



Department of Health
Division of State EMS

STAC PERFORMANCE IMPROVEMENT SUBCOMMITTEE

May 28, 2025 Troy, NY

Mission, Vision and Values



Department
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Mission

To protect and promote health and well-being for all, building on a foundation of health equity.

Vision

New York is a healthy community of thriving individuals and families.

Values

Public Good • Integrity • Innovation • Collaboration • Excellence • Respect • Inclusion

Health

Health is a state of optimal physical, mental and social well-being.

Statement on Health Equity

Health equity is foundational to everything we do to help all people achieve optimal physical, mental and social well-being. Everyone at the Department of Health shares responsibility for achieving health equity and eliminating health disparities.

AGENDA

- Optimizing Performance Improvement (PI) program
- Transforming trauma registry compliance
- Model for academic trauma research/scholarly activities
- Screening (time permitting)
- Whole blood updates (time permitting)

PACKAGING YOUR PERFORMANCE IMPROVEMENT PROGRAM

Eric Cohen
Trauma Program Director
Maimonides Medical Center

Disclosure:

This is the presenter's experience with the reverification process and is reflective of the American College of Surgeons (ACS) verification process, but is not endorsed or representative of the ACS Verification Review Committee

7.3 DOCUMENTED EFFECTIVENESS OF THE PIPS PROGRAM

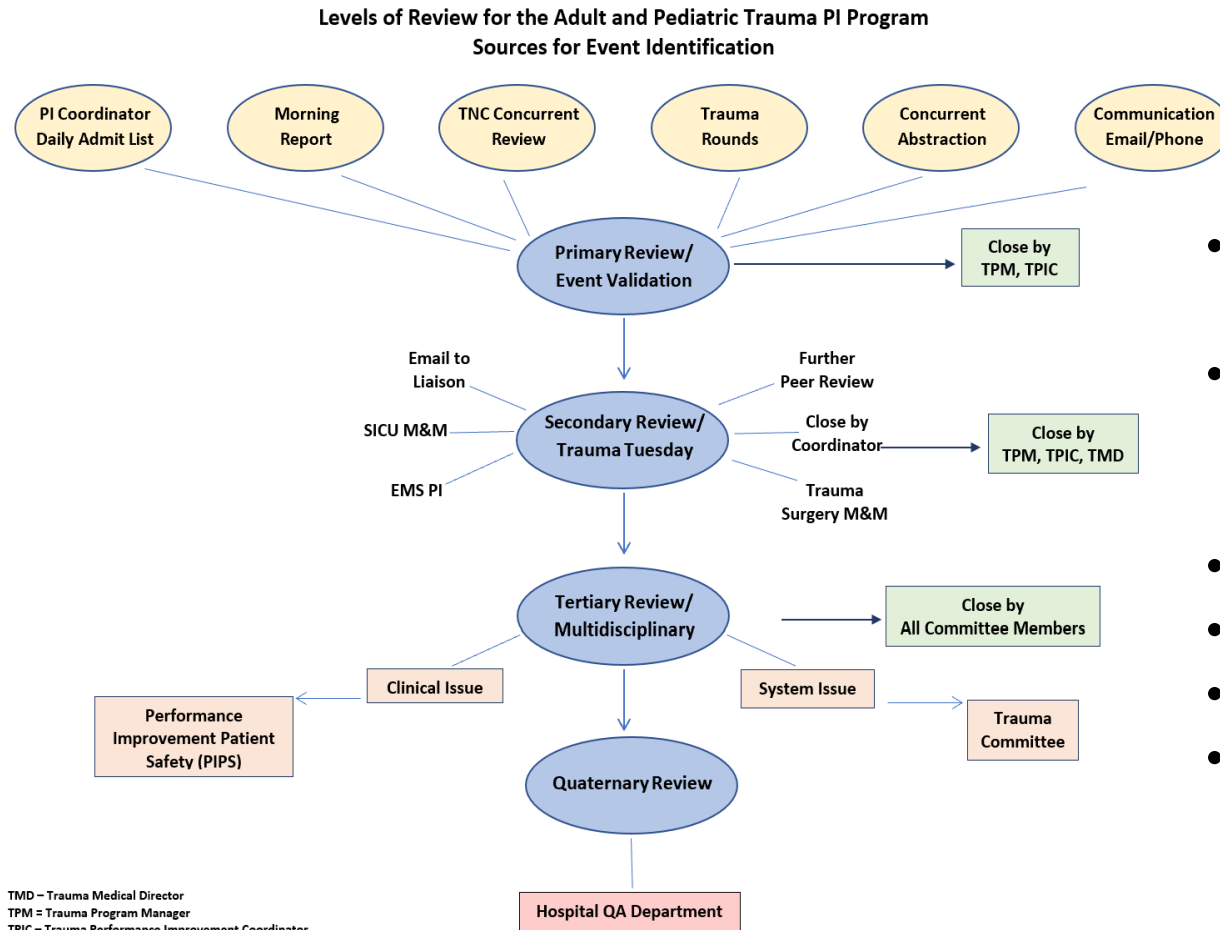
All trauma centers must have documented evidence of event identification; effective use of audit filters; demonstrated loop closure; attempts at corrective actions; and strategies for sustained improvement measured over time.

