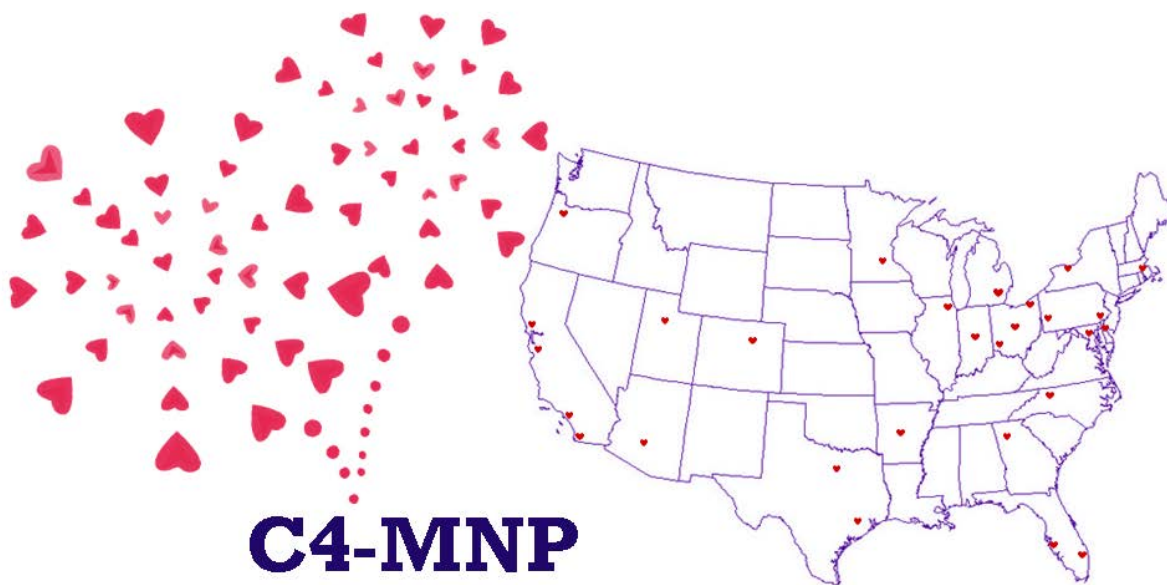


Consortium for Congenital Cardiac Care Measurement of Nursing Practice

State of Practice Assessment Survey

February 2016 – March 2016



Consortium for Congenital Cardiac Care Measurement of Nursing Practice

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Dear Colleagues,

We are pleased to inform you that we have completed the analysis of surveys for the Consortium for Congenital Cardiac Care - Measurement of Nursing Practice (C4-MNP) State of Practice Assessment.

The goal of C4-MNP is to establish a national collaborative to identify nursing care actions for measurement in the highly complex pediatric cardiovascular patient environment. Through the framework of the consortium, a national community of researchers, administrators, and expert clinicians have come together to form a broad network committed to rigorous measurement of the quality of care delivered by pediatric cardiovascular nurses.

The purpose of the C4-MNP State of Practice Assessment was to identify variation in practice, inform development of measures, and develop recommendations to standardize care. Questions were developed by the C4-MNP working groups for Clinical Deterioration, Patient/Family-Centered Care, Adult CHD, Pressure Ulcers, Work Environment, and Nutrition.

The invitation to participate in the State of Practice Assessment survey was sent to 28 C4-MNP hospitals and 17 completed the survey for a response rate of 61 percent. Below, please find the aggregate result report.

On behalf of this research team, I would like to extend our heartfelt appreciation for your continued commitment to this collaborative as we work to improve outcomes for pediatric cardiovascular patients and their families. I am confident that we will continue to generate new knowledge that will be important to our practice and to the overall field of pediatric cardiovascular nursing.

Please let me know if you have any questions related to any part of this work.

Sincerely,



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Topic One: Clinical Deterioration

Question 1. Do you utilize an early warning scoring system in your **acute** care area?

Early Warning Scoring System Acute Care	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	14	82%

Question 1a. If yes, how often are assessments done?

Early Warning Scoring, Acute Care Assessment Intervals	All Institutions (n=12)	
	# of Sites Responded Yes	% of Sites Responded Yes
Q4 Hours	9	75%
Q8 Hours	1	8%
Q12 Hours	2	17%

Question 1b. If yes, choose which early warning scoring system you use in your acute care area.

