# Table of Contents

Sample pocket cards with Safety Guidelines for Physical Therapy in the ICU, which can be used as a portable summary of screening exclusions.

## Safety Guidelines for Physical Therapy in the ICU - Pocket Cards

### Guidelines for physical therapy in MICU

Instructions: Physician should be consulted before starting physical therapy if any of the following conditions exists:

A. CNS: RASS score = -4, -5, or ≥+3

B. Poor oxygenation:
Pulse oximetry <88%, OR
$FiO_2$ > 0.6 and PEEP> 10 $cmH_2O$, OR
HFO ventilation

C. Tachypnea: Respiratory rate >45 bpm

D. Acidosis: most recent (i.e. today) arterial pH <7.25

E. Hypotension:
Mean arterial pressure (MAP) <55 mmHg, OR
Increase in vasopressor dose within the past 2 hours, OR
Norepinephrine (Levophed) >0.15 µg/kg/min, OR
Dopamine >15 µg/kg/min, OR
Phenylephrine (Neosynephrine) >1µg/kg/min, OR
Vasopressin >0.02 units/min

F. Hypertension:
Mean arterial pressure (MAP) >140 mmHg, OR
Any dose of a continuous IV infusion of nitroglycerin (Tridil), nitroprusside, nicardipine, diltiazem, esmolol, or labetolol

G. New DVT: Duration of anti-coagulation <36 hours (only applicable for rehab to affected limb & for ambulation)

H. Femoral sheath

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Page from the Physical Therapy (PT) and Occupational Therapy (OT) Log Book Creation Guide, with instructions to easily input patient information to create weekly PT and OT Log Books.

# Physical Therapy and Occupational Therapy Log Book Creation Guide

## PT Log Sheets:

1. On the work sheet labeled "PT Log", Enter the date of the first day of the week (Monday) into the space labeled "Enter the Date" at the top of the sheet

| Enter the Date: | 1/1/2017 |
| --- | --- |

2. Under the tab "Pt Information", complete the table labeled "ICU Nursing Census" by filling in the patient names and corresponding MRNs. Patients names should be entered alphabetically and using the format Last Name, First Name.
3. After entering patient names and MRNs, their information should automatically populate under the table labeled "Log Book Census" (see below figure).

### MICU NURSING CENSUS

| | Pt Name | Pt MRN |
| --- | --- | --- |
| 1 | Alpha, John | 1-234-5678 |
| 2 | Doe, Jane | 9-876-5432 |
| 3 | Fourty, Watch Doe | 1-111-1111 |
| 4 | Eight, John | 5-555-5555 |
| 5 | Smith, Steve | 9-999-9999 |
| 6 | Zero, Jane | 2-222-2222 |
| 7 | | |
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| 23 | | |
| 24 | | |

### LOG BOOK CENSUS

| | |
| --- | --- |
| 1 | Alpha, J 1-234-5678 |
| 2 | Doe, J 9-876-5432 |
| 3 | Fourty, W 1-111-1111 |
| 4 | Eight, J 5-555-5555 |
| 5 | Smith, S 9-999-9999 |
| 6 | Zero, J 2-222-2222 |

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# Physical Therapy Log Book

## Week of 1/1/2017 to 1/7/2017

**1**= Weekend or holiday with no PT services    **2**= No Consult    **3**= Rehab staff not available(during weekdays)    **4**= D/C before eval/tx    **5**=Patient not available    **6**= Sedated(drugs)  **7**= Sedated(CNS)
**8**= Not eligible for rehab    **9**= Medically not appropriate    **10**= Patient refused    **11**= No order    **12**= Not needed    **13**=Other (pls explain)    **14**= Unknown    **15**=comfort care

| SN | Patient name/MRN | Highest level of activity at baseline | Mon - 1/1/2017 | Tue - 1/2/2017 | Wed - 1/3/2017 | Thu - 1/4/2017 | Fri - 1/5/2017 | Sat - 1/6/2017 | Sun - 1/7/2017 | comments |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | |
| | | | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | |
| | | | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | |
| | | | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | |
| | | | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | |
| | | | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | __/__  ____  _____ | |

