

Welcome to the 4th Annual Data Champion Workshop

April 23, 2026 9:00am CT



Data Champion Workshop



Jennifer Epstein, RN, BSN
St. Louis Children's Hospital



Jordan Novack, RN, BSN
St. Louis Children's Hospital

welcome



welcome back

Thank you to the Data Champion Workshop Planning Group!

Allie Steele	Jen Schmoker	Marissa Yetzer
Allysa Gornall	Jennifer Epstein	Mary Lukacs
Amy Schiller	Jennifer Kreuter	Melanie Bell
Catherine Dimes	Jennifer Root	Melissa Wiggins
Chona Mariano	Jennifer Vasserman	Sarah Schukei
Craig Schott	Jeri Bennett	Sarah Youngberg
Elizabeth Fox	Jillian Clark	Teresa Tobin
Fred Roberts	Jordan Novack	Vanessa Watts Pettway
Ivo Pandjaitan	Kelly Veneziale	Viki Haro
Jazmin Olvera Alonso	Kim Gonzalez	Wendy Torres
Jean DiNovella	Maria-Theresa Balbin	

Agenda

Time (CT)	Topic	Presenters
9:00-9:05	Welcome	Jennifer Epstein, Jordan Novack
9:05-9:15	Workshop Keynote: Humans Asking Questions	Dr. Kevin Pettit
9:15 – 10:00	Site Share Part I: How We Do the Work	Jean Dinovella, Melissa Wiggins, Jillian Clark Moderators: Jennifer Epstein, Jordan Novack
10:00 – 10:15	Break	
10:15 – 11:00	Site Share Part II: How We Do the Work	Allysa Gornall, Catherine Dimes, Marissa Yetzer, Jenny Root Moderators: Jennifer Epstein, Jordan Novack
11:00-11:15	Site Share Q&A	
11:20 – 12:10	Panel Discussion: Collaborative Problem-Solving	Jazmin Olvera Alonso, Mary Lukacs, Sarah Youngberg, Catherine Dimes Moderators: Viki Haro, Maria-Theresa Balbin, Teresa Tobin
12:10 – 12:15	Closing Remarks	Jennifer Epstein, Jordan Novack

Keynote Address

Humans Asking Questions

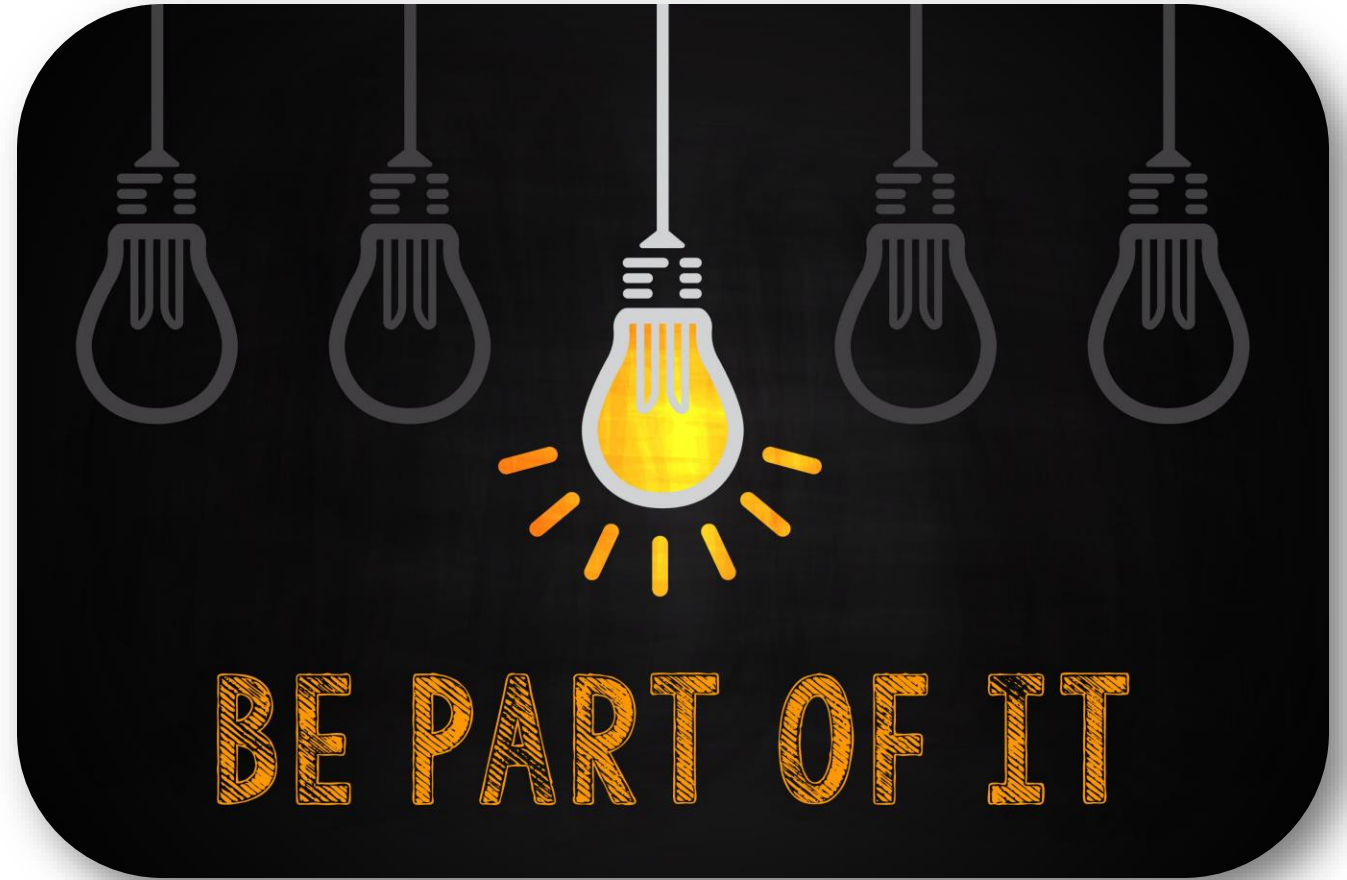


Kevin Pettit, MD
Children's Hospital Colorado

Risk Adjustment – Major Complications

If interested in participating,
contact:

pac3@childrens.com



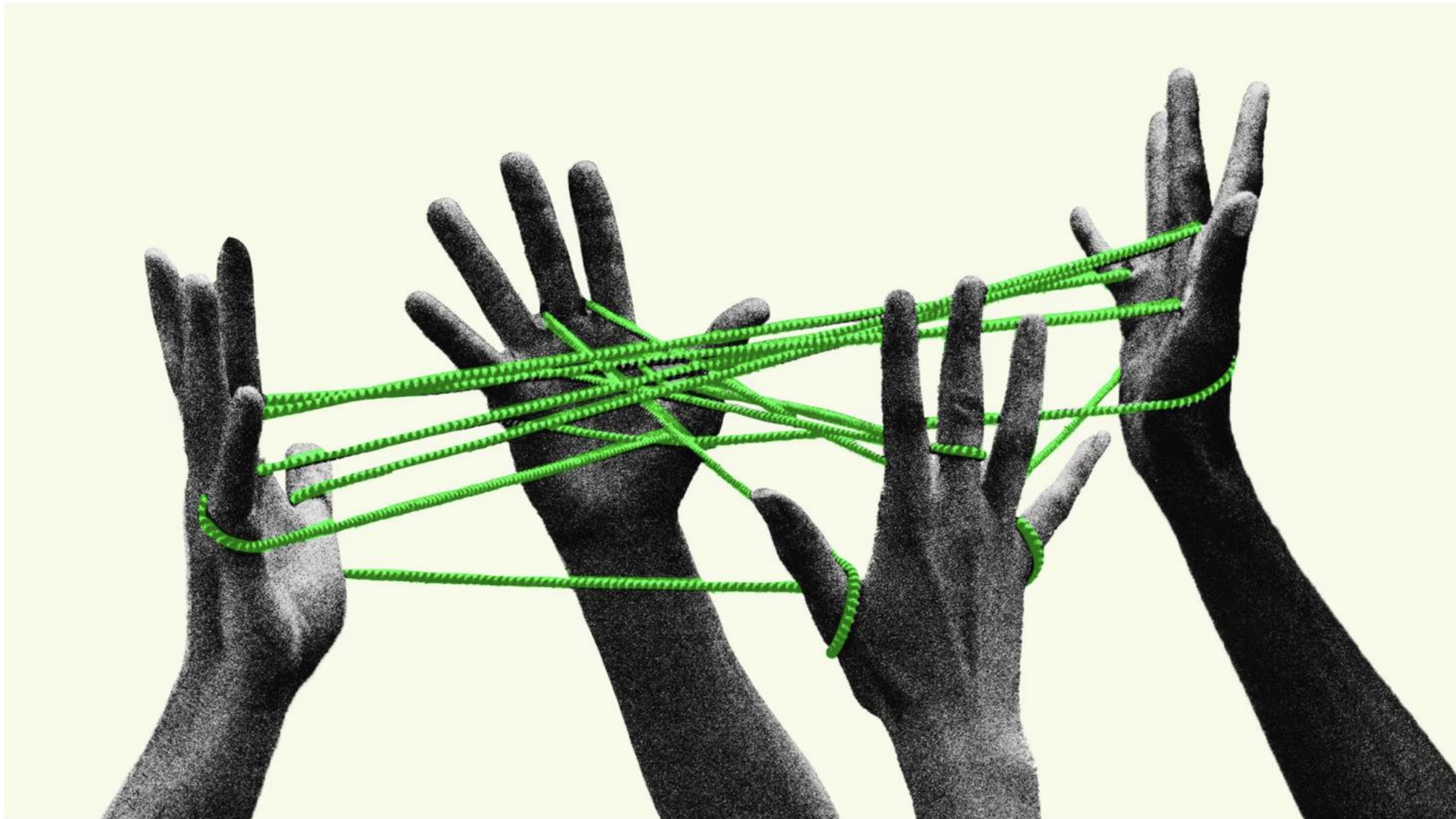


Illustration by The Atlantic. Source: Ray Massey / Getty.

Don't Call It 'Intelligence'

Humans are question machines. AI is an answer machine.

By Charles Yu

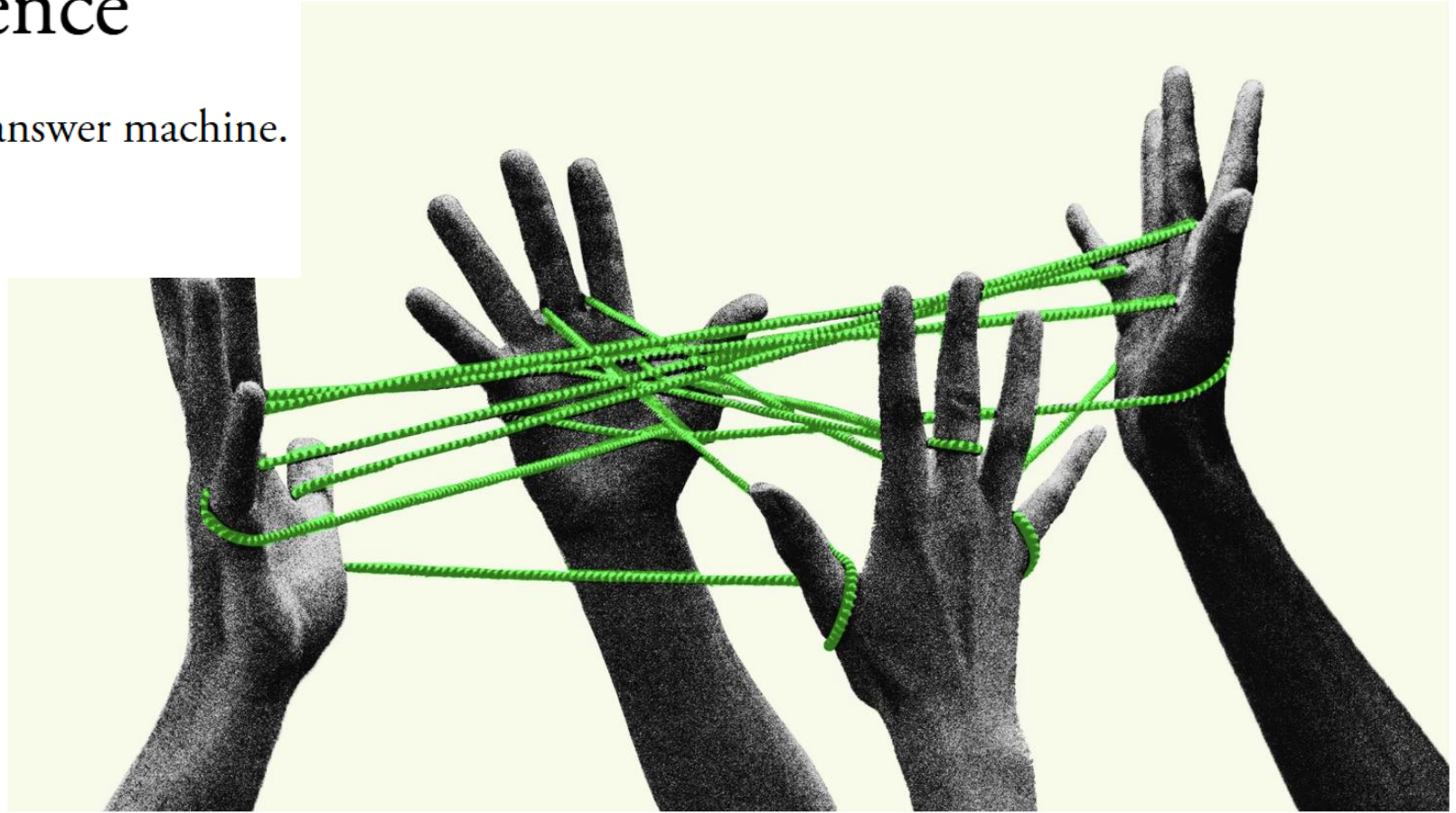


Illustration by The Atlantic. Source: Ray Massey / Getty.

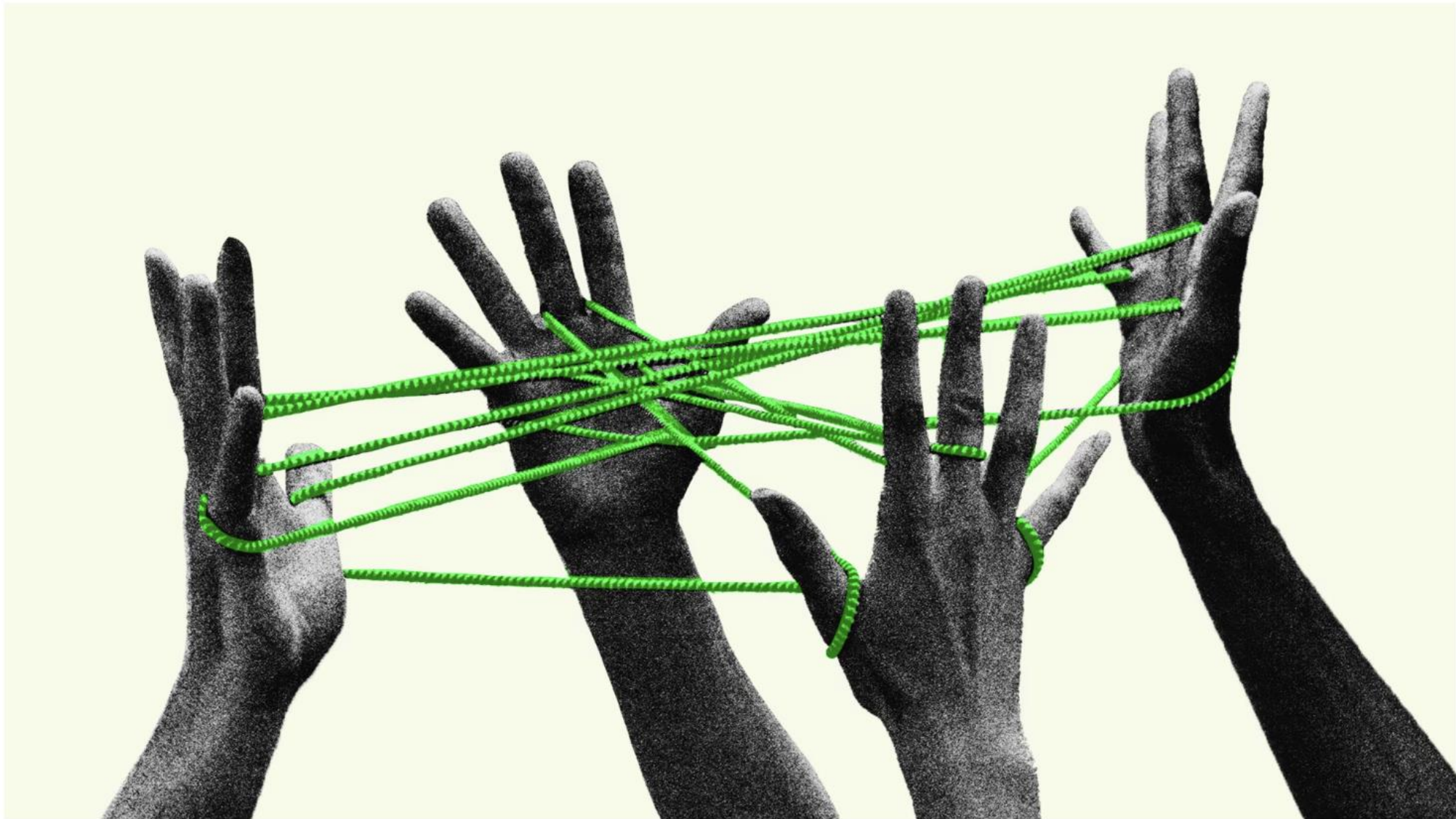


Illustration by The Atlantic. Source: Ray Massey / Getty.

