

Journey from 10 to 1

Deborah Krauser, DNP, APRN
HCA Florida Kendall Hospital

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TQIP Report Review

Fall 2019 TQIP KRMC

Table 2: Risk-Adjusted Mortality by Cohort

Cohort	N	Mortality				Odds Ratio and 95% Confidence Interval			Outlier	Decile
		Observed Events	Observed (%)	Expected (%)	TQIP Average (%)	Odds Ratio	Lower	Upper		
All Patients	683	43	6.3	6.8	7.5	0.89	0.63	1.26	Average	4
Blunt Multisystem	88	16	18.2	18.2	15.4	1.00	0.59	1.69	Average	6
Penetrating	10	1	10.0	2.3	10.3	1.16	0.49	2.71	Average	9
Shock	19	5	26.3	30.8	27.6	0.92	0.49	1.72	Average	3
Severe TBI	41	18	43.9	53.7	45.0	0.70	0.38	1.26	Average	2
Elderly	333	24	7.2	8.6	10.2	0.84	0.57	1.23	Average	3
Elderly Blunt Multisystem	29	7	24.1	19.2	22.4	1.11	0.65	1.89	Average	9
Isolated Hip Fracture	162	8	4.9	2.3	3.1	1.38	0.80	2.36	Average	10

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Meeting of Stakeholders

- Convert admission from Internal Medicine to Trauma
- EDP's trained to do fascia iliaca blocks
- Geriatric Bundle (G-55)
- TNCs engaged – rounding in ED

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G-55 - Geriatric Trauma Bundle

- UA evaluate for occult UTI
- BNaP for baseline volume status
- Troponin to identify silent MIs
- 12 Lead EKG for cardiac disease

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G-55 Geriatric Trauma Bundle

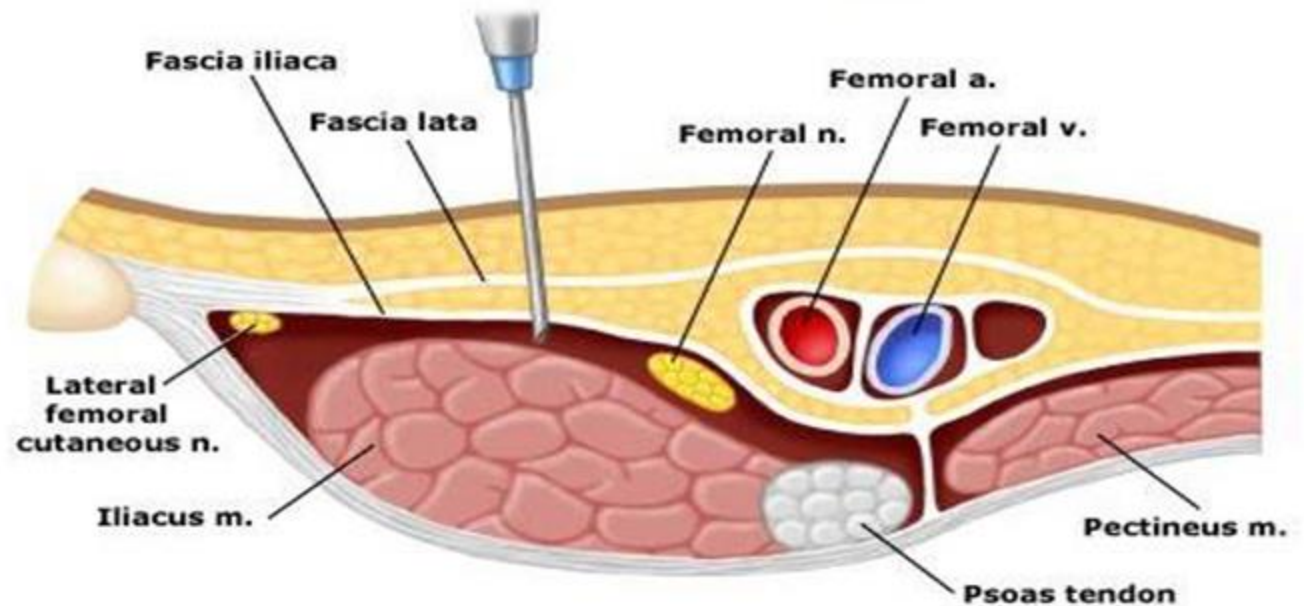
- Anticoagulant Screen – Rapid reversal if indicated
 - PT/PTT/INR
 - PFA (platelet function assay)
 - Anti Xa
- Medicine/Geriatric consult

