## University of the Philippines Manila College of Medicine DEPARTMENT OF PEDIATRICS

## Pediatrics 260 (Internship in Pediatrics) AY 2020-2021

#### **COURSE AND ACTIVITY GUIDE**

#### **COURSE DESCRIPTION**

This course is a six-week rotation in Pediatrics, that will provide skills in recognition and management of most childhood conditions. This course includes exposure in Ambulatory and Emergency Pediatrics, General Pediatrics, Newborn Medicine, and other subspecialties in Pediatrics.

#### **COURSE LEARNING OUTCOMES**

After completing this course, you should be able to:

- 1. To perform detailed and focused neonatal and pediatric history taking and physical examination
- 2. To recognize pediatric emergencies and effectively provide initial management of life-threatening conditions which include performing pediatric and neonatal cardiopulmonary resuscitation
- 3. To diagnose all common and some uncommon pediatric conditions and diseases, and provide logical differential diagnosis
- 4. To perform all common and demonstrate some uncommon invasive pediatric procedures
- 5. To formulate a comprehensive management plan for all common childhood illnesses including parental education, preventive care and health maintenance
- 6. To develop a structured approach in prioritizing and handling complicated pediatric cases including organizing referrals to subspecialties
- 7. To confidently present pediatric cases in a concise yet complete and wellorganized manner to consultants, fellows/residents, colleagues and nursing staff through effective verbal and written communication skills
- 8. To practice proper attitude and decorum in dealing with pediatric patients, their family/guardian and colleagues

#### **COURSE SUBMODULES (Rotations)**

- I. Pediatric Emergency Medicine
- II. Telemedicine/ Outpatient Clinic
- III. Pediatric Ward
- IV. Neonatal Intensive Care Unit

#### MODE OF DELIVERY

<u>Phase 1:</u> Remote/online learning, VLE (Pedia 260 Course)

<u>Phase 2:</u> Face to face, remote/online learning, VLE (Pedia 260 Course)

#### **COURSE REQUIREMENTS**

#### A. Clinical Rotations

Each intern is required to rotate and fulfill the requirements in the following areas/ submodules:

- 1. Pediatric emergency room
- 2. Telemedicine/ outpatient clinic
- 3. Pediatric wards
- 4. Neonatal intensive care unit

#### B. Case Presentation (small group discussion)

During the six week rotation, each intern is required to present one case to a consultant and to the rest of the block. The case will either be an actual patient seen or a paper case from any of the areas assigned to the presenting intern. Area and consultant will be assigned on the first day of the Pediatrics rotation.

Content of presentation should include:

- 1. Complete Pediatric History (for actual patient)
- 2. Physical Examination (for actual patient)
- 3. Present Working Impression
- 4. Differential Diagnoses
- 5. Theoretical (Pathophysiology, Epidemiology, etc.)
- 6. Management (Work up and Treatment)

#### **COURSE EVALUATION**

#### 1. Formative

a. Student participation in course activities and online forum

5%

b. Checklist of procedures

#### 2. Summative

a. rag o 11 Biadollo lociaros (1 oct toct)	0 / 0
b. Clinical rotations	
Ward	15%
NICU	15%
PER	15%
OPD/Telemedicine	15%
c. End of rotation Exam	5%
d. Case Presentation	10%
e. Final Exam	10%
f. Compre Exam	<u>10%</u>
TOTAL	100%

a Aug 6-11 Didactic lectures (Post-test)

## **COURSE SCHEDULE**

<u>Phase 1</u> August 1, 2021 – February 9, 2022	
1	Pediatric Emergency Room
2	Neonatal ICU
3	Wards/Telemedicine
<u>Phase 2</u> February 10, 2022 – June 30, 2022	
4	Neonatal Intensive Care Unit
5	Wards/ Telemedicine
6	Subspecialty

## INTERNSHIP COMMITTEE (Pediatrics)

Chair	Dr. Jonathan Cu
Co-chair Members	Dr. Aimee Nano Dr. Marysia Recto Dr. Kevin Bautista Dr. Carmina Arriola Delos Reyes Dr. Angelica Tomas Dr. Jonas Del Rosario Dr. Jochrys Estanislao Dr. Victoria Nolasco Dr. Olivia Reyes Dr. Kristine Tanega Dr. Esterlita Uy
<b>Head Resident Monitor</b>	Krizia Co (09256613498)
Resident Monitors	Ange Collantes 09279594635 Don dela Rosa 09054527272 AJ Fajutag 09212215134 Monique Maglaqui 09278180001 EJ Magnaye 09260220698 Nico Mata 09369497132 Colleen Patubo 09177103716 Marianne Tiongson 09258981063 Dan Concepcion 09175835078 Alqueen Almonte 09177914634

#### **GENERAL HOUSE RULES**

- 1. The student course pack is accessible through the VLE (and distributed in USB flash drive, for some). Please inform UPM IMS for VLE accessibility issues or UPM ILC and the resident monitors for difficulty to access the Pedia 260 course.
- 2. There will be activities that need to be done synchronously online. These are:
  - a. Case presentations and small group discussions (via zoom)
  - b. Quizzes (via google forms or VLE)
  - c. Department conferences
  - d. Virtual patient rounds.
- 3. Schedule for these synchronous activities will be given at the start of your rotation to give you time to prepare.
- 4. In the event that you cannot attend the synchronous session, a text to the resident monitor and a formal letter addressed to the Pediatrics Internship Committee Head shall be sent indicating the reason for non-attendance.
- 5. Attendance for the synchronous activities in the submodules/ rotations will be checked and you are encouraged to actively participate.

## PEDIA 260 Submodule: Pediatric Emergency Medicine

#### Introduction

The Pediatric Emergency Medicine Module is a 7-day clinical rotation under Pediatrics directed towards providing the intern with a simulated, immersive learning environment in order to equip them with the knowledge and application of Pediatric Advanced Life Support principles in the recognition and management of common pediatric emergency cases without direct patient contact at the PGH Pediatric Emergency Room.

The module includes a course orientation on the first day, followed by 5 daily synchronous lectures given in the morning reinforced by interactive case scenarios at the end of the day on the following core topics: (1) Principles of Pediatric Advanced Life Support, (2) Pediatric Respiratory Emergencies, (3) Pediatric Shock (4) Pediatric Cardiac Arrhythmia and Cardiac Arrest, and (5) Pediatric Emergency Procedures. To provide real-time clinical exposure to actual cases encountered in the emergency room, the students will be required to attend the Pediatric Emergency Medicine Virtual Rounds conducted daily at 7am. A post-test and a post-course debriefing with student feedback shall be done on the last day of the rotation.

#### **Objectives**

At the end of the submodule, the interns should be able to:

- 1. Use the **Pediatric Advanced Life Support systematic approach** in assessment and management of all PER paper cases
- Identify characteristics and annotate the steps in the correct sequence of highquality CPR within the context of Basic and Advanced Pediatric Life Support in handling all PER paper cases
- 3. Discuss and apply **Pediatric Advanced Life Support Algorithms** in handling all PER paper cases
- 4. Adequately assess and manage **pediatric respiratory** PER paper cases
- 5. Adequately assess and manage **pediatric cardiac** arrhythmia and cardiac arrest PER paper cases
- 6. Adequately assess and manage **pediatric shock** PER paper cases
- 7. Identify indications and annotate steps of common **pediatric emergency procedures**

#### **Activities**

#### 1. Module Orientation

The first day shall be allotted for the module orientation which shall give the intern an overview of the rotation which shall introduce the team and set mutual expectations for the 7-day rotation. Specifically, the module orientation will discuss the module description, module objectives, schedule of activities, list of required and supplemental resources, as well as the basis for student evaluation during the course.

#### 2. Independent Learning Activities

Time blocks with no scheduled activities shall be designated as periods for selfdirected learning. After each lecture, paper cases shall be released, with the interns given time to prepare for the interactive case presentations/ skills case scenarios later in the day. In the evening, it is expected that the interns shall continue to reinforce learning by reading required and supplemental resources.

#### 3. Pediatric Emergency Medicine Zoom Rounds

The Pediatric Emergency Medicine (PEM) Zoom Rounds is a virtual activity held by the PEM service consultant of the week at 7:00 am every day. In this activity, residents are required to present the cases that they encountered during their 24-hour tour of duty, the patient disposition, course of the patients in the emergency room, as well as resuscitation events. By attending the activity, the interns shall be given a chance to listen and participate to the actual emergency cases encountered during the week, in lieu of a physical, face-to-face rotation at the ER.

#### 4. Pretest

A 10-point pretest via google forms shall be given to the students prior to presenting the pre-recorded lecture for the day.