Site Share Part I: How We Do the Work

Moderators: Jennifer Epstein & Jordan Novack



Site Share Part I: How We Do the Work



Jean Dinovella, BSN, RN, CCRN
Advocate Children's Hospital - Oak Lawn



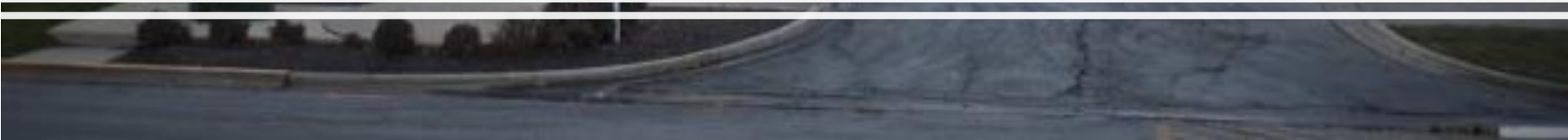
Melissa Wiggins, BSN, RN
Children's Hospital of Philadelphia



Jillian Clark, PA-C
Rady Children's Hospital



Advocate Children's Hospital- Oak Lawn, IL



ACH-OL PCICU

- Joined PC⁴ in 2024
- Approximately 400 2024; 334 2025 cases per year for PC⁴
- Care model/beds:
 - 16 bed PCICU
- PC⁴ Data Collectors: Jean Dinovella, Kelly Farrell, Chelsea Gutchewsky
- Data abstraction model: Hybrid





Our Process

Staffing Model- hybrid

- Total 0.5 FTE (20 hours/week total)
 - Data champion 8 hours/week, otherwise clinical RN in PCICU
 - Data abstractor 8 hours/week, otherwise clinical RN in PCICU
 - Data abstractor 4 hours/week, otherwise clinical RN in outpatient cardiology
 - STS data abstractor for surgical data only not included
 - (HeartBase, with transition to CardioAccess this step will no longer be necessary)

Meet every 2 weeks for questions and review of encounters to be submitted

- Physician, Data Champion & Abstractors, STS Data abstractor





Clinical champion starts each encounter in CardioAccess and adds name to shared spreadsheet

DOA	PC4 Encounter	Last name	first name	MRN	Primary data entry person	DOD	30 day followup	Data entry completed	Submitted to PC4 (Jeannie only)	Audit	Communication (free text) -optional	Changes to data entry	Questions for PC4 Call
1/1/2026	25	Doe	Jane	123456	Chelsea	1/5/2026	1/4/2026 Check for readmission	1/5/2026	1/5/2026	Reviewed	Chyllothorax requiring diet change, NEC, bacteremia 1/1/2026	Surgical data entered 1/2/2026; NEC doesn't meet criteria for entry	
1/3/2026	26	Doe	Arthur	123457	Kelly Farrell	1/9/2026	1/9/2026	1/19/2026	1/21/2026	Reviewed	iNO for post-op support; Demographics entered KF	1/13: Surgery data entered. KB	
1/26/2026	27	Doe	Brad	123458	Chelsea Gutchewsky	2/4/2026	2/4/2026			Reviewed	None	2/10: Non surgical. KB	
1/5/2026	28	Doe	Ciara	123459	Kelly Farrell	1/9/2026	1/9/2026	1/19/2026	1/21/2026	Reviewed	None	1/13: Surgery data entered. KB	
1/27/2026	29	Doe	D'Angelo	123460	Chelsea Gutchewsky	1/28/2026	1/28/2026 Check for readmission	2/3/2026	2/16/2026	Reviewed	None	2/3: Non surgical. KB	
1/28/2026	30	Doe	Fernanda	123461	Kelly Farrell	2/5/2026	2/5/2026	2/13/2026	2/16/2026	Reviewed	Trach/vent	2/10: Non surgical. KB	
1/29/2026	31	Doe	Giri Amanda	123462			Out of PCICU 2/14			Reviewed	Complete tracheal rings; iNO post op support; bronch 2/9	Demographics entered KF	
1/28/2026	32	Doe	Nina	123463	Kelly Farrell	2/2/2026	2/2/2026	2/13/2026	2/16/2026	Reviewed	None	2/10: Non surgical. KB	
1/28/2026	33	Doe	Dhaval	123464	Kelly Farrell	2/2/2026	2/2/2026	2/16/2026	2/16/2026	Reviewed	None	2/6: surgery data entered. KB	
1/28/2026	34	Doe	Andrew	123465	Kelly Farrell	2/4/2026	2/4/2026	2/13/2026	2/16/2026	Reviewed	Arrhythmia requiring temporary pacing and isopru	2/12: surgery date entered; Demographics and admit/discharge dates entered KF	
1/30/2026	38	Doe	Nancy	123466	Chelsea Gutchewsky	2/3/2026	Readmitted 2/11	2/17/2026		Reviewed	None	OR on 2/11; demographics and admission entered KF	
1/31/2026	39	Doe	Karoline	123467		2/10/2026				Reviewed	None	2/10: Non surgical. KB	
2/2/2026	40	Doe	Erin	123468	Kelly Farrell	2/9/2026	2/9/2026			Reviewed	None	2/11: SURGERY DATA STARTED, OR NOTE NOT COMPLETED.	
2/6/2026	41	Doe	Mohammed	123469		In PCICU 2/17/2026				Reviewed to 2/17	KCNT1 Mutation; UE; bronch 2/17		
2/11/2026	47	Doe	Scott	123470	Chelsea Gutchewsky	Out of PCICU 2/13				Reviewed	None		
2/11/2026	48	Doe	Aliya	123471		2/13/2026				Reviewed	PICU OVERFLOW	n/a	



STS data abstractor adds surgical data (HeartBase, with transition to CardioAccess this step will no longer be necessary)

L	M	N
Communication (free text) -optional	Changes to data entry	Questions for PC4 Call
Chylothorax requiring diet change, NEC, bacteremia 1/1/2026	Surgical data entered 1/2/2026; NEC doesn't meet criteria for entry	
iNO for post-op support; Demographics entered KF	1/13: Surgery data entered. KB	
None	2/10: Non surgical. KB	
None	1/13: Surgery data entered. KB	
None	2/3: Non surgical. KB	
Trach/vent	2/10: Non surgical. KB	
Complete tracheal rings; iNO post op support; bronch 2/9	Demographics entered KF	
None	2/10: Non surgical. KB	
None	2/6: surgery data entered. KB	
Arrhythmia requiring temporary pacing and isoprul	2/12: surgery date entered; Demographics and admit/discharge dates entered KF	
None	OR on 2/11; demographics and admission entered KF	
None	2/10: Non surgical. KB	
None	2/11: SURGERY DATA STARTED, OR NOTE NOT COMPLETED.	
KCNT1 Mutation; UE; bronch 2/17		
None		
n/a		



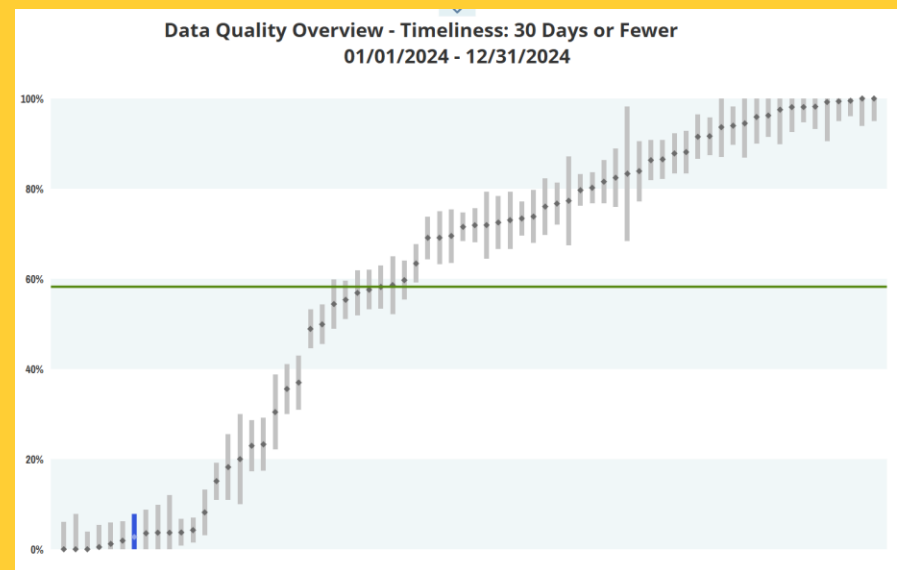
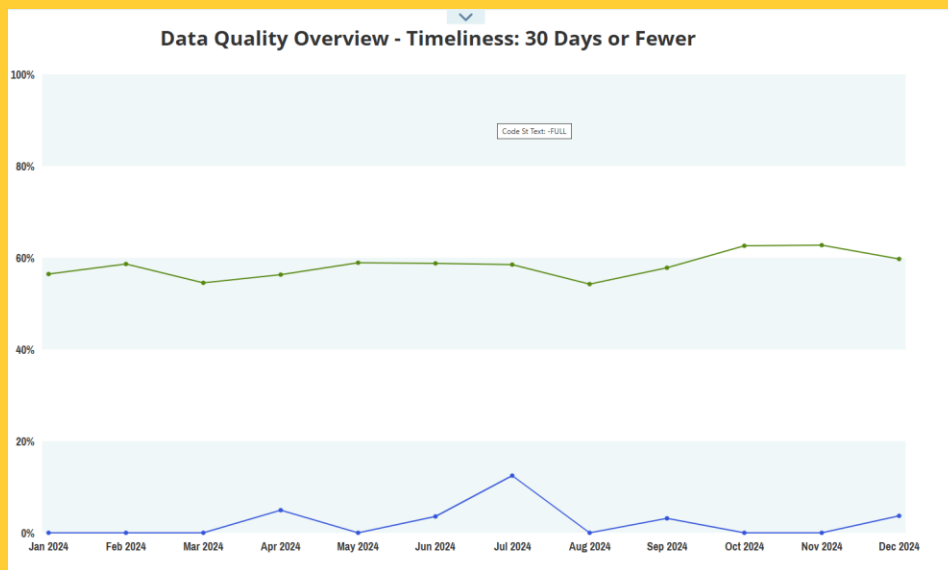
One of 3 abstractors signs up for patient on spreadsheet

PC4	Primary data entry person	Data entry completed	Submitted to PC4 (Jeannie only)					
Encounter	Last name	first name	MRN	DOD	30 day followup	Data entry completed	Submitted to PC4 (Jeannie only)	
25	Doe	Jane	123456	Chelsea	1/4/2026	Check for readmission	1/5/2026	1/5/2026
26	Doe	Arthur	123457	Kelly Farrell	1/9/2026		1/19/2026	1/21/2026
27	Doe	Brad	123458	Chelsea Gutchewsky	2/4/2026			
28	Doe	Ciara	123459	Kelly Farrell	1/9/2026		1/19/2026	1/21/2026
29	Doe	D'Angelo	123460	Chelsea Gutchewsky	1/28/2026	Check for readmission	2/3/2026	2/16/2026
30	Doe	Fernanda	123461	Kelly Farrell	2/5/2026		2/13/2026	2/16/2026
31	Doe	Girl Amanda	123462		Out of PCICU 2/14			
32	Doe	Nina	123463	Kelly Farrell	2/2/2026		2/13/2026	2/16/2026
33	Doe	Dhaval	123464	Kelly Farrell	2/2/2026		2/6/2026	2/16/2026
34	Doe	Andrew	123465	Kelly Farrell	2/4/2026		2/13/2026	2/16/2026
38	Doe	Nancy	123466	Chelsea Gutchewsky	2/3/2026	Readmitted 2/11	2/17/2026	
39	Doe	Karoline	123467		2/10/2026			
40	Doe	Erin	123468	Kelly Farrell	2/9/2026			
41	Doe	Mohammed	123469		In PCICU 2/17/2026			
47	Doe	Scott	123470	Chelsea Gutchewsky	2/13/2026	Out of PCICU 2/13		
48	Doe	Aliya	123471		2/13/2026			



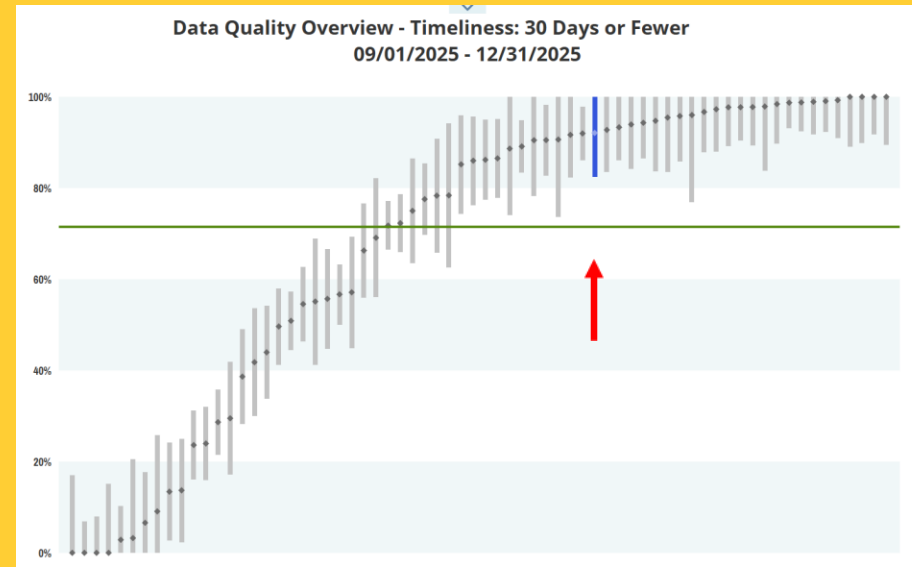
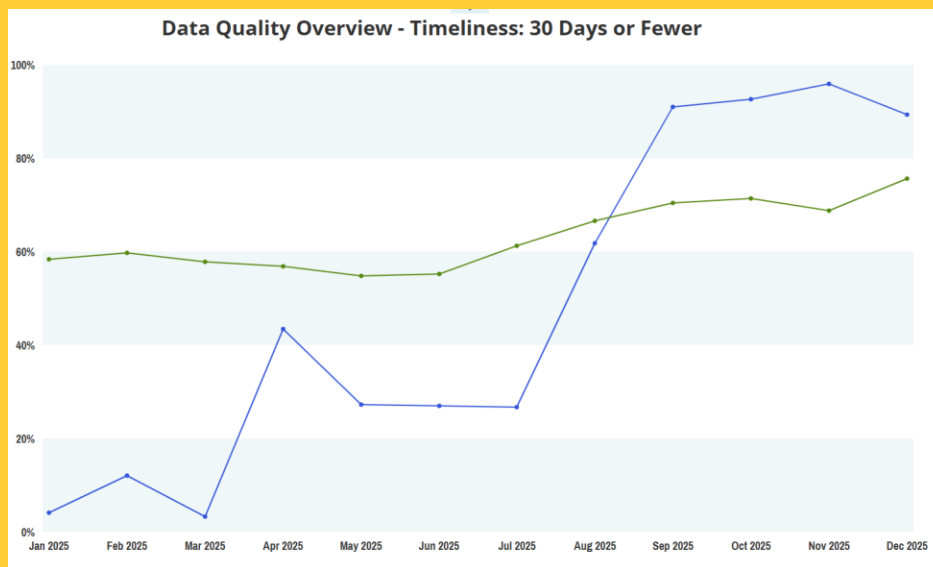


How we started





Where we are





Thank You!



CHOP Cardiac Center Data Collection Site Share PC⁴/PAC³

Melissa Wiggins, BSN, RN
Sr. Clinical Data Specialist





Cardiac Center Data Collection Site Share PC⁴/PAC³

Melissa Wiggins, BSN, RN Sr. Clinical Data Specialist

- Joined PC⁴ in 2011
- Joined PAC³ in 2019
- Approximately 1250 cases per year for PC⁴
- Approximately 1620 cases per year for PAC³
- Care model/beds:
 - Up to 43 beds for Acute Care Cardiology across 2 units
 - Up to 40 bed CICU (32 bed CICU with 8 surge beds)
 - VAD/ECMO/Transplant Center
 - In-hospital Delivery Suite
- Data abstraction model: Hybrid Model- mostly prospective data collection with retrospective case completion and quality check prior to submission within 30 days of discharge. PC⁴ and PAC³ cases are closed simultaneously.



Meet our Clinical Data Collection Team



Over 200 years of nursing experience in this photo!

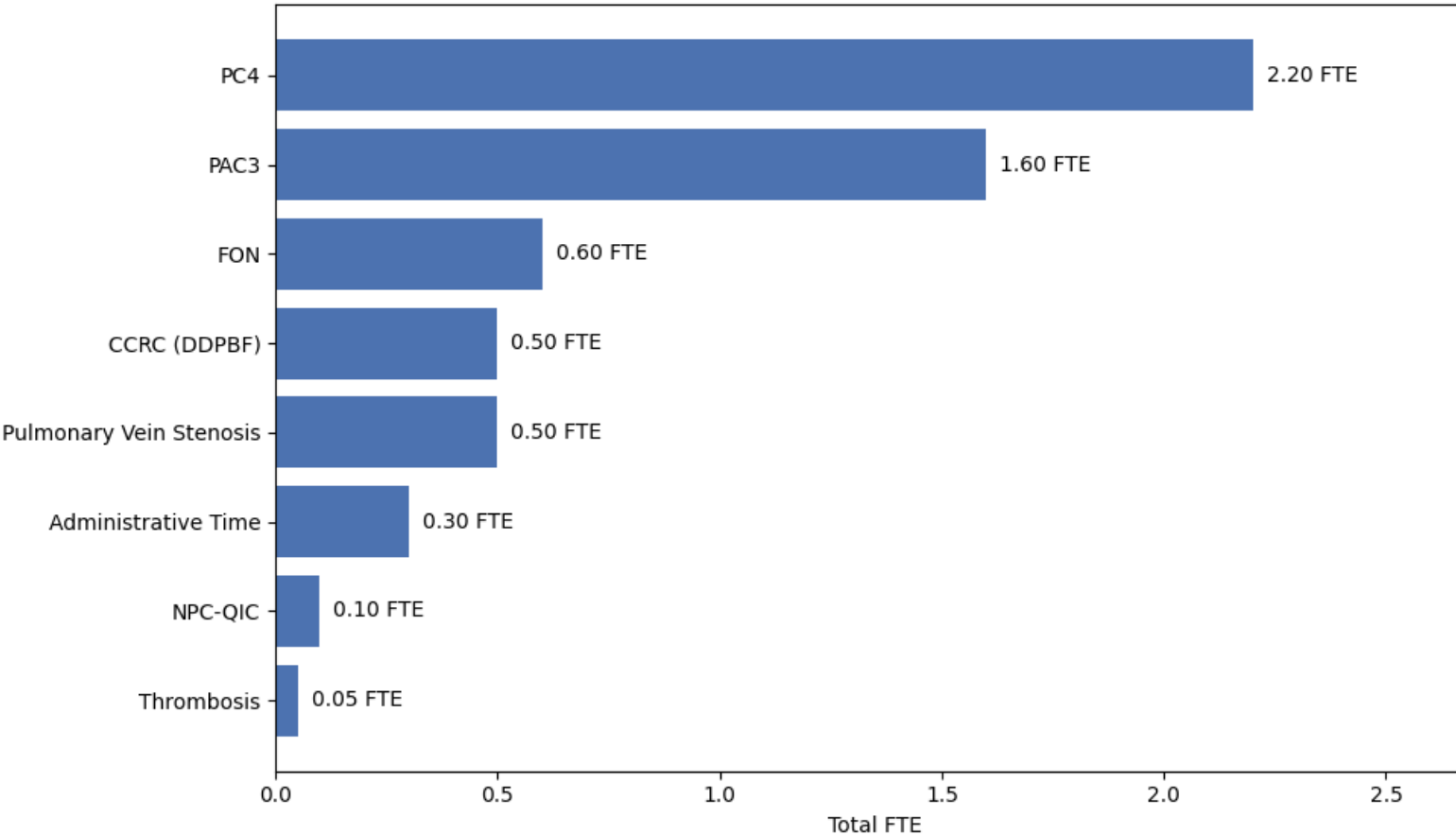
Kelly Veneziaie
Melissa Wiggins
Karen Murphy
Alison Hill
Brittany McClelland
Lauren DeLuca
Judah Siomos- CCRC, PVS
Ashley Paulson- FON, SVONE

Wenke Bach



Clinical Data Collection Team- Resource Allocation

Resource Distribution by Registry (Total FTE)



Cardiac Center Data Team: Total 5.8 FTE

Estimated PAC³/PC⁴ – 3.8 FTE

Additional PAC³/PC⁴ team responsibilities:

Administrative time

PC⁴ and PAC³ Audit committees

PC⁴ and PAC³ Executive Board

NPC-QIC

Thrombosis

SV-ONE

QC projects

Historical: H2H and CNOC

Cardiac Center Data and Analytics

Led by: Andrea Kennedy, Manager Data Analytics (with 4 FTE devoted to Cardiac Center Data Analytics)

