Supplemental Digital Content 1, The Trauma Patient Transitions: Administrator Survey

INSTRUCTIONS:

- The transition you should think about when completing this survey is when a trauma patient transitions from the ICU to non-ICU care areas within your hospital.
- Use the postage-paid envelope provided to return the completed survey.
- **Any** information you can provide will be important.
- Email Jason.A.Saucier@Vanderbilt.edu to request another paper survey if needed.
- You may use our electronic format via: https://redcap.link/42uj6s0i.
- Please indicate your survey number in the electronic format: Your Survey #: _____

Definitions of Terms

Registered Nurse (RN): a graduate trained nurse who is licensed by state authority after qualifying for registration.

APRN—Nurse Practitioner (NP): a registered nurse with advanced clinical training at the masters or doctoral level who is licensed by state authority after qualifying or registration.

Physician Assistant (PA): a licensed professional who practices medicine under the supervision of a licensed physician.

Physician (MD/DO): a doctoral prepared medical professional licensed to practice medicine under the laws of the state.

Intensivist: Is a physician who specializes in the care of critically ill patients

ICU: Adult intensive care units are critical care units resourced and dedicated to treated life-threatening conditions, often with specialty equipment and lower nurse to patient ratios.

Non-intensive, non-stepdown unit: Adult care units with a reduction in monitoring and increased patient to RN ratio; patients on these units do not require the specialized treatment, equipment, and staff ratios of the critical care units.

Senior management: Pertains to hospital administrators directly above the unit leadership team and are likely not part of the day-to-day operations of the unit.

FTE: Full-Time Equivalent; One (1) full time person equal 1 FTE. Two (2) part-time persons equal 1 FTE regardless of the number of hours employed.

1. Does your hospital have a designated trauma ICU? (Check one)
   ☐ Yes ☐ *No
       *If no, please skip to **# 34**

2. Is your trauma center verified? (Check ALL that apply)
   ☐ Yes, by state designation
   ☐ Yes, by ACS
   ☐ No
   ☐ Do not know

3. Does the trauma unit include ICU and step-down beds?   *Yes ☐   No ☐
       *If yes, approximately what percentage of these beds are dedicated to ICU patients? _____%

4. When patients are ready to transfer out of the trauma ICU, do 100% of these patients transition to a stepdown unit? (Check one)
   ☐ Yes, every ICU patient must go to a stepdown after the ICU
   ☐ No, at least some trauma patients may go to other types of units in the hospital (e.g., floor/ward)

Tell us about the transition processes in the Trauma ICU…

5. Does the trauma ICU have a guideline describing the patient characteristics that qualify for transition readiness? (Check **ALL** that apply)

☐ Yes, by policy/guideline ☐ Yes, computerized ☐ None

6. Do the providers at your institution utilize a standardize hand-off as patients transition from the trauma ICU? (An example is the I-PASS handoff tool) (Check one)

☐ *Yes ☐ No

6a. *If Yes, please describe it by name: _____

7. How are <u>patients</u> *and* <u>families</u> prepared for their new floor prior to the transition?

(Check **ALL** that apply)	Patients		Families	
Education about the floor environment…………………………..	☐Yes	☐No	☐Yes	☐No
Education about the floor staff expectations…………………..	☐Yes	☐No	☐Yes	☐No
Education about the transfer process…………………………..	☐Yes	☐No	☐Yes	☐No
An opportunity to pre-view the floor before transfer………….	☐Yes	☐No	☐Yes	☐No
A visit from a floor representative……………………………..	☐Yes	☐No	☐Yes	☐No

8. Patient transfer handoffs are conveyed between nurses *primarily* by (Check one)

☐ Tape recordings
☐ By phone call communication
☐ A review of patient information such as the care plan without face-to-face report
☐ Face-to-face report in nurses' station or other location such as break room
☐ Walking rounds/report at which they stop in the patient's room or bedside

