

Maternal, Newborn, Child and Youth Network

Available April 1, 2019

Kristine Fraser RN, MN, BN, BA, CNCCP(C)
Paediatric Nurse Consultant, MNCYN

- The Southwestern MNCYN's Paediatric Advancement Program developed a Regional Paediatric Orientation (RPO) to promote the consistent delivery of safe, quality paediatric care across our region
  - Core paediatric nursing competencies were created in collaboration with our regional partners
  - These core competencies are at the foundation of the RPO & will facilitate learners to develop the theoretical knowledge required to support care provision for paediatric patients in the region

# **Core Competency Indicators**

### TABLE OF CONTENTS

1.	A: Airw	vay Assessment (Module 2: Respiratory)	1
2.	B: Brea	athing Assessment (Module 2: Respiratory)	2
3.	C: Circ	ulation Assessment (Module 3: Cardiovascular)	3
4.	D: Disa	ability Assessment (Module 4: Neurological)	4
5.	E: Exp	osure (Module 1: Paediatric Assessment Framework)	5
6.	Pain A	ssessment (Module 4: Neurological)	6
7.	Paedia	atric Skills	6
	a.	Weight-based Medication Calculations	6
	b.	Administration of Medications	6
	C.	Intravascular Access	7
	d.	Fluid Balance	7
	e.	Venous Blood Sampling	7
	f.	Capillary Blood Sampling	7
	g.	Cardio-Respiratory Monitor	7
	h.	Lumbar Puncture	7
	İ.	Placement of NG/OG Tube	7
	j.	Urine Specimen Collection	7
	k.	Urinary Catheter Insertion	7
	I.	CNO's Practice Guidelines for Consent	7
8.	Employ	yee Comments	8
9.	Precep	otor Comments	8



# A: Airway

#### 9

#### competency maleutor root

### Registered Nurse

Belf-Accessment Key Novice (NA): Not a skill I have learned or developed	Evaluation Key O: Observation In clinical setting	Review Key P = Hospital Protocol or Procedure Review	Se		sessr nploy	nent l ee	by			tor Evalua ompetend	
1. Advanced Beginner: familiar, require guidance 2. Competent: basic experience, require support 3. Proficient: solid experience, recognize deviations, have ability to respond independently 4. Expert: vast experience, intuitive knowledge	RID: Return Demo T: Written Test V: Verbal Review	8 = Self-Learning Package D = Demonstration C = Clinical Practice or Simulation	NA	1	2	3	4	Method of Review (Use Key on Left)	Date	Initiale	Method
Module 2: The Respiratory System	n										
A: Airway Assessment											
Describe unique paediatric airway p	hysiology							S			
Recognize partial versus complete a upper & lower airway disease	irway obstructi	on, including						S/C			
Perform techniques to ensure airway positioning, jaw thrust & chin lift	y patency inclu	ding						P/S/D/C			
Set-up & problem solve suction equi	ipment (i.e.) 80	-100 mm/Hg						P/S/D/C			
Perform oral and nasopharyngeal suction techniques		<b>e</b> s						P/S/D/C			
Identify appropriate airway adjuncts sizing of oral & nasal airways	& techniques,	including proper						P/S/D/C			

Initials	Printed Name/Signature	Initials	Printed Name/Signature	Initials	Printed Name/Signature

Created: 2015-August, Updated: 2019-January-24 (K. Fraser, MNCYN Paediatric Nurse Consultant)



Page -

# **B:** Breathing

Module 2: The Respiratory System  B: Breathing Assessment	
Describe unique respiratory physiology of the paediatric patient	s
Describe & recognize age appropriate respiratory rates including too fast versus too slow	S/C
Determine & recognize respiratory distress, respiratory failure & respiratory arrest	S/C
Describe, recognize & perform auscultation to identify breath sounds	S/D/C
Describe & recognize increased work of breathing, including accessory muscle use & influencing factors	S/C
Initiate appropriate use of airway/oxygen delivery devices:	P/S/D/C



## C: Circulation

Expert: vast experience, intuitive knowledge		
Module 3: The Cardiovascular System  C: Circulation Assessment		
Describe unique paediatric cardiovascular physiology		s
Describe & understand congenital heart defects & acquired heart disorders		s
Describe & recognize age appropriate heart rates including rates which are too fast or too slow		S/D/C
Describe, recognize & perform auscultation to identify heart sounds, heart rate & rhythm, & describe heart murmurs		S/D/C
Describe, recognize & perform perfusion assessment, including capillary refill, skin colour, & central & peripheral pulse checks		S/D/C
Describe, recognize & perform non-invasive blood pressure monitoring with interpretation, including choosing correct BP cuff		S/D/C
Describe thermoregulation & perform age appropriate temperature measurement techniques, including implementing heat conserving measures (i.e.) isolette, radiant warmer, bear hugger or fluid warmer		P/S/D/C
Describe & understand different types of shock		S
Printed Name/Signature Initials Printed	Name/Signature	Initials



