OPTIMAL
HEALTHCARE ADVISORS

TRAUMA PI STRATEGY

Leveraging Case Review Versus Aggregate Review For More Efficient Loop Closure

NURSING CONTINUING EDUCATION CREDIT

OPTIMAL
HEALTHCARE ADVISORS

- Nurses: 1 Continuing Education (CE) contact hour
- Successful completion
  - Must attend/listen to entire activity and complete online evaluation
  - Nursing CE certificate will be available within 10 days of evaluation submission

Optimal Healthcare Advisors is approved as a provider of nursing continuing education by the California Board of Registered Nursing, Provider # CEP17970, for 1.0 Contact Hours

PRESENTER

OPTIMAL
HEALTHCARE ADVISORS

Angie Chisolm
MBA/HCM, BSN, RN, CFRN, TCRN
President and Managing Partner

DISCLOSURES

OPTIMAL
HEALTHCARE ADVISORS

Objective

- Correctly identify and document steps of the performance improvement process related to trauma care.

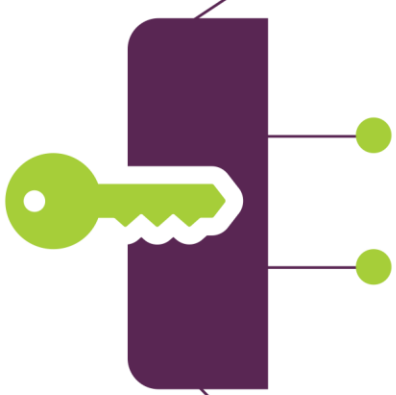
Conflict of interest disclosures

- All staff planners/faculty have no relevant financial relationships with commercial interests to disclose for this continuing medical education activity.
- No commercial support or sponsorship is provided.

Resources used for this presentation include American College of Surgeons | 2022 Standards | Resources for Optimal Care of the Injured Patient

OPTIMAL
HEALTHCARE ADVISORS

AGENDA



- THE PERFORMANCE IMPROVEMENT PATIENT SAFETY (PIPS) PROCESS
- EFFECTIVE CASE REVIEW
- AGGREGATE REPORTING: PERFORMANCE METRICS AND BENCHMARKING
- QUESTIONS & ANSWERS

PURPOSE OF TRAUMA PI

The American College of Surgeons Committee on Trauma (ACS-COT) calls for each trauma program to demonstrate a continuous process of monitoring, assessment, and management directed at improving care.

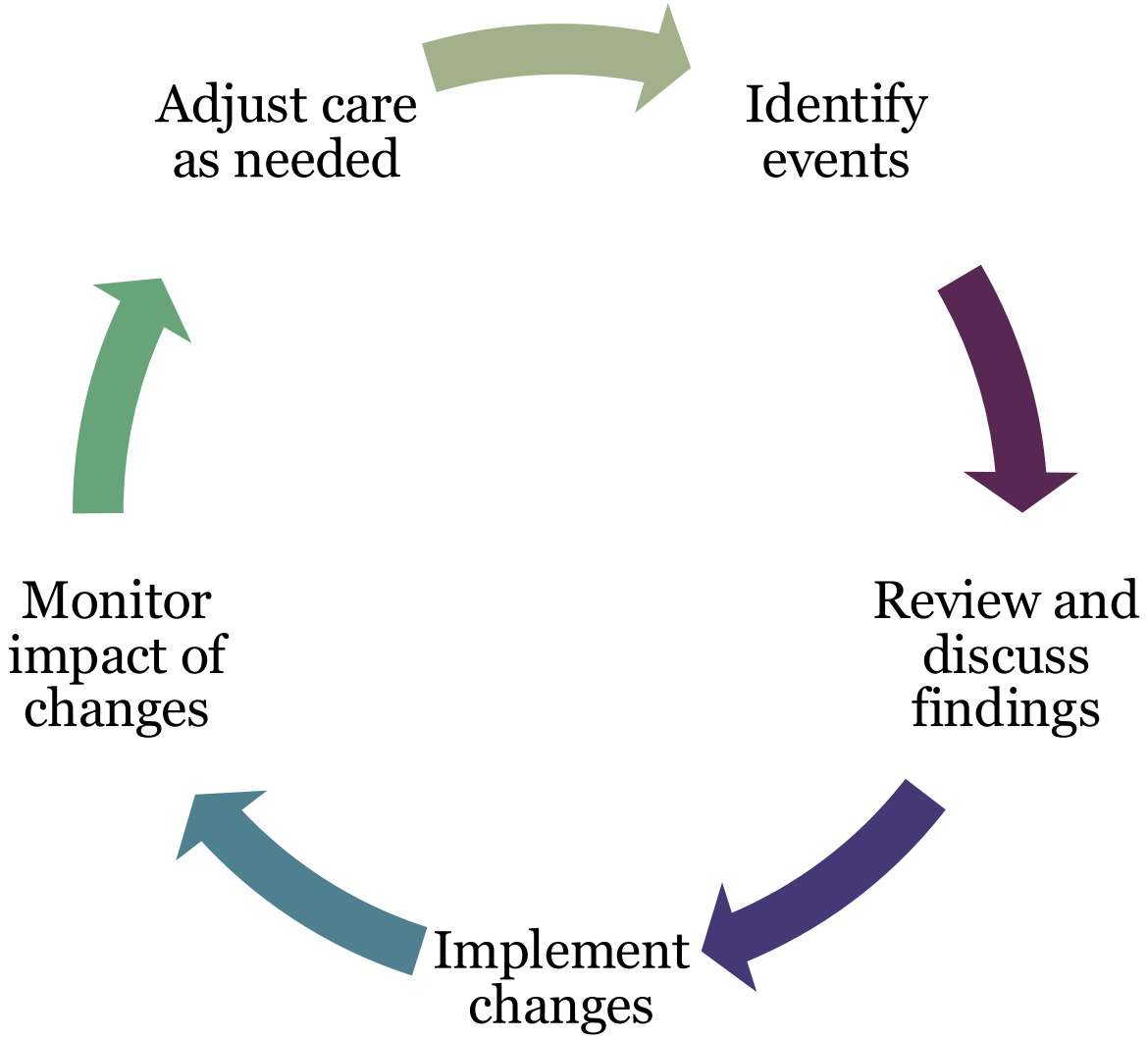
These performance improvement activities are concordant with the Institute of Medicine's six quality aims for patient care: safe, effective, patient centered, timely, efficient, and equitable.