#### 5. Lecture

There will be 5, **pre-recorded synchronous** 45-minute lectures conducted by the Pediatric Emergency Fellow-On-Duty at 8:00 am to 9:30 am every week for each batch of interns. For each session, a pre-test shall be given to emphasize the important concepts of the day's topic. At the end of the lecture there will be 15 minutes allocated for any questions and clarifications regarding the topic discussed. The following are the submodule topics with their corresponding objectives:

Lecture	Objectives
Principles of PALS	
Pediatric Respiratory	
Emergencies	
Pediatric Shock	<ul> <li>General:         <ul> <li>To discuss the recognition and management of shock in the framework of Pediatric Advanced Life</li> <li>Support (PALS)</li> <li>Specific:                 <ul> <li>To discuss the definition and pathophysiology of shock</li> <li>To discuss the types of shock and their specific pathogenesis</li> <li>To discuss the emergency management for each type of shock</li> <li>To apply the recognition and management of shock to theoretical cases based on actual patients</li> </ul> </li> </ul> </li> </ul>
Pediatric Cardiac Arrhythmia and	·
Cardiac Arrest	
Common Pediatric Emergency Procedures	General Objectives:

To discuss important emergency pediatric procedures based on Pediatric Advanced Life Support (PALS)

At the end of this module, students are expected to

- familiarize with the different emergency procedures
- understand the indications for each emergency procedure
- be able to identify the needs to be prepared prior to the procedure
- o enumerate the steps in performing each procedure
- participate in the demo-return demo at the end of the lecture
- apply the learning on sample situations needing the emergency procedure

At the end of each lecture, there will be a 15-minute period allocated for any questions and clarifications regarding the topic. The paper case for the day's interactive case discussion in the afternoon shall be given after the lecture, with the students expected to prepare during the allotted time for independent learning.

#### 6. Interactive Paper Case Discussion

The 4 interactive paper case discussions shall be conducted during the lecture days by the PEM Consultant of the Week/ Pediatric Emergency Senior Fellow at 4:00 to 5:00 pm. During these sessions, the interns shall be required to present assessment and management of the emergency cases using the Pediatric Advanced Life Support using the Systematic Approach with the four main components: Initial Impression, Primary Survey, Secondary Survey and Post-Resuscitation Care. The maximum length of the presentation shall be 30 minutes, with the next 30 minutes allotted for discussion with the consultant or fellow assigned. The presentation shall then be submitted in pdf format as part of the basis for their grades at <a href="mailto:pgmail.com">pgmail.com</a> with the following format: LU7PERInterns[Date of Rotation], ex. LU7PERInterns1to7September2020.

#### 7. Interactive Skills Case Scenarios

Knowledge of common emergency procedures shall be reinforced by providing 10 case scenarios for each rotating group of interns (8) who shall then identify the indicated procedures in each situation. This will be a light session, where the students will be required to annotate and creatively demonstrating the procedures remotely.

#### 8. Post-Test

The test shall compose of a fifty-point (50) exam which shall be given at 8:00 to 9:00 am on the last day.

#### 9. <u>Post-course Debriefing and Student Feedback</u>

After the test, a 30-minute debriefing session with student feedback shall be done to close the course, with all PowerPoints in PDF formats sent by 4:00pm.

#### Resources

#### 1. Intern's Module Guide

The PEM Learning Modules have accompanying module guides which includes an accompanying text for the lecture, key points and guide questions to facilitate preparation for the interactive case discussion and supplemental reading for the allotted time for independent learning.

#### 2. Supplementary Resources:

- a. Licensed
- 1. American Heart Association (2016) *Advanced Cardiovascular Life Support Provider Manual 2016.* (International English edition). Texas, USA: Orora Visual
- 2. American Heart Association. (2016). *Advanced Pediatric Life Support Provider Manual 2016.* (International English edition).
  - b. Open Resource
- American Heart Association. (2015) Highlights of the 2015 American Heart Association Guidelines Update for CPR and ECC. Retrieved from <a href="https://eccguidelines.heart.org/wp-content/uploads/2015/10/2015-AHA-Guidelines-Highlights-English.pdf">https://eccguidelines.heart.org/wp-content/uploads/2015/10/2015-AHA-Guidelines-Highlights-English.pdf</a>
- 2. American Heart Association. (2020). Interim Guidance for Basic and Advanced Life Support in Adults Children and Neonates with Suspected or Confirmed COVID-19. *Circulation 2020. 141:e933 e943.* Retrieved from https://www.ahajournals.org/doi/pdf/10.1161/CIRCULATIONAHA.120.047463
- 3. Castro, D., Freeman, L., (June 3, 2020).Oral Airway. Retrieved from <a href="https://www.ncbi.nlm.nih.gov/books/NBK470198/">https://www.ncbi.nlm.nih.gov/books/NBK470198/</a>
- 4. John E. Fiadjoe, Charles J. Coté, in A Practice of Anesthesia for Infants and Children(Sixth Edition). (2013). Retrieved from <a href="https://www.sciencedirect.com/topics/medicine-and-dentistry/nasopharyngeal-airway#:~:text=Indications%20for%20an%20NPA%20include,requiring%20oropharyngeal%20or%20laryngopharyngeal%20suctioning">https://www.sciencedirect.com/topics/medicine-and-dentistry/nasopharyngeal-airway#:~:text=Indications%20for%20an%20NPA%20include,requiring%20oropharyngeal%20suctioning</a>
- 5. Chappell, Bradley., (January 2020). How To Insert a Laryngeal Mask Airway. Retrieved from <a href="https://www.msdmanuals.com/professional/critical-care-medicine/how-to-do-other-airway-procedures/how-to-insert-a-laryngeal-mask-airway">https://www.msdmanuals.com/professional/critical-care-medicine/how-to-do-other-airway-procedures/how-to-insert-a-laryngeal-mask-airway</a>
- 6. American Heart Association. (2016). *Advanced Pediatric Life Support Provider Manual 2016.* (International English edition). Chapter 5: Resuscitation Tools, page 22-25.
- 7. UnityPoint.org. Endotracheal Intubation. Retrieved from <a href="https://www.unitypoint.org/peoria/filesimages/Services/ProctorEMSSMOs/79EndotrachealIntubation.pdf">https://www.unitypoint.org/peoria/filesimages/Services/ProctorEMSSMOs/79EndotrachealIntubation.pdf</a>
- 8. The Royal Childrens Hospital, (2017). Oxygen Delivery. Retrieved from <a href="https://www.rch.org.au/rchcpg/hospital\_clinical\_guideline\_index/Oxygen\_delive-ry/#Normal">https://www.rch.org.au/rchcpg/hospital\_clinical\_guideline\_index/Oxygen\_delive-ry/#Normal</a>
- Azoulay, E., et.al., (2018) High-flow nasal oxygen vs. standard oxygen therapy in immunocompromised patients with acute respiratory failure: study protocol for a randomized controlled trial. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5836389/
- 10. ClinicalTrials.gov (2013). A Single-center Study to Assess Peak Inspiratory Flow (PIF) in Different Stages' COPD Patients by Using the In-check Method. (INSPIRE). Retrieved from https://clinicaltrials.gov/ct2/show/NCT01855659
- 11. WebMD, LLC, (2020). Nebulizer. Retrieved from <a href="https://www.webmd.com/asthma/guide/home-nebulizer-therapy">https://www.webmd.com/asthma/guide/home-nebulizer-therapy</a>
- 12. Clevelandclinic, (2014). Inhalers. Retrieved from <a href="https://my.clevelandclinic.org/health/drugs/8694-inhalers">https://my.clevelandclinic.org/health/drugs/8694-inhalers</a>
- 13. Dezube, Rebecca, (June 2019).How To Do Needle Thoracostomy. MSD Manual Professional Version. Retrieved from <a href="https://www.msdmanuals.com/professional/pulmonary-disorders/how-to-do-pulmonary-procedures/how-to-do-needle-thoracostomy">https://www.msdmanuals.com/professional/pulmonary-disorders/how-to-do-pulmonary-procedures/how-to-do-needle-thoracostomy</a>

- 14. The Royal Childrens Hospital, (2017). Intraosseous Access. Retrieved from <a href="https://www.rch.org.au/clinicalguide/guideline\_index/Intraosseous\_access/">https://www.rch.org.au/clinicalguide/guideline\_index/Intraosseous\_access/</a>
- 15. World Health Organization, (2010). Guidelines on Drawing Blood: Best Practices in Phlebotomy. Arterial Blood Sampling.Retrieved from <a href="https://www.ncbi.nlm.nih.gov/books/NBK138661/">https://www.ncbi.nlm.nih.gov/books/NBK138661/</a>
- 16. The Royal Childrens Hospital. Clinical Guide: Lumbar tap.Retrieved from <a href="https://www.rch.org.au/clinicalguide/guideline\_index/Lumbar\_puncture/#:~:text="Lumbar%20puncture%20may%20be%20performed%20with%20the%20child%20lying%20on,than%20bend%20from%20their%20hips.">https://www.rch.org.au/clinicalguide/guideline\_index/Lumbar\_puncture/#:~:text="Lumbar%20puncture%20may%20be%20performed%20with%20the%20child%20lying%20on,than%20bend%20from%20their%20hips.">https://www.rch.org.au/clinicalguide/guideline\_index/Lumbar\_puncture/#:~:text="Lumbar%20puncture%20may%20be%20performed%20with%20the%20child%20lying%20on,than%20bend%20from%20their%20hips.">https://www.rch.org.au/clinicalguide/guideline\_index/Lumbar\_puncture/#:~:text="Lumbar%20puncture%20may%20be%20performed%20with%20the%20child%20lying%20on,than%20bend%20from%20their%20hips.">https://www.rch.org.au/clinicalguide/guideline\_index/Lumbar\_puncture/#:~:text="Lumbar%20puncture%20may%20be%20performed%20with%20the%20child%20lying%20on,than%20bend%20from%20their%20hips."</a>