Data Engineering

- Data transformation
- Building data models
- Data automation

Data Analytics

- All research Projects
- QI Initiatives
- Budgetary needs
- Operational needs

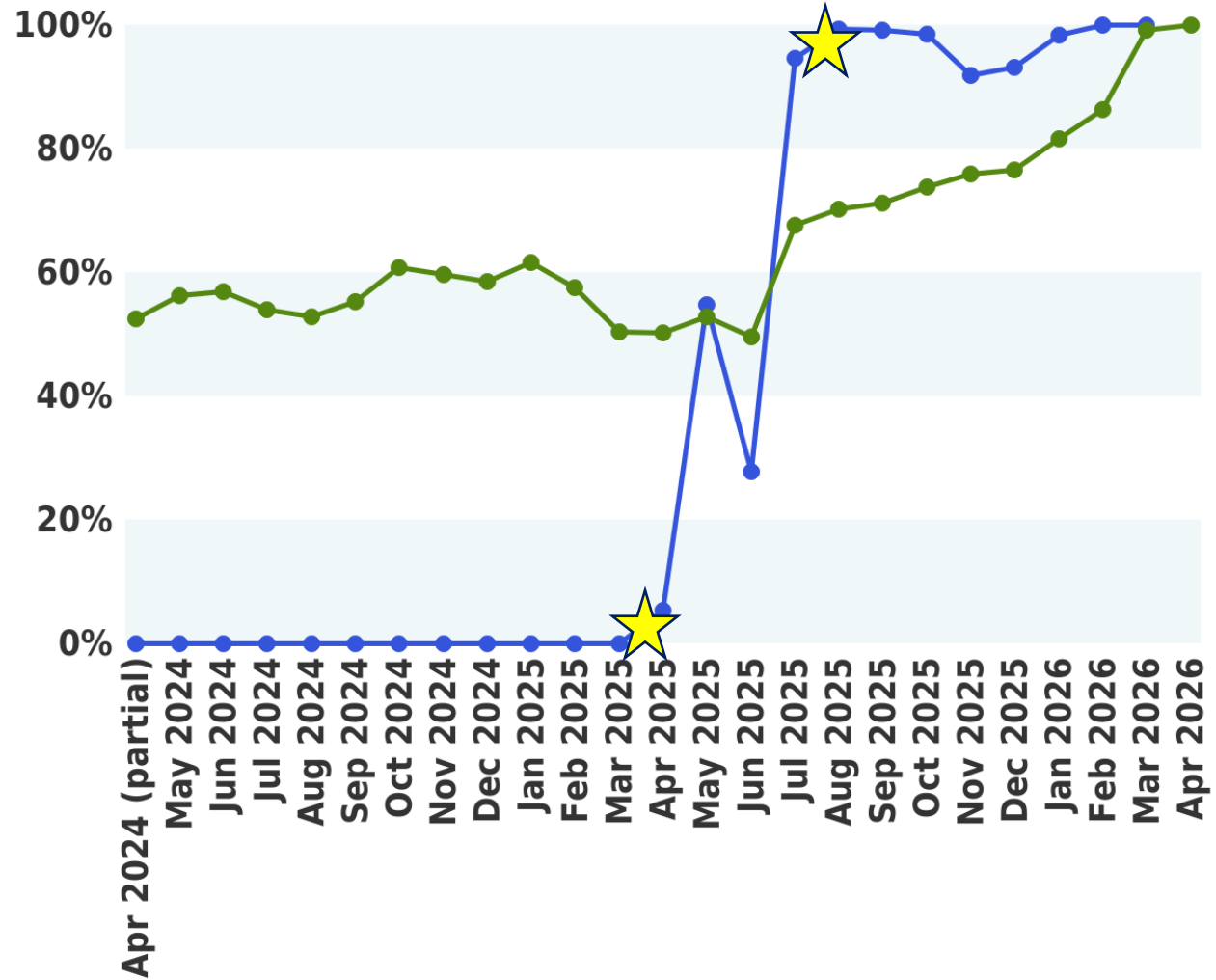
Clinical Data Specialist

- Simple queries
- QC projects
- Timeliness data
- Benchmarking

** The Cardiac Data Specialists Liaison and assist Analysts with clinical questions as well as partner and guide quality improvement and operational projects, utilizing the registry validated data*

❖ Process Evolution

Data Quality Overview - Timeliness: 7 + 30 Days or Fewer



LEGEND ■ CHOP ■ Aggregate - All

Navigating remote work:

Microsoft TEAMS: Separate chats for questions and work assignments.
Weekly Video Meetings (agenda kept on file for reference)



Microsoft ONEDRIVE: Visible division of work and progress tracking amongst team



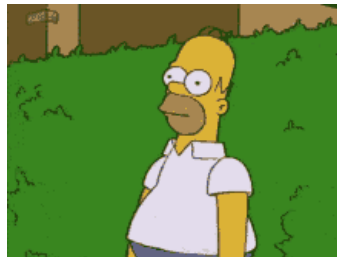
Shared drive in Microsoft FILE EXPLORER: Current shareable platform to organize patient documents.



Microsoft WORD: Pt specific log to track updated information



GIFS to make us laugh



Daily Operations Overview

Daily Unit
Census
Check

Data
collection
and
processing

Case
completion
and
submission



Assign
workload

Review
Daily
transfer/DC
Report

❖ Daily unit census check

❖ Confirm all Cardiac inpatients using File Explorer organization.

Patient Lists

[Edit List](#) | [Open Chart](#) | [Sign In](#) | [Sign Out](#) | [Add Patient](#) | [Remove Patient](#) | [Wrap Text](#) | [Collect](#) | [Write Handoff](#)

My Lists

- *Melissa's list
 - 6 East CCU
 - CICU
 - 5 East
 - 6 East CCU
 - 6 East CICU Overflow
 - 6 South Tower CICU
 - My kids
 - My Favorite Lists

Available Lists

- Recent Searches
- CHOP PHL Hospital
- CHOP CDR Hospital
- CHOP KOP Hospital
- HOD Downtime Re...
- Inpatient Phleboto...
- Link2CHOP Admitt...
- Pending Deliveries
- Preadmitted Patien...
- Recently Discharged
- Transport Patients

☆ 6 South Tower CICU 29 Patients

Unit/Rm/Bed	Patient Name	Age/Gender	Attend Prov	Service
6ST-6S01-1			DEWITT, A	Cardiac Critical Care
6ST-6S01-2			MAEDA, K	Cardiac Critical Care
6ST-6S01-4			DEWITT, A	Cardiology
6ST-6S02-1			HERRUP, E	Cardiac Critical Care
6ST-6S02-2			DEWITT, A	Cardiac Critical Care
6ST-6S02-3			HERRUP, E	Cardiac Critical Care
6ST-6S03-1			DEWITT, A	Cardiology
6ST-6S03-2			HERRUP, E	Cardiac Critical Care
6ST-6S03-3			ROMER, A	Cardiology
6ST-6S03-4			DEWITT, A	Cardiac Critical Care
6ST-6S04-1			DEWITT, A	Cardiology
6ST-6S04-2			ROMER, A	Cardiac Critical Care
6ST-6S04-3			HERRUP, E	Critical Care
6ST-6S04-4			HERRUP, E	Neonatology
6ST-6S05-1			DEWITT, A	Cardiology

File Explorer showing folder structure for CICU:

- CICU
 - 1.18-1
 - 1.18-2
 - 1-1
 - 1-2
 - 1-3
 - 1-4
 - 2-1
 - 2-2
 - 2-3
 - 2-4
 - 3-1
 - 3-2
 - 3-3
 - 3-4
 - 4-1
 - 4-2
 - 4-3
 - 4-4
 - 5-1
 - 5-2
 - 5-3
 - 5-4
 - 6
 - 7
 - 8
 - 9
 - 10

Files in selected folder:

Name	Date modified
PC4datacollectionNEW.2	9/24/2025 12:10 PM
VIS calculator	5/28/2020 11:18 AM

Name	Date modified
PC4datacollectionNEW.2	4/12/2023 6:59 AM
VIS calculator	5/28/2020 11:40 AM
[REDACTED].03252026	4/6/2026 12:39 PM

- 13
- 14
- 15
- 16
- 17
- 31S-1
- 31S-2
- 32S-1
- 32S-2
- 33S-1
- 33S-2
- 34S-1
- 34S-2
- CICU APRIL discharges
- CICU March Discharges
- CICU Transfers
- Closed
 - > 2025
 - > 2026
 - > Coding Guides
 - > QC
 - > FON

Save as:
Last_First_encounterdate

Discharged Patients
Awaiting submission
Organized by month

Transferred Patients
Still inpatient

Submitted patients
Organized by month
Archive old files

❖ Assign workload

❖ Assign daily workload to available team members utilizing a Microsoft Teams shared team calendar

23 Mon	24 Tue	25 Wed	26 Thu	27 Fri
Karen	Karen	Karen-Thrombosis	Karen	Karen
Alison	Alison	Alison	Alison	Ashley FON
Brittany	Ashley FON	Brittany	Ashley FON	Judah-CCRC/PVS
Judah-CCRC/PVS	Judah-CCRC/PVS	Judah-CCRC/PVS	Brittany	Lauren
Kelly	Kelly-No Operations	Kelly	Judah-CCRC/PVS	Melissa-PPL
Melissa	Lauren		Kelly	
	Melissa		Lauren	
			Melissa	

- Forecast bandwidth shortfalls or complex case closures in relation to submission deadlines
- Plan ahead for Audits, PPL, QC projects and Administrative time
- Daily assignments then posted on CDS Operations Teams channel- visible to all in order to confirm completion and maintain accountability from previous days

❖ Data collection and processing

Monday	Tuesday	Wednesday	Thursday	Friday
Full Review- CICU Full review-CCU	Notes- CICU New pt- CCU	New patients only – both units	Full Review- CICU Full review-CCU	Notes- CICU New pt- CCU

3 different types of Data collection days:

- Full Review
- Notes
- New Patients only

Benefits:

- Increased efficiency in daily operations
- Focused time on important data points, not rechecking the same thing every day.
- Can shift this model based on holidays/long weekends etc.

After implementing this operational change, we were able to meet and now maintain our 30-day submission timeliness metric

		PC4			Cath or Surgery:		
Name: Baby		MRN: <u>00000000</u>			2/1 OR not in STS yet- DONE Cath 2/3 VAD entered as <u>noCPB</u> case. Emailed Donna- UPDATED		
Event ID: 00000							
Therapy-Vasoactive Infusions							
Milrinone	2/1-2/5	2/9-3/10	3/15-3/20	Esmolol			
Dopamine				Isuprel			
Epinephrine	2/1-2/6			Nicardipine			
Vasopressin	2/1-2/4			Calcium	22Q- for iCal only		
Nitroprusside				Dobutamine			
Complications							
COMP	DATE	QUESTION/NOTE					
Diagnosis:							
PHTN:	3/5	Started on <u>iNO</u> , nothing in notes yet Note confirms <u>inc PVR</u> Confirmed on <u>cath 2/3</u>					
Arrhythmia:	2/1	CHB coming out of OR. Paced on arrival per MD and OP note. First doc on flowsheets isn't until an hour after <u>admit</u> . Counted as POA					
LCOS:	2/1	Triples then to 15 shortly after. MD notes state hypotension and increased lactate/ <u>decreased perfusion</u> . Counted all for <u>lcos</u> .					
Infectious:	2/5	Sepsis? Intubated at 1100, <u>inc wbc</u> , <u>inc temp</u> , started <u>gtts</u> and <u>abx</u> - need to confirm Abx x6 days and positive <u>Cx</u> . Counted Sepsis					
	3/3	CLABSI? Confirmed in <u>Qliskense</u> on 3/8					
Neuro:	3/18	Code as stroke? HIS concerning for a <u>infarct</u> , <u>but HCT</u> reassuring. <u>Call to Neuro 3/17 1110</u> then CT done 1229 Confirm if new finding on 3/31 CT is something new or hemorrhagic conversion					
Seizure	3/18	Noted on EEG report at 0105					
NEC:	3/10	Pneumatosis confirmed on <u>US</u> after being identified on Xray. Bloody stools and <u>abd</u> distention. Gen Surg <u>consulted</u> .. Zosyn started					
	3/18	Abx x7 days, counted NEC					

- Provides an organized, working platform
- Multiple data collectors actively log information to assist in thorough data collection
- Tracks pt specific questions and their clarifications/confirmations
- Delineates vasoactive courses
- Capability to Copy/Paste MD notes for clarity
- High-value, timesaving information

12345		PAC3		
Name:		MR#:		
Initial Feeds 2 nd checked (initials)	mw			
Milrinone highest dose and date:				
Nasal cannula dates	3/1-3/3			
HFNC dates	Poa-3/1			
CPAP dates				
First <u>24 hour</u> diuretics entered completely	Not 24 hrs yet- DONE			
First <u>24 hour</u> diuretics second checked	mw			
PT in CICU:				
OT in CICU:				
Speech in CICU:				
Notes:				
Dig for function				
DX questions:				
Pt from OSH, no surgery at CHOP- confirm fundamental.				
PAC definition questions:				

- Similar benefits and use as PC⁴ form
- PAC³ Focus of Oxygen, Meds and Diagnosis

 EPIC-Nursing Observations (view created for our team)

 Observations (last 3 days)

Date/Time	OBSERV
04/10/26 2201	CBG drawn and analyzed via iSTAT
04/10/26 1941	patient arrived to CICU
04/10/26 1920	code called
04/09/26 2305	extubated
04/09/26 1626	pt returned from cath lab to CICU

 Observations (last 3 days)

Date/Time	OBSERV
04/11/26 1600	warmed blankets applied
04/11/26 1500	prbcs complete
04/11/26 1118	15 min VS
04/11/26 1100	transwarmer applied
04/11/26 1030	nitropaste applied
04/11/26 0800	code event, see sheet for details
04/10/26 1349	pt transported to CI
04/10/26 1336	Arrived to CICU from PICU

 MD Progress note format

Hospital LOS: 3

Brief History: Baby Boy [REDACTED] is a 3 day male with critical PS, small RV S/P cath BDA pulmonary valve 3/31

Interim Events:

- S/P Cath BDA pulmonary valve
- PGE remained on
- Leg with vein thrombus so started on lovenox
- Extubated this AM to 2/ kg HFNC
- Bili 8



Accordion Reports- ICU RN Summary

ICU RN Summary

Go to now 4/9/2026

Thursday 2300 - Today 0859

24 hrs 12 hrs 8 hrs 4 hrs 2 hrs 1 hr | View All

	04/09 0700 - 04/10 0659					04/10 0700 - 04/11 0659					04/11 0700 - 04/12 0659					04/12																
	23-01	01-03	03-05	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	21-23	23-01	01-03	03-05	05-07	07-09	07-09														
HR >3 MO																																
Significant Events																																
Patient Observations																																
Vital Signs																																
Pulse	169*	131*	155*	135*	134*				172	174	163*	179*	178	170*	159*	160*	167*	163*	160*	160*	160*	156*	153*	160*	146*	141*	145*	141*	141*			
Respiratory Rate	73*	98	68*	43	67				30*	27	28	26	23*	32	22	23	23	23	20	21	29*	28	18	20	18	21	27*	18	19			
BP	72/50			63/31	43				65/28*		65...	4*							88/44				91...<*									
Cuff MAP (mmHg)	60			40<					40*		43<*								59				71<*									
Pressure Monitoring																																
Arterial (Port 1) BP mmHg	87/59	68/36*	83/55*	73/47*	75/48*				52/36*	62/42*	54/34*	53/36*	62/40*	57/36*	66/39*	70/42*	82/50*	78/47*	80/48*	75/45*	92/58*	90/54*	88/51*	70/42*	79/46*	100/83*	77/45*	68/40*	92/54*	Arterial (...)		
Arterial (Port 1) MAP mmHg	72	49*	68*	58*	60*				42*	49*	41*	42*	48*	44*	49*	52*	62*	58*	60*	56*	72*	68*	64*	52*	58*	77*	57*	50*	68*	Arterial (...)		
Arterial (Port 1) Location	Left...	Left...	Left...	Left...	Left...				Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Right...	Arterial (...)	
RA/Fontan (Port 2) mmHg									5*	4*	9*	5*	7*	7*	7*	7*	7*	5*	7*	7*	10*	9*	5*	5*	8*	8*	5*	3*	8*	RA/Font...		
RA/Fontan (Port 2) Location									RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA*	RA/Font...		
CVP (Port 2) mmHg									29																					CVP (Po...		
Pacer Assessment																																
Is pacing occurring?									No	No	No		No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Is pacing...	
Thermoregulation																																
Intake																																
Output																																
Oxygen Therapy																																
SpO2	100*	100*	99*	96*	95*				98*	97*	98*	93*	96*	95*	97*	98*	95*	93*	93*	97*	91*	92*	96*	99*	93*	95*	97*	94*	96*	SpO2		
FI02 (%)	21*	21*	21*	21*	21*				30*	30*	30*	30	30*	30*	30*	30*	30*	30*	30*	30*	30*	30*	35*	35	30*	30*	30*	30*	35*	FI02 (%)		
Respiratory Device				No re...					Vent...	Vent...	Vent...	Venti...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Vent...	Respirat...		
Blood Gases																																
Invasive																																
Invasive Device									Drager	Drager			Drager										Drager	Drager	Drager	Drager	Drager	Drager	Invasive ...			
Mode									SIMV/...	SIMV/...			SIMV/...										Press...	SIMV/...		SIMV/...	SIMV/...	SIMV/...	Mode			
Arterial Line 22 gauge Right Femoral																																
Chest Tube 1 Argyle Anterior Mediastinal;Pleural																																
Indwelling Urethral Catheter Foley 6 Fr																																
Endotracheal Tube Right Nare 3 mm																																
Placement Date/Time: 04/10/26 0840 Mask Ventilation: Ventilated easily by mask (1) Inserted by: Tkach CRNA Airway Device: Endotracheal Tube Location: Right Nare Airway Size (mm): 3 mm Secured by: Tape Secured at: Nare Marking at secured leng...																																
Manometer Pressure Air Cuff (c...)																																
0 10 9 Manome...																																
Wound 04/10/26 Surgical Sternum Anterior;Medial																																
Medications																																
ALPROSTadil mcg/kg/min	0.01...*	0.01...*	0.01...*	0.01...*	0 mc...				0.5 m	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	ALPROS...	
dexametomidine mcg/kg/min									3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	3 mc...	dexmed...
DOPamine mcg/kg/min									0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	DOPami...
EPINEPHrine mcg/kg/min									0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	0.05...*	EPINEP...
fentaNYL mcg/kg/hr									0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	0.5 ...*	fentaNY...
furosemide mg/kg/hr									0.1 m...	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	0.1 ...*	furosemi...
milrinone mcg/kg/min									0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	0.25...*	milrinone...
vasopressin milli-units/kg/min									24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	24 m...*	vasopres...
PCEA																																
Labs																																
NIRS																																
L Cerebral									66*	66*	62*	60*	72*	75*	71*	73*	67*	73*	65*	76	71	78	79*	83	79*	71*	74*	76*	69	L Cerebral		



EPIC Smart Search

Search results for "arrhythmia"

arrhythmia

All (734) **Notes (435)** Care Everywhere (1) Meds (10) Labs (2)

This Week

- Consult Note by O'Connor, Matthew, MD
... variant) with secondary **arrhythmias** requiring pacemaker p
- Progress Notes by Mille, Felina, MD
... variant) with secondary **arrhythmias** (first degree **AV block**,
- Consult Note by O'Connor, Matthew, MD
... variant) with secondary **arrhythmias** requiring pacemaker p
- Progress Notes by Mille, Felina, MD
... variant) with secondary **arrhythmias** (first degree **AV block**,
- Consult Note by O'Connor, Matthew, MD
... variant) with secondary **arrhythmias** requiring pacemaker p
- Progress Notes by Bird, Geoffrey L, MD
... variant) with secondary **arrhythmias** (first degree **AV block**,
- Consult Note by Irving, Sharon Y, CRNP
Atrial tachycardia 07/21/2023



