UC San Diego
SKAGGS SCHOOL OF PHARMACY
AND PHARMACEUTICAL SCIENCES

APPE Rotation Description

UC San Diego Thornton Inpatient Palliative Care Rotation

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?
  - http://www.mayoclinicproceedings.org/article/S0025-6196(13)00452-7/pdf
- Role of palliative care pharmacist:
  - http://ajh.sagepub.com/content/27/8/511.full.pdf
  - http://online.liebertpub.com/doi/pdf/10.1089/jpm.2008.0023
  - 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
  - Definition and balance in pain management: https://www.youtube.com/watch?v=TJaHsp2XsSQ
  - Different types of pain: https://www.youtube.com/watch?v=7o7oDryem7U
  - Pain Assessment: https://www.youtube.com/watch?v=emQJ_aZPXyY
  - Non-opioids: Acetaminophen and NSAIDS: https://www.youtube.com/watch?v=VjGbu3FWBVc
  - Overview of opioids and appropriate opioid language: https://www.youtube.com/watch?v=pETKefKUHo8
  - Assessment and treatment of opioid-induced adverse effects: https://www.youtube.com/watch?v=bCZ9-ptLPTU
  - Treatment of neuropathic pain: https://www.youtube.com/watch?v=X-5pG-IavWI
  - Clinical application of opioid pharmacokinetics: https://www.youtube.com/watch?v=SwyD3GWQaDk
  - Role of dexamethasone in palliative care: https://drive.google.com/file/d/0BylFEWCSwGsUOXlYbjJHRHVQNWM/view
  - Opioid conversion: Please use pain card below in appendix 5
  - 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

Flowsheets

File | Add LDA | Add Co

Hyperspace - PRD

Summary
Chart Review
Synopsis
Results Review
Allergies
History
Problem List
Immunizations
Medications
Notes
Manage Orders
Order Review
Flowsheets
Intake/Output
MAR
Admit-Txfr-Disch
Rounding + Con...

1

Opioid Risk Tool | Palliative Care Outcomes | Vital Signs | Head to Toe Assessment | IV Assessment | Braden Scale Assessment | Fall Risk Assessment ... | Daily Care | Patient Belongings

Basic Info
Palliative
Daily Sym
Outcomes

2

cordion Expanded | View All

TH 2-EA...
11/12/15
1500

Basic Information
Date of Palliative Care Consult
Attending Physician Requesting Consult
Location at Time of Consult
Reasons for Consult
Primary Diagnosis Leading to Consult
Code Status at Time of Consult
Functional Status at Time of Consult
Advance Directive on Chart?
POLST on Chart?

Palliative Care Consult Information
Number of Family Meetings Held
Disciplines Involved in Consultation
Issues Screened Positive
Issues Intervened Upon
Social Work Interventions
Pharmacist Interventions
Pharmacist Outcomes
Other Interventions

Daily Symptom Assessments
Pain
Nausea and vomiting
Dyspnea
Bowel Movement
Delirium
Anxiety
Depression

Outcomes
Hospital Location Just Prior to Discharge
Discharged Alive or Dead
Destination After Discharge
Services Received After Discharge

3

Selection Form

Optimized symptom drug regimen
Addressed inpatient non-adherence
Coordinated medication insurance issues
Decreased polypharmacy
Reviewed CURES report
Identified drug interactions
Made drug or dose adjustment for organ dysfunction
Educated patient and/or providers

Accept | Cancel

Appendix II: Palliative Care Pharmacists Outcomes

Flowsheets

File | Add LDA | Add Col | Insert Col | Compact | Last Filed | Details | Go to Date | Graph | Values By | Legend | Refresh

Opioid Risk Tool | Palliative Care Outcomes | Vital Signs | Head to Toe Assessment | IV Assessment | Braden Scale Assessment | Fall Risk Assessment | Daily Care | Patient Belongings | Intake/Outp

Summary
Chart Review
Synopsis
Results Review
Allergies
History
Problem List
Immunizations
Medications
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Intake/Output
MAR
Admit-Txfr-Disch
Rounding + Con...

