PCICS QI Research Practice Survey

Please complete the survey below.

Thank you!

Dear PCICS members,

 Attached is a survey on quality improvement (QI) research. Our aim is to query the state of past and present QI research within the discipline of Pediatric Cardiac Intensive Care. This survey will serve to inform the PCICS QI Committee on the state of QI research amongst member institutions, as well as to identify gaps or needs. This is a first step in better understanding a role that the PCICS QI Committee can serve to support institutions' needs, drive collaborations, and utilize available infrastructure.

 Participation is voluntary and respondent identifiers will not be collected. For questions or concerns, please contact us at brunettim@chop.edu.

 Sincerely,

 Marissa A. Brunetti, Children's Hospital of Philadelphia

Kevin Hummel MD, Boston Children's Hospital

Katja Gist MD, Cincinnati Children's Hospital

Tia Raymond MD, Medical City Children's Hospital

Carmen Watrin RN, MSN, Texas Children's Hospital

On behalf of the PCICS Quality Improvement and Safety Committee

Which hospital is your cardiac ICU associated with?

- ◯ Other (Not listed below)
- ◯ Advent Health for Children
- ◯ Advocate Children's Hospital
- ◯ Aga Khan University
- ◯ Albany Medical Center
- ◯ Alberta Health Services
- ◯ American Family Children's Hospital
- ◯ Amrita Institute of Medical Sciences
- ◯ Ann & Robert H Lurie Children's Hospital of Chicago
- ◯ AOU Ospedali Riuniti Ancona
- ◯ Apollo Hospital Delhi
- ◯ Arkansas Children's Hospital
- ◯ Arnold Palmer Hospital for Children
- ◯ Ascension Seton Dell Children's Medical Center
- ◯ Atrium Health Levine Children's
- ◯ Banner Medical Group
- ◯ Batson Children's Hospital
- ◯ Benioff Children's Hospital
- ◯ Boston Children's Hospital
- ◯ Bozhana Bakalcheva
- ◯ C.S. Mott Children's Hospital
- ◯ Cedars Sinai Medical Center
- ◯ Centre Mere-efant Soleil du CHU de Quebec-University Laval
- ◯ Chest Diseases Hospital Kuwait
- ◯ Children's Hospital of Philadelphia
- ◯ Children's Hospital of Atlanta
- ◯ Children's Health Dallas Medical Center
- ◯ Children's Health Ireland (CHI) at Crumlin
- ◯ Children's Health System of Texas
- ◯ Children's Heart Nevada
- ◯ Children's HeartLink
- ◯ Children's Hospital at OU Medical Center
- ◯ Children's Hospital Colorado
- ◯ Children's Hospital Los Angeles
- ◯ Children's Hospital New Orleans
- ◯ Children's Hospital of Georgia
- ◯ Children's Hospital of Michigan
- ◯ Children's Hospital of Orange County
- ◯ Children's Hospital of Pittsburgh
- ◯ Children's Hospital of Richmond at VCU Health
- ◯ Children's Hospital of the King's Daughters
- ◯ Children's Hospital of Wisconsin
- ◯ Children's Hospital of St Louis
- ◯ Children's Hospitals and Clinics of Minnesota
- ◯ Children's Memorial Hermann Hospital
- ◯ Children's Mercy Hospital
- ◯ Children's National
- ◯ Children's of Alabama
- ◯ Children's of Mississippi
- ◯ Children's Omaha
- ◯ Cincinnati Children's Hospital Medical Center
- ◯ Cipto Mangunkusumo Hospital
- ◯ Cleveland Clinic
- ◯ Cliniques universitaires Saint-Luc
- ◯ Cohen Children's Medical Center
- ◯ Cook Children's Medical Center
- ◯ Doernbecher Children's Hospital
- ◯ Driscoll Children's Hospital
- ◯ Duke University
- ◯ El Paso Children's Hospital
- ◯ Eskisehir Osmangazi University
- ◯ Fortis Escorts Heart Institute
- ◯ Garrahan Hospital
- ◯ Geiseinger
- ◯ Golisano Children's Hospital
- ◯ Great Ormond Street Hospital
- ◯ Hassenfeld Children's at NYU Langone Health
- ◯ Helen Devos Children's Hospital

