

MED SAFETY & COMPLIANCE

Patient Controlled Analgesia (PCA)

Documentation examples page 2

Metrics and Resources on page 3

INVENTORY INTEGRITY & QSRP

ISSUE 9

APRIL 2023

Documentation Requirements

DEMANDS and DELIVERD now required

START OF INFUSION AND New Bag/Syringe:

Dual Signoff required

- Correct Action, Time, Dose, Rate
- Volume at start (**ONLY** for new bag/syringe)
- **Volume** primed (**ONLY** when priming new tubing - **NEVER** document "0")

EVERY 4 HOURS

May be done via MAR Action OR Flowsheet
(See page 2 for examples)

- Volume infused (since last left to count value)
- Volume left to count
- Total Demands and Demands Delivered
- Total Amount (e.g. mg) infused
- Clear Patient History on infusion Pump

END OF SHIFT and HANDOFF

Dual Signoff required

- Volume infused (since last left to count value)
- Volume left to count

WASTE with Witness Visualizing Disposal:

Dual Signoff required

- When changing tubing
- When medication expires
- When medication discontinued

NEW Nursing Order!

PCA: Required
Documentation is now
ordered with every PCA.

PCA : Required Documentation

PCA : Required Documentation

Care Instructions: Document and Clear PCA pump
While on: PCA

1. Total Demands and Demands Delivered
 2. Total Amount (e.g. mg) infused
 3. Volume (mL) infused
 4. Volume (mL) bag/cartridge Left to Count
 5. Clear Patient History on infusion pump
- Routine, Every 4 hours, First occurrence today at 1600, Until Specified

HANDOFF

Before clicking **ACCEPT**, confirm that the prime and volume left to count is accurate.

Resources

- [Patient-Controlled Analgesia \(PCA\) and Continuous Controlled Substance Infusion: Administration and Management \(SOP\)](#)
- [Controlled Substance Administration and Accountability \(SOP\)](#)

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Documenting q4h Required Documentation using Rate Dose Verify MAR Action

Required Fields are Highlighted in Yellow

PCA Assess- Hydromorphone (1 mg/mL)

Volume (mL) at start Hydromorphone	<input type="text"/>	Document Calculated Volume Infused from #2	<input type="checkbox"/> 44.4 at 3/8/2023 0719
Volume (mL) primed Hydromorphone	<input type="text"/>		<input type="checkbox"/> 1.5 at 3/7/2023 1033
Volume (mL) infused Hydromorphone	<input type="text" value="10"/>	3	<input type="checkbox"/> 4.8 at 3/8/2023 0719
Total Dose (mg) - Hydromorphone	<input type="text" value="3.75"/>	4	
Total Demands - Hydromorphone	<input type="text" value="3"/>	5	
Demands Delivered - Hydromorphone	<input type="text" value="3"/>	6	
Volume (mL) prime wasted Hydromorphone	<input type="text"/>		
Volume (mL) bag/cartridge wasted Hydromorphone	<input type="text"/>		
Volume (mL) bag/cartridge left to count Hydromorphone	<input type="text" value="29.6"/>	1	<input type="checkbox"/> 39.6 at 3/8/2023 0719
Formula bag/cartridge left to count Hydromorphone	<input type="text" value="29.6"/>	7	<input type="checkbox"/> 39.6 at 3/8/2023 0719
Formula prime left to count Hydromorphone	<input type="text"/>		<input type="checkbox"/> 1.5 at 3/7/2023 1033

Annotations:
 1: Document VTBI from Alaris Pump
 2: Subtract VTBI from Alaris Pump from previous Documented Volume left to count: This is the Volume Infused since last documentation
 3: Document Calculated Volume Infused from #2
 4-6: Document 4-6 using data obtained from Patient History on
 7: Verify this matches the Volume entered in Step 1

Documenting q4h Required Documentation Using Flowsheets

Flowsheets

Children's Vitals I/O C.D.R. Assessment All Doc Intervention Plays Vitals I/O Screenings Blood Care Partner/Vitals &...

