

Clinical Care Classification (CCC) Utilization at Vanderbilt University Medical Center

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Assessment

- Assessment of all care categories is done on admission.
- At the beginning of each shift, an assessment is required for Pain, Neuro, Cardiac, Respiratory, Skin, Activity/Musculoskeletal, and Falls/Safety care categories --PLUS – any other care categories as warranted by patient condition or risk factors.
- All care categories are mapped to CCC categories but in order to get user acceptance for the model, we did rename some CCC categories (eg. “tissue perfusion” is called “vascular perfusion”) and combined CCC categories (eg. “fluid” and “nutrition”).
- Categories are generally arranged with physiological categories first in head to toe hierarchy followed by functional, health behavioral, and psychological categories.
- For our Acute Care hospitals, all psychological categories are grouped together under a single “psychosocial” category. In our Psychiatric facility, the psychological categories are displayed separately.

The screenshot shows the 'Flowsheets' interface in Epic. At the top, there are navigation options: 'File', 'Add Rows', and 'LDAAvatar'. Below this, there are tabs for 'VCH Vitals I/O', 'Assessment', and 'All Doc'. A search bar is present with the text 'Search (Alt+Comma)'. The main area displays a list of care categories, each with a checkbox and a dropdown arrow. The categories listed are: PAIN, Pain Assessment, FLACC (Face, Legs, ...), VITALS, PARS, NEURO, CARDIAC, VASCULAR/PERFUSION, RESPIRATORY, VENTILATOR, RESPIRATORY SUPPORT, GASTROINTESTINAL, RENAL/URINARY, REPRODUCTIVE, SKIN, ACTIVITY/MUSCULOSKELET..., FLUIDS/NUTRITION, FALLS/SAFETY ALL, BROSET, FALL RISK SCALE, FALL OCCURENCE, MEDICATION, SELF-CARE (ADLS), INFECTION /METABOLIC, PSYCHOSOCIAL, GOALS, PLAN OF CARE, NOTIFICATION, CARE CONTACT, TRANSPORT, and HANDOFF. On the right side, there are additional labels for various categories like 'Pain', 'Pain S', 'Pain T', 'Motor', 'FLAC', 'Pain F', 'Pain F', 'Pain F', 'Pain F', 'Score', 'Pain F', 'Pain F', 'Pain F', 'Score', 'Vital', 'Temp', 'Temp', 'Pulse', 'Pulse', 'Heart', 'Heart', 'Resp', 'BP', 'MAP', 'BP Lc', and 'BP M'. At the bottom, there is a copyright notice: '© 2019 Epic Systems Corporation. Used with permission.'

Assessment

- The required documentation button can be clicked to highlight those assessments that are required and not yet completed within the required time frame (1st 4 hours of each shift).
- For each category, the assessment may be “within normal limits” (WNL), “within expected limits” (WEL), “outside expected limits (OEL), or “Problem”. The definitions for each are shown as “flowsheet row information” [see next slide].
- If WEL, abnormal findings are documented once and are not documented again unless there is a change. Reassessment is not required.
- If OEL, abnormal findings are documented once and are not documented again that shift unless there is a change. Reassessment may be indicated based on patient condition and risk factors.
- Flowsheet row information provides on screen guidance.
- See information on Problems in later slide.

The screenshot displays the Epic EHR interface for a patient's assessment flowsheet. The top navigation bar includes options like 'Req Doc' (highlighted with a red box), 'Graph', 'Go to Date', 'Responsible', 'Refresh', and 'Legend'. Below the navigation, there are tabs for 'Doc', 'Intervention', 'PEWS', 'Protocols', and 'Lines/Drains/Airways'. The main content area is divided into several sections:

- Notification:** Includes 'Shift Event', 'Communication/Event Note', and 'Nursing Care Team Instructions'.
- Pain Assessment:** Includes 'Pain Assessment', 'Pain Score', 'Pain Type', 'Multiple Pain Sites', and 'Motor block (Bromage)'. The 'Pain Score' is currently 0.
- FLACC (Face, Legs, Activity, Crying, Consolability):** A table with columns for 'Pain Rating: FLACC (Rest) - Face', 'Pain Rating: FLACC (Rest) - Legs', 'Pain Rating: FLACC (Rest) - Activity', 'Pain Rating: FLACC (Rest) - Cry', 'Pain Rating: FLACC (Rest) - Consolability', and 'Score: FLACC (Rest)'. All ratings are 0.
- Post Anesthesia Recovery (PAR) Score:** Includes 'Post Anesthesia Recovery Scoring?'.
- Re-Assessment:** Includes 'Neurological ReAssessment', 'Cardiac ReAssessment', 'Respiratory ReAssessment', 'Vascular/Perfusion ReAssessment', and 'GI Reassessment'.