Event Log

View by: **Time** Category | ◀ 04/11/2026 1126 - 04/12/2026 1126 ▶ 1 Shift 12 Hours **24 Hours** 36 Hours More Options ▾

Given Medications

Medication	Date/Time	Action
Scheduled		
aspirin chew tab(s) 81 mg	04/12 0807	Given: Dose 81 mg Oral
carvedilol susp 6.68 mg	04/12 0807	Given: Dose 6.68 mg Nasogastric
dapagliflozin tab(s) 1.25 mg	04/12 0807	Given: Dose 1.25 mg Oral
famotidine susp 6.4 mg	04/12 0807	Given: Dose 6.4 mg Nasogastric
furosemide inj 25 mg	04/12 0852	IV Stopped: Dose 0 mg 0 mL/hr Intravenous
ivabradine oral soln 0.3 mg	04/12 0807	Given: Dose 0.3 mg Oral
potassium chloride inj 13.2 mEq	04/11 1518	IV Stopped: Dose 0 mEq 0 mL/hr Intravenous
spironolactone susp 21 mg	04/12 0807	Given: Dose 21 mg Nasogastric
vitamin-multi soln 1 mL	04/12 0807	Given: Dose 1 mL Oral
Continuous		
milrinone 0.2 mg/mL in D5W 100 mL infusion	04/12 1000	Rate Verify: Dose 1 mcg/kg/min 4.02 mL/hr Intravenous
SMOFIipid 20% fat emulsion (mixed oil-based) infusion	04/12 1000	Rate Verify: Dose 2 g/kg/24 hrs 5.4 mL/hr Intravenous
SMOFIipid 20% fat emulsion (mixed oil-based) infusion	04/11 1803	New Bag/Bottle/Syringe: Dose 2 g/kg/24 hrs 5.4 mL/hr Ir



Last filed

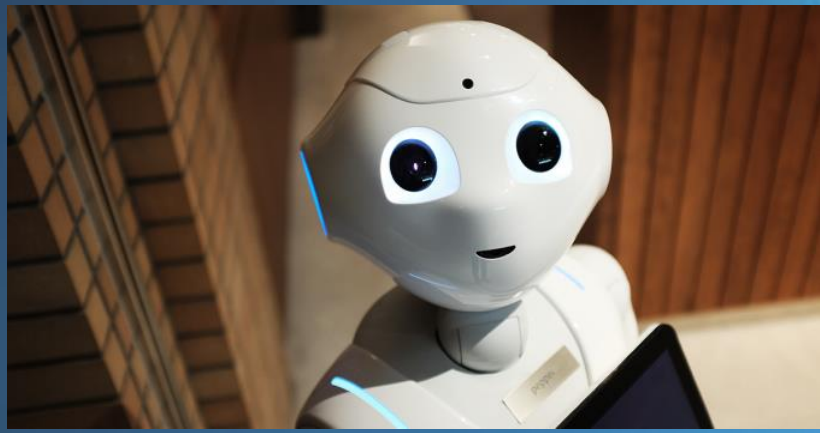
Last Filed ▾

0.02 mg/kg/hr
0.94 mL/hr
0.125 mg/mL
0.94 mL
1.4 mcg/kg/hr
2.07 mL/hr
4 mcg/mL
2.06 mL
0.02 mcg/kg/min
0.44 mL/hr
16 mcg/mL
0.45 ml
0.5 mcg/kg/min
0.89 mL/hr
200 mcg/mL
0.88 mL

Robotic Process Automation (RPA)

❤️ Wenke Bach

- Birth Weight Y/N
- Birth Weight
- Gestational Age Y/N
- Gestational Age
- Birth Length
- Birth Head Circumference
- Born at this Hospital Y/N
- Hospital Admit Weight
- Hospital Admit Length
- PC⁴/PAC³ Encounter Admit Weight/Length



Data shows this process saves 2-3 minutes per each unique encounter

❖ Review Daily Transfer/DC report

❖ EPIC ADT Report

A	B	C	D	E	F	G	H	I	J	K	L
mrn	patient_name	csn	hospital_admit_date	hospital_discharge_date	event_time	initial_service	department_from	department_to	event_type	report_group	discharge_ordering_provider
			2026-03-22 11:58:00		2026-03-23 09:45:00	Hematology	5 EAST	5 EAST	Transfer Out	CCU	
			2026-02-22 17:44:00		2026-03-23 13:04:00	Cardiac Critical Care	6 SOUTH TOWER	PERIOP COMPLEX	Transfer Out	CICU	
			2026-03-23 13:28:00	2026-03-23 17:10:00	2026-03-23 15:30:00	Magnetic Resonance Imaging	6 NORTHEAST	6 NORTHWEST	Transfer Out	CPRU	
			2026-03-23 13:28:00	2026-03-23 17:10:00	2026-03-23 17:10:00	Magnetic Resonance Imaging	6 NORTHEAST	UNSPECIFIED	Discharge	CPRU	
			2026-03-17 07:10:00	2026-03-23 15:02:00	2026-03-23 15:02:00	Cardiology	6 EAST	UNSPECIFIED	Discharge	CCU	WALD, SHIRA
			2026-03-21 09:48:00	2026-03-23 15:02:00	2026-03-23 15:02:00	Cardiology	6 EAST	UNSPECIFIED	Discharge	CCU	SEMENT, DEFNE
			2026-01-06 04:18:00		2026-03-23 17:50:00	Cardiac Critical Care	6 SOUTH TOWER	6E CICU OVERFLOW	Transfer Out	CICU	
			2026-02-23 21:50:00		2026-03-23 12:56:00	Cardiac Critical Care	6E CICU OVERFLOW	5 EAST	Transfer Out	CICU	
			2026-02-23 21:50:00		2026-03-23 12:56:00	Cardiology	6E CICU OVERFLOW	5 EAST	Transfer Out	CICU	
			2026-03-20 12:29:00		2026-03-23 11:22:00	Cardiology	6 SOUTH TOWER	6 EAST	Transfer Out	CICU	
			2026-03-20 12:29:00		2026-03-23 11:22:00	Cardiac Critical Care	6 SOUTH TOWER	6 EAST	Transfer Out	CICU	
			2026-02-27 22:44:00		2026-03-23 22:19:00	Critical Care	6 SOUTH TOWER	7 WEST PICU	Transfer Out	CICU	
			2026-02-27 22:44:00		2026-03-23 22:19:00	Cardiac Critical Care	6 SOUTH TOWER	7 WEST PICU	Transfer Out	CICU	
			2026-03-10 00:32:00		2026-03-23 22:41:00	Cardiology	6E CICU OVERFLOW	6E CICU OVERFLOW	Transfer Out	CICU	
			2026-03-09 04:34:00	2026-03-23 19:53:00	2026-03-23 05:44:00		6 SOUTH TOWER	6 SOUTH TOWER	Transfer Out	CICU	
			2026-03-09 04:34:00	2026-03-23 19:53:00	2026-03-23 19:53:00	Neonatology	6 SOUTH TOWER	UNSPECIFIED	Discharge	CICU	

- Autogenerated- received in daily email
- Utilizes EPIC ADT Events for selected units and Cardiology service for PAC³

Helpful in:

- Finding “sneaker patients”
- PAC³- finding patients who change service
- Bouncebacks

❖ Confirm all patients have a Registry case started

CCU (Cardiac Stepdown Units)

CICU (Cardiac Intensive Care Units)

	A	B	C	D	E	F
1	MRN	NAME	DATE	DISPOSITION	CASE	NOTES
2			2/1/2026	home	x	
3			2/1/2026	home	x	Med Review for fundamental
4			2/1/2026	home	x	
5			2/1/2026	home	x	
6			2/1/2026		General Pediatrics	
7			2/2/2026	home	x	
8			2/2/2026	home	x	
9			2/2/2026	home	x	
10			2/2/2026	home	x	
11			2/2/2026	cpru-cicu	x	
12			2/2/2026	home	x	
13			2/3/2026	home	x	
14			2/3/2026	cicu	x	
15			2/3/2026	home	x	
16			2/3/2026		ADOLESCENT	
17			2/3/2026	home	x	
18			2/3/2026	home	x	
19			2/3/2026	home	x	
20			2/3/2026	cpru-cicu	x	

	A	B	C	D	E	F
1	MRN	NAME	DATE	DISPOSITION	CASE	NOTES/QUESTIONS
2			3/1/2026	ccu	x	
3			3/1/2026	nicu	x	
4			3/1/2026	ccu	x	
5			3/2/2026	ccu	x	
6			3/2/2026	ccu	x	
7			3/2/2026	ccu	x	
8			3/3/2026	ccu	x	
9			3/3/2026	ccu	x	
10			3/3/2026	ccu	x	
11			3/4/2026	ccu	x	
12			3/4/2026	ccu	x	
13			3/4/2026	ccu	x	
14			3/4/2026	ccu	x	
15			3/5/2026	ccu	x	
16			3/5/2026	ccu	x	
17			3/6/2026	ccu	x	
18			3/6/2026	ccu	x	
19			3/6/2026	ccu	x	
20			3/7/2026	ccu	x	

- Confirms case initiation
- Working/shared document
- Confirms non-Cardiology patients
- Used for Case review with Clinical Champion

- Confirms case initiation
- Working/shared document
- Separate spreadsheet for review with Clinical Champion

❖ Case closure/submission

❖ Case closure/submission

MRN	Patient Name	HOSPITAL	HOSPITAL	REGIST	30 DAYS DUE	45 DAYS DUE	SUBMITTED	NOTES
		1/29/2026	3/1/2026	PAC3	3/31/2026	4/15/2026	x	
		1/29/2026	3/1/2026	PC4	3/31/2026	4/15/2026	x	
		3/1/2026	3/2/2026	PAC3	4/1/2026	4/16/2026	x	On review for fundamental- done
		3/1/2026	3/2/2026	PAC3	4/1/2026	4/16/2026	x	
		2/26/2026	3/2/2026	PAC3	4/1/2026	4/16/2026	x	
		2/26/2026	3/2/2026	PC4	4/1/2026	4/16/2026	x	
		2/17/2026	3/2/2026	PAC3	4/1/2026	4/16/2026		bm
		2/17/2026	3/2/2026	PAC3	4/1/2026	4/16/2026		
		2/17/2026	3/2/2026	PC4	4/1/2026	4/16/2026		
		2/17/2026	3/2/2026	PC4	4/1/2026	4/16/2026		
		2/16/2026	3/2/2026	PAC3	4/1/2026	4/16/2026	x	
		2/16/2026	3/2/2026	PC4	4/1/2026	4/16/2026	x	
		2/27/2026	3/3/2026	PAC3	4/2/2026	4/17/2026		km
		2/27/2026	3/3/2026	PAC3	4/2/2026	4/17/2026		
		2/26/2026	3/3/2026	PAC3	4/2/2026	4/17/2026		
		2/26/2026	3/3/2026	PC4	4/2/2026	4/17/2026		
		2/25/2026	3/3/2026	PAC3	4/2/2026	4/17/2026		kv
		2/25/2026	3/3/2026	PC4	4/2/2026	4/17/2026		

- Utilize QlikSense dashboard to export by month
- Shared document in ONEDRIVE for visibility between all data champions
- Plan ahead to meet 30-day timeliness metric

Submit

	<input type="checkbox"/>	PatientID	Patient Name	MRN	Admission Date	Discharge Date	Version	Record Status	Submitted By	Date Submitted	PC4 Message	30 Day Missing		
▶	<input type="checkbox"/>				03/28/25	03/12/26	3.0	Submitted	venezialek	4/9/2026 14:29	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				01/03/26	03/09/26	3.0	Submitted	hilla	4/8/2026 11:34	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				01/03/26	03/10/26	3.0	Submitted	murphykar	4/10/2026 14:14	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				02/04/26	03/11/26	3.0	Submitted	mcclellandb	4/9/2026 14:18	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				02/18/26	03/09/26	3.0	Submitted	venezialek	4/7/2026 12:53	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				02/21/26	03/12/26	3.0	Submitted	murphykar	4/10/2026 12:58	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				02/22/26	03/11/26	3.0	Submitted	venezialek	4/8/2026 11:36	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				02/25/26	03/09/26	3.0	Submitted	murphykar	4/7/2026 11:43	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				02/25/26	03/12/26	3.0	Submitted	hilla	4/8/2026 13:54	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				02/28/26	03/11/26	3.0	Submitted	venezialek	4/8/2026 10:47	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				03/04/26	03/09/26	3.0	Submitted	wigginsm	4/7/2026 12:04	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				03/05/26	03/09/26	3.0	Submitted	wigginsm	4/13/2026 12:36	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				03/06/26	03/09/26	3.0	Submitted	murphykar	4/3/2026 12:14	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				03/08/26	03/11/26	3.0	Submitted	wigginsm	4/8/2026 09:42	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				03/07/26	03/10/26	3.0	Submitted	wigginsm	4/7/2026 13:01	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				03/08/26	03/11/26	3.0	Submitted	wigginsm	4/8/2026 10:49	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				03/08/26	03/11/26	3.0	Submitted	mcclellandb	4/8/2026 11:12	SUCCESS	No	Edit/View	⬇
▶	<input type="checkbox"/>				03/09/26	03/11/26	3.0	Submitted	wigginsm	4/7/2026 14:13	SUCCESS	Yes	Edit/View	⬇
▶	<input type="checkbox"/>				03/02/26	03/13/26	3.0					Yes	Edit/View	
▶	<input type="checkbox"/>				02/09/26	03/12/26	3.0					Yes	Edit/View	



PC⁴/PAC³ Submission Tool:

- Run at the end of each month to ensure all cases are submitted



❖ Data validations and utilization

21800
Twice-Daily Email
(bed management)

Infection Control
Dashboard

Validations Projects
(CPR, Mech Support,
Infections, NEC)

Cardiac SSI Dashboard

CHOP Data Dictionary

STS/IMPACT
Collaboration

Clinical Champion
Data reviews
Geoff Bird- PC⁴
Sue Schachtner- PAC³

Weekly IRR
(Case audit)

Trusted Data Lifecycle

Delivering validated, high-quality data from collection to impact



After years of development and refinement, we have confidence in this hybrid data collection model, enabling immediate use of high-quality data within the Cardiac Center.

Thank You!

Transfer of care in an adaptable acuity unit

Rady Children's Hospital,
San Diego

Jillian Clark, PA-C
Clinical Data Coordinator, PAC³



Rady Children's Hospital



- Joined PC⁴ in 2018
- Joined PAC³ in 2022
- Approximately 420 cases per year for PC⁴
- Approximately 480 cases per year for PAC³
- PAC³ Data Collector(s): Jillian Clark, PA-C
- PC⁴ Data Collector(s): Katie Nguyen, BSN, RN; Mary Luong, BSN, RN
- EMR: EPIC
- Data abstraction model: Retrospective data collection and entry into CardioAccess, prospective patient tracking in Excel (daily census and ADT reports)

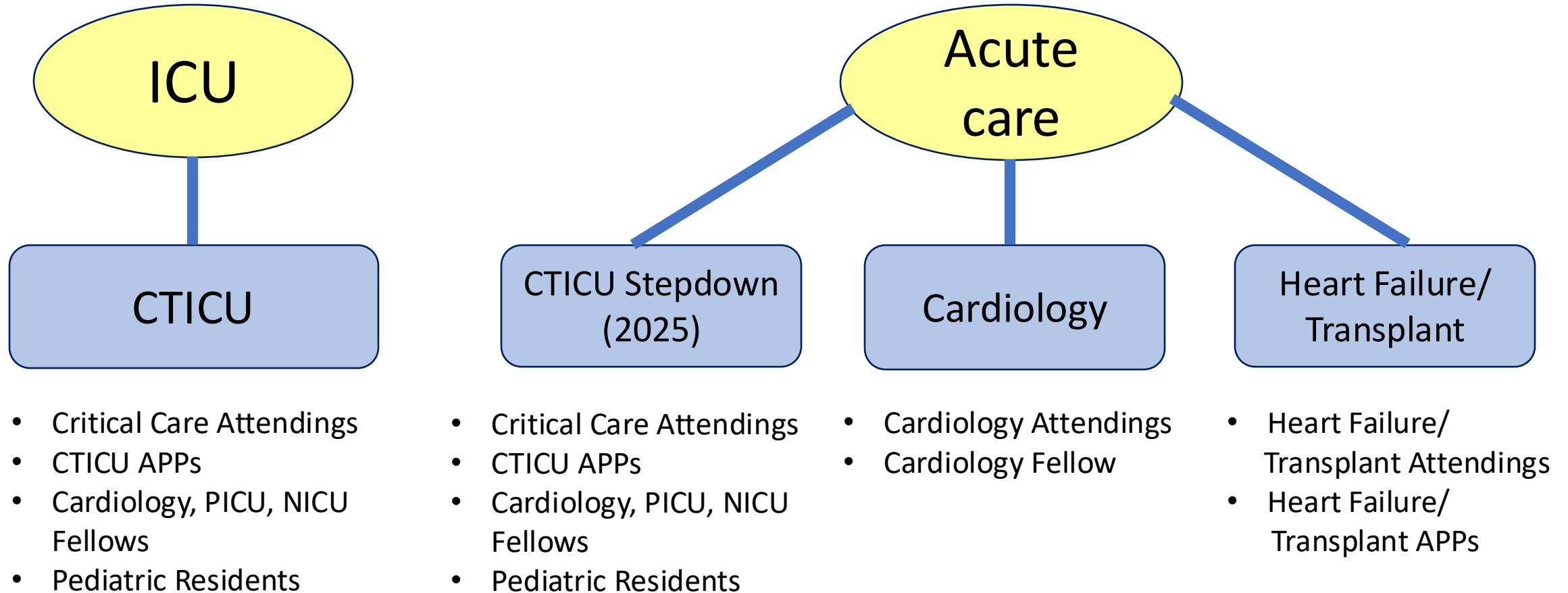


CTICU Care model

- Admit to discharge unit
- 30 adaptable acuity beds



CTICU care model



Transfer of care: 2022 – August 2025

Methods we considered:

- *Transfer to acute care at 08:00 on day of transfer – end of morning handoff meeting
- Transfer order
- To higher acuity level:
 - H&P from CTICU service
 - Reviewing EPIC for clinical change in status/treatment initiation, then adjudicating
 - *Acute event note documenting the reason for transfer, as well as date and time

CTICU/Cardiology Acute Event Note

Event type: Escalation of care
Event description:

CTICU consulted/at bedside/agreed and accepted transfer.

Date and time of transfer:

Name of transferring provider

Addition of CTICU Stepdown – August 2025



- Acute care service added to CTICU team – CTICU Stepdown
- Initiated to streamline care for post-op patients
- Cardiology service consults on Stepdown patients

Documentation:

- Stepdown status is documented by a change in title of the daily progress note
 - ICU level: “CTICU Daily Progress Note”
 - Acute care stepdown: “CTICU Stepdown Daily Progress Note”
 - Transfer of care from CTICU to Stepdown is at 08:00 on day of transfer
 - Transfer of care from Stepdown to CTICU determined by chart review and adjudication

Adaptable Acuity Challenges and Successes



Rady
Children's
Health

Challenges

- Documentation challenges
 - Cannot filter notes by service
 - Manual documentation of acuity level = manual review/data abstraction
 - Adjudicating more often
- Acuity assignment challenges
 - No handoff to another team

Successes

- A standardized time of transfer for ICU level acuity to acute care status
- Acute event notes with reason for transfer as well as date and time of transfer
- Timely communication within PC⁴/PAC³ teams
- Discussing acuity level at handoff meeting


Thank You!





