Data and Diamonds: A TQIP Benchmark Report Tale

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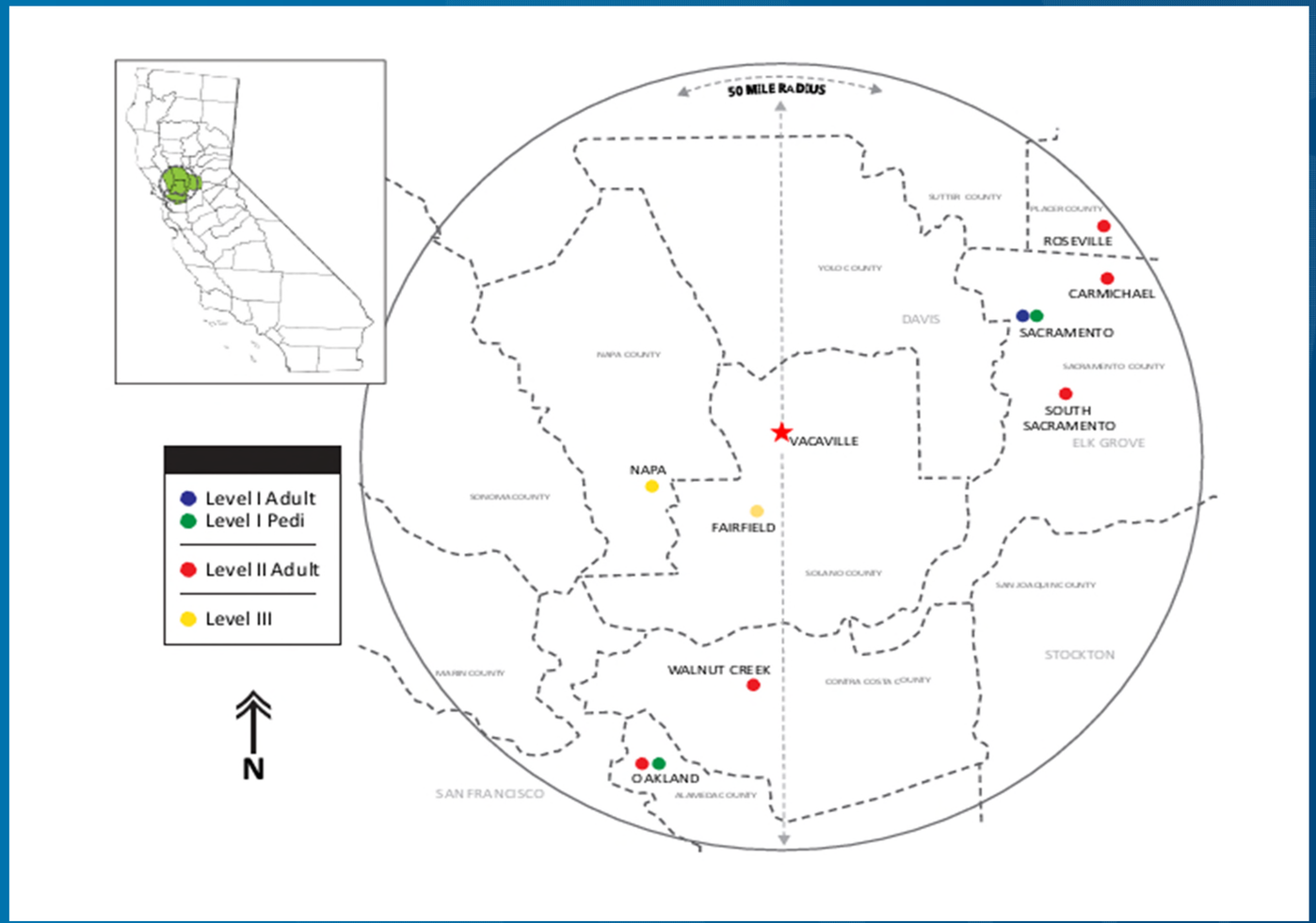
KPVAC Catchment Area



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Sometimes it’s easy

From: Annelyn V Ison <Annelyn.Ison@kp.org>
Sent: Thursday, February 8, 2024 11:36 AM
To: Amy L Brammer <Amy.L.Brammer@kp.org>; Amenah K Carter <Amenah.K.Carter@kp.org>
Subject: RE: Flags

Fixed and validated.

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From: Amy L Brammer <Amy.L.Brammer@kp.org>
Sent: Thursday, February 8, 2024 11:32 AM
To: Amenah K Carter <Amenah.K.Carter@kp.org>; Annelyn V Ison <Annelyn.Ison@kp.org>
Subject: Flags

Submission Id	65c529d147000f00b9a286a3
File Name	4Q2023NTDS.XML
Facility Id	CA0032
Facility Name	Kaiser Foundation Hospital-Vacaville, CA
Submission Date	2024-02-08 11:26:45 (US/Pacific)
Submitting User	Amy Brammer
Status	Success

Records Total	201
Records Added	0
Records Updated	201
Record Loading Error Count	0
Validation Message Count	4

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Sometimes …..

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TQIP Data Quality Report Filters

Data Quality Filter
More than 10% patients with an unknown Sex
Atypical percentage of records meeting the TQIP Patient Inclusion Criteria (Mean +/-2 STD (95%))
Atypical percentage of records reported with Major Hospital Events (Adults <1% or >15%; Pediatrics >4%; Level III >7%)
More than 10% of patients with an unknown BMI (Adult and Level III Centers ONLY)
More than 10% of patients with an unknown Initial ED/hospital Temperature
More than 10% of patients with an unknown Length of Stay (LOS)
More than 10% of patients with an unknown Initial ED/hospital Systolic Blood Pressure (SBP)
More than 10% of patients with an unknown Initial ED/hospital Pulse
More than 10% of patients with an unknown Initial ED/hospital GCS Motor
More than 10% of patients with an unknown Pre-hospital Cardiac Arrest (Level III Centers ONLY)
More than 10% of patients with an unknown Pre-Existing Conditions
More than 1% of patients with an unknown Hospital Events

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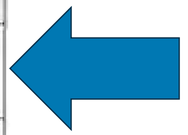

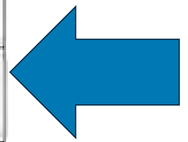

Roadblock to receiving a TQIP Benchmark Report

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Nobody Move

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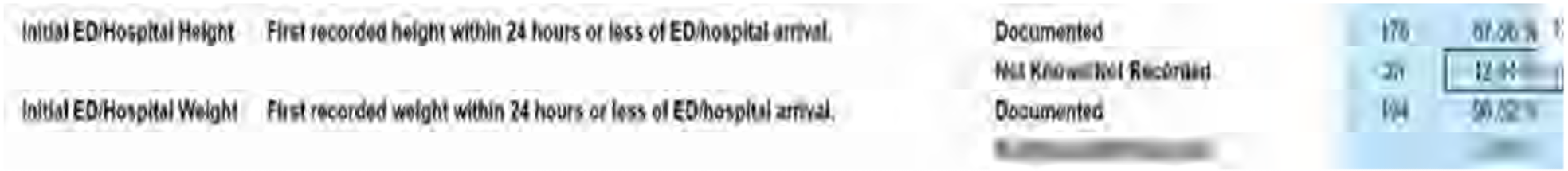
Submission Frequency Height



Initial ED/Hospital Height	First recorded height within 24 hours or less of ED/hospital arrival.	Documented	176	[illegible]
		Not Known/Not Recorded	[illegible]	[illegible]
Initial ED/Hospital Weight	First recorded weight within 24 hours or less of ED/hospital arrival.	Documented	194	[illegible]
		[illegible]	[illegible]	[illegible]

Time to Data Mine

Image Source: Bing creative commons license

We hit GOLD for HEIGHT.