At the top right, a table shows patient data for two dates: 11/5/19 and 11/6/19. The table has columns for '1931', '2000', and '1100'. The '1100' value is highlighted in green.

Admission (Current) from	in	at Vanderbilt with
1931	11/5/19	11/6/19
	2000	2320
		1100

Neuro Assessment

Select Single Option: (F5)

WNL
WEL
OEL
Problem

Comment (F6)

Row Information

WNL = No significant problems impacting plan of care
 --Alert & Calm
 --Oriented x 4 (or age appropriate)
 --Developmentally appropriate speech
 --No gross motor deficits
 --Follows simple commands appropriately for developmental age
 --No complaints of sleep deprivation

--WNL = Within normal limits. Meets standard criteria for developmental age (see above)

--WEL = Within expected limits. Does not meet all the standard criteria for development age, but is 'normal' or a new 'normal' for the patient. Normal is defined as the highest level of functioning expected for that particular patient. It does not require targeted re-assessments or measures beyond the standard of care. (Normal HR=50/min)

--OEL = Outside expected limits - Does not meet criteria for WNL, WEL or Problem (see definition). Include in next focused re-assessment.
 Some notation of what parameter is OEL in a key data field (eg RASS = 1, HR= 105) or associated comment (pt c/o dizziness).

--Problems - (aka Nursing diagnoses)- A

Neuro All

Neuro Assessment	WEL		
Neuro Problem	aspiration risk;seizure...		
Neurological ReAssessment			
Mental Status/RASS Score	0		
Disoriented to:			
Pupil Size Assessment			
Pupil size (both eyes)			
Pupil Size (right eye)			
Pupil Size (left eye)			
Pupil Reaction Assessment			
Pupil reaction (both eyes)			
Pupil reaction (right eye)			
Pupil reaction (left eye)			
Reflexes			
Seizure Activity	no		
Neuro Deficits - Other			
Neuro Monitoring			
Spinal Dermatome Sensations Assessment			
Neuro Interventions	aspiration precautions...		
Train of Four?			

CAM

CAM Assessment			
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Glasgow Coma Scale

Peds GCS Eye Opening	4		
Peds GCS Verbal Response	5		
Peds GCS Motor Response	6		
Glasgow Coma Scale Score	15		

VUMC Sedation Scale

Sedation Score			
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Goals

- Initially, all shift goals were free text but over time, we have been able to identify common goals and provide user with drop down lists of options from which to select. They may also create an individualized goal by selecting the “other” goal option and entering an annotation. (see neuro goal example).
- One goal may be associated with more than one care category (eg. Mobility goal may apply to both respiratory and skin problems).
- This patient has two priority problems and two goals for the shift.

24h Based On: 0700 | Reset | Now

11/06/19 1100

Neurological Goal

Other Neuro goal (annotate)

Select Multiple Options: (F5)

- AAOx4: person,place,time, & situation
- AAOx3: person, place, & time
- AAO x2: person & place
- exhibit Decreased Agitation/Restlessness
- exhibit Decreased Wandering Episodes
- Patient will be compliant with ordered medications
- Patient will exhibit reality-based thinking
- Patient will engage in simple conversation r/t present x
- will have 2-3 hrs of Uninterrupted Rest
- No s/s of Altered Intracranial Pressure
- will exhibit No s/s of Delirium/CAM
- will return to Baseline Mental Status
- will exhibit Decreased Seizure Activity
- will experience No Seizure Activity
- will maintain Neurological Stability
- Other Neuro goal (annotate)
- No s/s aspiration after feedings

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Respiratory Goal

will Clear Secretions Independently

Interventions

- Interventions are documented on the flowsheet from a drop down list for each care category. Note that each drop down list includes an “other” option that allows for annotation of a custom intervention if needed.
- Education interventions are documented using the Education Activity.