This effort should routinely reduce **unnecessary variation** in care and prevent adverse events (patient safety)**.**

Primary purpose: improve quality and outcomes in trauma care

CONTINUOUS IMPROVEMENT

OPTIMAL
HEALTHCARE ADVISORS



PIPS PROCESS

OPTIMAL HEALTHCARE ADVISORS

Issue or event identification

Levels of Review

Primary
- PI Nurse or TPM
- Closed or forwarded to next level

Secondary
- TPM and TMD
- Closed or forwarded to next level

Tertiary
- Multidisciplinary Peer Review
- Multidisciplinary Systems or Operations Review

Determination

Event w/o OFI – Case closed
Event w/OFI – Create action plan or forward to TMD

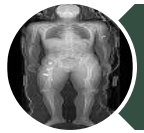
Event w/o OFI – Case closed
Event w/OFI – create action plan or forward to Peer/Systems

Event w/o OFI – Case closed
Event w/OFI – Create action plan

Judgment


Provider


System


Disease

Create corrective action plans to demonstrate problem resolution

Solving for x: what are we going to do to prevent this from happening again? …*Marco Bonta, MD*

LEVELS OF REVIEW

Primary

Once an event is identified, the trauma PIPS program must be able to verify and validate that event:

- Immediate feedback and resolution may occur at this level of review.
- If event resolution (loop closure) occurs at primary review, the issue, determination and judgment must be documented to allow for tracking and trending of issues, as well as evidence of case review.

Case summary: 35y M s/p reported self-inflicted GSW to head, transcranial injury with brain matter exposed. Arrived by EMS with CPR in progress. After confirming ETT placement and cardiac window FAST revealed absent contractility, patient pronounced dead (DOA).

OFI: None

Action: Add case to TMD secondary review for information. Add to Peer Review meeting as "consent agenda" item – meaning "no OFI identified, case closed at secondary".

LEVELS OF REVIEW

Secondary

Any event that requires further investigation should be reviewed by the TMD.

- Must include the following information:
  - EMR review for relevant information
  - Confirmation of individuals involved
  - Timeline of events and care
- Feedback and resolution may occur at this level of review ***or***
- Case may be referred to Peer Review, appropriate department or EMS agency.
- If event resolution (loop closure) occurs at secondary review, the issue, determination and judgment must be documented for tracking and trending of issues.

Case summary: 35y M s/p reported self-inflicted GSW to head, single wound noted to temporal region. Arrived by EMS with CPR in progress, vomit on face, no airway established. After ETT placement by the ED physician, a cardiac window FAST revealed absent contractility despite multiple rounds of ACLS drugs. Patient pronounced dead.

OFI: EMS airway management

Action: Feedback to EMS

Loop closure: Occurs when EMS replies with the actions they've taken to address the airway issue. Track and trend for additional occurrences. Add to dashboard for ongoing monitoring.

LEVELS OF REVIEW

Tertiary

- Mortality and Morbidity (M&M)
- Multi-disciplinary (peer/systems)

Goals

- Review the efficacy, efficiency, and safety of the care provided by the trauma center
- Provide focused education (system meeting or educational conference)
- Provide peer review

- Feedback and resolution may occur at this level of review ***or***
- Case may be referred to Hospital Quality, Medical Staff Quality, appropriate department, or EMS agency

Case summary: 35y s/p reported self-inflicted GSW to head, single graze wound noted to temporal region. Arrived by EMS awake and alert. Soon after arrival, ED physician decided to protect the patient's airway with RSI intubation. After multiple attempts at ETT placement the patient suffered a cardiac arrest. Despite multiple rounds of ACLS drugs, the patient was pronounced dead.

OFI: Failure to follow guideline - ATLS

Action: FPPE. This same physician does not follow ATLS guidelines for resuscitation documented in previous PI reviews.

Loop closure: Track for additional events. Event resolved when no further issues occur with this provider.