Measure of Compliance:

PIPS documentation including peer review minutes, loop closure documentation, monitoring of event rates, on-going professional practice evaluation (OPPE), benchmarking reports, or other relevant data to inform and evaluate Performance Improvement

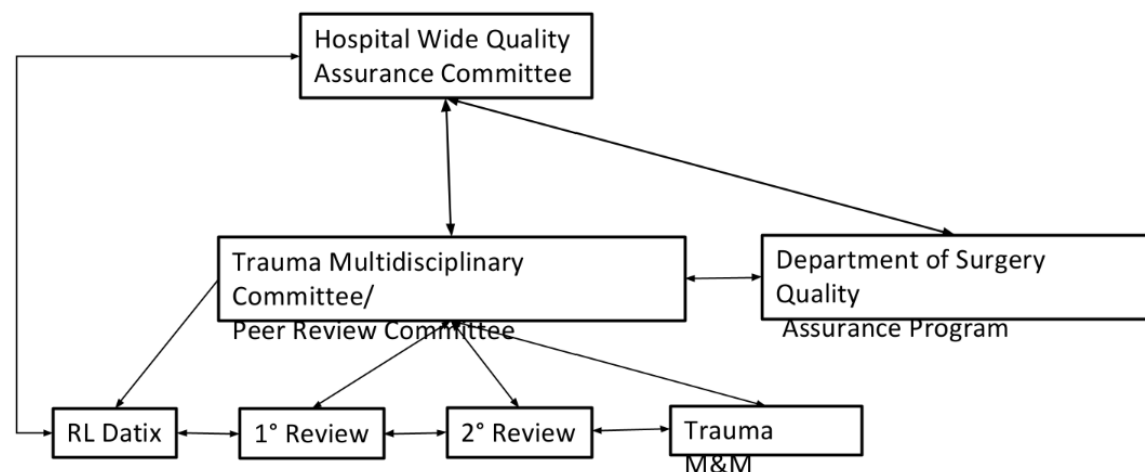
Most frequently cited standard for visits held under the 2022 Standards

WE ALL DO PERFORMANCE IMPROVEMENT

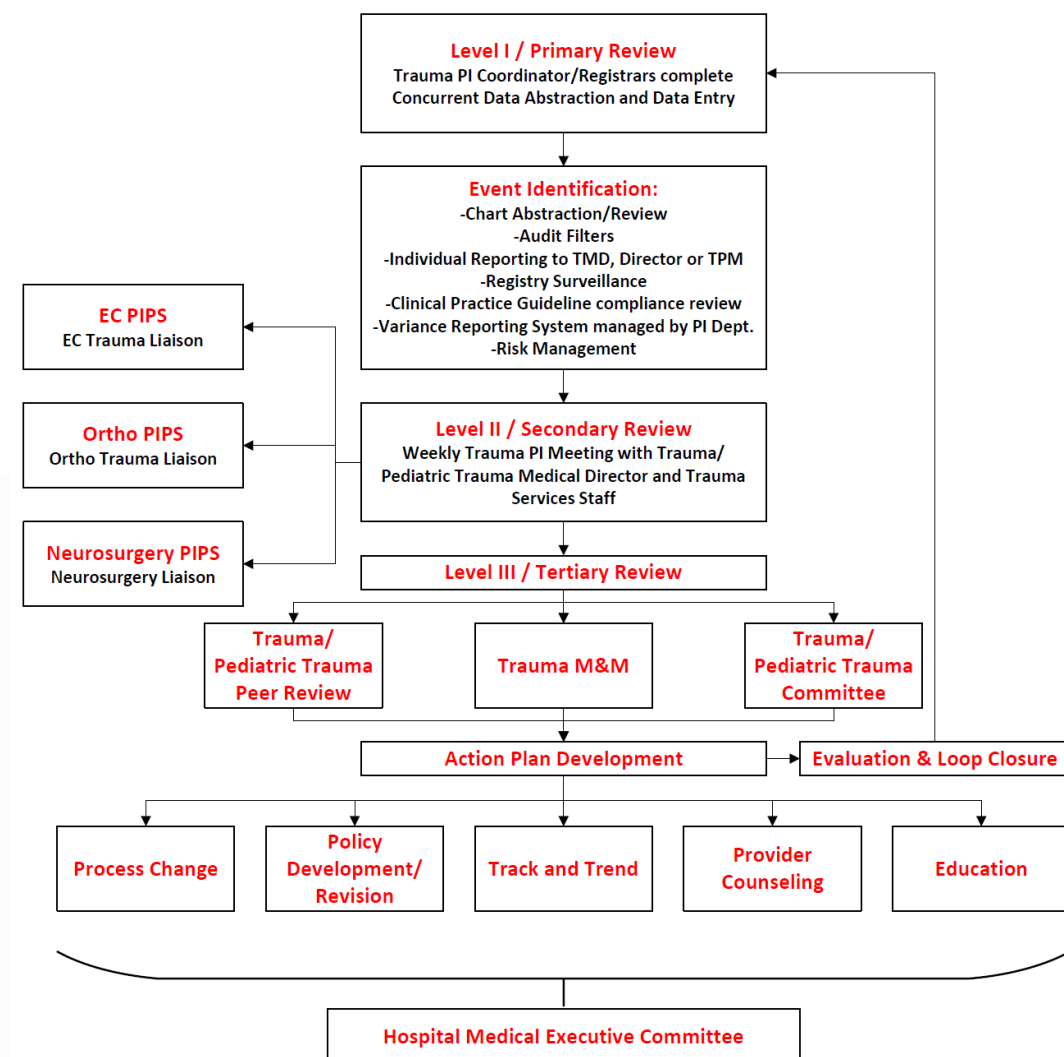
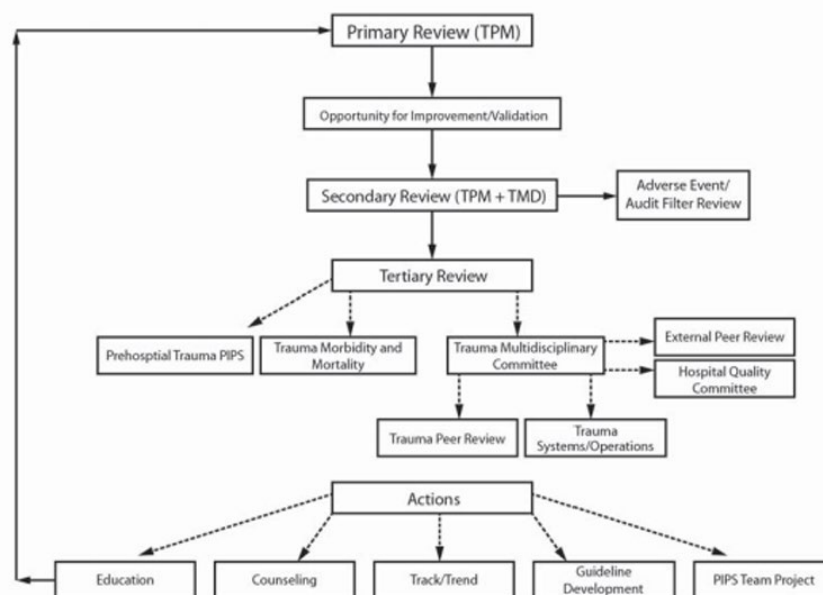


