

Flow Sheet  
Updated May 2014  
CCTC

For information on CCTC  
Procedures, Nursing Standards,  
Protocols or Bedside  
Assessment tools, refer to CCTC  
Website

# Cardiorespiratory Sections (Panels 1 and 3)



# BP-HR-Temperature

## Key Points:

- Add cooling or warming blanket on/off under temperature
- Hourly temperature documentation is required for hypothermia or use of cooling/warming blankets

HEMODYNAMICS		BP	0700	0800	0900	1000	1100	1130
TEMP °C (T)								
Cooling / Warming								
SBP ∇	100	220						
	95	200						
	90	180						
	85	160						
	80	140						
DBP ^	150							
	130							
	110							
PULSE •	120	75						
	110							

# BP-HR-Temperature

## Key Points:

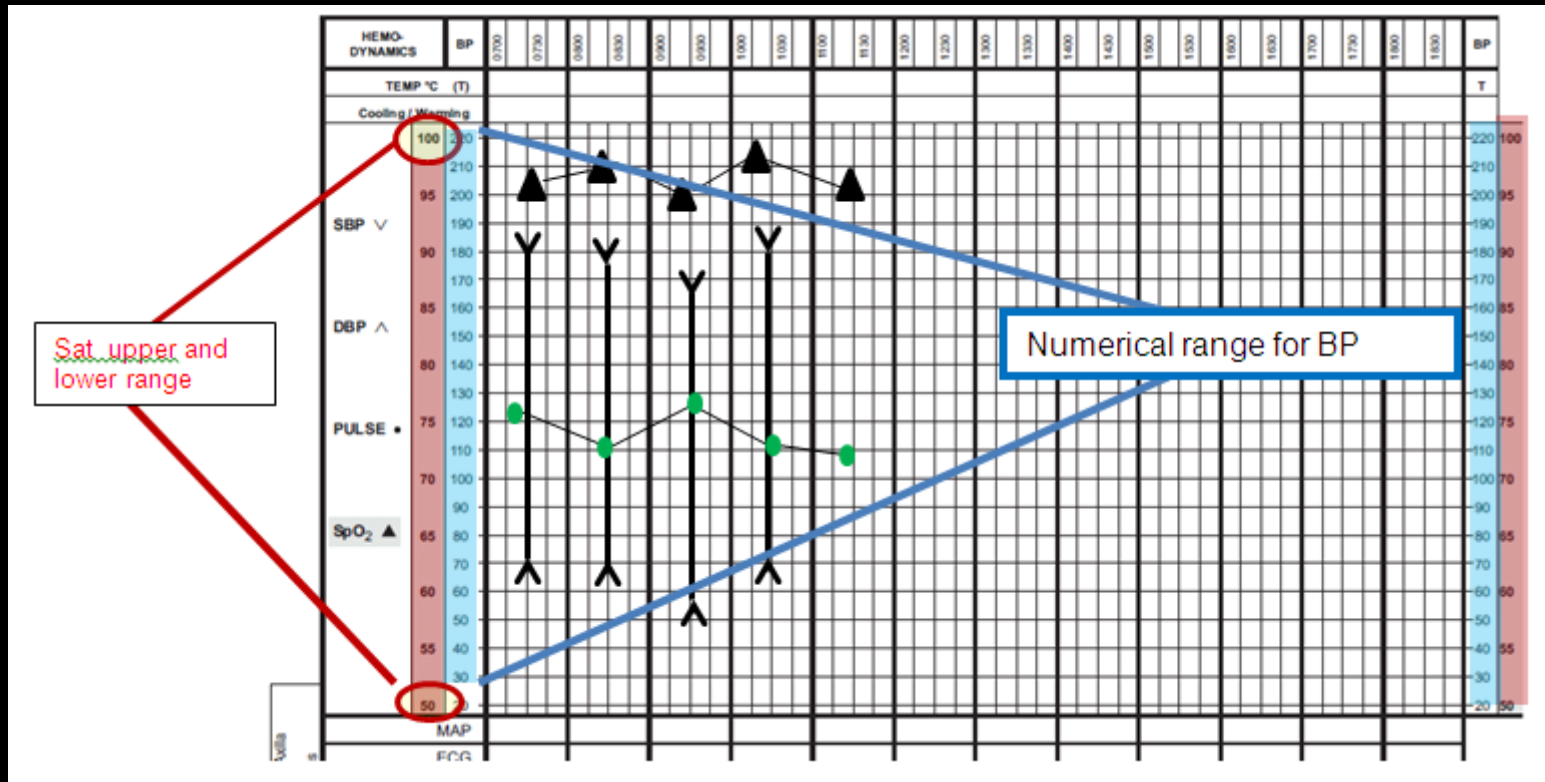
- Temperature is numeric
- Chart in blue/black
- WNL is now called WDL (Within Defined Limits)

## Standards:

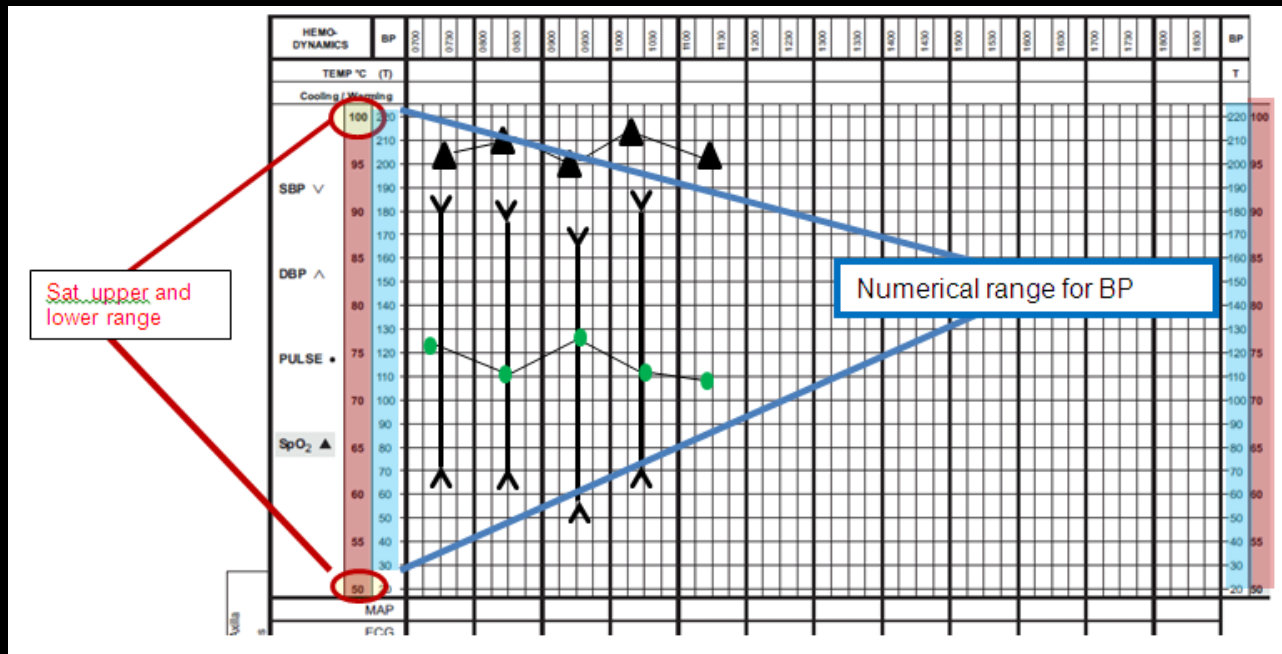
- Chart abnormal results more frequently to reflect change
- If not WDL, there must be a DAR note

HEMO-DYNAMICS		BP	0700	0730	0800	0830	0900
TEMP °C (T)							
Cooling / Warming							
SBP ∇	100	220					
		210					
	95	200					
		190					
	90	180					
DBP ▲	85	160					
		150					
	80	140					
		130					
	75	120					
PULSE •		110					
	70	100					
		90					
	65	80					
		70					
SpO <sub>2</sub> ▲	60	60					
		50					
	55	40					
		30					
	50	20					
MAP							

# How to Chart SpO<sub>2</sub>



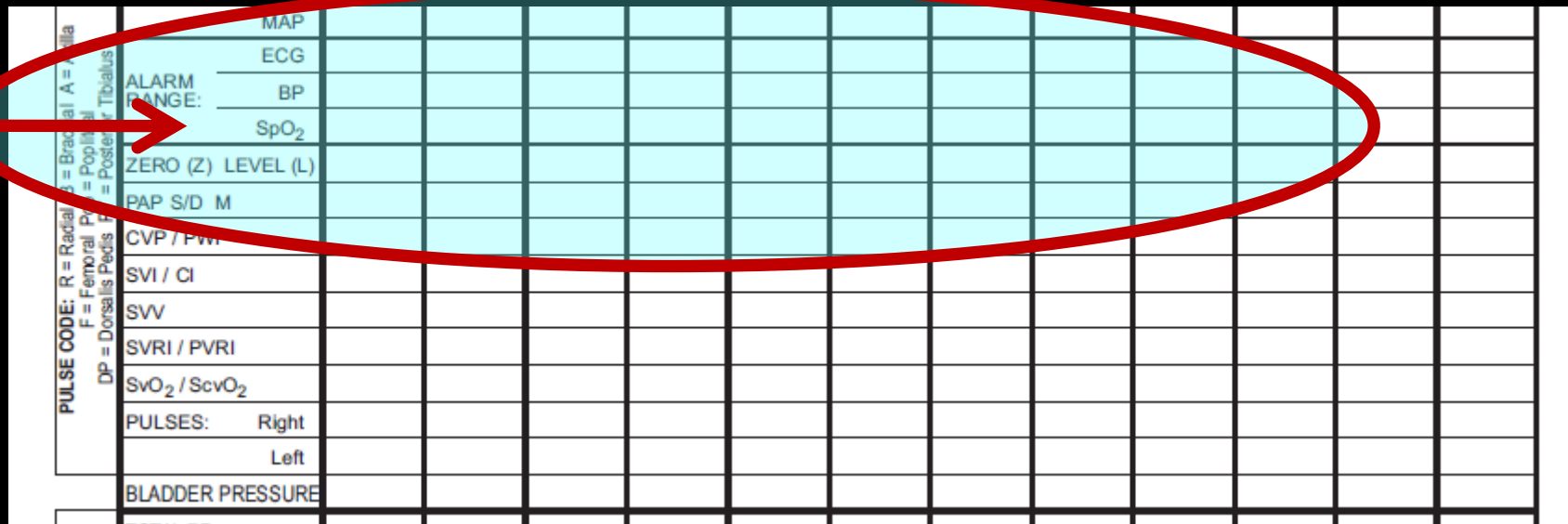
**Remember:** Brief episode of tachycardia or desaturation should be documented to display graphical variation



