



A. ICU DEMOGRAPHIC DATA (complete 1 form for each ICU participating in SANDMAN)

1. Hospital Name _____
2. City _____
3. Country _____
4. How would you best describe your hospital? (select one only)
 - University affiliated hospital
 - Community/District hospital – **Teaching**
 - Community/District hospital – **Non-teaching**
 - Other
5. How many beds in total does your hospital have? (select one response only)
 - ≤250
 - 251- 499
 - 500- 1000
 - >1000
6. What is the type of your ICU (predominantly)? (select one response only) If your ICU provides care for more than one type of patient, select 'Mixed ICU'
 - Burns Unit
 - Cardiac ICU
 - Coronary ICU
 - Medical ICU
 - Mixed ICU
 - Neurological/Neurosurgical ICU
 - Surgical ICU
 - Transplant ICU
 - Trauma ICU
 - Other
7. What is your ICU model of care? (select one response only)
 - Closed ICU: patients are cared for by 1 team of intensivists; only intensivists have admitting privileges to the ICU
 - Open ICU: any physician/surgeon can admit patients to the ICU; intensivists are available for consultation at the discretion of the responsible physician
 - Semi-closed: only intensivists have admitting privileges to the ICU but treat the patient in collaboration with other physicians
 - Other
8. How many beds can be staffed in your ICU? (select one response only, relevant to the ICU participating in SANDMAN)
 - ≤10
 - 11-19
 - 20-29
 - ≥30
9. How many ventilators are available for invasive mechanical ventilation in your ICU? (select one response only)
 - 1-5
 - 6-10
 - 11-20
 - ≥21
10. What is the number of annual admissions to your ICU? (select one response only)
 - <300
 - 301-500
 - 501-1000
 - >1000

B. ICU STAFFING INFORMATION

1. What is the average nurse to patient ratio in your ICU for MECHANICALLY VENTILATED patients? (select one response only)
 - 1:1
 - 1:2
 - 1:3
 - 1:4
 - Other
2. What is the average nurse to patient ratio in your ICU for NON-MECHANICALLY VENTILATED patients? (select one response only)
 - 1:1
 - 1:2
 - 1:3
 - 1:4
 - Other
3. What is the average intensivist to patient ratio in your ICU during day-time hours? (select one response only)
 - 1:5
 - 1:6-10
 - 1:11-15
 - 1:16-20
 - Other
4. Which of the following staff regularly work in your ICU? (select all that apply)
 - Trainee physician (non-critical care trainee)
 - Critical care/Anesthesiology trainee
 - Advanced Nurse Practitioner
 - Specialist Critical Care Nurse
 - Senior physician (Attending/Consultant)

5. Who provides out-of-hours (nights and weekends) senior clinical coverage ON SITE? (select all that apply)

- Trainee physician (non-critical care trainee)
- Critical care/Anesthesiology trainee physician
- Advanced Nurse Practitioner
- Specialist Critical Care Nurse
- Senior physician (Attending/Consultant)
- None of the above
- Other
- Unknown/Not available

6. What is the specialty of training of the intensivists who work in your ICU? (select all that apply)

- Anaesthesia
- Internal/General Medicine
- Surgery
- Emergency Medicine
- Other
- Critical Care/Intensive Care Medicine
- Respiratory/Pulmonary medicine
- Family Medicine/General Practice
- Neurology

7. Do you have respiratory therapists working in your ICU?

- No
- Yes
- Unknown/Not available

8. Does a dedicated pharmacist attend daily ICU rounds (at least daily on weekdays)?

- No
- Yes
- Unknown/Not available

9. Does your ICU have a dedicated physiotherapist (at least daily on weekdays)?

- No
- Yes
- Unknown/Not available

10. Does your ICU have a mobility team, whose primary role is to mobilize the patient?

- No
- Yes
- Unknown/Not available

11. Does your hospital have a music therapist?

- No
- Yes
- Unknown/Not available

12. Does your hospital provide pet therapy, or permit the patient's own pet(s) to visit?

- No
- Yes
- Unknown/Not available

13. How are patient rooms structured in your ICU? (select all that apply)

- Single patient rooms
- More than 2 patients per room
- 2 patients per room
- Open plan ICU with cubicles/bed spaces

14. What is your ICU visitor policy? (select one response only)

- Open access 24 hours/day (other than brief periods for procedures, etc.)
- Limited to specific times of the day
- No visitors are permitted in the ICU
- Other

C. ICU PRACTICES AND PROTOCOLS

1. Which of the following intravenous analgesics are available for use in your ICU? (select all that apply)

- Acetaminophen/Paracetamol
- Morphine
- Hydromorphone
- Fentanyl
- Sufentanil
- Remifentanyl
- Dezocine
- Cannabinoids (e.g. Nabilone)
- Other

2. Does your ICU routinely use a pain assessment scale?

- No
- Yes
- Unknown/Not available

2.1. If you responded 'Yes', please select the scale(s) you use (select all that apply)

- Behavioral Pain Scale (BPS)
- Critical Care Pain Observation Tool (CPOT)
- Faces Pain Scale
- Nociception Coma Scale
- Non-Verbal Pain Scale (NVPS)
- Numeric Rating Scale (NRS)
- Verbal Descriptor Scale (VDS)
- Visual Analogue Scale (VAS)
- Other
- Unknown/Not available

