

# ACUTE PAIN SERVICE

Welcome  
to  
New Employee Orientation



# ANESTHESIOLOGISTS

Nine anesthesiologists with specialized interest in acute pain management

- Primary duties during pain week
  - Nerve block
  - Epidural
  - Blood patch
  - Other specialized procedures on request (i.e. lumbar puncture, central line)
- When not assigned to Pain Service:
  - OR, Cath Lab, Endo and L& D



# ANESTHESIOLOGIST CONTACT INFORMATION

- Pain Service 212-2522
  - Available Mon-Fri 6:00- 4:30pm, after hours page 1<sup>st</sup> call anesthesiologist
  - After hours call 212-3155 and ask for 1<sup>st</sup> call anesthesiologist.



# ACUTE PAIN SERVICE NURSES

- Assist pain anesthesiologist with procedures
- Round and follow up on epidural & perineural catheter patients
- Teach new employee orientation
- Annual epidural pump skills check-off



# Acute Pain Service RN

- Available Monday thru Friday 0600 to 1630
- Not available on weekends or holidays unless a procedure is scheduled
- Pain service clinic is located in the middle of Ambulatory Surgery Unit (ASU).
- Office 2~2522 (Please leave detailed message, we check our messages frequently)
- Spectralink 2~3400



# PAIN ASSESSMENT and PAIN SCALE



# ACUTE PAIN



Pain from a recent surgery, injury, or medical illness are examples of acute pain.

In many cases, this pain can be managed immediately and will usually get better in just a short time.



# CHRONIC PAIN



Often defined as any pain lasting more than 12 weeks. The pain can last months or years after the source of pain is gone.





# Components of Assessment

- Pain
  - Location (s)
  - Frequency (constant, intermittent)
  - Quality (aching, burning, sharp)
  - Pain Rate (intensity, pain scale)
  - Duration (when worse, when better, if predictable)
- Effects of pain on the person's function
  - Alleviating factors
  - Aggravating factors
  - Effects on function (ADL's, ect)
- Pain Relief
- Expectations and goals
  - Function and quality of life goals



# Flowsheets

File | Add Rows | Add LDA | Cascade | Add Col | Insert Col | Data Validate | Hide Device Data | Last Filed | Reg Doc | Graph | Go to Date | Responsible | Refresh | Legend | More

Intake/Output | LDA Active | **Vital Signs Complex** | Adult PCS Body System | Blood Administration | PCA/Neuraxial/Epidural

Vital Signs Complex

- Hide All Show All
- Vitals
  - Oxygen Therapy
  - Pain/Comfort**
  - Cardiac
  - ECG
  - Height and weight
  - Orthostatic VS

Accordion Expanded View All

1m 5m 10m 15m 30m **1h** 2h 4h 8h 24h Based On: 0700 Reset Now

	Preop fr...	Pre-adm...
	10/31/17	11/1/17
	1216	0800

Home O2 eval performed?

## Pain/Comfort

<b>Presence Of Pain</b>		
Response to Pain Intervention		
(POSS) Pasero Opioid-Induced		
Richmond Agitation-Sedation		
Preferred Pain Scale		numbe...
Pain Body Location - Side		
Pain Body Location - Orientation		
Pain Body Location		
Pain Radiation to		
Pain Frequency		
Pain Quality		
Associated Signs/Symptoms		
Pain Rating (0-10): Rest		
Pain Rating (0-10): Activity		
Word Pain Rating: Rest	2	
Nonverbal Indicators Of Pain		
Pain Onset		
Pain Duration		
Factors That Aggravate Pain		
Factors That Relieve Pain		
Pain Management Interventions		
Additional Pain Site		

11/01/17 0800

## Presence Of Pain

Select Single Option: (F5)

denies pain/discomfort  
 complains of pain/discomfort  
 non-verbal indicator of pain/discomfort not present  
 non-verbal indicator of pain/discomfort present  
 assumed presence of pain (specify)  
 other (see comments)

Comment (F6)