Early Warning Scoring, Acute Care Tools in Use	All Institutions (n=14)	
	# of Sites Responded Yes	% of Sites Responded Yes
CHEWS	2	14%
PEWS	9	65%
PAWS	0	0%
Other*	3	21%

*Other tools include the Rothman Index, a modified C-PEWS system, and Safe Score.

Question 2. Do you utilize an early warning scoring system in your **intensive** care area?

Early Warning Scoring System Intensive Care	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	2	12%

Question 2a. If yes, how often are assessments done?

Early Warning Scoring, Intensive Care Assessment Intervals	All Institutions (n=2)	
	# of Sites Responded Yes	% of Sites Responded Yes
Q4 Hours	2	100%
Q8 Hours	0	0%
Q12 Hours	0	0%

Question 2b. If yes, choose which early warning scoring system you use in your intensive care area.

Early Warning Scoring, Intensive Care Tools in Use	All Institutions (n=2)	
	# of Sites Responded Yes	% of Sites Responded Yes
CHEWS	1	50%
PEWS	1	50%
PAWS	0	0%

Question 3. Do you utilize a decision-based algorithm for managing clinical deterioration?

Decision-Based Algorithm for Clinical Deterioration	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	8	47%

Question 4. Do you utilize a patient acuity scoring system?

Patient Acuity Scoring System	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	11	65%

Of the 11 sites that responded 'Yes', 9 sites responded describing the type of acuity tool.

Patient Acuity Tools in Use
AACN Synergy Model
CAMEO
Internally designed tool based on patient care hours using data pulled from EPIC
Cerner Clairvia, patient outcome based, not nurse task
STS database
Clairvia
Staff developed scoring
Optilink
INTERQUAL--based on tool, patients are critical, progressive, or floor level, determines assignments

Topic Two: Patient and Family Centered Care

Question 1. Does your hospital have a family resource center?

Family Resource Center	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	17	100%

Question 2. What services are available in your family resource center?

Family Resource Center Services	All Institutions (n=14)	
	# of Sites Responded Yes	% of Sites Responded Yes
Library/Librarian	7	50%
Social Workers	3	21%
Laundry	3	21%
Computer/Internet Access	8	57%
Educational Classes for Parents	4	29%
Patient Specific Care Training	3	21%
Ronald McDonald House Services	2	14%
Child Life Resources	3	21%
Massage Therapy, Stress Management, Reiki	2	14%
Sleeping Facilities	3	21%
Pamphlets, Booklets, Videos	3	21%

Question 3. Does your unit partner with outside agencies to provide support to your families?

Partnership with Outside Agencies to Support Families	All Institutions (n=16)	
	# of Sites Responded Yes	% of Sites Responded Yes
	13	81%

Question 3a. If yes, name the types of outside agencies.

Outside Agencies for Families	All Institutions (n=12)	
	# of Sites Responded Yes	% of Sites Responded Yes
Mended Little Hearts	7	58%
American Heart Association	2	17%
Ronald McDonald House	3	25%
Other*	5	42%

*Other agencies include Intermountain Healing Hearts, Sisters by Heart, Cox Automotive Michael P. Fisher Foundation, Raising Special Kids, home care companies, community organizations, and WIC clinics.

Question 4. What family resources are available at the unit level?

Unit Specific Family Resources	All Institutions (n=13)	
	# of Sites Responded Yes	% of Sites Responded Yes
Social Work	9	69%
Child Life Specialist	7	54%
Educational Resources: Pamphlets, Booklets, Videos	2	15%
Ronald McDonald House Services	1	8%
Parent Coffee Hours	2	15%
Case Management	3	23%
Lactation Rooms	2	15%
Parent Group/Support Group Meetings	5	38%
Chaplain	4	31%

Question 5. Does your unit engage families in patient and family-centered rounding?

Patient and Family-Centered Rounding	All Institutions (n=16)	
	# of Sites Responded Yes	% of Sites Responded Yes
	16	100%

Question 6. Does your unit engage families in medical or team-based bedside rounds?

Medical or Team-Based Bedside Rounds	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	17	100%

Question 7. Does your unit invite family members to be present during procedures at your center?

Family Members Present During Procedures	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	8	47%

Question 8. Does your unit invite family members to be present during nurse to nurse bedside report?