Image Source: Bing creative commons license

After clean up and re- submission

Initial ED/Hospital Height	First recorded height within 24 hours or less of ED/hospital arrival.	Documented	185	92.04 %
		Not Known/Not Recorded	16	7.96 %
Initial ED/Hospital Weight	First recorded weight within 24 hours or less of ED/hospital arrival.	Documented	195	97.01 %

Not out of the woods yet

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.05% from disaster

Initial ED/Hospital GCS - Eye	First recorded Glasgow Coma Score (Eye) in the ED/hospital within 30 minutes or less of ED/hospital arrival.	1-No eye movement when assessed	4	1.99 %
		2-Opens eyes in response to painful ...	0	0.00 %
		3-Opens eyes in response to verbal ...	4	1.99 %
		4-Opens eyes spontaneously	173	86.07 %
		Not Known/Not Recorded	20	9.95 %

Hanging by a thread?

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Data Mine and an Intervention

Data Mine:

- Double check the not known/ not recorded

Intervention:

- Gather stakeholders
- SBAR

Situation=

Initial ED/Hospital GCS is within .05% of causing failure to be benchmarked ACS Standard 7.4

Background=

Looking at Jan 1, 2023, through Nov 30, 2023, we have a not documented rate of 9% for GCS
Of the 9% almost 4% are those coming by ambulance not activated (some are non trauma service admissions, some are trauma consults, none are activations)
3 % of the 9% are patients coming by POV (some are non trauma service admissions, some are trauma consults, none are activations)

The others are repatriated patients.

The low hanging fruit is the 4% arriving by ambulance

Not all ambulance patients are seen right away. Ambulance patients with stable medical conditions are directed to the waiting room, where they check in and wait.

Assessment=

GCS is not part of the triage workflow and will require an add The trauma patients that are walk in's or by EMS that do not meet activation criteria wait. They wait longer than 30 minutes the GCS is missed. I have been told they will have to add a field to accommodate but it would affect every KP.

Recommendation=

Add a field to accommodate GCS at triage

INITIAL ED/HOSPITAL GCS-TOTAL

DESCRIPTION

[redacted]

ELEMENT VALUES

- Relevant value for data element

ADDITIONAL INFORMATION

- [redacted]
  documentation.
- The null value "Not Known/Not Recorded" is reported if Initial ED/hospital GCS-40 is reported.
- [redacted]
  30 minutes of ED/hospital arrival.
- Please note that the first record ED/Hospital vitals do not need to be from the same assessment.

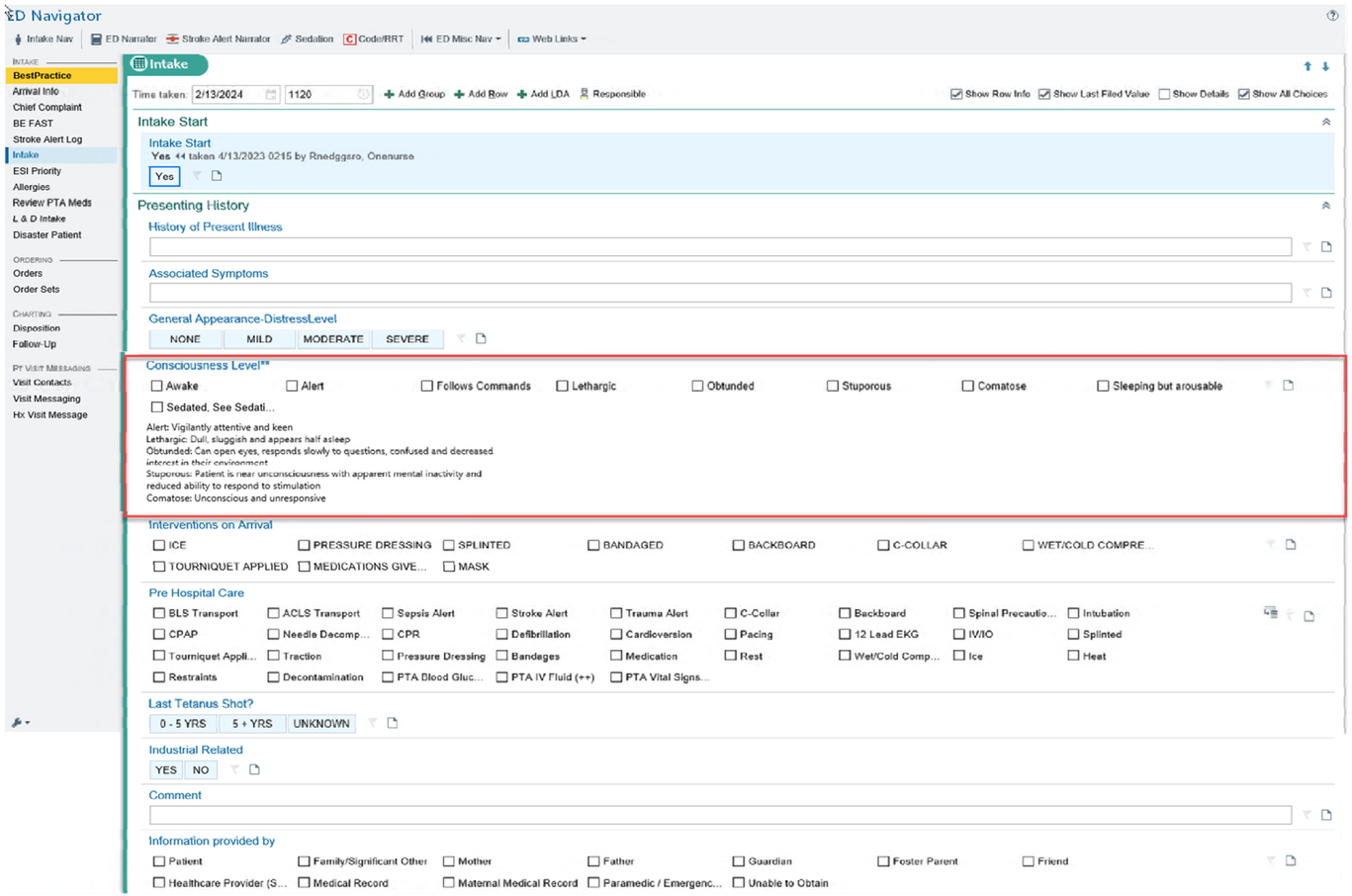
DATA SOURCE HIERARCHY GUIDE

1. Triage/Trauma/Hospital Flow Sheet
2. Nursing Notes/Flow Sheet
3. Physician Notes/Flow Sheet

ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
5701	1	GCS Total is outside the valid range of 3-15
5703	3	*Initial ED/Hospital GCS – Total* does not equal the sum of *Initial ED/Hospital* [redacted] *Motor*, unless any of these values are "Not Known/Not Recorded"
5705	2	Element cannot be blank
5706	2	Element cannot be "Not Applicable"
[redacted]		[redacted] GCS-40 Eyes, *Initial ED/Hospital GCS-40 Verbal*, or *Initial ED/Hospital GCS-40 Motor* are reported
5740	1	Single Entry Max exceeded

Row add for intake navigator formally requested



Do not wait until the last minute to upload

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Fall 2023 TQIP Benchmark Report

