Online Data Supplement

Medical Record Quality Assessments of Palliative Care for ICU Patients: Do They Match Nurses’ and Families’ Perspectives?

Richard A Mularski, MD, MSHS, MCR, Lissi Hansen, RN, PhD, Susan J Rosenkranz, MA, Michael C Leo, PhD, Paula Nagy, RN, MS, Steven M Asch, MD, MPH
Appendix A.
Results of the Delphi process with respect to factors of validity and feasibility

<table>
<thead>
<tr>
<th>Quality Metric</th>
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<th>Feasibility</th>
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<td>Median (Range)</td>
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<td>5 Documentation of Timely Physician Communication with the Family</td>
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<td>13 Medications Ordered for Use During Withdrawal of Mechanical Ventilation</td>
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<td>(1.0)</td>
<td>8.4</td>
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<td>7.5 (6-9)</td>
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<td>14 Documentation of Offering of Spiritual Support to Family Members</td>
<td>6.4</td>
<td>(1.9)</td>
<td>6.6</td>
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Appendix B.
Measure Definitions

1. Assessment of Decisional Capacity of the Patient
Definition: Assessment within 24 hours of admission of the patients’ capacity to make decisions.

2. Documentation of Identification of a Surrogate Decision-Maker
Definition: Documentation of surrogate decision-maker(s) or documentation of the absence of surrogate decision-maker within the first 24 hours of admission to the ICU.

3. Documentation of Presence and Contents of Advance Directives
Definition: Documentation of the presence or absence of an advance directive (including living will or durable power of attorney for healthcare) and, if present, documentation of the contents of the advance directive or a copy of the advance directive.

4. Documentation of the Goals of Care
Definition: Documentation of the goals of care, in the patient chart, within 72 hours.

5. Documentation of Timely Physician Communication with the Family
Definition: Documentation of communication between a physician and a family member or friend of the patient within 24 hours of admission.

6. Documentation of Timely Interdisciplinary Clinician-Family Conference
Definition: Documentation that an interdisciplinary clinician-family conference occurred within 72 hours of admission and documentation of what was discussed.

7. Transfer of Key Information with Transfer of the Patient out of the ICU
Definition: Documentation that the goals of care and resuscitation status are communicated to receiving team on transfer of the patient out of the ICU.

8. Documentation of Offering of Psychosocial Support
Definition: Documentation of offering of psychosocial support within the first 72 hours of admission to the ICU.

9. Documentation of Pain Assessment
Definition: Documentation of pain assessment every 4 hours.

10. Documentation of Pain Management
Definition: Treatment of pain that is assessed as >3 on a 0-10 scale or greater than mild on other scales with reassessment after treatment.

11. Documentation of Respiratory Distress Assessment
Definition: Documentation of respiratory distress assessment (for non-ventilated patients) or patient-ventilator dysynchrony (for ventilated patients) every 8 hours.
12. Documentation of Respiratory Distress Management
Definition: Treatment of or management plan for respiratory distress (for non-ventilated patients) or patient-ventilator dysynchrony (for ventilated patients) that is assessed as >3 on a 0-10 scale or greater than mild on other scales with reassessment after treatment.

13. Medications Ordered for Use During Withdrawal of Mechanical Ventilation
Definition: Documentation of opiates, benzodiazepines, and/or similar agents prescribed to manage distress or dyspnea for non-comatose patients undergoing terminal withdrawal of mechanical ventilation.

14. Documentation of Offering of Spiritual Support to Family Members
Definition: Documentation of an offering of spiritual support to family members within the first 72 hours of admission to the ICU.
Appendix C.