Photo Time!

Please assemble up by the screen. Zoom participants, we invite you to turn on your cameras and we'll capture as many as we can.

 *break* time

Please return at 10:15am CT.

Site Share Part II: How We Do the Work

Moderators: Jennifer Epstein & Jordan Novack



Site Share Part II: How We Do the Work



Allysa Gornall, BSN, RN, CCRN-K
Orlando Health Arnold Palmer
Hospital for Children



Catherine Dimes, RN, BSN, CPN
Nationwide Children's Hospital



Marissa Yetzer, RN, BSN, CPN
Nationwide Children's Hospital



Jennifer Root, RRT
University of Michigan Health –
C.S. Mott Children's Hospital

Small Center, Big Data

Allysa Gornall, BSN, RN, CCRN-K

Orlando Health Children's Heart Institute

- Joined PC⁴ in 2018
- Joined PAC³ in 2020
- Approximately 250 cases per year for PAC³
- Approximately 170 cases per year for PC⁴
- Care model/beds: 16 bed unit with a flexible acuity model
- PC⁴ and PAC³ Data Collector: Allysa Gornall
- Data abstraction model: Primarily a prospective data collection model

Orlando Health Arnold Palmer Hospital for Children



- Freestanding children's hospital with 158 beds
- Regional Level 1 Pediatric Trauma Center
- "Umbilical cord" connects Arnold Palmer Hospital to Winnie Palmer Hospital for Women and Babies
- Regional Perinatal Intensive Care and Level IV NICU delivering around 15,000 babies per year
- 142 NICU beds
- ANCC Magnet designation since 2013

Orlando Health Children's Heart Institute



- 16 bed mixed-acuity unit
- All nursing staff is cross-trained
- Acute care/step-down patients are cared for by the same providers as ICU patients
- As patients progress and de-intensify the bed space and care team do not change
- This care model is a blessing and a curse 😊

A Day in the Life of a Data Collector

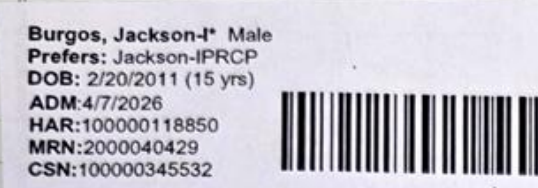



- I work fully on-site
- APH is an Epic/Intelerad (Lumedx) site
- Monday morning is to review the admissions and discharges from the weekend
- 7am review the events of the evening before
- 9am rounds in the unit
- Afternoons data entry, pulling reports, responding to data requests, meetings, etc.
- Review diagnoses and complications with Clinical Champions either in person or via email

Enter as we go....

- Each morning grab the Patient ID label for any new or transferred patients
- During rounds initiate the hospitalization and encounter in ApolloLX
- If a surgical encounter, cross-populate what has been entered by the STS data collector and complete additional fields as needed
- Enter the initial respiratory support and lines
- As rounds progress update each patient
 - Extubated
 - Lines pulled
 - New chest tubes

Manual data collection

- Use Patient Identification Label and place on ledger sheet
- Columns for admission, transfer and discharge
- Column for respiratory support
- Column for access
- Final column is for weight, height, final chest tube removal date and time and complications
- Pacemaker, ECMO, effusions, non-cardiac surgeries, etc.

		ADT	Resp	Lines	Complications	
1	 <p>Burgos, Jackson-I* Male Prefers: Jackson-IPRCP DOB: 2/20/2011 (15 yrs) ADM:4/7/2026 HAR:100000118850 MRN:2000040429 CSN:100000345532</p>	ICU 1/27 1640 Cath 1/28 1228 SD 1/31 0918	ETT 1/27-1/29 HFNC 1/29-1/30	IJ CVL 1/27-1/31 Rad AL 1/28-1/29	Bronch	
2						
3		1234				54Kg/178.5cm
4						
6	 <p>Aneri, TylerTwo-P* Male Prefers: TylerTwo-PICURN DOB: 4/6/2010 (16 yrs) ADM:4/6/2026 HAR:100000118438 MRN:318000002 CSN:100000344871</p>	ICU 1/29 1318 OR 1/31 1426 DSC 2/2 0925	ETT 1/31 - 2/5 CPAP 2/5-2/6 HFNC 2/6-2/7	UVC 1/29-2/2 Fem CVL 1/31 Rad AL 1/31-2/6	SVT/propranolol L VCP 2/7	
7						
8		1237				CT 2/6 1154 3.5Kg/49.5cm
9	 <p>Asiago, Mark-PICU* Male Prefers: Mark-PICURN DOB: 4/7/2020 (6 yrs) ADM:4/7/2026 HAR:100000119828 MRN:318000204 CSN:100000347303</p>	ICU 2/3 1840 SD 2/8 1015	HFNC 2/3-2/7	UE PICC 2/3	PI effusion 2/3 + BC 2/3	
10		2/11/26				
11		C				
14	 <p>Asiago, Mark-PICU* Male Prefers: Mark-PICURN DOB: 4/7/2020 (6 yrs) ADM:4/7/2026 HAR:100000119828 MRN:318000204 CSN:100000347303</p>				CT 2/7	
15		1239	D/C 2/8 1720			14Kg/78cm
16	V					

Finalizing data entry

- After discharge, each encounter receives another review, discharge summary, complications, discharge meds for PAC³
- If I have done my job well, I usually only need to enter the encounter end date and time and final weight and length and disposition
- I check that the validation is clean and make a note of it
- Every other week I submit the encounters that have reached greater than seven days from discharge
- Final step is to verify each encounter's presence in the Arbormetrix database

Data in Action

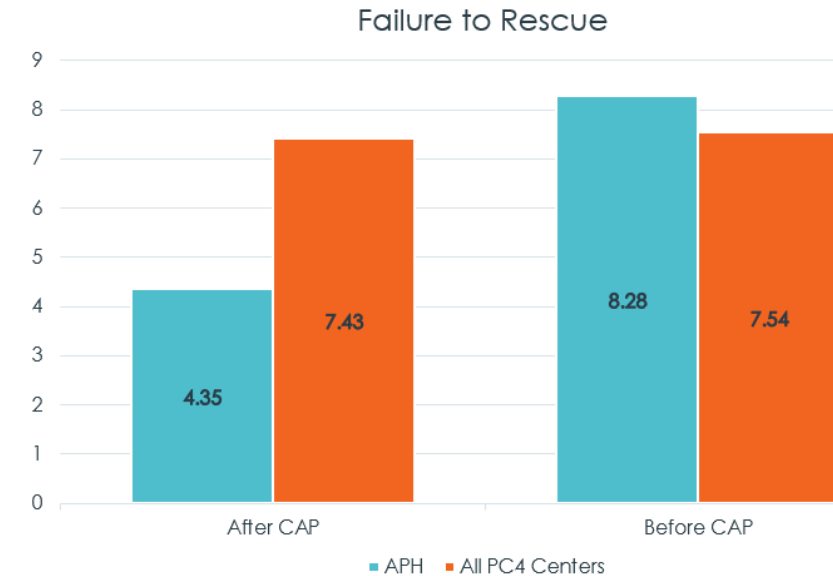
- Recent rollout of Cardiac Arrest Prevention Bundle
- Utilizing our data in Arbormetrix we were able to show to our staff the 47.5% reduction in the Failure to Rescue metric
- Update staff via staff meetings and our unit GEMBA board
- This provided positive feedback and reinforcement to the team that their efforts were paying off!

CAP Bundle Rollout

The Failure to Rescue metric measures how often patients who develop complications subsequently die from those complications.

This represents a 47.5% reduction!

Keep up the amazing efforts!

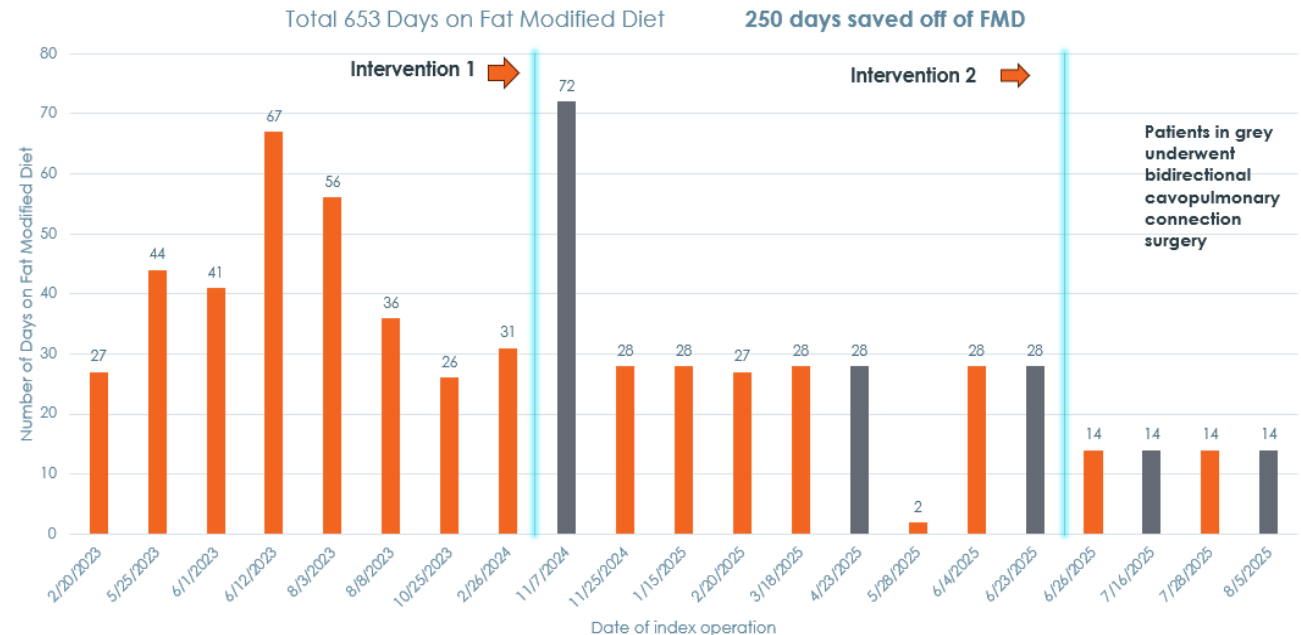


Improved Patient Outcomes

- Participated in the CNU Chylothorax Project
- Using our data in Arbormetrix allowed us to see we had been inconsistent in the duration of the fat-modified diet in patients with chylothoraces
- Using the guidelines we developed during the project we were able to reduce the time on a fat-modified diet from 42 days to 14 days without a single recurrence
- Happier patients, happier families, improved compliance and reduced length of stay= Win-Win!!

ORLANDO HEALTH

Reduction in Days on Fat Modified Diet for Post-op Chylothorax with Zero Recurrence

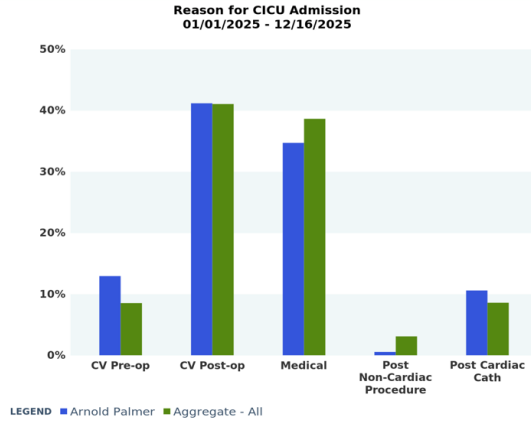


CONFIDENTIAL

Data Presentation to our Heart Center: CVICU 2025 Wrapped

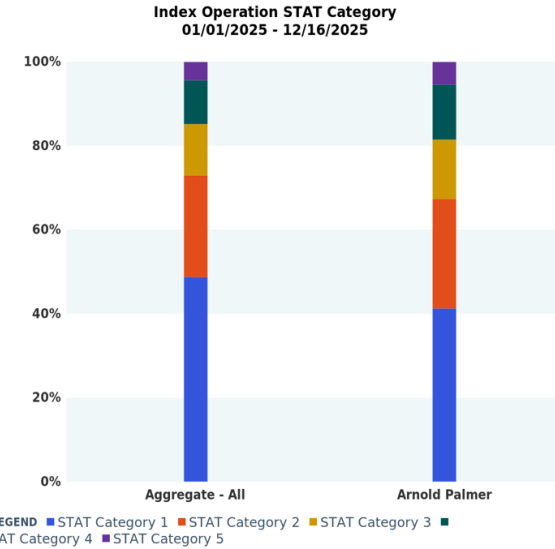
Top Genres

CV Postop 41.2%
 Medical 34.7%
 CV Preop 12.9%
 Post Cath 10.6%
 Post other procedure 0.6%

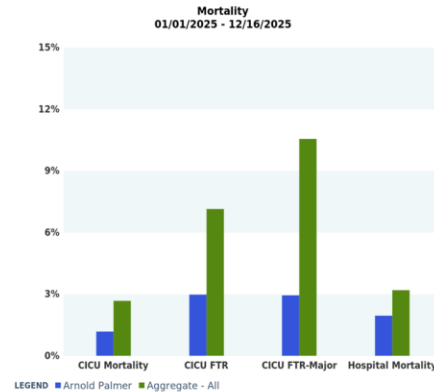


Our "Greatest Hits"

Stat 5 cases 5.4%
 Stat 4 cases 13%
 Stat 3 cases 14%
 Stat 2 cases 26%
 Stat 1 cases 41%



This is how we stacked up against all PC4 centers across the country this year.



Created a 15-page PowerPoint to share with administration and all members of the Heart Center to showcase what 2025 looked like in the CVICU

One Person Manual Show in a Spreadsheet World

Pros:

- Consistency
- No overlapping or delegation of responsibilities
- My process is what works for me
- Collecting for both registries sometimes eliminates redundancies
- Still maintain accuracy 2025: Audits for both PC⁴ and PAC³ with 99.4 and 98.6 percent accuracy

Cons:

- Consistency
- Vacations
- If I need help, I do not have a counterpart to answer questions
- Manual process is open to potential errors

Thank You!



Nationwide Children's Hospital

Catherine Dimes, RN, BSN, CPN

Marissa Yetzer, RN, BSN, CPN



NATIONWIDE
CHILDREN'S®



About us



Catherine Dimes, RN, BSN, CPN

Performance Improvement Coordinator

PC⁴ and IKDR Data Manager

Nationwide Children's Hospital CTICU

- * RN for 29 years
- * Data manager since 2010, full time since 2018
- * Worked on Burns/trauma, PICU and CTICU

Marissa Yetzer, RN, BSN, CPN

Performance Improvement Coordinator

PAC³ Data Manager

Nationwide Children's Hospital Cardiac Step-Down

- * RN for 9 years
- * Data manager since 2022
- * Worked on Cardiac Step-down unit

- NCH has 20 CTICU beds and 24 dedicated Cardiac Step-down beds
- Joined PC⁴ in 2018 and have approximately 645 cases per year
- Joined PAC³ in 2019 and have approximately 800 cases per year
- CardioAccess and Epic Center



The Ins and Outs of PC⁴ at NCH

Catt Dimes



Data Abstraction Process

Getting Started

- ◇ *Run weekly ADT reports of all admissions, transfers and discharges in Epic: eliminating overflow patients and those who do not meet the inclusion criteria (i.e. CT placement)*
- ◇ *Update patient list with new hospital discharges*
- ◇ *Add patients to case list or create a case form in order of hospital discharge: organizes cases in the order to work on*



Keeping Track

Patient List



Color coded for:

- Submitted cases
- 30d Discharge completed
- Case form started/ case form completed for encounter
- Case entered into CardioAccess awaiting STS/ IMPACT to enter data
- Cases with questions sent to MD or Clinical Champion
- Patients that do not meet PC4 inclusion criteria

Notes from:

- CTICU Sign out
- Case Management Conference
- Charm calls
- Date of MD email reply (kept in separate folder)

Keep track of:

- Time case took to complete
- Date started/ ended data collection
- Date 30d discharge complete
- Difficulty to complete case

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
		Awaiting D/C	Case Submitted	30 days Complete	Waiting on STS/IMPACT	Not included	Questions/MD						Y416												
Case #	PC4 ID#	Registry ID#	Name	MRN	CTICU Admit Date	Admitted from CTICU D/C Date	Transferred to Hospital D/C	30 Day Who	Submitted	Notes	Time	Date Started	Date Submit	Date 30d	Easy/Mediu	Notes after d/c									
3153	3194 (2)	15432	Poppins, Mary	456789	12/24/2025	ED	12/24/2025	OSH	12/24/2025	Y	Catt	Y	60	1/5/2026	1/5/2026	2/10/2026	Easy								
3154	3197 (5)	15060	Kitty, BG (Hello)	567890	12/24/2025	OSH	12/27/2025	NICU	12/30/2025	Y	Catt	Y	35	1/7/2026	1/7/2026	2/10/2026	Easy								
3155	3415	15391	Bear, Yogi	678901	12/26/2025	ED	12/31/2025	H4A	2/16/2026		Catt	Y415	*125	2/4/2026	2/18/2026		Medium	VSD, ASD, resp distress (rhino +ve 2wk ago -> now HF), BIPAP-> HFNC; OR planned							
3156	3200 (6)	8932	Lightyear, Buzz	789012	12/27/2025	CL	12/28/2025	H4A	12/31/2025	Y	Catt	Y	20	1/7/2026	1/7/2026	2/10/2026	Easy								
3157	3318	15236	Coyote, Wile E.	890123	12/28/2025	PICU	1/5/2026	H4A	1/14/2026	Y	Catt	Y	55	1/20/2026	1/20/2026	2/22/2026	Easy								
3158	3234 (15)	12382	Simpson, Bart	901234	12/29/2025	H4A	1/8/2026	H4A	2/14/2026		Catt	Y	45	2/20/2026	2/20/2026		Easy	AVC, CL1/3 balloon stent							
3159	3209	15350	Nancy, Fancy	741085	12/30/2025	ED	2/3/2026	H4A	2/12/2026	Y	Catt	Y	240	2/16/2026	2/18/2026		Complex	(3+ inotropes, notes)							
		2026																							
3160	3321	8424	Shortcake, Strawberry	410852	1/5/2026	OSH	1/12/2026	Morgue	1/12/2026	Y	Catt	Y	140	1/14/2026	1/14/2026	1/14/2026	Medium								
3161	3204 (7)	11143	Runner, Road	108529	1/14/2026	C.OR	1/15/2026	H4A	1/18/2026	Y	Catt	Y	25	1/19/2026	2/3/2026		Easy								
3162	3205 (8)	15383	George, Curious	852963	1/15/2026	C.OR	1/16/2026	H4A	1/20/2026	Y	Catt	Y	25	2/4/2026	2/4/2026		Easy								
3163	3206 (9)	15422	Monster, Cookie	529637	1/15/2026	ED	1/17/2026	H4A	1/20/2026	Y	Catt	Y	30	2/4/2026	2/4/2026		Easy	TOF, cyanotic episode at home, R/E+ve but more over circulated (diuretics started)							
3164	3416	15391	Bear, Yogi	678901	1/16/2026	H4A	1/20/2026	H4A	2/16/2026		Catt	Y415	*125	2/4/2026	2/18/2026		Easy								
3165			Frog, Kermit The	296374	1/16/2026	H4A	1/16/2026	H4A										CT Placement							
3166	3228 (14)	15352	Pan,BB (Peter)	963741	1/17/2026	OSH	1/27/2026	H4A	2/2/2026		Catt	Y	95	2/9/2026	2/9/2026		Medium								
3167			Snapo, Severus	637410	1/17/2026	PICU	1/26/2026	PICU										LV dysfunction (viral myocarditis), int; ext1/20, mil off1/22; ?arrhythmia emailed Brittany 1/25							
3168	3219 (11)	14051	Llama, Llama	374108	1/19/2026	CL	1/20/2026	H4A	1/26/2026		Catt	Y	25	2/4/2026	2/4/2026		Easy								
3169	3218 (10)	15386	Boop, Betty	159263	1/20/2026	C.OR	1/21/2026	H4A	1/22/2026		Catt	Y	20	2/4/2026	2/4/2026		Easy								
3170	3539	6305	Longstocking, BG (Pippi)	592637	1/20/2026	NICU	1/27/2026	NICU										T21, trach/GT, C.OR VSD repair 1/21, mil off1/24							
3171			Bear, Paddington	263748	1/20/2026	H4A												Failing fontan, mil, esmolol off1/23 (Afib), tx eval; OR1/24-VAD, int; (1/30) pleural effusion ->CT; Notes							
3172	3213	13534	Panther, Pink	926374	1/20/2026	H4A	1/21/2026	H4A	2/12/2026		Catt	Y413	*165	2/16/2026	2/16/2026		Easy								
3173			Flintstones, Pebbles	637481	1/21/2026	C.OR	1/24/2026	H4A										Easy							
3174	3222 (13)	12833	One, Thing	374815	1/21/2026	C.OR	1/23/2026	H4A	1/29/2026		Catt	Y	30	2/6/2026	2/6/2026		Easy								
3175	3220 (12)	12834	Two, Thing	374816	1/22/2026	C.OR	1/23/2026	H4A	1/27/2026		Catt	Y	20	2/4/2026	2/4/2026		Easy								
3176	3417	15391	Bear, Yogi	678901	1/24/2026	C.OR	1/26/2026	H4A	2/16/2026		Catt	Y415	*125	2/4/2026	2/18/2026		Easy								
3177	3214	13534	Panther, Pink	926374	1/25/2026	CL	2/1/2026	H4A	2/12/2026		Catt	Y413	*165	2/16/2026	2/16/2026		Easy								
3178			Holmes, Sherlock	543925	1/28/2026	ED																			
3179			Finn, Huckleberry	457812	1/30/2026	C.OR	2/1/2026	H4A	2/17/2026		Catt							unrepair TOF, vascular ring, Covid +ve, BIPAP -> HFNC							
3180		3150	Pig, Peppa	463152	1/30/2026	OSH	2/2/2026	H4A	2/17/2026		Catt														
3181			Granger, BG (Hermione)	951753	2/2/2026	NICU	2/4/2026	NICU	2/26/2026		Catt														
3182			White, Snow	946235	2/3/2026	C.OR	2/4/2026	H4A																	
3183		*3099,3132	Bird, Big	852963	2/3/2026	H4A																			