- ◯ Hong Kong Children's Hospital
- ◯ Hospital de Messajana
- ◯ Hospital for Sick Children
- ◯ Hospital Sanaritano de Sao Paulo
- ◯ Hospital Zambrano-Hellion
- ◯ Incor - Peru
- ◯ Indiana University School of Medicine
- ◯ Inova Children's Hospital
- ◯ Jaypee Hospital Noida
- ◯ Joe DiMaggio Children's Hospital
- ◯ Johns Hopkins Children's Center
- ◯ Johns Hopkins All Children's
- ◯ Kaiser
- ◯ Kardias Foundation
- ◯ Kentucky Children's
- ◯ Kimberley Regional
- ◯ King Faisal Specialist Hospital and Research Center
- ◯ KK Women's and Children's Hospital
- ◯ Kosher Children's Hospital
- ◯ Kravis Children's Hospital at Mt Sinai
- ◯ Lady Ridgeway Hospital
- ◯ Le Bonheur
- ◯ Leeds
- ◯ Leiden University Medical Center
- ◯ Loma Linda University
- ◯ Lucile Packard Children's Hospital
- ◯ Maine Medical Center
- ◯ Mayo Clinic
- ◯ Medical City
- ◯ Medical University of South Carolina
- ◯ Miller Children's Hospital
- ◯ Moi Teaching and Referral Hospital
- ◯ Monroe Carell Jr Children's Hospital at Vanderbilt
- ◯ Montefiore
- ◯ Morgan Stanley Children's Hospital
- ◯ National Cardiovascular Center Harapan Kita
- ◯ National Heart Hospital Sofia Bulgaria
- ◯ National Institute of Cardiovascular Disease Karachi
- ◯ Nationwide
- ◯ Nemours
- ◯ Nicklaus Children's Hospital
- ◯ North Carolina Children's Hospital
- ◯ Norton Children's Hospital
- ◯ Obafemi Awolowo University
- ◯ Ochsner Hospital for Children
- ◯ Oklahoma Children's Hospital
- ◯ Phoenix Children's Hospital
- ◯ Polish-American Children's Hospital
- ◯ Primary Children's Hospital
- ◯ Ready Children's Hospital
- ◯ Rainbow Babies
- ◯ Rocky Mountain Hospital for Children
- ◯ Royal Brompton Hospital
- ◯ Rush University
- ◯ St Louis Children's Hospital
- ◯ Santa Casa de Misericordia de Belo Horizonte
- ◯ Seattle Children's Hospital
- ◯ Siva Clinic Chennai India
- ◯ SSM Health Cardinal Glennon Children's Hospital
- ◯ St Christopher's Hospital for Children
- ◯ St Joseph Children's Hospital of Tampa
- ◯ Stollery Children's Hospital
- ◯ Sunrise Children's Hospital
- ◯ Sutter Medical Center
- ◯ Texas Children's Hospital
- ◯ The Royal Children's Hospital Melbourne
- ◯ Tokyo Metropolitan Children's Medical Center
- ◯ U.N. Mehta Hospital
- ◯ UC Davis Children's Hospital
- ◯ UCLA Mattel

○ UF Shands Hospital
○ University of Iowa Stead Family Children's Hospital
○ University of Maryland Children's Hospital
○ University of Nebraska Medical Center
○ University of Rochester Golisano Children's Hospital
○ University of Tennessee Health Sciences Center
○ Vietnam National Children's Hospital
○ West Virginia University Children's Hospital
○ Wolfson Children's Hospital
○ Yale New Haven Children's Hospital

| How would you categorize your hospital designation? | ○ Freestanding children's hospital |
| | ○ Non-freestanding children's hospital |

| How would you categorize your practice designation? | ○ Academic/teaching |
| | ○ Non-academic |

| Are the patients with cardiac critical illness in your organization cared for in a DEDICATED Cardiac ICU (4 walls or dedicated cardiac team) or a MIXED ICU (mixed cardiac and non-cardiac populations)? | ○ Dedicated |
| | ○ Mixed |

How many beds are dedicated to your cardiac intensive care team?	○ < 10
	○ 10-16
	○ 17-24
	○ 25-40
	○ >40

On average, how many annual admissions does your ICU have? Please average admissions for 2018, 2019, and 2020.	○ < 100
	○ 100-250
	○ 251-500
	○ 501-1000
	○ 1001-2000
	○ 2001-3000
	○ >3000
	○ Unknown

On average, how many cardiac surgical cases are performed annually at your institution? Please average case numbers for 2018, 2019, and 2020.	○ < 50
	○ 50-250
	○ 251-500
	○ 501-1000
	○ 1001-2000
	○ >2000
	○ Unknown

