

2020 Hospital Survey Results

Sites responding (Note: N < 54 for some questions due to missing/unknown responses):

PC4 2020 Hospital Survey Results

Generated December 1, 2020

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Section 1: CICU Staffing and Organizational Structure

Section 2: Heart Center Structure

Section 3: Training and Quality Improvement Activities

Section 4: Practice patterns



2020 Hospital Survey Results

Sites responding (Note: N < 54 for some questions due to missing/unknown responses):

Ob -	624.
Obs	Site
1	Arkansas Children's Hospital
2	Orlando Health, Arnold Palmer Hospital for Children
3	Boston Children's Hospital
4	Children's Healthcare of Atlanta
5	CHOC Children's Hospital
6	Children's Hospital of Philadelphia
7	Cedars Sinai Medical Center
8	Children's Hospital of Michigan
9	Children's Mercy Hospital
10	Children's National Medical Center
11	Children's Hospital Colorado
12	Children's Medical Center of Dallas
13	Children's Hospitals and Clinics of Minnesota
14	Children's Hospital of New Orleans
15	Children's Hospital and Medical Center in Omaha
16	Children's Hospital of Wisconsin
17	Cincinnati Children's Hospital Medical Center
18	Cohen Children's Medical Center
19	Cook Children's Hospital
20	Helen DeVos Children's Hospital, Spectrum
21	Duke Children's Hospital and Health Center
22	Joe DiMaggio Children's Hospital
23	Johns Hopkins Children's Center
24	Johns Hopkins All Children's Hospital
25	Levine Children's Hospital at Carolinas HealthCare
26	Loma Linda University Children's Hospital
27	Ann & Robert H. Lurie Children's Hospital of Chicago
28	Medical University of South Carolina Children's Hospital
29	Medical City Children's Hospital
30	Le Bonheur Children's Hospital



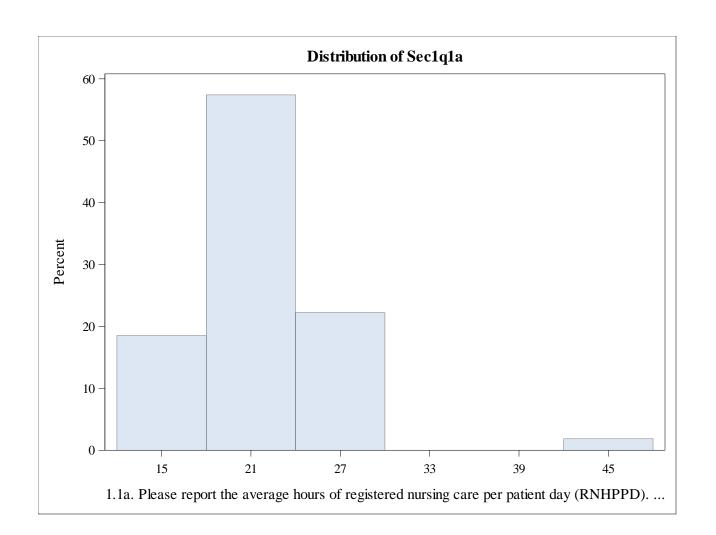
2020 Hospital Survey Results Sites responding (Note: N<54 for some questions due to missing/unknown responses):

Obs	Site
31	University of Michigan C.S. Mott Children's Hospital
32	Mount Sinai Kravis Children's Hospital
33	Nationwide Children's Hospital
34	Nemours/Alfred I. DuPont Hospital for Children
35	Nicklaus Children's Hospital
36	Norton Children's Hospital
37	Doernbecher Children's Hospital at OHSU
38	Phoenix Children's Hospital
39	Primary Children's Hospital
40	Rady Children's Hospital - San Diego
41	Riley Children's Hospital
42	Seattle Children's Hospital
43	The Hospital for Sick Children
44	St. Joseph's Children's Hospital
45	St. Louis Children's Hospital
46	Lucile Packard Children's Hospital Stanford
47	Texas Children's Hospital
48	UAB Children's of Alabama
49	UCSF Benioff Children's Hospital
50	University of Kentucky HealthCare
51	Children's Hospital of Pittsburgh of UPMC
52	University of Virginia Children's Hospital
53	University of Rochester Medical Center
54	Monroe Carell Jr. Children's Hospital at Vanderbilt



Sec1q1a 1.1a. Please report the average hours of registered nursing care per patient day (RNHPPD). - Cardiac Intensive Care Units. This value represents the number of nurses assigned to patients and would represent a ratio between 1:1 and 1:2 nurse: patient such that 1:1 for all patients = 24, while 1:2 for all patients = 12.

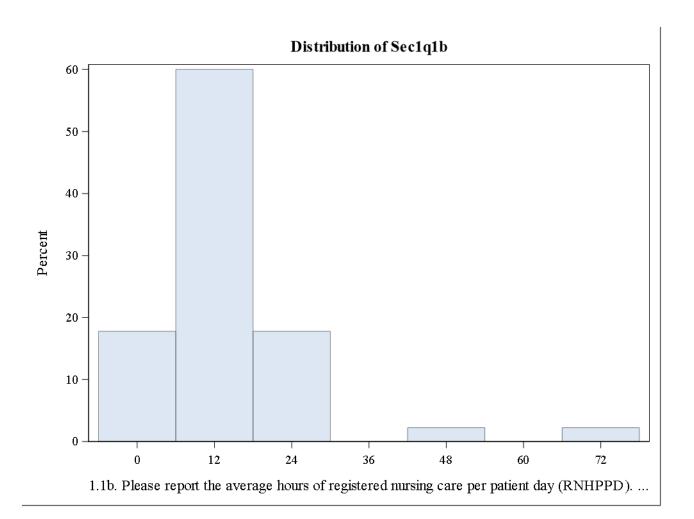
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	12.0	19.5	21.4	23.8	45.0	21.2	5.0





Sec1q1b 1.1b. Please report the average hours of registered nursing care per patient day (RNHPPD). - Cardiac Ward/Step Down Units. This value represents the number of nurses assigned to patients and would represent a ratio between 1:1 and 1:2 nurse: patient such that 1:1 for all patients = 24, while 1:2 for all patients = 12.

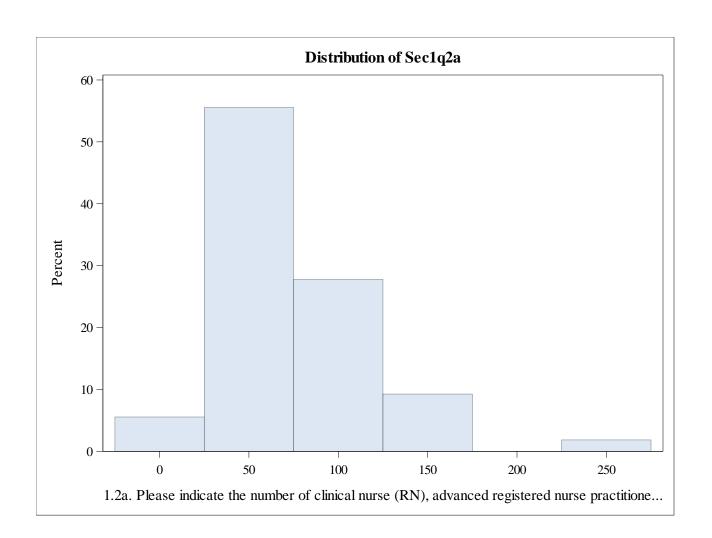
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
45	0.0	9.0	12.2	17.4	72.0	14.0	12.4





Sec1q2a 1.2a. Please indicate the number of clinical nurse (RN), advanced registered nurse practitioner (ARNP) or advanced practice registered nurse (APRN), Physician Assistant (PA), and hospitalist FTEs who work in or directly support your Cardiac Intensive Care Unit. (FTE RNs)

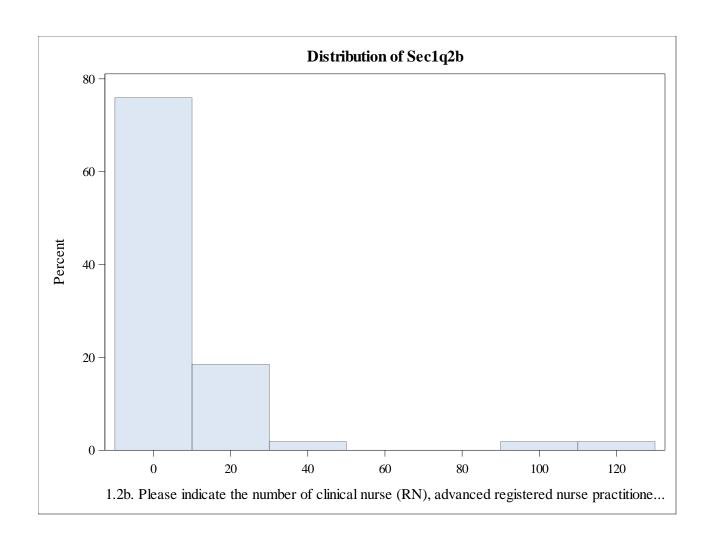
N	Minimum	25th Pctl	5th Pctl 50th Pctl 75th Pctl M		Maximum	Maximum Mean		
54	0.0	42.4	61.2	96.9	266.0	71.3	45.6	