3. Which of the following intravenous sedatives are available for use in your ICU? (select all that apply)

- Midazolam
- Lorazepam
- Diazepam
- Propofol
- Dexmedetomidine
- Clonidine
- Ketamine
- Thiopental
- Pentobarbital
- Other

4. Does your ICU routinely use a sedation assessment scale?

- No
- Yes
- Unknown/Not available

4.1 If you responded 'Yes', please select the scale(s) you use (select all that apply)

- Glasgow Coma Scale (GCS)
- Motor activity assessment scale (MAAS)
- Ramsay scale
- Richmond Agitation-Sedation Scale (RASS)
- Riker Sedation-Agitation Scale (SAS)
- Other
- Unknown/Not available

5. Does your ICU routinely use a delirium assessment scale?

- No
- Yes
- Unknown/Not available

5.1. If you responded 'Yes', please select the scale(s) you use (select all that apply).

- 4AT Assessment test for delirium & cognitive impairment
- Confusion Assessment Method – ICU (CAM-ICU)
- Delirium Motor Subtype Scale (DMSS)
- Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-V) criteria
- Intensive Care Delirium Screening Checklist (ICDSC)
- Memorial Delirium Assessment Scale (MDAS)
- Mini Mental State Examination (MMSE)
- NEECHAM Confusion Scale
- Nurses' Delirium Screening Checklist (NuDeSC)
- Single Question in Delirium
- Clinical Assessment only
- Other
- Unknown/Not available

6. Who evaluates patients for signs and symptoms of delirium in your ICU? (select all that apply)

- Consultant/Attending Intensivist
- Trainee
- Psychiatrist or Psychologist
- ICU nurse
- Other
- Not Applicable – our ICU does not assess patients for delirium

7. Indicate if in your ICU you have any of the following protocols (select all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Alcohol withdrawal | <input type="checkbox"/> Pain management |
| <input type="checkbox"/> Delirium/agitation prevention or treatment protocol | <input type="checkbox"/> Mobilisation |
| <input type="checkbox"/> Physical restraint | <input type="checkbox"/> Sedation management |
| <input type="checkbox"/> Use of paralytic drugs (neuromuscular blocking agents) | <input type="checkbox"/> Ventilator weaning/spontaneous breathing trial |
| <input type="checkbox"/> None of the above | <input type="checkbox"/> Other |
| <input type="checkbox"/> Unknown/Not applicable | |

8. Indicate if in your ICU you routinely... (select all that apply)

- Practice an analgesia-first (prior to sedation) strategy
- Use daily sedation-analgesia interruption / spontaneous awakening trial (unless contraindicated)
- Assess patients for iatrogenic opioid withdrawal
- Wean opioids slowly to prevent opioid withdrawal
- Perform daily spontaneous breathing trials (SBT)
- Use a mobility assessment tool (i.e. SOMS, PFIT, CPAx, FSS-ICU)
- Use physical restraints for agitated patients
- Provide extra-corporeal supportive technologies (e.g. ECMO)
- Use inhalation anaesthetic agents for sedation of critically ill patients (isoflurane, sevoflurane, desflurane, xenon, nitrous oxide, etc.)
- None of the above
- Other
- Unknown/Not applicable

9. Indicate the start time of the ICU day, as recorded in official documents in your ICU. For example, if your ICU counts the day from the morning at 8:00 AM, input 08:00. If your unit counts the days from midnight (i.e. calendar day), input 00:00.

_____ : _____ hh:mm

D. COVID-19 DATA

1. Indicate the date when 50 confirmed or suspected COVID-19 patients were admitted to ICU in your country. If this information is not available/unknown, input 01/01/2001.
2. Did your Government/Institution/Hospital/National Society issue a safety warning on sedative/analgesia/neuromuscular blocker drug shortages during the COVID-19 pandemic?
 No Yes Unknown/Not available

2.1 If you responded 'Yes', indicate when was the safety warning issued?

dd/mmm/yyyy ____/____/____

2.2 Did your institution change sedation practice/drugs of choice following the warning?

- No Yes Unknown/Not available

3. Did your unit admit any COVID-19 patients during the pandemic?

- No Yes Unknown/Not available

3.1 If you responded 'Yes' to Q3., indicate when was the first COVID-19 patient admitted to your unit?

dd/mmm/yyyy ____/____/____



3.2 Indicate what was the reason for their admission?

- COVID-19 related respiratory symptoms
- Other diagnosis and incidental SARS-CoV2 positive finding
- Unknown/Not available

4. Did your unit care for the same cohort of patients before and during the COVID-19 pandemic (i.e. you did NOT change the case-mix admitted to your ICU before and during the pandemic)?

- No Yes Unknown/Not available

5. Do you agree with any of the statements below regarding COVID-19 patients? (Select all that apply)

- This cohort required higher doses of sedative drugs
- This cohort required higher doses of analgesic drugs
- This cohort required lower doses of sedative drugs
- This cohort required lower doses of analgesic drugs
- This cohort required muscle paralysis more frequently than other ICU patients
- This cohort required muscle paralysis less frequently than other ICU patients
- This cohort required higher incidence of ICU delirium
- This cohort required lower incidence of ICU delirium