- Levels of review should be defined in your PI manual
- Clear definitions of issues that can be closed at various levels, and who has the authority to close them
- Process for elevation to a higher level of review
- Delineation between clinical vs. system issues
- Determination of corrective actions
- **Loop closure**

SOUNDS SIMPLE... RIGHT?



Trauma PIPS Levels of Review



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CAN BE CONFUSING FOR THE REVIEWERS

- Various meeting names- operational vs. clinical
- Various levels of review- various subcommittees
- Variations on who can close identified issues at defined levels
- Variations on loop closure tracking
 - Where is it tracked?
 - How is it tracked?
 - How is it determined when loop is closed?

PACKAGING YOUR PERFORMANCE IMPROVEMENT FOR REVIEW



PI filters triggered	Primary review	5/8- notified of death from registrars. Reviewed with TMD, to go to M&M 5/12/23 Incomplete Flow sheet	Date 5/8/23
	Secondary review	Mortality/ to present at M&M- Mortality Adherence to geriatric protocols Adherence to management of TBI guidelines (ICP bolt)	Date 5/12/23
	Tertiary review	MDPI- Mortality Adherence to geriatric protocols Adherence to management of TBI guidelines (ICP bolt)	Date 6/19/23
Action items that occurred as a result of review	Review of TBI management guidelines with Neurosurgery liaison (completed)		

- Clearly outline your levels of review
- Clearly outline issues identified
- Show progression of issues through the PI Process
- Clearly document any after-action items and closure status.
 - Be prepared to have supporting documentation demonstrating closure. (guideline review of TBI management)

PACKAGING YOUR PERFORMANCE IMPROVEMENT FOR REVIEW

PI REVIEW SUMMARY - ALL PATIENT ISSUES

ALL PI ISSUES - HISTORY LOG

PI REVIEW

PI ISSUE : Mortality

LEVEL OF REVIEW : Level III: Ped/ Adult MDS

DEATH REVIEW : Anticipated Mortality With Opportunity for Improvement

OPEN/CLOSED : Closed

CLOSE DATE : 07/03/2023

PI REV COMMENTS

CONCLUSION : Review case with TMD

DATE : 05/08/2023

TPM COMMENTS :

5/8- notified of death from registrars. Reviewed with TMD, to go to M&M 5/12/23

CONCLUSION : Trauma MDC

TMD COMMENTS :

M&M 5/12

Should patient have had an ICP bolt? May not have changed management, but pt was GCS <8. Need firm guidelines from Neurosurgery. Case to be referred to NS and discussed at next TMDC.

The following email was sent to [REDACTED] along with current TBI protocol for possible revision on 5/12

Hello [REDACTED],

The following case was discussed this morning in trauma M&M:

[REDACTED]

The question of whether or not the patient should have received an ICP bolt came up and led to a discussion regarding a protocol development that we can move forward to try and standardize the care of brain injured patients. This case will be discussed in this month's Trauma Multidisciplinary Committee meeting (this coming Wednesday) for NS input on the care of this patient. We hope that you can participate and provide some feedback.

Additionally I am attaching our current "Management of TBI" CPG to see if you suggest any revisions.

