GENERAL INTRODUCTION
The UC San Diego Palliative Care Service (also known as the Doris Howell Service) is a trans-disciplinary service that focuses on pain and symptom management as well as whole person assessment helping patients identify their goals of care and empowering patients to communicate with their health teams.

Primary Preceptor: Dr. Rabia Atayee, email: ratayee@ucsd.edu, cell: 858-603-1628

INTRODUCTION TO THE ROTATION – 6 Week Rotation (5 weeks for residents)
At UC San Diego there are 4 different consult palliative care teams separated by location and the focus on disease states:
1. Thornton Hospital: Inpatient Oncology/Hematology
2. Moores Cancer Center: Outpatient Oncology/Hematology
3. Supizio Cardiovascular Center: Cardiology/Pulmonary (with emphasis in pre-LVAD patients)
4. Hillcrest Hospital: Trauma, Liver and Kidney dysfunction

This rotation will be primarily at Thornton Hospital. Patients at Thornton are adult patients with various races, ethnic, socioeconomic differences.

Patients that are referred to the palliative care service are anywhere between the spectrum of a curable disease to end of life prognosis. On this rotation disease education, medication review, monitoring, management and counseling of medications will be tailored specific to each patient and their individual circumstances under the UC San Diego medication guidelines.

The student will have an opportunity to work with an inter-professional environment with a team including, but not limited to the following disciplines:
- Pharmacist Preceptor
- Physicians
- Nurse Practitioners
- Licensed Clinical Social Workers
- Psychiatrist
- Psychologist
- Hypnotherapist
- Other Pharmacist and Pharmacy Technicians

The trainees will round on the inpatient side with the palliative care team at Thornton. They will have a unique opportunity to spend part of the week with their pharmacist preceptor on rounds with them and then the rest of the week to practice their independent
pharmacist roles with their preceptor available to meet in person or via phone. The preceptor will review the trainees schedule and expectations in detail in the orientation. The students will also be expected, as part of the Thornton pharmacy team, to communicate and collaborate with both inpatient and discharge outpatient pharmacist on medication use and patient education.

Students will have the opportunity to participate in contemporary learning including document interventions in electronic medical record (EMR) inpatient notes as well as completing pharmacist flow sheet where pharmacist interventions and outcomes are documented for each patient interaction as shown below. Please refer to Appendix I&II. The preceptor will review these responsibilities in detail in the orientation. The students will also have an opportunity in collaboration with the discharge pharmacy at Thornton, to provide discharge counseling in the Med-to-Bed program under guidance of the discharge pharmacy pharmacists and technicians.

**GOALS AND OBJECTIVES**

By the end of the rotation the trainee should be able to successfully:

1. Optimize medication regimen including, but not limited to the following symptoms: pain, nausea, vomiting, and constipation
2. Coordinate medication insurance issues prior to discharge
3. Review medications
   a. Identify ways to decrease poly-pharmacy
   b. Address patient non-adherence
4. Review CURES report
   a. Confirm patient medication history
   b. Identify aberrant drug seeking behaviors
5. Identify any SEVERE drug interactions and make clinical recommendations to avoid or dose adjust for these interactions
6. Identify renal or hepatic dysfunction and make appropriate medication selection and dose recommendations
7. Provide education to patient, caregivers, and other healthcare providers

**APPE ACTIVITIES**

1) Direct patient care activities: Daily rounds in each patient’s room
2) Non patient care activities: Participating in consult note and flow sheet documentation
3) Interprofessional interaction and practice: Team discussions for each patient’s care including medications and non-medication recommendations.
4) Medication dispensing, distribution, administration, and systems management: In collaboration and communication with the inpatient and outpatient pharmacists and pharmacy team at Thornton hospital.
EVALUATION
The student will complete three evaluations throughout this experience: 1) a Midpoint/Formative Self-Evaluation, 2) a Preceptor Evaluation and 3) a Site Evaluation. The preceptor, in addition to commenting/signing off on the student Midpoint/Formative Self-Evaluation, will complete a Summative Evaluation at the end of the rotation. Students may be evaluated at any other time at the discretion of the preceptor. Preceptors may evaluate students more frequently, so that the student is informed of areas requiring improvement early in the rotation. The primary preceptor should obtain feedback from all team members as well as any patient comments.

ORIENTATION TO THE ROTATION
Important information to be reviewed prior to first day and any questions discussed on the first day
Review rotation description, trainee expectation, and clinical pearls.

- What is palliative care?