#### b. Schedule

The daily schedule for interns during the rotation will be as follows:

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
7:00 am to 8:00 am	Pediatric Emergency Medicine Virtual Zoom Rounds	Pediatric Emergency Medicine Virtual Zoom Rounds	Pediatric Emergency Medicine Virtual Zoom Rounds	Pediatric Emergency Medicine Virtual Zoom Rounds	Pediatric Emergency Medicine Virtual Zoom Rounds	Pediatric Emergency Medicine Virtual Zoom Rounds	Pediatric Emergency Medicine Virtual Zoom Rounds
8:00 am to 9:30 am	Module Orientation:	Pretest Lecture 1:	Pretest Lecture 2:	Pretest Lecture 3:	Pretest Lecture 4:	Pretest Lecture 5:	Post-Test Post-Course Debriefing
	Emergency Medicine	Principles of PALS	Pediatric Respiratory Emergencies	Pediatric Shock	Pediatric Cardiac Arrhythmia and Cardiac Arrest	Common Pediatric Emergency Procedures	Student Feedback
9:30 am to 4:00 pm	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
4:00 pm to 5:00 pm	Basic Life Support and High-Quality CPR	Interactive Paper Case Discussion:	Interactive Paper Case Discussion:	Interactive Paper Case Discussion:	Interactive Paper Case Discussion:	Interactive Skills Case Scenarios:	Submission of all Student Requirements
	Pediatric Emergency Medicine Module Study Guide	Application of PALS Principles to the Pediatric Patient in the Emergency Room	Management	Recognition and Management of Pediatric Shock	Recognition and Management of Cardiac Arrhythmias	Indications and Student Annotation of Common Pediatric Emergency Procedures	
5:00 pm to 7:00 am	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning

## c. Evaluation

## <u>Grades</u>

The following shall be the basis for student grades as they undergo the weekly pediatric emergency module:

Item	Weight
Attendance	5%
Interactive Paper Case presentations (4)	60% (15% each)
Interactive Case Scenarios – Indication and Annotation of	10%
Procedures	
Post-Test	25%

## PEDIA 260 Submodule: Pediatric Wards

#### **DESCRIPTION**

The UP-Philippine General Hospital is one of the appointed COViD-19 referral hospitals in the National Capital Region. During the COViD-19 pandemic, the exposure of interns to the pediatric ward will be limited for their safety and protection. Alternative tools will be utilized to enhance teaching of clinical skills and patient cases. This will include virtual rounds and conferences, instructional videos, websites, journal articles and other self-study materials.

Sixteen (16) interns will rotate for the duration of one (1) week per semester, with a total of 2 weeks for pediatric ward rotation. On the first week of rotation during the first semester, the interns will have a virtual rotation. On the second week of rotation during the second semester\*, the interns will have a face-to-face patient encounter. During this week, only four (4) interns will be allowed to be physically present at the ward at any given time.

Ward 9 has a total of 25 patient bed capacity and ward 11 has a total of 23 patient beds. The Ward 9 patient beds are being managed by the residents or fellows in-training. It is divided in to three General Pediatrics services. The Ward 11 patient beds are being managed primarily by the pediatric surgery service. When indicated, Ward 11 patients are referred to the pediatric service for co-management. Each ward service will be composed of residents or fellows and 1-2 interns.

At the start of the rotation, an orientation will be given by the Assistant Chief Resident for Services via a virtual meeting.

#### **OBJECTIVES**

#### **General Objectives**

- 1. Acquire proficiency in the recognition of diseases in children requiring inpatient care.
- 2. Acquire knowledge and skills in the comprehensive hospital management of common pediatric diseases.

#### **Specific Objectives**

After the two-week ward rotation, the intern rotator should be able to:

- 1. Identify common pediatric conditions requiring in-patient care.
- 2. Elicit a comprehensive pediatric history including the birth and maternal history, immunization history, nutritional history, developmental history, and when applicable, a thorough adolescent history.
- 3. Acquire and demonstrate appropriate bedside and webside manners.
- 4. Learn and perform a thorough actual or virtual pediatric physical examination using proper and appropriate techniques for specific age groups.
- 5. Formulate a clinical diagnosis and differential diagnoses based on gathered data from the history and physical examination.

<sup>\*</sup>Please see Appendix for alternative ward rotation plans: 1) purely face to face and 2) purely virtual

- 6. Understand the epidemiology and pathophysiology of common pediatric ward cases.
- 7. Identify appropriate diagnostic tools for common pediatric ward cases.
- 8. Correlate laboratory findings with the history, physical examination, and course of the patient.
- 9. Formulate an appropriate evidence-based management.
- 10. Present clinical data orally in a clear and concise manner.
- 11. Learn, demonstrate and/or perform basic pediatric procedures, such as but not limited to intravenous catheter insertion, blood extraction, nasogastric tube insertion and foley catheter insertion.

#### **ACTIVITIES**

#### First Semester (1 week): Virtual Ward Rotation

#### i. Online Clinical Rotation

Four to five interns will be assigned to a ward service. Interns are required to attend daily virtual patient rounds of their respective services that will be facilitated by the residents/ fellows. Each intern will be assigned one service patient. The intern should be able to perform a virtual interview of the patient/caregiver, which, he/ she will present during the service rounds. The intern may actively take part in the patient's management by suggesting diagnostic exams and treatment plans. He/ She should be able to recognize appropriate and timely referrals to other subspecialties when needed.

#### ii. Asynchronous Learning Activities

Interns will be assigned instructional/ educational materials to enhance their knowledge on common pediatric ward cases and basic pediatric procedures. The assigned learning materials should be completed by the interns during their two-week rotation.

#### Second Semester (1 week): Face-to-face Ward Rotation

#### 1. Clinical Rotation

#### **Duty Groups**

The 16 interns will be divided into 2 groups of 8. For the first 4 days, group 1 will rotate in Ward 9 and group 2 will rotate in Ward 11. For the next 3 days, the 2 groups will swap ward assignments. The interns will be divided into 4 subgroups with 4 members each (Groups 1A, 1B, 2A, 2B). Each group will go on-duty alternately at the ward from 7:00AM to 5:00PM (10 hours). The interns must sign the attendance logbook located at the Ward 9 Callroom at the start and end of his/her duty.

#### Interns-on-Duty

The duty interns should attend the morning patient endorsement rounds that will be supervised by the post-duty senior resident or fellow. The ward interns onduty should do patient rounds with their service fellow/ residents during their duty.

The ward interns on-duty may perform procedures like intravenous catheter insertion, blood extraction, NGT insertion, and foley catheter insertion with supervision of a resident or fellow.

Interns are required to wear at least level 2 PPEs with face shields during their ward duty. Social distancing, proper handwashing, and appropriate use of PPEs should be practiced inside the ward and hospital premises at all times.

After the 10-hour duty, interns should no longer have any ward work and should be out of the hospital premises.

#### Ward Clinical Rotation

Each intern will be part of a ward service. 1-2 patient/s from the service will be decked to the intern, for which, he/she will be assigned as the intern-in-charge. He/ She should attend rounds with the service consultant either face-to-face or virtually. As the intern-in-charge, he/ she may actively take part in the patient's management by suggesting diagnostic exams and treatment plans. He/ She should be able to recognize appropriate and timely referrals to other subspecialties when needed. The intern-in-charge is required to complete his/ her patient's clinical abstract, incoming/ outgoing notes, progress notes, and discharge papers. When the intern-in-charge is on-duty, he/she should be responsible to review the chart and the course of the patients which he/she may have missed during the pre-duty and post-duty days that he/she is not physically present in the ward.

#### 2. Asynchronous Learning Activities

Off duty interns are not allowed to be physically present at the ward and hospital premises. During these days, interns will be assigned instructional/educational materials that they should finish studying during their two-week rotation.

#### **Conferences and Preceptorials (for the 2-week rotation)**

All rotating Interns are required to attend the scheduled department conferences either face-to-face or virtually. Ward duty interns shall proceed with ward work after the aforementioned department activities.

For the second week (face-to-face patient encounter), a virtual admission conference will be scheduled every morning from 7:00AM to 8:00AM. Admissions from the previous duty (if any) between 7:00AM to 5:00PM will be presented by the post-duty interns the following day during the admission conference. The fellow or senior resident will facilitate this conference. All interns are encouraged to attend.

There will be 4 virtual small group discussions (SGDs) for the ward rotation that will be scheduled on the first week of rotation. An intern will be assigned to present a case management report of an actual patient or a paper case. The cases will be assigned by fellows or consultants and discussions will involve all rotating interns within the block via virtual conference.

Interns are encouraged to attend division conferences. A list of the schedule of division conferences will be given to the interns every start of the week. Interns can choose which virtual meeting they would attend.