- The scale for SpO<sub>2</sub> is shaded
- Use a triangle to record SpO<sub>2</sub>
- The scale for BP is unshaded; use a chevron to identify upper and lower levels (mean in box below)
- Pulse is identified by round dot points
- Link pulse dots and SpO<sub>2</sub> triangles to create graphic
- Include brief episodes of abnormal HR and SpO<sub>2</sub> in graphic



# Cardiac Output/Hemodynamic Pressures

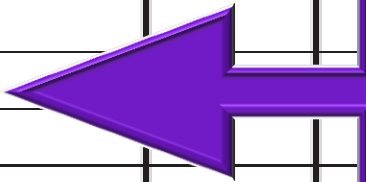


<p>PULSE CODE: R = Radial, B = Brachial, A = Axilla          F = Femoral, P = Popliteal          DP = Dorsalis Pedis, P = Posterior Tibialis</p>	MAP																					
	ECG																					
	ALARM RANGE:																					
	BP																					
	SpO <sub>2</sub>																					
	ZERO (Z) LEVEL (L)																					
	PAP S/D M																					
	CVP / PWA																					
	SVI / CI																					
	SVV																					
	SVRI / PVRI																					
	ScvO <sub>2</sub> / SvO <sub>2</sub>																					
	PULSES: Right																					
	Left																					
	BLADDER PRESSURE																					

SpO<sub>2</sub> alarm range is new

# Cardiac Output/Hemodynamic Pressures

<b>PULSE CODE:</b> R = Radial B = Brachial A = Axill F = Femoral Pop = Popliteal DP = Dorsalis Pedis PT = Posterior Tibialis	ALARM RANGE:	ECG		
		BP		
		SpO <sub>2</sub>		
	ZERO (Z) LEVEL (L)			
	PAP S/D M			
	CVP / PWP			
	SVI / CI			
	SVV			
	SVRI / PVRI			
	SvO <sub>2</sub> / ScvO <sub>2</sub>			
	PULSES:	Right		
		Left		
	BLADDER PRESSURE			



- CI (cardiac index): volume of blood pumped in one minute/BSA
- Normal 2.5-4.2 L/M<sup>2</sup>/beat
- Higher than normal may be required if hypermetabolic/septic
- If CI is inadequate, extraction will increase as first compensation
- If extraction is inadequate, lactic acidosis occurs
- CI with FloTrac is still accurate during A fib

# Cardiac Output/Hemodynamic Pressures

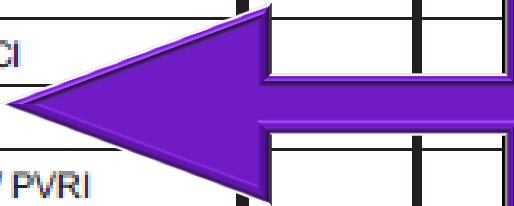
<b>PULSE CODE:</b> R = Radial B = Brachial A = Axilla F = Femoral Pop = Pop Iliac DP = Dorsalis Pedis PT = Posterior Tibialis		MAP		
		ECG		
	ALARM RANGE:	BP		
		SpO <sub>2</sub>		
	ZERO (Z) LEVEL (L)			
	PAP S/D M			
	CVP / PWP			
	SVI / CI			
	SVV			
	SVRI / PVRI			
	SvO <sub>2</sub> / ScvO <sub>2</sub>			
	PULSES: Right			
	Left			
	BLADDER PRESSURE			



- SVI (stroke volume index): volume of blood pumped with each systole/BSA
- Normal 35-45 mL/M<sup>2</sup>/beat
- Stroke volume index X heart rate = cardiac index
- SVI will fall earlier than CI (HR initially rises to maintain CI)

# Cardiac Output/Hemodynamic Pressures

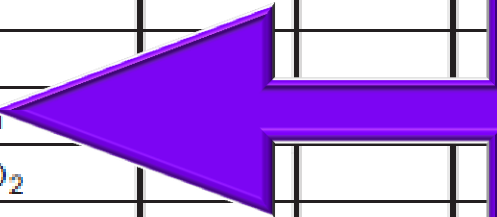
<b>PULSE CODE:</b> R = Radial B = Brachial A = Axilla F = Femoral Pop = Pop Iliac DP = Dorsalis Pedis PT = Posterior Tibialis		MAP		
		ECG		
	ALARM RANGE:	BP		
		SpO <sub>2</sub>		
	ZERO (Z) LEVEL (L)			
	PAP S/D M			
	CVP / PWP			
	SVI / CI			
	SVV			
	SVRI / PVRI			
	SvO <sub>2</sub> / ScvO <sub>2</sub>			
	PULSES: Right			
	Left			
	BLADDER PRESSURE			



- Stroke volume variation is the % of variation in the stroke volume between inspiration and expiration
- Normal SVV = 10-15%
- SVV < 13% may indicate that a patient is volume depleted
- You can pretest responsiveness to fluid by performing bilateral leg lift (cautiously) while monitoring for decrease in SVV and increase in SVI
- Afib and irregular heart rhythms add stroke volume variability to the respiratory variability

# Cardiac Output/Hemodynamic Pressures

<b>PULSE CODE:</b> R = Radial B = Brachial A = Axill F = Femoral Pop = Popliteal DP = Dorsalis Pedis PT = Posterior Tibialis	ECG			
	ALARM RANGE:	BP		
		SpO <sub>2</sub>		
	ZERO (Z) LEVEL (L)			
	PAP S/D M			
	CVP / PWP			
	SVI / CI			
	SVV			
	SVRI / PVRI			
	SvO <sub>2</sub> / ScvO <sub>2</sub>			
	PULSES:	Right		
		Left		
	BLADDER PRESSURE			



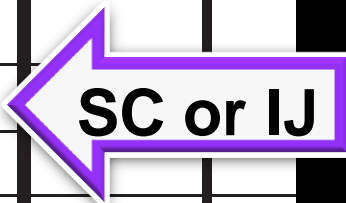
- Systemic Vascular Resistance Index (SVRI) is calculated as:  

$$(MAP - CVP) / CI \times 79.9$$
- You can calculate SVRI by entering the CVP into the derived values with FloTrac
- Pulmonary Vascular Resistance Index (PRVI) is calculate as:  

$$(PAP - PWP / CI) \times 79.9$$
- Both SVRI and PVRI are calculated in Critbase when SwanGanz values entered

# Cardiac Output/Hemodynamic Pressures

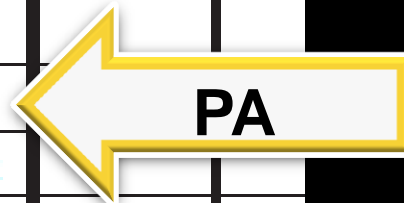
<b>PULSE CODE:</b> R = Radial B = Brachial A = Axilla F = Femoral Pop = Pop Iliac DP = Dorsalis Pedis PT = Posterior Tibialis		MAP		
		ECG		
	ALARM RANGE:	BP		
		SpO <sub>2</sub>		
	ZERO (Z) LEVEL (L)			
	PAP S/D M			
	CVP / PWP			
	SVI / CI			
	SWV			
	SVRI / PVRI			
	SvO <sub>2</sub> / ScvO <sub>2</sub>			
	PULSES:	Right		
		Left		
BLADDER PRESSURE				



- For venous gases, circle the correct option for ScvO<sub>2</sub> (right atrial sample) or SVO<sub>2</sub> (pulmonary artery sample)
- If femoral vein blood gas drawn for trending or venous confirmation, indicate sample location with “femoral”

# Cardiac Output/Hemodynamic Pressures

<b>PULSE CODE:</b> R = Radial B = Brachial A = Axilla F = Femoral Pop = Pop iliac DF = Dorsalis Pedis PT = Posterior Tibialis	MAP		
	ECG		
	ALARM RANGE:	BP	
		SpO <sub>2</sub>	
	ZERO (Z) LEVEL (L)		
	PAP S/D M		
	CVP / PWP		
	SVI / CI		
	SW		
	SVRI / PVRI		
	SvO <sub>2</sub> / ScvO <sub>2</sub>		
	PULSES:	Right	
		Left	
	BLADDER PRESSURE		



**PA**

- Just prior to removal of a PA catheter, measure the SvO<sub>2</sub> (from PA distal) and ScvO<sub>2</sub> (from PA proximal)
- After removal, this will enable you to interpret the significance of any change in the value obtained

# Cardiac Output/Hemodynamic Pressures

## Key Points:

- Pulse options have been added to facilitate charting

## Standards:

- Assess for anyone with potential for vascular compromise (e.g., central or arterial line in extremity, vascular Sx, trauma)

CODE: R = Radial B = Brachial A = Axilla  
F = Femoral Pop = Popliteal  
DP = Dorsalis Pedis PT = Posterior Tibialis

	MAP	
	ECG	
ALARM RANGE:	BP	
	SpO <sub>2</sub>	
ZERO (Z) LEVEL (L)		
PA? S/D M		
CVP / PWP		
SV / CI		
SW		
SVRI / PVRI		
ScvO <sub>2</sub> / ScvO <sub>2</sub>		
PULSES:	Right	
	Left	
BLADDER PRESSURE		



# Charting data derived from Flotrac™

		50	20
<b>PULSE CODE:</b> R = Radial B = Brachial A = Axilla F = Femoral Pop = Popliteal DP = Dorsalis Pedis PT = Posterior Tibialus	MAP	62	64
	ECG		
	ALARM RANGE:		
	BP		
	SpO <sub>2</sub>		
	ZERO (Z) LEVEL (L)		
	PAP S/D M		
	CVP/ PWP		18
	SVI / CI	3.1/40	38/3.0
	SVV	10	9
SVRI / PVRI		1706	
SvO <sub>2</sub> / ScvO <sub>2</sub>		64	
PULSES: Right			
Left			
BLADDER PRESSURE			

Chart indexed values

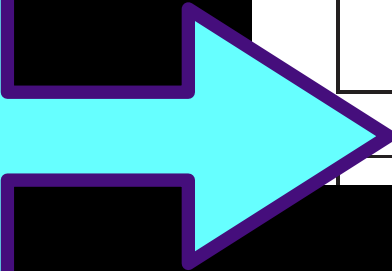
SVRI is obtained from Flotrac™ calculator by entering CVP. Note: the SVRI is not saved in the Flotrac™

Chart CI/SVI/SVV at time this ScvO<sub>2</sub> sample was drawn

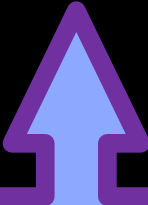
# Cardiac Output/Hemodynamic Pressures

## Key Points:

- A nurse can measure without an order if patient has a bladder catheter and there is concern regarding expanding abdomen



PULSES	DEF	SvO <sub>2</sub> / ScvO <sub>2</sub>	
		PULSES: Right	
		Left	
		BLADDER PRESSURE	



## Standards:

- Set on an individual patient basis





# Vasoactive Drugs

VASOACTIVE MEDS CHART DOSE/HOUR	Weight _____ kg							
	INITIALS							

8460-4922 (Rev. 2014/04/15)

Enter the weight that is being used to determine dose/kg/hr. This weight should be the same as entered in Power Chart. Update Power Chart as required to ensure both weights match. Power Chart weight will be used by providers for medication orders.