**Highest level of activity:** **(J)**= bed side exercises by PT (inc Letto)    **(A)**= roll    **(B)** = supine to sit    **(Q)**= tsf bed to chair w/o standing    **(V)**= Tilt table/bed    **(C)**= sitting at edge of bed **(D)**= tsf from bed to chair w/standing
**(E)**= stand    **(O)**= march in place (2 steps/foot)    **(F)**= walk (>= 4 steps AND w/assist. >=2 people)    **(G)**= walk (>= 4 steps AND w/assist. 1 person)    **(H)**= walk (>= 4 steps, 0 person AND w/gait aid; includes WC amb w/o assist)    **(I)**= walk (>= 4 steps) no gait aid (AND 0 person)    **(L)**= chest pt    **(P)**= Unknown

**Technology:** **(A)**= Standing Lift (e.g. Arjo)    **(SP)**= Sara Plus standing/walking aid    **(W)** = Wii    **(L)** = Letto    **(N)** NMES    **(K)** = Kreg Bed    **(R)** = gRip    **(M)** = Microfet HHD    **(T)** = Portable vent **(S)**= Shower **(IP)**= iPad

**Patient Status** **(MV)**= mechanically ventilated during PT Tx    **(HD)**= CVVHD during PT Tx

**Events:** *0 = none*  **For codes 1 - 13, Add "R" at the end of Code if unplanned treatment or intervention, OR  Add "-" if NO unplanned treatment or intervention was necessitated by event.**
**Removal, Dislodgement, Disruption or Dysfunction of following**-[Airway: (**1E** = endotracheal tube  ;  **1T** = tracheostomy)   ;  Feeding Tube: (**2N** = Nasal ;  **2O** = Oral ;  **2P** = Percutaneous)   **3**=Chest Tube ;  Vascular Access: (**4A**=Arterial ;  **4V**=Central Venous ;  **4D**=Dialysis ;  **4E**=ECMO Cannulae ; **4P**=Pulmonary Artery ;  **4fA**=femoral Arterial ;  **4fV**=femoral Venous ;  **4fD**=femoral Dialysis) ;  **5**=Cardiac Devices ;  **6**=Wound or Dressing]
**Cardiovascular and Hemodynamic stability [7**=Hypotension  (*change* of MAP<55 or if medical intervention required)    **8**=Hypertension (*change* of MAP>140 or if medical intervention required) **9**=Desaturation (*change* of SpO2<85% or if medical intervention required); **10**=Cardiac Arrest ; **11**=New Arrhythmia (excludes sinus tachycardia,PVCs,  non worsening pre-existing arrhythmia)
**13**=Other Event(describe in blank text field)  ;**15**=Death ;
**14** = fall  **(A)** assisted or **(U)** Unassisted by staff; Related Injury: i. None, ii. Minor, iii. Moderate, iv. Major or v.Death

# Occupational Therapy Log Book

**Week of 1/1/2017 to 1/7/2017**

1= Weekend or holiday with no OT services    2= No Consult    3= OT staff not available(during weekdays)    4= D/C before eval/tx    5=Patient not available    6= Sedated(drugs)    7= Sedated(CNS)

8= Not eligible for OT    9= Medically not appropriate    10= Patient refused    11= No order    12= Not needed    13=Other (pls explain)    14= Unknown    15=comfort care

| SN | Patient name/MRN | Highest level of activity at baseline | Mon - 1/1/2017 | Tue - 1/2/2017 | Wed - 1/3/2017 | Thu - 1/4/2017 | Fri - 1/5/2017 | Sat - 1/6/2017 | Sun - 1/7/2017 | comments |
|----|----|----|----|----|----|----|----|----|----|----|
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**Highest level of activity:** (a) = Splinting   (b) = Coma stimulation   (c) = ADLs in bed   (d) = ADLs edge of the bed   (e) = ADLs in chair   (f) = ADLs standing   (g)= No Activity

**Treatment:** (CS) Cognitive Stimulation* (CR) Cognitive Rehabilitation** (V) Vision (D) Coordination (N) Not applicable

*Cognitive stimulation are activities used to orient the patient or provide some stimulation (ex. reviewing orientation).

**Cognitive rehabilitation are activities provided to compensate or remediate an identified limitation (ex. teaching use of memory aids or performance of attention tasks).