### Row Information

Consider non-verbal/behavioral indicators



# PAIN REASSESSMENT DOCUMENTATION

- Oral Pain Medication

60 minutes

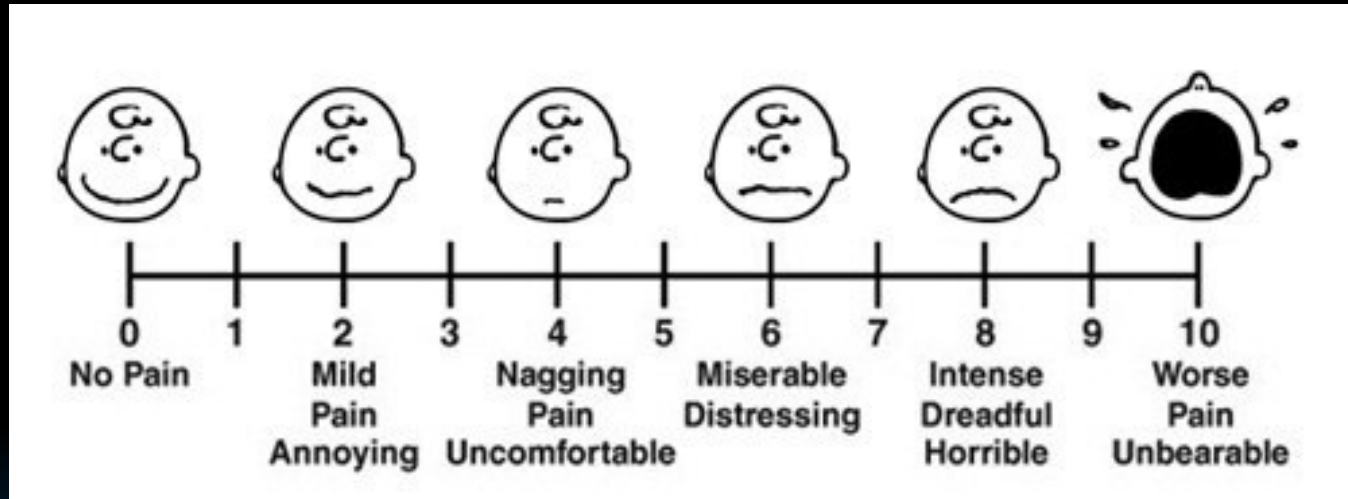
- IV Pain Medication

30 minutes



# Pain Scales

- NUMBER
- WORD
- WONG-Baker Face



# Pain Scales

- rFLACC (revised face, legs, arms, cry, consolability)
- Pain Assessment in Advance Dementia
- Critical Care Pain Observation Tool
- OB Pain
- Chest Pain



# PERIPHERAL NERVE BLOCK



# COMMON NERVE BLOCKS

- Femoral ~ knee
- Adductor Canal ~ knee
- Fascial Iliaca ~ hip
- Transversus Abdominis Plan ~ hysterectomy
- Sciatic ~ foot and ankle
- Saphenous ~ foot and ankle
- Interscalene ~ shoulder
- Supraclavicular ~ arm
- Axillary ~ wrist
- Pectoral ~ breast surgery



# POTENTIAL BENEFITS

- Less anesthesia
- Decreased IV and oral pain medication
- Fewer side effects: Nausea, Constipation, Drowsiness
- Earlier mobilization
- Participate in physical therapy day of surgery
- Faster recovery
- Earlier discharge





# POTENTIAL COMPLICATIONS

- Infection
- Vascular puncture/Bleeding/Hematoma
- Nerve injury
- Falls
- Shortness of breath



# BUPIVACAINE TOXICITY

- Metallic Taste
- Lightheadedness
- Dizziness
- Visual and Auditory Disturbances
- Disorientation
- Drowsiness
- Seizures
- Cardiac Arrhythmia



# MANAGING TOXICITY

- Contact ~ pain service, PEAT, if necessary call code
- Intralipid 20% and treatment checklist
  - Give 1.5 ml/kg intravenously over 1 minute
- Manage airway
- Basic and Advance Cardiac Life Support



# ON-Q PAIN BALL



# WHAT IS THE ON-Q?

- The On-Q is a disposable pump filled with a local anesthetic such as Bupivacaine or Ropivacaine
- The local anesthetic blocks the pain in the area of the surgery
- With On-Q the patient should need less IV and PO pain medication
- The On-Q pump is connected to a catheter placed by a surgeon or a pain anesthesiologist



# ON-Q PAIN RELIEF SYSTEM

- FIXED FLOW RATE
  - 4, 5, 10 mL/hour
  - Incision – placed by surgeon in OR
- SELECT-A-FLOW
  - 2 to 14 mL/hour
  - Nerve block catheter – placed by Pain Service



# ON-Q Pain Pump Fixed Flow



# ON-Q Pump with Select-A-Flow



The pump will have a patient medication label, an LDA entry, and be documented in the patient's eMAR

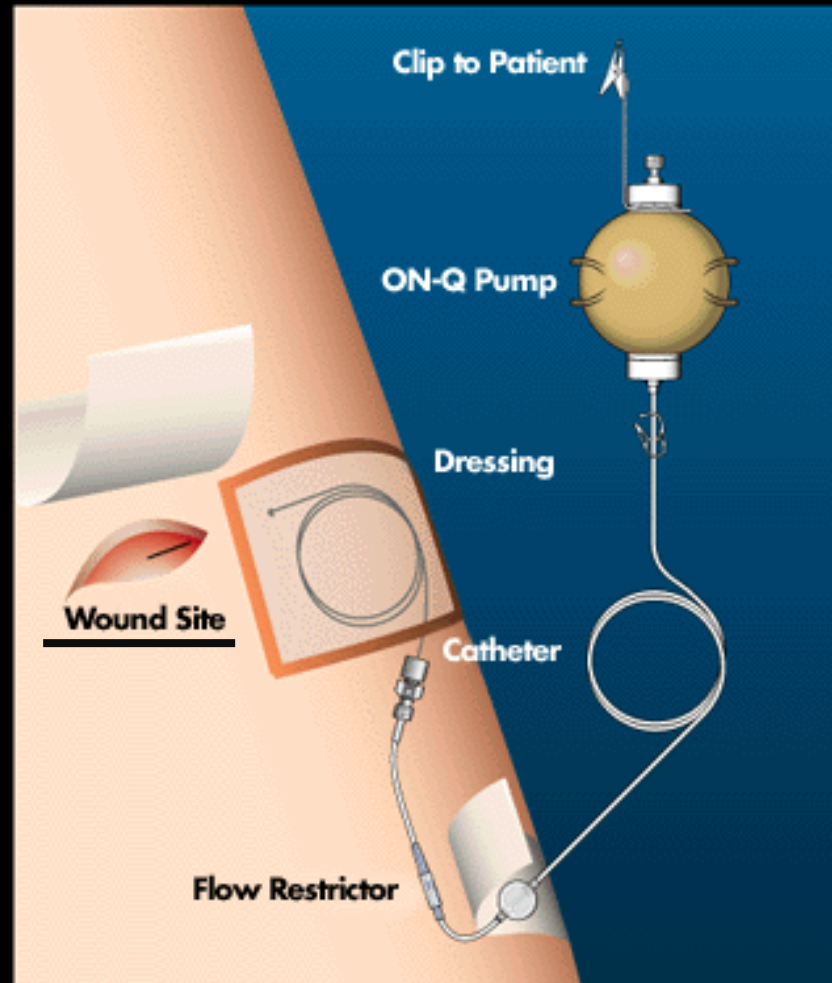




# Continuous Wound Infiltration



Soaker Catheter



# ON-Q Key Points

- Keep **CLAMP OPEN** unless directed otherwise by physician
- Tubing **NOT KINKED**
- Filter **NOT TAPED OR COVERED**
- **Flow restrictor** placed/secured on patient's skin
- Check the **RATE** if controlled by **Select-A-Flow**
- Variable rate controller –
  - Keep at room temperature
  - Skin contact is not necessary
  - Wear outside patient's clothing
  - Place on top of bed covers
  - Contact with cold therapy decreases the flow rate