A 5<sup>th</sup> line has been added for infusions (other than comfort meds which are charted in the neurological section).

# Insulin/Vasoactive Drugs

VASOACTIVE MEDS CHART DOSE/HOUR	weight kg								
INITIALS									

8460-4922 (Rev. 2014/04/15)

- This section is ONLY for continuous medications that may impact hemodynamic or respiratory status (e.g., vasopressors, Flolan) or require titration
- Chart drugs that effect neuro status in neuro section.
- DO NOT chart volume/hr; **chart only the dose per hour or dose per kg per hour** (volume is documented on I/O)
- Medications still must be signed off on the MAR

# Place to Track Dextrose Bolus

GLUCOSE	10	2.8	
INSULIN u/hr or DEXTROSE	4	↓1 D 25 ml	

Insulin or dextrose administration can be added to the tracking line to enhance the evaluation of glycemic response. You either enter the dose in u/hr or record “D” to indicate 50% dextrose bolus was given. Continue to sign for drugs on MAR.

# Practice Reminder

Always consider/rule out hypoglycemia for any change in neurological status including seizure.

Any low blood glucose reading by lab or glucometer should always be treated STAT. A confirmation sample should be sent to the lab to verify that the glucose was truly low, however, the confirmation sample should not delay treatment. A single low blood glucose value ***should be presumed accurate*** and treatment instituted immediately ***while awaiting the lab result.***

Administration of a bolus of dextrose will not cause harm even if the low reading was erroneous or the patient was in DKA.

Delay in the treatment of a truly low glucose (e.g., while awaiting confirmation results) can lead to irreversible neurological injury.



Neurological Assessment  
Spinal Cord Testing  
Pain and Sedation  
(Panel 2)

# 24-hour Neuro + Spinal Cord Record

VITALS		TIME																								
TEMP °C	HR	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	01	02	03	04	05	06	
SEP V	120																									
DIP A	180																									
PULSE *	70																									

NEUROLOGICAL RECORD
ALERT: Awake
DROWSY: Oriented and sleepy
CONFUSED
STUPOROUS: To voice/eye/verbal
COMATOSE: To voice/eye/verbal
GLASSCOM SCALE
COMA SCALE
APR 1982
Code: <input type="checkbox"/> Right <input type="checkbox"/> Left
Code: <input type="checkbox"/> Flex <input type="checkbox"/> React
Code: <input type="checkbox"/> Flex <input type="checkbox"/> React
Code: <input type="checkbox"/> Left <input type="checkbox"/> Right
Code: <input type="checkbox"/> Flex <input type="checkbox"/> React
<b>MOTOR ASSESSMENT: Patients unable to obey commands</b>
Code: L=Locate F=Flex W=Withdraw E=Extend O=Open U=Upright D=Downright
Response to Central Pain: Arms Right / Left
Legs Right / Left
Trunk Right / Left
<b>SPINAL CORD ASSESSMENT: Patients able to obey commands</b>
Motor Function: 0-5
Shoulder: Flex (C4)
Abduct (C5)
Elbow: Flex (C5)
Straighten (C7)
Wrist: Straighten (C6)
Flex toward palm (C7)
Prone: Flex first digit (C8)
Spreads apart (T1)
Hip: Flex (L2, L3)
Knee: Straighten (L3, L4)
Plant: Dorsal flexion heel to nose (L4, L5)
Plantar flexion point toes down (S1, S2)
Sensory Function: Refer to dermatome chart for code and select the highest level of sensation to pin AND light touch for Hand L, upper and lower limbs
Upper limbs to pin
Upper limbs to light touch
Lower limbs to pin
Lower limbs to light touch
Rectal Exam
Comfort: Rate to pain, motor and delirium scale. Step Codes: Markly perturbation patient appears to be sleeping. Q=Dist Sleep RS=Restless Sleep A=Awake
Pain NRS (1-10)
Pain CPOT (0-10)
UNASSD
KODSIC / CANACU
Sleep
ICP Monitoring: ICP
Z = Zan
L = Level
W = Wave
H = Hypertensive
CSF drained
Clonus: uninduced
CSF
Comfort Medic:
Charcoal:
Infuse if sedate as needed and NPO
Give (mg/kg)
per hr
Time of Feed 0-24
INITIALS

VITALS		TIME																								
TEMP °C	HR	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	01	02	03	04	05	06	
SEP V	120																									
DIP A	180																									
PULSE *	70																									

MAP	ECG	ALARM	BP	RANGE:	SpO <sub>2</sub>	ZERO (Z) LEVEL (L)	PAP SID: M	CP / PWP	SV / CI	SVV	SVR / PVR	SpO <sub>2</sub> / SevO <sub>2</sub>	PULSES: Right	Left	BLADDER PRESSURE

TOTAL RR	VENT P PRESSURES	MINUTE VOLUME	AC / SBV	PS / PAW / BL LEVEL	PC / VC	PEEP	PIO <sub>2</sub>	MARK / NP	OSCILLATOR - Wiggle	SUCTION: ETT / TRACH	SUCTION: NT / OT	GLUCOSE	INSULIN RATE: units/h

NEGATIVE MEDS	CHART DURATION	INITIALS

# Neurological Assessment

1 NEUROLOGICAL RECORD																	
		TIME	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21
•	2																
•	3	<b>ALERT:</b> Awake															
•	4	<b>DROWSY:</b> Oriented and sleepy															
•	5	<b>CONFUSED</b>															
•	6	<b>STUPOROUS:</b> Eye opening to pain only															
•	7	<b>COMATOSE:</b> No eye opening to pain															
•	8	<b>GAZCOW COMA SCALE</b>															
		Eye Opening															
		Verbal															
		Motor															
		<b>Total</b>															
		<b>REFLEXES</b>															
		<b>RIGHT</b> SIZE															
		REACTION															
		<b>LEFT</b> SIZE															
		REACTION															

**PUPILS**  
 = Fixed  
 ≠ Sluggish  
 ✓ Brisk  
 U/A - Unable to Assess

# Neurological Assessment

1		NEUROLOGICAL RECORD					
2		TIME	07	08	09	10	11
3	ALERT: Awake						
4	DROWSY: Oriented and sleepy						
5	CONFUSED						
6	STUPOROUS: <i>Eye opening to pain only</i>						
6	COMATOSE: <i>No eye opening to pain</i>						
7	GLASCOW COMA SCALE	Eye Opening					
		Verbal					
		Motor					
		Total					
8	PUPILS	Code:					
		RIGHT	SIZE				
			REACTION				
		LEFT	SIZE				
		REACTION					

## Key Points:

- Pupil sizes added
- Pupil codes added
- Record size after pupil adjusts to ambient room light
- GCS change: record score for pupil, verbal and motor plus total
- Refer to bedside

# Neurological Assessment

1		NEUROLOGICAL RECORD				
2		TIME	07	08	09	10
3	ALERT: Awake					
4	DROWSY: Oriented and sleepy					
5	CONFUSED					
6	STUPOROUS: <small>Eye opening to pain only</small>					
7	COMATOSE: <small>No eye opening</small>					
8	GLASCOW COMA SCALE					
PUPIL SCALE (mm)						
P U P I L S	Code:	RIGHT				
	<ul style="list-style-type: none"> <li>= Fixed</li> <li>≠ Sluggish</li> <li>✓ Brisk</li> <li>U/A - Unable to Assess</li> </ul>	LEFT				

## Key Points:

- Pupil sizes added
- Pupil codes added

## Standard:

- Q shift for all patients without deficit
- Q1h patients admitted with neuro dx or unstable LOC
- Q2-4h altered but stable
- Increase frequency if deterioration

e after pupil  
 ambient  
 ge: record  
 upil, verbal  
 plus total  
 dside

# Motor Assessment: Patients Unable to Obey Commands

**MOTOR ASSESSMENT: Patients unable to obey commands**

Code: L = Localizes F = Flexes W = Withdraws E = Extends O = None U = Upgoing D = Downgoing \* Record response to central pain

Response to Central Pain	Arms R/L																		
	Legs R/L																		
Spontaneous Movement	Arms R/L																		
	Legs R/L																		
Upgoing/Downgoing Toe	R/L																		

Motor assessment for the patient UNABLE to obey commands has been divided into response to central pain AND spontaneous response.

This will help to describe those patients who do not respond to pain but do have spontaneous movement.

# Practice Reminder

MOTOR ASSESSMENT: Patients unable to obey commands																					
Code: L = Localizes F = Flexes W = Withdraws E = Extends O = None U = Upgoing D = Downgoing											* Record response to central pain										
Response to Central Pain	Arms R/L	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Legs R/L	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Spontaneous Movement	Arms R/L	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Legs R/L	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Upgoing/Downgoing Toe	R/L	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Always assess the patient for response to:

1. Normal voice first
2. Loud voice (if no response to normal voice)
3. Light touch (if no response to voice)
4. Pain (only if no response to voice or light touch)

Painful stimulation should always be central first.

# Practice Reminder

Central pain provides an opportunity to assess for symmetry of response and reduces likelihood that response may be due to spinal reflex.

More than one method can be used for assessment of central pain. Try more than one method if the patient does not respond to your first attempt.