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- Multimodal Pain Management - including fascia iliaca blocks in ED within 6 hours of arrival
- Early Surgical Repair (within 24 hours!)
- Nutrition Consult
- Careful fluid management to avoid overload and subclinical hypovolemia

Multimodal Pain Management

- Scheduled Acetaminophen
- Scheduled NSAIDs (Ibuprofen, Toradol)
- Scheduled Gabapentoids
- Alpha Antagonists
- NMDA Antagonists
- Regional Analgesia
- Narcotics PRN



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Assessment of Pre-operative Risk

- Revised Cardiac Risk Index (RCRI)
- Metabolic Equivalent of Task Values (MET)

If RCRI is ≥ 2 or the MET is < 4 then Cardiology Consult is Indicated, otherwise no cardiology consult prior to surgery (this avoids unnecessary delays)

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RCRI

- High Risk Surgery – Checked for Hip Fracture Repair
- History of Ischemic Heart Disease
- History of CHF
- History of Cerebrovascular Disease
- Pre-operative treatment with insulin
- Pre-operative serum creatinine > 2mg/dL

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Metabolic Equivalent of Task

(pick highest capability prior to surgery)

- Walking slowly – 2
- Walking normally – 3
- Pushing a stroller – 4
- Walking briskly – 4.3
- Walking up a light of stairs with 1 lb – 5
- Combination jogging/walking - 6

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Operative Considerations

- TXA Administration intra-op (1 gram)
- Spinal Anesthesia if not anticoagulated
- Judicious Fluid Management
- Non-invasive continuous monitoring of fluid responsiveness (APWA)

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Post-op Management

- Intermediate Care Unit (IMC) admission post op
- Rounded on by STICU team
- Early mobilization (Ambulatory that night or next morning)
- Early Physical Therapy
- Daily BNaP
- Early consult with Physiatry

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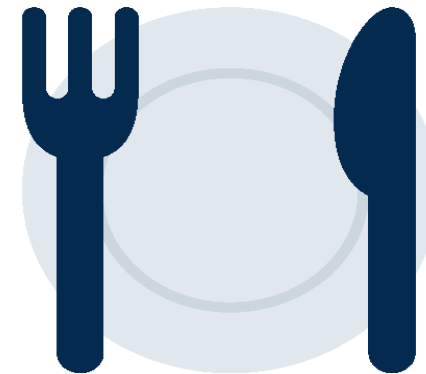
Early Mobilization