# ON-Q PATIENT MONITORING

- Assess and document
  - Patient's pain
  - Vital signs and respiratory effort
  - Extremity pale, discolored, or cool to touch
  - Perineural catheter dressing site
    - Clean and dry
    - Moderate drainage from catheter site may occur
    - Reinforce dressing and notify Pain Service
    - Do **NOT** attempt to change occlusive dressing as this will dislodge catheter
- Avoid patient injury due to numbness around surgical area/site
  - Cold, hot, or hard surfaces



# ON-Q PATIENT MONITORING

CLOSE THE CLAMP and NOTIFY PHYSICIAN

- Increase in pain
- Fever, chills, sweats
- Bowel or bladder changes
- Difficulty breathing
- Redness, warmth, discharge, excessive bleeding
- Pain, swelling, or large bruise at catheter site
- Symptoms of local anesthetic toxicity



# Commonly Asked Questions

- How can I tell that the pump is infusing?
  - Infusion may not be evident for more than 24 hours after surgery. Over time, the outside bag will loosen and begin to crease. As the medication is delivered, the pump balloon will gradually become smaller.
- When is the infusion complete?
  - Infusion is complete when the delivery time has passed and/or the pump is no longer inflated. A hard tube will be present in the middle of the pump. The infusion will typically last for 2 to 5 days, depending on the size and volume of the pump.
- Can the pump be refilled?
  - No. The pump is for single use only and is disposable.



# Discontinuing On-Q Catheter

(Fixed Flow Restrictor and Select-A-Flow)

- Obtain a physician's order.
- Remove the dressing.
- Grasp catheter close to the skin and with a steady motion gently pull catheter from the site.
- Catheter should not be sutured in and should be easy to remove and not painful.
- After removal, check the distal end of catheter for black marking to ensure the entire catheter was removed.



# CAUTIONS :

- If resistance is encountered
  - STOP
  - Wait 30 to 60 minutes and try again. Patient's body movements may relieve the catheter to allow easier removal.
  - If catheter is still difficult to remove call the MD.
  - Do not cut or forcefully remove catheter.
  - Do not apply additional tension if catheter begins to stretch.



# EPIDURALS







# EPIDURAL

- Provides post operative pain relief by injecting of anesthetic medication in the fatty tissue (epidural space) that surrounds the nerve roots as they exit the spine.
- Most common types of Surgeries:
  - Abdominal Surgery
  - Thoracic Surgery
  - Rib Fracture
  - Nephrectomy
  - Frostbite ~ increased perfusion



# Pain Service MD Responsibilities

- Administering the initial dose of analgesia.
- Writing all opioid and sedation orders.
- Changes & modification of epidural infusion.
- Treating side effects & complications
- Changing catheter site dressing if needed.
- Manipulation or removal of the catheter.



# Nursing Responsibilities

- Maintaining neuraxial infusion, hang a bag - order a bag, and document.
- Assess the dressing and catheter.
- Monitor level of sedation, respiratory status, effectiveness of analgesia & side effects.
- Labeling neuraxial catheter, tubing, door room and head of bed appropriately.
- Patient & Family education.
- Neuraxial tubing change every 72 hours with reservoir bag.
- Continuous pulse oximeter and neuraxial emergency supplies (ambu bag and mask)
- Document the dermatomes.



File | Add Rows | Add LDA | Cascade | Add Col | Insert Col | Hide Device Data | Hide Comp'd | Last Filed | Reg Doc | Graph | Go to Date | Responsible | Refresh | More

PCA/Neuraxial/Epidural | PACU | LDA Active | Intake/Output | Aldrete Score | Modified Aldrete | Non-Violent or Non-Se... | Adult Patient Profile | PCA/Neuraxial/Epidur...

Levels of Dermatomes | Mode: Accordion | Expanded | View All | 1m | 5m | 10m | 15m | 30m | 1h | 2h | 4h | 8h | 24h | Based On: 0700 | Reset Now

Admission (Current) from 3/8/2017 in PROVIDENCE ALASKA MEDICAL CEN...

		3/9/17							Last Filed Value
		0630	0645	0700	0708	0800	0900	1000	

**Vitals**   
 HYDROmorphone (PF) (DIL...   
 Start: 03/08/17 0745  
 HYDROmorphone (PF) (DIL...   
 Start: 03/08/17 1330  
 HYDROmorphone (PF) (DIL...   
 Start: 03/08/17 1645  
 Epidural Catheter 03/08/17 ...   
 Sensory Level   
 Pain/Comfort/Sleep