A. Intracranial Hypertension and Elevated ICP:

1. Intracranial hypertension/elevated ICP in TBI can result from a variety of mechanisms

a. Increasing cerebral edema

b. Venous outflow obstruction

c. Worsening bleeding or mass effect

2. Prompt and effective management of intracranial hypertension can help minimize morbidity and mortality and should include:

a. Elevation of the head of bed to at least 30 degrees

b. Systolic blood pressure goal less than 140 mmHg unless needed to maintain CPP goals

c. Appropriate work-up and treatment of fevers

d. Adequate analgesia and sedation in intubated patients using short acting agents when possible

e. Consideration of ICP monitoring and/or EVD when appropriate

1. Goal ICP less than 20 mmHg

2. Goal CPP between 50-70 mmHg with vasopressors as needed to achieve this goal

3. Consideration of paralysis, barbiturate coma, operative decompression, and hypothermia if ICP remains refractory



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PI REVIEW SUMMARY - ALL PATIENT ISSUES

CLOSE DATE : 07/07/2023

PI REV COMMENTS

CONCLUSION : Closed

PI COMMENTS :

trauma surgeon arrival time, temp, gcs breakdown, FAST time, RN signature

Ongoing review of adherence to all documentation fields in place with ED leadership

PI REVIEW

PI ISSUE : Other

LEVEL OF REVIEW : Level I: TPM, PI Coordinator

OPEN/CLOSED : Closed

CLOSE DATE : 05/08/2023

PI REV COMMENTS

CONCLUSION : Closed

DATE : 05/08/2023

TPM COMMENTS :

Pt met STAT NS response criteria (GCS6), seen appropriately, 14 minutes

MAKE IT EASY FOR YOUR REVIEWERS

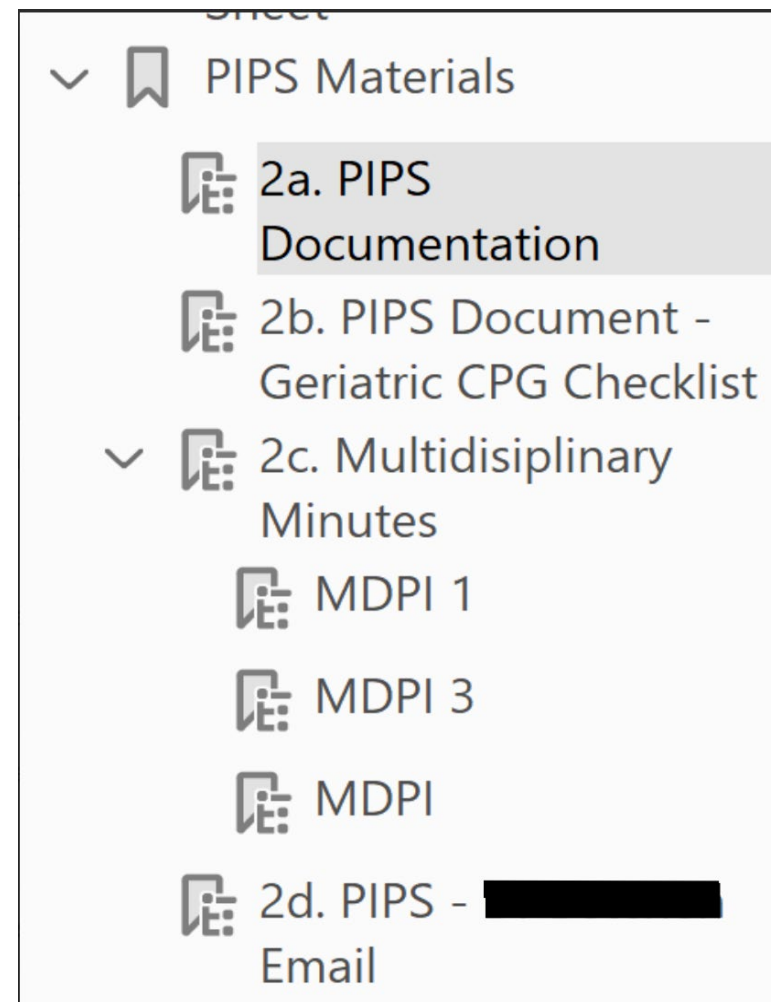
- Clearly show how your PI infrastructure integrates into the basic PI program
- Supply screen shots of meetings/minutes where identified issues were discussed
- Clearly identify after-action items and any interventions taken to correct
- Demonstrate loop closure as part of the PIPS materials uploaded (dashboards, emails, meeting discussions)
- All of this information should be clearly tabbed out and uploaded in the PIPS section of the indexed chart for review

DEMONSTRATING LOOP CLOSURE

The documented loop closure for this case consisted of:

- PI summary from the registry
- Minutes from each meeting where this case was discussed (clipped from the original minutes uploaded separately)
- Corresponding emails
- Review and revision of the TBI Guideline presentation at Operations Meeting (with screenshots of minutes)
- Approved new guideline (uploaded to guidelines section)
- 4 months of data showing compliance (dashboard presented at MDPI)

All related PIPS documentation was clearly tabbed out in the indexed PDF file



QUESTIONS?



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AGENDA

- Concurrent PI
 - Benefits
 - Creating Structure
 - Measuring impact

BENEFITS OF CONCURRENT PI

- Assures timely event identification, corrective action and loop closure – the cornerstones of effective PI
- Prevents future errors
- Ensures effective use of resources
- Expedites patient care
- Improves compliance with Clinical Management Guidelines (CMGs)
- Helps to identify resource needs: education, guideline, equipment
- Timely follow up with providers – staff satisfaction and better clarity on the patient events and decision making

STRUCTURE OF CONCURRENT PI

New admissions
records entered
before rounds

Daily screening
for compliance

Concurrent
documentation

Immediately
provider follow-
up



CONCURRENT DATA ENTRY GUIDE

Concurrent Review	
Demographics Page	MRN, Encounter #, Last 4 of SS#
	Last Name, First Name
	Admit Date, Admit Time, DOB, Gender
Injury Page	Injury Date, Injury Time, MOI
Referring Page (SICU/L1/L2)	Initial Hospital Arrival, Initial Hospital D/C time, Transfer in Y/N, Interventions, 1st Head CT
ED page	ED D/C Date, ED D/C Time
	Admit MD, Admit Service, ED Dispo, 1st VS
	Next Trauma Phase, Floor
Trauma team Page	Activation Level
Discharge Page	Record Complete N
Clinical Abstract	Cut/Paste Impression/Plan from H/P or Trauma Consult
PI fields	Add PI issue for: Incidental Findings, Missed injury, Under/Over Triage or Clinical RN review