#### **SUMMARY OF ON-LINE ACTIVITIES**

- Department Conferences
- Division Conferences
- Daily Virtual Patient Rounds with Senior Resident/ Fellow
- Service Consultant Patient Rounds
- Daily Admission Conference

- Emeritus Rounds (SGD with Dr. Alfiler)Small Group Discussions

## **SCHEDULE**

## 1<sup>ST</sup> WEEK

TIME	ACTIVITY	FACILITATOR
7:00AM -10:00AM	Daily Service Rounds	Fellows/ Residents
10:00AM - 5:00PM	Service Activities/	Fellows/ Residents/
	Division	Consultant
	Conferences (if	
	any)	
		Fellows/ Residents
10:00AM – 11:00AM		Department
		Conference
11:00AM – 5:00PM		Fellows/ Residents/
		Consultant
	,	
	•	Fellows/ Residents
10:00AM – 12:00PM		Dr. Alfiler
1:00AM – 5:00PM		Fellows/ Residents/
		Consultant
7.00AM 40.00DM		Fallerra / Danislanda
		Fellows/ Residents
1:00PM - 2:00PM	Fellow's Hour	Department
0.00004 5.00004	Comico Activitica/	Conference
2:00PM - 5:00PM		Fellows/ Residents/
		Consultant
7:00AM 12:00DM		Fellows/ Residents
	,	Fellows/ Residents/
1.00F IVI — 3.00F IVI		Consultant
		Consultant
		Student
		Student
	7:00AM –10:00AM	7:00AM –10:00AM  10:00AM – 5:00PM  Service Activities/ Division Conferences (if any)  7:00AM – 10:00AM  10:00AM – 11:00AM  10:00AM – 11:00AM  11:00AM – 5:00PM  Service Rounds Hour  11:00AM – 5:00PM  Service Activities/ Division Conferences (if any)  7:00AM – 10:00AM  Daily Service Rounds  10:00AM – 12:00PM  Dr. Alfiler Emeritus Rounds  1:00AM – 5:00PM  Service Activities/ Division Conferences (if any)  7:00AM – 12:00PM  Daily Service Rounds  1:00PM – 2:00PM  Service Activities/ Division Conferences (if any)  7:00AM – 12:00PM  Service Activities/ Division Conferences (if any)  Daily Service Rounds  1:00PM – 2:00PM  Daily Service Rounds  Division Conferences (if any)  Division Conferences (if any)  Daily Service Rounds

## 2<sup>nd</sup> WEEK

DAY	TIME	ACTIVITY	FACILITATOR/S
MONDAY	7:00AM - 8:00AM	Admission	Fellow/ Senior
		Conference	Resident
	8:00AM -12:00PM	Daily Service Rounds	Fellows/ Residents
	1:00PM - 5:00PM	Service Activities/	Fellows/ Residents/
		Division Conferences	Consultants
		(if any)	
TUESDAY	7:00AM – 8:00AM	Admission	Fellow/ Senior
		Conference	Resident
	8:00AM – 10:00AM	Daily Service Rounds	Fellows/ Residents
	10:00AM –	House Staff Teaching	Department
	11:00AM	Hour	Conference
	11:00AM - 5:00PM	Service Activities/	Fellows/ Residents/
		Division Conferences	Consultants
		(if any)	
WEDNESDAY	7:00AM – 8:00AM	Admission	Fellow/ Senior
		Conference	Resident
	8:00AM – 10:00AM	Daily Service Rounds	Fellows/ Residents
	10:00AM –	Dr. Alfiler Emeritus	Dr. Alfiler
	12:00PM	Rounds	
	1:00PM - 5:00PM	Service Activities/	Fellows/ Residents/
		Division Conferences	Consultants
		(if any)	
THURSDAY	7:00AM – 8:00AM	Admission	Fellow/ Senior
		Conference	Resident
	8:00AM – 12:00AM	Daily Service Rounds	Fellows/ Residents
	1:00PM - 2:00PM	Fellow's Hour	Department
			Conference
	2:00PM - 5:00PM	Service Activities/	Fellows/ Residents/
		Division Conferences	Consultants
		(if any)	
FRIDAY	7:00AM – 8:00AM	Admission	Fellow/ Senior
		Conference	Resident
	8:00AM – 12:00AM	Daily Service Rounds	Fellows/ Residents
	1:00PM - 5:00PM	Service Activities/	Fellows/ Residents/
		Division Conferences	Consultants
		(if any)	
SATURDAY	7:00AM – 8:00AM	Admission	Fellow/ Senior
		Conference	Resident
	8:00AM – 5:00PM	Daily Service Rounds	Fellows/ Residents
0.0.1		Ward Work	_ , , , , , ,
SUNDAY	7:00AM – 8:00AM	Admission	Fellow/ Senior
	0.00444	Conference	Resident
	8:00AM – 5:00PM	Daily Service Rounds	Fellows/ Residents
		Ward Work	

- The Department Conferences, SGDs, and Dr. Alfiler Rounds should be prioritized.
   The interns may be excused from other service activities if any of these activities are scheduled.
- SGDs will be scheduled based on the availability of the consultant.
- If there are no department or service activities scheduled or if the intern is not on-duty (for week 2), interns may use their free time to study asynchronous learning materials.
- The duty interns (for week 2) will join the daily service rounds and other service activities physically. Interns who are not on-duty will join daily service activities or other service activities virtually.

#### **DUTY SCHEDULE (2<sup>nd</sup> week)**

The 16 interns will be divided into 2 groups of 8. For the first 4 days, group 1 will rotate in Ward 9 and group 2 will rotate in Ward 11. For the next 3 days, the 2 groups will swap ward assignments. The interns will be divided into 4 subgroups with 4 members each (Groups 1A, 1B, 2A, 2B). The same duty schedule will be followed for the second part/ semester of the ward rotation.

WEEK 1		MON	TUES	WED	THUR	FRI	SAT	SUN
AM	OPD	Α	Α	Α	Α	А		
9-12NN	WARD	В	В	В	В	В	В	В
PM	OPD	В	В	В	В	В		
1-4PM	WARD	Α	Α	Α	Α	Α	Α	А
		Int 1	Int 2	Int 3	Int 4	Int 5	Int 1	Int 2
DU	TY	Int 6	Int 7	Int 8	Int 9	Int 10	Int 6	Int 7
7PM-	7AM	Int 11	Int 12	Int 13	ER	ER	Int 11	Int 12
		ER	ER	ER	ER	ER	ER	ER

WEEK 2		MON	TUES	WED	THUR	FRI	SAT	SUN
AM	OPD	В	В	В	В	В		
9-12NN	WARD	Α	А	Α	Α	Α	А	Α
PM	OPD	Α	А	Α	Α	Α		
1-4PM	WARD	В	В	В	В	В	Α	А
		Int 3	Int 4	Int 5	Int 1	Int 2	Int 3	Int 4
DU	TY	Int 8	Int 9	Int 10	Int 6	Int 7	Int 8	Int 9
7PM-	-7AM	Int 13	ER	ER	Int 11	Int 12	Int 13	ER
		ER	ER	ER	ER	ER	ER	ER

#### WARD PORTFOLIO

Each rotating intern should submit a ward portfolio by the end of the rotation. Each portfolio should include the following: patient clinical notes (clinical abstract, incoming or admitting notes, progress notes and outgoing notes), duty reflection paper, and procedure checklist.

The patient clinical notes shall be accomplished during the face-to-face patient encounter with each intern submitting notes on a minimum of 2 co-managed patients per week of rotation. The intern should also write a reflection paper about his/her experiences and thoughts during his/ her duty days.

Each intern shall accomplish a procedure checklist. For week 1, interns will be provided video links of each ward procedure that they can watch when they are not on-duty. The intern shall indicate the date he/she finished watching the video on the table below. For week 2, the interns shall perform the procedures to ward patients. Upon completing a procedure, the resident/ fellow present should sign the intern's procedure checklist.

#### **Procedure Checklist**

	WEEK 1	V	VEEK 2
PROCEDURE	VIDEO	DATE	SIGNATURE OF
	DATE	PERFORMED	FELLOW/RESIDENT
	ACCOMPLISHED		
Blood		1.	1.
Extraction		2.	2.
(at least 1)		3.	3.
Intravenous		1.	1.
Line Insertion		2.	2.
(at least 1)		3.	3.
NGT/ OGT		1.	1.
Insertion		2.	2.
(at least 1)		3.	3.
Foley		1.	1.
Catheter		2.	2.
Insertion		3.	3.
(at least 1)			

#### **♦** Should be completed by the end of rotation in Pediatrics

- ♦ 4 ABGs
- ♦ 5 blood extractions
- ♦ 5 IV insertions
- ♦ 2 NGT/OGT insertion
- ♦ 2 Foley catheter insertion

#### WARD GRADE MATRIX

Activity	Weight
Clinical Rotation Phase 1 Phase 2	40% 20%
Progress Notes Phase 1 Phase 2	13% 7%
Procedure Checklist	20%
TOTAL	100%

#### VIDEO LINKS FOR PEDIATRIC BEDSIDE PROCEDURES

- 1. Peripheral IV line insertion <a href="https://www.youtube.com/watch?v=W4\_9louZ4OU&feature=youtu.be">https://www.youtube.com/watch?v=W4\_9louZ4OU&feature=youtu.be</a> <a href="https://www.youtube.com/watch?v=7PfgrngKyM8&feature=youtu.be">https://www.youtube.com/watch?v=7PfgrngKyM8&feature=youtu.be</a>
- 2. Nasogastric Tube Insertion https://www.youtube.com/watch?v=k8aH0TyJYhc&feature=youtu.be
- 3. Foley catheter insertion <a href="https://www.youtube.com/watch?v=O3E\_VOduhPk&feature=youtu.be">https://www.youtube.com/watch?v=O3E\_VOduhPk&feature=youtu.be</a>
- 4. Blood extraction https://www.youtube.com/watch?v=7NSEFVbzTAU