Sec1q2b 1.2b. Please indicate the number of clinical nurse (RN), advanced registered nurse practitioner (ARNP) or advanced practice registered nurse (APRN), Physician Assistant (PA), and hospitalist FTEs who work in or directly support your Cardiac Intensive Care Unit. (FTE **ARNPs or APRNs**)

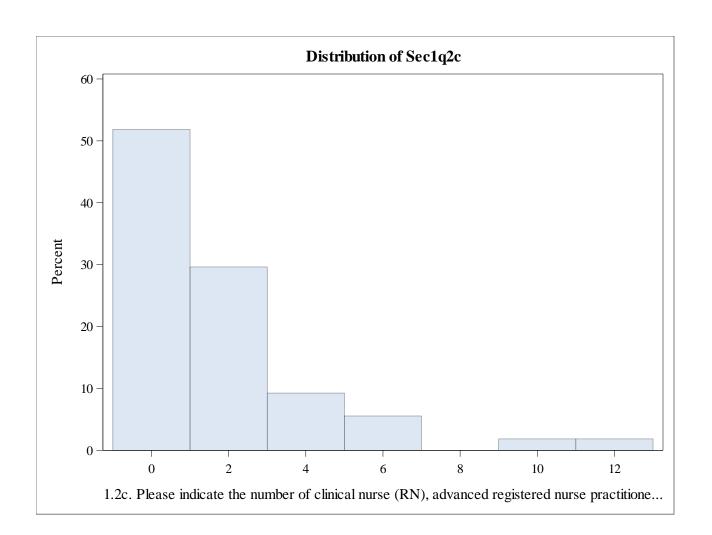
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	0.0	2.0	6.0	9.5	121.5	10.4	21.3





Sec1q2c 1.2c. Please indicate the number of clinical nurse (RN), advanced registered nurse practitioner (ARNP) or advanced practice registered nurse (APRN), Physician Assistant (PA), and hospitalist FTEs who work in or directly support your Cardiac Intensive Care Unit. (FTE PAs)

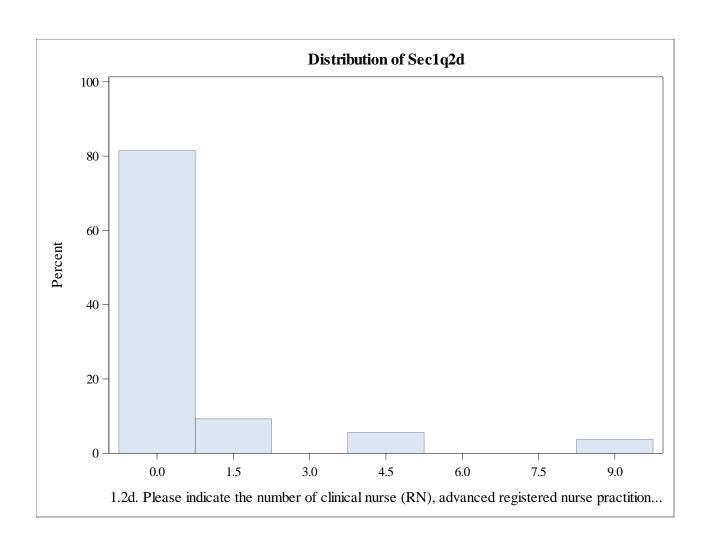
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	0.0	0.0	0.3	2.0	12.0	1.5	2.4





Sec1q2d 1.2d. Please indicate the number of clinical nurse (RN), advanced registered nurse practitioner (ARNP) or advanced practice registered nurse (APRN), Physician Assistant (PA), and hospitalist FTEs who work in or directly support your Cardiac Intensive Care Unit. (Hospitalists)

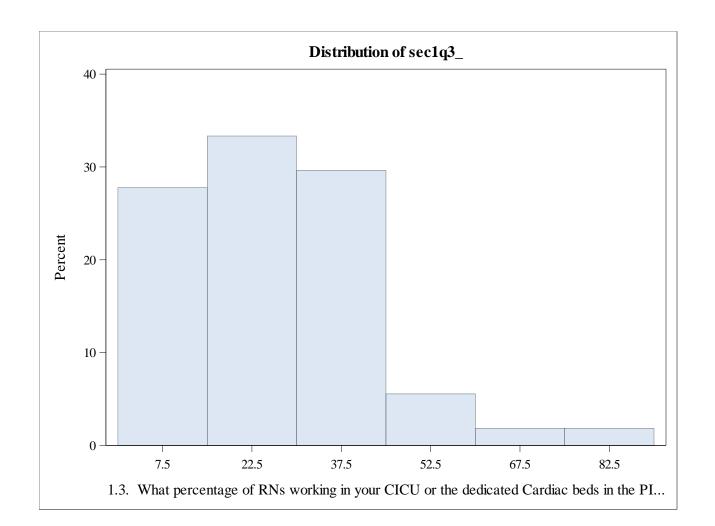
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	0.0	0.0	0.0	0.0	9.0	0.7	2.0





2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

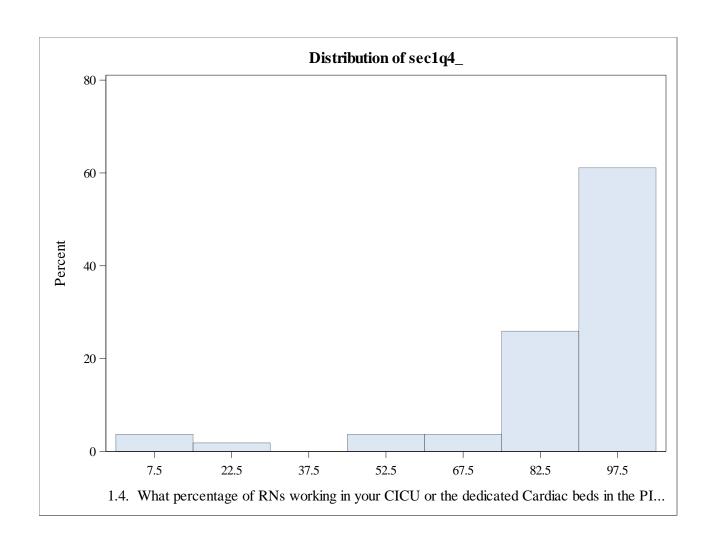
Sec1q3_1.3. What percentage of RNs working in your CICU or the dedicated Cardiac beds in the PICU have less than 2 years of cardiac critical care experience as of December 31, 2019? 25th Pctl | 50th Pctl | 75th Pctl | Maximum | Mean | Std Dev Minimum 54 1.0 14.0 23.0 34.0 83.0 25.5 15.9





2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

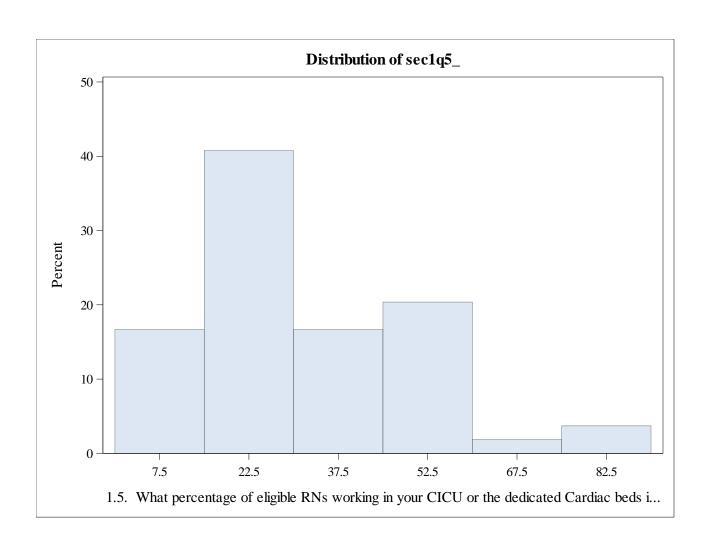
	Sec1q4_ 1.4. What percentage of RNs working in your CICU or the dedicated Cardiac beds in the PICU have a BSN or higher as of December 31, 2019?									
N	N Minimum 25th Pctl 50th Pctl 75th Pctl Maximum Mean Std Dev									
54	4 3.0 84.0 93.0 96.0 100.0 85.2 21.8									





Sec1q5_ 1.5. What percentage of eligible RNs working in your CICU or the dedicated Cardiac beds in the PICU had the CCRN certification for critical care nursing from the American Association of Critical-Care Nurses (AACN) as of December 31, 2019?