DAILY PI AUDITS DURING ROUNDS

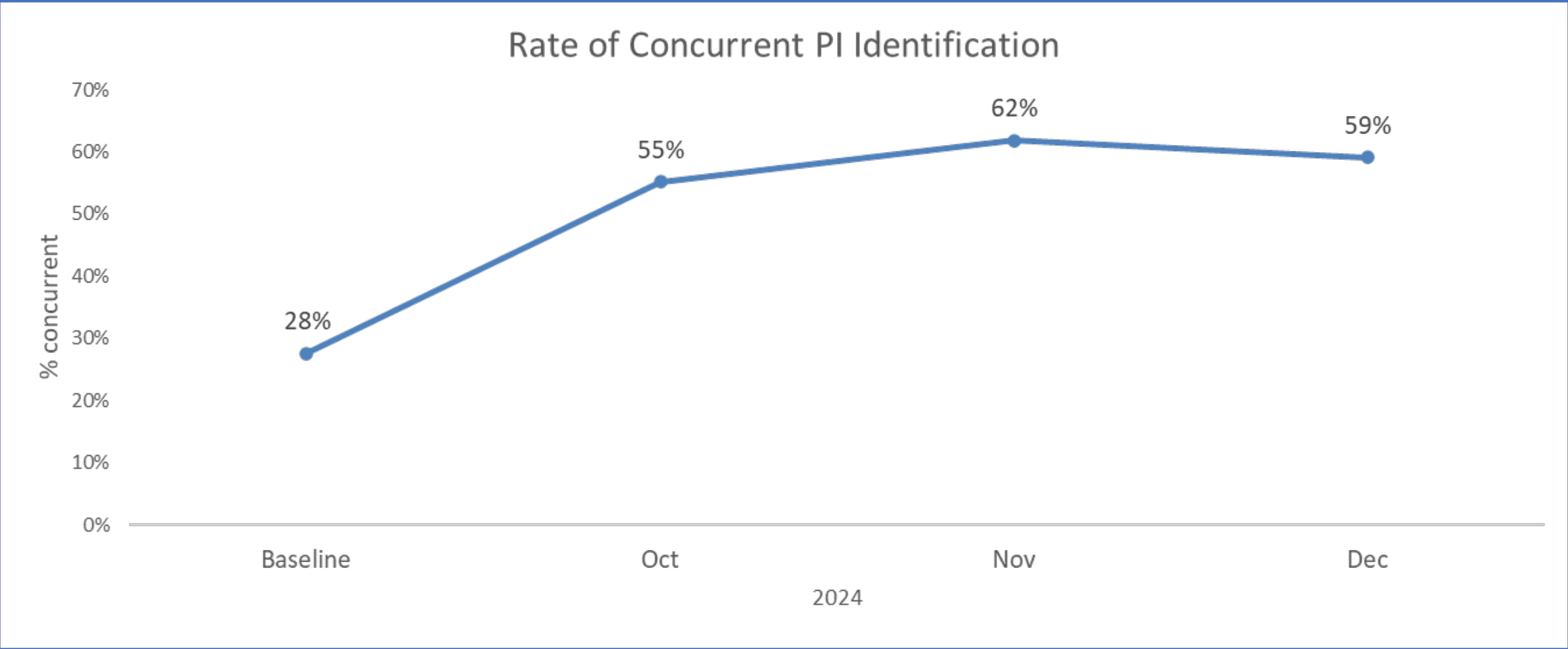
Daily PI Audit Tasks		
Tasks	Documentation in registry	
Daily clinical events summary	Document last 24 hour plan of care details in registry	
Audit Filter review	<ul style="list-style-type: none">• Undertriage• Provider response• Trauma H/P documentation	<ul style="list-style-type: none">• Mass transfusion protocol (MTP) < 4 hours from arrival• Withdrawal of care• Complication review• Mortality review
CMG monitoring	<ul style="list-style-type: none">• Venous thromboembolism (VTE) prophylaxis• Trauma Admit service review• Critical Response compliance	<ul style="list-style-type: none">• Open fracture antibiotics• Post-traumatic stress disorder consult• Screening, brief intervention and referral to treatment (SBIRT)