# Practice Reminder

Clinical notes (DAR) that clearly describe the patient's response to specific neurological assessment tests provides more meaningful information than assessment tools such as the GCS.

Change from the previous assessment is the most important finding.

Neurological assessment should be performed together between incoming and outgoing nurses.

# Central Pain Testing

While sternal rub does not specifically test the central nerves, it does provide an opportunity to observe for symmetrical response to a noxious stimulus.

Central nerves can be assessed using the trapezius squeeze, supraorbital pressure or mandibular pressure. Overuse of any one method may lead to bruising or soft tissue injury.

Supraorbital pressure is not recommended if raised ICP is a concern and facial or orbital trauma may be a contraindication for supraorbital or mandibular pressure.

High spinal cord injury above T4 may limit the use of sternal rub or trapezius squeeze.



# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

Motor Function: 0-5/5

	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L
<b>Shoulder:</b> Snrugs (C4)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Abducts (C5)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
<b>Elbow:</b> Bends (C5)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Straightens (C7)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
<b>Wrist:</b> Straightens (C6)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Flex toward palm (C7)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
<b>Fingers:</b> Bends first digits (C8)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Spreads apart (T1)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
<b>Hips:</b> Flexes (L2, L3)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
<b>Knees:</b> Straightens (L3, L4)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
<b>Feet:</b> Dorsal flexion toes to nose (L4, L5)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Plantar flexion point toes down (S1, S2)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

- Assess motor in all patients at least once per shift
- Test all muscle groups in patients with potential brain or cord injury
- For low risk patients, choose 3 or 4 major muscle groups to test

# Motor Assessment: Patients able to Obey

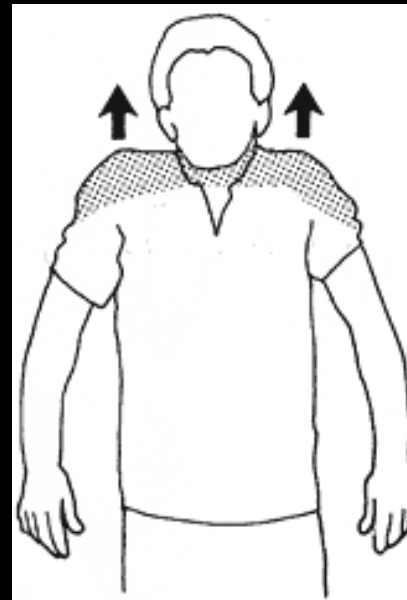
## SPINAL CORD ASSESSMENT: Patients able to obey commands

Motor Function: 0-5/5

Shoulder: Shrugs (C4)

Abducts (C5)

	R	L	R	L	R	L	R	L	R	L	R	L	R	L
	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	/	/	/	/	/	/	/	/	/	/	/	/	/	/



# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

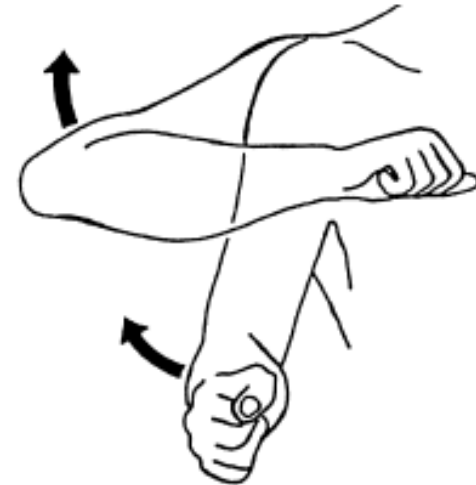
Motor Function: 0-5/5

Shoulder: Shrugs (C4)

Abducts (C5)

	R	L	R	L	R	L	R	L	R	L	R	L	R	L
	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	/	/	/	/	/	/	/	/	/	/	/	/	/	/

### SHOULDER ABDUCTION (C4, C5)



# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

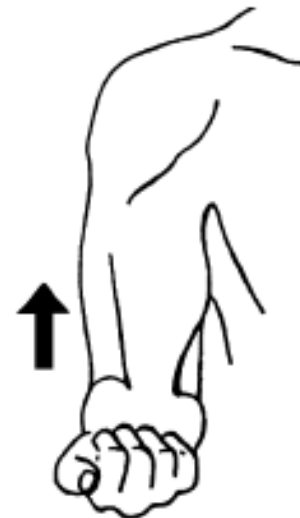
Motor Function: 0-5/5

R L R L R L R L R L R L R L R L R L R L R L R L R L R

Elbow: Bends (C5)

Straightens (C7)

### ELBOW FLEXION (C5)



# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

Motor Function: 0-5/5

R L R L R L R L R L R L R L R L R L R L R L R L R L R

Elbow: Bends (C5)

Straightens (C7)

### ELBOW EXTENSION (C7)





# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

Motor Function: 0-5/5

R L R L R L R L R L R L R L R L R L R L R L R L R L R L R

Wrist: Straightens (C6)

Flex toward palm (C7)

WRIST EXTENSION (C6, C7)

Straightens



# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

Motor Function: 0-5/5

R L R L R L R L R L R L R L R L R L R L R L R L R L R

Elbow: Bends (C5)

Straightens (C7)

### WRIST FLEXION (C7, C8)



# Motor Assessment: Patients able to Obey

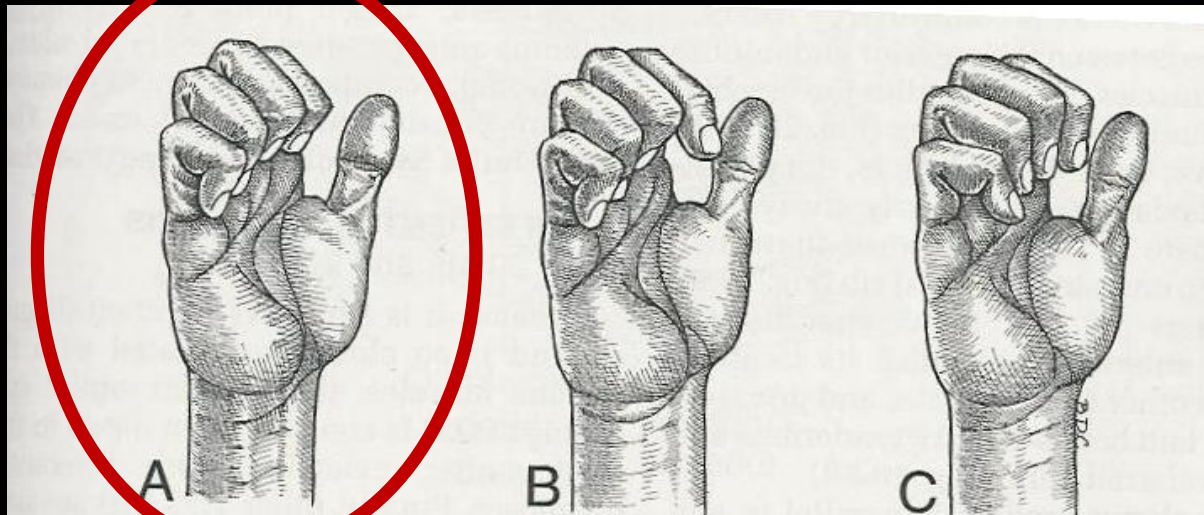
**SPINAL CORD ASSESSMENT: Patients able to obey commands**

Motor Function: 0-5/5

R L R L R L R L R L R L R L R L R L R L R L R L R L R

Fingers: Bends first digits (C8)

Spreads apart (T1)



# Motor Assessment: Patients able to Obey

**SPINAL CORD ASSESSMENT: Patients able to obey commands**

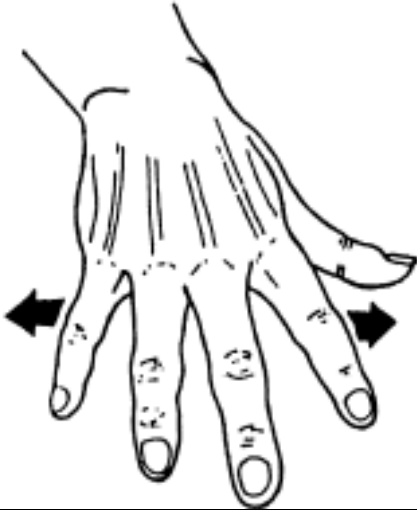
**Motor Function: 0-5/5**

R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Fingers: Bends first digits (C8)**

Spreads apart (T1)


**FINGER ABDUCTION (T1)**

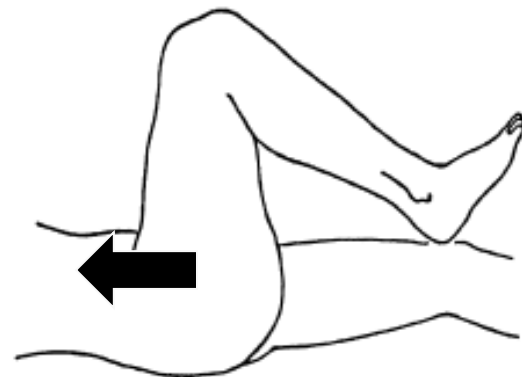


# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

Motor Function: 0-5/5	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	
Hips: Flexes (L2, L3)																													
Knees: Straightens (L3, L4)																													
Feet: Dorsal flexion toes to nose (L4, L5)																													
Plantar flexion point toes down (S1, S2)																													

HIP FLEXION (L2, L3)



# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

Motor Function: 0-5/5

R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Hips: Flexes (L2, L3)

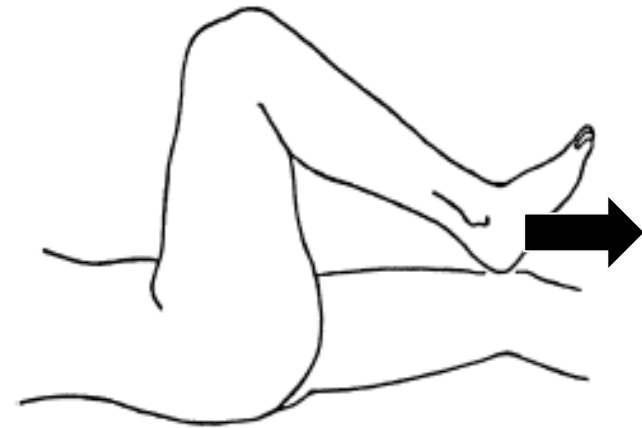
Knees: Straightens (L3, L4)

Feet: Dorsal flexion toes to nose (L4, L5)