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Red Diamonds not a Trauma Programs BEST Friend

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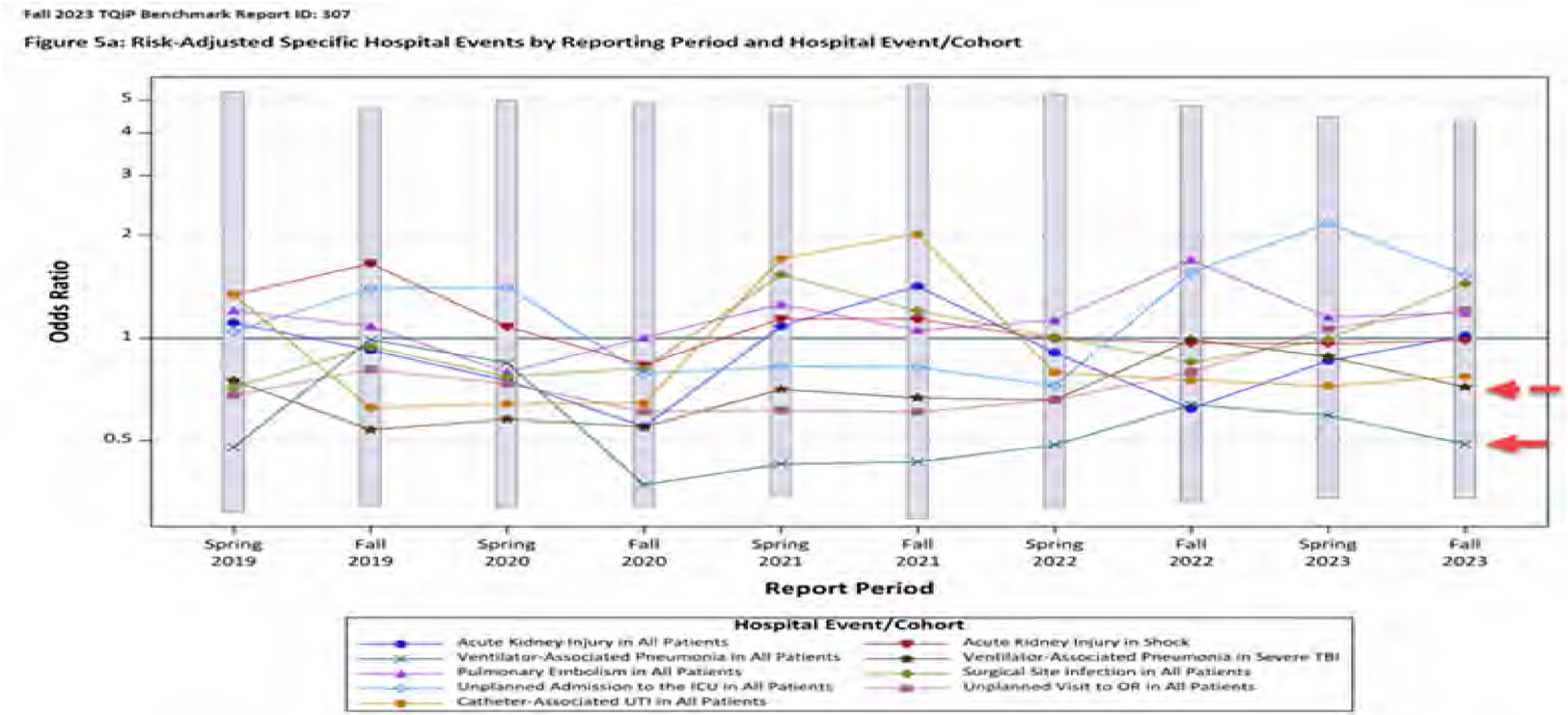
Top 3 Successes

1) Risk – Adjusted Specific Hospital Events Ventilator Associated Pneumonia in All Patients

KP Vac is 2nd Decile for all patients (285 patients with zero observed VAP events) and 3rd Decile for Severe TBI (10 patients with zero observed VAP events). Pg. 7 in TQIP benchmark report



Top 3 Successes

2) Risk -Adjusted Mortality by Cohort – Penetrating

KP Vac is 3rd Decile (14 patients with zero observed mortality events). Pg.3 TQIP benchmark report

Top 3 Successes

3) Resource Utilization by cohort – All patients

KP Vac Length of Stay median of 5 days compared to all Hospitals median of 6 days, KP Vac ICU Utilization median of 3 days compared to all Hospitals median of 4 Days, KP VAC Mechanical Ventilation median of 3.5 days compared to all Hospitals median of 3 days (299 patients in all patient's cohort). Pg. 24 TQIP benchmark report

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VII. Patient Characteristics

Table 10: Resource Utilization by Cohort

		Patients	Length of Stay (days)	ICU Utilization		Mechanical Ventilation		Unknown LOS (%)		
Cohort	Group	N	Median (IQR)	Patients with ICU Care (%)	Median ICU Days (IQR)	Patients with Mechanical Ventilation (%)	Median Days on Ventilator (IQR)	Hospital	ICU	Ventilator
All Patients	All Hospitals	395,750	6 (3-10)	45.5	4 (2-7)	17.5	3 (2-8)	0.1	0.1	0.1
	Your Hospital	299	5 (3-9)	49.5	3 (2-5.5)	12.0	3.5 (2-10)	0.0	0.0	0.0

Top 3 Opportunities

1) Unplanned Admission to the ICU in ALL Patients

KP Vac is an average outlier in the 10th decile (slight improvement over “high” outlier in Spring 2023). Monitoring and taking actions to prevent being an outlier in the future. There were 15 observed events at KP Vac. 5.3 % observed compared to an expected of 2.9%. Pg.15 TQIP benchmark report. See the attached A3.

Table 5: Risk-Adjusted Specific Hospital Events by Hospital Event/Cohort

		Patients	Specific Hospital Event				Odds Ratio and 95% Confidence Interval				
Hospital Event	Cohort	N	Observed Events	Observed (%)	Expected (%)	TQIP Average (%)	Odds Ratio	Lower	Upper	Outlier	Decile
Acute Kidney Injury	All Patients	293	2	0.7	0.7	0.8	1.02	0.42	2.44	Average	6
Acute Kidney Injury	Shock	7	0	0.0	0.9	4.7	0.96	0.27	2.60	Average	6
Ventilator-Associated Pneumonia	All Patients	259	0	0.0	0.6	0.8	0.49	0.13	1.80	Average	2
Ventilator-Associated Pneumonia	Severe TBI	11	0	0.0	5.6	6.6	0.72	0.15	3.34	Average	3
Pulmonary Embolism	All Patients	293	3	1.1	0.6	0.6	1.49	0.57	2.50	Average	8
Surgical Site Infection	All Patients	285	3	1.1	0.5	0.5	1.05	0.57	3.68	Average	9
Unplanned Admission to the ICU	All Patients	285	15	5.3	2.9	3.1	1.53	0.96	2.44	Average	10
Unplanned Visit to OR	All Patients	293	5	1.6	1.9	2.0	1.21	0.61	2.44	Average	6
Catheter-Associated UTI	All Patients	285	0	0.0	0.2	0.2	0.77	0.19	3.20	Average	3

A-3

A3 Problem Solving Tool

Project Name: Trauma unplanned ICU stays (including bounce backs to ICU)