**Patient Status:** (MV)= mechanically ventilated during PT Tx    (HD)= CVVHD during PT Tx

**Technology:** (IP) =iPad   (SP) = Sara plus standing/walking aid   (S)= Shower   (R) = gRip   (M) = Microfet HHD   (K)= Kreg Bed   (TB)= TOBII Eye Gaze system

**Events:** 0 = none; For Codes 21 - 33, add "R" at the end of Code if unplanned treatment or intervention, OR Add "-" if NO unplanned treatment or intervention was necessitated by event;

**Removal, Dislodgement, Disruption or Dysfunction** -[Airway: (21E= endotracheal tube   21T = tracheostomy) ; Feeding Tube: (22N = Nasal   22O = Oral   22P = Percutaneous) ; 23=Chest Tube ; Vascular Access: (24A=Arterial ; 24V=Central Venous ; 24D=Dialysis ; 24E=ECMO Cannulae ; 24P=Pulmonary Artery ; 24fA=femoral Arterial ; 24fV=femoral Venous ; 24fD=femoral Dialysis) ; 25=Cardiac Devices ; 26=Wound or Dressing]

**Cardiovascular/Hemodynamic stability - [27** = Hypotension ( *change* of MAP<55 or if medical intervention required) ; **28**=Hypertension ( *change* of MAP>140 or if medical intervention required) ; **29**=Desaturation ( *change* of SpO2<85% or if medical intervention required) ; **30**=Cardiac Arrest ; **31**=New Arrhythmia   (excludes sinus tachycardia,PVCs, non worsening pre-existing arrhythmia)] **33**=Other Event(describe in blank text field) ; **35**=Death; **14** = FALLS (do *not* use "R" to denoted intervention) (A) assisted or (U) Unassisted by staff; Related Injury: i. None, ii. Minor, iii. Moderate, iv. Major or v.Death

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Page from the Operations Manual for Completing the Physical Therapy and Occupational Therapy Log Book. This provides instructions to code the patient days without therapy treatment in the PT and OT log books.

## Completing the Physical Therapy and Occupational Therapy Log Book

Each week the PT and OT Logbooks must be completed. To do this, all patients in the ICU that week must be logged and they must be given a code for each full day they were present and did not receive PT or OT Treatment.

The PT/OT Logbooks should be completed using the following steps:

1. All patients present in the ICU that week should be listed in the logbook with both their name and MRN. They should be listed regardless of their length of stay and whether or not they received PT/OT. Ensure that all patients present, admitted, or readmitted during that week are included.
    - For each day of the week, check the ICU census for patients that were admitted to the unit that day. Add their name and MRN to the PT/OT Logbooks.
    - Patients who are discharged from the ICU and then readmitted that same week should have their information for that week in the same line in the logbook.
    - If the patient is discharged from the ICU and hospital then readmitted to the ICU that week, the patient should have a new line for their new admit.
    - For patients that are discharged from the ICU during the week, be sure to record the date and time of discharge, in addition to their discharge location, in the comments column
2. For each patient listed in the logbook, use EPIC (or other specific EHR) to determine when the patient was in the ICU that week. Put an X in each day that patient was not in the ICU. Additionally the following days can be excluded:
    - Any stay in the ICU for <24hrs
    - Days a patient was admitted to the ICU after 14:00
    - Days a patient left the ICU prior to 8:00
3. Using the patient's EPIC record, review all treatments they received that week and verify that the ones listed are correct and that there are no missing treatments. Additionally, ensure that all treatments are filled out fully and correctly.
4. On days where a patient was in the ICU but did not receive treatment, you must consult the patients' EMR to determine reason for not receiving treatment on that day. First, determine whether or not the patient had PT or OT orders for that day.

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Page from the Documentation System for Physiological Changes coding system. This is used to document any potential safety issues during PT or OT therapy sessions.

