| **Question** | | **Answer(s)** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. In what hospital is your EMU located? | | Open-ended response |  |  |  |  |  |
| 2. What type of patients do you monitor in your EMU? | | Adults | Children | Both |  |  |  |
| 3. Approximately how many years has your EMU been active in total? | |  |  |  |  |  |  |
| 4. To your knowledge, have any deaths occurred in your EMU since its launch? | | Yes | No |  |  |  |  |
| 5. How many beds does your EMU encompass? | | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 | 11-12 |
| 6. Do patients remain in the same location during day/night shifts or are they relocated to another location? | | Same location always | Relocated |  |  |  |  |
| 7. In what ward is your EMU located? | | Neurology | Other |  |  |  |  |
|  | 7.1. If the answer to Q6 was “same location always” |  |  |  |  |  |  |
|  | 7.2. During the day, if the answer to Q6 was “relocated” |  |  |  |  |  |  |
|  | 7.3. During the night, if the answer to Q6 was “relocated” |  |  |  |  |  |  |
| 8. Does your EMU operate in a standalone, designated hospital area? | | Yes | No |  |  |  |  |
|  | 8.1. If the answer to Q6 was “same location always” |  |  |  |  |  |  |
|  | 8.2. During the day, if the answer to Q6 was “relocated” |  |  |  |  |  |  |
|  | 8.3. During the night, if the answer to Q6 was “relocated” |  |  |  |  |  |  |
| 9. Does your EMU have individual or shared rooms? | | Individual | Shared | Both |  |  |  |
|  | 9.1. If the answer to Q6 was “same location always” |  |  |  |  |  |  |
|  | 9.2. During the day, if the answer to Q6 was “relocated” |  |  |  |  |  |  |
|  | 9.3. During the night, if the answer to Q6 was “relocated” |  |  |  |  |  |  |
| 10. Is there a transparent screen allowing outside visualization of patients in the room? | | Yes | No |  |  |  |  |
|  | 10.1. If the answer to Q6 was “same location always” |  |  |  |  |  |  |
|  | 10.2. During the day, if the answer to Q6 was “relocated” |  |  |  |  |  |  |
|  | 10.3. During the night, if the answer to Q6 was “relocated” |  |  |  |  |  |  |
| 11. Is there an operational, continuous patient monitoring station available to the staff members? | | Yes, available all day and night | Yes, available all day, but not at night | Yes, available all night, but not during the day | No, not available |  |  |
| 12. Is there at least one staff member assigned/dedicated to continuously monitor the video recording of each patient? | | Yes, all day and night | Yes, all day, but not at night | Yes, all night, but not during the day | No, not during the day nor at night |  |  |
| 13. During the periods when no staff member is continuously monitoring the video recording of each patient, is at least one staff member assigned to “physically” monitor each patient instead (i.e., continuous direct observation from outside or within the patient rooms)? | | Yes | No |  |  |  |  |
| 14. Is sound activated along with the video monitoring? | | Yes, sound is turned on all day and night | Yes, but sound is only turned on during the day | Yes, but sound is only turned during the night | No |  |  |
| 15. Does your EMU employ heart rhythm monitoring? | | Yes, for all patients | Yes, only for certain patients | No |  |  |  |
| 16. If the answer to Q15 was “Yes”: does your EMU employ an alarm system for heart rhythm abnormalities? | | Yes, visual and audible alarm | Yes, visible alarm only | Yes, audible alarm only | No, there is no alarm system |  |  |
| 17. Does your EMU employ oximetry monitoring? | | Yes, for all patients | Yes, only for certain patients | No |  |  |  |
| 18. If the answer to Q17 was “Yes”: does your EMU employ an alarm system for oximetry abnormalities? | | Yes, visual and audible alarm | Yes, visible alarm only | Yes, audible alarm only | No, there is no alarm system |  |  |
| 19. Does your EMU employ automated systems for seizure detection that generate alarms in real time? | | Yes, systematically for all patients | Yes, only for certain patients | No |  |  |  |
| 20. If the answer to Q19 was “Yes”: are these automated systems used during the day or the night? | | During the day and night | During the day only | Durin the night only |  |  |  |
| 21. If the answer to Q19 was “Yes”: please specify the type of system(s) used for seizure detection. | | EEG-based | Non-EEG based |  |  |  |  |