Measuring Quality Palliative Care in Intensive Care Unit

Measure Operationalization Handbook version May 4, 2015
Robert Wood Johnson Foundation (RWJF), Interdisciplinary Nursing Quality Research Initiative (INQRI), Nursing’s Specific Contributions to Quality Palliative Care within the Context of Interdisciplinary Intensive Care Practice

co-PIs: Lissi Hansen, RN, PhD and Richard Mularski, MD, MSHS, MCR
Project Managers: Amy Waterbury (CHR) and Susan Rosenkranz (OHSU)

The 14 patient-level processes of care indicators in the measure set are organized into 7 evidence-based domains of palliative care in the ICU and build on a quality indicator set and identified palliative care needs in the ICU (work supported by the Robert Wood Johnson Foundation Critical Care End-of-Life Peer Workgroup). The domains are: (1) decision-making, (2) communication, (3) continuity of care, (4) emotional and practical support for patients and family, (5) spiritual support for patients and family, (6) symptom management and comfort care, and (7) emotional and organizational support for clinicians. Each domain is operationalized by one or more quality measures; these process measures are at patient level of analysis.

Schematic Outline of Study Design

**Phase I:**
Delphi Method

→ Test Developed Medical Record Audit Tool

**Phase II**
Collect Medical Record Data Using Audit Tool

→ Measure Quality for Palliative ICU Care

(Assess Relationships of Quality)

Nursing Evaluation of Quality of Palliative Care

Family Members Satisfaction Measure
Complete Quality Measures for Palliative ICU Care Organized by Domain

Process measures at patient level of analysis with the medical record proposed as the predominant source of data for comprehensively evaluating the quality of palliative care delivered in the ICU; note that a † designates 4 structural measures evaluated at ICU level of analysis (see appendix for details on structural measures).

Patient and Family Centered Decision-Making
1. Assessment of the patient’s decisional capacity
2. Documentation of a surrogate decision-maker within 24 hours of admission
3. Documentation of the presence and, if present, contents of advance directives
4. Documentation of the goals of care

Communication within the Team and with Patients and Family
5. Documentation of timely physician communication with the family
6. Documentation of a timely interdisciplinary clinician-family conference

Continuity of Care
7. Transmission of key information with transfer of the patient out of the ICU
8. Policy for continuity of nursing services †

Emotional and Practical Support for Patients and Family
9. Open visitation policy for family members †
10. Documentation that psychosocial support has been offered

Symptom Management and Comfort Care
11. Documentation of pain assessment
12. Documentation of pain management
13. Documentation of respiratory distress assessment
14. Documentation of respiratory distress management
15. Protocol for analgesia/sedation in terminal withdrawal of mechanical ventilation †
16. Appropriate medications available during withdrawal of mechanical ventilation

Spiritual Support for Patients and Family
17. Documentation of that spiritual support was offered

Emotional and Organizational Support for Clinicians
18. Opportunity to review experience of caring for dying patients by ICU clinicians †
DETAILED MEASURE OPERATIONAL CHARACTERISTICS:

1. Assessment of Decisional Capacity of the Patient

Indicator Definition: Assessment within 24 hours of admission of the patients’ capacity to make decisions.

Numerator: Total number of patients in the ICU with documentation of decisional capacity made within 24 hours of admission.

Gold Standard for Full DMC Assessment (Grisso T, Appelbaum PS)
- Ability to understand relevant information to treatment decision making
- Appreciation of the significance of that information for one’s situation and consequences of treatment options including no treatment
- Ability to reason with relevant information so as to engage in rational deliberation in weighing treatment options and deciding on choice
- Ability to express a choice

- Accept statements of identification / discussions with a proxy due to patient lack DMC
- Accept statement of sufficient DMC present
- Accept statement of assessed this patient and they don’t have DMC
- Do not exclude or waive assessment if only documentation is ‘alert and oriented’
- Signing consent is not sufficient

Denominator: Total number of patients in the ICU > 24 hours.
Unit of analysis: ICU patients.
Intended sample: All patients admitted to the ICU for more than 24 hours.
Potential exclusions: Coma; currently delirious documentation; prior incompetence declared

Data source and collection methods: Process measure; any clinician charting from EMR
- ED notes or antecedent ICU transfer notes
  - nurse
  - physician
- ICU admission or consultant notes
- RN assessment (flowsheet)
- Clinician admission and 1st 24 hours charting notes

NOTES:
2. Documentation of Identification of a Surrogate Decision-Maker

Indicator Definition: Documentation of surrogate decision-maker(s) or documentation of the absence of surrogate decision-maker within the first 24 hours of admission to the ICU.