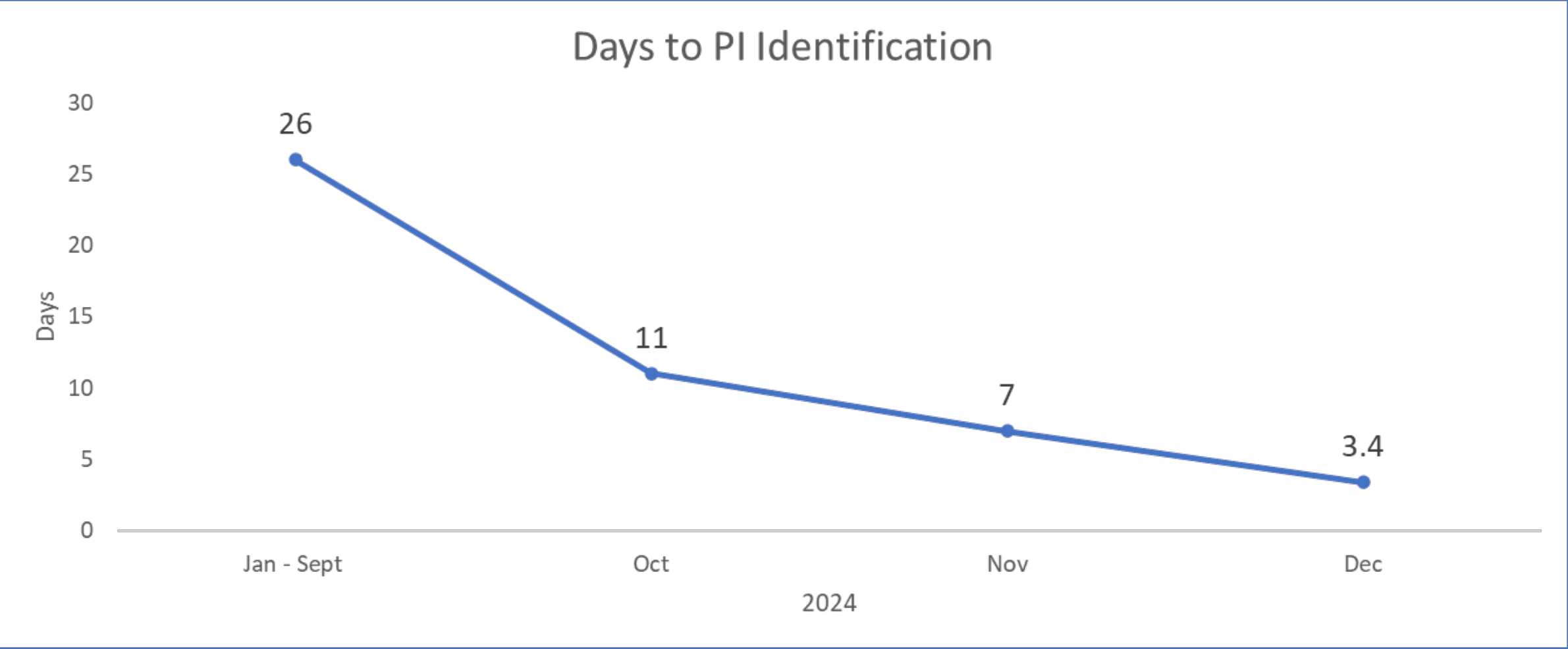
DAILY ROUNDS

- Rotating assignments – Trauma Program Manager and PI coordinator take turns
- Last 24 hours patients are reviewed first
- Run the trauma list next

MEASURING IMPACT



DAYS TO PI IDENTIFICATION



SUSTAINING THE CHANGE

- Virtual calendar assigning rounding staff member daily
- Tracking results of time to ID/Time and % concurrent monthly
- Weekly Trauma PI dashboard to track mortalities and video reviews to be completed

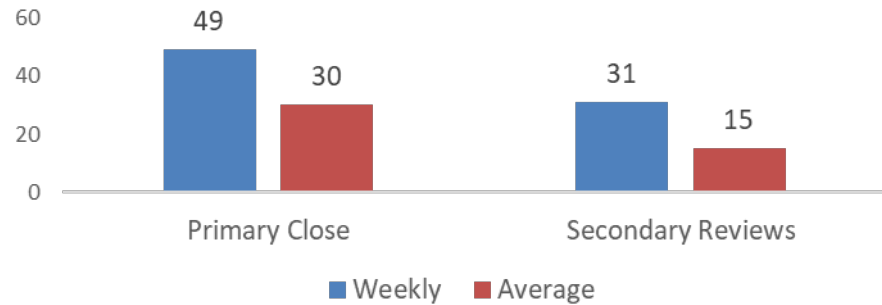
SPECIALIST AVAILABILITY

24/7 Availability	Specialist	# in Call Pool	Additional Compensation	Peds Replant
Yes	Ortho Hand	2	No	Yes
Yes	Plastic Surgery	2	No	No
Yes	Ortho Hand Plastic Surgery	7	No	Yes
Yes	Ortho Hand Plastic Surgery	5	Yes	Yes