## Documentation System for Physiological Changes during Therapy Treatment Session

### Code 0 – No Event during a Treatment Session
### Codes 1-15 are used for PT Coding
### Codes 21-35 are used for OT coding
### Removal, Dislodgement, Disruption or Dysfunction

*If any removal, dislodgement, disruption or dysfunction occurred as a result of a fall, do NOT use the coding below; instead, code the event as part of the Fall-related coding (see #14)*

Add "**R**" at the end of Code if there was an unplanned treatment or intervention necessitated by the safety event

| Code | Critical Event | Critical Event Definition |
|---|---|---|
| 1/21 | Airway | Use letters below with Code #1 to describe the type of artificial airway |
| E | *Endotracheal tube* | *e.g. 1E= dislodgement of an endotracheal tube which did <u>not</u> require any intervention* |
| T | *Tracheostomy* | |
| 2/22 | Feeding Tube | Use letters below with Code #2 to describe location of feeding tube |
| N | *Nasal* | tube from nose to stomach or small bowel (e.g. gastric or post-pyloric tube) |
| O | *Oral* | tube from mouth to stomach or small bowel (e.g. gastric or post-pyloric tube) |
| P | *Percutaneous* | tube from abdominal wall to stomach or small bowel (e.g. PEG, PEJ) |
| | | *e.g. 2PR = removal of a percutaneous feeding tube which required replacement* |
| 3/23 | Chest Tube | includes all tubes in pleural space (e.g. chest tubes, pig-tail catheters) |
| 4/24 | Vascular Access | **Use letters below with Code #4 to describe location of catheter** |
| A | *Arterial* | includes radial, pedal and other locations; excludes femoral and pulmonary artery (coded separately) |
| V | *Central Venous* | includes PICC (i.e. peripherally inserted central venous catheter); excludes peripheral intravenous (not coded) & femoral (coded separately) |
| D | *Dialysis* | includes tunneled and non-tunneled catheter in any location except femoral (coded separately); excludes dialysis fistula or graft |
| E | *ECMO Cannulae* | includes venous and arterial cannulae |
| P | *Pulmonary Artery* | pulmonary artery catheter or Swan-Ganz catheter |
| fA | *femoral Arterial* | catheter in femoral artery, not for dialysis |
| fV | *femoral Venous* | catheter in femoral vein, not for dialysis |
| fD | *femoral Dialysis* | includes tunneled and non-tunneled femoral catheter for dialysis; excludes dialysis fistula or graft |
| | | *e.g. 4V = removal of a subclavian central venous catheter that did <u>not</u> require replacement* |
| | | *e.g. 4fAR= removal of a femoral arterial line that required replacement* |
| 5/25 | Cardiac Devices | includes temporary pace-maker wire, ventricular assist device, and intra-aortic balloon pump |
| 6/26 | Wound or Dressing | includes disruption or *new* bleeding at site of skin graft, tissue flap, temporary surgical closure, wound vacuum, and other dressing (e.g., dressing at insertion site of a catheter, tube or drain) |

Page from the RASS and CAM-ICU Quality Assurance Provider Training Manual, used to train and evaluate staff undergoing QA review for the validated and recommended sedation RASS and CAM-ICU instruments.

## RASS and CAM-ICU Quality Assurance Provider Training Manual

The following is a Question and Answer format for Quality Assurance (QA) of RASS and CAM-ICU. The supervising research staff should ask the questions and get a response from the person undergoing the QA review – both the supervisor and the person undergoing QA review **can** refer to the CAM-ICU pocket card in doing this exercise.

**I.    Richmond Agitation Sedation Scale (RASS)**

    a.  What score would you give a patient that has been in a persistent vegetative state meaning:
- Eyes open and rolls about
- Eyes don't move to your voice and no eye contact
- Normal wake sleep cycle

**Answer: -3**

    b.  What steps, in order, do you undertake in assessing RASS
**Answer:**
- Observe patient, without any form of verbal or physical contact.
- If patient is not agitated AND is not alert or calm, give a verbal stimulation like calling their name and asking how they are today
- If no response to verbal stimulation, do the physical stimulation (sternal rub)

**II.    Confusion Assessment Method for the ICU (CAM-ICU)**

**Question regarding Overall Scoring:**
    a.  After assessing all 4 features of CAM-ICU, how do you combine the 4 features to determine if the patient is CAM-ICU positive?
**Answer**: Delirious only if:
        **i.**  Positive for both features 1 and 2, **and**
        ii.  Positive for either features 3 or 4, or both

    b.  How would you score a patient's CAM-ICU if RASS -4 or -5
**Answer:** select "unable to assess"

**Feature 1 questions**

    a.  How would you score a patient's overall CAM-ICU if they were **negative** for feature 1
**Answer:** subject is **not delirious**, since patient has to be positive for feature 1 to be delirious
    b.  If you examine a patient and the RASS score is zero (0), how would you score feature 1
**Answer:** You need to find out the answer to question: "*did the patient's mental status fluctuate during the past 24 hrs*" (option B on feature 1)

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Page from RASS and CAM-ICU Quality Assurance Provider Training Excel, for documenting the Quality Assurance review process.