#### **LINKS FOR PEDIATRIC LECTURES**

- 1. COVID-19 related lectures <a href="https://drive.google.com/drive/folders/1dAkAjzAH4LJIgmR-33zkeA0HFmu4aYMh">https://drive.google.com/drive/folders/1dAkAjzAH4LJIgmR-33zkeA0HFmu4aYMh</a>
- 2. Other instructional materials <a href="https://drive.google.com/drive/folders/1g64WAd34qqNwnY1wmePX0Hz40MyHdDeY">https://drive.google.com/drive/folders/1g64WAd34qqNwnY1wmePX0Hz40MyHdDeY</a>

## PEDIA 260 Submodule: Outpatient/ Telemedicine

#### **DESCRIPTION:**

Coronavirus disease (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) which is a new strain of coronavirus. It has caused illness and death in several countries. In the Philippines, the first case of COVID-19 was reported last January 2020 (DOH, 2020a) while a local transmission was confirmed last March 2020 (DOH, 2020b). The government declared Community Quarantine as the number of cases of COVID-19 continue to rise. This declaration led to restriction of movement of people in an area with the aim to prevent the transmission of disease (Presidential Communications Operations Office, 2020). With this pandemic, children seeking medical management were affected.

The Philippine General Hospital established telemedicine approach to render services to the old patients of the institution. Afterwards, the services will be opened to new patients as well. In relation, the Pediatrics Clinic Rotation for LU7 students of the Philippine General Hospital will now be a combination of phone, video and face-to-face consultation with the pediatric patients of the Sick Child and Pediatric Subspecialties clinics. During this rotation, the LU7 students will learn under the supervision of Pediatric Residents, Fellows and Consultants.

#### **OUTCOMES**

At the end of the clinical rotation, the learners (LU7 students of Philippine General Hospital) will become the following and achieve the set of objectives

#### Outcome 1. Competent Clinician

#### Objectives:

- 1. Experience learning and rendering care of acute and chronically-ill patients in the outpatient setting through different modalities (phone and video) and platforms (i.e. phone calls, video calls through viber/fb messenger, and etc.)
- 2. Acquire skills and knowledge necessary to assess and manage (under supervision) common pediatric illnesses in the outpatient setting
- 3. Attain the skills and knowledge in executing an effective telemedicine approach based on the guidelines set by the Department of Health and University of the Philippines Manila
- 4. Develop skills in proper documentation and data management of a telemedicine consult in the different available platforms such as PGH's OCRA and RADISH electronic medical record system.

#### Outcome 2. Compassionate Doctor

#### Objectives:

1. Provide quality care for pediatric patients needing outpatient medical care by doing proper webside manners during telemedicine consults and inpatient clinic manners during face-face consults.

2. Provide quality medical continuity of care for patients discharged from the pediatric wards or emergency room services by utilizing telemedicine.

#### Outcome 3. Effective Educator

#### Objectives:

- 1. Educate parents and patients on the importance of early consultation, good health habits and disease prevention, and the present problems of the patient even over telemedicine consults.
- 2. Acquire experience in teaching parents and healthcare professionals using different platforms available and feasible to continue health education (i.e. zoom, phone calls)

#### Outcome 4. Social Mobilizer

#### Objective/s:

1. Become advocates of preventive and holistic care for the pediatric patients and their families despite the challenges of COVID-19 pandemic.

#### **LEARNERS**

The target learners of the rotation in pediatric clinics are the Learning Unit 7 (LU7) students or the Medical Interns of the Philippine General Hospital.

#### **EDUCATORS**

The educators of the LU7 students are the consultants, fellows of different subspecialty clinics and the residents assigned at the Sick Child Clinic (Telemedicine and Face to Face) of the Department of Pediatrics, Philippine General Hospital

#### SETTING

Due to limitations of access to patients in the outpatient clinic brought about by the COVID-19 pandemic, telemedicine approach to patient care was established. The rotation in pediatric clinics becomes a combination of phone, video and face-to-face consultations. Through this rotation, there is a continued training of Pediatric residents in general pediatrics in outpatient settings and LU7 students in the sick child and pediatric subspecialty clinics. Moreover, the LU7 students are expected to attend and participate in virtual lectures which will be delivered or facilitated by a Pediatric Residents, Fellows and Consultants. Thus, learning will be done in the homes and the different pediatric clinics practicing proper COVID 19 preventive measures.

\*\*\*In the event that face to face consultations will be done in the future, LU7 students shall wear Level 2 – 2.5 PPE (Face shield, Face mask +/- reusable gown) when they are in the PGH Outpatient Department Services. They shall answer the Health Declaration Form and log in the contact tracing documents at the clinics they are rotating in. All symptomatic LU7 students shall inform their Liason Officer, who in turn will inform the Resident in charge of LU7.

#### CONTENT

- Telemedicine Approach to Patient Care in Outpatient Setting
- Integrated Management of Childhood Illnesses (IMCI)
- Pediatric History and Physical Examination in the Outpatient Setting
- Anticipatory Care in Outpatient Setting
  - 1. Oral Health Care
  - 2. Nutrition
  - 3. Child Safety
  - 4. Immunization
  - 5. Responsible Digital Media Use

#### **INSTRUCTIONAL STRATEGIES / ACTIVITIES**

#### 1. Large Group Discussions

#### 1.1. Orientation

During their first day in the rotation, LU7 students will be oriented in the following:

- A. The Objectives, schedule and requirements of the rotation,
- B. Telemedicine guidelines, benefits, and ethical principles

#### 1.2 Department Lectures and Conferences

LU7 Students rotating in the Pediatric OPD shall attend the different lectures and conferences of the Department of Pediatrics.

#### \*Roles of the Learners

The LU7 students shall attend the Orientation and Department's lectures and conferences. They are encouraged to take notes, learn and participate actively.

#### 2. Online Asynchronous Learning: IMCI Modules

LU7 Students shall be given access to online IMCI Modules. They are given time to accomplish IMCI modules and are to submit the post-test at the end of their first week of rotation.

#### \*Roles of the Learners

The learners will read and study the IMCI modules within the given period of selfdirected learning. They should contact the facilitators during their consultation hours for questions or clarification regarding the modules. After the asynchronous learning, the students should answer and pass the post-test.

#### 3. Telemedicine Consultation (Phone or Video)

Telemedicine consultations are done by Pediatric Residents and Fellows through phone or video calls. This mode of consultation will cater the old patients of the sick-child clinic and other subspecialty clinics at Philippine General Hospital (PGH). These consultations are done during office hours, Monday to Friday, from 8AM to 12PM and

from 1PM to 4PM at the Patient Outpatient Department Services or respective Subspecialty's chosen areas.

LU 7 students shall be assigned to have 2 sick child and 1 subspecialty subclinic telemedicine encounters. During their first week, LU7 students shall observe how telemedicine is being done by the residents/fellows in the different subclinics. During their second week, LU7 students shall do actual consultations and are required to have themselves evaluated by the consultant or resident or fellow-in-charge of their selected cases. They shall log all their patient encounters in their patient census sheet.

#### 3.1 Observation (Role Modeling)

Pediatric Residents and Fellows will be doing Telemedicine Consultations with the LU7 students during their first week in a particular pediatric clinic.

#### \*Roles of the Learners

The LU7 students will observe how the residents and fellows do the telemedicine consultation, use the different platforms for consultation and record the data in the PGH Electronic Medical Records platform.

#### 3.2 Actual

LU7 Students shall do actual telemedicine consultation on their second week rotation in the Pediatrics Outpatient Department.

Pediatric Residents and Fellows will access the patients scheduled through the UP PGH Online Consultation Requests and Appointment (OCRA) System. Patients with scheduled appointments will be managed through phone or video call, whichever is available to the patient and used by the pediatric clinic. During the first week of the rotation, the LU7 students will observe the resident, fellow, or consultant by joining the telemedicine consult. They may be asked to perform a part of the history or examination. They will also discuss the patient with the resident, fellow, or consultant afterwards, and they may be asked questions about the patient and about what they have learned.

During the second week of the rotation, the process will be as follows: Before the consultation, the LU7 students will discuss the case of the patient with the assigned resident or fellow. This would help the LU7 students to know what to consider and the questions to ask and whether the case could be dealt with through telemedicine or needs emergent or urgent consultation in a hospital.

During the telemedicine consultation, LU7 students will do the history and virtual physical examination and would tell the patient that he/she will call again. LU7 students will then discuss the collected information with the resident/fellow in charge and come up with a diagnosis and management as possible. If necessary, the LU7 students with the residents and or the fellows may also refer the patient to a subspecialty clinic or to the consultant-in-charge.

After the telemedicine consultation, residents and fellows shall do a debriefing session and or discussion after the telemedicine consultation as necessary.