Basic Info...
Pallative ...
Daily Sym...
Outcomes

Mode: Accordion Expanded View All

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Daily Symptom Assessments
Pain
Nausea and vomiting
Dyspnea
Bowel Movement
Delirium
Anxiety
Depression
Outcomes
Hospital Location Just Prior to Discharge
Discharged Alive or Dead
Destination After Discharge
Services Received After Discharge

4

Selection Form

Aberrant drug-taking behavior identified
Plan for safe prescribing developed
Patient harm from drug interaction identified / corrected
Potential harm from drug interaction identified / avoided
Harmful drug dose avoided or corrected
Patient and/or family educated
Health care professionals educated
Discharge prescriptions coordinated

Accept | Cancel

Flowsheets

File | Add LDA | Add Col | Insert Col | Compact | Last Filed | Details | Go to Date | Graph | Values By | Legend | Refresh

Opioid Risk Tool | Palliative Care Outcomes | Vital Signs | Head to Toe Assessment | IV Assessment | Braden Scale Assessment | Fall Risk Assessment | Daily Care | Patient Belongings | Intake/Outp

Basic Info...
Pallative ...
Daily Sym...
Outcomes

Mode: Accordion Expanded View All

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Anxiety
Depression
Outcomes
Hospital Location Just Prior to Discharge
Discharged Alive or Dead
Destination After Discharge
Services Received After Discharge

Selection Form

Change in medication therapy implemented
Adherence to medication regimen improved
Prior authorization approved
Prior authorization denied / alternative medication selected
Medication regimen consolidated
Medication history and response to drug clarified
Aberrant drug-taking behavior identified
Plan for safe prescribing developed

Accept | Cancel

Apprendix 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: respirations 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**	**Previous 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)**

Appendix V: Pain Card

EQUIANALGESIC DOSING GUIDELINES FOR CHRONIC PAIN

CHANGING ROUTES OF ADMINISTRATION	
PO/PR	IV/SC/IM
3	1

OPIOIDS		
Oral/Rectal Dose (mg)	Analgesic	Parenteral SC/IV/IM Dose (mg)
150	Meperidine	50
150	Tramadol	-
150	Codeine	50
15	Hydrocodone	-
15	Morphine	5
10	Oxycodone	-
5	Oxymorphone	-
3	Hydromorphone	1
-	Fentanyl	0.05 mg (1000 mcg = 1 mg)

TRANSDERMAL FENTANYL
Morphine 50mg PO in 24 hrs => Fentanyl 25 mcg in 72 hrs

ADJUSTMENT FOR INCOMPLETE CROSS TOLERANCE*	
Poor	100%
Moderate	75%
Excellent	50%

**Incomplete cross-tolerance:* Tolerance to a currently administered opiate that does not extend completely to other opioids. This tends to lower the required dose of the second opioid.

COMBINATION PRODUCTS	
Product	Morphine PO Equivalent (mg)
APAP 325 mg + Codeine 30 mg PO (Tylenol #3)	≈ 3-4 mg PO
APAP 325 mg + Hydrocodone 5 mg PO (Norco)	≈ 5-6 mg PO
APAP 325 mg + oxycodone 5 mg PO (Percocet)	≈ 7-8 mg PO

Adapted from Ferris FD, Pirello RD: *Improving Equianalgesic Dosing for Chronic Pain Management*, American Association for Cancer Education Annual Meeting, oral presentation, Cincinnati, Ohio, Sept 2005.
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Appendix VI: How to "interrogate" PCA in EPIC/PCA pump

Summary

Index | i-Vent-Patient | Onc Summary | Onc Springboard | More ▾ | Report: Pain

Pain Monitoring

Go to now | 12/19/2015 | Saturday 2300 - Today 1459

24 Hrs 8 Hrs

4 Hrs:	12/19 - 12/20		12/20 0700 - 12/21 0659						12/2
	23-03	03-07	07-11	11-15	15-19	19-23	23-03	03-07	07-11
Pain Screening									
Pain Score	5+	6+	7+	7+	7+	5+	5	7+	6+
Pain Orientation (primary site)			Right;...						
Pain Location	Back+	Neck+	Back+	Back+	Back+	Back+	Back	Back+	Abdom...+
Pain Description	Aching+	Aching+							
Patient's Stated Pain Goal	3+		4			4			
Pain Intervention(s)	Medica...+	Medica...+	Medica...+	Medica...+	Medica...+	Medica...+		Medica...	Medica...+
Hydromorphone PCA									
Route			IV	IV	IV	IV			IV+
Concentration (mg/ml)	0.2	0.2	0.2+	0.2+	0.2	0.2+		0.2	0.2+
Demand Dose (mg)	0.5	0.5	0.5+	0.5+	0.5	0.5+		0.5	0.5+
Lockout (mins)	10	10	10+	10+	10	10+		10	10+
Basal Rate (mg/hr)	0.4	0.4	0.4+	0.6+	0.6	0.6+		0.6	1+
New PCA Syringe Volume (ml)	50	50	50	50	50	50		50	50+
Handoff Volume (ml)			40.5			30.7			9.1
Doses Given (Inj)			39			46			35
Number of Attempts			58			241			81
Total Shift Dose (mg)			23.73			28.13			23.73

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

PCA pump

This is an end tidal CO_2 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.

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