Family Members Present During Nurse to Nurse Report	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	13	76%

Question 9. Does your unit invite family members to be present during standardized patient handoffs?

Family Members Present During Standardized Patient Handoffs	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	12	71%

Question 10. Do you hold regular interdisciplinary care conferences?

Regular Interdisciplinary Care Conferences	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	13	76%

Question 10a. If yes, how frequently?

Interdisciplinary Care Conferences Frequency	All Institutions (n=12)	
	# of Sites Responded Yes	% of Sites Responded Yes
As Needed	5	42%
Daily	2	17%
Weekly	5	42%
Specific for Chronic Patients	1	8%
At the Request of Parents	1	8%

Question 10b. If yes, do you invite parents to the care conferences?

Parents Invited to Interdisciplinary Care Conferences	All Institutions (n=13)	
	# of Sites Responded Yes	% of Sites Responded Yes
	8	62%

Question 11. What are the top two ways that parents get information from the team?

Sources of Information for Parents	All Institutions (n=16)	
	# of Sites Responded Yes	% of Sites Responded Yes
Rounds	14	88%
Bedside Nurses	7	44%
Bedside Communication Board	3	19%
Multidisciplinary Rounds	1	6%
Care Conferences	2	13%
Meeting with Physician	4	25%

Question 12. Is there a formal way for parents to get support from other parents?

Parent to Parent Support	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	9	53%

Question 12a. If yes, please describe how this happens.

Parent to Parent Support	All Institutions (n=8)	
	# of Sites Responded Yes	% of Sites Responded Yes
Advisory Councils	2	25%
Support Groups	6	75%
Mended Little Hearts	3	38%

Topic Three: Adult Congenital Heart Disease

Question 1. Do you care for adult congenital heart disease (CHD) patients at your center?

Adult CHD Patients	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	15	88%

Question 1a. If yes, do you care for all adult congenital disease or is care limited to specific diagnoses?

Adult CHD Patients	All Institutions (n=14)	
	# of Sites Responded Yes	% of Sites Responded Yes
All Adult CHD Patients	9	64%
Limited to Specific Diagnoses	5	36%

Of the 5 sites that chose 'Limited to Specific Diagnoses', 4 sites provided additional information regarding the types of diagnoses.

Types of Specific Diagnoses
Single Ventricle Fontan patients
Limited to diagnosis not usually seen in the adult population.
No co-morbidities
Single Ventricle Physiology, and any complicated ACHD patient that an adult cardiologist does not feel comfortable providing care of pre/post-surgery

Question 1b. If yes, do you utilize the American Association of Critical-Care Nurses 'ABCDE' bundle?

ABCDE Bundle	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	3	20%

Question 1c. If yes, are adult-based protocols utilized for these patients?

Adult-Based Protocols in Use for ACHD Patients	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	6	40%

Of the 6 sites that chose 'Yes', 4 sites named the types of adult-based protocols utilized.

Types of Adult-Based Protocols Used
We utilize algorithms specific to diagnosis/procedure
VAP, DVT prevention, early ambulation
VTE prophylaxis, anticoagulation
VTE, hypoglycemic protocols, and antibiotic protocol

Question 1d. If yes, are adult-based non-cardiac resources and/or consultations (e.g. pulmonary, diabetes, psychology) available in your program for these patients?

Adult-Based Non-Cardiac Resources and/or Consultations	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	15	100%

Topic Four: Pressure Ulcers

Question 1. Please indicate if any of the following common practices to prevent device-related pressure ulcers are in place at your center.

Device-Related Pressure Ulcer Prevention	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
Guidance for selecting appropriately sized device(s)	12	71%
Monitoring/evaluation of correct size/fit of device(s)	11	65%
Monitoring/evaluation of device securement	13	76%
Assessment of skin under/around device(s)	17	100%
Cleaning of skin under/around device(s)	15	88%
Repositioning of device(s)	15	88%
Use of skin protectant (ointment or dressing)	15	88%
Padding of area	14	82%

Question 2. Is there a process for evaluating device necessity at your center?

Process for Evaluating Device Necessity	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	15	88%

Question 2a. If yes, how frequently is device necessity evaluated?

Frequency of Device Necessity Evaluation	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
Hourly	0	0%
Each Shift	8	53%
Daily	7	47%
Weekly	0	0%
Other	0	0%

Topic Five: Work Environment

Question 1. What programs or initiatives are in place at your center to support staff in a healthy work environment?