N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	0.0	15.0	28.0	45.0	88.0	31.3	18.9





1.6. Please describe the physician staffing model for the intensive care unit that receives cardiac patients.								
sec1q6 Frequency Percent Cumulative Cumulative Percent Frequency Percent								
Dedicated CICU	46	85.19	46	85.19				
Mixed unit	3	5.56	49	90.74				
Other 5 9.26 54 10								

1.6.TEXT. Please describe the physician staffing model for the intensive care unit that receives cardiac patients. Oth (please specify)						
sec1q6 TEXT	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
Dedicated CICU staffing during day / Mixed at night	1	25.00	1	25.00		
Dedicated during the day, covers both CICU and PICU patients at night	1	25.00	2	50.00		
HybridDedicated CICU during day 7 days a week. Overnight coverage of both PICU and CICU split between providers from both sides.	1	25.00	3	75.00		
Mostly dedicated CICU (RN staffing will be dedicated 8/3/20); CICU attending will admit Med/Surg patients at night and if census very high	1	25.00	4	100.00		

Frequency Missing = 50

in Med/Surg PICU; Currently still technically a mixed unit



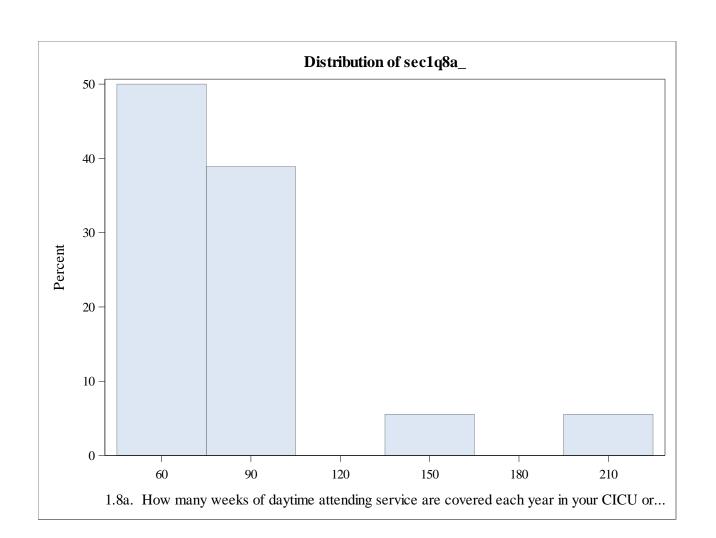
1.7. What is the training background of the Medical Director of your intensive care unit?						
sec1q7	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
BC/BE in Pediatric Cardiology	1	1.85	1	1.85		
BC/BE in Pediatric Critical Care	20	37.04	21	38.89		
Double boarded or eligible in Pediatric Critical Care and Cardiology	17	31.48	38	70.37		
Pediatric Cardiology with additional 4th year training	5	9.26	43	79.63		
Pediatric Critical Care with additional 4th year training	6	11.11	49	90.74		
Other	5	9.26	54	100.00		

1.7.TEXT. What is the training background of the Medical Director of your intensive care unit? Other (please specify)								
sec1q7_TEXT	Frequency	Percent	Cumulative Frequency	Cumulative Percent				
Anesthesia/Critical Care	1	20.00	1	20.00				
Double boarded in pediatric critical care and pediatric anesthesiology.	1	20.00	2	40.00				
Medical Director position is vacant	1	20.00	3	60.00				
No medical directorDivision head is double boarded	1	20.00	4	80.00				
board certified in pediatrics, critical care and anesthesia	1	20.00	5	100.00				
Frequency Missing = 49								



2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

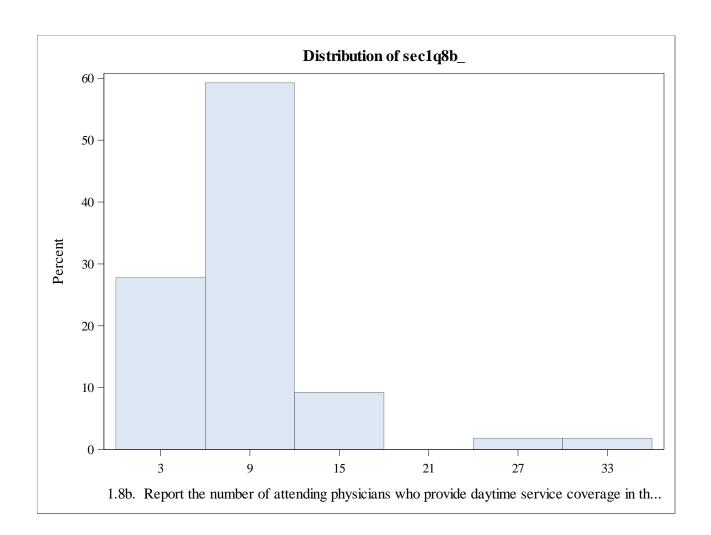
	Sec1q8a_ 1.8a. How many weeks of daytime attending service are covered each year in your CICU or the dedicated Cardiac beds in the PICU?							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev	
54	52.0	52.0	84.5	104.0	208.0	86.9	42.7	





2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

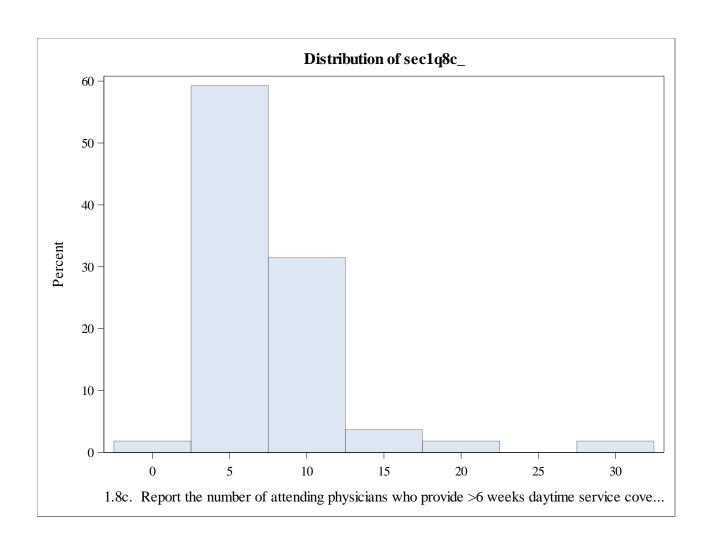
Sec1q8b_ 1.8b. Report the number of attending physicians who provide daytime service coverage in the CICU.							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	1.0	5.0	7.0	10.0	35.0	8.0	5.5





2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

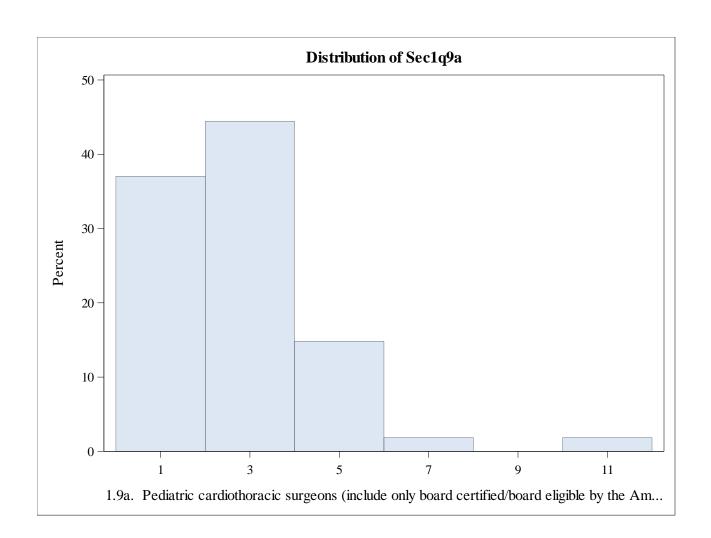
Sec1q8c_ 1.8c. Report the number of attending physicians who provide >6 weeks daytime service coverage in the CICU during the current calendar year.							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	2.0	5.0	6.0	9.0	30.0	7.7	4.4





Sec1q9a 1.9a. Pediatric cardiothoracic surgeons (include only board certified/board eligible by the American Board of Thoracic Surgery or equivalent for surgeons trained outside the US, with a fellowship or other training in pediatric and congenital heart surgery)

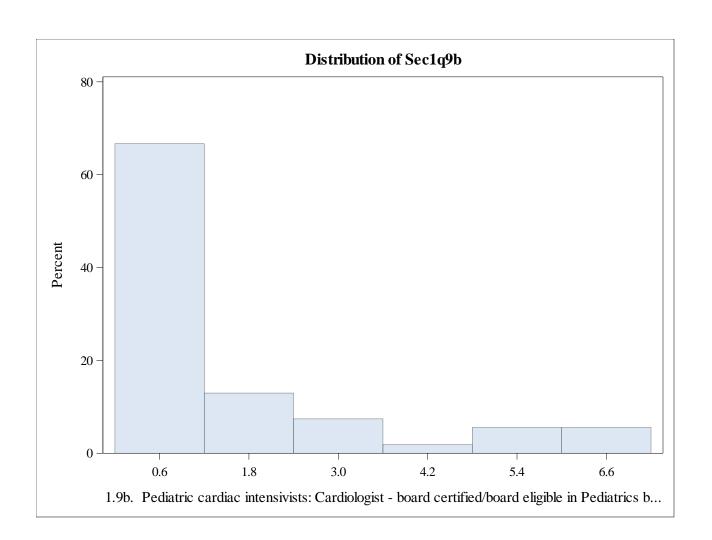
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	0.0	0.0	2.0	3.0	11.0	2.1	2.1