MULTI-DISCIPLINARY PEER REVIEW MEETING

Best Practice

- The multidisciplinary trauma peer review committee must systematically review mortalities, significant complications, and process variances associated with unanticipated outcomes and determine opportunities for improvement.
- ….both the appropriateness and timeliness of care should be reviewed, and opportunities for improvement should be determined and documented.
- Always refer cases to the appropriate liaison(s) prior to the meeting so they may be prepared to discuss.
- The radiology liaison should receive a list of all cases for review prior to the meeting. Relevant studies should be displayed as the case is discussed.
- If a liaison is not able to attend, require an alternate attendee (who has also received the case information prior to the meeting).
- Include relevant guidelines in the case summary to determine compliance with standard of care (as instituted by your facility).
- Identify discussion by specialty, not by provider's name.
- At the end of **every** case discussion, the TMD should ask the group "what could have been done differently to prevent this from happening in the future?" ***This becomes your OFI and action plan.***

OPTIMAL
HEALTHCARE ADVISORS

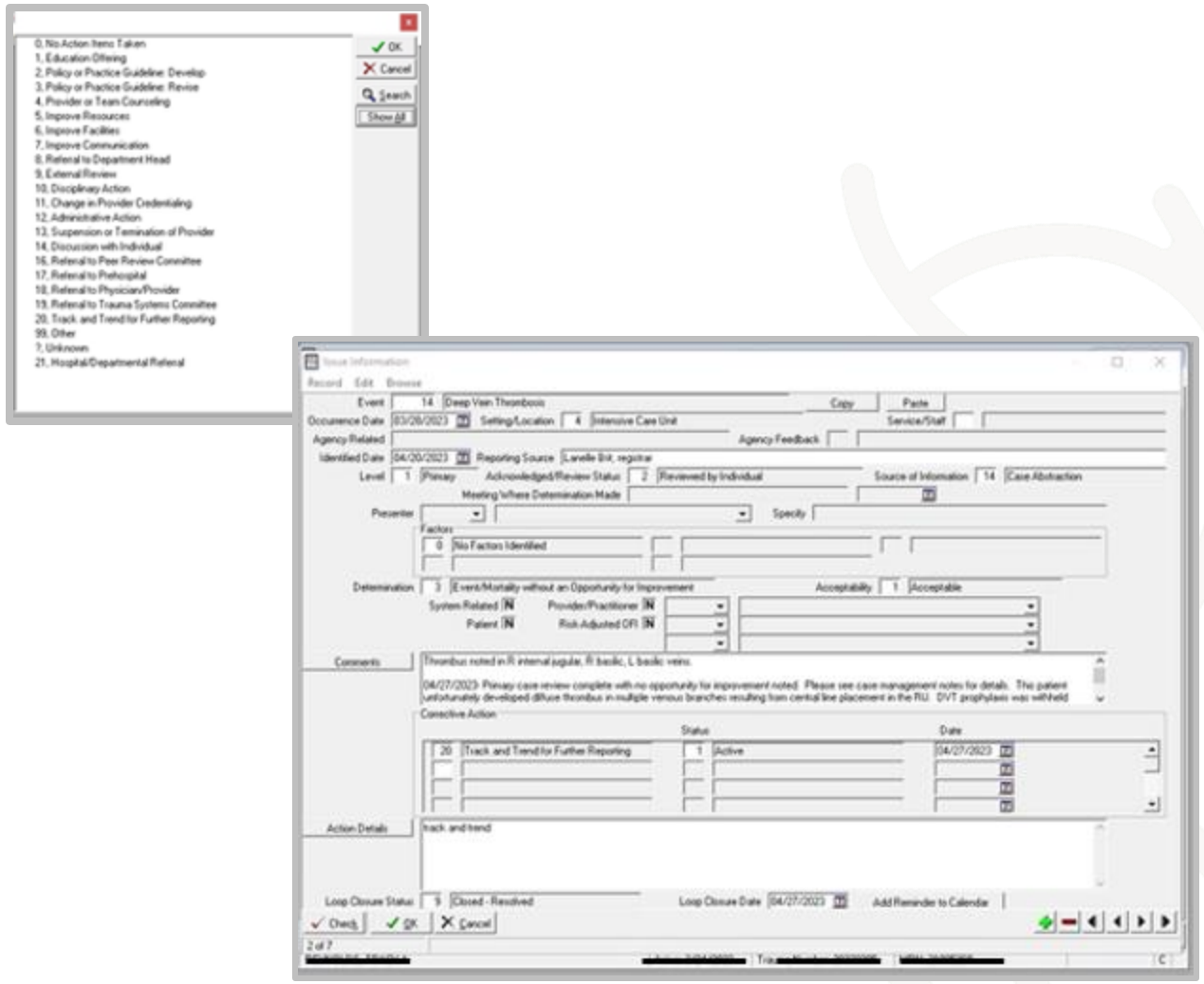
Determination	Is this related to a system issue, provider issue, or disease issue?
Judgment	Was there an opportunity for improvement?
Action Plan	If OFI: what are the recommendations to resolve or improve the event/issue?

CORRECTIVE ACTIONS ≠ LOOP CLOSURE

OPTIMAL HEALTHCARE ADVISORS

Action plan examples

- Guidelines, protocol, or pathway development or revision
- Targeted education (for example: rounds, conferences, or journal clubs)
- Additional and/or enhanced resources
- Counseling (provider, staff, pre-hospital, etc.)
- Peer review presentation
- External review or consultation
- Ongoing professional practice evaluation (OPPE) or focused professional practice evaluation (FPPE)
- Change in provider privileges



LOOP CLOSURE = EVENT RESOLUTION*

*Or Improvement

OPTIMAL HEALTHCARE ADVISORS

Action plan examples

- Guidelines, protocol, or pathway development or revision
- Targeted education (for example: rounds, conferences, or journal clubs)
- Additional and/or enhanced resources
- Counseling (provider, staff, pre-hospital, etc.)
- Peer review presentation
- External review or consultation
- Ongoing professional practice evaluation (OPPE) or focused professional practice evaluation (FPPE)
- Change in provider privileges

Did it work?