Healthy Work Environment for Staff	All Institutions (n=12)	
	# of Sites Responded Yes	% of Sites Responded Yes
Health & Wellness Programs	3	25%
Employee Assistance Programs	2	17%
Internal Councils	5	42%
Internal Committees/Support Programs	4	33%
Unit Based Activities	2	17%

Question 2. How do you evaluate staff satisfaction?

Staff Satisfaction	All Institutions (n=14)	
	# of Sites Responded Yes	% of Sites Responded Yes
Gallup Survey	2	14%
NDNQI Survey	5	36%
Press Ganey Annual Employee Survey	3	21%
Internal Staff Satisfaction Surveys	7	50%
AACN Healthy Work Environment Survey	2	14%

Question 3. Does your center engage in clinical inquiry (evidence-based reviews, improvement science, collaborations and/or research)?

Clinical Inquiry Activity	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
	17	100%

Question 4. Please indicate if the following resources and/or programs to support clinical inquiry are available at your center.

Clinical Inquiry Support	All Institutions (n=17)	
	# of Sites Responded Yes	% of Sites Responded Yes
Nurse scientist for consultation/mentorship	11	65%
Research or evidence-based practice (EBP) fellowships	13	76%
Research or EBP grants	12	71%
Access to research/EBP support services	15	88%
Courses on clinical inquiry	8	47%
Dedicated/protected project time	5	29%
Connection to faculty at School of Nursing	9	53%
Funds for dissemination	6	35%

Topic Six: Nutrition

Question 1. Do dietitians at your center round with the team daily?

Dietitian Daily Rounding	All Institutions (n=16)	
	# of Sites Responded Yes	% of Sites Responded Yes
	14	88%

Question 2. Does your center have a feeding protocol?

Feeding Protocol	All Institutions (n=16)	
	# of Sites Responded Yes	% of Sites Responded Yes
	14	88%

Question 3. Would you be willing to share this protocol?

Sharing Feeding Protocol	All Institutions (n=14)	
	# of Sites Responded Yes	% of Sites Responded Yes
	11	79%

Question 4. What are the common formulas you feed patients less than or equal to 1 year old at your center?

Infant Formulas in Use	All Institutions (n=14)	
	# of Sites Responded Yes	% of Sites Responded Yes
Enfamil Products	9	64%
Alimentum	3	21%
Elecare	2	14%
Enfaport	2	14%
Similac	5	36%
Breast Milk	3	21%
Gentlease	3	21%
Enfacare	2	14%
Neosure	3	21%

Question 5. Are there nutritional supplements you use routinely other than Vitamin D and calcium?

Nutritional Supplements	All Institutions (n=16)	
	# of Sites Responded Yes	% of Sites Responded Yes
	6	38%

Of the 6 sites that chose 'Yes', all 6 sites named the types of additional supplements they use routinely.

Additional Supplements in Use	# of Sites Responded
Poly-vi-sol with Iron	3
Add formula powders to increase calorific values	1
Multi Vitamin	2

Question 6. What criteria does your center use to deem a patient ready to start feeding?

Unique Responses Across Participating Sites
Hemodynamically stable, low dose inotropes, respirations less than 60 for infants with oral feeds.
Depends upon the cardiac defect. May need evaluation by a speech therapist if a patient is gagging, slow to feed and or disinterested in feeding. Coordinated suck and swallow without gagging, May need a Speech Therapist Consult if concerned.
Hemodynamic stability; lack of contraindication; evidence of GI motility.
Patient dependent- we do use trophic feeds for patients who are deem too sick to begin a feeding regimen.
Signs of good abdominal per-fusion, normal Urine output, normal lactate.
Ready, Set, Eat! Pathway for OT/ST (physical signs) Feeding Algorithm (physiologic readiness).
Not on CPAP and HFNC less than or equal to 4L Not on vasopressin Epi less than or equal to 0.03 No procedures in next 8 hours.
Daily assessment of feeding readiness at daily rounds. Patient must have normal bowel function (bowel sounds, passing flatus, or stooling), normal abdominal exam. We do not routinely measure abdominal girth unless we have a clinical concern.
pH, Lactate, cerebral saturation.
Clinical Assessment.
Positive bowel sounds, stooling, hemodynamic stability, stable lactate levels.
Stable hemodynamics, low vasopressor requirement.