Respiratory Interventions ↑ ↓

suction - airway ↕

Select Multiple Options: (F5)

- breathing exercises
- chest physiotherapy
- CPPD
- continuous lateral rotation
- DB cough
- incentive spirometry
- nasal trumpet
- prone
- percussion/vibration
- suction - airway**
- suction - nasal
- suction - OP
- suction - NP
- suction - NT
- refused respiratory monitor
- other (annotate)

Mom & Dad bulb suctioningoral airway q 2-3 hrs.

Value Information ⤴

suction - airway 📄 Mom & Dad bulb suctioningoral airway q 2-3 hrs.

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VUMC General Patient Education [History](#)

Other Education [History](#)

Activity/positioning ⤴ [History](#)

Instruct learner(s) on ordered activity, activity restrictions, use of assistive devices, need for frequent re-positioning, and proper body position, as appropriate, to prevent injury or damage.

✔ **See Comment** Acceptance, Explanation/Demonstration, Needs Reinforcement/Teach-back (verbalized understanding) /Show-back (demonstrated understanding) [redacted], RN at [redacted] 1750
📄 Foster mom and dad

✔ **Mother** Active participation, Explanation/Demonstration/Handout, Teach-back (verbalized understanding) /Show-back (demonstrated understanding) [redacted], RN at [redacted] 1139 ✕

✔ **Father** Active participation, Explanation/Demonstration/Handout, Teach-back (verbalized understanding) /Show-back (demonstrated understanding) [redacted], RN at [redacted] 1139 ✕

Evaluation

Plan of Care				
Response to Care/Recommendations				Both parents demonstra
Discharge Plan of Care Reviewed				
Discharge Readiness				
Rooming In				
Car Seat Tolerance Testing				
Discharge Problems Needing Follow-up				
Phone Number for Discharge Call				

Value Information ^

Both parents demonstrated good positioning and feeding techniques during and following feedings today. No s/s aspiration from feedings. Continues to have copious, clear secretions and had difficulty clearing oral secretions w/o occasional bulb suctioning by parents. Upper and lower airway breath sounds much improved over last 24 hrs.

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The plan of care is evaluated within 4 hrs. of the end of each shift by entering a free text Response to Care/Recommendations note. Status of goal attainment for each priority problem and any other significant findings and any recommendations for changes to the plan are included in this note.

Multidisciplinary Plan of Care

The interdisciplinary plan of care is reflected in the *Patient Story Report* which shows contributions from all disciplines involved in the patient's care. (continued on next 2 slides)

Summary

Overview Pt Sum StarTracker Event Log Intake/Output **Pt Story**

Vanderbilt Patient Story Report

Care Contacts
No data to display

Emergency Contact(s)

Name	Relation	Home
[Redacted]	[Redacted]	[Redacted]
Mobile: [Redacted]	[Redacted]	[Redacted]
Work: [Redacted]	[Redacted]	[Redacted]
Mobile [Redacted]	[Redacted]	[Redacted]
Mobile: [Redacted]	[Redacted]	[Redacted]

Getting to Know Me [Comment](#)

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Multidisciplinary Plan of Care

- Status of Education Plan and additional plan of care elements from other disciplines round out the Patient Story Report.
- We are currently considering how best to add high level intervention information to this report to better reflect to full Plan of Care in a single place.

Recent Education [View Details](#)

Active Education Titles		Last Documented In
Homeward bound Classes	2 of 3 complete	at Vanderbilt (/2019 - Present)
VUMC General Patient Education	10 of 25 complete	at Vanderbilt (/2019 - Present)
Trach/Vent Education	17 of 17 complete	at Vanderbilt (/2019 - Present)

Nutrition Dx/Problems

	/2019	/2019	/2019
Intake Problems:	1400	1600	1200
	Inadequate protein-energy intake;Decreased nutrient needs	—	—
Nutrition Intake Dx/Problem	New	Active	Active
Progression			
Assessment:			

Nutrition Interventions & Goals

	/2019	/2019	/2019	/2019
Interventions:	0700	1100	1400	1200
	—	—	Type of enteral nutrition	—
Intake Goals:	—	—	to meet 75-100% of estimated needs via G Tube	tolerate EN at goal
Registered Dietitian	—	—	see RD note on	See RD Note on
Recommendations:				
Nutrition Services Care Team	referred to RD for	—	—	—

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