Create measurable change

- Ex: reduced the incidence of “event” by “%” after implementing guideline

Document the effect of the change you put into place

- Dr. Jones has no further incidents reported
- Guideline revised, tracked for compliance, noted 50% reduction in VTE rates

LEVELS OF REVIEW
Quaternary

OPTIMAL HEALTHCARE ADVISORS

Quaternary review

- Occasionally, this level of review is warranted but should not be routinely utilized to determine the judgment or OFI's for trauma PI cases.
- Referral to the hospital quality department or external peer review is considered quaternary review. The Trauma Medical Director must have a mechanism in place to receive relevant findings from a quaternary review.

7.1 Trauma PIPS Program—TYPE II

- The expected frequency and level of review require the PIPS program to function **independently from** the hospital / departmental PI program.
- The PIPS program must have a means to report events and actions to a departmental / hospital PI program so that events are aggregated across the organization
- The hospital or departmental quality program **must provide feedback** and loop closure to the trauma program.

OPTIMAL
HEALTHCARE ADVISORS

AGGREGATE REPORTING – PERFORMANCE METRICS AND BENCHMARKING

DATA COLLECTION METHODS AND TOOLS

OPTIMAL
HEALTHCARE ADVISORS

Accurate data collection is crucial in improving trauma care, **identifying trends**, and **implementing preventive measures**.

Examples:

- EHRs
- Trauma flow sheets
- Procedure notes
- ICD10 codes
- Trauma scoring systems (ISS and GCS)
- Imaging and diagnostics reports
- NTDS
- Data validation tools
- Compliance audits

IMPORTANCE OF DATA COLLECTION AND ANALYSIS

OPTIMAL HEALTHCARE ADVISORS

Reduce unnecessary variation

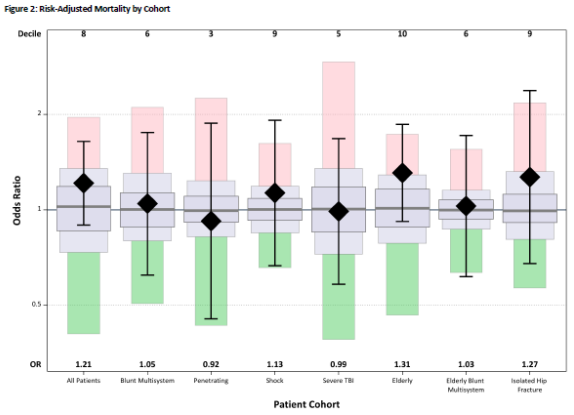
Monitoring and measurement to improve efficiency, increase effectiveness, or reduce harm, and to improve future outcomes

Analysis includes identification of trends and patterns

Ensuring that trauma care meets established standards and guidelines through monitoring of compliance

Root cause analysis when adverse events or suboptimal outcomes occur

Development of key performance metrics and benchmarks



Consults (Shock Trauma 3)	c	232	202	243	191	263	231	263	240	226	215	162	110	**2576**
No activation- CCA only	c	8	5	8	7	6	6	3	6	14	25	27	18	**133**
Total admissions (all services)	c	360	330	403	367	436	391	395	401	325	416	393	391	**4608**
Total Trauma Service admissions	c	260	244	295	296	321	291	292	305	243	317	292	286	**3442**
Total number of patients admitted to a non-surgical service	≤ 10%	14%	13%	12%										
Number with trauma consult		100												
Total pediatric admissions (≤14y)	c	0	1	1	0	0	0	2	0	0	0	0	0	4
Average ISS of Trauma Service Admissions	c	10	10	13	14	10	15	14	13	12	15	14	14	12.83
% ISS >15		24%	18%	33%	34%	21%	40%	35%	30%	30%	33%	38%	36%	31%
% ISS ≤15		73%	77%	66%	65%	72%	56%	60%	65%	68%	61%	61%	63%	66%
Blunt ISS		17	22	24	24	44	46	52	39	71	2	3	27	
Arkansas	c	91	74	107	98	98	96	92	101	107	86	91	76	1117
Mississippi	c	92	87	92	70	109	114	114	126	108	133	107	104	1256
Pediatric Patient Population (≤14 yrs)		0	1	1	0	1	0	2	0	0	0	0	0	5
Adult Patient Population (≥15 yrs, ≤64 yrs)		433	396	495	470	516	510	509	495	513	520	469	456	5782
Geriatric Patient Population (≥65 yrs)		95	86	100	81	116	83	81	103	95	127	99	102	1180
Mode of Arrival: EMS Ground		383	362	438	411	427	415	411	406	418	465	422	470	72%
Mode of Arrival: EMS Air		110	80	119	112	153	139	131	141	161	142	12	63	13.52%
Mode of Arrival: Private Operating Vehicle		19	24	30	22	39	29	39	43	23	31	27	19	4.34%
Mode of Arrival: Police		5	8	4	4	6	7	3	5	0	4	7	3	0.80%
Interfacility Transfer In (ED to ED)		209	183	221	176	240	201	220	226	232	238	231	223	37%
Direct Admission (ED to Inpatient)				3	5	3	0	2	2	1	1	0	1	
Transfer outs from CCA			1	0	0				4	2	0	0	0	
Mechanism: Blunt		72%	74%	73%	67%	65%	69%	74%	72%	73%	74%	71%	69%	71%
Mechanism: Penetrating		26%	25%	25%	32%	26%	29%	24%	27%	27%	26%	27%	29%	27%
Mechanism: Thermal		2%	1%	1%	1%	1%	1%	2%	1%	0%	1%	1%	1%	1%
Mechanism Blunt or Other		0%	3%	1%	0%	8%	1%	1%	0%	0%	0%	0%	0%	2%
Average Hospital Length of Stay	6 d	6.3	6.3	5.33	5.81	6	6.1	5.3	7.4	5.3	6.8	7	7.45	6.5
Average ICU Length of Stay	3 d	8.1	7.2	6.59	7.4	6.7	7	7.1	7.7	7.7	9.3	7.75	7.8	7.6
Average Ventilator Days	3 d	7.3	6.7	5.33	6.5	6.3	6	7.2	7.8	7.8		7.06	7.8	
Hours on Diversion (<36 hrs/mo OR <400 hrs/yr)	<5%	2.3%	6.3%	5.2%	3.2%	8.3%	6.8%	1.6%	1.6%	0.2%	1.6%	0.8%	1.1%	3.3%
Data entry within 60 days of discharge	≥80%	83%	77%	87%	83%	78%	75%	74%	70%	64%	69%	65%	86%	75%
Validation / IRR		0	0	0	0	0	0	0	0	0	0	0	0	
Under triage	≤ 5%	8%	6%	5%	5%	8%	5%							
Over triage	≤ 25%	45%	45%	50%	47%	53%	45%							