Plantar flexion point toes down (S1, S2)

/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

KNEE EXTENSION (L3, L4)



# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

Motor Function: 0-5/5	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	
Hips: Flexes (L2, L3)																													
Knees: Straightens (L3, L4)																													
Feet: Dorsal flexion toes to nose (L4, L5)																													
Plantar flexion: point toes down (S1, S2)																													

DORSI FLEXION (L4, L5)

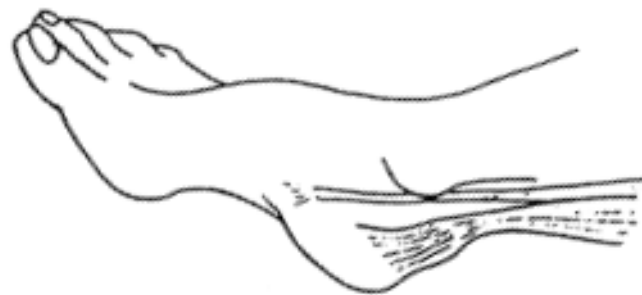


# Motor Assessment: Patients able to Obey

## SPINAL CORD ASSESSMENT: Patients able to obey commands

Motor Function: 0-5/5	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L
Hips: Flexes (L2, L3)																														
Knees: Straightens (L3, L4)																														
Feet: Dorsal flexion toes to nose (L4, L5)																														
Plantar flexion point toes down (S1, S2)																														

**PLANTAR FLEXION (S1, S2)**







# Motor Assessment:

## Using either “unable” or “able” to obey

• **Assessments:**  
 • Document in correct motor

**MOTOR ASSESSMENT: Patients unable to obey**

Code: L = Loss, F = Flexion, W = Withdrawal, E = Extension

Response to Central Pain:	Arms	Right / Left					
	Legs	Right / Left					
Babinski	Right	Left					

**SPINAL CORD ASSESSMENT:**

Motor Function: 0-5/5

<b>Shoulder:</b>	Shrugs (C4)	_____
	Abducts (C5)	_____
<b>Elbow:</b>	Bends (C5)	_____
	Straightens (C7)	_____
<b>Wrist:</b>	Straightens (C6)	_____
	Flex toward palm (C7)	_____
<b>Fingers:</b>	Bends first digits (C8)	_____
	Spreads apart (T1)	_____
<b>Hips:</b>	Flexes (L2, L3)	_____
<b>Knees:</b>	Straightens (L3, L4)	_____
<b>Feet:</b>	Dorsal flexion toes to nose (L4, L5)	_____
	Plantar flexion point toes down (S1, S2)	_____

### Minimum Motor Assessment:

- Q1-2h and prn following trauma, uncleared CTL spines, thoracic aneurysm, postop spinal surgery or following any neurological deterioration X 24 hrs
- For above, Q2-4H after initial 24 hours if no deterioration
- With each neurological assessment
- Minimum Q shift for all patients until awake and findings normal (symmetrical and 4-5/5) for at least 4 days
- Increase monitoring for any neurological change

# Sensory Testing

**Sensory Function:** Refer to dermatome chart for code and select the best (lowest) level of sensation to pin AND light touch for R and L upper and lower limbs.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Upper limbs to pin																															
Upper limbs to light touch																															
Lower limbs to pin																															
Lower limbs to light touch																															
Rectal Exam																															

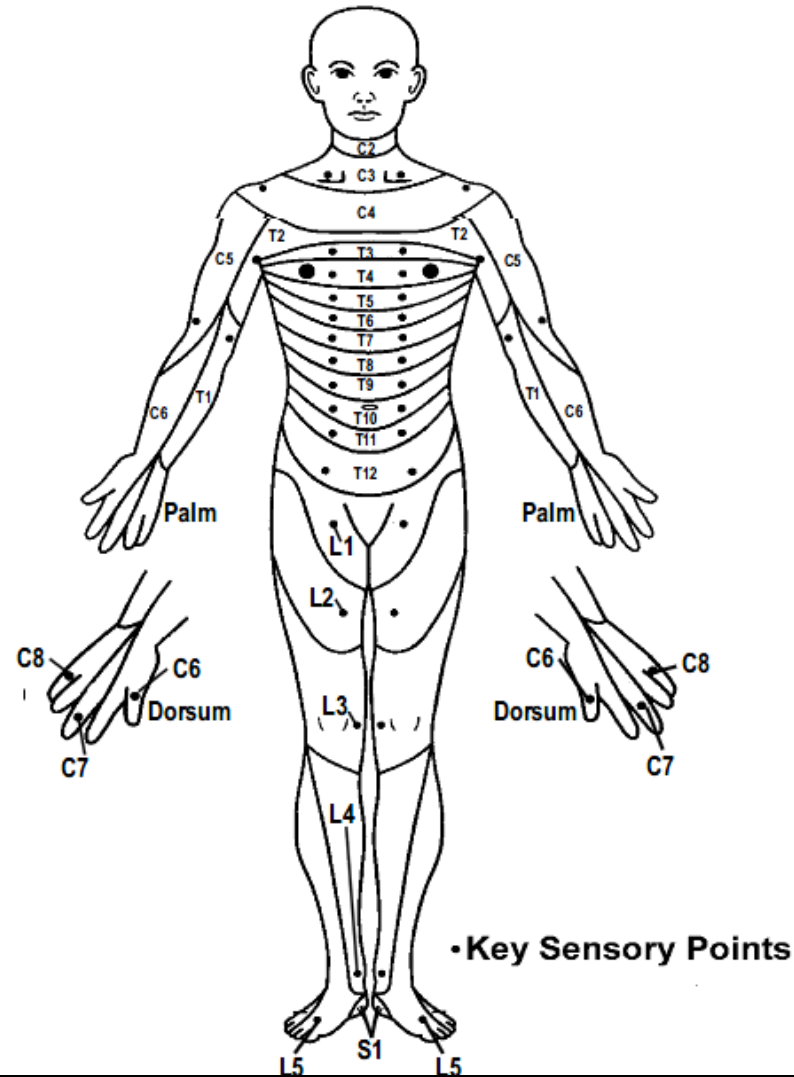
Refer to Bedside Assessment Sheets for dermatome diagram

# Sensory Testing

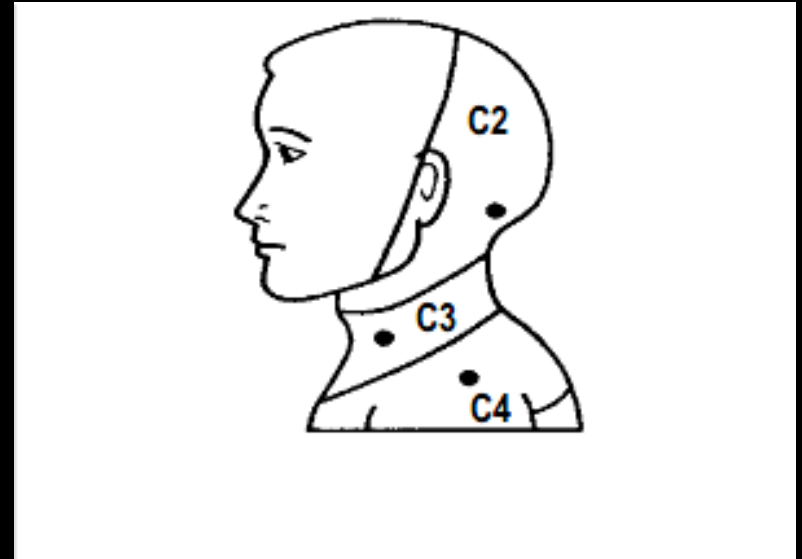
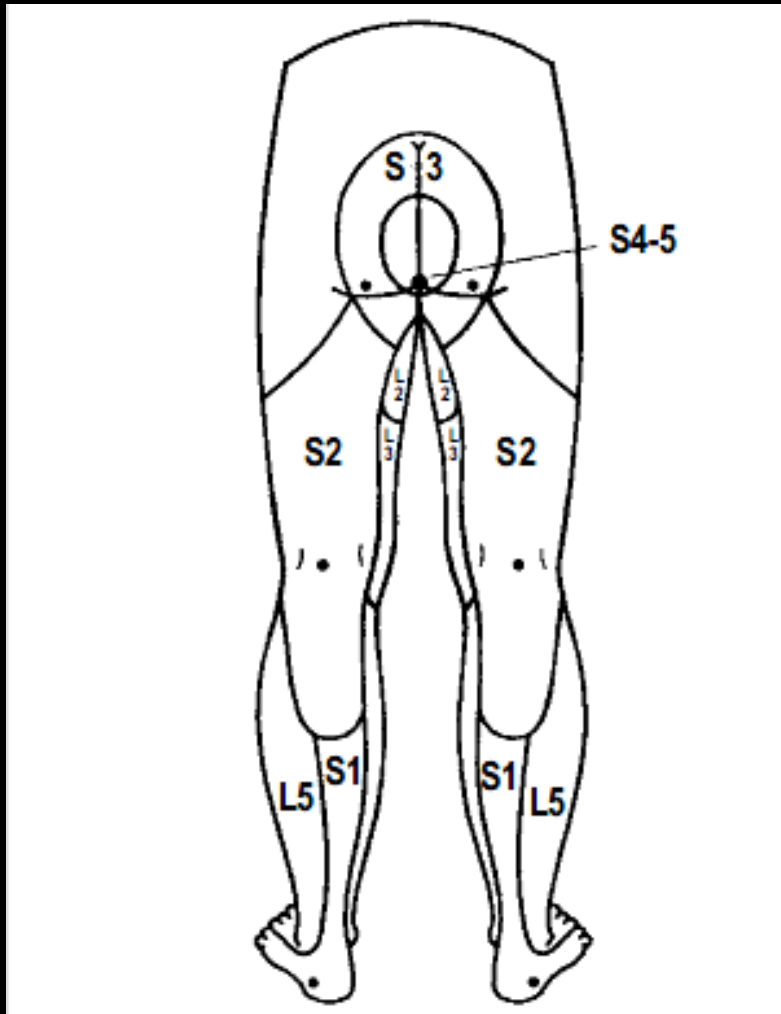
Sensory Function: Refer to dermatome	R	L	R	L	R
	Upper limbs to pin	C4	C5		
Upper limbs to light touch	C4	C4			
Lower limbs to pin	ϕ	ϕ			
Lower limbs to light touch	ϕ	ϕ			
Rectal Exam	No tone, sens or motor				

# Sensory Levels

To test sensory function: apply pin prick to each dermatome in anatomical descending order.