Sec1q9b 1.9b. Pediatric cardiac intensivists: Cardiologist - board certified/board eligible in Pediatrics by the American Board of Pediatrics, with subspecialty certification/eligibility in Pediatric Cardiology, plus 1 year of additional specific training in pediatric cardiac intensive care, or > 10 years of experience as a dedicated pediatric cardiac intensivist

N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	0.0	0.0	1.0	2.0	7.0	1.5	1.8





54

0.0

2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

Sec1q9c 1.9c. Pediatric cardiac intensivists: Pediatric Critical Care board certified/board eligible in Pediatrics by the American Board of Pediatrics, with subspecialty certification/eligibility in Pediatric Critical Care, plus 1 year of additional specific training in pediatric cardiac intensive care or > 10 years of experience as a dedicated pediatric cardiac intensivist Minimum | 25th Pctl | 50th Pctl | 75th Pctl Maximum | Mean | Std Dev

4.0

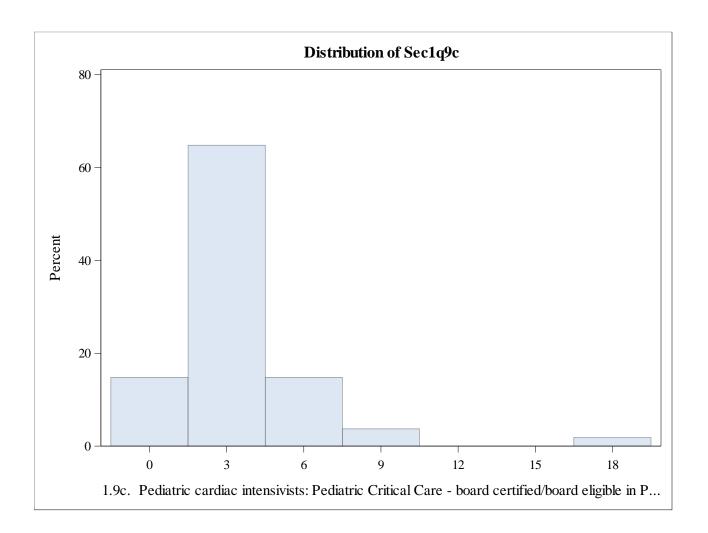
18.0

3.6

2.8

3.0

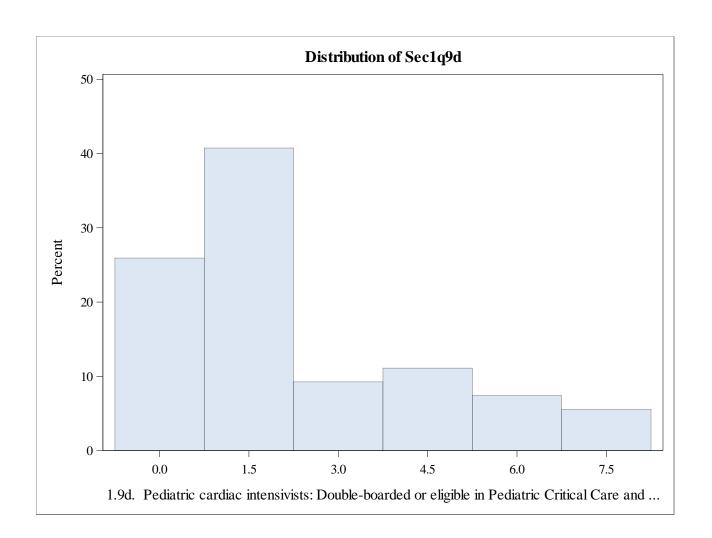
2.0





2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

Se	Sec1q9d 1.9d. Pediatric cardiac intensivists: Double-boarded or eligible in Pediatric Critical Care and Pediatric Cardiology							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev	
54	0.0	0.0	1.5	3.0	8.0	2.2	2.2	





54

0.0

0.0

2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

Sec1q9e 1.9e. Pediatric cardiac intensivists: Anesthesiologist - board certified/board eligible in Anesthesia by the American Board of Anesthesia, with at least 6 months of additional training in pediatric cardiac anesthesia, and 1 year of additional training in pediatric cardiac intensive care, or > 10 years of experience as a dedicated pediatric cardiac intensivist Minimum | 25th Pctl | 50th Pctl | 75th Pctl Maximum | Mean | Std Dev

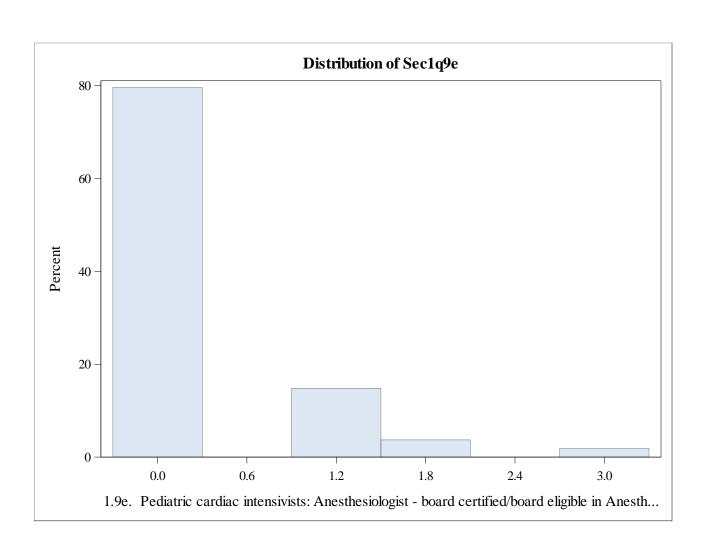
0.0

3.0

0.3

0.6

0.0





54

0.0

0.0

2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

Sec1q9f 1.9f. Pediatric cardiac intensivist: Neonatologist – board certified/board eligible in Neonatology by American Board of Pediatrics, with additional board certification in Pediatric Cardiology and/or Pediatric Critical Care Medicine, or 1 year of additional training in pediatric cardiac intensive care, or > 10 years of experience as a dedicated pediatric cardiac intensivist Minimum 25th Pctl 50th Pctl | 75th Pctl Maximum | Mean | Std Dev

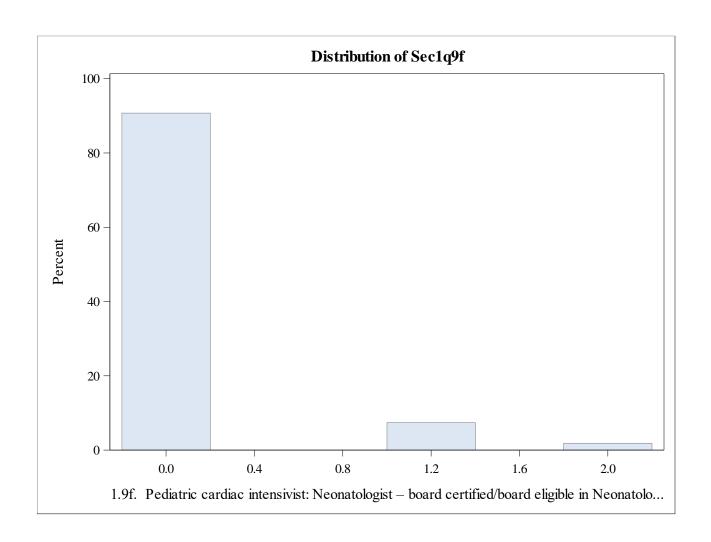
0.0

2.0

0.1

0.4

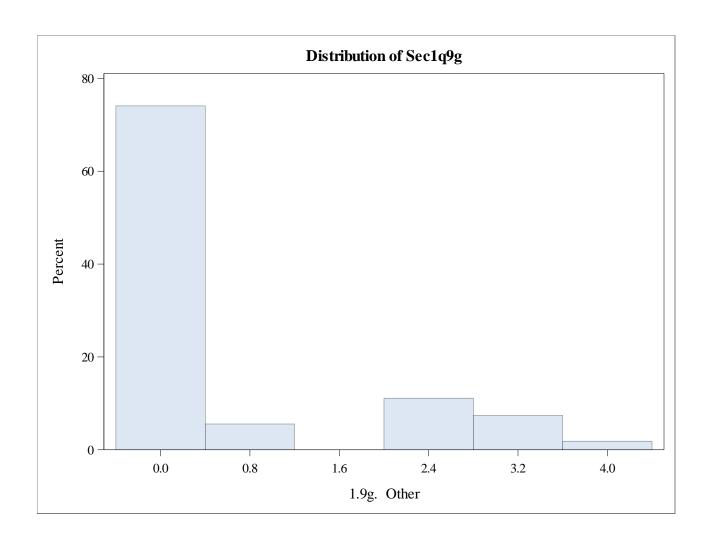
0.0





2020 Hospital Survey Results Section 1: CICU Staffing and Organizational Structure

	Sec1q9g 1.9g. Other							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev	
54	0.0	0.0	0.0	1.0	4.0	0.6	1.1	





1.10a. Does your hospital have surgical residents or fellows in-house 24/7?							
sec1q10a	Frequency	Percent	Cumulative Frequency	Cumulative Percent			
Yes	18	33.33	18	33.33			
No	36	66.67	54	100.00			

