

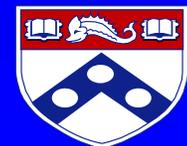
Examining the Role of IRR in Trauma Performance Improvement as a New Best Practice

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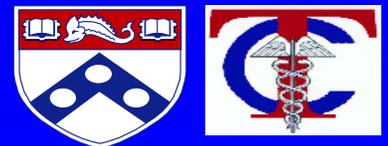
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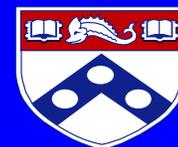


No Disclosures or Conflicts of Interest



Background

- Since inception, there have been several updates to the Pennsylvania Outcomes Performance Improvement Measurement System (POPIMS) and to the PA definitions for audit filters and occurrences.
- The Pennsylvania Trauma Systems Foundation (PTSF) mandates trauma registrars participate in Inter-rater reliability (IRR) by re-abstracting a percentage of PTOS cases in an effort to monitor and improve quality data abstraction in-line with PTSF/NTDB and TQIP definitions.
- PICs have no such standard.

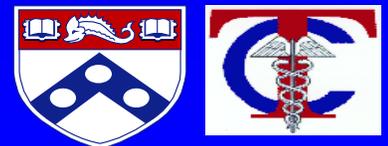


AIM

The aim of this study was to define a best practice and a data quality re-abstraction tool for PICs.

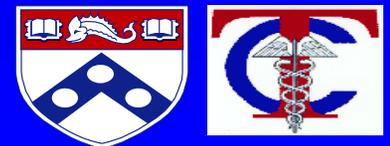
Hypothesis

We hypothesize that the implementation of a formalized PI IRR process would identify areas for improvement.



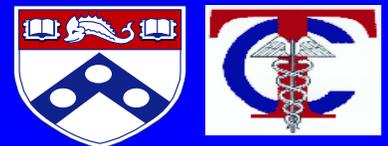
Design

- A standardized REDCap data abstraction tool was developed
- Focused on PIC's daily process
 - ♦ Evaluating clinical care
 - ♦ Identifying issues
 - ♦ Assigning appropriate providers
 - ♦ Classifying errors
 - ♦ Articulating action oriented loop closure and meeting discussion
- An IRB was obtained



Setting

Multicenter, retrospective, quality improvement study.



Purpose

- Define inconsistencies in PIC's chart reviews

Tracked Events: Please complete this section by examining the top 5 most important events that were identified by the Trauma Center's PIC.

Did the Registry/ PIC identify any issues in this case? Yes No

Issue Number One

I agree with the Domain chosen for issue one. Yes No N/A

I would have chosen the following, for this domain, instead.
(Check all that apply, please check factor)

Different Setting/Location
 Different Service/Staff
 Different Phase of Care
 Different Target/Goal of Care

I agree with the impact chosen for this issue. Yes No N/A

I agree with the determination of this issue Yes No N/A

I would have selected the following determination instead

Unanticipated Event with Opportunity for Improvement
 Anticipated Event with Opportunity for Improvement
 Event without Opportunity for Improvement
 Undetermined Opportunity for Improvement
 Not applicable
 Unknown Event Outcome

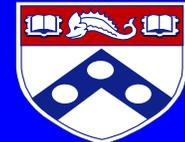
I agree with the acceptability for this issue. Yes No N/A

I would have selected the following acceptability instead

Acceptable
 Acceptable with reservations
 Unacceptable
 Not applicable
 Unknown

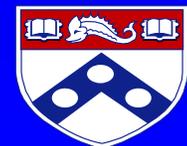
Was there supporting documentation under the issue or meeting section/s to support the categorization? Yes No N/A

Was the issue correctly assigned to an individual or provider? Yes No N/A



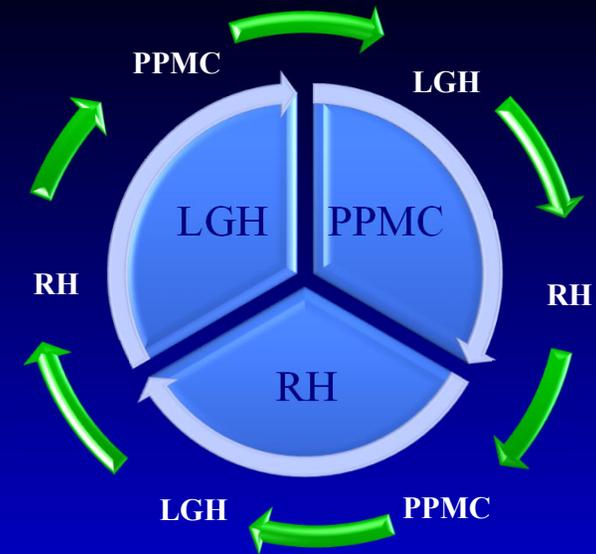
Sample

- PTOS eligible adults (≥ 18)
- Injury Severity Score (ISS) ≥ 16
- ICU LOS ≥ 5 days
- HLOS ≥ 10 days
- Any MOI
- ≥ 4 events referred for tertiary review.
- The study period ranged from 1/1/16 to 12/31/18.