Trauma PIPS Weekly Dashboard

Dec 30 – Jan 3, 2025

PI closure Weekly



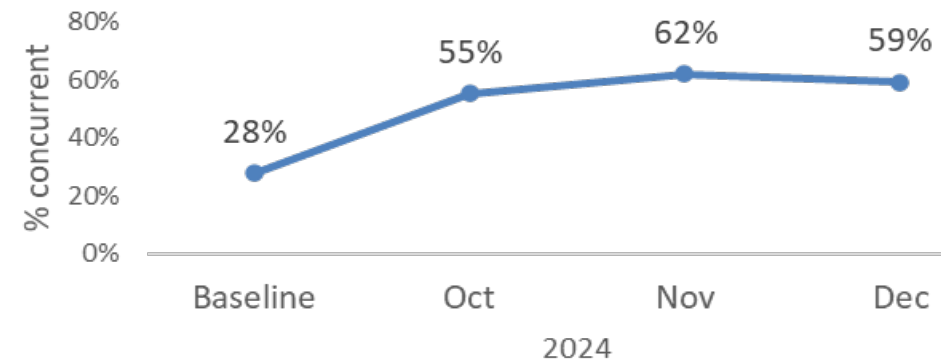
Mortalities for Review

	Oct 2024	Nov 2024	Dec 2024	Jan 2025
Primary Needed	3	5	5	1
Peer Ready	3	0	3	0

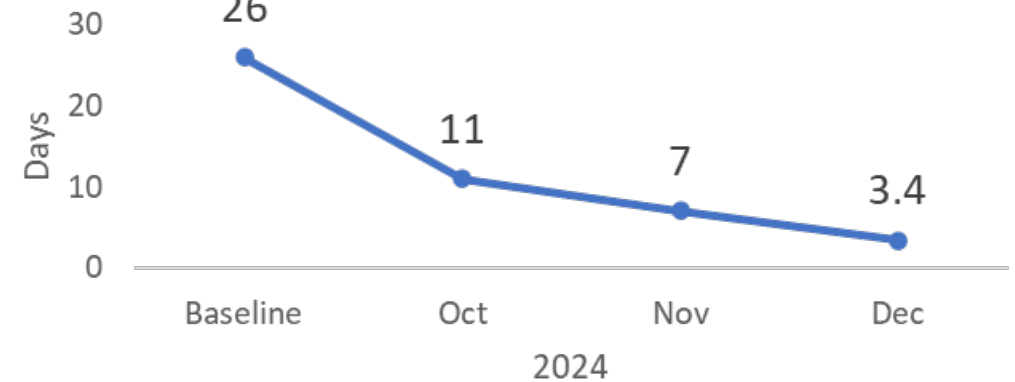
Level 1 for Review

	Oct 2024	Nov 2024	Dec 2024	Jan 2025
Review Needed	0	0	18	4
Review Complete	23	23	7	0

Rate of Concurrent PI Identification



Days to PI Identification



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TRANSFORMING TRAUMA REGISTRY COMPLIANCE

FROM NON-COMPLIANT TO NOTABLE STRENGTH

Achieving ACS Standard 6.2 (80% Completion in 60 days)

Presented by:

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Trauma Program Manager

Upstate University Hospital

Level 1 Trauma Center

Syracuse NY, 13210



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VERIFICATION REVIEW COMMITTEE STANDARD OVERVIEW

6.2 Trauma Registry Patient Record Completion—TYPE II

Applicable Levels

LI, LII, LIII, PTCI, PTCII

Definition and Requirements

In all trauma centers, the trauma registry must be concurrent, defined as having a minimum of 80 percent of patient records completed within 60 days of the patient discharge date.

Additional Information

A completed record is one where all of the required data have been entered in the registry and the record has been closed.

Timeliness of data collection is necessary so that centers can validate their data and identify opportunities for improvement at the earliest possible time.

Measures of Compliance

Registry report covering the reporting period demonstrating that data for 80 percent of patient records are completed within 60 days of discharge date

Resources

None

References

None



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BACKGROUND

- Upstate University Hospital
- Adult ACS Verified Level 1 Trauma Center
- 3500-4000 Trauma registry entries annually
- 7 full-time staff trauma registrars
- Each registrar independently maintains own caseload
- Each registrar maintains completed cases within 30-45 days from discharge
- Notable strength received for standard 6.2 during site visit 12/2023

THE PROBLEM

- Starting point:
 - ~40% concurrency rate
 - Severe backlog of charts
 - Fluctuating registrar staffing and open positions
 - Variability in abstraction practices and experience levels

THE SOLUTION

Combination of 3 things:

- Data utilization
 - Tracking and reporting
 - Using data to cultivate a shared vision
- Workload optimization
 - Smarter reports
 - Job aids
 - Automation of tasks
- Leadership strategies
 - Lead with support
 - Leveraging experience
 - Championing innovation and creativity
 - Focus on retention, not recruitment

UTILIZING DATA

- Monthly automated reports on % completed within 60 days (individual and team)
- Share this data frequently
- Weekly (Monday) reports to each registrar showing days since discharge on their patients. Highlight cases that are close to 45 days
- Shared vision – always returning to the “why”

Trauma Registrar Productivity Tracker 2025													
Registrar	January	February	March	April	May	June	July	August	September	October	November	December	Average
1	100%												100%
2	100%												100%
3	100%												100%
4	100%												100%
5	100%												100%
6	100%												100%
7	100%												100%
Team Total	100%												100%

WORKFLOW OPTIMIZATION

- Shared job aids
- Automated reports
- Registry platform maintenance and updates
 - Automating routine tasks to reduce manual entry time (e.g., setting registry defaults to most common selection)
- Fair and equal chart distribution
- Streamlining data entry with EMR reports (Epic)

LEADERSHIP STRATEGIES

- Leverage experience
- E.g., Certified Abbreviated Injury Score (AIS) registrars sharing coding tips at registry meetings
- Champion creativity and innovation
- Epic reports, internal data dictionaries, other projects
- Retention vs recruitment
- Invest in your team
- Listen

THE “DATA YEAR PUSH” & MANAGING STRESS

- Pre-review questionnaire (PRQ) deadlines demand near 30-day chart completion
- Prioritizing efficiency over unnecessary meetings and projects
- Providing incentives and reducing workload when possible
- Messaging matters

REGISTRY OVERHAUL

- Consider starting with your data quality plan (standard 6.1)
- Quality doesn't always have to be at odds with productivity
- Doesn't need to happen all at once
- Define, Measure, Analyze, Improve, Control (DMAIC methodology – Lean Six Sigma)

MEASURING EFFECTS OF CHANGES AND STRATEGIES

- Compare data quality vs productivity vs job satisfaction vs retention vs ..