Notes

	A	B	C
1	Brown, Charlie	345678	OHT1/5, Ca, Vaso, Isopril, epi; paced initially from OR, ECMO, SVT paced post op, start CRRT; returned to OR for bleeding, decann1/14, chest left open, closed1/16 and ext, Afib 2/1-paced(still2/18), drug infusion, CSO2/6-Cath returned intub, bronch, remains on CRRT; self ext2/8, reintub later; CT, Cath&Bronch-2/12, still Vaso2/13, trach/GT2/16; 2/16-amioderone gtt, paced2/17, permanent dialysis cath placed, CRRT off 3/1, narc wean, trach; vent/HFNC alternating, CRRT/HD cont.; trach collar3/2, hemodialysis; HME day/ vent night
2	Bear, Paddington	263748	CPRI/31, seizure1/31, CRRT2/1; ext to BiPAP, epi off2/8, CRRT off2/9; HFNC, mil off2/11
3			
4			
5			
6			
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18			
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20			
21			
22			
23			

Case List Possible Mtg Pts **Notes** +

◆ Additional notes for complex or long-term patients

Possible Meeting Patients

	A	B	C	D
	Name	MRN	D/C Date	Criteria Met
1				
2	Duck, Daffy	357689	12/14/2025	ICU>14d
3	Bedelia, Amelia	325684	12/20/2025	Mult. C ICU encounters, VAD, ICU>14d
4	de Vil, Cruella	58264	12/21/2025	Arrest, CL, ICU>14d
5	Shortcake, Strav	410852	1/12/2026	Mortality
6	Coyote, Wile E.	890123	1/14/2026	STAT5
7	Brown, Charlie	345678		OR/CL, ICU>14d, arrest
8	Bear, Paddingto	263748		VAD, arrest, ICU>14d
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				

Case List **Possible Mtg Pts** Notes +

◆ Patients meeting criteria to discuss at our monthly Registries Meeting; includes STS, IMPACT, PC⁴ and PAC³ data champions

Case List



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Case #	PC4 #	Registry #	Time	Name	MRN	CICU Admit	Admit From	CICU D/C	Transfer To	Hospital D/C	Notes	Admission Notes		
2	3153	3194	15432	60	Poppins, Mary	456789	12/24/2025	ED	12/24/2025	OSH	12/24/2025	No longer meets endocarditis criteria			
3	3151	3195	1582	20	Bunny, Bugs	234567	12/23/2025	C.OR	12/24/2025	H4A	12/27/2025				
4	3150	3196	3375	20	Mouse, Mickey	123456	12/22/2025	C.OR	12/23/2025	H4A	12/29/2025				
5	3154	3197	15060	35	Kitty, BG (Hello)	567890	12/24/2025	OSH	12/27/2025	NICU	12/30/2025				
6	3156	3200	8932	20	Lightyear, Buzz	789012	12/27/2025	CL	12/28/2025	H4A	12/31/2025				
7	3161	3204	11143	25	Runner, Road	108529	1/14/2026	C.OR	1/15/2026	H4A	1/18/2026	Emailed JenS. 1/19, ?LCOS			
8	3162	3205	15383	25	George, Curious	852963	1/15/2026	C.OR	1/16/2026	H4A	1/20/2026				
9	3163	3206	15422	30	Monster, Cookie	529637	1/15/2026	ED	1/17/2026	H4A	1/20/2026		TOF, cyanotic episode at home, R/E+ve but more over circulated (diuretics started)		
10	3169	3218	15386	20	Boop, Betty	159263	1/20/2026	C.OR	1/21/2026	H4A	1/22/2026				
11	3168	3219	14051	25	Llama, Llama	374108	1/19/2026	CL	1/20/2026	H4A	1/26/2026				
12	3175	3220	12834	20	Two, Thing	374816	1/22/2026	C.OR	1/23/2026	H4A	1/27/2026				
13	3174	3221	12833	30	One, Thing	374815	1/21/2026	C.OR	1/23/2026	H4A	1/29/2026				
14	3166	3228	15352	95	Pan, Peter	963741	1/17/2026	OSH	1/27/2026	H4A	2/2/2026	Time on birth info, genetics			
15	3158	3234	12382	45	Simpson, Bart	901234	12/29/2025	H4A	1/8/2026	H4A	2/14/2026		AVC, CL1/3 balloon stent		
16	3179				Finn, Huckleberry	457812	1/30/2026	C.OR	2/1/2026	H4A	2/17/2026		unrepair TOF, vascular ring, Covid +ve, BiPAP -> HFNC		
17	3180				Pig, Peppa	463152	1/30/2026	OSH	2/2/2026	H4A	2/17/2026				
18	3181				Granger, BG (Hermione)	951753	2/2/2026	NICU	2/4/2026	NICU	2/26/2026				
19															

◇ Working case list

- Organized by hospital discharge date
- Includes patients who do not require a case form
- Marked yellow when submitted and green when 30d discharge is completed



Digital Case Form

- ◇ Used for complex or long-term patients
- ◇ Filled in text or boxes are red
- ◇ Top of form has:
 - PC⁴ encounter #
 - CardioAccess ID#
 - Patient list case # (and any others during the same hospitalization)
 - Notes from the Patient list



PC⁴ v.3 Form **3415 15391** (3155),3164,3176 VSD, ASD, resp distress (rhino +ve 2wk ago -> now HF), BIPAP-> HFNC; OR planned

Patient Information

MRN **678901** Name: **Bear, Yogi**

Date of Birth: Click Gender: Male Female Ambiguous

Deceased: Yes No Date of death: Click or tap here to enter text.

Mother's Information

Mother's Name: Click or tap here to enter text.

Race / Ethnicity

Race: Caucasian Black/African Am Native American
 Asian Pacific Islander/Hawaiian Other

Hispanic/Latino Ethnicity: Yes No Not documented

Birth Information

Birth State/Country: Click Birth zip code: Click

Birth weight: Click Birth length: Click Born at NCH: Yes No

Birth head circumference: Click

In-vitro fertilization: Yes No Unk Antenatal Diagnosis of CHD: Yes No Unk

Gestational age: Click Premature birth: Yes No Unk

Fundamental Diagnosis and Congenital Anomalies

Fundamental cardiac diagnosis: **VSD, ASD**

Extracardiac abnormalities: Click or tap here to enter text.

Chromosomal abnormalities: Click or tap here to enter text.

Syndromes: Click or tap here to enter text.

Hospitalization

Hospital admission date: **12/26/2025** Time: **04:23**** Country of residence: Click

Primary insurance type: Public Private Non-US Insurance None/Self

Initial length: Click Initial weight: Click

Cardiothoracic surgery: Yes No Cardiac catheterization: Yes No

Encounter

CICU start date: **12/26/2025** Time: **04:23**

CICU end date: **12/31/2025**

CICU discharge date: **12/31/2025** Time: Click

Planned: Planned Unplanned

Reason for encounter:

Preop CT surgery Pre cath Post non-cardiac procedure

Postop CT surgery Post cath Anticoagulation

Medical condition Evaluation of heart ICU overflow

Non-CT postop Surgery: Click or tap here to enter text.

Current surgical status:

Never had CT surgery S/P aortopulmonary shunt

S/P stage I- Norwood S/P stage I- Hybrid S/P stage II S/P stage III

S/P other 1V surgery S/P 2V surgery S/P heart tx S/P thoracic surgery

Encounter medical dx: **Acute HF**

CT dx: Click or tap here to enter text.

Source of CICU admission:

Home

Current Hospital Clinic OR-cardiac Delivery suite

ED OR-general NICU

Ward-cardiac Cath lab PICU

Ward-non cardiac PACU/procedure suite

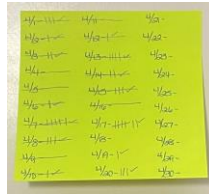
Timely Data Submission

◇ *Who covers me while I'm away?*

- No one

◇ *How do I stay on time or catch up?*

- Post-it note with discharges



- Enter cases in order of hospital discharge, beginning with the case forms then the easier case list
- Start case forms for complex patients (long CICU stay or multiple complications)
- Update case forms if patient is still in the CICU
- Enter easier patients awaiting hospital discharge into CardioAccess (but do not submit until discharged)
- Start cases on short-term patients still in the CICU
- Don't panic!!! Slow and steady wins the race



Nuts and Bolts of PAC³ at NCH

Marissa Yetzer




PAC³ Data Abstraction Process







- Run Weekly Patient Reports of PAC³
Eligible Patients: eliminate off-service patients, <24-hour cath admissions, bounce backs from PACU (one encounter)--using color coded system
- Organize patient list by discharge date in efforts to achieve timely submission goal of 30+7 days of discharge
- Begin data collection on patients discharged first from the weekly patient report

Name	MRN	Attending	Eff Date	Eff Time	From Unit	From Room	From Bed	From Service	To Unit	To Room
Brown, Charlie	410852	Salavk, Tony, MD	02/10/2026	11:10 AM	PERIOPERATIVE SERVICES	PERIPOOL	NONE	CAR	H04A	04A008
01		CAR								
Duck, Daffy	356985	Black, Mallory, MD	02/10/2026	03:37 PM	H04A	04A011	01	CAR	H04B	04B046
01		CAR								
Mouse, Mickey	569845	Hugh, Emmet, MD	02/10/2026	05:08 PM	H04B	04B044	01	CIC	H04A	04A021
01		CAR								
Llama, Llama	987533	Taylor, Brant, MD	02/10/2026	07:02 PM	H04B	04B046	01	CAR	H04A	04A011
01		CAR								
One, Thing	562148	Stick, Emily, MD, PhD	02/10/2026	05:02 AM	EMERGENCY DEPARTMENT MAIN CAMPUS	GRN041	41	EMR	H04A	04A018
01		HOS								
Bunny, Bugs	286244	Valentine, Kristen, MD	02/10/2026	02:28 AM	EMERGENCY DEPARTMENT MAIN CAMPUS	ORG020	20	EMR	H04A	04A022
01		INF								
White, Snow	112356	Levin, Katie, MD	02/11/2026	01:59 AM	EMERGENCY DEPARTMENT MAIN CAMPUS	ORG022	22	EMR	H04A	04A023
01		CAR								

Electronic Patient Form

- Each patient has a form that includes major data fields
- Large note section:
 - *Major Complications*
 - *Infections*
 - *Medications*
 - *Questions for Clinical Champion*
- Saved to folder organized by weekly patient report
- Easy to search encounter by patient ID
- Ability to highlight important events and when patient case is completed
- Collect data on form, then transfer to CardioAccess

Patient ID: _____	Event # _____	
Language: _____	Insurance: _____	
 PEDIATRIC ACUTE CARE CARDIOLOGY COLLABORATIVE Data Collection Form v1.0		
Patient Name: _____		
MRN: _____	Notes: _____	
Hospital Admit Date/Time: _____		
Weight: _____		
Height: _____		
Feed Route: _____		
Surgery: Yes No	Cath: Yes No	
Notes: _____		
Hospital Discharge Date/Time: _____		
Weight: _____		
Height: _____		
H4A Admit Date/Time: _____	H4A Discharge Date/Time: _____	
From: _____	To: _____	
Weight: _____	Weight: _____	
Height: _____	Height: _____	
Lines: _____		
Final CT: _____		
7 Day Readmit	Encounter: _____	30 Day Readmit

-  7.4-7.10
-  7.11-7.17
-  7.18-7.24
-  7.25-7.31
-  8.1-8.7
-  8.8-8.14

Tracking Cases



- ❑ *Separate Excel Sheet that includes:*
 - Amount of time spent on patient cases
 - Case difficulty level and reason
 - Number of cases collected during workday



Backlog: Closing the Gap

- |Oreo effect|: complete most recent discharges and then discharges >30 days
- Recruit help from contingent staff when able to assist with workload and increase timeliness
- Alternate between difficult and more straightforward cases to reduce burnout and increase timeliness
 - It's not easy, but you can do it!!



Collaboration Among Registries at NCH

- Continuous open communication about cases with team
- Monthly Registry Meetings including our team of data managers from PC⁴, PAC³, STS, and IMPACT



Month	Mortalities	Stay >14 days	STAT 5/ OHT	Cath/OR	Re-op
November	Poppins, Mary 456987	Poppins, Mary 456987 (ICU>14d) Mouse, Mickey 123456 (ICU >14d, ECMO/VAD)	Two, Thing 3578895	Llama, Llama 365894	Mouse, Mickey 123456
December		George, Curious 857659 (ICU>14d, cardiov) Boop, Betty 456852 (ICU>14d, mult encounters)	Simpspon, Bart 3462897 (OHT) Pan, Peter 323140 (OHT)	Pig, Peppa 564218 (Hybrid) Lightyear, Buzz 521477 Mouse, Mickey 123456	

PC⁴ and PAC³ in QI, Research and Projects at NCH



- ◇ *PROMISE/ CHARM Pathways*- PC⁴ Failure to Rescue rates identified a higher-than-expected rate at NCH despite having an established system (PROMISE-PROactive Mitigation to decrease Serious adverse Events), a high-risk pathway multidisciplinary team QI project updated the PROMISE pathway and created the CHARM (Comprehensive Heart Assessment Review of Management) pathway.
- ◇ *Interpreter QI Project*- PC⁴ and PAC³ admission data is being used for a QI project looking at how many interpreter services were used over the days no-English speaking patients were on the unit and if an interpreter was used when a parent was at a bedside during an ACT/Code.
- ◇ *CTICU Pathway to Home*- Project to help increase parent satisfaction and communication. Similar to the PC⁴ project Targeted Based Care, our PC⁴ data was used to identify our most common surgeries and average length of time intubated, ICU LOS and hospital LOS for each procedure. A form was designed the bedside nurse would complete when a surgery date was determined. This project was an addition to the Pathway to Home project on the Cardiac Step-down unit that created a checklist for parents with expected benchmarks the family and patient must accomplish prior to discharge.
- ◇ *M&M Benchmark Outcomes*- Each month at our M&M conference PC⁴ benchmark outcomes over the last 12 months are shared.
- ◇ *QI Score cards*- PC⁴ data is used for the CTICU score cards and PAC³ data is used for the step-down unit score cards.



Thank You!



