Surveying the State of Performance Improvement Staffing in Trauma Centers

Leigh Pack, BSN,RN; Laura Wolf, MA, BSN, RN, CEN, TCRN

Northeast Georgia Health System

Background

The American College of Surgeons (ACS) has included a new requirement in their 2022 revision of *Resources for the Optimal Care of the Injured Patient*. Trauma centers seeking verification or re-verification will soon be asked to demonstrate they employ dedicated Performance Improvement (PI) personnel. The new guidelines indicate that "in all trauma centers, there must be at least 0.5 FTE dedicated performance improvement personnel when the annual volume of registry patients exceeds 500 patients[.][W]hen the annual volume exceeds 1,000 registry patient entries, the trauma center must have at least 1 [full time equivalent] FTE PI personnel."

Purpose

Many programs have clinical or administrative personnel who are tasked with this work. The titles by which many of these providers are labeled vary, and for most, their PI duties are not their only responsibilities. For trauma centers seeking to better define or implement a dedicated PI role, it is helpful to identify common characteristics among personnel currently completing PI activities at other facilities, including their defined position in the trauma program, responsibilities, and preferred experience and education level.

Team Members

Leigh Pack, BSN, RN, Trauma Research Coordinator

Laura Wolf, MA, BSN, RN, CEN, TCRN, Trauma Performance Improvement Coordinator

The authors would like to acknowledge the Society of Trauma Nurses for allowing us to use their open forum for the implementation of this survey, our Trauma Program Director Jesse Gibson for supporting this work, and trauma center leaders in the state of Georgia for their continued dedication to optimal trauma care.

Study Design

A questionnaire was developed and administered electronically with the goal of better understanding how PI tasks are currently distributed among personnel at trauma centers of varying levels of ACS verification and state designation. The survey link was posted in the Open Forum section of the Society for Trauma Nurses' website; it was also emailed to trauma program leaders in a state with a large number of trauma centers of all levels and robust participation in regional, state, and Trauma Quality Improvement Program PI activities.

Methods

Literature detailing trauma performance improvement practices was reviewed to identify appropriate survey questions related to the role and job duties, and these were vetted by experienced PI personnel and team leaders. Results were collected anonymously via the survey site, and no participant or facility-specific data points were requested that could be used to identify the survey participants. For all of the multiple-choice questions, a comment box was included to allow participants to most accurately describe the status of their PI program and personnel. The survey was posted for one month, then results were tabulated. A review of the survey results was then performed by the survey administrator.

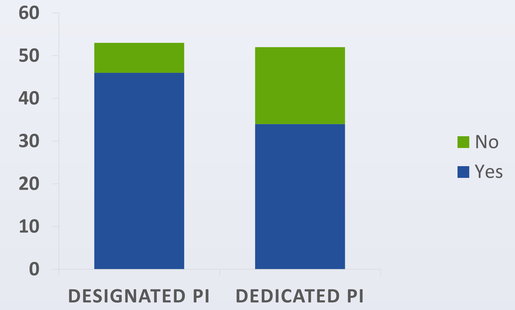
53 responses to the survey were obtained; respondents from Level 1 centers had the greatest number of responses at 18, followed by a somewhat equal distribution of Level 2 centers at 15 and level 3 centers at 14. Of the responding centers, 36 entered more than 1000 patients in their registry each year.

Trauma Center Level	
1	18
2	15
3	14
4	4
N/A	2

Trauma Registry Volume	
500-1000	15
1001-2000	16
2001-3000	7
> 3000	13
Unknown	1

Results

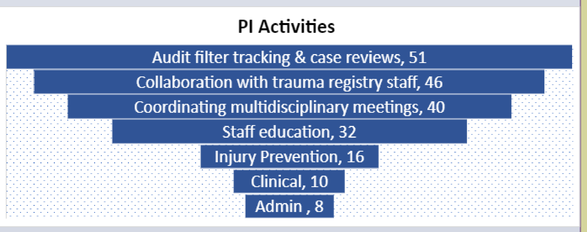
While 87% of centers indicated that they have a designated employee who performs PI activities as part of their work, 34% stated that they are not dedicated solely to PI.



Eleven respondents reported that their Trauma Program Manager performs these functions and six employed a trauma coordinator with additional job duties.

Responsibilities

Audit filter tracking and case reviews were almost unanimously identified as primary PI responsibilities. Collaboration with trauma registry staff in data abstraction, analysis, validation, and coordination of multidisciplinary meetings were also selected by most respondents. Many reported that PI personnel performed staff education and developed guidelines, pathways, and order sets.



Experience

Emergency department experience, certification, and trauma-specific experience scored highest in the selection criteria. Individual survey respondents added experience in quality, PI, or risk management, as well as data analysis and nursing leadership activities to their criteria.

Limitations

The results of this survey should in no way be interpreted to reflect a consensus among trauma programs regarding the most effective and efficient ways of staffing for PI needs. This was a small, qualitative study designed to measure the state of current PI operations. Because survey results were collected anonymously, the surveyor is unable to validate the accuracy of responses provided or correlate responses to the relative success of each trauma program's PI program. Future studies may be beneficial to better measure the role and responsibilities of PI personnel once clarification from the ACS regarding their definition for this new requirement is provided.

Discussion

It is important to consider both the needs of the trauma program, as well as training and experience, in hiring for a PI position. Improving patient care requires knowledge of best practices from prehospital to post-discharge, as well as an understanding of data abstraction and validation, team dynamics, practical patient considerations, and facility-specific guidelines, protocols, and pathways. Thus, the PI role and responsibilities overlap with that of the Trauma Program Manager, registry staff, and other trauma-specific and hospital positions. While it would be impossible to generalize FTE and personnel needs based on such a small sample, the results of this survey suggest a need for further definition of ACS requirements and clarification of the job description in many trauma programs.

References

1. *Resources for Optimal Care of the Injured Patient*. (2022). American College of Surgeons. (2022).
2. American College of Surgeons, Committee on Trauma. https://www.facs.org/quality-programs/trauma/quality/verification-review-and-consultation-program/standards/
3. Gosnell, J., & Slivinski, A. (2021). The Building Blocks to a Highly Effective Trauma Program. *Journal of Trauma Nursing*, *28*(2), 126-134. https://doi.org/10.1097/jtn.0000000000000570
4. Mikhail, J. N. (2021). Survey Research: A Reporting Guideline for the Journal of Trauma Nursing. *Journal of Trauma Nursing*, *28*(4), 215–218. https://doi.org/10.1097/jtn.0000000000000598
5. Polovitch, S., Muertos, K., Burns, A., Czerwinski, A., Flemmer, K., & Rabon, S. (2019). Trauma Nurse Leads in a Level I Trauma Center: Roles, Responsibilities, and Trauma Performance Improvement Outcomes. *Journal of Trauma Nursing*, *26*(2), 99–103. https://doi.org/10.1097/jtn.0000000000000431