Methods

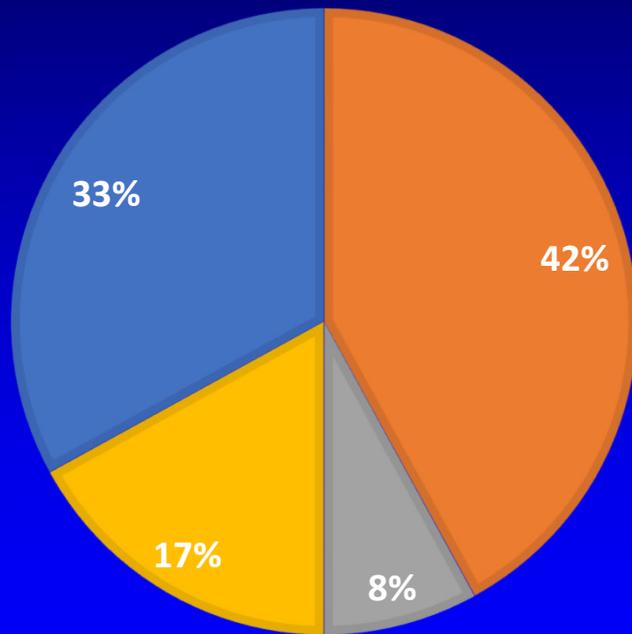
- 3 PA Trauma Centers within the Penn Trauma Network met quarterly.
- Records were selected per IRB criteria.
- EMR and POPIMS records were examined in a round-robin fashion.
- The findings of each review were shared at the end of the meeting for the purpose of knowledge transfer and peer review.



Results: n=23

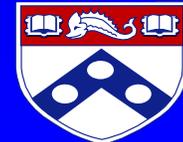
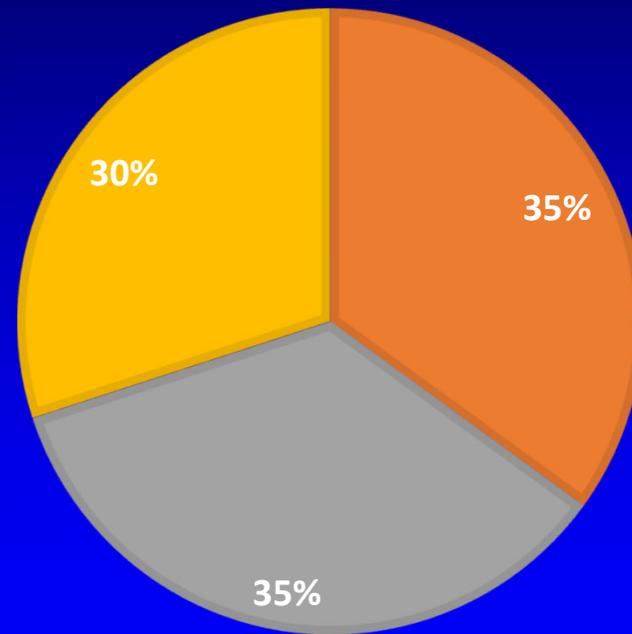
MECHANISM OF INJURY