Last Updated Date: 8/14/2023

Prepared By: Jessica Pemberton

Not at target: Share Improvement Plan

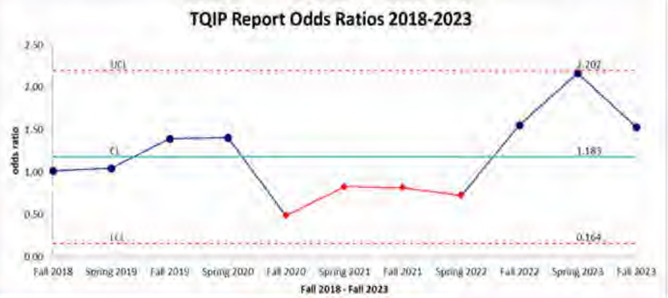
At or Just Below Target: Share Improvement Plan

On Track: Share Sustainability Plan

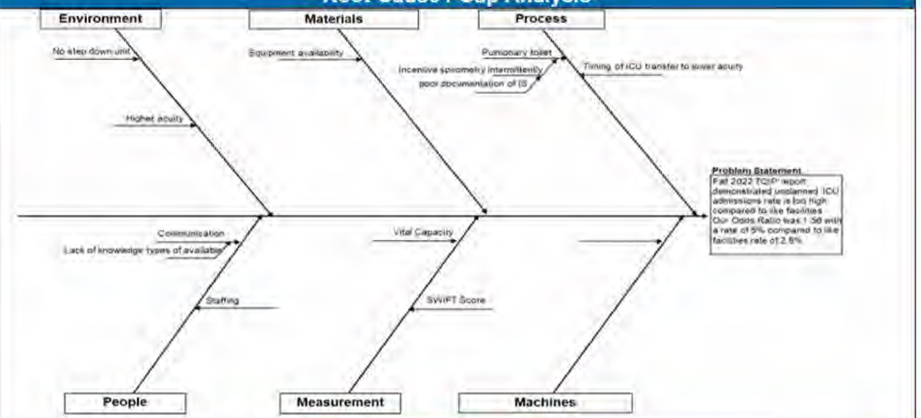
Department(s) / Team Members: Trauma: Dr. Travis Gerlach, Dr. George Liao, Amy Brammer, Jessica Pemberton. ICU: Dr. Kara Rakoczy, Victoria Grant CNS, Dawn Roberts Patient Care Services Director. Med/Surg Tele: Dr. Michelle Lim, Annette T, Geriatric CNS. Respiratory Therapy: Carolyn Coy, RT

Problem Statement

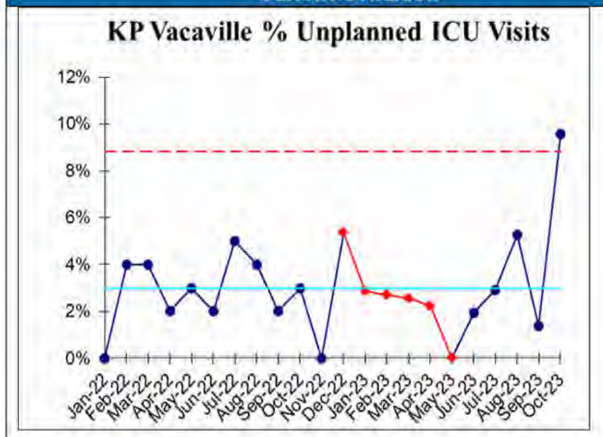
Higher unplanned ICU admissions on Fall 2022 TQIP Benchmark. KPVMC unplanned admissions to ICU is 5% compared to like facilities rates of 2.8% Our risk-adjusted unplanned admission to ICU with Odds Ratio of 1.56.



Root Cause / Gap Analysis



Current Condition



Experiments / Action Plan

Action Plan/TOC	Person Responsible	Start Date	End Date	Status / Results
Review 100% unplanned ICU visits at secondary review	Jessica/Amy/Dr. Gerlach	Ongoing		In progress
Spring 2023 TQIP Benchmark report review	Jessica/Amy/Dr. Gerlach	05/25/2023	6/5/2023	Initial review completed and data validated
Abstract for TQIP December 2023	Jessica/Amy	06/05/2023	12/3/2023	Completed 12/3/23
1. Ensure accuracy of submitted data	Jessica/Vendor	05/25/2023	6/6/2023	6/6-meeting with vendor to problem solve "refresh" issue
2. Share findings TSR	Jessica/Amy	6/14/2023		pending
3. Share report/findings TPIC	Jessica/Amy/Dr. Gerlach	6/20/2023		Pending
4. Literature Review	Jessica	6/5/2023	6/5/2023	Sent to team

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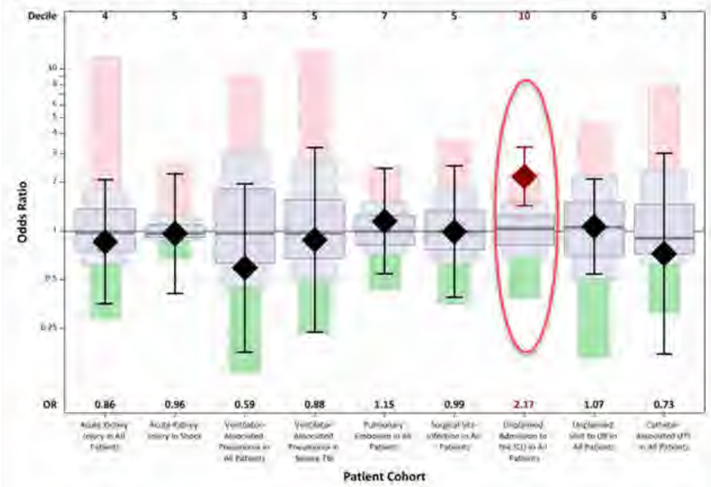
A3 Problem Solving Tool

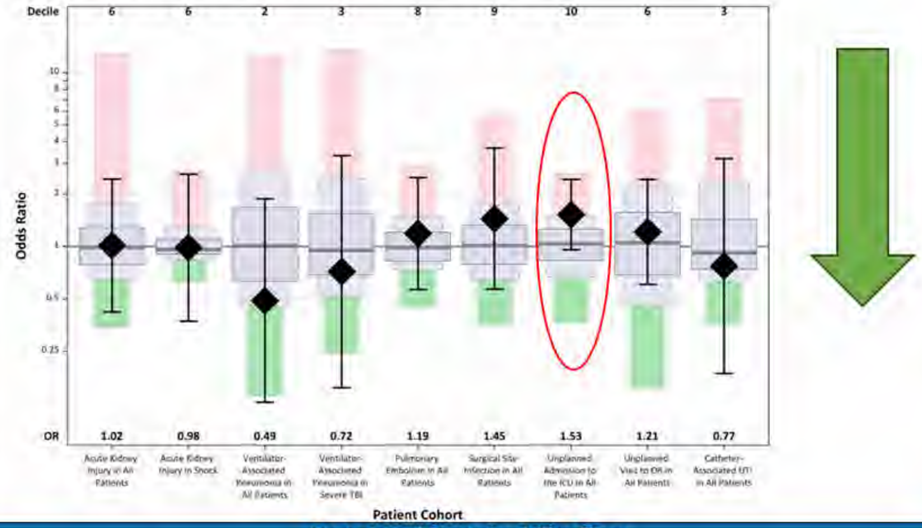
Spring 2023 TQIP Benchmark Report ID: 307

Figure 5: Risk-Adjusted Specific Hospital Events by Hospital Event/Cohort



Fall 2023 TQIP Benchmark Report ID: 307

Figure 5: Risk-Adjusted Specific Hospital Events by Hospital Event/Cohort



Target Condition

Goal: Odds Ratio of < 1.25 on Fall of 2023 TQIP Benchmark Report.
Stretch goal: Odds Ratio of 1.0 on Fall of 2023 Benchmark Report.
Goal: Decrease unplanned ICU

Outcome / Sustainability Plan

Spread- Trauma Grand Rounds
Spring 2023 Benchmark report with odds ratio of 2.17 – validate data – done, 3 of 9 patients are not accurate in this report (we resubmitted data but not reflected on this report) Should see a drop in odds ratio in Fall report.
Fall 2023 TQIP Benchmark Report with odds ratio of 1.53
Goal not met, will continue work to reduce unplanned ICU visits

Current Activities

8/14- 1 unplanned return to ICU in June – hip fx, HBS/Ortho, ISS 10, death. Case to be reviewed TPIC for any physician OFIs. Pt was a transfer in from KP Vallejo with MMP.