1.10b. Are there Attending Cardiac Surgeons in-house 24/7?							
sec1q10b	Frequency	Percent	Cumulative Frequency	Cumulative Percent			
Yes	1	1.85	1	1.85			
No	53	98.15	54	100.00			

	1.11. Does your center provide 24-hour in-house attending physician/intensivist coverage every day to the cardiac-specific ICU?							
sec1q11	Frequency	Percent		Cumulative Percent				
Yes	46	85.19	46	85.19				
No	8	14.81	54	100.00				

1.12. Do you have nights covered by physicians who do not regularly care for patients in the CICU?					
sec1q12	Cumulative Frequency	Cumulative Percent			
Yes	15	27.78	15	27.78	
No	39	72.22	54	100.00	



1.13. Does the attending covering the CICU cover additional units at night?					
sec1q13	c1q13 Frequency Percent Cumulative Frequency				
Yes	14	25.93	14	25.93	
No	40	74.07	54	100.00	

1.14a. Which group(s) of front-line providers takes in- house overnight call in the CICU at your hospital - Pediatric Cardiology Fellows					
sec1q14_1	Cumulative Percent				
Yes	33	61.11	33	61.11	
No	21	38.89	54	100.00	

1.14b. Which group(s) of front-line providers takes in- house overnight call in the CICU at your hospital - Pediatric Critical Care Medicine Fellows							
sec1q14_2	14_2 Frequency Percent Cumulative Cumulative Percent Frequency Percent						
Yes	41	75.93	41	75.93			
No	13	24.07	54	100.00			

1.14c. Which group(s) of front-line providers takes in- house overnight call in the CICU at your hospital - Hospitalists (BC/BE physicians not in an ACGME Fellowship)					
sec1q14_3	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
Yes	7	12.96	7	12.96	
No	47	87.04	54	100.00	



1.14d. Which group(s) of front-line providers takes in- house overnight call in the CICU at your hospital - NPs/PAs					
sec1q14_4	Frequency	Cumulative Percent			
Yes	36	66.67	36	66.67	
No	18	33.33	54	100.00	

1.14e. Which group(s) of front-line providers takes in- house overnight call in the CICU at your hospital - Surgical Residents/Fellows					
sec1q14_5	sec1q14_5 Frequency Percent Cumulative Frequency				
Yes	2	3.70	2	3.70	
No	52	96.30	54	100.00	

1.14f. Which group(s) of front-line providers takes in- house overnight call in the CICU at your hospital - Other Residents (please specify)							
sec1q14_6	14_6 Frequency Percent Cumulative Cumulat Frequency Percent Frequency Perc						
Yes	5	9.26	5	9.26			
No	49	90.74	54	100.00			

1.14f.TEXT. Which group(s) of front-line providers takes in-house overnight call in the CICU at your hospital - Other Residents						
sec1q14f_TEXT Frequency Percent Cumulative Percent Perc						
NICU fellows. all non-ICU fellows paired with ICO fellow for call	1	25.00	1	25.00		
Residents	1	25.00	2	50.00		
pediatrics	1	25.00	3	75.00		
pediatrics, anesthesia, emergency medicine	1	25.00	4	100.00		
Frequency Missing =	50					



1.14g. Which group(s) of front-line providers takes inhouse overnight call in the CICU at your hospital - Other Clinicians (please specify)					
sec1q14_7	Frequency	Cumulative Percent			
Yes	9	16.67	9	16.67	
No	45	83.33	54	100.00	

1.14g.TEXT. Which group(s) of front-line providers takes in-house overnight call in the CICU at your hospital - Other Clinicians					
sec1q14g_TEXT	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
4th Year Fellows in CICU (completed CCM or Cardiology fellowships)	1	12.50	1	12.50	
Attending's only	1	12.50	2	25.00	
CICU attending's	2	25.00	4	50.00	
CICU fellow	1	12.50	5	62.50	
CVICU Attending's	1	12.50	6	75.00	
PICU attending's only	1	12.50	7	87.50	
Attending physician	1	12.50	8	100.00	
Frequency Missing = 46					

1.14. Combine 1. Which group(s) of front-line providers takes inhouse overnight call in the CICU at your hospital - <u>Pediatric</u> <u>Cardiology Fellows</u> and/or <u>Pediatric Critical Care Medicine Fellows</u>						
sec1q14 1_2	ec1q14 1_2 Frequency Percent Cumulative Cumula Percent Frequency Percent Perce					
Yes	43	79.63	43	79.63		
No	11	20.37	54	100.00		



1.14. Combine 2. Which group(s) of front-line providers takes inhouse overnight call in the CICU at your hospital - Hospitalists (BC/BE physicians not in an ACGME Fellowship) and/or NPs/PAs Cumulative **Cumulative** sec1q14 3_4 **Frequency Percent Frequency Percent** 37 68.52 37 68.52 Yes 17 31.48 54 100.00 No

1.15. Does your CICU have a dedicated nursing staff (distinct staffing/scheduling from another ICU)? **Cumulative Cumulative** sec1q15 **Frequency** Percent **Frequency Percent** 90.74 Yes 49 90.74 49 No 5 9.26 54 100.00

1.16a. Please describe your hospital's approach to nurse staffing challenges - Hospital-based float pool or other float capability available to meet staffing needs **Cumulative Cumulative** Percent sec1q16_1 Frequency **Percent** Frequency Yes 52 96.30 96.30 52 No 2 100.00 3.70 54

1.16b. Please describe your hospital's approach to nurse staffing challenges - Local agency provides nurses on an "as-needed' basis **Cumulative Cumulative** sec1q16_2 Frequency **Percent** Percent **Frequency** 3 3 5.56 Yes 5.56 51 94.44 54 100.00 No



1.16c. Please describe your hospital's approach to nurse staffing challenges - Travel nursing contracts					
sec1q16_3	Frequency	Cumulative Frequency	Cumulative Percent		
Yes	34	62.96	34	62.96	
No	20	37.04	54	100.00	

1.16d. Please describe your hospital's approach to nurse staffing challenges - Other					
sec1q16_4	Frequency	Cumulative Frequency	Cumulative Percent		
Yes	9	16.67	9	16.67	
No	45	83.33	54	100.00	

1.16d.TEXT. Please describe your hospital's approach to nurse staffing challenges. Other (please specify)						
sec1q16 TEXT	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
Flex pool with cardiology step=down/ward. RNs sent to relieve in other units based on needs	1	12.50	1	12.50		
Flex program when volume surges w/incentive pay	1	12.50	2	25.00		
Heart Center float pool	1	12.50	3	37.50		
Local per diem nurses that were previously active in the CICU	1	12.50	4	50.00		
Mandatory float pool from other units in the hospital.	1	12.50	5	62.50		
Overtime for dedicated CICU nurses if can't fill with the above first	1	12.50	6	75.00		
Premium Pay (overtime, extra pay per hour)	1	12.50	7	87.50		
Staff Resourcing Program with current CVICU staff signing contracts for additional overtime shifts with a bonus program.	1	12.50	8	100.00		
Frequency Missing = 46						



1.17. Does your ICU have a clinical pharmacist who is assigned to the unit?					
				Cumulative Percent	
Yes	54	100.00	54	100.00	
No	0	0.00	54	100.00	

1.18. Does your ICU have a dietitian/nutritionist who is assigned to the unit?					
sec1q18 Frequency		Percent	Cumulative Frequency	Cumulative Percent	
Yes	52	96.30	52	96.30	
No	2	3.70	54	100.00	

1.19. Does your ICU have dedicated respiratory therapists who are assigned to the unit?					
sec1q19	Frequency	Cumulative Percent			
Yes	47	87.04	47	87.04	
No	7	12.96	54	100.00	

1.20. Does your center deliver babies or have an attached delivery center?					
sec1q20	Frequency Percent Cumulative Cumulative Percent Frequency Percent				
Yes	42	77.78	42	77.78	
No	12	22.22	54	100.00	



1.21. Where are the majority of late pre-term and/or full-term newborns with congenital heart disease cared for pre-operatively?							
sec1q21 Frequency Percent Cumulative Percent Percent Prequency Percent							
CICU	24	44.44	24	44.44			
NICU	7	12.96	31	57.41			
Mixed PICU/CICU	1	1.85	32	59.26			
Both CICU/NICU	19	35.19	51	94.44			
Other	3	5.56	54	100.00			

1.21.TEXT. Where are the majority of late pre-term and/or full-term newborns with congenital heart disease cared for pre-operatively? - Other					
sec1q21 TEXT	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
CCCU or cardiology ward (PGE-dependent, non-PGE dependent, CoA on ward).	1	33.33	1	33.33	
Most neonates remain in the NICU with cardiology on consult until 24-48 hours preop then come to CICU. If unstable will come to CICU earlier	1	33.33	2	66.67	
brief stop in NICU for umbilical line placement with transfer in less than 4 hours	1	33.33	3	100.00	
Frequency Missing = 51					

1.22a. For cardiac patients in the NICU, who provides primary coverage? - CICU Attending					
sec1q22_1	Frequency	Cumulative Frequency			
Yes	2	3.70	2	3.70	
No	52	96.30	54	100.00	