Adult Hospital with Adetola Adamo Kassim, MD

	1m	5m	10m	15m	30m	1h	2h	4h	8h	24h	Interval Start: 0700	Reset	
PCA Assess- Hydromorphone (1 mg/mL)						2300					0000	0031	Last Filed
Volume (mL) at start Hydromorphone													40.5 mL
Volume (mL) primed Hydromorphone													1.5 mL
Volume (mL) infused Hydromorphone						14.8							4.1 mL
Total Dose (mg) - Hydromorphone						3.75							
Total Demands - Hydromorphone						3							
Demands Delivered - Hydromorphone						3							
Volume (mL) prime wasted Hydromorp...													0
Volume (mL) bag/cartridge wasted Hyd...													44.5 mL
Volume (mL) bag/cartridge left to count...						29.6							44.4 mL
Formula bag/cartridge left to count Hyd...													44.4 mL
Formula prime left to count Hydromorp...													1.5

Annotations:
 1: Document VTBI from Alaris Pump
 2: Subtract VTBI from Alaris Pump from previous Documented Volume left to count: This is the Volume Infused since last documentation
 3: Document Volume Infused calculated in step 2
 4-6: Document 4-6 using data obtained from Patient History on Alaris Pump

Flowsheets

Admissi

3/7/2023

2300

PCA Assess- Hydromorphone (1 mg/mL)	
Volume (mL) at start Hydromorphone	
Volume (mL) primed Hydromorphone	
Volume (mL) infused Hydromorphone	14.8
Total Dose (mg) - Hydromorphone	3.75
Total Demands - Hydromorphone	3
Demands Delivered - Hydromorphone	3
Volume (mL) prime wasted Hydromorp...	
Volume (mL) bag/cartridge wasted Hyd...	
Volume (mL) bag/cartridge left to count...	29.6
Formula bag/cartridge left to count Hyd...	29.6

8: Verify documented left to count matches Formula left to count

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March 2023 Metrics

	VUAH	Monroe Carell	VPH	VWCH	VBCH	VTHH
Guardrails Compliance Reach = 95% Target = 90% Threshold = 85%	88.9% (↔)	88.9% (↔)	No smart pump use	83.4% (↑)	No data	No data
BCMA Compliance Reach = 97.5% Target = 95% Threshold = 92.5%	95.6% (↔)	94.9% (↔)	97.1% (↔)	95.5% (↔)	97.9% (↑)	93.9% (↓)
BCMD Compliance (Prep/Check) Reach = 95% Target = 90% Threshold = 85%	96.1/97.3 (↔)	94.2/96.8 (↔)	No sterile product prep	92.6/95 (↓)	No data	98.4/98.9 (↑)

	Below Threshold	Threshold Goal	Target Goal	Reach Goal	Data Source
Guardrails Compliance	< 85%	85 – 89.9%	90 – 94.9%	≥ 95%	ISMP standard 95%
BCMA Compliance	< 95%	95 – 95.9%	96 – 96.9%	≥ 97%	Leapfrog Group 95%
BCMD Compliance	< 85%	85 – 89.9%	90 – 94.9%	≥ 95%	VUMC Sterile Products Oversight Cmte.

	VUAH	Monroe Carell	VPH	VWCH	VBCH	VTHH
ADS Override % No external benchmark. Excludes IV fluid overrides.	2.3% (↔)	2.7% (↓)	0.2% (↔)	1.4% (↔)	0.3% (↑)	0.3% (↓)

Benchmarks Undefined	
ADS Override %	<ul style="list-style-type: none"> No published external benchmarks Due to variance in patient acuity and ADS loaded meds, no current internal benchmarks set Appropriate overrides are urgent/emergent situations, where the patient's clinical condition and medication need require bypassing the standard med use process (med order, pharmacist order review and profiled ADS vend)

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Med Safety Metric Definitions:

- Guardrails compliance (Alaris smart pump)** - % of IV infusions run on a Guardrails file versus total IV infusions administered
- Barcode Medication Administration (BCMA) compliance** - % of administrations where both patient AND medication are scanned in VUMC areas live on BCMA
- Barcode Medication Dispensing (BCMD) compliance** - % of medications scanned, typically sterile products, during pharmacy preparation
- Automated dispensing cabinet (ADS) overrides** - volume of override accesses of medications in ADS on profile mode

Smart Pump Resources:

VUMC main campus:

- Current Alaris library (main campus) version name **VUMC 9-33 v 04-2023** (pushed 04/05/23)
- Current Alaris library profile pdfs (main campus): <https://www.vumc.org/departments-pharmacy/infusion-libraries>
- Alaris Guardrails file request form (main campus): <https://redcap.vanderbilt.edu/surveys/?s=WDHMAMYP RC>

VWCH:

- Alaris Guardrails file request form (VWCH): <https://redcap.vanderbilt.edu/surveys/?s=3RH37LP49K>

Medication Safety Data Tools:

(Access limited to nursing and other leaders)

- [BCMA Compliance](#)
- [ADS Overrides](#)