Numerator: Total number of patients in the ICU > 24 hours with documentation of a surrogate decision-maker or decision-makers or documentation of the absence of any surrogate decision-maker.

- Demographics or next of kin field in EMR or a copy of POLST or AD is not sufficient documentation without provider acknowledgement of this information

- Acceptable to have a clinician’s note indicating surrogate decision-maker
  • Required documentation of a decision or care preference (e.g. DNR, DNI) AND
  • Indication of who this was discussed with other than patient

- Desired behavior is statement identifying who patient has indicated as proxy

Denominator: Total number of patients in the ICU > 24 hours.

Unit of analysis: ICU patients.
Intended sample: All patients admitted to the ICU for more than 24 hours.
Potential exclusions:
- Statement that says pt has asked that no surrogates have been contacted
- Previous search for surrogate has been performed and no surrogate found
- Do not give credit only for nurse’s identification of a family spokesperson
- Consent form signed by a surrogate is not sufficient

Data source and collection methods: Process measure; any clinician charting from EMR
  ● ED notes or antecedent care transfer notes
    ○ nurse
    ○ physician
  ● Admit notes or other provider consultant notes
  ● RN assessment (flowsheet)
  ● Clinician admission and 1st 24 hours charting notes
  ● Social work / care coordinator notes

NOTES:
3. Documentation of Presence and Contents of Advance Directives

Indicator Definition: Documentation of the presence or absence of an advance directive (including living will or durable power of attorney for healthcare) and, if present, documentation of the contents of the advance directive or a copy of the advance directive.

**Numerator:** Total number of patients in the ICU > 24 hours with documentation of the presence or absence of an advance directive (including living will or durable power of attorney for healthcare) and, if present, documentation of the contents of the advance directive or an acknowledged copy of the advance directive in the patient chart.

- AD Tabs / POLST / scanned document acceptable for presence
  AND
- Clinician acknowledgement of its contents

- Notation or order for care preferences or limitations citing AD/POLST acceptable
- Evidence that AD viewed or altered is sufficient.

**Denominator:** Total number of patients in the ICU > 24 hours.

**Unit of analysis:** ICU patients.

**Intended sample:** All patients admitted to the ICU for more than 24 hours.

**Potential exclusions:** Patients documented to have decisional capacity.

**Data source and collection methods:** Process measure; any clinician charting from EMR in 1st 24 hours of ICU stay or antecedent transfer/ED
  - AD Tabs/POLST Tabs (or EMR folder)
  - Clinician documentation of care preferences or limitations in any notes
  - Clinician acknowledgement of this information
    - nurse documentation tab and/or flowsheet
    - social workers notes
    - physician note
    - provider order with text associated documentation

**NOTES:**
4. Documentation of the Goals of Care

**Indicator Definition:** Documentation of the goals of care, in the patient chart, within 72 hours.

**Numerator:** Total number of patients in the ICU > 72 hours with documentation of the goals of care.

- Daily goals of care notation in rounding notes acceptable
- General statements of patient or care goals in documentation (ie beyond simple statements as in measure #3 of patient preferences, limitations to therapy, or AD/POLST)

**Denominator:** Total number of patients in the ICU > 72 hours.

**Unit of analysis:** ICU patients.
**Intended sample:** All patients admitted to the ICU for more than 72 hours.

**Data source and collection methods:** Process measure; any clinician charting from EMR
- ED notes
  - nurse
  - physician
- Admit notes
- RN assessment (EPIC flowsheet) or nursing care plans section (Vista)
- Respiratory Therapy
- Rehabilitation services notes is another source for finding goals of care.
- Clinician admission and 1st 72 hours charting notes

**NOTES:**
Suggestion that we assess separate categories medical from patient-centered goals:
Medical goals of care, nursing goals of care and patient goals of care. Whose goals? They are currently all lumped together and meet this measure. Group suggests stratifying by whose goals and by abstract or concrete constructs.
5. Documentation of Timely Physician Communication with the Family

Indicator Definition: Documentation of communication between a physician and a family member or friend of the patient within 24 hours of admission.