Through this activity, the LU7 students with the residents and fellows will be able to manage an acute and/or chronic pediatric case. They will also develop communication skills necessary during telemedicine consultation and referral system. The students will also be reviewed of taking a clinical history, instructing physical examination, establishing an appropriate diagnosis, and designing medical and nonmedical management.

#### \*Roles of the Learners

The learners shall join the telemedicine consultation on the time, date and platform set by the educators with the patients/caregivers.

During the first week, they shall be observing how the telemedicine consultation is done. During the second week, they shall be actively learning and participating in the interview, examination and care of the patient over telemedicine under the supervision and guidance of the educator. The Learners are encouraged to share their thoughts and feelings on their experiences during the discussion and debriefing to ensure clarity and goals for this activity are met.

#### 4. Face-to-face Consultation (\*\*\*Pending PGH and Department's Decision)

This mode of consultation will cater to the old patients of the sick-child clinic and other subspecialty clinics at Philippine General Hospital (PGH). This will be done during the outpatient clinics of Sick Child and other subspecialty divisions, Monday to Friday, from 8AM to 12PM and from 1PM to 4PM at the Patient Outpatient Department Services (see schedule below).

LU 7 students shall be assigned to have 2 sick child and 1 subspecialty subclinic face-to-face encounters. During their first days in the OPD, LU7 students shall observe how FTF is being done by the residents/fellows in the different subclinics. During their subsequent days, LU7 students shall do actual consultations and are required to have themselves evaluated by the consultant or resident or fellow-in-charge of their selected cases. They shall log all their patient encounters in their patient census sheet.

During this teaching-learning strategy, the LU7 students shall learn how to do the physical examination for the pediatric population afflicted with different conditions. The residents and fellows shall be their educators. Both sides shall maximize the opportunity for a face to face consult with the patients

#### \*Roles of the Learners

The learners shall go to the assigned clinics with appropriate PPE. They shall be actively learning and participating in the interview, examination and care of the patient under the supervision and guidance of the educator. The Learners are encouraged to share their thoughts and feelings on their experiences during the discussion and debriefing to ensure clarity and goals for this activity are met.

#### 5. Small Group Discussion

The small group discussion will be done virtually on Tuesday and Wednesday in the first week of the rotation. With this activity, the students will present a general pediatrics case that he/she wants to learn and discuss. These will be taken from the encounters in telemedicine consultations. This will be facilitated by the consultant preceptor.

#### \*Roles of the Learners

The student presenter shall present his/her discussion from history down to the management with anticipatory guidance on the chosen case. The rest of the students are encouraged to listen and actively participate in the learning process by sharing their inputs on the case presented.

#### **ASSESSMENT**

The LU7 students will be assessed through their performance during the phone, video, and face-to-face consultation with the patient and caregiver. Outputs for the small group discussion and Infographics as well as their active participation in the different lectures and activities will also be evaluated.

At the end of the rotation, they will submit the following:

- Patient Census (encountered via Telemedicine and Face to Face)
- IMCI post test
- Infographics (done by groups of 4-5)
- Evaluation Sheets (Webside Manners and Mini-CEX) for the clinics they rotated in

#### **SCHEDULES:**

A. Schedule of Telemedicine Consultation - Each LU7 student will be assigned to one clinic per day, which will be either the sick child clinic, or one of the subspecialty clinics.

	Monday	Tuesday	Wednesday	Thursday	Friday
8AM - 12P M	<ul> <li>Sick child</li> <li>Adolescent Medicine</li> <li>Development al Pediatrics</li> <li>Pediatric Neurology</li> <li>Newborn High Risk Clinic</li> </ul>	<ul> <li>Sick child</li> <li>Adolescent medicine</li> <li>Development al Pediatrics</li> <li>Pediatric Cardiology</li> </ul>	<ul> <li>Sick child</li> <li>Adolescent medicine</li> <li>Development al Pediatrics</li> <li>Allergy</li> <li>Pedia GI</li> </ul>	<ul> <li>Sick child</li> <li>Adolescent Medicine</li> <li>Development al Pediatrics</li> <li>Endocrinolog y</li> <li>Newborn High Risk Clinic</li> </ul>	<ul> <li>Sick child</li> <li>Adolescent medicine</li> <li>Development al Pediatrics</li> <li>Pediatric Nephrology</li> <li>Pediatric Neurology</li> </ul>
1PM - 4PM	<ul><li>Sick Child</li><li>Pedia Hema- Onco</li></ul>	<ul> <li>Sick Child</li> <li>Pedia Hema- Onco</li> <li>Pediatric Nephrology</li> <li>Pediatric Rheumatology</li> </ul>	<ul><li>Sick Child</li><li>Pedia Hema- Onco</li><li>Pediatric Pulmonology</li></ul>	<ul> <li>Sick Child</li> <li>Pedia Hema- Onco</li> <li>Pediatric Cardiology</li> <li>Pediatric INTROP</li> </ul>	<ul> <li>Sick Child</li> <li>Pedia Hema- Onco</li> <li>Endocrinology</li> <li>Pediatric Pulmonology</li> </ul>

#### B. Schedule of Face-to-face Consultation

	Monday	Tuesday	Wednesday	Thursday	Friday
8AM – 12PM	<ul><li>Newborn High Risk</li><li>Pediatric Neurology</li></ul>	Pediatric Cardiology	<ul> <li>Pediatric GIN</li> <li>Clinical and Metabolic Genetics</li> <li>Allergy and Immunology</li> </ul>	<ul><li>Sick Child clinic</li><li>Adolescent Medicine</li></ul>	<ul><li>Pediatric Pulmonology</li><li>Pediatric Neurology</li></ul>
1PM – 4PM	Pediatric     Hematology	<ul><li>Pediatric Nephrology</li><li>Pediatric Rheumatology</li></ul>	Pediatric Endocrinology		Pediatric INTROP

<sup>\*</sup> Developmental and Behavioral Pediatrics will use DBSU

#### C. Schedule of Interns

INSTRUCTIONS: Please make a NEW tab for your block.  Please name the sheet in this format < BLOCK _, Date of rotation >, and edit the DATE cells on row number 2. The decking of clinic slots for week 1 or week 2 rotators is flexible. LO to coordinate with other blocks's LO to maximize schedule. Contact resident monitor												
for questions.												
			Date Monday	Name	Date Tuesday	Name	Date Wednesd	Name	Date Thursday	Name	Date Frid	Name
		1	DevPed *		Adol *		DevPed *		NICU HR *		Allergy	
		2	DevPed *		GenPed		DevPed *		NICU HR *		Genetics	*
	OPD Week 1	3	Neuro		GenPed		Allergy		NICU HR *		Genetics	*
	Interns	4	Neuro		GenPed		Adol *		GenPed		Genetics	*
		5	GenPed		GenPed		GenPed		GenPed		GenPed	
ا ۱		6	GenPed		GenPed		GenPed		GenPed		GenPed	
AM clinic		7	NICU HR *		Allergy		Genetics *		Endo		Neuro	
		8	NICU HR *		Cardio		Genetics *		Endo		Neuro	
		9	NICU HR *		GenPed		Genetics *		Adol *		Renal	
	OPD Week 2 interns	10	Adol *		GenPed		GIN		GenPed		Renal	
	interns	11	GenPed		GenPed		GIN		GenPed		Adol *	
		12	GenPed		GenPed		GenPed		GenPed		GenPed	
		13	GenPed		GenPed		GenPed		GenPed		GenPed	
$\neg$		1	GenPed		Renal		GenPed		Cardio		Endo	
	OPD Week 1		GenPed		Renal		GenPed		GenPed		Endo	
	Interns	_	GenPed		GenPed		GenPed		GenPed		GenPed	
3		_	GenPed		GenPed		GenPed		GenPed		GenPed	
		5	GenPed		Rheuma *		Pulmo		INTROP		Pulmo	
		6	GenPed		Rheuma *		Pulmo		INTROP		Pulmo	
	OPD Week 2 interns	7	GenPed		GenPed		GenPed		GenPed		GenPed	
	interns	8	GenPed		GenPed		GenPed		GenPed		GenPed	
		9	GenPed		GenPed		GenPed		GenPed		GenPed	

#### **REFERENCES:**

Department of Health. (2020a). DOH confirms first 2019-ncov case in the country; assures public of intensified containment measures. https://www.doh.gov.ph/doh-press-release/doh-confirms-first-2019-nCoV-case-in-the-country

<sup>\*</sup> Pedia Hema-Onco will also make use of CI

- Department of Health. (2020b). DOH confirms local transmission of covid-19 in PH; reports 6th case. https://www.doh.gov.ph/doh-press-release/doh-confirms-local-transmission-of-covid-19-in-ph
- Section of Ambulatory Pediatrics. (2018). Manual of pediatric outpatient clinics and child health services.
- Presidential Communications Operations Office. (2020, March 13). Gov't imposes community quarantine in Metro Manila to contain coronavirus. *Presidential Communications Operations Office*. https://pcoo.gov.ph

#### **APPENDIX**

#### A. References

Bahaghari Health Supervision Guidelines of Infants, Children and Adolescents (4th ed 2009, PAPA)

**Bright Futures Documents** 

Hagan, J., Shaw, J., & Duncan, P. (2017). Bright futures: guidelines for health supervision of infants, children, and adolescents 4<sup>th</sup> ed. American Academy of Pediatrics. USA.