		0630	0645	0700	0708	0800	0900	1000	Last Filed Value
<b>HYDROmorphone (PF) (DILAUDID-HP) 5 mcg/mL, bupivacaine (PF) (MARCAINE) 0.0625 % in sodium chloride 0.9% 250 mL - Epidural Catheter 03/08/17 0727</b>									
<b>Start: 03/08/17 1645</b>									
Loading Dose (mL)									
Bolus Dose (mL)									
Basal Rate (ml/hr)				10					10 mL/hr
Demand Dose (ml) - OLD									
Demand Dose (mL)									5 mL
Lockout Interval (min)									20 minutes
Max Doses per 1 hour (mL)									
Max Doses per 4 hour (mL)									
# of Doses Given									
Number of Attempts									
Shift Total (mg)									
Volume Infused (mL)									108 mL
Sedation Level									1 - Awake an...
Sedation Level - Read Only									
Respiratory Effort									Unlabored

**Epidural Catheter 03/08/17 0727**

		0630	0645	0700	0708	0800	0900	1000	Last Filed Value
<b>Epidural Catheter - Properties</b> <span style="float: right;">Placement Date/Time: 03/08/17 (c) 0727 Catheter Length (cm): 10 Additional</span>									
Site Day									1
Catheter Length Distal to									
Infusion Method									continuous;e...
Dressing									dressing dry ...
Securement									catheter secu...
Safety Interventions									catheter conn...
Insertion Site									clean and dry
Daily Review of Necessity									completed
Motor Function-Bromage									
Anesthesia/Analgesia									



**Flowsheets**

File Add Rows Add LDA Cascade Add Col Insert Col Hide Device Data Last Filed Reg Doc Graph Go to Date Responsible

PCA/Neuraxial/Epidural PACU LDA Active Intake/Output Aldrete Score Modified Aldrete Non-Violent or Non-Se... Adult Patient Pro

Mode: Accordion Expanded View All 1m 5m 10m 15m 30m 1h 2h 4h

PCA/Neuraxial/Epidural from 2/28/2017 in DAMC FIL MEDICAL ONCOLOGY

**Levels of Dermatomes**

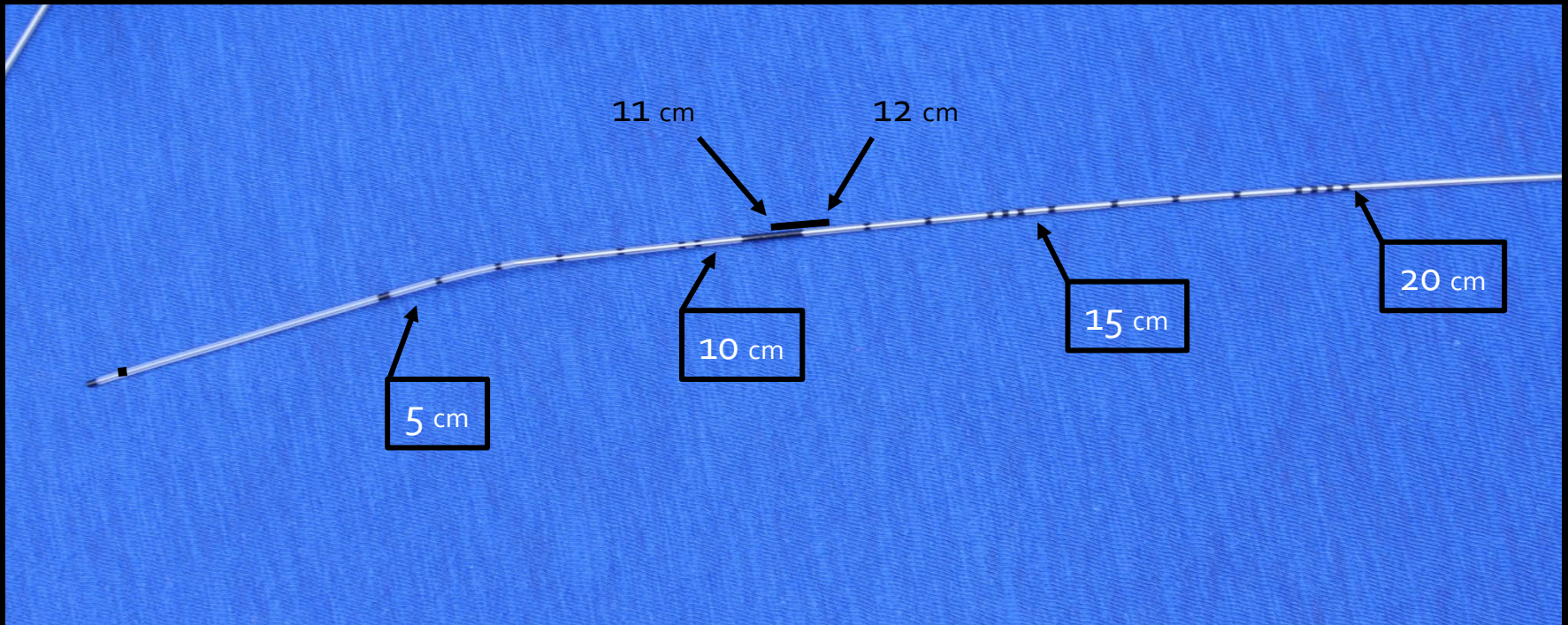
Vitals   
 morphine (PF) (DURAMOR...   
 Start: 03/09/17 0700  
 Epidural Catheter 03/09/17 ...   
 Sensory Level   
 Pain/Comfort/Sleep

Vitals  
 Temp  
 Pulse  
 Resp  
 BP  
 SpO2  
 ETCO2  
 O2 Dev  
 Oxygen  
 Flow (L  
 morph  
 Sta  
 Loading  
 Bolus [   
 Basal F  
 Deman  
 Deman

Lockout Interval (min)  
 Max Doses per 1 hour (mL)  
 Max Doses per 4 hour (mL)



# CATHETER MEASUREMENTS



# POTENTIAL BENEFITS

- Less Anesthesia
- Decreased pulmonary complications
  - Increased Incentive Spirometer
    - Surgery
    - Rib Fractures
- Decreased Mechanical Ventilation
- Reduces post operative ileus
- Earlier ambulation
- Earlier discharge from hospital