Numerator: Patients in the ICU for > 24 hours for whom there is documentation that a physician communicated with a family member or friend of the patient in person or by another medium like email/phone.

- Physician provider note
- Nurse provider note
- Standardized rounding forms acknowledging family communication

Denominator: Total number of patients in the ICU for > 24 hours for whom a family member or friend can be identified.

Unit of analysis: ICU patients.

Intended sample: All patients admitted to the ICU for more than 24 hours.

Exclusions: Patients for whom no family member or friend can be identified in the first 24 hours; patients with DMC who have refused or has asked that no one be contacted or talked to
- Noted no next of kin or family in demographics
- Social worker/care manager documentations of no one available
- Provider documentation of unable to reach anybody
- Chaplain or social worker notes

Data source and collection methods: Process measure; any clinician charting (electronic or paper) obtained by medical record review.

NOTES:
For medical goals, source may be in paper forms from rounding (look to see if accessible as scanned into EMR or free-standing MRR.
6. Documentation of Timely Interdisciplinary Clinician-Family Conference

**Indicator Definition:** Documentation that an interdisciplinary clinician-family conference occurred within 72 hours of admission and documentation of what was discussed.

**Numerator:** Patients in the ICU for > 72 hours for whom there is documentation that an interdisciplinary clinician-family conference occurred that included at least one family member or friend of the patient, an ICU physician, and another clinician (other than a physician) and where the documentation includes a description of what was discussed.

**Denominator:** Total number of patients in the ICU for > 72 hours for whom a family member or friend can be identified.

**Unit of analysis:** ICU patients.

**Intended sample:** All patients admitted to the ICU for more than 72 hours.

**Exclusions:** Patients for whom no family member or friend can be identified in the first 72 hours or patients who have decisional capacity and chose to exclude family members from participation in discussions.

**Data source and collection methods:** Process measure; any clinician charting that the conference occurred (electronic or paper) obtained by medical record review
- Physician
- Nurse
- Social worker/care manager

**NOTES:**
Interesting concensus that although conference leader could be from palliative care team or team leader could be someone other than physician; all agreed a ICU physician MUST BE PRESENT at the formal conference.

Consider exclusion for people on their way out of ICU.
7. Transfer of Key Information with Transfer of the Patient out of the ICU

Indicator Definition: Documentation that the goals of care and resuscitation status are communicated to receiving team on transfer of the patient out of the ICU.

Numerator: Total number of patients transferred out of the ICU with documentation of that the goals of care and resuscitation status were communicated to receiving team.

Denominator: Total number of patients transferred out of the ICU alive to another service in the hospital or other care facility.

- accept continuation of care limitations in orders as sufficient proof of documentation

Unit of analysis: ICU patients.

Intended sample: All patients transferred out of the ICU alive to another team, location in the hospital, care facility, or home health service.

Exclusions: Patients that die in the ICU and patients discharged to home from the ICU without home care services.

Data source and collection methods: Process measure; any clinician charting (electronic or paper) obtained by medical record review.

- Notes on day of transfer
  - Sources:
    - Transfer note
    - Accept note
    - Nurse note
      - Plan of care
      - Transfer care report

NOTES:
8. Documentation of Offering of Psychosocial Support
Indicator Definition: Documentation of offering of psychosocial support within the first 72 hours of admission to the ICU.

Numerator: Total number of patients in the ICU > 72 hours with psychosocial support offered to the patient or family by any team member

EXAMPLES: note that chaplain saw the pt and provide support, documentation by nurse or physician that family was very upset and sat down and debriefed and given opportunity to express concerns, patient tearful and grief stricken and helped patient through the experience

Denominator: Total number of patients in the ICU > 72 hours.

Intended sample: All patients admitted to the ICU for more than 72 hours.
Unit of analysis: ICU patients.
Exclusions: Comatose patients (e.g. GCS 2T or 3) with no family member or friend identified.

Data source and collection methods: Process measure; any clinician charting (electronic or paper) obtained by medical record review.