LET'S TAKE OUR PATIENTS

OUT TO EAT

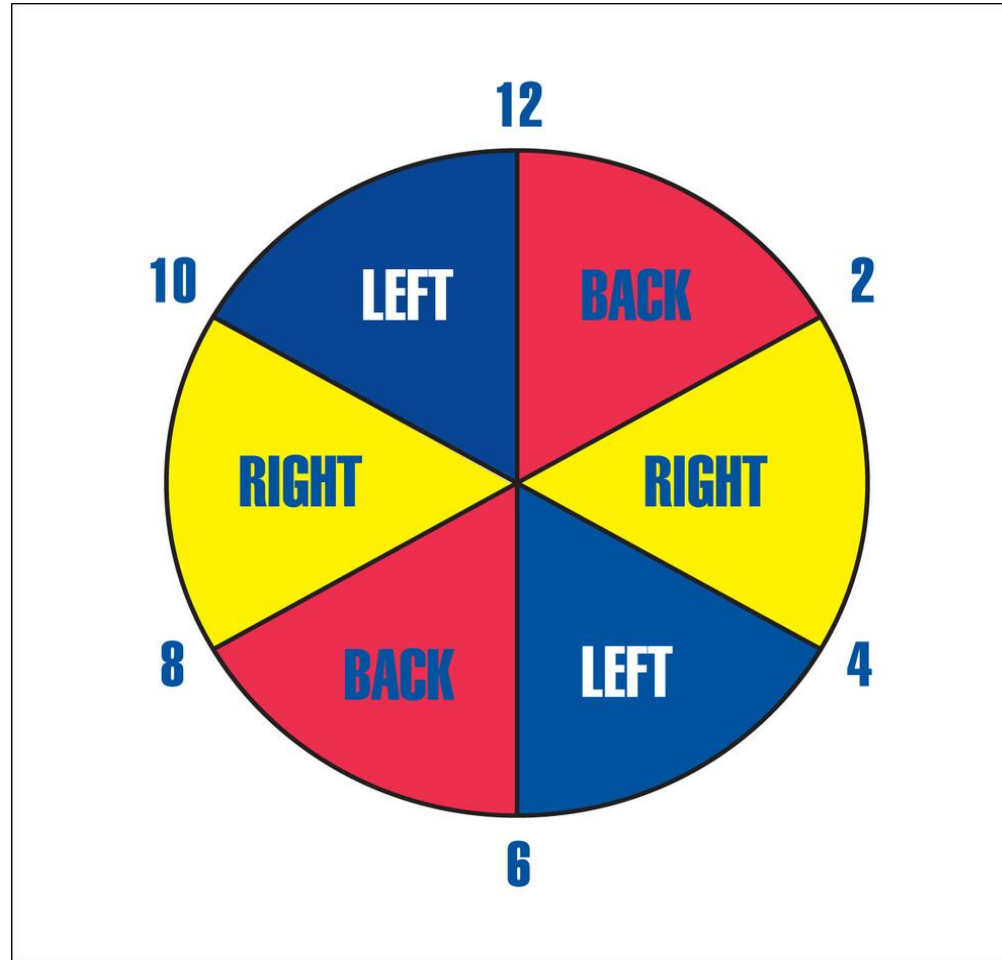
If the doctor's order states **"OOB"**, the trauma patient is to receive all of their meals out of bed and in a chair.



**KENDALL REGIONAL MEDICAL CENTER
LEVEL 1 TRAUMA**



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Discharge Status Table 14 TQIP

- Discharge home 17% Fall 2019
 - (SNF 51%, Rehab 26%)
- Discharge home 31% Spring 2022
 - (SNF 51%, Rehab 14%)

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Spring 2022 TQIP KRMC

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Cohort	Patients N	Mortality				Odds Ratio and 95% Confidence Interval			Outlier	Decile
		Observed Events	Observed (%)	Expected (%)	TQIP Average (%)	Odds Ratio	Lower	Upper		
All Patients	893	59	6.6	11.5	7.9	0.45	0.33	0.60	Low	1
Blunt Multisystem	154	19	12.3	20.2	15.3	0.58	0.37	0.90	Low	1
Penetrating	11	1	9.1	9.9	11.0	0.99	0.52	1.89	Average	5
Shock	22	8	36.4	38.9	27.8	0.98	0.64	1.49	Average	4
Severe TBI	52	19	36.5	53.2	47.0	0.49	0.28	0.87	Low	1
Elderly	431	43	10.0	16.8	10.9	0.52	0.38	0.71	Low	1
Elderly Blunt Multisystem	53	9	17.0	30.7	22.8	0.71	0.44	1.12	Average	1
Isolated Hip Fracture	164	3	1.8	9.3	3.7	0.44	0.25	0.78	Low	1