1.22b. For cardiac patients in the NICU, who provides primary coverage? - NICU Attending					
sec1q22_2	Frequency	Cumulative Frequency	Cumulative Percent		
Yes	52	96.30	52	96.30	
No	2	3.70	54	100.00	

1.22c. For cardiac patients in the NICU, who provides primary coverage? - Other					
sec1q22_3	Frequency	Cumulative Frequency	Cumulative Percent		
Yes	5	9.26	5	9.26	
No	49	90.74	54	100.00	

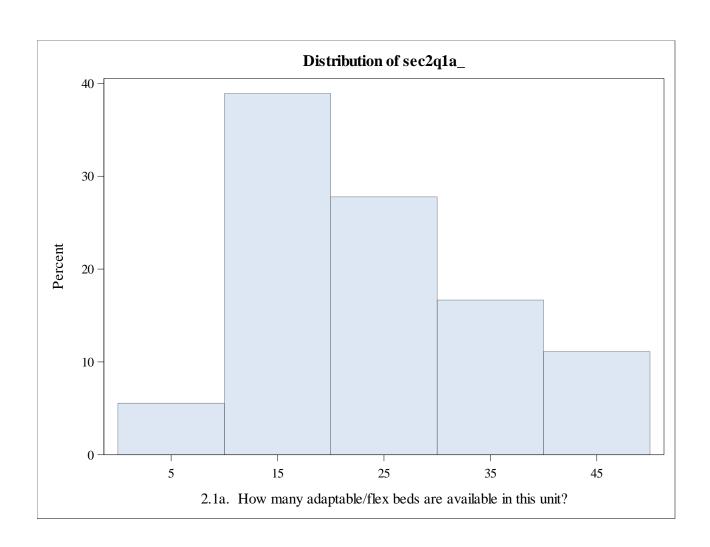
1.22c.TEXT. For cardiac patients in the NICU, who provides primary coverage?						
sec1q22_TEXT	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
Cardiology consult service	1	20.00	1	20.00		
Co-managed with Cardiology Consult service	1	20.00	2	40.00		
Not applicable	1	20.00	3	60.00		
no patients in NICU	1	20.00	4	80.00		
with cardiology on consult	1	20.00	5	100.00		
Frequency Missing = 49						



2.1. Does your hospital have an adaptable/flex bed model?						
sec2q1	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
Yes	18	33.33	18	33.33		
No	36	66.67	54	100.00		

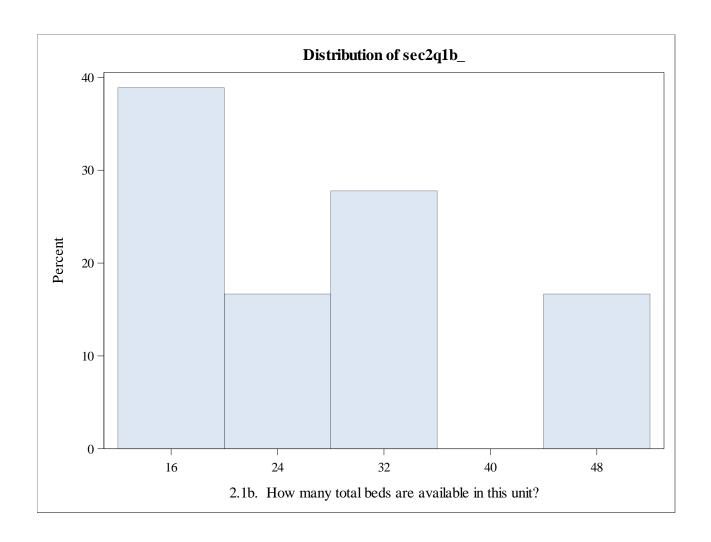


Sec2q1a_ 2.1a. How many adaptable/flex beds are available in this unit?							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
18	4.0	14.0	20.5	30.0	44.0	22.7	11.3





Sec2q1b_ 2.1b. How many total beds are available in this unit?							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
18	3 12.0	16.0	21.5	34.0	48.0	25.2	11.7





2.1ca. What factors and who determines how patients get assigned to bed locations - Nursing ratio						
sec2q1c_1	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
Yes	11	20.37	11	20.37		
No	43	79.63	54	100.00		

2.1cb. What factors and who determines how patients get assigned to bed locations - Defined clinical criteria						
sec2q1c_2 Frequency		Percent	Cumulative Frequency	Cumulative Percent		
Yes	11	20.37	11	20.37		
No	43	79.63	54	100.00		

2.1cc. What factors and who determines how patients get assigned to bed locations - Rounding team						
sec2q1c_3 Frequency Percen			Cumulative Frequency	Cumulative Percent		
Yes	13	24.07	13	24.07		
No	41	75.93	54	100.00		

2.1cd. What factors and who determines how patients get assigned to bed locations - Surgical team						
sec2q1c_4	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
Yes	4	7.41	4	7.41		
No	50	92.59	54	100.00		



2.1ce. What factors and who determines how patients get assigned to bed locations - Other						
sec2q1c_5 Frequency		Percent	Cumulative Frequency	Cumulative Percent		
Yes	4	7.41	4	7.41		
No	50	92.59	54	100.00		

2.1ce.TEXT. What factors and who determines how patients get assigned to bed locations? Other (please specify)						
sec2q1c TEXT	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
General acuity	1	25.00	1	25.00		
There is no downgrade or upgrade in status	1	25.00	2	50.00		
Typically patients who are admitted on POD#0 or those who are most active are admitted to the cardiac bay which is a 6 bed open unit.	1	25.00	3	75.00		
when clinical criteria is complex multi-disciplinary discussion between teams and leaders.	1	25.00	4	100.00		
Frequency Missing = 50						

2.2. Does your hospital have a cardiac step-down or acute care cardiology unit; i.e. a unit where typically nurse-to-patient ratios are higher than a typical inpatient ward and some intensive care monitoring or therapies are given? If there are separate units from the CICU that are EITHER step down or acute care/ward, then the answer should be "yes."

sec2q2	Frequency	Percent		Cumulative Percent
Yes	39	72.22	39	72.22
No	15	27.78	54	100.00



2.2a. Does your CICU and acute care unit share some nurses?						
sec2q2a	Frequency	Percent		Cumulative Percent		
Yes	25	65.79	25	65.79		
No	13	34.21	38	100.00		
Frequency Missing = 16						



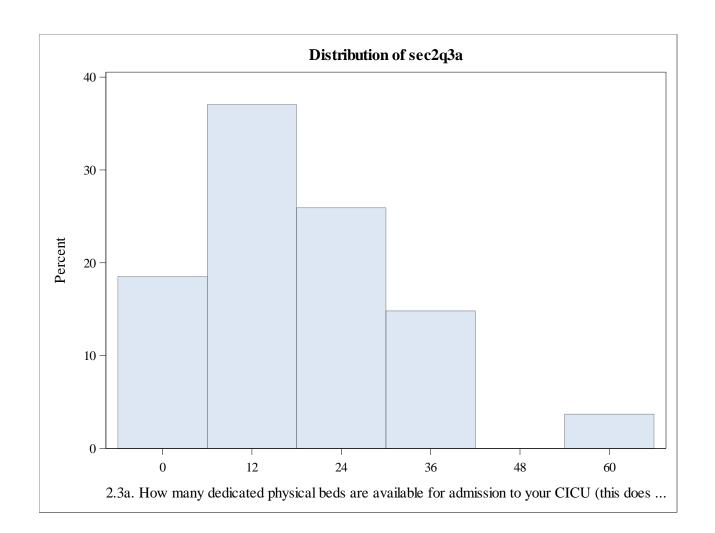
2.2b. Do cardiac intensivists (physicians who provide daytime service coverage in the CICU) also attend on patients in the stepdown/acute care unit? The acute care unit (i.e. the ward) is considered separate from the CICU/stepdown units and would not be covered by CICU practitioners. The "step down" unit is considered an extension of the CICU, therefore not separate.

sec2q2b	Frequency	Percent		Cumulative Percent		
Yes	10	26.32	10	26.32		
No	28	73.68	38	100.00		
Frequency Missing = 16						



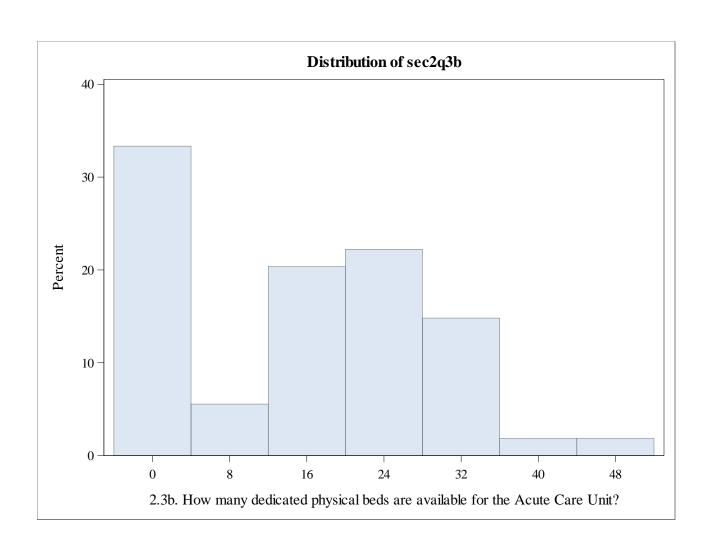
Sec2q3a 2.3a. How many dedicated physical beds are available for admission to your CICU (this does not include beds that are not available due to staffing reasons, but the number of physical bed spaces)?