- Sources of exclusion:
  - Physician
  - Nurse (notes or flowsheet)
  - Social worker/care manager

- Source for psychosocial support:
  - Physician
  - Nurse
  - Care manager/social worker
  - Chaplain
  - Patient advocate

NOTES:
Consider separating patient support from family support
Consider computing kappa amongst domains / components of operationalized definition
9. Documentation of Pain Assessment

**Indicator Definition:** Documentation of pain assessment every 4 hours.

**Numerator:** Total number of 4 hour periods during the portion of the 24-hour day that a patient is in the ICU or under the care of the ICU nurse for which pain is assessed and recorded using a quantitative rating scale.

**Denominator:** Total number of 4 hour periods that a patient is in the ICU during the portion of the 24-hour day that the patient is in the ICU or under the care of the ICU nurse.

- accept list of pain-related behaviors for patients unable to rate pain intensity (eg CPOT)

**Unit of analysis:** ICU patients-days.

**Intended sample:** All patients admitted to the ICU for more than 4 hours.

- We will sample all for first 48 hours (inclusion criteria includes >2 days in ICU)
- To capture information for those with longer stays (anticipating a median length of stay 5 days in ICU) we will sample the last 48 hours of the ICU stay
  - Subanalysis for those that survive vs. die in ICU

**Exclusions:** Time spent off the unit and no longer in the care of the ICU nurse (e.g. in OR); potential exclusions may also include comatose patients (e.g. GCS 2T or 3).

**Data source and collection methods:** Process measure; nurse charting (electronic or paper) obtained by medical record review

*charts will assess the following information – first raw data; second summary data:*

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<tr>
<th>Eligible time interval</th>
<th>Was pain assessed (NRS, self verbal, or behavioral)</th>
<th>What # or grading was assigned (or not evaluated severity)</th>
<th>If only in flowsheet, (E.g. pain is the 5th vital sign) was there RN acknowledgement in notes of pain?</th>
<th>If only in flowsheet, (E.g. pain is the 5th vital sign) was there physician acknowledgement in notes of pain?</th>
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<td>Day 1</td>
<td>Day 2</td>
<td>End of ICU t-1</td>
<td>End of ICU t-2</td>
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<td># of times pain assessed in a day</td>
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<td>Average pain intensity</td>
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<td>If only in flowsheet, (E.g. pain is the 5th vital sign) # of times RN acknowledgement in notes of pain?</td>
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<tr>
<td>If only in flowsheet, (E.g. pain is the 5th vital sign) # of times physician acknowledgement in notes of pain?</td>
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</table>

**NOTES:**
10. Documentation of Pain Management

Indicator Definition: Treatment of pain that is assessed as >3 on a 0-10 scale or greater than mild on other scales with reassessment after treatment.

Numerator: Total number of 4 hour periods during the portion of the 24-hour day that a patient in the ICU or under the care of the ICU nurse for which pain is assessed as >3 (or greater than mild) and there is a documented treatment provided and documented reassessment within 2 hours after treatment.

Denominator: Total number of 4 hour periods during the portion of the 24-hour day that a patient in the ICU or under the care of the ICU nurse for which pain is assessed as >3 (or greater than mild).

- accept nurses statements that pain therapy was either "effective" or "not effective"

Unit of analysis: ICU patients-days.

Intended sample: All patients admitted to the ICU for more than 4 hours.
- We will sample all for first 48 hours (inclusion criteria includes >2 days in ICU)
- To capture information for those with longer stays (median length of stay approx 5 days in ICU) we will sample the last 48 hours of their ICU stay
  - Subanalysis for those that survive vs. die in ICU

Exclusions: Time spent off the unit and no longer in the care of the ICU nurse.

Data source and collection methods: Process measure; nurse charting (electronic or paper) obtained by medical record review

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<td>Reassessment within 2 hours y/n</td>
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<td>□ non-opiate analgesia/NSAID</td>
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<td>□ opiate analgesia</td>
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<td>□ sedative</td>
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<td>□ non-pharmacologic intervention</td>
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NOTES:
11. Documentation of Respiratory Distress Assessment

Indicator Definition: Documentation of respiratory distress assessment (for non-ventilated patients) or patient-ventilator dysynchrony (for ventilated patients) every 8 hours.