# Sensory Levels



# Sensory Assessment: Patients able to Obey

**Sensory Function:** Refer to dermatome chart for code

Upper limbs to pin			
Upper limbs to light touch			
Lower limbs to pin			
Lower limbs to light touch			
Rectal Exam			

# Sensory Assessment: Patients able to Obey

## Key Points:

- Patient must be able to obey/nod
- Refer to scoring tools at bedside

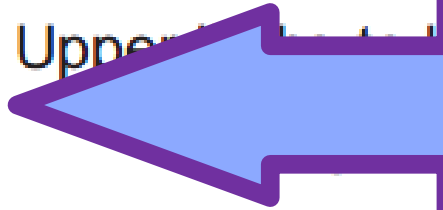
**Sensory Function:** Refer to

Upper limb

Upper limb

Lower limbs to l

Re





# Sensory Assessment: Patients able to obey

Requirements:

- Patient must be able

## Sensory Function

### Minimum Sensory Assessment:

- Q1-2h and prn following trauma, uncleared CTL spines, thoracic aneurysm, postop spinal surgery or following any neurological deterioration X 24 hrs
- For above, Q2-4H after initial 24 hours if no deterioration
- If patient is not awake/able to obey and meets above criteria, document q shift recent for lack of assessment

# Neuro Section: Comfort Section

**Comfort:** Refer to pain, sedation and delirium scales.    **Sleep Codes:** Identify periods when patient appears to be sleeping

NSR (0-10) or CPOT (0-8)														
VAMAAS														
SWAP Pass/Fail														
EPS/NMS (+* or -)														
SLEEP														

**Note:** Delirium is charted once per shift in neuro section of AI record

**Delirium assessment requires:**

- Pain assessment
- Sedation assessment
- Delirium screening

# Steps to Pain, Sedation and Delirium Screening

## First Step: Assess pain

- Self-report first
- CPOT if unable to self-report
- Q shift, Q4H and prn
- Reassess with procedures and following analgesia
- Rx pain or assess ability to reduce narcotic unless contraindicated

## Second Step: Assess sedation

- Q shift, Q4H and prn
- VAMAAS if ventilated, MAAS is unventilated
- Rx anxiety or assess ability to reduce sedatives unless contraindicated

## Third Step: Screen for delirium

- Screen all patients during second half of shift
- Record time of assessment and document in neuro section of AI record
- If MAAS < 2, document “unable to screen” and document reason
- If MAAS  $\geq$  2, complete ICDSC

# Pain Assessment

- ❑ Determine pre-admission medication for pain, sedation, anxiety or mental health issues
- ❑ Assess pain and comfort level
  - Self-report of pain is the priority for assessment
  - Use CPOT to screen for pain if patient unable to self-report



# Self-Report (Subjective Pain):

## □ NRS (Numeric Rating Scale) :

- Verbal report (rate pain on a scale of 0-10/10)
- Visual analogue scale
- Refer to Bedside Assessment tools for prompts to pain assessment (PQRST)

# Use CPOT for Patients Unable to Self-Report:

- CPOT (Critical Care Pain Observation Tool)

## Critical Care Pain Observation Tool

Response	Strength	Score
Facial Expressions	Relaxed	0
	Tense	1
	Grimacing	2
Body Movements	None	0
	Protection	1
	Restlessness	2
Muscle Tension	Relaxed	0
	Tense/Rigid	1
	Very Tense	2
Ventilator Compliance <b>OR</b> Vocalization	Tolerating ventilator or talking in normal tone	0
	Coughing against ventilator or Sighing/Moaning	1
	Fighting the ventilator or crying or Sobbing	2
<b>TOTAL</b>		<b>/8</b>



# Neuro Section: Comfort Section

**Comfort:** Refer to pain, sedation and delirium scales. **Sleep Codes:** Identify periods when patient appears to be sleeping

NSR (0-10) or CPOT (0-8)																			
VAMAAS																			
SWAP Pass/Fail																			
EPS/NMS (+* or -)																			
SLEEP																			

Pain scores are on a single line. Circle the tool that you are using and enter the number.

# Neuro Section: Comfort Section

**Comfort:** Refer to pain, sedation and delirium scales. **Sleep Codes:** Identify periods when patient appears to be sleeping

NSR (0-10) or CPOT (0-8)																				
VAMAAS																				
SWAP Pass/Fail																				
EPS/NMS (+* or -)																				
SLEEP																				

All tools including VAMAAS are on bedside laminated cards and on the CCTC website (What's New or Standards links)

# Neuro Section: Sedation

**Comfort:** Refer to pain, sedation and delirium scales. **Sleep Codes:** Identify periods when patient appears to be sleeping

NSR (0-10) or CPOT (0-8)																				
VAMAAS																				
SWAP Pass/Fail																				
EPS/NMS (+* or -)																				
SLEEP																				

- Screen all patients at start of shift
  - VAMAAS if ventilated.
  - MAAS if unventilated
- Q4h and prn with each neuro assessment unless sleeping
- Reassess following administration of sedatives
- Document on MAR to support reason for prn sedative

# Neuro Section: Pain and Sedation

- If you give a prn, you are required to \* and DAR rationale and response
- It is acceptable to write a summary note to describe, pain, sedation and delirium assessment/interventions q4-12h
- Document Pain or VAMAAS score pre/post medication

**Comfort:** Refer to pain, sedation and delirium scales. **Sleep Codes:** Identify periods when

Pain NRS (1-10)																				
Pain CPOT (1-8)																				
VAMAAS																				
Sleep																				

## STANDARD:

- Chart q shift, q4h (while awake) and PRN
- Chart MAAS if unventilated
- Chart VAMAAS on MAR at time prn dose given

# Sedation Weaning Assessment Protocol (SWAP)

**Comfort:** Refer to pain, sedation and delirium scales. **Sleep Codes:** Identify periods when patient appears to be sleeping

NSR (0-10) or CPOT (0-8)																			
VAMAAS																			
SWAP Pass/Fail																			
EPS/NMS (+* or -)																			
SLEEP																			

The analgesia and sedation orders require each patient to be **SCREENED** at least once per shift for his/her readiness for automatic sedation weaning trials. The screening tool is called the SWAP (Sedation Weaning Assessment Protocol).

The results of the SWAP are entered as Pass/Fail

## Daily Sedation Weaning Assessment Protocol (SWAP)

- ✓ **CONTRAINDICATED** in patients requiring deep sedation (e.g., 0-1A)
- ✓ RN/RRT to collaborate at the start of each shift to review SWAP/SBT goals
- ✓ Document assessment and weaning plan in 24 hour assessment record
- ✓ Record response to sedation weaning in AI record under "comfort/sedation" parameter

Is the patient's reason for ventilation resolved or partially resolved?

Is the  $\text{PaO}_2/\text{FiO}_2 > 200$  on  $\text{FiO}_2 \leq .5$  and  $\text{PEEP} \leq 10 \text{ cm H}_2\text{O}$ ?

Is the patient hemodynamically stable?  
(may be on stable doses of vasoactive drugs)

Is the patient's VAMASS score  $\leq 3A$ ?

Is the patient on continuous analgesic or sedative infusions?

If **YES** to all of these questions:

- ➡ Wean sedation and narcotic as per weaning orders
- ➡ Document response to weaning in AI record

If **No** to any of these questions:

- ➡ Review sedation goals during morning rounds
- ➡ Document reason why sedation weaning is contraindicated
- ➡ Use the lowest dose of sedation required to achieve pain and MAAS targets

# Sedation Weaning Assessment Protocol (SWAP)

**Comfort:** Refer to pain, sedation and delirium scales. **Sleep Codes:** Identify periods when patient appears to be sleeping

NSR (0-10) or CPOT (0-8)																			
VAMAAS																			
SWAP Pass/Fail																			
EPS/NMS (+* or -)																			
SLEEP																			

If a patient passes the screen, weaning attempts (as per the analgesia and sedation orders) are initiated automatically by the RN. Sedation weaning attempts should be coordinated with the RRT SBT.

If a patient fails the screen, analgesia and sedation plans should be discussed during morning rounds. Weaning trials or medication reductions may still be ordered.

# Practice Reminder

Every patient is expected to have at least one DAR note each shift that outlines their response to comfort medications, any weaning attempts/response to weaning and or reasons why weaning is contraindicated.



# Neuro Section: Sleep

**Comfort:** Refer to pain, sedation and delirium scales. **Sleep Codes:** Identify periods when patient appears to be sleeping

NSR (0-10) or CPOT (0-8)																			
VAMAAS																			
SWAP Pass/Fail																			
EPS/NMS (+* or -)																			
SLEEP																			

- Use code to identify periods of quiet sleep or wakefulness
- Arrow over to highlight periods of sleep and wakefulness
- Sleep disruption and/or day-night confusion is often the first marker of delirium

# Neuro Section: Pain and Sedation

## Comfort Meds:

Chart infusions of  
sedatives/narcotics/ NMBs  
as mg or mcg/hour.  
Chart propofol as mg/kg/hr.

INITIALS

## Key Points:

- Sedatives, narcotics and NMB infusions documented here
- Chart dose per hour only (volume on fluid balance)

# Fluid Balance (Panel 4)

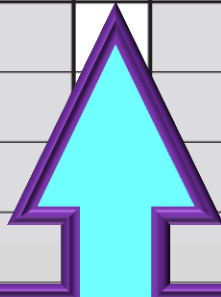


# Fluid Balance

**FLUID BALANCE** KEY: T = Tubing Change (IV and Enteral) = protein bolus given G = glutamine bolus given O = other\* dietary supplement

Previous 24 Hour Balance: \_\_\_\_\_ Cumulative Balance: \_\_\_\_\_

INTAKE							OUTPUT													
Main-tenance	IV Meds				P.O.	Tube Feeds	Meds & Flush P/G/O	HOUR	URINE											
								0600												
								0700												
								0700												
								0800												
								0800												
								0900												
								0900												
								1000												



## STANDARD:

- Change tubing q96h
- q12h for propofol
- q24h for TPN or lipids
- after 2 units or q4h for blood tubing
- Remove peripheral IVs q 96 hrs

# Fluid Balance

FLUID BALANCE															KEY: T = Tubing Change (IV and Enteral) P = protein bolus given G = glutamine bolus given O = other* dietary supplement											
Previous 24 Hour Balance: _____										Cumulative Balance: _____																
INTAKE										OUTPUT																
Maintenance				IV Meds			P.O.	Tube Feeds	Meds & Flush P/G/O	HO	UR															
										0600																
										0700																
										0700																
										0800																
										0800																
										0900																

We can no longer enter enteral feeding supplements onto the MAR in the electronic world.