N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev
54	0.0	10.0	16.0	24.0	65.0	17.2	13.3





S	Sec2q3b 2.3b. How many dedicated physical beds are available for the Acute Care Unit?							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev	
54	0.0	0.0	14.0	24.0	48.0	15.1	13.0	





2.4. If your hospital has a mixed ICU (patients admitted for both cardiac and non-cardiac care), what is the maximum number of potential physical beds available for CICU patients?

sec2q4	Frequency	Percent		Cumulative Percent			
Please provide number below	10	20.00	10	20.00			
N/A	40	80.00	50	100.00			
Frequency Missing = 4							

2.4.TEXT. If your hospital has a mixed ICU (patients admitted for both cardiac and non-cardiac care), what is the maximum number of potential physical beds available for **CICU patients? Text**

sec2q4_TEXT	Frequency	Percent		Cumulative Percent			
10	2	22.22	2	22.22			
12	1	11.11	3	33.33			
16	1	11.11	4	44.44			
17	1	11.11	5	55.56			
22	1	11.11	6	66.67			
37	1	11.11	7	77.78			
48	1	11.11	8	88.89			
65	1	11.11	9	100.00			
	Frequency Missing = 45						

2.5. Is there a dedicated recovery unit that is generally only used for pediatric cardiac patients within your hospital facility (separate from the CICU or other inpatient wards) where care can be provided for patients prior to or immediately after interventional or radiologic procedures requiring sedation?

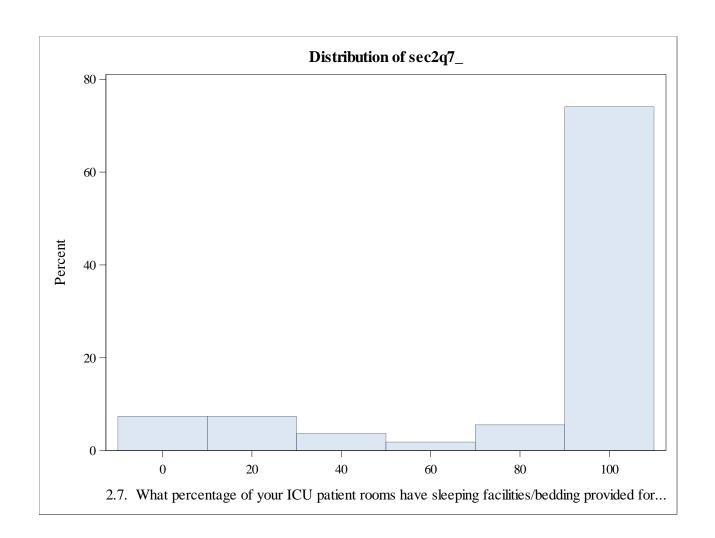
sec2q5	Frequency	Percent		Cumulative Percent
Yes	22	40.74	22	40.74
No	32	59.26	54	100.00



2.6. Are families invited to participate on rounds?							
sec2q6	Frequency	Percent		Cumulative Percent			
Yes	53	98.15	53	98.15			
No	1	1.85	54	100.00			



Se	Sec2q7_ 2.7. What percentage of your ICU patient rooms have sleeping facilities/bedding provided for families to sleep inside?							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev	
54	0.0	80.0	100.0	100.0	100.0	82.4	33.4	

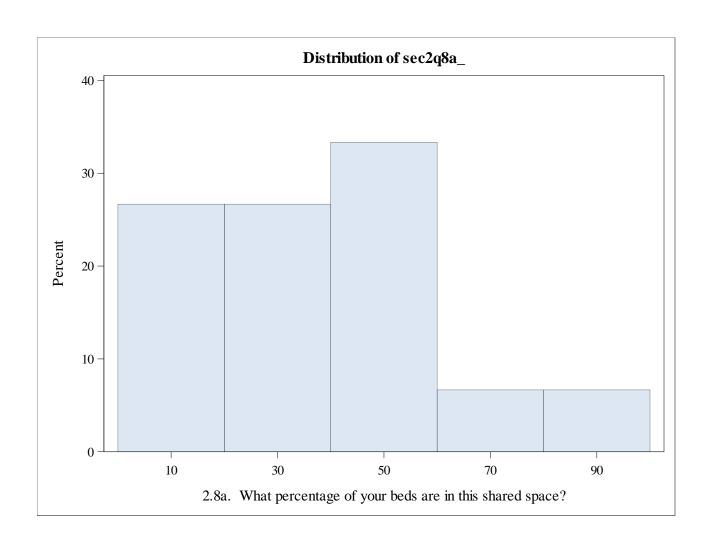




2.8. Does the physical environment within the CICU include beds that are in a shared space?						
sec2q8	Frequency	Percent		Cumulative Percent		
Yes	15	27.78	15	27.78		
No	39	72.22	54	100.00		



Se	Sec2q8a_2.8a. What percentage of your beds are in this shared space?							
N	Minimum	50th Pctl 75th Pctl Maximum			Mean	Std Dev		
15	4.0	16.0	38.0	50.0	86.0	36.5	22.5	





2.9. Is there a pulmonary hypertension specialist and/or team available for in-patient consultation?					
sec2q9	Frequency	Percent		Cumulative Percent	
Yes	50	92.59	50	92.59	
No	4	7.41	54	100.00	

2.10. Is there a dedicated heart failure/transplant team that rounds on CICU patients 5 days a week or more?							
sec2q10	Frequency	Percent	Cumulative Frequency				
Yes	42	77.78	42	77.78			
No	12	22.22	54	100.00			

2.11. Is there a BC/BE ACHD physician at your center?						
sec2q11	Frequency		Cumulative Frequency			
Yes	49	90.74	49	90.74		
No	5	9.26	54	100.00		

2.12. Is there a dedicated ECMO team of physicians and/or perfusionists/specialists, that round on CICU patients receiving ECMO therapies?					
sec2q12	Frequency	Percent		Cumulative Percent	
Yes	43	79.63	43	79.63	
No	11	20.37	54	100.00	



2.13. Does your institution have a formal palliative care team/PACT team available for in-patient consultation for **CICU patients?**

sec2q13	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes	52	96.30	52	96.30
No	2	3.70	54	100.00

2.14. Does your cardiac ward (or general wards where cardiac patients are cared for) use an objective warning score or other system for nurses to chart clinical deterioration?

sec2q14	Frequency		Cumulative Frequency	Cumulative Percent
Yes	45	83.33	45	83.33
No	9	16.67	54	100.00

2.15. Does your hospital offer ECMO in the setting of active cardiac arrest (E-CPR)?				
sec2q15	Frequency	Percent		Cumulative Percent
Yes	51	94.44	51	94.44
No	3	5.56	54	100.00



3.1a. Please tell us whether your hospital has the following programs - On-site critical care nursing course				
sec3q1_1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes	44	81.48	44	81.48
No	10	18.52	54	100.00

3.1b. Please tell us whether your hospital has the following programs - Mandatory PALS/ACLS training for ICU nurses				
sec3q1_2	Frequency	Percent		Cumulative Percent
Yes	50	92.59	50	92.59
No	4	7.41	54	100.00

3.1c. Please tell us whether your hospital has the following programs - Teamwork and communication programs				
sec3q1_3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes	49	90.74	49	90.74
No	5	9.26	54	100.00

3.1d. Please tell us whether your hospital has the following programs - Tuition reimbursement for nursing/ancillary staff				
sec3q1_4	Frequency	Percent		Cumulative Percent
Yes	48	88.89	48	88.89
No	6	11.11	54	100.00



3.1e. Please tell us whether your hospital has the following programs - Centralized orientation program for newly-hired nurses				
sec3q1_5	Frequency	Percent		Cumulative Percent
Yes	52	96.30	52	96.30
No	2	3.70	54	100.00

3.1f. Please tell us whether your hospital has the following programs - Unit-based preceptorship program for nurses new to the field				
sec3q1_6	Frequency	Percent		Cumulative Percent
Yes	54	100.00	54	100.00
No	0	0.00	54	100.00

3.1g. Please tell us whether your hospital has the following programs - Resiliency Programs for staff					
sec3q1_7	Cumulative Cumulative In Cumulative Percent Cumulative Percent Prequency Percent Prequency Percent Cumulative Percent Prequency Percent Prequency Percent Prepare Prep				
Yes	49	90.74	49	90.74	
No	5	9.26	54	100.00	

3.1h. Please tell us whether your hospital has the following programs - Bereavement Program				
sec3q1_8	Frequency	Percent	Cumulative Frequency	
Yes	48	88.89	48	88.89
No	6	11.11	54	100.00



3.2a. Please tell us whether your CICU has the following quality improvement activities - Clinical quality data are shared at least quarterly with front-line staff

sec3q2_1	Frequency		Cumulative Frequency	Cumulative Percent
Yes	49	90.74	49	90.74
No	5	9.26	54	100.00