IDENTIFYING AREAS FOR IMPROVEMENT BASED ON DATA ANALYSIS

OPTIMAL HEALTHCARE ADVISORS

Source	Review Item	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	Trauma Registry														
ACS	Total Adult (15 or >) Registry Patients	c	165	140	163	194	197	230	254	232	216	209	210	198	2408
ACS	Charts closed within 60 days of D/C	≥80%	100%	100%	100%	100%	99%	92%	92%	85%	83%	87%	83%	88%	92%
ACS	Interrater reliability (IRR)	≥95%													
ACS	Mechanism: Blunt	c	81.8%	82.9%	81.0%	78.4%	78.7%	80.0%	83.5%	81%	81%	81%	80%	83%	81%
ACS	Mechanism: Penetrating	c	17.0%	15.7%	17.2%	19.1%	20.3%	19.6%	14.6%	18%	16%	17%	20%	15%	17%
ACS	Mechanism: Thermal	c	0%	0%	0.6%	0.5%	0.5%	0.4%	0.8%	0.4%	0.0%	1.0%	0.0%	0.0%	0.4%
	Trauma Team Activations														
ACS	Total activations	c	80	84	82	94	99	119	98	125	106	112	116	105	1220
ACS	Level I	c	27	29	29	33	36	37	32	49	32	38	43	37	422
ACS	Level 2	c	53	55	63	58	63	82	66	76	74	74	73	68	805
	Response Times														
ACS	Level 1 TS response time w/in 15 minutes	≥80%	100%	96%	100%	97%	100%	100%	100%	93%	100%	95%	95%	100%	98%
ACS	Level 2 Trauma chief response time w/in 30 minutes	≥80%	96%	96%	97%	98%	100%	98%	98%	99%	100%	95%	90%	96%	97%
ACS	Level 2 TS response	≥80%	94%	100%	97%	100%	100%	97%	100%	100%	100%	89%	100%	100%	98%
ACS	Anesthesia response time w/in 15 minutes Full	≥80%	85%	78%	63%	68%	82%	84%	66%	78%	83%	82%	70%	69%	76%
ACS	NS emergent response w/in 30 mins	≥80%	50%	100%	75%	100%	100%	100%	67%	75%	100%	67%	63%	67%	80%
ACS	Orthopedic surgeon emergent response w/in 30 mins	≥80%	n/a	100%	100%	100%	100%	89%	100%	100%	n/a	83%	100%	100%	97%
	Admissions														
ACS	Total adult admissions	c	128	106	125	154	164	168	194	181	157	163	169	144	1853
ACS	Direct admissions	c	1	1	0	0	2	0	0	0	1	1	2	1	9
ACS	Total Trauma Service admissions	c	102	79	96	114	129	129	141	137	122	123	128	123	1423
ACS	Non-Surgical Admissions (NSA)	<10%	9%	4%	6%	8%	5%	7%	9.8%	9%	5%	10%	10%	7%	7.5%
ACS	NSA w/Trauma or Surgical consult	%	100%	100%	100%	100%	100%	100%	100%	100%	75%	100%	92%	100%	97%
ACS	NSA w/ISS>9	%	9%	0%	13%	8%	17%	27%	11%	26%	13%	17%	0%	11%	13%
ACS	ISS > 15	240	17	13	12	15	19	40	36	34	43	37	41	20	327
	Transfers														
ACS	In	c	16	23	14	22	27	34	24	29	29	23	27	22	290
ACS	Out	c	1	5	0	2	5	4	4	5	3	3	4	2	38
	Mortality														
ACS	Deaths (by discharge date)	c	6	9	2	6	7	6	12	7	10	9	10	9	93
ACS	Dead On Arrival	c	0	2	0	1	1	0	0	2	3	5	5	4	23
ACS	Death in the ED	c	1	2	1	1	2	6	4	0	0	0	1	3	21
ACS	Death in the hospital	c	5	5	1	4	4	0	8	5	7	4	4	2	49
ACS	Death: w/ OFI	c	0	2	0	1	1	0	0	0	1	2	2	5	14
ACS	Death: w/o OFI	c	4	5	2	5	5	6	5	5	9	7	8	4	65
ACS	Discharge to Hospice	c	2	0	1	1	0	0	1	0	1	0	0	0	6
ACS	Autopsies (Autopsy/Total Deaths)	%	50%	30%	33%	83%	43%	83%	100%	11%	11%	20%	60%		48%
ACS	OPO Referrals	%	100%	100%	67%	100%	86%	100%	71%						89%
ACS	OPO w/Donation	c	1	0			1						2	1	5
	Trauma											chis			
PI	Tertiary survey complete w/in 48 hrs (w/in 24hrs Jan - Jun)	≥80%	80%	85%	54%	68%	73%	86%	91%	64%	94%	91%	79%	95%	80%
PI	Trauma bay checklist	≥80%	89%	73%	90%	79%	70%	89%	83%	93%	93%	96%	86%	86%	86%
	Prehospital														
	Airway Management	c										1	1	3	5
	Emergency Department														
ACS	Over-triage - NFTI	<25%	10%	6%	8%	6%	4%	7%	7%	9%	6%	4%	7%		7%
ACS	Under-triage - NFTI	<5%	6%	2%	5%	1%	6%	3%	2%	2%	3%	2%	3%		3%
TQIP	Antibx for open long bone fx w/in 60 mins of arrival	≥80%	n/a	100%	100%	100%	100%	83%	100%	100%	n/a	100%	100%	60%	94%
PI	Trauma flowsheet documentation compliance	≥80%	94%	91%	96%	96%	94%	93%	94%	96%	96%	95%	94%	92%	94%
TQIP	Massive Transfusion Protocol ratio compliance documentation	≥80%	100%	100%	0%	0%	100%	100%	50%	100%	100%	100%	100%	100%	79%
PI	MTP activation time documented	≥80%	100%	100%	100%	100%	100%	100%	50%	100%	80%	100%	100%	100%	94%