## Revision:

Record enteral feeding flushes in the medication/flush column as P (protein), G (glutamine) or O (other dietary supplement). If other is chosen, describe the supplement being used.

# Fluid Balance

FLUID BALANCE														
KEY: T = Tubing Change (IV and Enteral) P = protein bolus given G = glutamine bolus given O = other* dietary supplement														
Previous 24 Hour Balance: _____ Cumulative Balance: _____														
INTAKE										OUTPUT				
Main-tenance	IV Meds						P.O.	Tube Feeds	Meds & Flush P/G/O	HOURS	URINE			
										0600				
										0700				
										0700				
										0800				
										0800				
										0900				
										0900				
										1000				
										1000				
										1100				
										1100				
										1200				
										1200				
										1300				
										1300				





# Fluid Balance

FLUID BALANCE																	
KEY: T = Tubing Change (IV and Enteral) P = protein bolus given G = glutamine bolus given O = other* dietary supplement																	
Previous 24 Hour Balance: _____												Cumulative Balance: _____					
INTAKE												OUTPUT					
Main-tenance	IV Meds						P.O.	Tube Feeds	Meds & Flush P/G/O	HOUR	URINE						
										0600							
										0700							
										0700							
										0800							
										0800							
										0900							
										0900							
										1000							
										1000							
										1100							
										1100							
										1200							
										1200							
										1300							
										1300							

# Fluid Balance

										1100										
										1200										
										1300										
										1400										
										1500										
										1600										
										1700										
										1800										
										TOTAL										

▷ 0600-1800 Intake: \_\_\_\_\_ INTAKE

Output: \_\_\_\_\_ Net 12 Hour Balance: \_\_\_\_\_ OUTPUT

# Fluid Balance

## Key Points:

- 0600-0600 hrs
- “T” to indicate enteral or IV tubing change
- Reminder to add total dialysis output at end of shift
- Carry cumulative total forward from previous shift

24 Hour Balance: \_\_\_\_\_ Cumulative Balance: \_\_\_\_\_

Meds & Flush	HOUR	URINE	OUTPUT											
	0600													
	0700													
	0800													
	0900													
	1000													
	1100													
	1200													
	1300													
	1400													
	1500													
	1600													
	1700													
	1800													
	TOTAL													

▷ 0600-1800 Intake: \_\_\_\_\_ Output: \_\_\_\_\_ Net 12 Hour Balance: \_\_\_\_\_

INTAKE OUTPUT

# Nursing Care Interventions (Panel 5)

# Nursing Care Documentation

## STANDARD:

- HOB  $\geq 30$  degrees documented q1h
- \* and DAR if other than 30 degrees
- Reposition at least q2h
- Be sure to document activity

NURSING INTERVENTIONS (✓ = Care completed WDL; Initial when)											
TIME	07	08	09	10	11	12	13	14	15	16	17
POSITIONING	Activity Code: C = Chair CC = Cardiac Chair										
Degree HOB elevation (< 30 requires *DAR)											
Rev Trendelenburg											
Supine / Right / Left											
Right sided wedge (OB)											
Activity (Use Code)											

\*If you cannot meet the standard (e.g., HOB to 30 degrees), \* and DAR rationale  
Refer to bedside tools for contraindications

# Nursing Care Documentation

<b>PULMONARY BEDS</b>	<b>Code: L = Left</b>	<b>R = Right</b>	<b>B = Both</b>	<b>P = Percussion Mode</b>	<b>V = Vibration Mode</b>														
Rotation																			
Percent Rotation																			
Pause Time																			
Percussion/Vibration																			
Duration in Minutes																			
Maximum Setting																			

- Documentation in the AI record must include reason for starting, continued use of, and discontinuation of CLRT q 4 h

## Continuous Lateral Rotational Therapy

- Only indicated for patients with impaired gas exchange due to pneumonia or atelectasis
- Obesity and prevention of skin breakdown are not indications for use

# Nursing Care Documentation

## Rotation:

- Indicate left, right or both for turn, percent of rotation, and pause time
- Percuss/Vibrate:
- Indicate duration and max setting

PULMONARY BEDS	Code: L = Left	R = Right	B = Both	P = Percussion Mode	V = Vibration Mode													
Rotation																		
Percent Rotation																		
Pause Time																		
Percussion / Vibration																		
Duration in Minutes																		
Maximum Setting																		

- Chart on flow sheet q1h
- Reassess use for q4h and chart in AI
- Monitor for tolerance in vital signs and n/v

# Nursing Care Documentation

<b>HYGIENE</b>	<b>Bath Code: C = Complete P = Partial Nurse to sign for Chlorhexidine on Medication Administration Record (MAR).</b>															
Skin Inspection																
Bath																
Shower																
Hair Wash																
Pericare																
Linen Change																
Facial Shave																
Collar Care																



## **Documentation:**

- Chlorhexidine baths q shift; place on MAR
- Spot for linen change added; should be prn



# Nursing Care Documentation

ORAL CARE	Nurse to sign for Chlorhexidine on Medication Administration Record (MAR).															
Oral Inspection																
Toothette																
Teeth Brushed																
Lubricant																

## Documentation:

- Oral inspection q shift
- Toothette q2-4h and prn
- Teeth brushed q shift
- If patient has no teeth, document at start of shift on teeth brushing line

# Nursing Care Documentation

EYE CARE	Code: D = Drops    O = Ointments													
Lubricant														

## Documentation:

- Obtain lubricant order and apply q4h and prn for unconscious patient or those with impaired eye closure including neuromuscular blocking agent

# Nursing Care Documentation

<b>BOWEL ROUTINE</b>	<b>Stool Code: - = Small + = Large S = Soft D= Diarrhea H = Hard</b>										<b>Impaction Code: H = Hard S = Soft N = None</b>				
Stool Record															
Impaction ✓															
Fecal Incontinence System Flush															
Fecal Incontinence System Irrigation															

- Flushing is the rinsing of the drainage tube. It should be done q 8 h
- Irrigation can only be done with specific products that have an irrigation port
- Irrigation is the administration of a saline infusion/ bolus into the rectum
  - Can either be retained by inflating the luminal cuff, or allowed to run in and out
  - Should be done q 8 h for fecal diversion strategies (patients who do not have diarrhea as their indication for use)

# Nursing Care Documentation

RESPIRATORY	Identify	L = Left	or	R = Right	and drainage tube number	AT = Adhesive Tape	AF = Anchor Fast	TT = Trach Ties												
Trach/ETT Securement change																				
Trach Dressing																				
Chest Tube Dressing																				
Chest Drainage Unit Change																				
DB&C/Breath Stacking																				
SpO <sub>2</sub> Monitor Site Change																				
Preoxygenated / Hyperoxygenated																				
INITIALS																				

- Trach ties/ETT securement are responsibility of the RRT; RN is encouraged to notify when a change is needed
- Trach dressing is changed daily and prn
- Chest tube dressings are changed q 2 days and prn
- Document preoxygenation (100% oxygen) and hyperventilation (extra breaths) pre suctioning as indicated
- Findings not WDL are documented in AI record, which is most dressings unless wound is dry and healed
- Chest Drainage Unit Change done q7days and when filled and/or tipped over

# Nursing Care Documentation

RESPIRATORY	Identify L = Left or R = Right and drainage tube number AT = Adhesive Tape AF = Anchor Fast TT = Trach Ties															
Trach/ETT Securement change																
Trach Dressing																
Chest Tube Dressing																
Chest Drainage Unit Change																
BB&C/Breath Stacking																
SpO <sub>2</sub> Monitor Site Change																
Hyperoxygenated / Hypo-oxygenated																
INITIALS																

- SpO<sub>2</sub> monitor site change performed q 2 hours
- Change the placement to a different digit, and indicate any abnormal findings in the AI record

# Nursing Care Documentation

RESPIRATORY	Identify L = Left or R = Right and drainage tube number AT = Adhesive Tape AF = Anchor Fast TT = Trach Ties														
Trach/ETT Securement change															
Trach Dressing															
Chest Tube Dressing															
Chest Drainage Unit Change															
DB&C/Breath Stacking															
SpO <sub>2</sub> Monitor Site Change															
Preoxygenated / Hyperoxygenated															
INITIALS															

## STANDARD:

- Ties/Tapes prn
- Trach drsg qshift
- Chest Tube drsg q2days
- CT Unit q7days and prn
- SpO<sub>2</sub> site change q2h

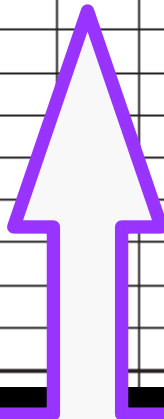
Line Tracking  
Nursing Care Interventions  
(Panel 6)





# Line Tracking

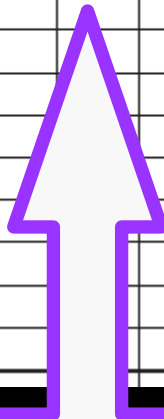
MONITORING OF INVASIVE LINE SITE(S)											
KEY: ✓ Indicates = (1) Solution infusing at prescribed rate OR Venous access lock patent (2) Waveforms WDL (3) Dressing dry and intact OR if site visualized: absence of redness, swelling or tenderness * = Significant findings (documentation on A/I Flowsheet required)											
A = Redness B = Positional C = Pain D = Occluded E = Interstitial F = Dislodged I = Initiated Δ = Dressing change D/C = IV / NJS lock discontinued											
DATE LINE INSERTED	CCTC/ ED/OR/ IR/Other	Insertion Bundle		LIST ALL CENTAL AND PERIPHERAL VENOUS AND ARTERIAL LINES	TIME						
		Docu- mented	Unknown/ unmet								



- Enter the date AND location of all lines upon insertion or admission
- Speak with the team who put the line in to find out if it was placed during an emergency
- Unless there is documentation that the line was placed according to central line insertion standards, choose “unknown/unmet” for insertion bundle.