# POTENTIAL COMPLICATIONS

- Unsuccessful catheter placement
- Intraspinal catheter migration
- Dural puncture, spinal headache
- Possible loss of extremity motor function
- Urinary retention (lumbar placement)
- Back pain (at site of needle insertion)
- Hypotension - Most often occurs as a result of hypovolemia







- Intraspinal catheter migration
- Risk of inadvertent injection of neurotoxic agents into the cerebrospinal fluid.
- Neurologic complication from trauma to tissue
  - Infection, abscess, hematoma, s/s cord compression
  - Check for changes in bowel, bladder function, weakness and mobility



# Sapphire Pumps



# AFTER HOURS AND WEEKENDS...

- Contact the Shift Coordinator x22584
- Shift Coordinator will bring a epidural pump and set-up supplies from PACU
  - Epidural tubing
  - StatLock extension
  - Epidural StatLock
  - Epidural medication tubing labels
  - Epidural signs x2
  - 3mL syringe



# SAPPHIRE KEY POINTS

## Administration cassette

- Close the Anti-Free Flow Valve prior to spiking
- Attach epidural tubing extension for StatLock
- Prime tubing manually past the cassette
- Approximate priming volume 7mL
- Inserting administration cassette into pump
- Removing administration cassette from pump



Set the VTBI to 50mL less than bag volume

10 minute warning before VTBI is complete

Next epidural bag available



# Programming



# Epidural “Show All Details”

MAR - \*Read-Only\*

Report MAR Note Messages Legend Show All Actions Link Lines Doc Flowsheets

Snapshot Period Scheduled PRN **Continuous** All Meds Labs

Summary Go to Now or Select Date:  **Not Scanned** Hide All Details Hide All Admins

Chart Review Monday August 14, 2017

Care Everywhere... 0400 0500 0600 0700 **0800** 0900 1000 1100

Synopsis

Results Review

Review Flows...

Problem List

History

Notes

Demographics

Allergies

Manage Orders

Order Review

**MAR**

Intake/Output

Flowsheets

Work List

Care Plan

Education

Diagnosis/With

**fentaNYL (PF) 1 mcg/mL, bupivacaine (PF) (MARCAINE) 0.1 % in sodium chloride 0.9% 250 mL : 10 mL/hr : EPIDURAL : CONTINUOUS** !!

Order Questions/Answers

Patient-controlled Bolus Dose (mL): 5

Lockout Interval (min): 30

Frequency: CONTINUOUS

Route: EPIDURAL

Ordered Infusion Rate: 10 mL/hr

**250 mL**

Last Admin: Today 08/14/17 at 0754

Recent Admin Within 24

Hours: 08/14/17 0754

Order Start Time: 08/12/17 at 0645

Expected Dispense

Volume: 250 mL

Dispense Location: Refrigerator -or- Pyxis Bin

Mixture Components

Component	Type	Amount
fentaNYL (PF) 50 mcg/mL SOLN	Medications	1 mcg/mL
bupivacaine (PF) 0.5% SOLN	Medications	0.1 %
sodium chloride 0.9% QS Base	QS Base	195 mL

Pharmaceutical Class: Local Anesthetics-Parenteral, Analgesics-Narcotic

Linked Line: Epidural Catheter 08/07/17 1320

**5 mL PCEA bolus  
30 minute lockout  
10 mL/hr continuous**

Recent Actions: 08/12 0710 | 08/12 2335 | 08/13 1630



# Rx: New Order

MAR - \*Read-Only\*

Report MAR Note Messages Legend Show All Actions Link Lines Doc Flowsheets

Snapshot Perio Scheduled PRN **Continuous** All Meds Labs

Summary Go to Now or Select Date:  **Not Scanned** Hide All Details Hide All Admins

Chart Review Monday August 14, 2017

Care Everywhere... 0400 0500 0600 0700 **0800** 0900 1000 1100

Synopsis

Results Review

Review Flows...

Problem List

History

Notes

Demographics

Allergies

Manage Orders

Order Review

**MAR**

Intake/Output

Flowsheets

Work List

Care Plan

Education

Discharge Meds

fentaNYL (PF) 1 mcg/mL, bupivacaine (PF) (MARCAINE) 0.1 % in sodium chloride 0.9% 250 mL : 10 mL/hr : EPIDURAL : CONTINUOUS

Order Questions/Answers

**6 mL PCEA bolus**  
**30 minute lockout**  
**12 mL/hr continuous**

Last Admin: Today 08/14/17 at 0754  
Admin Within 24 Hours: 08/14/17 0754  
Order Start Time: 08/12/17 at 0645  
Expected Dispense Volume: 250 mL

Dispense Location: Refrigerator -or- Pyxis Bin

Mixture Components

Component	Type	Amount
fentaNYL (PF) 50 mcg/mL SOLN	Medications	1 mcg/mL
bupivacaine (PF) 0.5% SOLN	Medications	0.1 %
sodium chloride 0.9% QS Base	QS Base	195 mL

Pharmaceutical Class: Local Anesthetics-Parenteral, Analgesics-Narcotic  
Linked Line: Epidural Catheter 08/07/17 1320

Recent Actions: 08/12 0710 | 08/12 2335 | 08/13 1630



# Clinician Bolus

Results Review

Flowsheets

Problem List

History

Notes

Demographics

Allergies

**Order Entry**

Order Review

Immunizations

MAR

Intake/Output

Doc Flowsheets

Work List

Care Plan

Patient Education

Discharge Writer

**Nursing communication**

Administer 2mL Clinician Bolus via the epidural infusion pump., Routine, ONE TIME First occurrence Today at 0729

Comments (F6):

abc [Icons] Insert SmartText [Icons]

Administer 2mL Clinician Bolus via the epidural infusion pump.