Source	Review Item	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	Radiology														
Hospital	Radiology interpretation discrepancy (misread or missed injury)	c										1		1	2
TQIP	Timing to IR w/in 60 minutes (request to needle) for hem control	≥80%	50%	0%	100%	n/a	67%	100%	100%	n/a	50%	0%	0%	0%	47%
ACS	Timing to MRI w/in 120 minutes	≥80%	0%	100%	100%	100%	100%	n/a	50%	100%	n/a	50%	83%	54%	74%
	Surgical Services														
TQIP	Timing to OR for emergent cases w/in 15 mins	≥80%	100%	75%	100%	86%	86%	83%	89%	100%	83%	83%	91%	67%	87%
ACS	Anesthesia response time w/in 30 mins (not TTA)	≥80%													
	Medical/Surgical														
ACS	Screening for ETOH	≥80%	90%	90%	89%	83%	85%	86%	84%	91%	93%	83%	90%	95%	88%
ACS	Brief Intervention for +ETOH	≥80%	64%	64%	67%	86%	61%	73%	56%	42%	67%	55%	69%	73%	65%
ACS	Referral to Treatment for +ETOH	≥80%	64%	64%	53%	61%	39%	63%	33%	4%	47%	42%	58%	54%	49%
	Ortho trauma														
TQIP	IHF repair >64y within 48 hours (TQIP = 24h)	≥80%	57%	88%	78%	57%	69%	82%	60%	70%	63%	78%	64%	89%	71%
TQIP	Femur Fx Fixation within 48 hours	≥80%	100%	100%	100%	83%	75%	100%	100%	80%	100%	100%	100%	100%	95%
TQIP	Open Tibia Fx Fixation within 24 hours	≥80%	n/a	100%	100%	n/a	n/a	100%	100%	100%	n/a	33%	50%	100%	85%
TQIP	Timing to OR for spine fxs <100hr (TQIP = <24h)	≥80%	0%	100%	50%	67%	75%	n/a	100%	100%	n/a	50%	0%	100%	64%
	Neuro trauma														
PI	Timing to ICP monitoring w/in 24 hrs (TQIP = 4h)	≥80%	n/a	100%	n/a	100%	100%	n/a	100%	100%	0%	50%	100%	n/a	81%
TQIP	Timing to ICP monitoring w/in 4 hrs	≥80%	n/a	0%	n/a	25%	50%	n/a	50%	0%	0%	50%	0%	n/a	22%
TQIP	Craniotomy in severe TBI (GCS <9) w/in 8 hrs (TQIP 2.4h)	≥80%	0%	100%	100%	100%	67%	n/a	100%	n/a	100%	100%	100%	n/a	85%
PI	Craniotomy for epidural w/in 2 hrs	≥80%	n/a	n/a	100%	100%	100%	n/a	100%	n/a	n/a	n/a	100%	n/a	100%
TQIP	Timing to trach in severe TBI w/in 7 days	≥80%													
	TQIP Hospital Events														
TQIP	Acute Kidney Injury (AKI)	c	2				1	2			3	2			10
TQIP	Acute Respiratory Distress Syndrome (ARDS)	c				1			1			2			4
TQIP	Alcohol Withdrawal Syndrome	c				2		2	2	1	1	1		1	10
TQIP	Cardiac Arrest with CPR (in hospital)	c	3	3	1	3	5	1	2	3	3	3	2	1	30
TQIP	Catheter-Associated Urinary Tract Infection (CAUTI)	c													0
TQIP	Central Line-Associated Blood Stream Infection (CLABSI)	c													0
TQIP	Deep Surgical Site Infection	c									1		1		2
TQIP	Deep Vein Thrombosis	c	2		4	2	4	2	1	3	2	1	3		24
TQIP	Delirium	c			1	1	2	1	2	4	1	2	1		15
TQIP	Extremity Compartment Syndrome	c													0
TQIP	Myocardial Infarction (MI)	c										1			1
TQIP	Pressure Ulcer	c	1		2		2		1	1	1		1	1	10
TQIP	Pulmonary Embolism (PE)	c			2		1			1		1			5
TQIP	Severe Sepsis	c					2		2		1	1	2		8
TQIP	Stroke/CVA	c		1	1	1		1			1			1	6
TQIP	Unplanned Admission to ICU	c	2	2	4	3	3	3	2	4	4	3	4	2	36
TQIP	Unplanned Intubation	c	2	2	2	2	4	1	2	1		3	3		22
TQIP	Unplanned Visit to the Operating Room	c			1	2	1		2	3	3	1	5	1	19
TQIP	Ventilator-Associated Pneumonia (VAP)	c			1		1					1			3