- Role of palliative care pharmacist:
  - [http://ajh.sagepub.com/content/27/8/511.full.pdf](http://ajh.sagepub.com/content/27/8/511.full.pdf)
  - [http://opp.sagepub.com/content/early/2015/10/01/1078155215607089.full.pdf+html](http://opp.sagepub.com/content/early/2015/10/01/1078155215607089.full.pdf+html)

- Documentation: Consult notes/flow sheet (please refer to appendices 1-3)
  - Pharmacist flow sheet- completed by trainees: after 1st week for residents; after 3rd week for students

- Inpatient rounding tool (example template appendix 4)

- How to access the patient list in EPIC
  - Sign in to EPIC
  - For “Department” put in “La Jolla Main Pharm”
    - Then at the top click on “Patient list”
    - Then click on “Shared patient list” on the left hand side
    - Then click on “*aa DHS LJ inpt” (access must be given by preceptor first)

- Recommendations for “quick tabs” up top in EPIC
  - “IP Pain Management”
  - “UC Gen Mar History”
  - UC IP Mar Admin History by Pharm Class”
  - “IP Labs Since Admission”
• Palliative care clinical pearls
  o Definition and balance in pain management: https://www.youtube.com/watch?v=TJaHsp2XsSQ
  o Different types of pain: https://www.youtube.com/watch?v=7o7oDryem7U
  o Pain Assessment: https://www.youtube.com/watch?v=emQJ_aZPXyY
  o Non-opioids: Acetaminophen and NSAIDS: https://www.youtube.com/watch?v=VjGbu3FWBVc
  o Overview of opioids and appropriate opioid language: https://www.youtube.com/watch?v=pETKefKUHo8
  o Assessment and treatment of opioid-induced adverse effects: https://www.youtube.com/watch?v=bCZ9-ptLPTU
  o Treatment of neuropathic pain: https://www.youtube.com/watch?v=X-5pG-IavWI
  o Clinical application of opioid pharmacokinetics: https://www.youtube.com/watch?v=SwyD3GWQaDk
  o Role of dexamethasone in palliative care: https://drive.google.com/file/d/0BylFEWCSwGsUOXIYbjJHRHVQNWM/view
  o Opioid conversion: Please use pain card below in appendix 5
  o How to “interrogate” PCA in EPIC/PCA pump: please refer to appendix 6

• Attendance: Monday-Friday 8am-5pm. Rounds will begin at 9:30 am in the meditation room at Thornton 3rd floor. The code to enter room is 75389.
• Preceptor will communicate in advance any changes to the schedule. Student needs to contact preceptor by texting preceptor on their listed cell phone above for any sick calls. Other professional requests must be discussed and approved by preceptor in advance.
• Dress Code: Business casual attire, closed toes, white coat and badge required.
• Calendar: The trainee will be at Thornton M-F from 8am-5pm. Trainee will round every morning with Thornton palliative care team. Afternoon activities will vary and will be discussed weekly with trainee.
• Paid parking is available at Thornton hospital. Trainee may also elect to park on the street or take public transportation including MTS or UC San Diego shuttle.

ADDITIONAL TOPICS OF DISCUSSION (DISCUSSED WITH PRECEPTOR OVER WEEKS 2-5/6)
Treatment of bone pain
Opioid Titration
Renal and Hepatic Dosing of Opioids
Methadone
Ketamine/Lidocaine
Blue Sheet
SPIKES
Treatment of malignant bowel obstruction
SELF-LEARNING ASSIGNMENTS

1. Register https://www.capc.org/accounts/register-member/F41560A243/
   a. Click on tab for providers CME/CEU courses
      i. Under Pain Management Courses
         1. Comprehensive pain assessment
         2. Matching the drug class to the pain
         3. Opioid trials: determining design, efficacy and safety
         4. Prescribing short-acting opioids
         5. Monitoring for opioid efficacy, side effects and substance use disorder
         6. Prescribing practice and opioid conversions
         7. Advanced conversions & opioid side effects
         8. Special populations & patient-controlled analgesia
         9. Pain management - Putting it all together
   ii. Under Communication Courses
      1. Clarify goals of care
   b. Fast facts: 2 Fast facts per week and then discussion

2. THE FOLLOWING WEEKLY ASSIGNMENTS MUST BE EMAILED EACH FRIDAY BY 3:30PM:
   a. Certification of completion of 2 CME modules from above (All 10 must be completed by the end of the rotation)
   b. List 2 fast fact topics that were read during the week for discussion in the following week
Appendix I: Palliative Care Pharmacist Interventions
Appendix II: Palliative Care Pharmacists Outcomes
Appendix III: Inpatient Palliative Care Pharmacist Note Template

Palliative Care Pharmacist Note

Requesting Physician: @IPATTPROV@

Reason for Consult/Chief Complaint: To evaluate patient for ***

HPI: is a @AGE@ @SEX@ who prefers to be called.

Interval History:

Symptom Assessment:

Pain
Location:
Quality:
Severity
  Current pain score 1-10:
  Worst pain score 1-10:
  Best daily pain score 1-10:
  Realistic goal pain score 1-10:
Duration
Timing
Modifying factors
  Aggravating factors:
  Alleviating factors:
Associated Signs & Symptoms
  Nonverbal Pain Indicators:

Constipation:
Last BM

Nausea/vomiting:
Any nausea?
Last episode of vomiting?