Priority: Routine  Routine  ASAP  STAT  Timed

Frequency: ONE TIME  ONE TIME  Until Discontinued  Continuous  PRN  1 Time  Upon Admission  Prior to Discharge

Starting: 11/21/2014  Today  Tomorrow  At: 0729

First Occurrence: **Today 0729**

**Scheduled Times:** [Hide Schedule](#)

11/21/14 0729





Friday January 13, 2017

0500

0600

0700

0800

0900

1000

1100

Electrolytes in water (PLASMALYTE-148/NORMOSOL-R) infusion : 100 mL/hr : Intravenous : CONTINUOUS

0835 NewBag  
100 mL/hr

Fentanyl (MARCAINE) 0.1 % in sodium chloride 0.9% 250 mL : 14 mL/hr : Epidural : CONTINUOUS

Enter 8 ml bolus with rate change.

0700 Rate/Dose  
Change 14 mL/hr

- Due
- New Bag
- New Syringe/Cartridge
- Started During Downtime
- D Bolus from Bag**
- Continue bag from transfer
- Restarted
- Stopped
- Rate/Dose Change
- Rate/Dose Verify
- Not Given
- Hold
- Canceled Entry
- MAR Hold
- MAR Unhold
- Push
- Return to Cabinet
- Milk Verified

Administration Warning

Patient was not scanned



Scan patient barcode now  
or  
Select the MAR action and a

Action:

Bolus from Bag

Override reason:



Accept

Cancel

... an example of how the bolus looks in Epic.



MAR ? Resize

Refresh Report MAR Note Rx Messages Legend Show All Actions Link Lines Doc Flowsheets

Documented By: JOHNSON, JANICE A Schedule Date/Time: 03/23/17 1329 Request esign

**Infusion**

✕ HYDROmorphone (PF) (DILAUDID-HP) 5 mcg/mL, bupivacaine (PF) (MARCAINE) 0.075 % in sodium chloride 0.9% 250 mL : 12 mL/hr : Epidural : CONTINUOUS Rx

**!!** Show Flowsheet

Frequency:	CONTINUOUS
Route:	Epidural
Ordered Infusion Rate:	12 mL/hr
Order Start Time:	03/21/17 at 1215
Dispensed Volume:	250 mL
Disp Location:	Refrigerator -or- Pyxis Bin
Last Admin Given:	Today 03/23/17 at 0705
Recent Admin Within 24 Hours:	03/23/17 0705

? Order Questions/Answers

Patient-controlled Bolus Dose (mL):	6
Lockout Interval (min):	30

Recent Actions			Next Actions		
03/21	03/22	03/23			
1418	0733	0227			

Line at time of administration: Epidural Catheter 03/21/17 1119

**Mixture Components**

Component	Type	Amount
HYDROmorphone (PF) 10 mg/mL SOLN	Medications	5 mcg/mL
bupivacaine (PF) 0.5% SOLN	Medications	0.075 %
sodium chloride 0.9% QS Base	QS Base	212.375 mL

Action:

Date:  Time:

Comment:

Route:

Site:

Rate:  mL/hr

Last Rate: 12 mL/hr (03/23/17 0705)

8mL clinician bolus given per acute pain anesthesiologist

EXAMPLE



Documented By: JOHNSON, JANICE A Schedule Date/Time: 03/23/17 1329

Request Cosign

Infusion

HYDROmorphone (PF) (DILAUDID-HP) 5 mcg/mL, bupivacaine (PF) (MARCAINE) 0.075 % in sodium chloride 0.9% 250 mL : 12 mL/hr : Epidural : CONTINUOUS

Frequency: CONTINUOUS  
 Route: Epidural  
 Ordered Infusion Rate: 12 mL/hr  
 Order Start Time: 03/21/17 at 1215  
 Dispensed Volume: 250 mL  
 Disp Location: Refrigerator -or- Pyxis Bin  
 Last Admin Given: Today 03/23/17 at 0705  
 Recent Admin Within 24 Hours: 03/23/17 0705

**Order Questions/Answers**

Patient-controlled Bolus Dose (mL):	6
Lockout Interval (min):	30

Action: Canceled Entry  
 Date: 3/23/2017 Time: 1329  
 Route: Epidural  
 Rate: 12 mL/hr  
 Last Rate: 12 mL/hr (03/23/17 0705)

8mL clinician bolus given per acute pain anesthesiologist

Recent Actions		Next Actions	
03/21 1418	03/22 0733	03/23 0227	

Line at time of administration: Epidural Catheter 03/21/17 1119

**Mixture Components**

Component	Type	Amount
HYDROmorphone (PF) 10 mg/mL SOLN	Medications	5 mcg/mL
bupivacaine (PF) 0.5% SOLN	Medications	0.075 %
sodium chloride 0.9% QS Base	QS Base	212.375 mL

Request cosign by:

EXAMPLE



# Cosign Request

**Summary**

Snapshot | Peri-Op Orders | Snapshot | Labs | Facesheet | **Overview** | Index | Anesthesia Summary | More

Bed Mobility: needs assistance  
Bed Mobility Equipment: slide sheet  
Mobility and Transfers: moderate assistance  
Mobility Assistive Devices: none  
Mobility/Transfers Equipment: slide sheet

**Precaution Orders** Expand | Hide

Ordered	Start
08/07/17 1330 > Neuraxial precautions UNTIL DISCONTINUED	08/07/17 1329