3.2b. Please tell us whether your CICU has the following quality improvement activities - Adverse event reporting system

sec3q2_2	Frequency	Percent		Cumulative Percent
Yes	53	98.15	53	98.15
No	1	1.85	54	100.00

3.2c. Please tell us whether your CICU has the following quality improvement activities - A quality and safety committee that reports to the hospital's board

sec3q2_3	Frequency	Percent		Cumulative Percent
Yes	41	75.93	41	75.93
No	13	24.07	54	100.00

3.3a. Does your CICU and/or Heart Center have the following individuals - Quality officer (CICU based)

10110 Wing 11101 (111001)						
			Cumulative	Cumulative		
sec3q3_1	Frequency	Percent	Frequency	Percent		
Yes	38	70.37	38	70.37		
No	16	29.63	54	100.00		



3.3b. Does your CICU and/or Heart Center have the following individuals - Quality officer (Heart center based [shared leadership with Surgery and Cardiology]) Cumulative Cumulative sec3q3_2 **Frequency Percent Percent Frequency** 70.37 38 70.37 Yes 38 54 No 16 29.63 100.00

3.3c. Does your CICU and/or Heart Center have the following individuals - Data analysts/programmers						
sec3q3_3	Frequency	Percent		Cumulative Percent		
Yes	36	66.67	36	66.67		
No	18	33.33	54	100.00		

3.3d. Does your CICU and/or Heart Center have the following individuals - Statisticians					
sec3q3_4	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
Yes	25	46.30	25	46.30	
No	29	53.70	54	100.00	

3.4a. Does your CICU and/or Heart Center have any of the following conferences - Conferences to review important quality metrics (HACs)					
sec3q4_1	Frequency	Percent		Cumulative Percent	
Yes	48	88.89	48	88.89	
No	6	11.11	54	100.00	



3.4b. Does your CICU and/or Heart Center have any of the following conferences - Conferences to review morbidities and mortalities (including Cardiac arrest)					
sec3q4_2	Frequency	Percent		Cumulative Percent	
Yes	54	100.00	54	100.00	
No	0	0.00	54	100.00	

3.4ba. At which level are the M and M conferences held - CICU based						
sec3q4a_1	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
Yes	28	51.85	28	51.85		
No	26	48.15	54	100.00		

3.4bb. At which level are the M and M conferences held - Heart center based					
sec3q4a_2	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
Yes	51	94.44	51	94.44	
No	3	5.56	54	100.00	

3.5. Do you have dedicated CICU unit-based simulation resources?					
sec3q5	Frequency	Percent		Cumulative Percent	
Yes	40	74.07	40	74.07	
No	14	25.93	54	100.00	

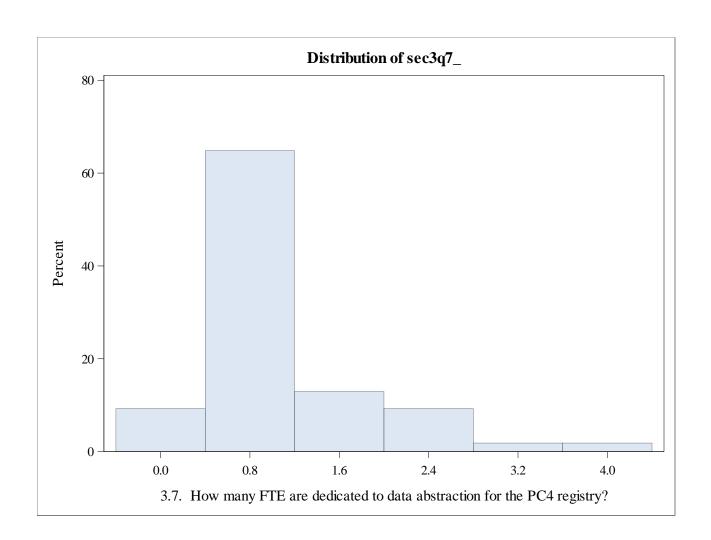


3.6. Do you conduct Simulation exercises on a regular basis in your unit?					
sec3q6	Frequency	Percent		Cumulative Percent	
Yes	41	75.93	41	75.93	
No	13	24.07	54	100.00	



2020 Hospital Survey Results Section 3: Training and Quality Improvement Activities

Se	Sec3q7_ 3.7. How many FTE are dedicated to data abstraction for the PC4 registry?							
N	Minimum	25th Pctl	50th Pctl	75th Pctl	Maximum	Mean	Std Dev	
54	0.0	0.5	1.0	1.2	4.0	1.1	0.7	





3.8a. What is the training background of PC4 data abstractors at your institution - RN						
sec3q8_1	Frequency	Percent		Cumulative Percent		
Yes	36	66.67	36	66.67		
No	18	33.33	54	100.00		

3.8b. What is the training background of PC4 data abstractors at your institution - RT					
sec3q8_2	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
Yes	4	7.41	4	7.41	
No	50	92.59	54	100.00	

3.8c. What is the training background of PC4 data abstractors at your institution - MD						
sec3q8_3	Frequency Percent Cumulative Cumulative Percent					
Yes	7	12.96	7	12.96		
No	47	87.04	54	100.00		

3.8d. What is the training background of PC4 data abstractors at your institution - APP					
sec3q8_4	ec3q8_4 Frequency Percent Cumulative Frequency				
Yes	7	12.96	7	12.96	
No	47	87.04	54	100.00	



3.8e. What is the training background of PC4 data abstractors at your institution - Non-clinical					
sec3q8_5	Frequency	Percent		Cumulative Percent	
Yes	15	27.78	15	27.78	
No	39	72.22	54	100.00	



4.1. Is there a standard of care for sedation assessment and documentation in your unit?				
sec4q1	Frequency	Percent		Cumulative Percent
Yes	50	92.59	50	92.59
No	4	7.41	54	100.00

4.2. Does your institution routinely perform vascular ultrasounds around the time of removal of central catheters (arterial or venous) even if there is no clinical suspicion for thrombosis?

sec4q2	Frequency	Percent		Cumulative Percent
Yes	3	5.56	3	5.56
No	51	94.44	54	100.00

4.3. Does your institution routinely perform preoperative cranial ultrasound in neonates for clinical surveillance? Cumulativa Cumulativa

sec4q3	Frequency	Percent		Percent
Yes	42	77.78	42	77.78
No	12	22.22	54	100.00

4.4. Does your institution routinely perform postoperative cranial ultrasound in neonates for clinical surveillance?

sec4q4	Frequency	Percent		Cumulative Percent
Yes	7	12.96	7	12.96
No	47	87.04	54	100.00



4.5. Does your institution routinely perform continuous EEG monitoring in post-operative neonates for clinical surveillance?				
sec4q5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes	10	18.52	10	18.52
No	44	81.48	54	100.00

4.6. Does your institution routinely perform continuous EEG monitoring in post-operative patients (non-neonates) for clinical surveillance?				
sec4q6	Frequency	Percent		Cumulative Percent
Yes	1	1.85	1	1.85
No	53	98.15	54	100.00

4.7. Does your institution perform CT/MRI to assess for neurologic injury in pre-operative neonates?						
sec4q7 Frequency Percent Cumulative Percent Frequency Percent						
Yes, for clinical surveillance/standard of care	12	22.22	12	22.22		
Yes, for research purposes only	5	9.26	17	31.48		
No	37	68.52	54	100.00		

4.8. Does your institution perform CT/MRI to assess for neurologic injury in post-operative neonates?					
sec4q8 Frequency Percent Cumulative Cumulat Frequency Percent Frequency Percent					
Yes, for clinical surveillance/standard of care	10	18.52	10	18.52	
Yes, for research purposes only	6	11.11	16	29.63	
No	38	70.37	54	100.00	



4.9. Does your institution routinely perform a screening upper airway evaluation (formal laryngoscopy or vocal cord ultrasound by ENT specialists, with or without swallow study) in neonate after arch repair to assess for vocal cord dysfunction, regardless

sec4q9	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Yes	18	33.33	18	33.33
No	36	66.67	54	100.00

4.10. Does your institution routinely perform a screening upper airway evaluation (formal laryngoscopy or vocal cord ultrasound by ENT specialists, with or without swallow study) in all neonates who have NOT undergone arch repair to assess for vocal cord

sec4q10	Frequency		Cumulative Frequency	Cumulative Percent
Yes	2	3.70	2	3.70
No	52	96.30	54	100.00

4.11a. Does your institution routinely require a code status order on admission for those under 18 years of age (i.e. full code, limitations to care, DNR/DNI)?

sec4q11a	Frequency	Percent		Cumulative Percent
Yes	28	51.85	28	51.85
No	26	48.15	54	100.00



4.11b. Does your institution routinely require a code status order on admission for those 18 years of age or older (i.e. full code, limitations to care, DNR/DNI)?

(======================================				
	_	_		Cumulative
sec4q11b	Frequency	Percent	Frequency	Percent
Yes	32	59.26	32	59.26
No	22	40.74	54	100.00

4.12. Does your CICU have a dedicated time each weekday where the attending intensivist(s) and attending surgeon(s) round together?

sec4q12	Frequency	Percent		Cumulative Percent
Yes	47	87.04	47	87.04
No	7	12.96	54	100.00