Other
Any SOB? NA

Allergies: @ALG@

Relevant Medications:
Relevant Drug Interactions:

Inpatient medication non-adherence (related to consult)
-reason for patient not receiving the medication

Medication History:

CURES report: NA

Conversion to Oral Morphine Equivalent =

Past Medical History:
@PMH@

Past Surgical History:
@SURGICALHX@

Family History:
@FAMHX@
Mental illness?
Substance abuse?

Physical Examination:
@VS@
General: alert, cooperative @SEX@ in no acute distress
Respiratory: respiration even and unlabored

Pertinent Labs:
@IPBRIEFLAB(WBC,}@  
@IPBRIEFLAB(Hgb,}@  
@IPBRIEFLAB(plt,}@  
@IPBRIEFLAB(creat,}@  
@IPBRIEFLAB(ALT,}@  
@IPBRIEFLAB(AST,}@  
@IPBRIEFLAB(Tbili,}@  
@IPBRIEFLAB(alb,}@  

Last QTc:

Yesterday's intake and output:
@RRIOYESTERDAY@

Above labs and results reviewed.

ASSESSMENT:

RECOMMENDATIONS:

Thank you very much for involving us in @FNAME@ @LNAME@’s care. Please do not hesitate to contact us with any further questions.

Rabia Atayee, PharmD
### Appendix IV: Pre-rounding template

#### Date:

| Name | One liner + Reason for admission: Age, sex, primary diagnosis, current status, and reason for admission (H&P or Admission Dx in Visit Report) | Reason for consult to Howell Service Eval of Pain or Goals of Care? (consult note) | Pain meds: Include long-acting/basal then shorting-acting including number of uses in 24 hours, then any adjuvant therapy | OME for 24 hours | Previou s Day’s 24 hr OME | Has the patient’s pain improved from yesterday? Y/N (pain score) | Was the patient constipated? Did the patient have N/V? (consult note, progress notes) | If yes, please list out current regimen If no, then complete after rounds Bowel regimen: (scheduled, prn) N/V regimen: (scheduled, prn) | Anxiolytics Antidepressants Antipsychotics (scheduled, prn) | Plans for today (to be completed after rounds) |
|------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------|----------------|---------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
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## Appendix V: Pain Card

### Equianalgesic Dosing Guidelines for Chronic Pain

<table>
<thead>
<tr>
<th>Oral/Rectal Dose (mg)</th>
<th>Analgesic</th>
<th>Parenteral SC/IV/IM Dose (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>Meperidine</td>
<td>50</td>
</tr>
<tr>
<td>150</td>
<td>Tramadol</td>
<td>-</td>
</tr>
<tr>
<td>150</td>
<td>Codeine</td>
<td>50</td>
</tr>
<tr>
<td>15</td>
<td>Hydrocodone</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>Morphine</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Oxycodone</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Oxymorphone</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Hydromorphone</td>
<td>1</td>
</tr>
<tr>
<td>-</td>
<td>Fentanyl</td>
<td>0.05 mg (1000 mcg = 1 mg)</td>
</tr>
</tbody>
</table>

### Adjustment for Incomplete Cross Tolerance

<table>
<thead>
<tr>
<th>Tolerance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>100%</td>
</tr>
<tr>
<td>Moderate</td>
<td>75%</td>
</tr>
<tr>
<td>Excellent</td>
<td>50%</td>
</tr>
</tbody>
</table>

*Incomplete cross-reference: Tolerance to a currently administered opioid does not extend completely to other opioids. This needs to lower the required dose of the new opioid.

### Combination Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Equivalent (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>APAP 325 mg + Codeine 30 mg PO (Tylenol #3)</td>
<td>≈ 34 mg PO</td>
</tr>
<tr>
<td>APAP 325 mg + Hydrocodone 5 mg PO (Norco)</td>
<td>≈ 56 mg PO</td>
</tr>
<tr>
<td>APAP 325 mg + Oxycodone 3 mg PO (Percocet)</td>
<td>≈ 78 mg PO</td>
</tr>
</tbody>
</table>


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### Transdermal Fentanyl

Morphine 50mg PO in 24 hrs => Fentanyl 125 mcg in 72 hrs
Appendix VI: How to “interrogate” PCA in EPIC/PCA pump

Press “CHANNEL SELECT”
Then press “OPTIONS”
Then you can look at “PATIENT HISTORY” OR “DRUG EVENT HISTORY”

When you are evaluating the PCA use in the morning for the last 24 hours you need to look at the last 2 shift doses as highlighted in red below. So if the data was accurately entered by the nurse then the total hydromorphone IV in 24 hours was 28.13 + 23.73 mg = 51.86 mg of IV hydromorphone. And then to calculate the oral morphine equivalent per day (OME) you multiply by 15 = 777.90 mg OME.

This is an end tidal CO2 monitor. Will discuss pros/cons on rotation.

The nurse can program for the PCA button to turn green when it is ready for patient to press it again after lockout mode. NOTE: this must be programmed by nurse.