On average, how many cardiopulmonary bypass cases are done annually at your institution? Please average bypass case numbers for 2018, 2019, and 2020.	○ < 50
	○ 50-250
	○ 251-500
	○ 501-1000
	○ >1000
	○ Unknown

How many CICU attendings does your unit have? For the purposes of this question, please count any partial FTE attendings as a full FTE provider.	○ < 10
	○ 11-15
	○ 16-20
	○ >20
	○ Unknown

| Do you have in-house overnight CICU attending coverage? | ○ Yes |
| | ○ No |

Who provides front line care to your cardiac ICU patients? Choose all that apply.	☐ Critical care fellows ☐ Cardiology fellows ☐ NICU fellows ☐ Pediatric residents ☐ Nurse practitioners/physician assistants ☐ Hospitalists (general pediatricians with no additional cardiac or critical care training) ☐ N/A; care is provided by the attending intensivist.
How many total dedicated advance practice providers (nurse practitioners and physician assistants) does your unit have as front-line providers?	○ 0-5 ○ 6-10 ○ >10 ○ Unknown

Definitions for the below questions:

Research: systematic inquiry to produce generalizable knowledge and/or refine or validate existing knowledge

Quality Improvement (1,2,3): identifies performance gaps and practice variation and implements methods to design and test changes to systematically improve the quality and safety of health systems. Data is used to monitor the outcomes of new care processes.

For the sake of this survey, QI research includes methods to design and test changes to systematically improve quality performed with the intent to disseminate via publication or to collaborate at multiple institutions.

Please include projects that collect data and share that data as research, rather than a local QI project that refines a process and either does not collect data or collects limited data which is not shared.

How many CICU attending physicians or advance practice providers lead QI research?	○ 0-5 ○ 6-10 ○ >10 ○ Unknown
Have you participated in or led QI research in the past 5 years? Participation is defined as being a team member in an organized project with another person leading the work.	○ Yes ○ No
Was the QI research in the past single center or multicenter?	○ Single center ○ Multicenter ○ Both
Did the QI research in the past lead to a publication?	○ Yes ○ No
Please list the citation(s).	_____
Are you participating in or leading QI research currently? Participation is defined as being a team member in an organized project with another person leading the work.	○ Yes ○ No
Is the current QI research single center or multi center?	○ Single center ○ Multicenter
Have you used a registry or collaborative to obtain data in the multi center research?	○ Yes ○ No

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Please list the registry or collaborative used.

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What type of QI support is provided to your CICU? Choose all that apply.	☐ A hospital-based QI section ☐ A departmental or divisional QI section ☐ A unit-based QI section ☐ We don't have a formal QI section in our organization

Does your ICU have a dedicated QI specialist as support staff who has protected non-clinical time to perform QI work?

◯ Yes
◯ No

What type of work does the QI specialist do? Choose all that apply	☐ Data collection/Auditing ☐ Data review ☐ Project creation/lead ☐ QI training ☐ Safety compliance ☐ Other

Does your institution provide formal QI training?

◯ Yes
◯ No

What type of QI training does your institution provide? Choose all that apply.	☐ Online training course or modules ☐ Live formal training course ☐ Master's Degree ☐ Fellowship in QI ☐ Mentored projects

Have you completed QI Training?

◯ Yes
◯ No

If so, what type of training have you completed? Choose all that apply	☐ Online training course or modules ☐ Live formal training course ☐ Master's Degree ☐ Fellowship in QI ☐ Mentored projects

Can QI work, including QI research, be used for faculty promotion?

◯ Yes
◯ No
◯ N/A

Please select what type of QI support you would use if offered by PCICS. Choose all that apply.	☐ Feedback on project ideas or design from an expert in the field ☐ Q&A service to answer pressing QI questions ☐ Resources and education on QI (self-directed course material/webpage) ☐ QI course - bring your idea and develop it into a QI project ☐ Network connections to others in PCICS with similar ideas/projects ☐ Other

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References
1. Module 4. Approaches to Quality Improvement. Content. Agency for Healthcare Research and Quality, Rockville, MD. Accessed April 7, 2021. https://www.ahrq.gov/ncepcr/tools/pf-handbook/mod4.html.
2. Fitzpatrick JJ. Distinctions Between Research, Evidence Based Practice, and Quality Improvement. Applied Nursing Research 2016; 29:261
3. Hirschhorn LR, Ramaswamy R, Devnani M, et al. Research versus practice in quality improvement? Understanding how we can bridge the gap. International Journal for Quality in Health Care, 2018, 30(S1), 24-28