# **D:** Disability

Module 4: The Nervous System  D: Disability Assessment	
Describe & perform fontanelle assessment, including understanding abnormal findings (i.e.) bulging versus sunken fontanelle	S/D/C
Describe basic primitive reflexes & understanding of abnormal findings	S
Describe & perform a neurological assessment on a child including:  Tone Interactiveness Consolability Speech/cry Look/gaze	S/D/C
Recognize neurological concerns including pupil, motor & verbal response (i.e.) Glasgow Coma Scale (GCS)	S/C
Describe neurological conditions & recognize signs of clinical deterioration	s
Describe hypoglycemia & hyperglycemia including performing point of care glucose monitoring	S/D/C



# E: Exposure

expert: vast experience, intuitive knowledge  Module 1: Paediatric Assessment Framework  E: Exposure	
Complete a primary assessment of an ill or injured child using a focused physical examination	P/S/D/C
Complete a secondary assessment consisting of a focused history & detailed physical examination with ongoing reassessment of child's status & response to treatment	P/S/D/C
Consider the mental health & well-being of both the child & family members involved in the care plan	D/C
Identify & deliver developmentally appropriate care, providing anticipatory guidance & coaching based on developmental stage for both child & family	P/S/D/C
Incorporate principles of Family-Centered Care into the planning & delivery of care, including supporting & partnering with the child & family, creating a friendly, safe environment.  Please review: 2017 Canadian Paediatric Nursing Standards	P/S/D/C



## **Pain Assessment**

Pain Assessment							
Perform & document paediatric pain scales, including self-report & observational scales (i.e.) Faces & FLACC						P/S/C	
Describe & understand paediatric procedural sedation, including a general knowledge of common medications  • Complete MNCYN's Procedural Sedation Learning Package						P/S/D/C	
Mandrille 4: Dendintrie Annanguage Programme III Mandrille Et Phried N							
Module 1: Paediatric Assessment Framework; Module 5: Fluid N Nursing Skills & Simulation Paediatric Skills  Weight-based medication calculations: Perform & document	ianag	emer	it & F	Medic	ation		ion; a
Nursing Skills & Simulation Paediatric Skills Weight-based medication calculations: Perform & document	lanag	emer	nt & N	Medic	ation	P/S/D/C	ion; a
Nursing Skills & Simulation Paediatric Skills  Weight-based medication calculations: Perform & document  Administration of medications: Perform & document	lanag	emer	nt & F	Medic	ation		ion;
Nursing Skills & Simulation Paediatric Skills Weight-based medication calculations: Perform & document	lanag	emer	nt & I	Medic	ation		ion; i



# **Nursing Skills**

. Expert: vast experience, intuitive knowledge	
Intravascular Access: Perform & document  Initiate vascular access with age appropriate techniques, including securing site & maintaining patency  Anticipate & assist with intraosseous needle insertion	
Fluid Balance: Perform & document input & output, including calculating weight based total fluid intake (TFI)	P/S <sub>1</sub> .
Venous Blood Sampling: Perform & document	P/S/D/C
Capillary Blood Sampling: Perform & document	P/S/D/C
Cardio/Respiratory Monitor: Apply monitor & pulse oximetry	P/S/D/C
Lumbar Puncture: Assist with & document	P/S/D/C
Placement of NG/OG Tube: Perform & document, including appropriate sizing	P/S/D/C
Urine Specimen Collection: Perform & document Culture & Sensitivity (C&S) & Routine & Microscopic (R&M)	P/S/D/C
Urinary Catheter Insertion: Perform & document, including appropriate catheter sizing, sterile technique & indwelling	P/S/D/C
CNO's Practice Guidelines for Consent: Review & practice obtaining consent as per CNO's policy (pg. 6)	n



### **Primary Goal of Program**

- Teach nurses how to perform a systematic paediatric assessment & to critically think through findings
- Useful for new staff during orientation, as well as a valuable tool for experienced staff wishing to refresh their paediatric knowledge
- Consists of 6 self-directed learning modules which are based on current best practice guidelines
- Available online, which allows learners to complete at their own pace
- Available April 1, 2019



- No fee for MNCYN partners, \$150 fee for non-members
  - For non-members, simulation fees are not included & may be negotiated as needed
- Simple Sign-Up for registration
- MNCYN will generate a login & password, email learner
- May be a waitlist depending on uptake of program
- Participants receive a certificate with course completion
- Introduction module will be sent to leaders
- Please note, this is not a credit course
- RPN-OP is the intellectual property of MNCYN



### **RPO Online Platform**



Home / Course catalog

Search courses



### Regional Paediatric Orientation (RPO)

The Southwestern Ontario Maternal, Newborn, Child and Youth Network (MNCYN)'s Paediatric Advancement Program has developed a Regional Paediatric Orientation (RPO) to promote the consistent delivery of safe, quality paediatric care across our...