RESULTS & COMPLIANCE DATA



SUSTAINING THE CHANGES

- Continued investment in registrar team
- Maintain expectations and fairness
- Lead with support

THANK YOU

Questions?

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A SCALABLE MODEL FOR ACADEMIC SURGICAL RESEARCH & SCHOLARLY ACTIVITIES IN TRAUMA

— NewYork-
— Presbyterian
Queens



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AGENDA

1. Introduction & Program Overview
 - Role as Research Coordinator
 - Team composition and structure
2. Accreditation and Compliance History
 - History of maintaining level one trauma center status with limited resources
3. Building the Research Program
 - Volunteer Pipeline Program
 - Institutional Collaborations
4. Research Output and Impact
 - Publications, abstracts, and presentations
5. Multispecialty Research Impact
 - Scholarly output across multiple surgical subspecialties beyond trauma
6. Volunteer Experience and Growth
 - Scaling research efforts
 - building additional pipelines with universities and medical schools
 - new academic partnerships and institutional collaborations



INTRODUCTION AND PROGRAM OVERVIEW

Team Structure & My Role:

- Trauma Team: 5 core trauma surgeons
- Research Team: Surgical Research Director, Research Coordinator (myself), and part-time statistician (10 hrs/week)
- My Role as Research Coordinator:
 - Manage research across the entire surgical department, with focus on trauma
 - Lead Institutional Review Board (IRB) tasks: protocol writing, submissions, and renewals
 - Oversee 20+ ongoing resident/faculty research projects at a time
 - Support with data collection, analysis, abstract/manuscript writing
 - Coordinate retrospective, prospective, and multicenter studies
 - Present research at numerous national conferences

ACCREDITATION AND COMPLIANCE HISTORY: IDENTIFYING THE NEED FOR CHANGE

2019:

- Received a weakness by Verification Review and Consultation Program (VRC) for lack of high impact research publications.
- Improvement Opportunity

2020:

- Joined as Research Coordinator and identified major resource and staffing limitations
- Recognized the need for a new, sustainable approach to meet and exceed research benchmarks
- Launched Volunteer Pipeline Program to expand capacity and improve research output

2022:

- Successfully passed the research component and all other requirements for accreditation, resulting in re-verification as a Level 1 Trauma Center

BUILDING THE RESEARCH PIPELINE

- As a CUNY Hunter alum, I connected with the Pre-Health Director to launch a volunteer research pipeline program (hybrid)
- Aimed to give students (pre-med, pre-PA, pre-nursing) exposure to surgery and hands-on research experience
- Program expanded organically via word-of-mouth and cold inquiries from undergrads, high schoolers, and medical students
- Since the program's inception, 37 volunteers have participated
- The majority of volunteers have remained engaged for multiple years
- Currently, there are 12 active volunteers
 - 4 medical students or MD graduates
 - 8 undergraduate or high school students
- Program requirement: 8-hour weekly commitment for a minimum of one year
- Volunteer management system includes:
 - Google Sheets schedule to track hours, assignments, attendance, and progress

BUILDING COLLABORATIONS

- Collaborations with:
 - a. WCM Neuroscience/Trauma
 - b. Duke Neurosurgery



- Collaborations formed through networking at conferences and leveraging surgeon relationships
- Key takeaway: Invest in quality, long-term research partnerships, not quantity

RESEARCH OUTPUT AND IMPACT IN TRAUMA SURGERY

- Currently managing 16 active trauma projects across various phases
- IRB approval
- Since last verification, 16 trauma abstracts presented at major conferences:
 - Academic Surgical Congress
 - American College of Surgeons
 - American Association of Neurological Surgeons
 - ACS TQIP Conference
 - Society of Asian Academic Surgeons
 - Society of Trauma Nurses
- 7 trauma papers published, 2 under review and 4 manuscript drafts
- On track to meet trauma research benchmarks by March 2026 for next verification

MULISPECIALTY RESEARCH IMPACT BEYOND TRAUMA

NewYork-
Presbyterian
Queens

- Currently managing 42 surgical projects across all surgical specialties
- (Acute care, breast, colorectal, global surgery, plastics, neurosurgery, vascular, MIS) in various phases:
 - IRB approval, data collection/analysis, abstract submission, presentation prep, manuscript writing
- Collaborations with:



Beth Israel Deaconess
Medical Center



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

- In the past 3 years, 34 abstracts presented at major conferences across the US
- 13 papers published in Surgical Journals and numerous projects in manuscript writing phase



VOLUNTEER EXPERIENCE AND GROWTH

- Hands-on research training: Data collection, literature reviews, IRB exposure
- Clinical shadowing: Direct observation of trauma activations
- Educational access: Participation in weekly Morbidity & Mortality (M&M) conferences and monthly Trauma Joint Conferences
- Authorship opportunities: Contribute to abstracts and manuscripts
- Career advancement support:
 - Letters of recommendation for professional school
 - Mentorship from faculty and research staff

PROGRAM GROWTH AND FUTURE DIRECTIONS

- Building additional pipelines with neighboring universities and especially medical schools
- Expanding the program to public health schools
- Fostering alumni engagement and building an active network of program graduates
- Continuing to seek new academic partnerships and institutional collaborations through networking and relationship building
- Creating formalized evaluation metrics to track program outcomes and impact
- Conducting regular surveys of volunteers to evaluate their experiences and identify ways to enhance engagement and long-term commitment to the program

THANK YOU FOR YOUR TIME AND ATTENTION

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