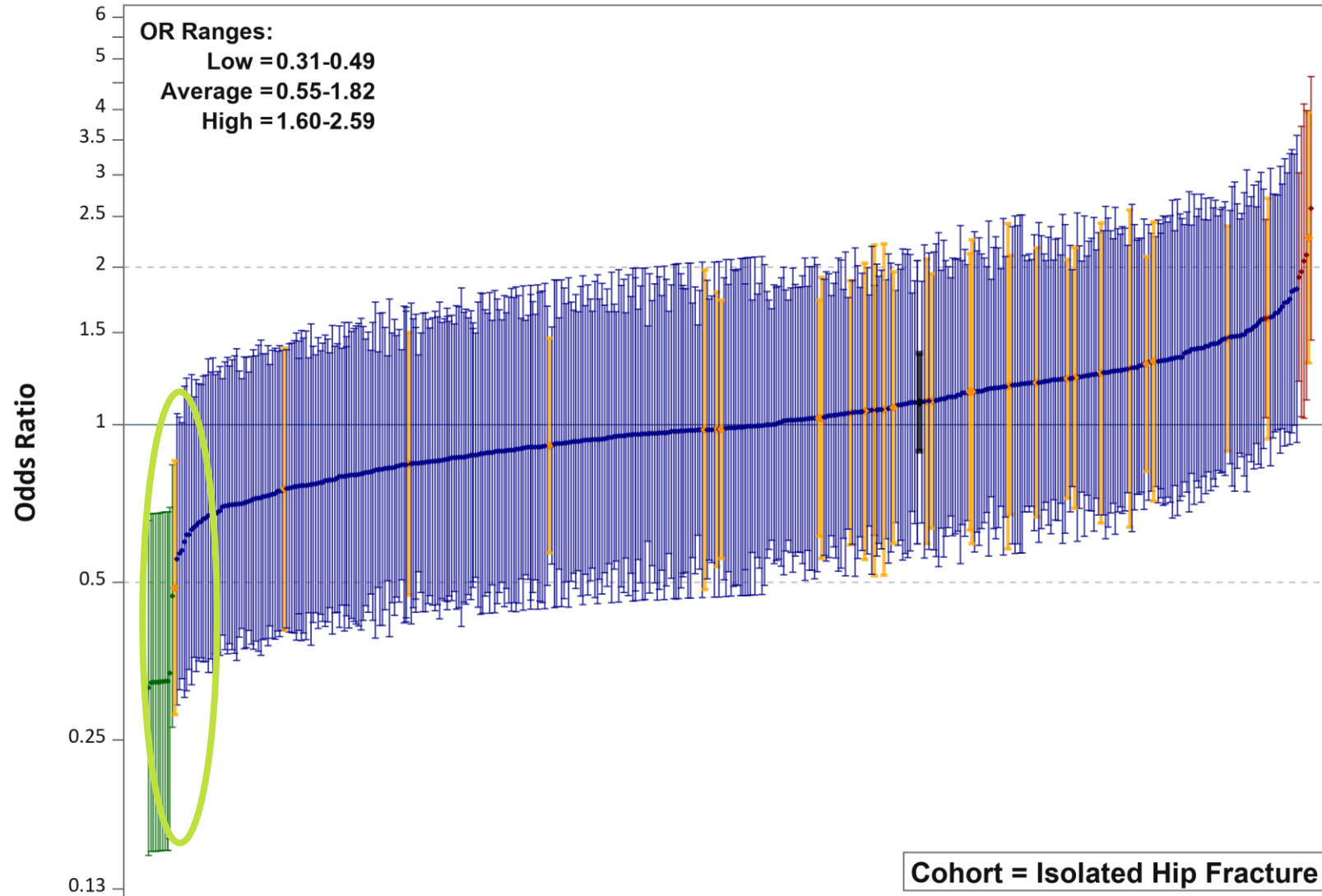
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Risk Adjusted Mortality by Cohort - IHF

Fall 2019	10
Spring 2020	8
Fall 2020	1
Spring 2021	1
Fall 2021	1
Spring 2022	1
Fall 2022	1

Florida TQIP Collaborative Spring 2022

Odds Ratios by TQIP Hospital; Mortality



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Conclusion

- Isolated Hip Fracture patients are well served on the Trauma Service
- Patients are Extremely Frail
 - G-55 Bundle
 - Regional Analgesia
 - Early Surgery
 - TXA
 - Early Mobilization/PT
- Post op IMC Admission

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