Source	Review Item	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ACS	Screening for ETOH	≥80%	90%	90%	89%	83%	85%	86%	84%	91%	93%	83%	90%	95%	88%
ACS	Brief Intervention for +ETOH	≥80%	64%	64%	67%	86%	61%	73%	56%	42%	67%	55%	69%	73%	65%
ACS	Referral to Treatment for +ETOH	≥80%	64%	64%	53%	61%	39%	63%	33%	4%	47%	42%	58%	54%	49%

SBIRT Compliance

PLAN a change or improvement

The Problem

The ACS standards for verified trauma centers includes the requirement for screening admitted patients greater than age 12 for alcohol misuse and provide a brief intervention with referral to treatment if screening is positive. In 2024, the compliance rate is less than 80% for brief intervention and referral to treatment.

Aim/Goal

The goal of this project is to improve compliance to 80% or greater for brief intervention and referral to treatment in patients who screen positive for alcohol misuse.

Team

TMD
ATMD
TPD
Social Work
IP Coord
Lead trauma registrar

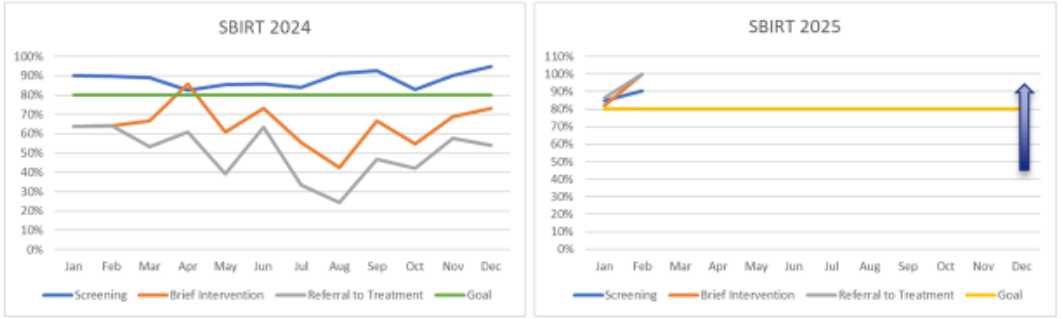
DO the improvement, make the change

The Interventions

- 9/2024 compliance added to new PI dashboard – identified problem
- 10/24 review of trauma registry data fields for collecting and reporting SBIRT compliance
- 11/21/24 review existing SBIRT process
- 12/17/24 meeting with Social Work to discuss work flow and proposed changes to existing SBIRT process that include all admitted patients over 12y for screening
- 12/2024 Revise guideline to include ACS criteria for SBIRT
- 1/2025 daily monitoring of SBIRT compliance with weekly communication with SW team
- 1/2025 coordinate with registry to ensure consistency in data collection
- 2/19/25 finalized revision of SBIRT guideline

STUDY the results and examine data

Graphs/Data



Lessons Learned

State Key Accomplishments achieved to date and lessons learned from working on this project

- Need for criteria that meets inclusion/exclusion for SBIRT process
  - Inclusion: all admissions age 12 and older for screening; brief intervention and referral to treatment for all positive screenings
  - Exclusion for brief intervention/referral to treatment: Death, met brain death criteria, discharge to Hospice/LTAC/TBI rehab (cognitively impaired)

ACT to sustain performance and spread change

Next Steps Determine if need to expand to other areas or rework the cycle

- Continued daily monitoring for compliance
- Weekly communication with SW team
- Monthly reporting of compliance through PI dashboard

Resource: ACS 2022 standards – Standards 5.30 and 5.31

Source	Review Item	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	Radiology														
TQIP	Timing to IR w/in 60 minutes (request to needle) for hem control	≥80%	50%	0%	100%	n/a	67%	100%	100%	n/a	50%	0%	0%	0%	47%

IR response to hemorrhage control

PLAN a change or improvement

The Problem

The ACS standards for verified trauma centers includes the requirement for interventional radiology response to hemorrhage control within 60 minutes of request. In 2024, the compliance rate was 47%.