PC⁴/PAC³ Patient Tracking & Submission

Jennifer Root, RRT

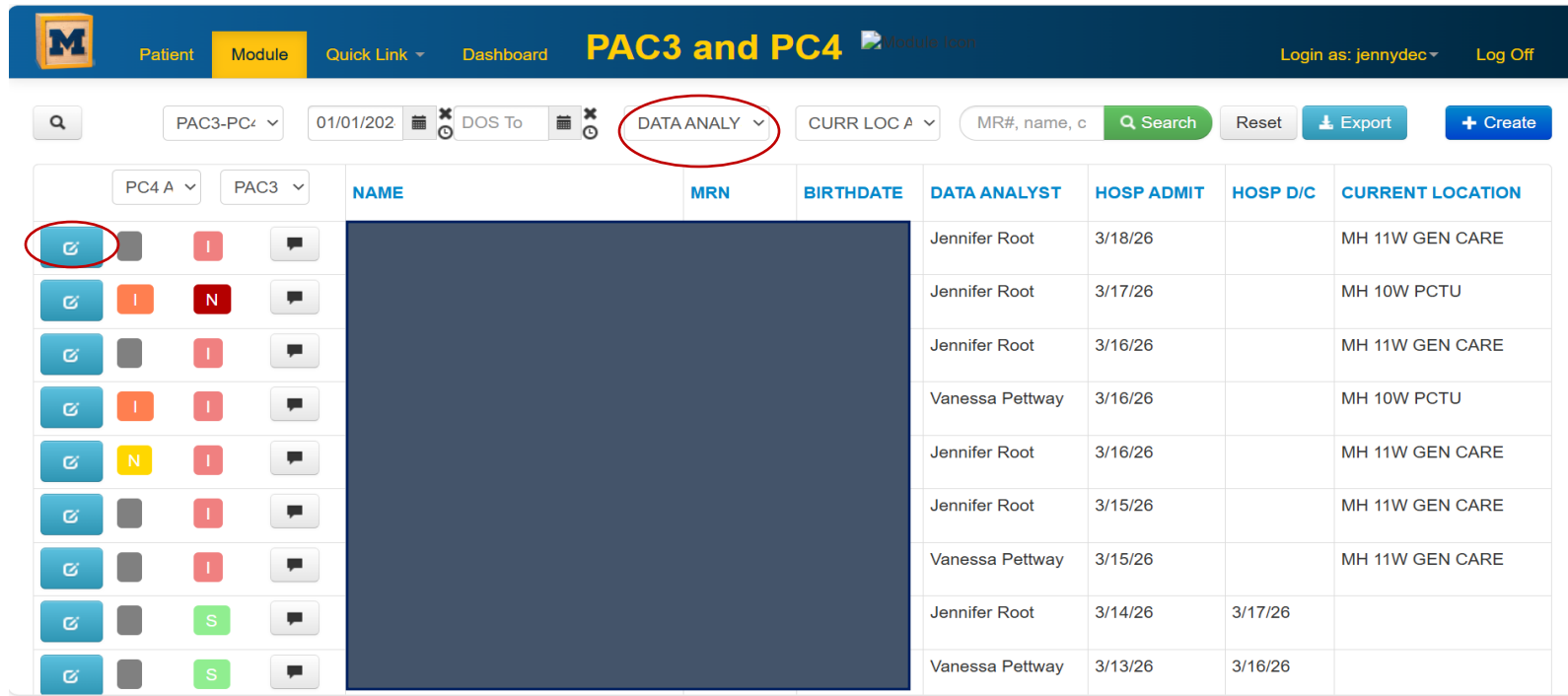
C.S. Mott Children's Hospital






























- Joined PC⁴ in 2009
- Joined PAC³ in 2019
- Approximately 900 cases per year for PAC³
- Approximately 600 cases per year for PC⁴
- Care model/beds:
 - 32 bed Acute Care Cardiology Unit
 - 21 bed CICU
- PAC³ & PC⁴ Data Collectors: Jenny Root and Vanessa Pettway
- Data abstraction model: Prospective

Patient Tracking

- Case Review Module



	PC4 A	PAC3	NAME	MRN	BIRTHDATE	DATA ANALYST	HOSP ADMIT	HOSP D/C	CURRENT LOCATION
						Jennifer Root	3/18/26		MH 11W GEN CARE
						Jennifer Root	3/17/26		MH 10W PCTU
						Jennifer Root	3/16/26		MH 11W GEN CARE
						Vanessa Pettway	3/16/26		MH 10W PCTU
						Jennifer Root	3/16/26		MH 11W GEN CARE
						Jennifer Root	3/15/26		MH 11W GEN CARE
						Vanessa Pettway	3/15/26		MH 11W GEN CARE
						Jennifer Root	3/14/26	3/17/26	
						Vanessa Pettway	3/13/26	3/16/26	

Patient Tracking: Admissions

M Patient Module Quick Link - Dashboard **PAC3 and PC4** Login as: jennydec - Log Off

PAC3-PC 01/01/2021 DOS To Jennifer Root **MH 10W PCT** MR#, name, c Search Reset Export Create

PC4 A	PAC3	NAME	MRN	BIRTHDATE	DATA ANALYST	HOSP ADMIT	HOSP D/C	CURRENT LOCATION
					Jennifer Root	3/17/26		MH 10W PCTU
					Jennifer Root	3/13/26		MH 10W PCTU
					Jennifer Root	3/10/26		MH 10W PCTU
					Jennifer Root	3/10/26		MH 10W PCTU
					Jennifer Root	3/4/26		MH 10W PCTU
					Jennifer Root	3/2/26		MH 10W PCTU
					Jennifer Root	2/24/26		MH 10W PCTU
					Jennifer Root	12/29/25		MH 10W PCTU
					Jennifer Root	11/24/25		MH 10W PCTU

M Patient Module Quick Link - Dashboard **PAC3 and PC4** Login as: jennydec - Log Off

PAC3-PC 01/01/2021 DOS To Jennifer Root **MH 11W GEN** MR#, name, c Search Reset Export Create

PC4 A	PAC3	NAME	MRN	BIRTHDATE	DATA ANALYST	HOSP ADMIT	HOSP D/C	CURRENT LOCATION
					Jennifer Root	3/18/26		MH 11W GEN CARE
					Jennifer Root	3/16/26		MH 11W GEN CARE
					Jennifer Root	3/16/26		MH 11W GEN CARE
					Jennifer Root	3/15/26		MH 11W GEN CARE
					Jennifer Root	3/13/26		MH 11W GEN CARE
					Jennifer Root	3/11/26		MH 11W GEN CARE
					Jennifer Root	3/1/26		MH 11W GEN CARE
					Jennifer Root	2/15/26		MH 11W GEN CARE
					Jennifer Root	2/9/26		MH 11W GEN CARE

Patient Tracking: Admissions

Fundamental Diagnosis: Pulmonary atresia, VSD-MA...

2 of 2 12/29/25 I N MD Review Completion Ver Hx 🗑️

HOSP Admsn Dt: 12/29/2025 🗑️ 🕒 Hosp Disch Dt:
 PC4/PAC3 Pat ID: ██████████ PC4 Status: In Progress ▼ PC4 Submission: 🗑️ 🕒 Data Analyst: Jennifer Root ▼
 PAC3 Status: Needs Rev ▼ PAC3 Submission: 🗑️ 🕒
 Current Location: MH 10W PCTU ▼

HOSP Admsn Dt	Hosp Disch Dt	PC4/PAC3 Pat ID	PC4 Status	PC4 Submission	Data Analyst
03/18/2026 1850	MH 10E PED ICU	██████████	In Progress	🗑️	Jennifer Root
03/18/2026 1850	MH 10E PED ICU	██████████	In Progress	🗑️	Jennifer Root
03/13/2026 1636	MH 10E PED ICU	██████████	In Progress	🗑️	Jennifer Root
03/13/2026 1636	MH 10W PCTU	██████████	In Progress	🗑️	Jennifer Root
02/26/2026 1438	MH 10W PCTU	██████████	In Progress	🗑️	Jennifer Root
02/26/2026 1438	MH 10W PCTU	██████████	In Progress	🗑️	Jennifer Root
02/23/2026 2228	MH 10W PCTU	██████████	In Progress	🗑️	Jennifer Root
02/23/2026 1455	MH 10W PCTU	██████████	In Progress	🗑️	Jennifer Root
02/23/2026 1455	MH OPERATING ROOMS	██████████	In Progress	🗑️	Jennifer Root
02/23/2026 1138	MH OPERATING ROOMS	██████████	In Progress	🗑️	Jennifer Root

Comments: return from OR 2/23 @1456 chest tube out_____

Pat Enc CSN ID: 398064116 Num of PCTU: 2 Num of Ward: 1

PC4 Event ID: ██████████

Encounter Reason: Preop Cardiothoracic Surgery ▼ Encounter CT Diagnosis: Single ventricle, DILV ▼ Medical Diagnosis: None ▼ Planned Event? Yes No N/A

Encounter Type: Medical Surgical

Complications/Events: × Arrhythmia requiring therapy × Bleeding requiring reoperation × Chylothorax Requiring Intervention × LCOS × Mechanical Circulatory Support × NEC × Sternum Left Open

Corrected Encounter Time: 10/11 @1638

Analyst Comments: bleeding requiring reop: 10/13 @1900, chest opened/closed at bedside

MD Comments: + -

Analyst Comments 2: LCOS: post op 10/13 @1858 VIS=17

MD Comments 2:
 Analyst Comments 3:
 MD Comments 3:

Patient Tracking: Admissions

✖ Chylothorax Requiring Intervention
✖ LCOS
✖ Mechanical Circulatory Support
✖ NEC ✖ Sternum Left Open

Analyst Comments 2 LCOS: post op 10/13 @1858 VIS=17	MD Comments 2 [Empty]
Analyst Comments 3 chylothorax: 10/20 R CT placed, chylous effusion, started on skimmed BM feeds 10/21	MD Comments 3 [Empty]
Analyst Comments 4 open chest: opened at bedside 10/24-11/4	MD Comments 4 [Empty]
Analyst Comments 5 ECMO: bedside 10/24 @1721- 11/2 @1719 ECPR	MD Comments 5 [Empty]

03/11/2026 0840	MH CHILDRENS EMERGENCY	Patient Update	Pat Enc CSN ID	Num of PCTU	Num of Ward
03/11/2026 0614	MH CHILDRENS EMERGENCY	Admission	403203642	0	1

PC4 PAC3

PAC3 Event ID: [Redacted]

Corrected Encounter Time: 3/11 @1529

Encounter Reason: Medical Condition

Encounter CT Diagnosis: Cardiomyopathy (including dilat...)

Medical Diagnosis: Other

Planned Event? Yes No N/A

Encounter Type: Medical Surgical

Complications/Events: [Empty]

Analyst Comments: med dx: other, VAD driveline infection
VAD present on admission

MD Comments: [Empty] + -

Patient Tracking: Discharges/Submissions

PC4 A	PAC3	NAME	MRN	BIRTHDATE	DATA ANALYST	HOSP ADMIT	HOSP DIC	CURRENT LOCATION
					Jennifer Root	3/20/26	3/22/26	POST-DISCHARGE
					Jennifer Root	2/19/26	3/18/26	POST-DISCHARGE
					Jennifer Root	2/18/26	3/12/26	POST-DISCHARGE
					Jennifer Root	2/9/26	3/19/26	POST-DISCHARGE
					Jennifer Root	8/14/25	3/25/26	POST-DISCHARGE

1 of 1 3/16/26 S S

MD Review Completion Ver Hx

HOSP Admsn Dt: 03/16/2026 Hosp Disch Dt: 03/20/2026

PC4/PAC3 Pat ID: [REDACTED]

PC4 Status: Submitted (v)

PC4 Submission: 03/25/2026

Data Analyst: Jennifer Root

PAC3 Status: Submitted (v)

PAC3 Submission: 03/25/2026

Current Location: [REDACTED]

Comments: 3/25

Pat Enc CSN ID	Num of PCTU	Num of Ward
397723367	1	1

03/20/2026 1824	MH 11W GEN CARE	Discharge
03/17/2026 1207	MH 11W GEN CARE	Transfer In
03/17/2026 1207	MH 10W PCTU	Transfer Out
03/17/2026 0906	MH 10W PCTU	Patient Update
03/17/2026 0905	MH 10W PCTU	Patient Update
03/16/2026 1325	MH 10W PCTU	Transfer In
03/16/2026 1325	MH OPERATING ROOMS	Transfer Out
03/16/2026 1205	MH OPERATING ROOMS	Patient Update
03/16/2026 0607	MH OPERATING ROOMS	Admission

Data Usage

- PC⁴
 - Local research projects
 - Post-op AKI in neonates
 - Fetal outcomes in HLHS patients
 - ECMO outcomes
 - Ongoing surveillance & QI projects
 - Bi-weekly review of outcomes vs expected outcomes compared to collaborative
 - Monthly review to identify new issues
- PAC³
 - Local research projects
 - Cardiac arrest prevention on 11W
 - Morbidity and mortality review

Thank You!





Panel Discussion

Collaborative Problem Solving

Moderators: Maria-Theresa Balbin, Teresa Tobin, and Viki Haro



Collaborative Problem Solving: Panel Discussion Moderators



Maria Balbin, BSN, MPH
Children's National



Teresa Tobin, MSOD, RRT-NPS
Children's Nebraska



Viki Haro, RN, MSN, PNP
UCSF Benioff Children's Hospital

Collaborative Problem Solving Panel Discussion Add credentials

Expert Panelists



Mary Lukacs, RN, BSN
Children's Healthcare of Atlanta



Catherine Dimes, RN, BSN, CPN
Nationwide Children's



Jazmin Olvera Alonso
Children's Hospital Los Angeles



Sarah Youngberg
Primary Children's

Mary Lukacs

- Joined PC⁴ in 2015
 - Approximately 1140 cases per year for PC⁴
- Joined PAC³ in 2019
 - Approximately 1775 cases per year for PAC³
- Data abstraction model: *Hybrid but mostly retrospective*
- Data abstraction software: *Intelerad (Lumedx)*
- EMR: *Epic*
- Registries you support: *STS, PC⁴, PAC³, C3PO, PHTS, Pediperform, CCRC, CNOOC, NPC-QIC, FON, Action Network, ELSO,*

Catt Dimes

- Joined PC⁴ in 2018
 - Approximately 645 cases per year for PC⁴
- Joined PAC³ in 2019
 - Approximately 800 cases per year for PAC³
- Data abstraction model: ***Hybrid but mostly retrospective***
- Data abstraction software: ***CardioAccess***
- EMR: ***Epic***
- Registries you support: *STS, PC⁴, PAC³, C3PO, IMPACT, AATS, Pediperform, CNOOC, SV-ONE, PHTS, Action Network, ELSO, IKDR, WDPCHS, OPPE*

Jazmin Olvera Alonso

- Joined PC⁴ in 2022
 - Approximately **838** cases/963 events per year for PC⁴
 - Joined PAC³ in 2023
 - Approximately **787** cases/ 912 events per year for PAC³
 - Data abstraction model: **Hybrid but mostly retrospective**
 - Data abstraction software: **CardioAccess**
 - EMR: **Cerner**
 - Registries you support: STS, *PC⁴, *PAC³, C3PO, AATS, CCRC, CNOC, NPC-QIC, FON, PHTS, Action Network, IKDR, ELSO, Pediperform
 - Research Studies supported: MR Seq Refining and Establishment of Normal Values by Magnetic Resonance); Lymphatic Vessel Defects after Fontan; Transcatheter Fontan Stenting: Impact on Hepatic Stiffness and Exercise Capacity; Pulmonary Flow Restrictor Registry; Self Expanding RVOT Valve Evidence Registry
- * *Registries I mainly support*

Sarah Youngberg

- Joined PC⁴ in 2015
 - Approximately 600 cases per year for PC⁴
- Joined PAC³ in 2019
 - Approximately 780 cases per year for PAC³
- Retrospective data collection
- Data abstraction software: Intelerad (Lumedx)
- EMR: Switched to Epic 9/6/25, previously Cerner
- Registries you support: PC⁴ & PAC³ primarily, minor support for CNOCC

Question 1

How do you update genetics for patients after discharge?

Updating Genetics

- If documentation pending genetic testing, notate in PC⁴ roster to follow up
- Clinical Champion provides more insight during coding meeting regarding genetic work up

- Non RN/non clinical cath colleague created “pending STS” tracker for shared fields in Cardio Access for all registries to collaborate on any updates, questions and or adjudication
- If providing screenshots of source, updates also made via Teams



K	L	M	N	O	P	Q	R
Hosp DC date	Pending Field or Registry	JA/IP/BS/AS Notes/Qs	Due Date	Ruthie Notes	Status	Registry	
1/2/2026 16:51	Jazmin ST. LOUIS Pending Pt Info	Loeys-Dietz Syndrome. JA updated genetics from none to other “Heterozygous missense NM_005902.4(SMAD3):c.1161G>C (p.Gln387His) variant of uncertain significance”. JA updated ECAA from none to laryngomalacia	2/18/2026	Thanks for updating	Cardioaccess & pp Updated	PC4	



Question 2

Tell about your process for updating 30-day readmission and mortality for patients seen outside your hospital.

Updating 30-day readmission/mortality

- PAC³/PC⁴ collaboration to update any previous hospital encounters' 30d Readmission & Mortality with any NEW PC⁴/PAC³ admission
- Initiating: Healtheintent Report for **Readmissions** (using STS readmission field and Cerner data)

Children's Hospital LOS ANGELES		PC4 30-Day Readmissions			Start Date	End Date	Inpatient Readmission Within 30 Days	Patient ID
					4/8/2022	4/8/2026	Yes	(All)
Patient ..	Encounter ID	Hospitalization ID	Admit Date	Discharge Date	Readmit Admit Date	Readmit Encounter Type	Readmit Reason For Visit	Inpatient Readmissi
			1/21/2023 6:15:00 AM	2/17/2023 7:30:00 PM	2/21/2023 12:37:00 AM	Inpatient	SEIZURES	Yes
			1/21/2023 6:15:00 AM	2/17/2023 7:30:00 PM	2/21/2023 12:37:00 AM	Inpatient	SEIZURES	Yes
			12/19/2024 1:59:00 PM	12/21/2024 7:00:00 PM	1/18/2025 4:17:00 PM	Inpatient	DEHYDRATION, HEART TRANSPLANT	Yes
			5/13/2025 5:35:00 PM	5/14/2025 7:39:00 PM	5/16/2025 2:48:00 PM	Inpatient	ORAL BLEEDING	Yes
			11/28/2023 3:04:00 PM	12/23/2023 11:02:00 AM	12/28/2023 12:43:00 PM	Inpatient	R/O REJECTION	Yes
			8/26/2024 1:05:00 PM	8/28/2024 4:36:00 PM	9/1/2024 11:15:00 PM	Inpatient	CHEST PAIN, DEHYDRATION, ATRIAL FLUTTER	Yes
			3/27/2024 3:30:00 PM	4/18/2024 1:20:00 PM	4/20/2024 12:24:00 AM	Inpatient	CHEST PAIN, HEART TRANSPLANTED, SHORTNESS OF B..	Yes
			1/20/2026 11:45:00 PM	2/6/2026 6:48:00 PM	2/27/2026 1:09:00 AM	Inpatient	VOMITING, DEHYDRATION, STOOL IMPACTION	Yes

Updating 30-day mortality

- STS/PC⁴/PAC³ will update team with any OSH mortality
- Primarily use Teams Group so all are updated & source provided
- Initiating: Healtheintent Report for **30-Day Mortality** using STS 30-day follow-up date and Cerner data (Labs, notes, visit)

Children's Hospital LOS ANGELES PC4 30-Day Mortality				Start Date	End Date	30 Day Mortality Flag	Any Activity After 30 Da
				4/8/2025	4/8/2026	(All)	(All)

Encounte..	FIN	Patient ID	Hospitali..	Admit Date & Time	Discharge Date & Time	Last Followup Date	Last Followup Type	Deceased Date	30 Day Mortality Flag	Any Activity After 30
				2/7/2025 8:16:00 PM	4/23/2025 4:21:00 PM	4/1/2026 2:00:00 PM	Outpatient - 1X OP	Null	No	Yes
				2/26/2025 11:05:00 AM	10/24/2025 9:24:00 PM	10/24/2025 9:24:00 PM	Inpatient	Null	No	No
				2/15/2025 4:13:00 PM	4/11/2025 4:17:00 PM	3/23/2026 12:00:00 AM	Lab	Null	No	Yes
				10/24/2024 11:43:00 PM	8/21/2025 6:26:00 PM	2/17/2026 8:30:00 AM	Outpatient - Series Calendar Month	Null	No	Yes
				2/17/2025 11:11:00 AM	5/14/2025 3:32:00 PM	12/9/2025 12:24:00 PM	Inpatient	Null	No	Yes
				4/8/2025 6:51:00 AM	4/9/2025 12:23:00 PM	3/2/2026 9:00:00 AM	Outpatient - 1X OP	Null	No	Yes
				2/3/2025 7:43:00 AM	4/15/2025 8:07:00 PM	3/27/2026 11:00:00 AM	Outpatient - 1X OP	Null	No	Yes
				2/12/2025 6:52:00 AM	4/10/2025 3:47:00 PM	3/7/2026 2:15:00 PM	Inpatient	Null	No	Yes
				2/12/2025 6:52:00 AM	4/10/2025 3:47:00 PM	3/7/2026 2:15:00 PM	Inpatient	Null	No	Yes

Updating 30-day mortality/readmit

- Analyst created report, scheduled to run every other week
- Data pulled from Intermountain system