Navarro, X., Bauzon, A., Aguilar, J., & Malanyaon, O. (2014). Fundamentals of Pediatrics Competency-based. C & E Publishin, Inc. Quezon City.

Nelson's Textbook of Pediatrics, 19th ed.

Philippine Pediatric Society. Policy Statements.

Philippine Pediatric Society. Preventive Pediatrics 2018

Philippine Pediatric Society. Clinical Practice Guidelines

Primary Pediatric Care, 3rd ed.

World Health Organization Website

**IMCI** 

#### **B.** Evaluation tools for Summative Assessment

1. Summary of Percentages

Activity	Percentage
Consultant/Fellow/Resident evaluation	40%
GenPed Resident evaluation	35%
Attendance	25%
TOTAL	100%

#### 2. Evaluation Tools for the Activities

#### a. IMCI post-test - 10%

## b. Telemedicine

## i. Actual

Rating Scale on Webside Manners (contents from DOH-UPM Telemedicine Guidelines June 2020)

,	No	Rar	Somet	Frequ	Alwa	Not
	t	ely	imes	ently	ys	Applica
	do			done		ble
	ne	2	3	4	5	
	0					
1. Preparation						
Prepared the things needed for						
the telemedicine consultation						
Studied how to use the platform						
to use for the telemedicine						
Reviewed Patient's charts and						
case with the resident/fellow						
2. Greetings						
Introduced Self and role						
Asked patient and caregiver to						
introduce himself/herself and						
companions						
Confirmed with patient/caregiver						
that he/she can be heard and						
seen clearly						
Acknowledged the use of						
technology						
Demonstrated confidence in the						
technology and reason for use						
Obtained informed consent from						
caregiver and assent from						
patient (adolescent patients)						
3. Maintaining Etiquette						
Sat fully upright						
Did not fidget, scratch, play with						
hair or touched face						
unnecessarily						
Made eye-contact with the						
caregiver/patient						
Explained and narrated all						
actions and things to do						
4. Empathy and						
Communication						
Spoke slowly and clearly						
Typed into the chat window to						
reiterate instructions						

Checked-in frequently to elicit reactions and confirm understanding			
Used non-verbal cues: warm tone of voice, smiled ofted			
Used empathetic statements showing that she or he is listening			
Summarized and clarified questions			
Informed patient/caregiver on how to continue the consultation in case of signal disconnection or interference			
SUM			
Total Score			
/100 (minus the N/A)			

#### Mini- Clinical Evaluation Exercise (CEX)

was initially used for face to face, but may also be used in the telemedicine patient encounters. This includes assessing the learner for the following competencies.

- **a. Medical Interviewing Skills:** Facilitates patient's telling of story; effectively uses questions/directions to obtain accurate, adequate information needed; responds appropriately to affect, non-verbal cues
- **b. Physical Examination Skills:** Follows efficient, logical sequence; balances screening/diagnostic steps for problem; informs patient; sensitive to patient's comfort, modesty
- **c.** Humanistic Qualities/Professionalism: Shows respect, compassion, empathy, establishes trust, attends to patient's needs of comfort, modesty, condientiality, information
- **d. Clinical Judgement:** Selectively orders/preforms appropriate diagnostic studies, considers risks and benefits
- **e. Counseling skills:** Explains rationale for test/treatment, obtains patient's consent, educates/counsels regarding management
- f. Organization/Efficiency: Prioritizes; is timely, succinct
- **g. Overall Clinical Competence:** Demonstrates judgement, synthesis, caring, effectiveness, efficiency

taken from <a href="https://www.abim.org/~/media/ABIM%20Public/Files/pdf/paper-tools/mini-cex.pdf">https://www.abim.org/~/media/ABIM%20Public/Files/pdf/paper-tools/mini-cex.pdf</a>

c. Face to Face

Rating Scale for Patient Encounter for Interns

A. Knowledge 70% B. Skills 15%

## C. Attitude 15%

#### d. Infographics

**Criteria for the Infographics** 

Criteria	Percent
<ul> <li>Organization         <ul> <li>Rationale, plan and objectives of the material are discussed and aligned with the topic chosen</li> <li>Mentioned target audience and platform to be used are appropriate with the material and plan</li> </ul> </li> </ul>	35%
<ul> <li>Content</li> <li>Organized plan is well executed</li> <li>Communicate the message or information effectively</li> <li>Engage audience attention</li> <li>Screened message or information are recalled by the audience</li> </ul>	35%
Creativity     Chosen colors are pleasant to eyes and vision     Text and fonts are readable     Images, photos, or shapes used are appropriate with the content	30%
Total	100%

#### e. Attendance

\*Schedule of Activities shall be presented to the LU7 students during the orientation, they can give feedback in advance if they would be absent on particular dates. Deductions shall be given based on the reasons posted and shall be decided by the LU7 consultants.

Activities
Orientation
SGDs
Telemedicine/Face to Face Observation Days (Patient Census)
Telemedicine/Face to Face Actual Consults (Patient Census)
Exit Feedback

#### **Patient Census**

Patient's Surname, Initials	Age	Clinic (with signature of the resident/fellow in charge)	Case	Mode of Consult *Telemedici ne (voice/video platform) *FTF

# C. Evaluation for Small Group Discussion Rating Scale for Small Group Discussion A. Knowledge 70% B. Skills 15%

C. Attitude 15%

## PEDIA 260 Submodule: Neonatal Intensive Care Unit

#### INTRODUCTION

In the Pediatric Module, the interns will receive a week-long didactic lecture, synchronous and asynchronous to review for the clinical rotation. In the Newborn Sub-Module, a one-day online series of lectures will focus on common and relevant neonatal morbidities which they may or may not encounter in their Newborn Medicine Clinical rotation. Once they are in the clinics, a half day series of online lecture including orientation will start their Newborn Medicine rotation. The lectures at this time will consist of topics which will prepare them for their rotation. Their clinical rotation will be spent in 3 different areas – NICU, DR and the rooming in wards. Unlike before, the High-Risk Clinic will no longer be part of the Newborn Medicine rotation but will be included in the interns' OPD rotation.

#### **OBJECTIVES**

After the one-day didactics (once only) and the clinical rotation in Newborn Medicine, you should be able to:

- 1. Understand the pathophysiology, diagnostic and therapeutic management of common and relevant neonatal morbidities
- 2. Master the basics of newborn care
- 3. Master the common neonatal skills such as basic and advanced resuscitation, EINC, Pediatric aging, physical examination, and recognition of red flags in the newborn
- 4. Perform neonatal procedures such as BCG and Hepatitis B vaccination, Vitamin K injection, eye prophylaxis, newborn screening, critical congenital heart screening and if available, transcutaneous bilirubinometry.
- 5. Observe and understand the mechanics of oto-acoustic emission (hearing screening)
- 6. Develop empathy on the parents while performing discharge instructions and planning and online follow-up.

#### **SCHEDULE OF ACTIVITIES**

#### A. Clinical Rotation - 2 weeks

#### 1. Orientation

- The interns (16) will rotate in the Nursery for 2 weeks; each duty team will be composed of 4 interns
- The intern is expected to be at his/her post by 8:00am during AM duty
- The intern must sign the attendance logbook located at the Main NICU nursery station
- Interns are required to wear at least level 2 PPEs on all areas. Only four interns per area are allowed at any given time.
- The interns will be assigned 1-2 patients in the non-COVID NICU.
- Interns are required to attend departmental conferences and division audits.
- At the end of the rotation, interns are required to submit their grading sheet.

#### 2. Schedules

- On-Duty
  - o AM duty: 8:00 4:00 PM
  - Attend the endorsement rounds and discuss the Intern's patient during the morning rounds
  - During the tour of duty, 2 of the interns will present one new admission to the assigned consultant via Zoom. The other two interns will present one or two patients during the endorsement rounds (this will be a graded activity).
  - Assist mothers in performing KMC
  - Assist resident/NICU fellow in doing procedures
    - Newborn resuscitation
    - Blood extraction
    - Lumbar puncture
    - Umbilical catheterization
    - Intubation
    - Surfactant administration
- Pre-duty
  - Required to attend morning endorsement at NICU Covid area (via Zoom)
  - Will present in the SGDs or CATs
- Post-duty
  - Will attend the morning endorsements via Zoom

#### B. Graded activities

- 1. Duty rounds
  - a. 2 of the interns will update an assigned consultant on 1 NICU admission.
  - b. 2 of the interns will present once patient during the endorsement rounds. (Interns will be assigned 1-2 patients in the non-covid NICU during their week-long clinical rotation. discussion of 1 patient encountered. One intern in the team to present per duty.
- 2. Attendance virtual rounds
- 3. CATS/SGD
  - a. There will be 2 SGD topics during the one week rotation. Two interns to present one topic.
  - b. There will be 2 journals to be appraised (CATS). Two interns will present for one journal.
  - c. A total of 8 interns will be presenting during the tour of duty.
  - d. For the 4 sessions (2 CATs and 2 SGDs), two interns each will be the reactors (should have prepared before hand)
- 4. Procedures the interns should at least perform 4 of the following
  - a. Resuscitation (required)
  - b. Newborn Physical examination (required)
  - c. Ballard scoring (required)
  - d. IV insertion
  - e. Newborn Screening
  - f. Surfactant administration
  - g. Assist in UVC insertion
  - h. Online follow-up