# Line Tracking

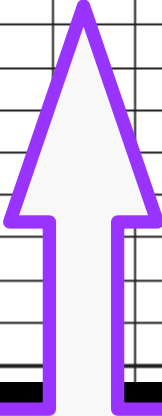
<b>MONITORING OF INVASIVE LINE SITE(S)</b>																					
KEY: ✓ Indicates = (1) Solution infusing at prescribed rate OR Venous access lock patent (2) Waveforms WDL (3) Dressing dry and intact OR if site visualized: absence of redness, swelling or tenderness * = Significant findings (documentation on A/I Flowsheet required) A = Redness B = Positional C = Pain D = Occluded E = Interstitial F = Dislodged I = Initiated Δ = Dressing change D/C = IV / NJS lock discontinued																					
DATE LINE INSERTED	CCTC/ ED/OR/ IR/Other	Insertion Bundle		LIST ALL CENTAL AND PERIPHERAL VENOUS AND ARTERIAL LINES	TIME																
		Docu- mented	Unknown/ unmet																		



- Unless there is documentation that the line was placed according to central line insertion standards, choose “unknown/unmet” for insertion bundle

# Line Tracking

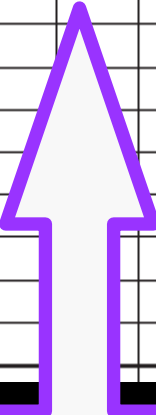
MONITORING OF INVASIVE LINE SITE(S)																							
KEY: ✓ Indicates = (1) Solution infusing at prescribed rate OR Venous access lock patent (2) Waveforms WDL (3) Dressing dry and intact OR if site visualized: absence of redness, swelling or tenderness * = Significant findings (documentation on AI Flowsheet required) A = Redness B = Positional C = Pain D = Occluded E = Interstitial F = Dislodged I = Initiated Δ = Dressing change D/C = IV / NJS lock discontinued																							
DATE LINE INSERTED	CCTC/ ED/OR/ IR/Other	Insertion Bundle		LIST ALL CENTAL AND PERIPHERAL VENOUS AND ARTERIAL LINES	TIME																		
		Docu- mented	Unknown/ unmet																				



- If the line insertion bundle was not met or is unknown, the medical team must be notified
- Document your report and the line plan in the AI record
- If the line is not changed on your shift, report information to oncoming shift

# Line Tracking

MONITORING OF INVASIVE LINE SITE(S)																									
KEY: ✓ Indicates = (1) Solution infusing at prescribed rate OR Venous access lock patent (2) Waveforms WDL (3) Dressing dry and intact OR if site visualized: absence of redness, swelling or tenderness * = Significant findings (documentation on A/I Flowsheet required) A = Redness B = Positional C = Pain D = Occluded E = Interstitial F = Dislodged I = Initiated Δ = Dressing change D/C = IV / NJS lock discontinued																									
DATE LINE INSERTED	CCTC/ ED/OR/ IR/Other	Insertion Bundle		LIST ALL CENTAL AND PERIPHERAL VENOUS AND ARTERIAL LINES	TIME																				
		Docu- mented	Unknown/ unmet																						



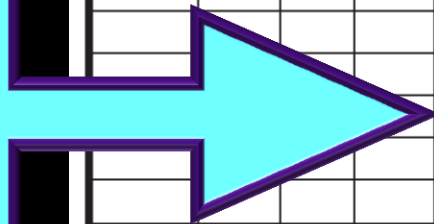
- Remember to document when dressings are changed and if there are issues with any line (e.g., positional, blocked, dressing adherence)
- All line issues require a DAR note and should be reported during rounds
- The issue, discussion and plan must be documented in the DAR

# Nursing Care Documentation

## STANDARD:

- Central line and arterial line dressings are changed q 2 days and prn (tape/gauze), or q 7 days and prn (transparent)
- Use KEY to indicate findings and changes
- \* and DAR if not WDL
- Be sure to document leaks, positional and blocked lines
- D/c peripheral IVs q96h

MONITORING OF INVASIVE LINE SITE(S)				
KEY: ✓ Indicates = (1) Solution infusing at prescribed rate OR Venous access lock patent (2) Waveforms V (3) Dressing dry and intact OR if site visualized: absence of redness, swelling or tenderness A = Redness B = Positional C = Pain D = Occluded E = Interstitial F = Dislodged I = I				
DATE LINE INSERTED	CCTC/ ED/OR/ IR/Other	Insertion Bundle		LIST ALL CENTAL AND PERIPHERAL VENOUS AND ARTERIAL LINES
		Docu- mented	Unknown/ unmet	



# Nursing Care Documentation

NURSING INTERVENTIONS (initial when completed/assessed; *significant findings and document on A/I Flowsheet)																									
TIME	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	01	02	03	04	05	06	
<b>RESTRAINTS</b> Code: += On -= Off																									
R Wrist Restraint																									
✓ CSM																									
L Wrist Restraint																									
✓ CSM																									
R Ankle Restraint																									
✓ CSM																									
L Ankle Restraint																									
✓ CSM																									
Magnetic Restraint																									

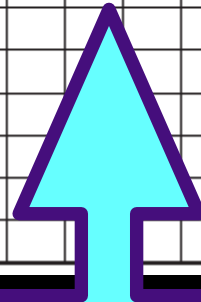
Document consent on AI record; this is both a hospital policy and Ontario law.

\* DAR the following:

- the behaviour that necessitated the use of the restraint
- the date and time of initial application
- the type of restraint used
- the discussion with the Family/Substitute Decision-Maker
- the verbal consent or refusal
- observations regarding the effect of the restraint on patient's behaviour
- \*refusal requires completion of the consent for refusal

# Nursing Care Documentation

NURSING INTERVENTIONS (initial when completed/assessed; *significant findings and document on A/I Flowsheet)																									
TIME	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	01	02	03	04	05	06	
RESTRAINTS Code: + = On - = Off																									
R Wrist Restraint																									
✓ CSM																									
L Wrist Restraint																									
✓ CSM																									
R Ankle Restraint																									
✓ CSM																									
L Ankle Restraint																									
✓ CSM																									
Magnetic Restraint																									



## STANDARD:

- Assess CSM q15X4, then q1h
- Remove/reapply and chart q2h
- ROM q12h
- Reassess need q shift and document in A/I reason for ongoing use; document consent on AI

# Nursing Care Documentation

VTE PROPHYLAXIS		Code: + = On - = Off																					
TEDS																							
*Skin <input checked="" type="checkbox"/> Legs																							
IPC																							



## STANDARD:

- TEDS/IPC off for ~20-30 minutes for bathing and skin assessment q12h and prn

IPC stands for:  
Intermittent Pneumatic  
Compression (AKA SCD)



# Nursing Care Documentation

MUSCULOSKELETAL		Code: + = On - = Off																		
Splints	Upper Extremities																			
	Lower Extremities																			
ROM	Leg																			
	Arm																			

## STANDARD:

- Splints on/off q2h, assess CSM
- ROM q12h

# Nursing Care Documentation

## STANDARD:

- Change regular foley q7days to a silastic then leave until removed
- Change drainage bag with any catheter changes

CATHETER CHANGE Code: R = Regular Foley S = Silicone T = Thermistor

Catheter Change

Drainage Bag Change

## Changes only needed if:

- regular to silastic
- UTI (review with team)
- break in the system
- requirement of different type of catheter (ie: 3way)

# Obstetrical Section

<b>OBSTETRICAL CARE</b> (refer to postpartum checklist for WDL definitions) * if not WDL (requires DAR note)																
Lochia (✓ if WDL, or * and DAR)																
Fundal Height (✓ if WDL, or * and DAR)																
Perineum (✓ if WDL, or * and DAR)																
Abdominal Incision																
Pre Eclampsia/Eclampsia Assess (headache, vision, epigastric, pain, patellar reflex) ✓ assessed * DAR abnormal																

- Download a copy of the post partum admission and Q shift checklist for assessment tips and reminders.

# Obstetrical Section

OBSTETRICAL CARE (refer to postpartum checklist for WDL definitions) * if not WDL (requires DAR note)															
Lochia (✓ if WDL, or * and DAR)															
Fundal Height (✓ if WDL, or * and DAR)															
Perineum (✓ if WDL, or * and DAR)															
Abdominal Incision															
Pre Eclampsia/Eclampsia Assess (headache, vision, epigastric, pain, patellar reflex) ✓ assessed * DAR abnormal															

All patients with preeclampsia or eclampsia (or who are receiving  $MgSO_4$  treatment) must be assessed q 1 h for presence of headache, vision changes, epigastric pain and patellar reflexes.

Headache, visual changes, epigastric pain and/or hyperreflexia are signs of worsening preeclampsia.

# Obstetrical Section

## Definition Review:

**Preeclampsia:** new onset of hypertension and either proteinuria or end-organ dysfunction after 20 weeks of gestation in a previously normotensive woman

**Eclampsia:** Preeclampsia PLUS generalized seizure that is not due to another neurological cause

The treatment for preeclampsia is birth.

# MgSO<sub>4</sub> Use

MgSO<sub>4</sub> is indicated to prevent progression of preeclampsia to eclampsia (defined by onset of seizures). It is the drug of choice for the treatment of seizures due to eclampsia (this is the one indication where benzodiazepines are not the first line anticonvulsants).

MgSO<sub>4</sub> is not used for the management of hypertension alone. Drugs such as labetalol or hydralazine are used.

# MgSO<sub>4</sub> Toxicity

Reflex testing is also important if a patient is receiving MgSO<sub>4</sub> as decreased reflexes (hyporeflexia) may indicate MgSO<sub>4</sub> toxicity. Toxicity risk increases in renal failure.

MgSO<sub>4</sub> can also cause respiratory depression/arrest or hypotension and cardiac arrest. Sudden hemodynamic instability or cardiac arrest during MgSO<sub>4</sub> therapy is treated with calcium chloride.

# Postpartum Eclampsia

Preeclampsia or eclampsia is usually a complication of pregnancy, but symptoms of preeclampsia/eclampsia can develop or worsen > 2 days and up to 6 weeks postpartum. Preeclampsia/eclampsia should be considered in the differential diagnoses of any pregnant or post partum patient with hypertension and headache, visual changes, epigastric pain, proteinuria, organ dysfunction or seizures.

The first line treatment for the seizures due to eclampsia is  $\text{MgSO}_4$  even if seizure onset is postpartum.



# Nursing Care Documentation

OTHER DRESSINGS/CARE	* = Significant findings (Documentation on AI Flowsheet Required)																							
INITIALS																								

- List other dressings that do not have a dedicated spot
- \* and DAR significant findings