Aim/Goal

The goal of this project is to improve compliance to 80% or greater for Interventional Radiology response to hemorrhage control within 60 minutes of request.

Team

TMD
Trauma Surgeons
IR Attending
Radiology Liaison
TPD
PIC

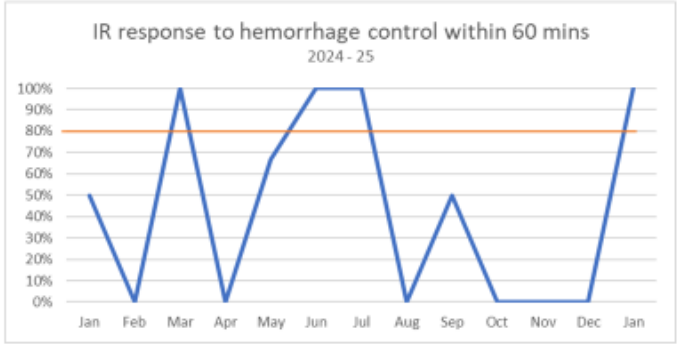
DO the improvement, make the change

The Interventions

- 9/20/24 compliance added to new PI dashboard – identified problem
- 10/24 review of cases to validate problem
- 11/24 Dr. Smith drafted IR guideline to include Emergent, Urgent, Routine categories
- 1/7/25 meeting with Radiology liaison to discuss issue, possible causes for delays; provided list of cases with delays for review
- 1/20/25 Follow up meeting to review findings from Rad liaison review
- 2/4/25 Meeting w/trauma surgeons and radiology team (Dr. Jones & Dr. Gray). Discussed options for improving access to IR suite and review of proposed guideline
- "Contrast Nurse" will open IR suite to allow trauma team to expedite patient to table
- Time measure will be "order time" to "time out"
- 2/25/25 Dr. Gray provided proposed criteria for each activation category; Dr. Smith to review with trauma surgeons

STUDY the results and examine data

Graphs/Data



Lessons Learned

State Key Accomplishments achieved to date and lessons learned from working on this project

- Criteria needed to define emergent response
- Need for defined measures of time

ACT to sustain performance and spread change

Next Steps Determine if need to expand to other areas or rework the cycle

- Monthly monitoring for compliance
- Timely notification to IR team
- Feedback to providers

INDICATIONS FOR CASE REVIEW VS AGGREGATE REVIEW

OPTIMAL
HEALTHCARE ADVISORS

Case Review

- Patient-level detailed review to identify deviations from standard of care
- Event-based review: adverse events, complications, unexpected outcomes
- Mortalities or complex cases
- Peer review to address care concerns and develop corrective actions

Aggregate Review

- System issues
- Assessment of trends and patterns across multiple cases
- Benchmarking (TQIP) against national or collaborative standards
- Assessment of effectiveness of guidelines and protocols

PROS & CONS

Case review vs Aggregate review

OPTIMAL
HEALTHCARE ADVISORS

Case Review

Pros:

- Allows for precise identification of guideline or protocol deviations
- If PI is concurrent, can promote timely interventions to correct issues as they arise
- Real-time feedback to clinicians to foster learning

Cons:

- Resource intense
- Does not capture patterns and trends, can be biased
- Can result in inconsistent action plans

Aggregate review

Pros:

- 'Big Picture' analysis – allows the reviewer to focus on trends and high-frequency issues
- Benchmarking
- Broader overview is resource efficient

Cons:

- Delayed impact
- Less detail – may not include important facts that lead to variances
- Dependent on accuracy in data collection

OPTIMAL
HEALTHCARE ADVISORS

WOULD YOU LIKE PERSONAL FOLLOW-UP?

KEY CONCEPTS

OPTIMAL
HEALTHCARE ADVISORS

1. Purpose of PI: This effort should routinely reduce **unnecessary variation** in care and prevent adverse events (patient safety)**.**
2. Achieved through monitoring and reporting of variances against established standards and best practice guidelines. This is accomplished by reviewing specific cases or aggregate data analysis.
3. PI Coordinators do not need to review every patient record. Focus on high-risk populations:
   - Full trauma activations, ICU admissions, IR cases, timing to OR, etc. – any area of concern that needs concurrent surveillance.
   - Less time focused on individual performance (ex: trauma flowsheet documentation)
4. Corrective actions are not the end of the story – to document effectiveness of your PIPS program, you need evidence that your actions worked.
5. Try to create measurable change whenever possible – easiest way to show event resolution or improvement.
6. Focus on what matters – improving patient outcomes.

OPTIMAL
HEALTHCARE ADVISORS

QUESTIONS & ANSWERS

OPTIMAL
HEALTHCARE ADVISORS

CONTACT US

Angie Chisolm

MBA/HCM, BSN, RN, CFRN, TCRN

President and Managing Partner

727-236-1352

Angie.Chisolm@oha-llc.com

Visit our website:

www.oha-llc.com

Follow us on LinkedIn:

www.linkedin.com/company/oha-llc