Numerator: Total number of 8 hour periods during the portion of the 24-hour day that a patient is in the ICU or under the care of the ICU nurse for which dyspnea/dysynchrony is assessed and recorded using a quantitative rating scale.

Denominator: Total number of 8 hour periods that a patient is in the ICU during the portion of the 24-hour day that the patient is in the ICU or under the care of the ICU nurse.

Unit of analysis: ICU patients-days.

Intended sample: All patients admitted to the ICU for more than 8 hours.
- We will sample all for first 48 hours (inclusion criteria includes >2 days in ICU)
- To capture information for those with longer stays, we will sample the last 48 hours of their ICU stay.

Exclusions: Time spent off the unit and no longer in the care of the ICU nurse (e.g. in the operating room); potential exclusions may include comatose patients (GCS 2T or 3).

Data source and collection methods: Process measure; clinician charting (electronic or paper) obtained by medical record review
- nurse flowsheet or notes
- respiratory therapy
- other charting

charts will assess the following information – first raw data; second summary data:

<table>
<thead>
<tr>
<th>t₀</th>
<th>t₈</th>
<th>...</th>
<th>t₄₈</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible time interval</td>
<td>Was dyspnea/dysynchrony assessed</td>
<td>What grade or level; or none used</td>
<td>If only in flowsheet, was there RN acknowledgement in notes of dyspnea or dysynchrony?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 2</th>
<th>End of ICU t-1</th>
<th>End of ICU t-2</th>
</tr>
</thead>
<tbody>
<tr>
<td># of times dyspnea/dysynchrony assessed in a day</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average dyspnea/dysynchrony intensity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If only in flowsheet, # of times RN acknowledgement in notes of dyspnea/dysynchrony?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If only in flowsheet, # of times physician acknowledgement in notes of dyspnea/dysynchrony?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
12. Documentation of Respiratory Distress Management

Indicator Definition: Treatment of or management plan for respiratory distress (for non-ventilated patients) or patient-ventilator dysynchrony (for ventilated patients) that is assessed as >3 on a 0-10 scale or greater than mild on other scales with reassessment after treatment.

Numerator: Total number of 8 hour periods during the portion of the 24-hour day that a patient is in the ICU or under the care of the ICU nurse for which respiratory distress/dysynchrony is assessed as >3 (or greater than mild) and there is a documented treatment/management plan provided and documented reassessment within 2 hours after treatment/management plan.

Denominator: Total number of 8 hour periods during the portion of the 24-hour day that a patient in the ICU or under the care of the ICU nurse for which respiratory distress/dysynchrony is assessed as >3 (or greater than mild).

Unit of analysis: ICU patients-days.

Intended sample: All patients admitted to the ICU for more than 8 hours.
- We will sample all for first 48 hours (inclusion criteria includes >2 days in ICU)
- To capture information for those with longer, we will sample the last 48 hours of their ICU stay

Exclusions: Time spent off the unit and no longer in the care of the ICU nurse (e.g. in the operating room).

Data source and collection methods: Process measure; nurse charting (electronic or paper) obtained by medical record review. Random selection of ICU patient-days may enhance feasibility.

<table>
<thead>
<tr>
<th>t₀</th>
<th>t₈</th>
<th>...</th>
<th>t₄₈</th>
</tr>
</thead>
<tbody>
<tr>
<td>distress/dysynchrony &gt;3 y/n (self report or observed noted)</td>
<td>Pharmacologic therapy within 2 hours y/n</td>
<td>Reassessment within 2 hours y/n</td>
<td></td>
</tr>
<tr>
<td>□ non-opiate analgesia</td>
<td>□ opiate analgesia</td>
<td>□ sedative</td>
<td></td>
</tr>
<tr>
<td>□ non-pharmacologic intervention</td>
<td>□ other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTES:
13. Medications Ordered for Use During Withdrawal of Mechanical Ventilation

Indicator Definition: Documentation of opiates, benzodiazepines, and/or similar agents prescribed to manage distress or dyspnea for non-comatose patients undergoing terminal withdrawal of mechanical ventilation.