**Care Plan Problems** Report

- Moderate protein-calorie malnutrition (HCC)
- Pressure Ulcer Risk (Braden Scale) (Adult,Obstetrics,Pediatric)
- Patient Care Overview (Adult)
- Fall Risk (Adult)
- Restraint/Seclusion Use for Patient Safety
- Nutrition, Enteral (Adult)

**Language** Update | Document Assistance

Name	Patient	Burgos, Bella	Burgos, Mark
Relation	Self	Spouse	Son
Interpreter Needed	No		
Language	Tagalog		
Deaf/Hard of Hearing	No		
Blind/Low Vision	No		

**Administrations with Cosign Requests** [Cosign all administrations]

Alicia Kilgore, RN [Cosign all from this user]  
bupivacaine (PF) (MARCAINE) 0.1 % in sodium chloride 0.9% 250 mL [Cosign all for this order]  
Status: Discontinued  
Line: Epidural Catheter 08/07/17 1320

Action	Dose	Rate	Route	Site	Time	Requested Cosigner
New Bag		10 mL/hr	EPIDURAL		08/11/17 0321	Stephanie A Randall, RN

[Cosign]



# Transistion

Results Review

Flowsheets

Problem List

History

Notes

Demographics

Allergies

**Order Entry**

Order Review

Immunizations

MAR

Intake/Output

Doc Flowsheets

Work List

Care Plan

Patient Education

Discharge Writer

### Nursing communication

Administer 2mL Clinician Bolus via the epidural infusion pump., Routine, ONE TIME First occurrence Today at 0729

Comments (F6):

Turn off the epidural pump at 0600 and give oral pain medication.

**\*Remember to chart "stopped" on MAR\***

Priority: Routine  Routine  ASAP  STAT  Timed

Frequency: ONE TIME  Until Discontinued  Continuous  PRN  1 Time  Upon Admission  Prior to Discharge

Starting: 11/21/2014  Today  Tomorrow  At: 0729

First Occurrence: **Today 0729**

**Scheduled Times:** [Hide Schedule](#)

11/21/14 0729



# PCA



# Alaris PCA



# Nursing Responsibilities

- PCAs are ordered in a order set.
- Nursing will follow the monitoring, treatment and notification parameters indicated with in the specified order set.
- Patient receives continuous capnography monitoring.
- Two qualified personnel must independently verify person, drug, dose parameters, route and appropriate CCA.
- IV fluids must be run.
- Remain at bedside until the loading dose is complete.
- Vital signs, pain, sedation levels, infusion site, IPI level.
- Reassess pain relief, side effects
- Document assessment, shift totals and shift hand-off.
- Unless otherwise specified by prescriber, enteral pain medications are not started until the PCA has been stopped or will be stopped within the next two hours.





# Monitoring based on orders:

## ▼ PCA Management Until Completed Complete

Process Instructions:

### ★ GENERAL

- Assess vital signs, pain level, and sedation level Q30 min X 2, then Q1H X 2, then Q2H upon initiation of PCA and with any dose adjustments
- Assess and document pain every 2 hours while awake
- If pain level is rated as acceptable by patient for 24 hours, assess and document pain every 4 hours
- Monitor ETCO<sub>2</sub> or continuous pulse oximetry per facility routine
- If no IV fluid ordered, infuse NS at 25 mL/hr

### NOTIFICATION

While patient on PCA, notify the provider for the following unless otherwise indicated:

- Temperature less than 35 or greater than 39.4
- SBP less than 85 or greater than 200
- DBP less than 35 or greater than 110
- HR less than 45 or greater than 130
- RR less than 10 or greater than 28
- Urinary output less than 30 mL/hr for four hours
- If needs O<sub>2</sub> >4 Lpm NC to maintain pulse ox >92% or intensification of respiratory support (NC to face mask)

Question: D/C PCA when taking oral analgesics? Answer: Yes



Accordion Expanded View All

Admission (Current) from 6/19/2017 in...	
3/21/19	6/17/19
1237	1000

Vitals

Temp		
Pulse		
Resp		
BP		
SpO2		
ETCO2		
O2 Device		
Oxygen Concentration (%)		
Flow (L/min)		

morphine 5 mg/mL PCA syringe

Loading Dose (mg)		
PCA Dose (mg)		
Lockout Interval (min)		
Continuous Rate (mg/hr)		
Max Dose per 1 hour		
Max Dose per 4 hour		
# of Doses Given		
Number of Attempts		
Shift Total (mg)		
Volume Infused (ml)		
Sedation Level		
Respiratory Effort		

Pain/Comfort/Sleep

Presence Of Pain	denies pain/dis...
Response to Pain Intervention	
(POSS) Pasero Opioid-Induced	
Richmond Agitation-Sedation	
Preferred Pain Scale	
Sleep/Rest/Relaxation	
Fever Reduction/Comfort	
Additional Pain Site	
Additional Documentation	



# CCA = Clinical Care Area

- Adult LESS than 65 and NO risk of sleep apnea
  - PCA only
- Adult over 65 years old or history of sleep apnea
  - PCA only
- Opiate Tolerant – Continuous rate with PCA
- Palliative Care - high rates (end of life)