9. How often do patient transitions occur during a nursing shift change? (Check one)

☐ Always
☐ Frequently
☐ Sometimes
☐ Rarely
☐ Never

Tell us about the resources that support Trauma ICU transition work…

10. What types of **computer software programs** are utilized during Trauma ICU transitions? (Check **ALL** that apply)

☐ Electronic bed flow programs
☐ Software text platforms
☐ Patient physiological readiness programs
☐ Decision support software
☐ Identification of the receiving team prior to transfer
☐ Other:_____

11. Do all unit RNs use:

	Yes	No
Phones/2-way mobile communications……………….………	☐	☐
Vibrating pager/other communication device……………….…	☐	☐

12. Does your institution use an electronic medical record (EMR)?

☐ *Yes. ☐ No

*If yes, indicate which of the following EMR functions are available to staff:

	*Yes	No	*If yes, is it used for transition work?	
			Yes	No
Physician order entry…………………………	☐	☐	☐	☐
Admission/transfer functions………………..	☐	☐	☐	☐
In-and-out of hospital records……………….	☐	☐	☐	☐
Primary care office records………………….	☐	☐	☐	☐
Skilled nursing facility records………………	☐	☐	☐	☐

12b. Does the trauma ICU have a transfer form(s) unique to their unit?

☐ Yes ☐ No

12c. If yes, describe: _____

13. Do you have a standardized method on which your nurse staffing budget is based?

☐ Yes ☐ No ☐ Do not know

13a. If yes, describe the system: _____

14. What is the trauma ICU *budgeted* occupancy for last month? (#_____patients)

15. What was the *actual* trauma ICU occupancy for last month? (#_____patients)

16. Which of the following acuity measures is (are) used to characterize patients? (Check **ALL** the apply)

APACHE……. ☐
TSI…………… ☐
TRISS……….. ☐
SARS………… ☐
CMI…………. ☐
SOFA……….. ☐
Other………… ☐ (Specify: _____)

17. Approximately what percentage of your population is greater than 65 years of age?

_____% > 65 years of age

18. Approximately, what percent of the trauma ICU patient population identifies as:

% ____ American Indian, Alaskan Native
____ Asian
____ Black, African-American
____ Native Hawaiian or Other Pacific Islander
____ White
____ More than one of these
Total 100%

19. Approximately what percent of the trauma unit's population is Hispanic/Latino/Latina?

_____**%** Hispanic or Latino

Tell us about the provider role and human resources in the Trauma ICU…

20. Which statement best describes the <u>physician</u> model on the trauma ICU? (Check one)
    - ☐ Only intensivist manage patients (**closed model**)
    - ☐ Some patients are managed by intensivist(s) and some are managed by attending physicians (**simple mixed model**)
    - ☐ Patients are managed jointly by an intensivist and the attending physician with defined roles (**semi-closed model**)
    - ☐ Some patients are managed by an intensivist, some are managed by attending physicians, and some are jointly managed by both intensivists and attending physicians (**matrix mixed model**)
    - ☐ There are no intensivists, attending physicians manage their own patients (**open unit**)

21. In your trauma ICU, what physician role can write a transfer order? (Check **ALL** that apply)
    - ☐ First-year resident
    - ☐ Resident
    - ☐ Fellow
    - ☐ Attending

22. In your trauma ICU, what *physician* level is <u>**most**</u> responsible for providing elements of the transition process during a patient transfer? (Check one)
    - ☐ First-year resident
    - ☐ Resident
    - ☐ Fellow
    - ☐ Attending

23. Who is <u>**primarily**</u> tasked with the ICU provider-to-provider hand off? (Check **ALL** that apply)
    - ☐ APRN- Nurse Practitioner
    - ☐ Physician Assistant
    - ☐ Attending Physician
    - ☐ Resident/Fellow MD/DO
    - ☐ Other: please specify_____

24. Approximately how many residents were assigned to the trauma ICU last month? (#_____)

25. In a *one-month period*, approximately how many <u>intensivists</u> care for patients on this unit? (#_____)

26. Does this unit have a physician director?   *Yes ☐ No ☐ *If Yes, more than one? Yes ☐ No ☐

27. Do the following kinds of providers practice in the Trauma ICU?
    (Please check one, if yes, specify approximate #)