| 22. If the answer to Q19 was “Yes”: please specify the system(s) used for seizure detection. | | … |  |  |  |  |  |
| 23. Please provide the technologist-to-patient ratio… | | 1:1 | 1:2 | 1:3 | 1:4 | … |  |
|  | 23.1. During the day |  |  |  |  |  |  |
|  | 23.2. During the evening |  |  |  |  |  |  |
|  | 23.3. During the night |  |  |  |  |  |  |
|  | 23.4. During the weekend |  |  |  |  |  |  |
|  | 23.5. During the holidays |  |  |  |  |  |  |
| 24. Please provide the technologist-to-patient ratio for intracranial EEGs. | | Same as scalp EEG | 1:1 | No intracranial EEG at this EMU |  |  |  |
| 25. Are nurses dedicated to the EMU? | | Yes | No |  |  |  |  |
| 26. If the answer to Q25 is “Yes”, please provide the nurse-to-patient ratio… | | 1:1 | 1:2 | 1:3 | 1:4 | … |  |
|  | 25.1. During the day |  |  |  |  |  |  |
|  | 25.2. During the evening |  |  |  |  |  |  |
|  | 25.3. During the night |  |  |  |  |  |  |
|  | 25.4. During the weekend |  |  |  |  |  |  |
|  | 25.5. During the holidays |  |  |  |  |  |  |
| 27. If the answer to Q25 is “No”, please provide the nurse-to-EMU patient ratio… | |  |  |  |  |  |  |
|  | 27.1. During the day |  |  |  |  |  |  |
|  | 27.2. During the evening |  |  |  |  |  |  |
|  | 27.3. During the night |  |  |  |  |  |  |
|  | 27.4. During the weekend |  |  |  |  |  |  |
|  | 27.5. During the holidays |  |  |  |  |  |  |
| 28. If the answer to Q25 is “No”, please provide the nurse-to-total number of patients ratio… | |  |  |  |  |  |  |
|  | 28.1. During the day |  |  |  |  |  |  |
|  | 28.2. During the evening |  |  |  |  |  |  |
|  | 28.3. During the night |  |  |  |  |  |  |
|  | 28.4. During the weekend |  |  |  |  |  |  |
|  | 28.5. During the holidays |  |  |  |  |  |  |
| 29. Please provide the nurse-to-patient ratio for intracranial EEGs. | | Same as scalp EEG | 1:1 | No intracranial EEG at this EMU |  |  |  |
| 30. For whom do you require the presence of a caregiver or a family member during long-term video-EEG monitoring (LTVEM)? | |  |  |  |  |  |  |
|  | 30.1. If the answer to Q2 is “Adults” | For all adults admitted to the EMU | For adults with intellectual/cognitive/behavioural challenges | For no one |  |  |  |
|  | 30.2. If the answer to Q2 is “Children” | For all children admitted to the EMU | For children under the age of 5 | For no one |  |  |  |
|  | 30.3. If the answer to Q2 is “Both” | For all adults admitted to the EMU | For adults with intellectual/cognitive/behavioural challenges | For no one | For all children admitted to the EMU | For children under the age of 5 | For no one |
| 31. If the answer to 30 is not “For no one”: at what times do you require the presence of a caregiver or a family member during LTVEM for the previously mentioned scenarios? | | During the day | During the evening | During the night | ... | N/A |  |
|  | 31.1. For adults |  |  |  |  |  |  |
|  | 31.2. For children |  |  |  |  |  |  |
| 32. Do you require patients to fill out an informed consent form prior to their admission in your EMU detailing the risks of antiseizure medication reduction and associated seizure emergencies? | | Yes | No |  |  |  |  |
| 33. Do you have standardized protocol for… | | Yes | No |  |  |  |  |
|  | 33.1. Falls |  |  |  |  |  |  |
|  | 33.2. Rescue medication (emergency anti-seizure medication) |  |  |  |  |  |  |
|  | 33.3. Status epilepticus |  |  |  |  |  |  |
|  | 33.4. Seizure cluster |  |  |  |  |  |  |
|  | 33.5. Postictal psychosis |  |  |  |  |  |  |
| 34. Do you use… | | Yes | No |  |  |  |  |
|  | 34.1. Antisuffocation pillows |  |  |  |  |  |  |
|  | 34.2. Soft toilets |  |  |  |  |  |  |
|  | 34.3. Shower seats |  |  |  |  |  |  |
|  | 34.4. Recessed sinks |  |  |  |  |  |  |
|  | 34.5. Padded railings |  |  |  |  |  |  |
|  | 34.6. Seizure harnesses |  |  |  |  |  |  |
|  | 34.7. Out-swing design doors |  |  |  |  |  |  |
|  | 34.8. Low-beds or mattresses on the floor |  |  |  |  |  |  |

**Table S1: Survey questions sent to Canadian EMUs, August – December 2022.**

Chart, bar chart

Description automatically generated

**Figure S1: Nurse to total patient ratio across Canadian EMUs.**

EMU = epilepsy monitoring unit.

The total number of answers was 9, 9, 9, 7, and 6 for the day, the evening, the night, the weekend, and holidays, respectively.