- i. Assist in intubation
- j. Assist in Lumbar tap
- 5. Infographics

Interns not assigned to present during the SGD or CATS will make an infographic in the form of a poster or video

- C. Grading Matrix
  - a. 30% SGD/ CATS (30% for presentors, 15% for reactors\*)
  - b. 10% attendance
  - c. 10% procedure
  - d. 30% Patient presentation
  - e. 20% clinical rotation
  - f. 15%\* infographics about common neonatal problem, or newborn care

#### D. Grading instruments

1. Clinical Rotation

a.	Knowledge	70%
b.	Skills	15%
C.	Attitude	15%

#### 2. SGD/CATS

a.	Knowledge	70%
b.	Skills	15%
c.	Attitude	15%

- 3. Procedure Checklist
  - a. Each procedure will be given 2.5 points
  - b. Any excess of 4 procedure will be credited additional 2.5 points (maximum of 5 points)
- 4. Attendance
  - a. Morning endorsements 0.5 point each (total of 3.5points)
  - b. CATS/ SGD 0.5 point (total of 2)
  - c. Consultant lecture 1 point each
  - d. Ballard, NRPH, PE, EINC 0.5 point each (total of 2)
  - e. Department and Section activities (0.5 each)
- 5. Infographics
  - a. 5% poorly done
  - b. 10% adequately done
  - c. 15% more than adequate

#### **APPENDIX 1\*\*\***

## VIRTUAL ROTATION IN THE PEDIATRIC WARD DURING THE COVID-19 PANDEMIC

(all virtual/ without face-to-face patient encounter)

#### **DESCRIPTION**

The UP-Philippine General Hospital is one of the appointed CoViD-19 referral hospitals in the National Capital Region. During the CoViD-19 pandemic, the interns will not have any physical exposures to the pediatric ward for their safety and protection. Rather, alternative tools will be utilized to enhance teaching of clinical skills and patient cases. This will include: virtual patient interview, virtual rounds and conferences, use of instructional videos, websites, journal articles and other self-study materials.

Sixteen (16) interns will rotate for the duration of one (1) week per semester, with a total of 2 weeks for pediatric ward rotation. Ward 9 has a total of 21 patient beds and ward 11 has a total of 23 patient beds. The Ward 9 patient beds are being managed by the residents or fellows in-training. It is divided to subspecialty services, including: Cardiology, Pulmonology, Neurology, Gastroenterology, Allergy, Endocrinology, Genetics, Nephrology, and Rheumatology. The Ward 11 patient beds are being managed primarily by the pediatric surgery service. When indicated, Ward 11 patients are referred to the pediatric service for co-management. Each ward service will be composed of residents or fellows and 1-2 interns. The interns will be exposed to ward patients virtually with the use of online meeting platforms.

At the start of the rotation, an orientation will be given by the Assistant Chief Resident for Services via a virtual meeting.

#### **OBJECTIVES**

#### **General Objectives**

- 1. Acquire proficiency in the recognition of diseases in children requiring inpatient care
- 2. Acquire knowledge and skills in the comprehensive hospital management of common pediatric diseases.

#### **Specific Objectives**

After the two-week ward rotation, the intern rotator should be able to:

- 1. Identify common pediatric conditions requiring in-patient care.
- 2. Elicit a comprehensive pediatric history through virtual patient interview, including the birth and maternal history, immunization history, nutritional history, developmental history, and when applicable, a thorough adolescent history.
- 3. Acquire and Demonstrate appropriate webside manners.
- 4. Learn virtual pediatric physical examination.

- 5. Formulate a clinical diagnosis and differential diagnoses based on gathered data from the history and physical examination.
- 6. Understand the epidemiology and pathophysiology of common pediatric ward cases.
- 7. Identify appropriate diagnostic tools for common pediatric ward cases.
- 8. Correlate laboratory findings with the history, physical examination, and course of the patient.
- 9. Formulate an appropriate evidence-based management.
- 10. Present clinical data orally in a clear and concise manner.
- 11. Acquire knowledge on the basic pediatric procedures, such as, blood extraction, nasogastric tube insertion and foley catheter insertion using video demonstrations.

#### **ACTIVITIES**

#### A. On-line Clinical Rotation

Eight (8) interns will be assigned to ward 9 and 8 interns will be assigned to ward 11 for the first week. The interns will interchange wards for the second week. One to two interns will be assigned to a service per ward. Interns are required to attend daily virtual patient rounds of their respective services that will be facilitated by the residents/ fellows. Each intern will be assigned one service patient. The intern should be able to perform a virtual interview of the patient/ caregiver, which, he/ she will present during the service rounds. The intern may actively take part in the patient's management by suggesting diagnostic exams and treatment plans. He/ She should be able to recognize appropriate and timely referrals to other subspecialties when needed.

#### B. Asynchronous Learning Activities

Interns will be assigned instructional/ educational materials (eg video clips, journal articles, books) to enhance their knowledge on common pediatric ward cases and basic pediatric procedures. The assigned learning materials should be completed by the interns during their two-week rotation.

#### C. Conferences and Preceptorials

All rotating Interns are required to attend the scheduled department conferences virtually.

There will be 4 virtual small group discussions (SGDs) for the ward rotation that will be scheduled on the first week of rotation. Two (2) SGDs will be facilitated by emeritus professor Dr. Alfiler during the scheduled emeritus rounds. The other 2 SGDs will be moderated by assigned consultants. An intern will be assigned to present a case management report of an actual patient or a paper case. The cases will be assigned by fellows or consultants and discussions will involve all rotating interns within the block via virtual conference.

Emeritus rounds with Dr. Alfiler will be held every Wednesdays from 10:00AM to 12:00NN via a virtual meeting. All intern rotators are encouraged to attend.

Interns are encouraged to attend division conferences. A list of the schedule of division conferences will be given to the interns every start of the week. Interns can choose which virtual meeting they would attend.

•

#### **SUMMARY OF ON-LINE ACTIVITIES**

- Department Conferences
- Division conferences
- Daily Virtual Patient Rounds with Senior Resident/ Fellow
- Service Consultant Patient Rounds
- Small Group Discussions
- Emeritus Rounds

#### SAMPLE SCHEDULE FOR A WEEK (All activities will be virtual)

DAY	TIME	ACTIVITY	FACILITATOR
MONDAY	7:00AM -10:00AM	aily Service Rounds	ellows/ Residents
	10:00AM - 5:00PM	vice Activities/ Division	ellows/ Residents/
		Conferences (if any)	Consultant
TUESDAY	7:00AM - 10:00AM	aily Service Rounds	ellows/ Residents
	0:00AM - 11:00AM	se Staff Teaching Hour	partment Conference
	11:00AM – 5:00PM	vice Activities/ Division	ellows/ Residents/
		Conferences (if any)	Consultant
WEDNESDAY	7:00AM - 10:00AM	aily Service Rounds	ellows/ Residents
	0:00AM - 12:00PM	Alfiler Emeritus Rounds	Dr. Alfiler
	1:00AM - 5:00PM	vice Activities/ Division	ellows/ Residents/
		Conferences (if any)	Consultant
THURSDAY	':00AM - 12:00PM	aily Service Rounds	ellows/ Residents
	1:00PM - 2:00PM	Fellow's Hour	partment Conference
	2:00PM - 5:00PM	vice Activities/ Division	ellows/ Residents/
		Conferences (if any)	Consultant
FRIDAY	':00AM - 12:00PM	aily Service Rounds	ellows/ Residents
	1:00PM - 5:00PM	vice Activities/ Division	ellows/ Residents/
		Conferences (if any)	Consultant
SATURDAY		SELF-STUDY	Student
SUNDAY		SELF-STUDY	Student

- The Department Conferences, Preceptorials (SGD), and Dr. Alfiler Rounds should be prioritized. The interns may be excused from other service activities if any of these activities are scheduled.
- o If there are no department or service activities scheduled, interns may use their free time to study asynchronous learning materials.
- SGDs will be scheduled based on the availability of the consultant.

#### **WARD PORTFOLIO**

Each rotating intern should submit a ward portfolio by the end of the rotation. Each portfolio should include the following: patient clinical notes (clinical abstract, incoming or admitting notes, progress notes and outgoing notes), rotation

reflection paper and procedures checklist. The intern is required to submit clinical notes on a minimum of 2 co-managed patients per week of rotation.

The interns will be given video links of each ward procedure that they should learn. The learning materials should be accomplished within their two-week ward rotation. After which, the intern will be required to do a demonstration of the procedure via video conference to be scheduled towards the end of the Ward Rotation.

#### **Procedure Checklist**

PROCEDURE	DEMO DATE	SUPERVISED BY
Blood Extraction		
Intravenous Line Insertion		
NGT/ OGT Insertion		
Foley Catheter Insertion		

#### WARD GRADE MATRIX

	PERCENTAGE
CLINICAL ROTATION	
WARD 9	30%
WARD 11	30%
WARD PORTFOLIO	20%
PROCEDURE CHECKLIST	20%
TOTAL	100%