A3 page 3

A3 Problem Solving Tool

Unplanned ICU or Unplanned return to ICU - 14

ED Dispo

ICU	Floor	OR	Obs	NA(repat)	ED intubation	EDLOS AVG
9	1	2	1	1	1	1.6 hrs

HLOS		ICU LOS (total)		Vent Days (total) -8 pts		Trachs- 2	
Range	Avg	Range	Avg	Range	Avg	Range	Avg
10-45 d	25 d	3-32 d	13 d	4-19 d	10.5 d	3-13 d	8 d

MTP	COVID +	Spinal Stabilization	At least one AIS in Head	Crani	Time AVG	Time Range	Midline shift	ICP monitor 1
2	4	1	9	2	55 hr	2.9-107.8 hr	2	12 hrs

Splenectomy	Time to splenectomy	Operative Hip Fx	Time to fix	Open tib fib repair Avg	Range
1	24.38 h	1	16.67 h	22.6 h	1-61.3 h

GCS- ED		Time to VTE Prophylaxis		VTE Prophy -93%		
Range	Avg	Range	Avg	Lovenox	UH	None
3-15	12	13-289 h	92 h	12	1	1

ISS		Days to withdrawal of life support - 4	
Range	Avg	Range	Avg
10-59	25	10-39 d	22 d

	Overall # Pts	Overall Avg HLOS	Overall # with ICU days	Overall Avg ICU LOS	Overall Avg ISS	Repat #	Repat Avg HLOS	Repat # with ICU days	Repat Avg ICU LOS	Repat Avg ISS	#≥ 65 y	≥ 65 y Avg HLOS	≥ 65 y # with ICU days	≥ 65 y Avg ICU LOS	≥ 65 y Avg ISS
Jan-22	6	23.3	3	9.6	20	1	19	1	9	38	1	17	0	0	9
Feb-22	7	26.6	5	13.4	26.3	1	22	0	0	22	2	30	1	2	9.5
Mar-22	5	55.8	2	42	22.2	3	80	2	42	30	1	17	0	0	10
Apr-22	3	31.3	1	4	21	2	37	0	0	22	0	0	0	0	0
May-22	10	28.5	7	14	16	1	44	40	40	33	2	25.5	1	2	9.5
Jun-22	6	35	5	20	18.3	4	39.2	3	23	17	3	35.3	2	33.5	10
Jul-22	7	26.1	5	6	20.3	2	26	1	7	28	1	19	1	3	5
Aug-22	7	29.7	6	12	25.7	1	33	1	5	22	4	33.3	3	12.3	23
Sep-22	6	23.3	5	11	16.2	2	15.5	2	6	23	4	20.75	3	11	14
Oct-22	7	22.4	6	7.5	25.6	2	16.5	1	11		1	27	1	15	25

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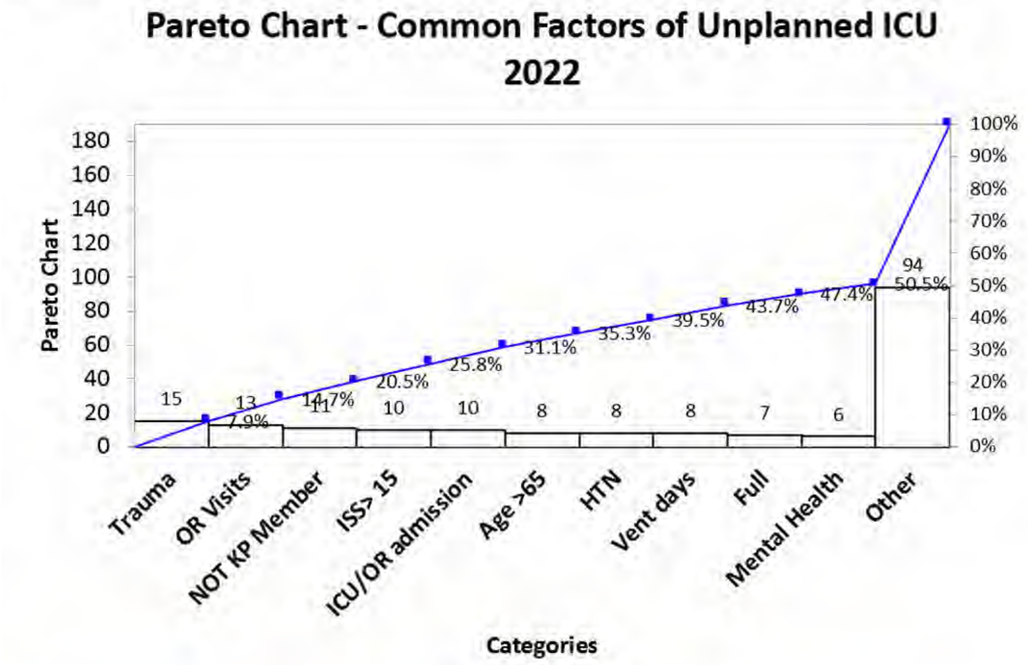
A3 Problem Solving Tool



Past Actions	Person Responsible	Start Date	End Date	Status / Results
RT Trauma Grand Rounds	Carolyn/Evan	February 2023	February 2023	Reschedule/pending
RT meet and greet with surgeons	Carolyn/Amy			Completed/Successful
SWIFT tool	Jessica	NA	NA	Not effective for all ICU admission types

ICU Bounce-Backs: The RED Diamond; Is It The Software, Or Is It ME?

Jessica Pemberton MSN RN CEN TCRN CAISS CSTR, Annelyn Ison CAISS, Amenah Carter BS

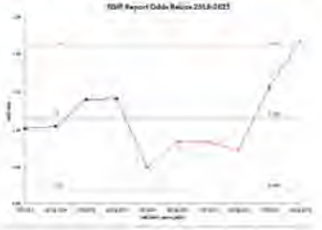
Kaiser Permanente Vacaville Medical Center

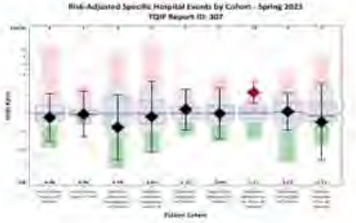
What Happened

Kaiser Permanente Vacaville Medical Center had higher than anticipated volume of unplanned ICU visits Fall 2022 TQIP Report. We pulled a group together and worked on accuracy with our next submission. In Spring of 2023 we were expecting good things on our benchmark report.