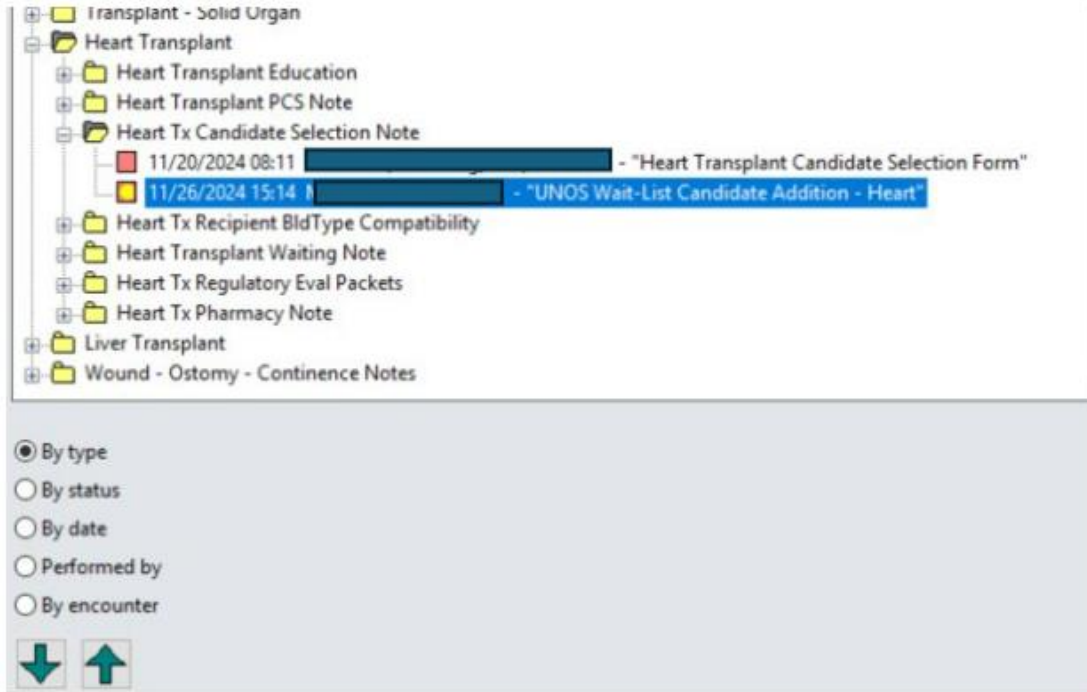
PCH PC4/PAC3 Death, Readmits List											
EMPI	ORIG_FIN	LAST_NM	FIRST_NM	BIRTH_DT	ORIG_HOSP_ADMIT_DT	ORIG_HOSP_DC_DT	DEATH_DTS	READMIT_30D_FIN	READMIT_30D_DTS	READMIT_7D_FIN	READMIT_7D_DTS
782176336	1409879107	LAST NAME 61	PATIENT 61	5/29/2025	5/29/25 16:56	6/9/25 20:24		1410860805	7/3/25 13:31		
780772319	1410125180	LAST NAME 62	PATIENT 62	9/17/2022	6/6/25 21:58	6/10/25 12:03					
780873344	1409345593	LAST NAME 63	PATIENT 63	11/29/2022	5/29/25 6:21	6/10/25 13:00					
782102459	1410155241	LAST NAME 64	PATIENT 64	6/29/2024	6/8/25 15:06	6/10/25 13:15					
782046547	1410123839	LAST NAME 65	PATIENT 65	3/2/2025	6/7/25 13:38	6/10/25 16:35	6/21/25 10:00	1399162231	6/11/25 14:13	1531062956	7/26/25 14:13
780457182	1410201825	LAST NAME 7	PATIENT 7	2/3/2022	6/8/25 22:09	6/10/25 18:55		1410959280	7/5/25 22:36		
781789757	1410160357	LAST NAME 34	PATIENT 34	8/30/2024	6/8/25 13:36	6/11/25 12:35					
781982564	1410217816	LAST NAME 16	PATIENT 16	1/16/2025	6/9/25 17:49	6/11/25 12:55		1410139727	6/14/25 10:52	1542040452	7/29/25 10:52
781958838	1409605043	LAST NAME 66	PATIENT 66	12/29/2024	5/18/25 20:19	6/11/25 13:55					
781626069	1410220439	LAST NAME 67	PATIENT 67	5/9/2024	6/9/25 17:57	6/11/25 19:55					
703080750	1409434779	LAST NAME 68	PATIENT 68	11/15/2014	6/8/25 5:59	6/12/25 12:19					
780567392	1410039578	LAST NAME 69	PATIENT 69	4/21/2022	6/4/25 2:32	6/12/25 16:19					
782173554	1409925446	LAST NAME 70	PATIENT 70	5/27/2025	5/30/25 18:58	6/13/25 13:32					
781855351	1409783655	LAST NAME 8	PATIENT 8	10/15/2024	5/26/25 0:08	6/13/25 14:00					
781873801	1410288959	LAST NAME 59	PATIENT 59	10/27/2024	2/14/00 0:00	6/13/25 16:03		1409334372	6/15/25 5:40	1541235097	7/30/25 5:40
777229832	1409626808	LAST NAME 71	PATIENT 71	7/17/2017	6/12/25 8:11	6/13/25 16:15					
683295396	1410233039	LAST NAME 72	PATIENT 72	9/3/2009	6/9/25 23:12	6/13/25 17:15					
781830286	1408608927	LAST NAME 73	PATIENT 73	9/28/2024	4/14/25 12:23	6/14/25 11:50		1410785734	6/29/25 15:21		
782032908	1409101831	LAST NAME 74	PATIENT 74	2/21/2025	5/2/25 11:30	6/14/25 19:27					

Question 3

How do you identify the date a patient is listed for transplant?

Date Listed for transplant

- Gold source is UNOS Candidate Addition
- Find in Notes in Cerner filtered By Type -> Heart Transplant -> Heart Tx Candidate Selection Note



Transplant - Solid Organ

- Heart Transplant
 - Heart Transplant Education
 - Heart Transplant PCS Note
 - Heart Tx Candidate Selection Note
 - 11/20/2024 08:11 [redacted] - "Heart Transplant Candidate Selection Form"
 - 11/26/2024 15:14 [redacted] - "UNOS Wait-List Candidate Addition - Heart"
 - Heart Tx Recipient BldType Compatibility
 - Heart Transplant Waiting Note
 - Heart Tx Regulatory Eval Packets
 - Heart Tx Pharmacy Note
- Liver Transplant
- Wound - Ostomy - Contenance Notes

By type
 By status
 By date
 Performed by
 By encounter

UNOS Wait-List Candidate Addition/Charges

Transplant Episode Name : Heart

Transplant List Date : 11/26/2024 15:05

UNOS Fee Listing Charges - Heart : Done

Signature Line

Author(s): [redacted] Transplant Coord I

Date listed for transplant

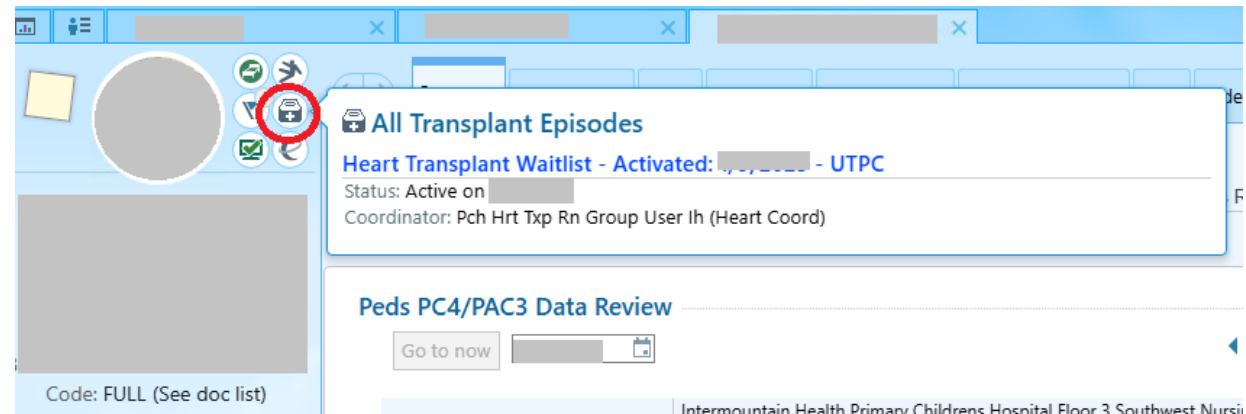
Cerner- Documentation section filter

Epic- default icon

List

Display : Heart Tx Listing Advanced Filters

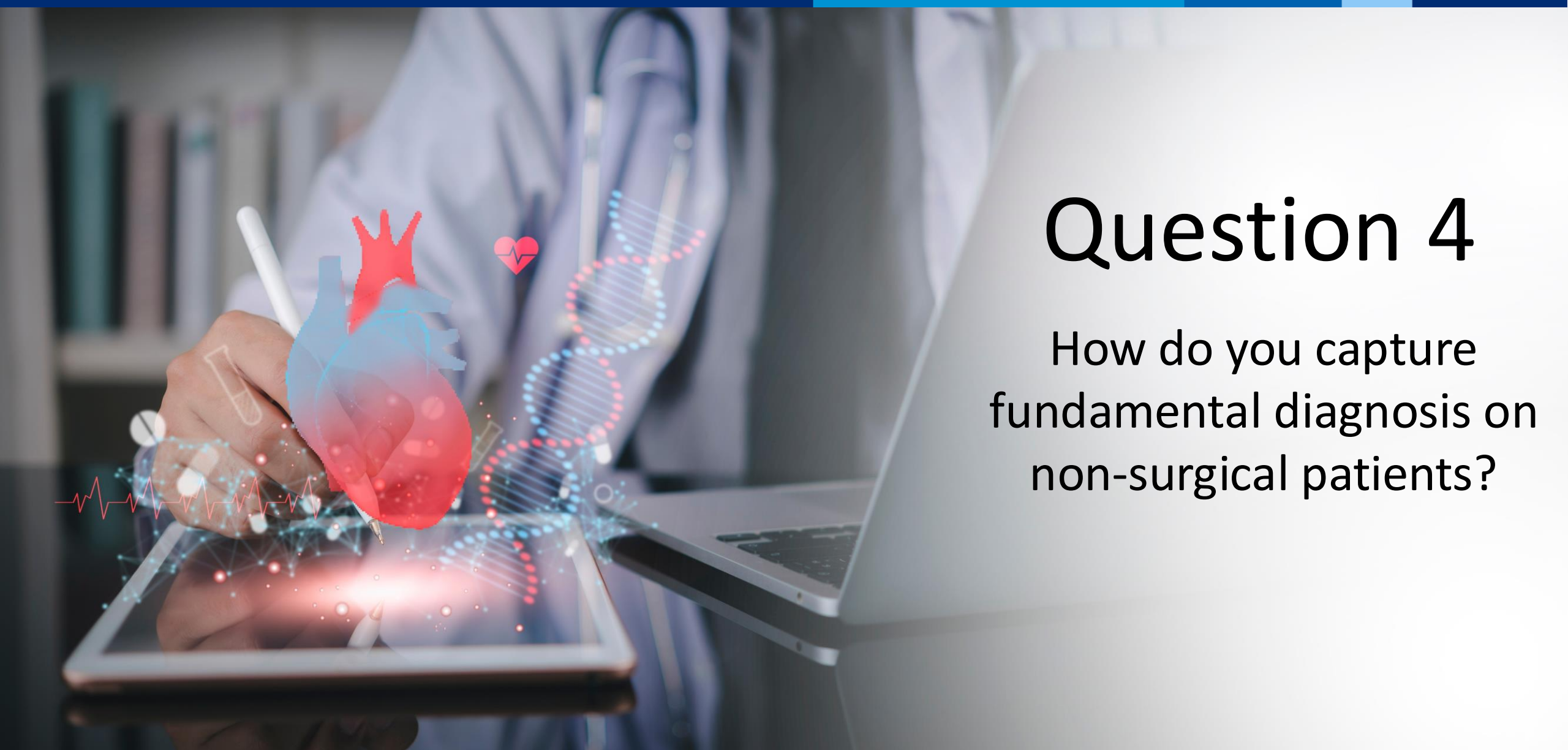
Service Date/Time	Subject	Type
M...	Heart Tx Coordinator Note	Transplant Coordinator
M...	Heart Tx Coordinator Note	Transplant Coordinator
M...	Heart Tx Coordinator Note	Transplant Coordinator
M...	Transplant Coordinator Note	Transplant Coordinator
M...	Heart Tx Coordinator Note	Transplant Coordinator
M...	Heart Tx Coordinator Note	Transplant Coordinator
M...	Heart Tx Coordinator Note	Transplant Coordinator
M...	Heart Tx Coordinator Note	Transplant Coordinator
M...	Heart Tx PCP Discharge Letter	Transplant Coordinator
M...	Heart Tx Coordinator Note	Transplant Coordinator
M...	Heart Tx Insurance Notification	Transplant Coordinator
M...	Heart Tx- Functional Assessment Note	Transplant Coordinator
M...	Transplant Event Coordination Note	Transplant Coordinator
MST	Heart Tx Coordinator Note	Transplant Coordinator
MST	Heart Tx Coordinator Note	Transplant Coordinator
MST	Heart Tx Listing Status	Transplant Coordinator
MST	Heart Tx Immunizations	Transplant Coordinator



The screenshot shows the Epic interface with a default icon circled in red. A tooltip is displayed over the icon, showing the following information:

- All Transplant Episodes**
- Heart Transplant Waitlist - Activated:** [redacted] - UTPC
- Status: Active on [redacted]
- Coordinator: Pch Hrt Txp Rn Group User Ih (Heart Coord)

Below the tooltip, there is a section for "Peds PC4/PAC3 Data Review" with a "Go to now" button and a calendar icon. At the bottom, it says "Code: FULL (See doc list)" and "Intermountain Health Primary Childrens Hospital Floor 3 Southwest Nursi".



Question 4

How do you capture fundamental diagnosis on non-surgical patients?

Fundamental Dx – Non Surgical Patients



- Use the "Pending STS" tracker for all registries (PAC³, PC⁴, Cath) to validate or select Fundamental Dx for non-STs patients
- STS Clinical RN provides **high-quality feedback** and clarification within 7-10 days of hospital discharge

Hosp DC date	Pending Field or Registry	JA/IP/BS/AS Notes/Qs	Due Date	Ruthie Notes	Status	Registry
11/23/2024 13:44	Jazmin Pending Fundamental Dx	no sts pt; JA selected "ASD, Secundum" no sts JA selected "Fetal diagnosis, Pulmonary valve stenosis" or is better to select " Neonatal respiratory failure, Persistent pulmonary hypertension of the newborn (PPHN) (Persistent fetal circulation) (PFC)" - pt w/ severe congenital PS, PDA, PPHN, and depressed RV function	submitted	I agree "Fetal diagnosis, Pulmonary valve stenosis" maps to 'Cardiac, other'. Best Dx: Pulmonary stenosis, Valvar, Congenital	Cardioaccess & pp Updated	PC4
11/22/2024 22:16	Jazmin Pending Fundamental Dx				Cardioaccess & pp Updated	PC4
11/22/2024 0:00	Molly Pending Fundamental Dx	prev PAC3 dx = Normal heart. Should this be WPW now?		I agree Yes WPW now- Please let PAC3 know you are updating in Group chat - done 12/11 MM	Cardioaccess & pp Updated	IMPACT
06/25/2025 15:13	Molly Pending Fundamental Dx	no prev encounters: perimembranous VSD and mild pulmonary stenosis and ASD. no sts	7/30/2025	VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	Cardioaccess & pp Updated	PAC3

Question 5

How do you stay timely with PAC³ and PC⁴ data submission?

How do we stay timely?



- Pivot Table Stat of Weekly Discharges from Discharge Roster
 - Zoom Out to Assess Monthly Discharge Volume
 - Organizing work into weekly discharges improves achievability and provides clearer visibility into progress

DC as of 05/02/20	Admitted	Discharged	PC4	Coding feedback	Encounter Sta	Encoun	Planned surgery / Cath
3/24/2026	3/5/2026 7:12	3/9/2026 11:52	1		SUBMITTED	medical	planned cath
JA 4/16/2026	3/2/2026 5:55	3/9/2026 13:59	1		Submitted - Per	surgical	planned surgery
JA 3/31/2026	1/7/2026 22:47	3/9/2026 15:11	1		Submitted - Per	surgical	planned surgery
4/14/2026	3/6/2026 14:35	3/9/2026 16:45	1		SUBMITTED	medical	
JA 3/11	3/3/2026 6:10	3/10/2026 14:00	1	admit CICU 3/3/26	Pending - Incom	surgical	planned surgery
JA 3/13/2026	3/10/2026 0:35	3/12/2026 14:52	1		Submitted - Per	medical	
	3/4/2026 5:25	3/12/2026 17:44	1	admit CICU 3/4/26 -> CVA 3/7/26	Pending - Not St	medical	
	3/11/2026 6:00	3/14/2026 14:24	1	admit CICU 3/11/26 -> DUQ5 3/12/26	Pending - Not St	surgical	planned surgery
JA 12/16.	1/28/2025 20:02	3/15/2026 8:31	2	expired 3/15/2026	Pending - Incom	surgical	planned surgery
	3/11/2026 9:30	3/15/2026 13:34	1	admit CICU 3/11/26 -> CVA 3/13/26	Pending - Not St	surgical	planned surgery
JA 3/20/26	3/18/2026 19:04	3/19/2026 17:25	0	PICU Overflow	No PC4 needed		
JA 1/6	1/5/2026 0:34	3/25/2026 4:51	1	Expired 3/24/2026; ED -> admit CICU 1/5/26	Pending - Incom	surgical	planned surgery
~readmit 3/28	11/17/2025 16:24	3/25/2026 20:14	4	admit CICU 11/17 -> CVA 1/5/25 -> CICU 1/6/26 -> CVA 1/1	Pending - Not St	surgical	planned surgery
3/27/2026	3/13/2026 23:34	3/26/2026 13:26	1		SUBMITTED	medical	
	3/26/2026 11:18	3/26/2026 14:58	1	admit CICU 3/26/26	Pending - Not St	medical	
JA 3/27/2026	3/25/2026 13:10	3/26/2026 17:10	1	pending DC summary	Submitted - Per	medical	
JA 3/11 incomplete	12/12/2025 16:29	3/26/2026 17:51	4	admit CICU 12/12 -> CVA 12/17 -> CICU 12/22 -> CVA 12/22	Pending - Incom	medical	planned cath
~perfusion CUF, pending STS	4/8/2026 5:48	4/15/2026 18:01	1	admit CICU 4/8/26 -> CVA 4/12/26	Pending - Not St	surgical	planned surgery
	3/28/2026 6:24	3/31/2026 19:07	1	admit CICU 3/28/26 -> CVA 3/28/26;	Pending - Not St	medical	

PC4 Hospitalization Stat	2/26/2026 - 3/4/2026	3/5/2026 - 3/11/2026	3/12/2026 - 3/18/2026	3/19/2026 - 3/25/2026	3/26/2026 - 4/1/2026	4/2/2026 - 4/8/2026	4/9/2026 - 4/10/2026	Grand Total
DC Dates								
Submitted	10	14	13	14	14	16	2	3095
Submitted	9	5	4	2	5			3024
Pending	1	9	9	12	9	16	2	58
CVA Overflow								13
NO PC4				1				91
No PC4 needed				1				75
No PC4 - Prior to Launch Date								16
Grand Total	10	14	13	15	14	16	2	3186

Question 6

What other registries does your center participate in? Which ones does your team support, or you personally support?



Call to Action

- Map and refine your data workflow to identify bottlenecks and improve efficiency. Include who is responsible and where updates are documented.
- Adopt at least one strategy to reduce data burden.
 - Implement a novel or creative solution (e.g., shared tools, EMR shortcuts, cross-registry reuse, or standardized notes) that helps your team meet submission deadlines, and reduces duplicate work while maintaining data quality.
- Create or update your source of truth document.
- “Close the loop” with your Clinical Champion and/or care teams by routinely reviewing where your site’s data are being shared and how they are being used—such as in publications, presentations, or local QI initiatives.

thank you

We invite you to grab lunch and continue the discussion.