Question 7. Does your center typically feed patients on low doses of inotropic/pressor support?

Low Doses of Inotropic/Pressor support	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	10	67%

Question 8. Does your center typically feed patients on higher levels of inotropes/pressors?

High Doses of Inotropic/Pressor support	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	1	7%

Question 9. Does your center typically feed patients on paralytics?

Feeding Patients on Paralytics	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	4	27%

Question 10. Does your center do pre-operative screening for malrotation?

Pre-Operative Screening for Malrotation	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	5	33%

Question 11. Does your center feed patients pre-operatively who are on PGE1 for pulmonary blood flow?

Pre-Operative Feeding for Pulmonary Blood Flow	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	12	80%

Question 11a. If yes, please select the method.

Methods of Feeding	All Institutions (n=12)	
	# of Sites Responded Yes	% of Sites Responded Yes
Oral	1	8%
NG/NJ	2	17%
Both	9	75%

Question 12. Does your center feed patients pre-operatively who are on PGE1 for systemic blood flow?

Pre-Operative Feeding for Systemic Blood Flow	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	9	60%

Question 12a. If yes, please select the method.

Methods of Feeding	All Institutions (n=8)	
	# of Sites Responded Yes	% of Sites Responded Yes
Oral	2	25%
NG/NJ	3	38%
Both	3	38%

Question 13. What percentage of your stage 1 palliation single ventricle patients receives a G-tube?

Percent of Stage 1 Single Ventricle Patients with G-tube	All Institutions (n=14)		
	# of Sites Responded	Average Percentage of All Sites	Range
	14	27%	0% - 90%

Question 14. How does your center determine who needs a G-tube?

Unique Responses Across Participating Sites
Failed OPMS; vocal cord injury/paralysis, ENT/GI recommendations.
Swallow Study and team discussion, FTT or inability to PO feed enough caloric intake.
No standards.
Feeding intolerance/reflux/ aspiration events.
Overt dysphagia, poor growth, inadequate intakes.
FTT or distress with feeds.
Usually only trach patients receive a G tube.
Algorithm.
Not able to feed or have failed a speech swallow evaluation.
Inability to tolerate PO feeds.
Surgeon preference, consult with general surgeon.
Long Term Feeding Intolerance.
Failure to be cleared for oral feedings by Speech Therapy, inability to take adequate calories for growth with oral intake alone.
If NG feeding > one year potentially earlier i.e. 6 months if family requests GT.

Question 15. Does your center place G-tubes at the time of surgery for single ventricle patients?

G-tube at Surgery for Single Ventricle Patients	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	0	0%

Question 16. Does your center send patients home with NG tubes?

Patients Discharged with NG Tubes	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	13	87%

Question 17. In intubated patients, does your center initiate feeding via an NG or an ND tube?

Feeding via NG or ND Tube for Intubated Patients	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	15	100%

Question 18. Do nurses routinely measure residual gastric volumes in NG fed patients?

Gastric Volume Measurement for NG Fed Patients	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	7	47%

Question 19. Do nurses routinely measure abdominal circumferences in NG fed patients?

Abdominal Circumference Measurement for NG Fed Patients	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	9	60%

Question 20. How long does your center keep your aortic coarctation repairs NPO post-operatively?

Length of Post-Op NPO	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
24 - 48 Hours	8	53%
Patient Specific	3	20%
Other*	4	27%

*Other responses include 5 days, 4-6 hours post-extubation for older infants, and one day post-op for infants on low dose or no vasoactive medications

Question 21. For patients that develop chylothorax, what type of formula does your center utilize?

Formula Type	All Institutions (n=14)	
	# of Sites Responded Yes	% of Sites Responded Yes
Enfaport	9	64%
Monogen	2	14%
Portagen	4	29%

Question 22. For patients that develop chylothorax, does your center offer skimmed breast milk as an option?

Skimmed Breast Milk for Patients with Chylothorax	All Institutions (n=14)	
	# of Sites Responded Yes	% of Sites Responded Yes
	11	79%

Question 23. Do speech language pathologists at your center work with all high risk and single ventricle patients?

Speech Language Pathologists for Single Ventricle Patients	All Institutions (n=15)	
	# of Sites Responded Yes	% of Sites Responded Yes
	13	87%