You have this course

1 to 1 of



### **Course Outline**

- Introduction to the Regional Paediatric Nursing Orientation Program
- Core Paediatric Nursing Competencies.docx
- Pre-Examination Knowledge Check-In
- Module 1: Paediatric Assessment Framework
- Module 1 Quiz
- Module 2: The Respiratory System
- Module 2 Quiz
- Module 3: The Cardiovascular System
- Module 3 Quiz
- Module 4: The Nervous System
- Module 4 Quiz
- Module 5: Fluid Management and Medication Administration
- Module 5 Quiz
- Module 6: Nursing Skills and Simulation
- Module 6 Quiz
- Post-Examination Knowledge Check-In
- Course Evaluation



Learners must complete each module before moving on to the next

## **Snippets from Modules**

MNCYN Regional Paediatric Nursing Orientation Program

### Introduction to the Regional Paediatric Nursing Orientation Program

Self-Directed Learning Package

#### Module 3: The Cardiovascular System

The circulatory system is a complex network of arteries, veins and capillaries. Ca. disorders affect not only the adult population; though not as common, heart and circula problems can also affect children. In paediatrics, cardiovascular disorders are divided into ty major groups: congenital cardiac defects and acquired heart disorders<sup>3</sup>. This module will review cardiovascular disorders which affect children, important elements of a hemodynamic assessment of a child, including how children are unique from adults, information about sepsis, thermoregulation, dysrhythmias and identifying different types of shock.

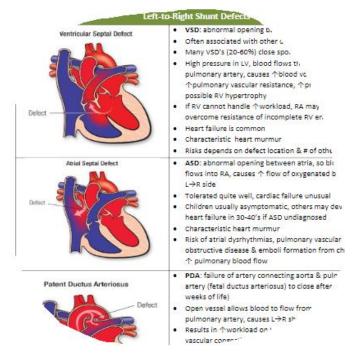
#### **Learning Objectives**

Learners will demonstrate an understanding of the following cardiovascular system concepts:

- > Anatomical differences in the paediatric cardiovascular physiology
- > Congenital heart defects & acquired heart disorders
- > Cardiovascular assessment, interpretation of abnormal findings & interventions
- > Thermoregulation
- > Identify types of shock & nursing considerations for each
- Discuss dysrhythmias as described by Paediatric Advanced Life Support (PALS) P Paediatric Emergency Assessment, Recognition & Stabilization (PEARS) and potr acute management

#### Module Readings

- TREKK (2018): Sepsis
- Government of T



### "Nursing Tip\*\*

When caring for a child on an MDI with a spacer, It is a effectiveness of the treatment, the child's tolerance and ability child's ability to use the equipment correctly. Distraction and reckey to the successful administration of a nebulized or MDI treatmen spend a few minutes calming the child after the therapy is done. The tolerate the MDI if on a significant amount of O<sub>2</sub> by mask and/or are the sider using the nebulized route for medication delivery.

### Pre & Post-Exam



The RPN-OP includes a pre and post-examination which are designed to measure the learner's knowledge of paediatrics prior to taking the course, as well as determine knowledge gained after the completion of the program. This design is also a valuable tool to effectively evaluate the program content itself. Learners are not expected to know all of the answers to the questions, however, this course was created to improve and increase the learner's knowledge and understanding of paediatric nursing which should be reflected in the post-exam results. The results of both the pre and post-exam, which will be de-identified for confidentiality, will be used by the MNCYN Paediatric Nurse Consultant to evaluate the program.

The test contains 87 questions

Start test



## **Sample Test Questions**

4 month old with BP 95/50	Normal	
2.5 month old with BP of 101/48	Abnormal	
13 year old with HR of 108	Abnormal	
16 year old with HR of 46 and BP of 85/55	Abnormal	
2 day old with BP of 55/33	Normal	
3.5 year old with BP of 92/58	Normal	
9 year old with HR of 85	Normal	
1 month old with BP of 68/33	Abnormal	
Submit answer		

As a child grows, elastic recoil of the lungs:

Decreases
Stays the same
Increases
Submit answer

Rapid fluid replacement is not recommended for which type of dehydration?

Hypertonic
Istonic
Hypotonic

Submit answer



