

## Neurologic Assessment of Critically Ill Children

### Demographics

What is your current position?

- ICU attending
- ICU nurse
- Other (please specify)

What is the name of your hospital/institution?

Please indicate which unit you will answer the remainder of the survey questions about.

- PICU
- CICU
- Combined PICU/CICU

How many beds are there in the unit selected in the prior question.

## Neurologic Assessment of Critically Ill Children

### Assessment of Neurologic Function

Are routine neurologic assessments or "neuro checks" performed on patients in your ICU?

- Yes
- No

Who determines the frequency of these neurologic assessments? (Select all that apply)

- MD discretion
- RN discretion
- Institution Protocol

Do these neurologic assessments require a physician order?

- Yes
- No

Is there a minimum frequency of routine neurologic assessments for patients in your ICU?

- No
- Yes. Please enter frequency in hours below. (i.e. if they are preformed q 4 hours, enter the number 4)

For general ICU patients, (i.e. those without acute brain injury or those not at high risk for brain injury) how frequently are neurologic assessments performed?

- Not routinely performed
- Routinely preformed with the following frequency (i.e. if they are preformed q 4 hours, enter the number 4)

For patients with acute brain injury (e.g. TBI, stroke, status epilepticus, cardiac arrest), how frequently are neurologic assessments performed?

- Not routinely performed
- Routinely preformed with the following frequency (i.e. if they are preformed q 4 hours, enter the number 4)

For patients at high risk for brain injury, but without acute brain injury (e.g. shock, ECMO, liver failure, etc.) how frequently are neurologic assessments performed?

- Not routinely performed
- Routinely preformed with the following frequency (i.e. if they are preformed q 4 hours, enter the number 4, must be a whole number)

## Neurologic Assessment of Critically Ill Children

### Components of Neurologic Assessment

Who performs routine neurologic assessments in your ICU? (check all that apply)

- Nurses
- Front line care providers (i.e. residents, NP's, PA's)
- ICU Fellows
- ICU Attendings
- Other (please specify)

Are the components of a routine neurologic assessment standardized in your ICU?

- Yes
- No

A routine neurologic assessment or neuro check in your ICU includes? (Check all that apply)

- |  |   |
|--|---|
| <input type="checkbox"/> Glasgow Coma Scale (GCS)                      | <input type="checkbox"/> Corneal Reflex       |
| <input type="checkbox"/> Alert Voice Pain Unresponsive (AVPU)          | <input type="checkbox"/> Cough                |
| <input type="checkbox"/> Full Outline of UnResponsiveness (FOUR) Score | <input type="checkbox"/> Gag Reflex           |
| <input type="checkbox"/> Pupillary Reflex                              | <input type="checkbox"/> 4 Extremity Strength |
| <input type="checkbox"/> Other (please specify)                        |   |

If you care for neonates, do you use a specific neonatal neurologic assessment scale?

- No
- Yes (please specify which scale is used)

## Neurologic Assessment of Critically Ill Children

### GCS Questions

Is a specific pediatric Glasgow Coma Scale (GCS) used in your ICU?

- Yes
- No

If yes, what is the cut-off age for use of the pediatric scale?

- ≤ 1 year old
- ≤ 2 years old
- ≤ 3 years old
- ≤ 4 years old
- ≤ 5 years old
- Other (please specify)

For intubated patients in your ICU, how is the GCS Verbal Response recorded:

- Best verbal response
- 1T
- Non-testable
- No response
- Unsure
- Variable depending on provider

Please paste your pediatric GCS scale below (Optional)

Please rate the following statement: GCS is a valuable tool for serial assessment of neurologic function in an ICU setting.

- 1, Strongly Agree  2, Agree  3, Neutral  4, Disagree  5, Strongly Disagree

## Neurologic Assessment of Critically Ill Children

### Documentation of Neurological Assessment

If a patient's neurologic status on routine assessment has declined from the prior assessment, is this change communicated to the medical team?

- Yes  
 No  
 Depends on the finding and severity or degree of the neurologic decline

What triggers communication regarding a change in neurologic status? (select all that apply)

- RN discretion  
 By ICU protocol  
 Individualized per patient  
 Physician order  
 Other (please specify)

How are changes in neurologic status documented? (select all that apply)

- Neurologic assessment section in Electronic Medical Record  
 Free text nursing comments in Electronic Medical Record  
 Physician progress note in Electronic Medical Record  
 Not routinely documented  
 Other (please specify)

## Neurologic Assessment of Critically Ill Children

### Optimization of Neurologic Assessment

For children admitted to the ICU with chronic brain injury (i.e. chronic static encephalopathy) is there a standardized way of characterizing their pre-illness neurologic functioning in your ICU?

Yes

No

Please explain

Would a system to more clearly define pre-illness neurologic functioning of patients be beneficial to your practice?

Yes

No

Please explain

Do you think your current practice is the optimal way to monitor neurologic status in ICU patients?

Yes

No

Please describe

What do you think could be done to improve neurologic assessment in critically ill patients?

Other comments...