**Numerator:** Total number of non-comatose patients for whom mechanical ventilation is withdrawn in anticipation of death who have an order written for opiates and/or benzodiazepines as scheduled or PRN.

**Denominator:** Total number of non-comatose patients for whom mechanical ventilation is withdrawn in anticipation of death.

**Unit of analysis:** Non-comatose ICU patients undergoing withdrawal of mechanical ventilation.

**Intended sample:** All non-comatose patients undergoing terminal withdrawal of mechanical ventilation.

**Exclusions:** Comatose patients (GCS 2T or 3). Brain dead patients

**Data source and collection methods:** Process measure; physician orders from electronic or paper medical record review.

- Sources of exclusion:
  - Physician
  - Nurse (notes or flowsheet)
  - Social worker/care manager

**NOTES:**
14. Documentation of Offering of Spiritual Support to Family Members

Indicator Definition: Documentation of an offering of spiritual support to family members within the first 72 hours of admission to the ICU.

Numerator: Total number of patients in the ICU > 72 hours with an offering spiritual support by any team member

Denominator: Total number of patients in the ICU > 72 hours and with family members visiting.

Unit of analysis: ICU patients.
Intended sample: All patients admitted to the ICU for more than 72 hours.
Exclusions: Patients with no family member visiting the patient during the ICU stay.

Data source and collection methods: Process measure; any clinician or other personnel charting (electronic or paper) obtained by medical record review

- Sources of exclusion & source for documentation of spiritual support:
  - Physician
  - Nurse
  - Care manager/social worker
  - Chaplain
  - Patient advocate

NOTES:
APPENDIX OF STRUCTURAL MEASURES (N=4):

1. Policy for continuity of nursing services
   **Indicator Definition:** Documentation of a policy that allows for continuity of nursing care for patients with multiple day stay in the ICU for patients and family members.
   **Numerator:** Presence of a policy in the ICU that supports arranging continuity of nurses for patients that spend more than one day in the ICU.
   **Denominator:** ICU.
   **Unit of analysis:** ICU.
   **Intended sample:** All ICUs.
   **Exclusions:** None.
   **Data source and collection methods:** Structural measure; review of ICU policies.

2. Policy for “Open Visitation” for Family Members
   **Indicator Definition:** Documentation of a policy that allows for unrestricted visitation by family members and friends.
   **Numerator:** Presence of a policy in the ICU that allows for family members and friends to spend time in the patient’s room irregardless of the time of day. Policy may include restrictions on the number of visitors at one time or restrictions based on disturbance of other patients or family members or disturbance of the functioning of the ICU. Policies may also include provisions for asking family members or friends to wait in the waiting room during procedures.
   **Denominator:** ICU.
   **Unit of analysis:** ICU.
   **Intended sample:** All ICUs.
   **Exclusions:** None.
   **Data source and collection methods:** Structural measure; review of ICU policies.

   **Indicator Definition:** Documentation of a protocol for provision of analgesia and sedation during terminal withdrawal of mechanical ventilation.
   **Numerator:** Presence of a protocol that can be applied in settings of terminal withdrawal of mechanical ventilation.
   **Denominator:** ICU.
   **Unit of analysis:** ICU.
   **Intended sample:** All ICUs.
   **Exclusions:** None.
   **Data source and collection methods:** Structural measure; review of ICU protocols.

   **Indicator Definition:** Documentation of a forum for ICU clinicians to review, discuss, and debrief the experience of caring for dying patients and their families.
   **Numerator:** Presence of a forum for ICU clinicians to review, discuss, and debrief the experience of caring for dying patients and their families.
   **Denominator:** ICU.
   **Unit of analysis:** ICU.
   **Intended sample:** All ICUs.
   **Exclusions:** None.
   **Data source and collection methods:** Structural measure; survey of ICU clinicians.
APPENDIX OF DELPHI METHOD:

The Delphi technique was originally developed by RAND Corp (Santa Monica, CA) to formalize the input of a multidisciplinary group with a transparent and rigorous process of iteratively seeking graded input on proposed recommendations. This method consists of a small group of stakeholders with expertise in a topic to respond to proposed quality measure statements that are developed on evidence-based recommendations by using multiple rounds of independent rankings of each item on the proposed measure set. The rankings use a 9-point Likert-type scale of validity and feasibility; the process employs moderated discussion between ranking rounds with formal analysis of responses to questions to determine the degree of consensus.