Imagine our surprise at seeing a RED DIAMOND!
So here we are with a red diamond wishing it was green or at least black. We had been running the bases trying to dodge that red diamond… it tagged us despite our best efforts.

Graph Opportunities/Reports

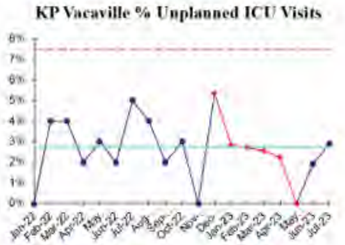




Initial Actions

Step 1 - Pull the patient population from the TQIP Data Center from the TQIP Fall 2023 Report.
Step 2 - Review each patient for similarities or commonalities that seemed to predispose them to "bouncing back" or having and unplanned ICU visit. Work Group developed to assist (A3)
Step 3 - Recognition of inaccurate data (phew)
Step 4 - Inclusion of registry vendor to assist in identification if this was software problem
Step 5 - Learned that each time you change anything in the EVENTS or Preexisting condition fields in the trauma registry the information had to be re-verified.
Step 6 - Went through every record in current quarter and ensured it was refreshed.
Step 7 - TQIP report time—And uh oh a RED DIAMOND! Diamonds are supposed to be a girl's best friend but red? Not so much…

Graph current state pending Fall 2023 Benchmark Report



Opportunity

Many trauma centers struggle with minimizing the frequency of unplanned ICU visits. Either a floor patient decompensates and is transferred to the ICU or a patient previously in the ICU bounces back due to decompensation. These unplanned ICU visits are associated with higher cost of care and increased morbidity and mortality. Our center had noticed the insidious creep of the ICU bounce backs into the danger zone of the TQIP Benchmark report.

Actions- 2nd group

- Gathered key stake holders, trauma surgeons, critical care physicians, respiratory therapists, and nursing
- Worked together to identify commonalities - respiratory compromise
- Developement of new smart phrases for providers for respiratory therapy orders
- Familiarized providers with the different modalities available from respiratory therapy at Trauma Grand Rounds and one on one with providers
- Reviewed the registry it was identified that what we saw was NOT the value submitted to NTDB
- Contacted our registry vendor for assistance to determine if there was a mapping error and to help problem solve
- The registry data was corrected and resubmitted for all of 2022

Learnings

The software vendor no longer supported system refresh or refreshing a subset of records. The team went in each and every record and made sure the record was re-validated.

Our current submission to TQIP was sent in June after a thorough review of the Submission Frequency report which focused on our Events to ensure our numbers match what we pull from the registry.
We anticipate a much-improved appearance on our TQIP report in Fall of 2023 which is the first report that will reflect the corrects that were made with the data once refreshed.

Real time case review, working with vendor to come up with a simpler "fix" than manually reviewing each record prior to submission to refresh individually, ongoing work group and ultimately a TQIP report that reflects and matches our data. You cannot fix a problem when a big part of the problem is not identified. We identified the problem and (fingers crossed) Fixed it!

So how do you avoid being face down in the dirt just before home plate? Validate your submission frequency report early, know your cut off dates, and keep yourself engaged and in the game of Trauma.

References

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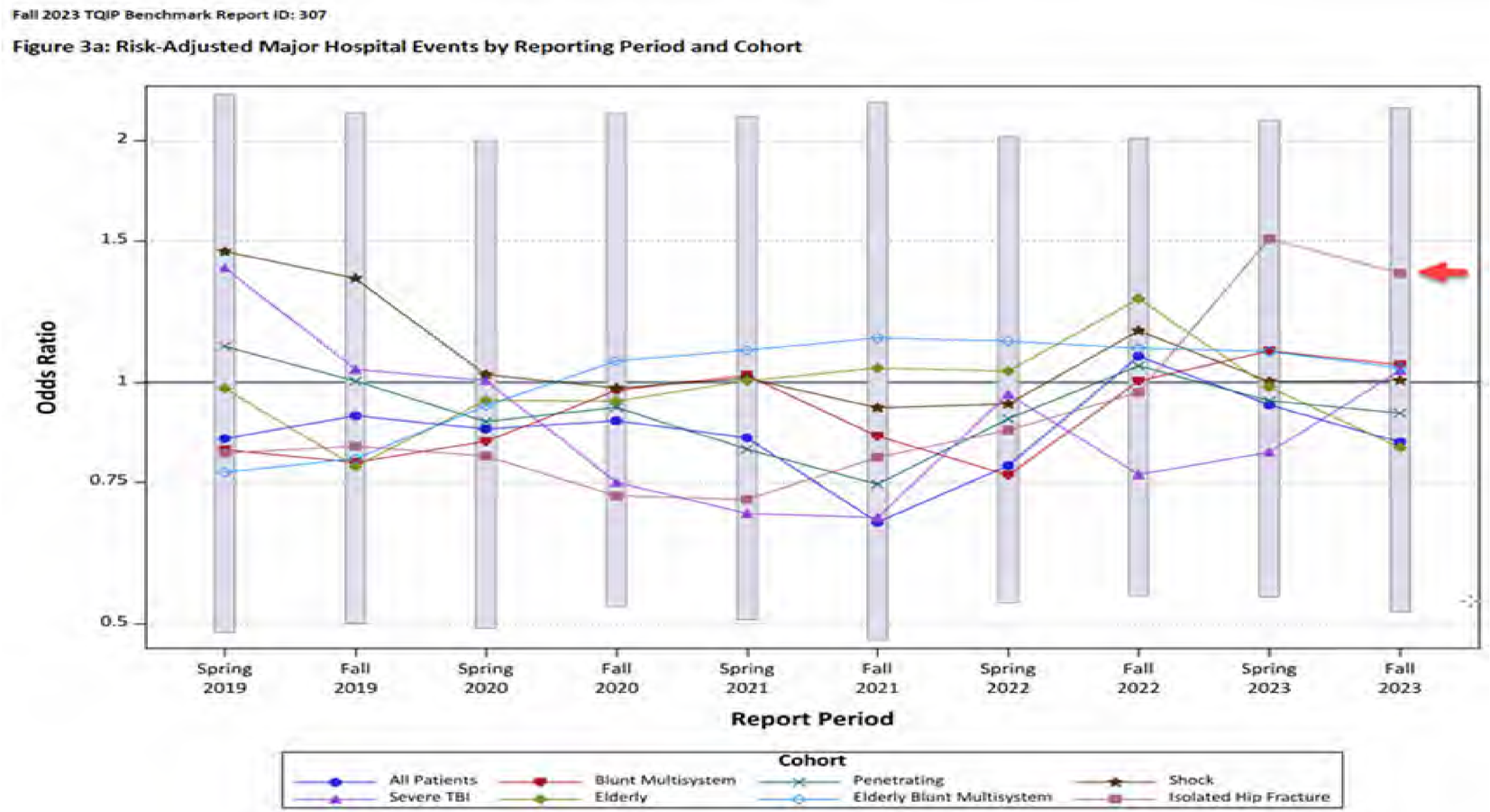
Top 3 Opportunities

2) Risk- Adjusted Major Hospital Events Including Death by Cohort Isolated Hip Fractures

KP Vac is an average outlier but in the 8th decile. There were 75 patients in the cohort with 6 observed events. 8.0% observed compared to and expected of 5.6%. Monitoring and taking actions to prevent becoming an outlier in the future. Pg.11 TQIP benchmark report.