■ MOI ■ MCC/MVC ■ Fall ■ GSW ■ Other



PERCENTAGE OF CASE REVIEWS BY SITE LOCATION

■ Site ■ Reading ■ LGH ■ PPMC



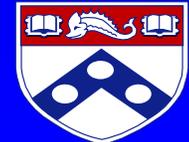
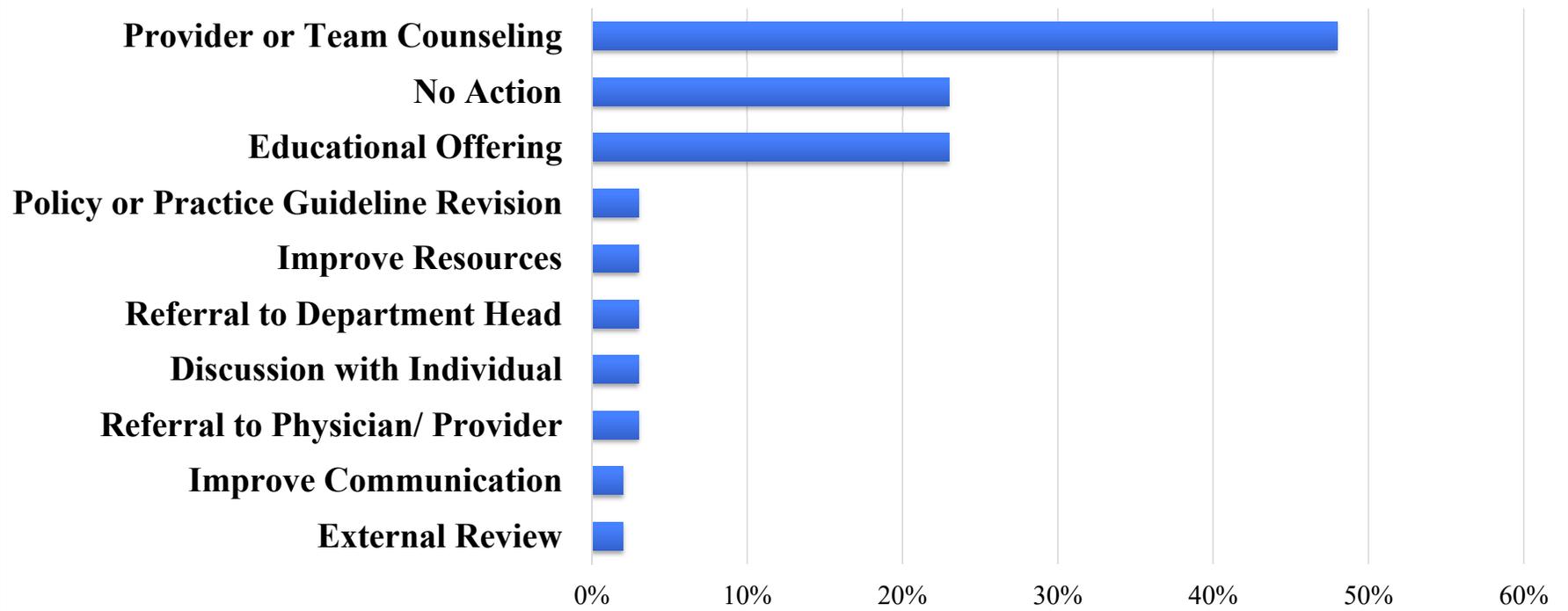
Results

Survey Question	Yes	No	N/A
A clear decision or action was identified and present in the meeting section.	92%	8%	0%
The discussion and critical thinking of the team surrounding the issues was clearly conveyed within the meeting section.	92%	8%	0%
The meeting section clearly defined the next steps in process (closed event, referred action, follow up).	84%	8%	8%
I agree with the Domain chosen for issue one.	90%	8%	2%
I agree with the Impact chosen for this issue.	72%	11%	17%
I agree with the Factors chosen for this issue.	85%	14%	1%
I agree with the Determination of this issue	96%	4%	0%
I agree with the Acceptability for this issue	100%	0%	0%
Was there supporting documentation under the issue or meeting section/s to support the categorization?	94%	6%	0.0%
Was the issue correctly assigned to an individual or provider?	89%	7%	4.0%
The corrective action was (choice=Present and timely, < 3 months)	73%	27%	0%



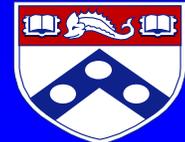
Results

Type of Corrective Action Chosen



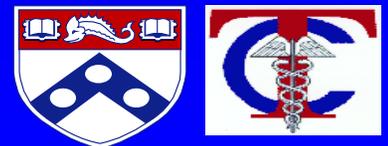
Additional Opportunities for Improvement

- Ensuring the discussion addresses the issue
- Reduce copy/paste
- Ensuring the meeting section addresses loop closure
- Ensure the determination matches the factors & discussion
- Validation of events
 - Did it meet the definition
- Use of provider counseling:
 - How does your center ensure that they have changed practice?



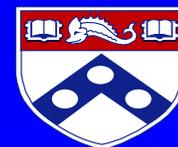
Study Limitations

- Judgement is subjective
- Lack of user-friendly data dictionary for taxonomy



Conclusions

- PI IRR exposed trends which if unaddressed, could potentially leave a trauma center vulnerable during an accreditation review.
- The development of a standardized data collection tool focusing on high priority areas within the POPIMS record is essential to standardizing PI abstraction practices and decreasing variability.
- Ensuring a just culture and the transparency of findings allows the PIC and TPM to focus on and embed practice changes.
- Implementing an IRR process for trauma performance improvement should be considered as a new best practice.
- Collaborating with a network of centers to perform PI IRR could provide an unbiased case review and strengthen finding results.



Questions?



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