# PCA Programming Tip-sheet

## PCA Pump Programming Guide

Review this guide before setting up a PCA

Order in MAR	Meaning	Programming
Loading Dose (mg): 0.6	This is a one-time dose to be administered the very first time the PCA is hooked up. Think of it as a one-time bolus.	<b>LOADING DOSE</b> _____ mg
Starting PCA Dose(mg): 0.6 Incremental Increase PCA Dose(mg): 0.2 Maximum PCA Dose(mg): 1.2	<p>This is a <i>range order</i> for the Patient-Controlled aspect of the pump. This refers to the amount of medication delivered each time the patient pushes their PCA button.</p> <p>Always start with the "starting PCA dose".</p> <p>If the patient's pain is not controlled, you can "Incremental(ly) Increase" by 0.2 mg in this case. i.e. PCA started with 0.6 mg + 0.2 mg increase for pain = 0.8 mg</p> <p>If the patient continues to be in pain, you can continue to increase the PCA by 0.2 mg (in this case) until you reach the "Maximum PCA Dose" of 1.2 mg.</p> <p>If the patient's pain is still uncontrolled with the maximum dose, notify the LIP.</p>	<b>PCA DOSE</b> 0.6 mg
Lockout Interval(min): 6	This is the amount of time allowed between each PCA dose. A dose will only be administered every 6 minutes in this case.	<b>LOCKOUT INTERVAL</b> 06 minutes
Continuous Rate(mg/hr): 0.8	Think of this as a basal rate. This is the amount of medication that will be given per hour in addition to the PCA doses the patient is administering.	<b>CONT DOSE</b> 0.8 mg/h
One Hour Limit (mg): 10.6	<p>This is the maximum amount of medication that the pump will allow the patient to receive.</p> <p>PCA doses administered + Loading Dose + Continuous Rate = <b>One Hour Limit (mg)</b></p>	<b>MAX LIMIT</b> _10.6 mg/1 h

Refer to "IV Patient Controlled Analgesia" policy for the most updated PAMC standards.

Created June 2020  
Savannah Courtright & April Hough



# PCA Programming Tip-sheet

**Dual Signoff Summary**

Documented By: COURTRIGHT, SAVANNAH M      Schedule Date/Time: 03/02/20 0900

**HYDRomorphine in saline (DILAUDID) 1 mg/mL PCA**      Intravenous : CONTINUOUS

Order Instructions: "Palliative care PCA"

Order Questions/Answers

Loading Dose (mg): 0.6  
 Starting PCA Dose(mg): 0.6  
 Incremental Increase PCA Dose(mg): 0.2  
 Maximum PCA Dose(mg): 1.2  
 Lockout Interval(min): 6  
 Continuous Rate(mg/hr): 0.8  
 One Hour Limit (mg): 10.6

Frequency: CONTINUOUS  
 Route: Intravenous  
 Order Start Time: Today 03/02/20 at 1300  
 Pharmaceutical Class: Analgesic-Narcotic  
 Reference(s): Respiratory Depression/NARCAN  
 Medication  
 Linked Link: Not Linked (as of Today 03/02/20 at 0904)

Action:  New Bag  
 Route:  Intravenous  
 Dose:  mg  
 Rate:  mL/hr  
 Order Concentration: 1 mg/mL

**Comment:**  
 Loading dose: 0.6  
 PCA dose: 0.6 every 6 min  
 Continuous rate: 0.8  
 One hour limit: 10.6

Document programmed dosage ***and*** any dose changes in the Comment section of the **MAR Administration**.

**AND**

Document programmed dosage ***and*** any rate changes in Intake/Output Flowsheet under the Medication's row.

Vital Signs | Intake/Output | Adult PCS | Adult Patient Profile | Quickchart | LDA (Activ)

Search (Alt+Comma) 🔍

Accordian   Expanded   View All

1m   5m   10m   15m   30m   1h   2h

Hide All   Show All

INTAKE	<input checked="" type="checkbox"/>	
MEDS/BLOOD/INFUSIONS	<input checked="" type="checkbox"/>	3/2
HYDRomorphone i...	<input checked="" type="checkbox"/>	0904
URINE	<input checked="" type="checkbox"/>	
STOOL	<input checked="" type="checkbox"/>	
EMESIS/GASTRIC OUTPUT	<input checked="" type="checkbox"/>	
BLOOD OUTPUT	<input checked="" type="checkbox"/>	
ADDITIONAL OUTPUT	<input checked="" type="checkbox"/>	

HYDRomorphone in saline (DILAUDID) 1 mg/mL	
Loading Dose (mg)	0.6
PCA Dose (mg)	0.6
Lockout Interval (min)	6
Continuous Rate (mg/hr)	0.8
Max Dose per 1 hour	10.6
Max Dose per 4 hour	
# of Doses Given	
Number of Attempts	
Shift Total (mg)	
Volume Infused (ml)	
Sedation Level	
Respiratory Effort	


Document Pain Assessments & Re-Assessments Routinely. Assess respiratory status using capnography.

Refer to "IV Patient Controlled Analgesia" policy for the most updated PAMC standards.



# Patient Controlled Analgesia

- PCA only

HYDROmorphine in saline (DILAUDID) 1 mg/mL PCA : Intravenous : CONTINUOUS : 


Admin Instructions:  
\*\*for adult patients LESS than 65 years old and NO risk of sleep apnea\*\*

Order Questions/Answers

Loading Dose(mg): 0  
Starting PCA Dose(mg): 0.2  
Incremental Increase PCA Dose(mg): 0.1  
Maximum PCA Dose(mg): 0.4  
Lockout Interval(min): 10  
One Hour Limit(mg): 3

# Patient Controlled Analgesia

- Continuous rate with a PCA

HYDRomorphone in saline (DILAUDID) 1 mg/mL PCA : Intravenous : CONTINUOUS : 

Admin Instructions:  
**\*\* opiate tolerant w/continuous rate\*\***

[Order Questions/Answers](#)

Loading Dose (mg): 0.4  
Starting PCA Dosing (mg): 0.4  
Incremental Increase PCA Dose (mg): 0.4  
Maximum PCA Dose (mg): 0.8  
Lockout Interval (min): 10  
Continuous Rate (mg/hr): 0.2  
One Hour Limit (mg): 5

WELCOME

to

PROVIDENCE!!!