A3 Problem Solving Tool

Project Name: Geriatric Hospital Event Reduction

Sponsor(s): Sanjit Singh, COO

Last Updated Date: 6.6.2023

Prepared By: Jessica Pemberton

Department(s) / Team Members: Trauma- Jessica Pemberton, Amy Brammer, Dr. Travis Gerlach, Intensivist- Dr. Rakoczy

HBS- Dr. Lin, Geriatric CNS-Annette Tuatagaloa, ICU CNS Victoria Grant

Not at target: Share Improvement Plan

At or Just Below Target: Share Improvement Plan

On Track: Share Sustainability Plan

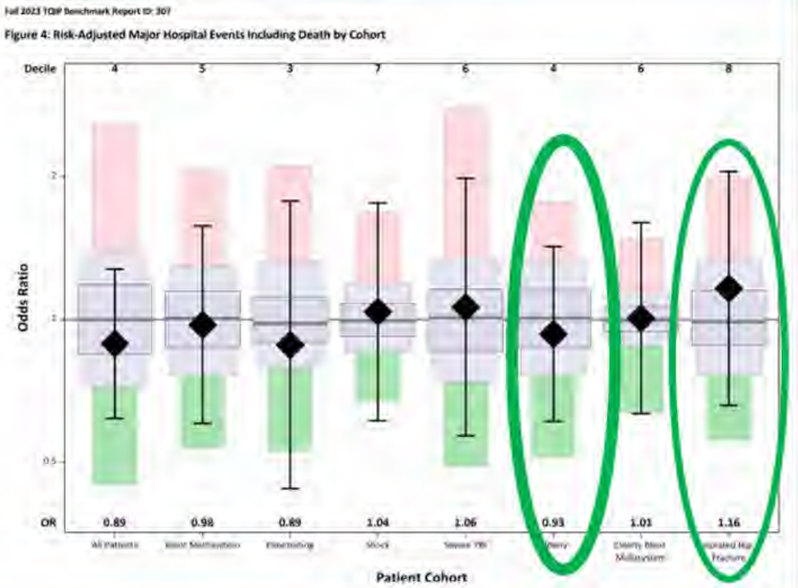
Problem Statement

Fall 2022 TQIP Benchmark Report demonstrates KP Vacaville is an average outlier at the 10th decile for Risk Adjusted Major Hospital Events including Death for Elderly Cohort. The current performance is a departure from historical comparisons.

Root Cause / Gap Analysis

See Geriatric files

Current Condition



Experiments / Action Plan

	Person Responsible	Start Date	End Date	Status / Results
Geriatric Core Work Group Development	Jessica/Dr. Gerlach	12/2/2022	12/2/2022	Ongoing while in project phase
Fall 2023 TQIP Benchmark Review	Jessica/Amy, Dr. Gerlach	11/21/2023		In progress, to be shared at TSR/TPIC

Target Condition

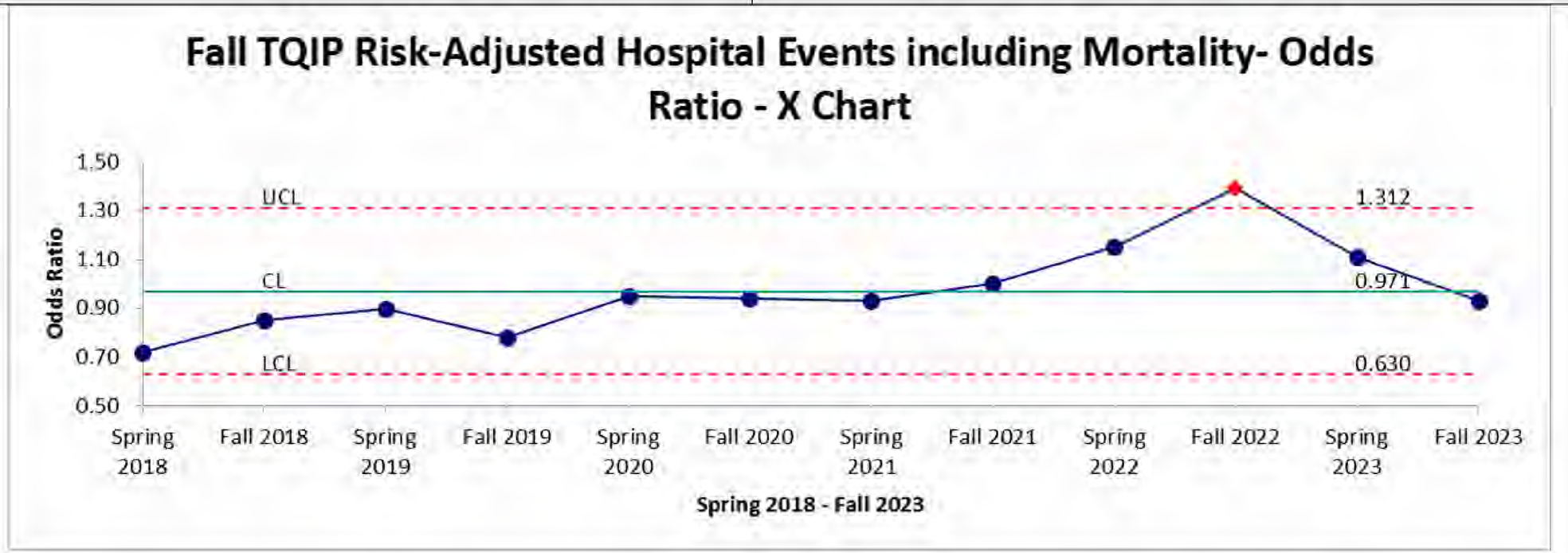
Demonstrate a decrease in geriatric morbidity and mortality from odds ratio of 1.39 to odds ratio of 1.0 by Fall TQIP report 2023