	*<u>Yes</u> (if *yes, estimate #)	<u>No</u>
Nurse practitioners employed by hospital…………	☐ (#____)…………………	☐
Nurse practitioners employed by physician group……	☐ (#____)…………………	☐
Physician assistants employed by hospital…………	☐ (#____)…………………	☐
Physician assistants employed by physician group…..	☐ (#____)…………………	☐

28. What is the approximate typical provider-to-patient ratio during the **day-time**?
(Check one per provider-type where *Provider : # of Patients*)

Provider Type	1:1or 2:1	1:2	1:3	1:4	1:5	1:6	>6
RNs	☐	☐	☐	☐	☐	☐	☐

	1:5 or less	1:6-8	1:9-11	1:12-14	1:15-18	1:19-21	>21	Not Applicable
APRN- Nurse Practitioner	☐	☐	☐	☐	☐	☐	☐	☐
Physician Assistant	☐	☐	☐	☐	☐	☐	☐	☐
Intensivist (MD/DO)	☐	☐	☐	☐	☐	☐	☐	☐
Attending Physician	☐	☐	☐	☐	☐	☐	☐	☐

29. In the last month, approximately how often did the unit use temporary nursing agency or float pool nurses? (Check one)
- ☐ 0% of shifts
- ☐ > 0% and equal or less than 10% of shifts
- ☐ > 10% and equal or less than 20% of shifts
- ☐ > 20% and equal or less than 50% of shifts
- ☐ > 50% of shifts

30. In the trauma ICU, nursing shifts are scheduled to overlap…. (Check one)

☐ not at all
If not at all, check here if some staff overlap at least some shifts to update incoming nurses: ___
☐ 1 - 15 minutes
☐ 16 – 29 minutes
☐ 30 minutes
☐ 31 – 59 minutes
☐ 60 minutes

Besides the overlap, are some RNs assigned to overlap shifts by > 1 hour (e.g. an RN who works 1300-1700 when most RNs change shift at 1500) ☐ Yes ☐ No

31. Approximately what percent of trauma ICU RNs have a bachelors or higher nursing degree?: **%____**
31a. In the last *two years*, have there been educational initiatives associated with *transitions*?
(Check **ALL** that apply)

Personnel	Yes	No	Unit based	Hospital based	Outside Agency Provided	Required? Yes	No
Unit leadership	☐	☐	☐	☐	☐	☐	☐
Staff RN	☐	☐	☐	☐	☐	☐	☐
Physician/Intensivist	☐	☐	☐	☐	☐	☐	☐
APRN (NP)/PA	☐	☐	☐	☐	☐	☐	☐

32. At your institution, what *people* have an essential role in the transfer process of trauma patients? (Select **ALL** that apply)
- ☐ Network of nursing leaders
- ☐ Non-clinical bed management roles
- ☐ Nurse Practitioner/Physician Assistant roles
- ☐ Physicians

33. Is there a role in your institution dedicated to facilitating overall bed management resources? (e.g., nurse liaisons, clinical resource coordinators, etc.) (Check one)
☐ Yes ☐ No

Tell us about your organization…

34. Senior management has a good idea of the kinds of mistakes that occur in this facility.

Check one				
Always	Frequently	Sometimes	Rarely	Never
☐	☐	☐	☐	☐

35. The trauma ICU follows a specific process to review performance against defined metrics.

Check one				
Always	Frequently	Sometimes	Rarely	Never
☐	☐	☐	☐	☐

36. The culture of this organization makes it easy to learn from errors.

Check one				
Always	Frequently	Sometimes	Rarely	Never
☐	☐	☐	☐	☐

37. Good communication flow exists up the chain of command regarding patient safety issues.

Check one				
Always	Frequently	Sometimes	Rarely	Never
☐	☐	☐	☐	☐

38. Patient safety decisions are made at the proper level by the most qualified people.

Check one				
Always	Frequently	Sometimes	Rarely	Never
☐	☐	☐	☐	☐

This is the end of the survey, thank you for your time.
Please use the postage-paid envelope provided to return the completed survey:

Jason Saucier
1229 Chestnut St.
Philadelphia, PA 19107
FRNT 1 PMB #461

or fill out the electronic version: https://redcap.link/42uj6s0i