# RASS and CAM-ICU Quality Assurance Provider Training Excel

| Date: | | Trainee's name: | | | | | | Trainer's name: | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|

| No. | Bed # | Trainee | | | | | | Trainer | | | Pass? (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RASS | CAM-F1 | CAM-F2 | CAM-F3 | CAM-F4 | CAM-ICU | RASS | CAM-ICU | Comments | |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
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| 20 | | | | | | | | | | | |

| Participant passed the quiz? | YES ☐ | NO ☐ |
|---|---|---|

Overall comments:

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Page from the Instructions for Completing CAM-ICU Quality Assurance Calculator. This guide gives directions for inputting CAM-ICU documentation error information into the CAM-ICU Quality Assurance Calculator Excel.

## Instructions for Completing CAM-ICU Quality Assurance Calculator

1. Go to the "FORMULAS" tab on the top of the excel sheet and look to extreme right side for "Calculation Options", which needs to be changed to "MANUAL"

2. Now, move on to the **Raw Data** tab on lower border of your excel sheet

| Summary | JULY | **Raw Data** | RNerrors | ⊕ |

   i. Copy and paste following fields from the data you have collected
      - A. RN
      - B. Date
      - C. PM
      - D. AM
      - E. Type of Error

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | RN | Date | PM | AM | Type of error |

   ii. Next, go to cells F3 (column F and row 3= F3) and G3, and drag the formulae in the 3rd cell of F and G to the last line of the data entered ( RN, date, PM, AM, type of error)

| | F | G |
|---|---|---|
| 1 | MONTH ▼ | AM/PM ▼ |
| 2 | Jul | AM |

3. Move on to the lower border of excel sheet to find tab labelled Month

| Summary | **Month** | Raw Data | RNerrors | ⊕ |
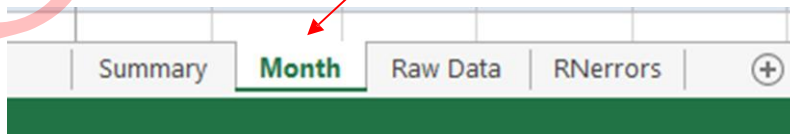
   i. Now, starting at Row 27, fill in the following fields (yellow columns are the only one that needs to be entered, rest all would pop-up automatically after finishing the last step number 6)

      A. Date

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Page from the CAM-ICU Quality Assurance Excel Calculator RN Error Report. This is output from the CAM-ICU Quality Assurance Calculator Excel. It provides information on the number of CAM-ICU documentation errors, broken down by RN.

## CAM-ICU Quality Assurance Calculator - RN Error Report

| RN NAME | Total # of Errors | Scoring error | Missed assessme | Incomplete assessme | F-1 error | F-4 error | Coma-CAM done | Total Errors for Mont |
|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
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| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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Page from the CAM-ICU Quality Assurance Excel Calculator Summary Report. This is summary output from the CAM-ICU Quality Assurance Calculator Excel. It provides information on the number of CAM-ICU documentation errors in each given month.

# CAM-ICU Quality Assurance Calculator - Summary Report

| CAM-ICU Error Report | January '17 | | February '17 | | March '17 | |
|---|---|---|---|---|---|---|
| Total no. of assessment | | | | | | |
| Total no. of errors (% of total errors) | | | | | | |
| | | | | | | |
| | | | | | | |
| Total no. of  assessment | | | | | | |
| Total no. of errors, (% of total assmts) | | | | | | |
| TYPES OF ERRORS | | | | | | |
| Scoring error | | | | | | |
| Missed assessment | | | | | | |
| Incomplete assessment | | | | | | |
| Feature-1 error | | | | | | |
| Feature-3 error | | | | | | |
| Feature-4 error | | | | | | |
| RASS -4 or -5; and CAM done | | | | | | |
| | | | | | | |
| sum of no. of errors | | | | | | |

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