Outcome / Sustainability Plan

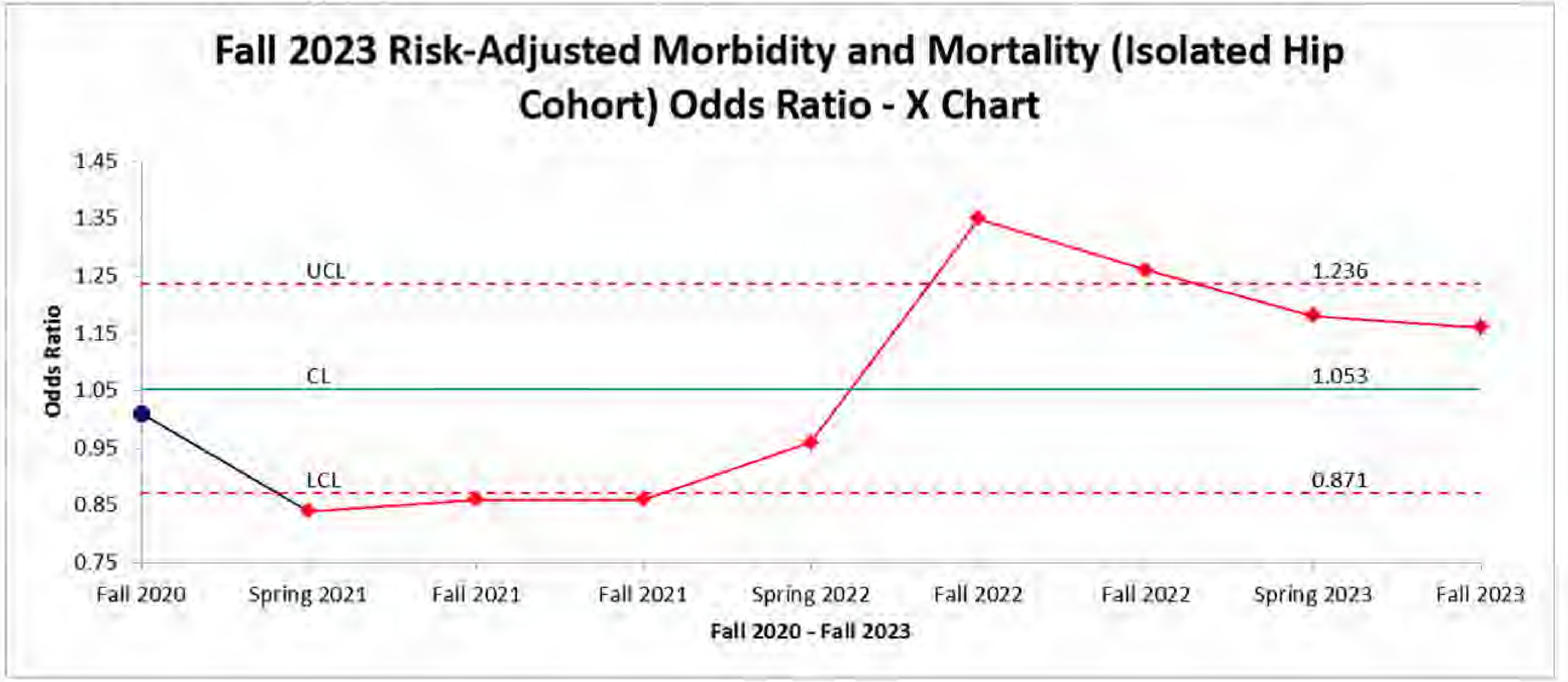
Spring 2023 Benchmark report with odds ratio of 1.11, an improvement from Fall 2022 report.
Ongoing work on Geriatric CPG and Compliance with CPG
Fall 2023 Benchmark report with odds ratio of 0.93, GOAL met
In the isolated hip fracture cohort the odds ratio decreased from 1.18 to 1.16,
We are continually improving these outcomes.

A3 Problem Solving Tool

	Fall 2023 demonstrates KP Vacaville at 4th decile, a significant improvement over one year period



A3 Problem Solving Tool



A3 Problem Solving Tool

Spring 2023 Geriatric Cohort mortality cases - 14 pts

Location			
ED	ICU	Floor	Hospice
2	5	3	4

MOI				
	Fall	GSW	MVPed	MVC
Deaths	3	2	2	3
Hospice	4	0	0	0

Comorbidities		
None	1-2	3+
1	3	6
0	1	3

Activation Level					
	Full	Limited	Consult	NOT	NA
Inpt death	3	3	2	0	0
DC hospice	0	0	2	2	0
Died in ED	1	0	1	0	0

Injury Severity Scoring					
Range	*AVG*				
9-50	23	0-9	10-15	16-25	25+
Facility Death		1	2	3	4
Hospice patients		1	1	1	1

Hospital LOS			ICU LOS		Vent days		Goals of care discussion				
	Range	*AVG*	*Range*	*AVG*	*Range*	*AVG*	1 day	2 day	3 day	4+d	>10
Inpt	0-29	9	0-27	9	0-16	8.3	2	1	1	2	2
Hospice	2-11	6	3-5	4	0	0	3	1			

Associated Hospital Events							
VAP	CPR	AKI	unplanned intubation	unplanned ICU	CVA	Pressure Injury	prolonged ED LOS
0	3	1	3	3	1	1	4

GCS											
EMS		Arrival		Highest in TBI (6 pts)		Highest motor (6 pts)		Pupillary response (8 pts)		Midline shift (8 pts)	
Range	*AVG*	*Range*	*AVG*	*Range*	*AVG*	*Range*	*AVG*	*Neither*	*Both*	*Yes*	*No*
3-14	10.7	3-15	10.2	4-15	11.5	1-6	4.5	3	5	1	7

PRBC in 1st 4 hrs - 1 pt							SBP lowest ED		EtOH use -1 pt
PRBC		FFP		PLt 6 packs (2pts)		Cryo	2 pts		
Range	*AVG*	*Range*	*AVG*	*Range*	*AVG*	*none*	*Range*	*AVG*	
0-3	3	0-2	2	0-3			53-110	81.5	

Withdrawal of care		Days to withdrawal		0-2 days	3-5 days	6-9 days	>9 days
Yes	*No*	*Range*	*AVG*				
7	7	2-28	10.14	*1*	*1*	*3*	*2*

Previous activities					
	Person Responsible	Start Date	End Date	Status / Results	Notes
Case review and drill down	Jessica/Amy/Dr. Gerlach	11/12/2022	11/30/2022	Completed/no issues identified	
Gap Analysis 2022 ACS COT Verification Criteria for Geriatrics	Jessica/Amy/Dr. Gerlach				Identified Dr. Lim as liaison for geriatric trauma.
Geriatric Trauma Workgroup developed	Jessica	7/5/2022	07/5/2022	Completed	Team members identified
Geriatric Work Group Meeting	Jessica	8/9/2022	8/9/2022	Completed	CPG, Gap Analysis Reviewed
Geriatric "age" definition	Group	12/2/2022	12/2/2022	Completed	Determined age will be 75+
Discuss palliative involvement with Dr. Durkin	Dr. Gerlach	12/2/2022	5/1/2023	tabled	
Meeting with Senior Surgical Care staff to evaluate medication reconciliation process.	Dr. Gerlach	12/5/2022	12/5/2023	Pharmacy will assist based on	
Who should HBS be involved with that are < 75?	Dr. Rakoczy, ~~Dr. Lim~~	12/2/2022	5/1/2023	done	
Meeting to be set up with Jen Ellis, Tom Pham to review dashboard opportunities	AMY	12/6/2022			
Palliative care Grand Rounds	Dr. Gerlach	5/18/2023	5/18/2023	Attended, recommend other providers also review recording.	
Geriatric Core Work Group Development	Jessica/Dr. Gerlach	12/2/2022	12/2/2022	Ongoing while in project phase	
Update Geriatric CPG from 2020	Dr. Gerlach	11/6/2022	11/2023	6/5-Final stages of review from key stakeholders	
Spring TQIP Benchmark Review	Jessica/Amy, Dr. Gerlach	5/16/2023	6/2023	In progress, to be shared at TSR/TPIC	
Meeting with Pharmacy re. Geriatric Med rec process		3/9/2023	3/2023		
Geriatric meeting with Pharmacy and Geriatric CNS	Amy	6/1/2023	6/2023		

Top 3 Opportunities

3) Time to Tracheostomy (days) -Tracheostomy Management for Severe TBI Patients

KP Vac Median days is 14 days compared to 10-day median in all hospitals. Monitoring and taking actions to prevent being outlier in the future. There were 20 severe TBI Patients. Three TBI Patients with Tracheostomy at KP Vac during this reporting period. Pg. 39 TQIP benchmark report.

Table 30: Tracheostomy Management for Severe TBI Patients

	Severe TBI	Tracheostomy	Time to Tracheostomy (days)	Tracheostomy after more than 7 days	Unknown Time to Tracheostomy
Group	N	N (%)	Median (IQR)	N (%)	N (%)
All Hospitals	27,219	4,581 (16.8)	10 (7-14)	3,188 (69.6)	0 (0.0)
Your Hospital	20	3 (15.0)	14 (3-22)	2 (66.7)	0 (0.0)

Questions?

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Image Source: Amy Brammer