The Delphi process employs descriptive summaries of rating scores presented to participants in each phase of the 2 step process along with participants own ratings to aid their decision making and the consensus rigor. Following the first round of ratings, Dr Mularski mediated discussion with the Delphi panel to work thru consensus for the key aspects of the measures. A second vote will follow at the end of the meeting and refinement of the measures. Consensus is ideal if a score of 7 or greater on the ranking 9 point scale is obtained. The final rating step generates the strength of consensus and endorses measures to move on to the chart abstraction tool.

The modified Delphi method increases scientific rigor by using expert opinion to interpret and fill-in gaps in existing literature base via a one-person, one-vote method. The method increases the technical relationship of process measurement to desired health outcomes and adds grading to quantify anticipated validity and feasibility. The fundamental assumption behind this methodology is that the available nursing and medical literature cannot fully translate to a discrete quality assessment for a care event and that clinical judgment is required to develop robust and operationalizable measures. Further, the method uses a multidisciplinary approach to include comprehensive clinical input to determinations of appropriateness. The proposed measure set will be operationalized for utility as a quality of care assessment tool at the patient level with summary scores from all patients cared for in a particular facility; it is envisioned to be able to generate a hospital level performance metric. This operationalization method should result in a valid, homogenous, comprehensive, and feasible measure set.
### VALIDITY to Gold Standard

<table>
<thead>
<tr>
<th>Scale Reference</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not Valid</td>
</tr>
<tr>
<td>2</td>
<td>Barely Valid</td>
</tr>
<tr>
<td>3</td>
<td>Moderately Valid</td>
</tr>
<tr>
<td>4</td>
<td>Definitely Valid</td>
</tr>
<tr>
<td>5</td>
<td>Most Valid</td>
</tr>
</tbody>
</table>

- Not a valid measure
- Not capture key care
- No measurable effect
- Not well operationalized
- Insignificantly valid
- Misses care aspects and has little impact to measure quality
- May identify some care
- Tracks well with the statement of quality care
- Valid operationalization
- May have impact
- May be a determining factor to quality
- Is relevant to ICU quality of care measurement
- Valid as written
- Well operationalized for imagined gold standard of delivered care
- Completely valid operationalization
- No missing pieces
- Captures all major issues related to quality

**Validity relates to how well to the operationalization of the measure tracks to an imaginary gold standard (if you could prospectively observe the whole care experience) - how good will the measure detect good versus not-good care; (note: not related to importance or whether measure should exist).**

### FEASIBILITY

<table>
<thead>
<tr>
<th>Scale Reference</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not Feasible</td>
</tr>
<tr>
<td>2</td>
<td>Unlikely Feasible</td>
</tr>
<tr>
<td>3</td>
<td>May or May Not be Feasible</td>
</tr>
<tr>
<td>4</td>
<td>Probably Feasible</td>
</tr>
<tr>
<td>5</td>
<td>Definitely Feasible</td>
</tr>
</tbody>
</table>

- Missing or poorly characterized sources of data
- Poor operationalization of the exclusions and inclusions
- Design can be implemented
- Probable roadblocks exist
- May miss important sources of data or mischaracterize
- Needs substantive improvement
- Contradictory evidence that this can be implemented
- Roadblocks may exist
- Potential sources of error in how measure may be scored by different reviewers
- Likely will capture most of the key information needed to score
- Low likelihood of misclassification
- No major missing sources
- Comprehensive inclusions and exclusions for data sources
- Characterized well - within the limits of medical documentation
- Accounts for all inclusions, exclusions, and data sources
- No worry about finding information

**Feasibility relates to how well the details of the operationalization will perform to get the data from available data source if it is there (note: does not relate to if it is a useful quality measure or if the information in the measures should or should not be documented).**

*NOTE: Standard > 7 for an Ideal Measure*
References:


