

Outcomes of the included studies

First author, year	Outcome measures collected		Results
1. FRAILITY PATHWAYS n=1 study			
Bryant 2019 [34]	Delirium		21.6% pre implementation vs 12.5% post implementation (odds ratio [OR] 0.44, 95% CI 0.22 to 0.88); post intervention absolute risk reduction 9.1%
	Major complications		28% vs. 28.47%
	In-hospital mortality		7.2% vs. 4.17%; post intervention absolute risk reduction 3.0%
	30-day re-admission		9.6% vs. 2.78% (OR 0.25, 95% CI 0.07 to 0.84); post intervention absolute risk reduction 6.8%
2. GERIATRIC CONSULTATION n= 7 studies			
Fallon, 2006 [48]	Length of stay (median [unit unspecified, days assumed])		Geriatric seen group 7.3, unseen group 3.0, p = 0.001
	Length of stay on ICU (median [unit unspecified, days assumed])		Geriatric seen group 3.3, unseen group 1.4, p=0.001
	Discharge disposition, including death	home	SEEN group n=32, 28% vs UNSEEN n=68, 40%, p=0.001
		rehabilitation	SEEN group n=66, 58% vs UNSEEN n=54, 32%, non-significant
		nursing care home	SEEN group n=6, 5% vs UNSEEN n=7, 4%, non-significant
		coroner (i.e. died)	SEEN n=5, 4% vs UNSEEN n=31, 18%, p=0.001
		other	SEEN group n=4, 4% vs UNSEEN n=2, 1%, non-significant
	Types of issues addressed by GTT recommendations		Pain (59%), pain control (42%), rehabilitation (49%), delirium (36%), hypertension (33%), dementia (26%), adverse drugs decreased (20%), depression/anxiety (20%), diabetes (19%), constipation (19%), advance care planning (15%), alcohol issues (14%)
	Physician adherence to one of more GTT recommendations		91%
Lenartowicz, 2012 [40]	Rate of comprehensive geriatric assessment		Pre intervention 3.8% versus post-intervention 59.4%
	Recommendation adherence rate		93.2%
	Geriatric-specific in hospital complications (falls, delirium, physical restraint use) and trauma quality indicators (decubitus ulcer, deep vein thrombosis, pulmonary embolus, myocardial infarction, pneumonia, cardiac arrest, missed injuries)		Falls 2.0% pre, 0.8% post, p 0.72 Delirium 50.5% pre and 40.9% post, p = 0.05 Physical restraint 52.5% pre, 50.3% post, p 0.65 Trauma quality indicators: No statistically significant differences

	Sub-specialty consultation requests			Pre-GTCS n=31, post-GTCS group n=18, p=0.04 to internal medicine Pre-GTCS n=31, post-GTCS group n=18, p=0.02 to psychiatry
	In-hospital mortality (excluding first 48 hours)			Pre GTCS 12.3%, post-GTCS 14.6%, p 0.47
	Discharges to long term care			6.5% pre-GTCS vs 1.7% post-GTCS, p=0.03
Min, 2015 [38]	Overall Quality of Care (QOC) score (33 Assessing the Care of Vulnerable Elders 'ACOVE-3' quality indicators in the hospital care set for appropriateness of care)			Unadjusted control group 76.5% vs geriatric consultation 73.2; p < 0.05 Adjusted for patient-level confounders, no difference (2.8 percentage-point difference; p = 0.08).
	Geriatric condition-based care (e.g. delirium screening)			Unadjusted: geriatric consultation 74%, control 68.3%. Adjusted 5.0 percentage point difference (95% CI, 1.2-9.2)
	Delirium care			Unadjusted: geriatric consultation 63.9%, control 55.0. Adjusted 8.4 percentage point difference (95% CI, 0.5-16.4)
	Mobility care			Unadjusted: geriatric consultation 80.0%, control 74.0. Adjusted 4.7 percentage point difference (95% CI, -1.7-11.3)
	Screening or prevention			Unadjusted: geriatric consultation 88.6%, control 83.2. Adjusted 6.1 percentage point difference (95% CI, 1.2-11.2)
	Care process: diagnosis quality indicators			Unadjusted: geriatric consultation 70.5%, control 68.5. Adjusted 2.1 percentage point difference (95% CI, -5.7-9.9)
	Care process: treatment quality indicators			Unadjusted: geriatric consultation 86.3%, control 86.4. Adjusted 0.3 percentage point difference (95% CI, -5.3-6.0)
	Care process: follow-up and continuity quality indicators			Unadjusted: geriatric consultation 62.4%, control 58.8. Adjusted 1.8 percentage point difference (95% CI, -4.5-8.6)
Olufajo, 2016 [52]	Geriatric consult			3.26% pre intervention, 100.0% post intervention, p<0.01
	Documentation of delirium			31.2% pre intervention, 38.2% post intervention, p= 0.14
	DNR/DNI code status			10.2% pre intervention, 38.2% post intervention, p<0.01
	Referral for formal cognitive evaluation			2.3% pre intervention, 14.2% post intervention, p<0.01
	In-hospital mortality			9.30% pre intervention, 5.24% post intervention, p= 0.12
	30-day mortality (within 30 days of discharge)			11.63% pre intervention, 5.24% post intervention, p= 0.12
	ICU readmission (within the incident hospitalisation)			8.26% pre intervention, 1.96% post intervention, p= 0.06
	30-day readmission (within 30 days of hospital discharge)			16.92% pre intervention, 14.92% post intervention, p= 0.60
Southernland 2017 [53]	Hospital length of stay			6.41 pre intervention, 5.95 post intervention, p= 0.90
	Geriatrics consultation			Pre-implementation 2.0%, post-implementation 47.7% (40.7-54.7%), p < 0.01
	ICU length of stay (days)			Pre-implementation 6.8 (2.4-11.2), post-implementation 5.5 (4.1-7.0), p 0.49 Geri Trauma group 4.70 [2.9-6.5]; Trauma group 6.00% [3.9-8.2], p<0.39
	Proportion of accomplished TQIP	Compliance in initial documentation	Initial code status	Pre-implementation 87.5% (78.1-96.9), post-implementation 91.4% (87.4-95.3), p 0.04 Geri Trauma group 97.9% [95.0-100]; Trauma group 85.4%, p<0.01

	Geriatric Trauma quality indicators		Home medication list	Pre-implementation 8.4 (6.9-10.0), post-implementation 9.0 (8.2-9.8), p 0.50 Geri Trauma group 91.5% [85.8-97.1]; Trauma group 76.7% [68.5-84.9], p<0.01
			Home number medications	Pre-implementation 89.6% (80.9-98.2), post-implementation 83.8% (78.6-88.9), p 0.51 Geri trauma 9.3 [8.2-10.4], trauma 8.7% [7.6-9.8], p=0.48
			Pre-injury level of care (community or skilled facility)	Pre-implementation 87.5% (78.1-96.9), post-implementation 83.8% (78.6-88.9), p 0.78 Geri trauma 90.4% [84.5-96.4]; trauma 77.7% [69.6-85.7], p=0.02
	Inpatient quality measures		Goals of care discussion	Pre-implementation 10.4% (1.8-19.1), post-implementation 11.7% (7.2-16.2), p 0.77 Geri trauma 5.3% [0.8-9.9]; trauma 17.5% [10.1-24.8], p<0.01
			Bowel regimen given	Pre-implementation 81.3% (70.2-92.3), post-implementation 74.6% (68.5-80.7), p 0.17 Geri trauma 78.7% [70.4-87.0]; trauma 70.9% [62.1-79.6], p=0.19
			Delirium screening	Pre-implementation 33.3% (20.0-46.7), post-implementation 38.6% (31.8-45.4), p 0.50 Geri Trauma 45.7% [35.7-55.8], trauma 32.0% [23.0-41.1], p=0.05
			Delirium diagnosed	Pre-implementation 6.6% (3.1-21.9), post-implementation 24.9% (18.8-30.9), p 0.07 Geri Trauma 36.2% [26.5-45.9], trauma 14.6% [7.8-21.4], p<0.01
			Benzodiazepines given	Pre-implementation 39.6% (25.7-53.4), post-implementation 34.5% (27.9-41.2), p 0.51 Geri trauma 28.7% [19.6-37.9]; trauma 39.8% [30.4-49.3], p=0.10
			Physical therapy consult	Pre-implementation 79.2% (67.7-90.7), post-implementation 81.2% (75.8-86.7), p 0.75 Geri Trauma 95.7% [91.7-99.8], trauma 68.0% [58.9-77.0], p<0.01
			Surgery required	Pre-implementation 27.1% (14.5-39.7), post-implementation 20.8% (15.1-26.5), p 0.35 Geri trauma 20.2% [12.1-28.3]; trauma 21.4% [13.4-29.3], p=0.84
			Discharge number of medications	Pre-implementation 11.0 (9.3-12.6), post-implementation 11.5(10.6-12.3), p 0.68 Geri trauma 11.9 [10.8-13.0]; trauma 11.1 [9.7-12.4], p=0.37
			Change in medications (median)	Pre-implementation +2.5 (1.4-3.6), post-implementation +2.8(2.1-3.5), p 0.62 Geri trauma 2.80 [2.0-3.5]; trauma 2.90 [1.8-4.0], p=0.89

		Discharge quality measures	Length of stay (days)	Pre-implementation 8.0 (5.0-10.9), post-implementation 5.6 (4.7-6.5), p 0.05 Geri trauma 6.0 [4.7-7.3]; trauma 5.2 [3.9-6.6], p=0.42
			Inpatient survival	Pre-implementation 100% (n/a), post-implementation 91.4% (87.4-93.5), p 0.04 Geri Trauma 95.7% [90.0-99.7], trauma 87.4% [81.0-93.8], p=0.03
			Discharged to higher level of care	Pre-implementation 33.3% (20.0-46.7), post-implementation 23.9% (18.8-30.9), p 0.02 Geri Trauma 51.2% [40.5-61.9], trauma 24.0% [14.3-33.7], p<0.01
			90 day readmissions	Pre-implementation 16.7% (6.1-27.2), post-implementation 13.2% (8.5-19.7), p 0.53 Geri Trauma 13.3% [6.3-20.4], trauma 15.5% [8.1-23.0], p=0.74
Wong, 2017 [42]	Percentage of patients aged 65 or older admitted to the trauma service who received a comprehensive geriatric assessment		89.9% (124/138) in the sustainability phase versus 59.4% in the implementation phase (p<0.001)	
	Reasons for no assessment by the geriatric trauma consultation service		Patient died (n=9), discharged (n=1) or transferred (n=1) within 72 hour of admission; imminent withdrawal of treatment or death anticipated (n=1).	
	Geriatric-specific in-hospital complications (falls, delirium, physical restraint use) and trauma quality indicators (decubitus ulcer, thromboembolism, myocardial infarction, pneumonia, cardiac arrest and missed injuries)		Implementation vs. sustainability phase: falls 1.5% v.3.9%; delirium 40.9% v. 53.3; physical restraint use 50.3 v. 49.4%; decubitus ulcer 4.4 v. 10.4%; deep vein thrombosis 0.5 v. 6.5%; myocardial infarction 2.0 v. 0%; pneumonia 18.2 v. 23.4%	
	Discharge destination		1.4% discharged to a nursing home; 1.7% in the implementation phase	
	Frequency of geriatric issues addressed by the geriatric trauma consultation service, mean number of issues per participant and number of recommendations made (sustainability phase only)		Mobilisation 55, continence 53, pain 51, discharge planning 43, medication reconciliation 39, sensory impairment 14, mood disorder 6, nutrition 4, restraint 4, decubitus ulcer 3. Frequency of geriatric issues addressed; delirium 67, Mean number per participant implementation phase 4.3 issues, sustainability phase 4.7 issues. At least 1 recommendation made in 73/76 patients	
	Trauma team adherence rate to recommendations		Implementation phase 93.2%; sustainability phase 88.2%.	
	Cortez, 2018 [41]	Length of stay (mean [SD] days)		Pre-intervention 6.58 [8.0] vs. post-intervention 5.03 [3.8], p 0.532
Discharge destination		Home	Pre-intervention n=26 (33.8%) vs post-intervention n=16 (40%), p=0.505	
		Subacute rehabilitation	Pre-intervention n=35 (45.5%) vs post-intervention n=15 (37.5%), p=0.409	
Death		Pre-intervention n=5 (6.5%) vs post-intervention n=3 (7.5%), p=0.838		
Medical complications		Pre-intervention 15.6% vs post-intervention 22.5%, p=0.355		
Acute readmission		Pre-intervention n=10 (13%) vs post-intervention n=5 (12.5%), p=0.940;		
Readmission		Pre-intervention n=1 (1.3%) vs post-intervention n=0, p=0.469		
Processes		Admitted to orthopaedics	Pre-intervention n=26 (33.8%) vs post-intervention n=9 (22.5%), p=0.207	
		Admitted to medicine	Pre-intervention n=24 (31.2%) vs post-intervention n=3 (7.5%), p=0.004	
	Anticoagulant given	Pre-intervention n=25 (32.5%) vs post-intervention n=14 (35.0%); p=0.783		

		EtOH screen performed	Pre-intervention n=19 (24.7%) vs post-intervention n=20 (50%); p=0.006
		Family meeting	Pre-intervention n=7 (9.1%) vs post-intervention n=6 (15%), p=0.335
		Family involved	Pre-intervention n=51 (66.2%) vs post-intervention n=34 (85%), p=0.31
		Geriatric consult	Pre-intervention n=5 (6.5%) vs post-intervention n=9 (22.5%), p=0.011
		Palliative care consult	Pre-intervention n=2 (2.6%) vs post-intervention n=2 (5%), p=0.498
		Medicine consult	Pre-intervention n=17 (22.1%) vs post-intervention n=2 (5%), p=0.018
		Physical therapy consult	Pre-intervention n=54 (70.1%) vs post-intervention n=28 (70%), p=0.988
		Social work consult	Pre-intervention n=57 (74%) vs post-intervention n=28 (70%), p=0.643
		Identification of Seniors At Risk completed	Pre-intervention n=71(92.2%) vs post-intervention n=33(82.5%), p=0.113
4. GERIATRIC-SPECIFIC CARE (including geriatric consultation in some cases) n=4 studies			
Bradburn, 2012 [49]	In-hospital mortality	Unadjusted	Not receiving the geriatric protocol 6.2% (referent); partial protocol 7.6% OR 1.23, 95% CIs 0.88-1.72; both parts of protocol 7.1%, OR 1.16, 95% CIs 0.77-1.74
		Adjusted (trauma alert status, ISS, age group, RTS, pre-existing conditions)	Partial protocol OR 0.96, 95% CIs 0.66-1.42, p=0.854; both parts of protocol OR 0.63, 95% CIs 0.39-0.99, p=0.046.
Frederikson, 2013 [50]	ICU length of stay (mean [SD] days)		Pre-protocol 3.75 [4.77]; post-protocol 3.56 [4.54], non-significant (value not stated)
	Hospital length of stay (mean [SD] days)		Pre-protocol 6.11 [16.74] to post-protocol phase 4.20 [2.18], t (934) = 4.071; p < 0.01.
	Variables that predict LOS within each time period (of age, sex, Injury Severity Score, systolic and diastolic blood pressures at admission, primary medical insurance, injury category):		Pre-protocol adjusted R ² .03, SE 17.07; post-protocol R ² .118, SE 4.36
	ED discharge location	Home	Pre-protocol 2.44%; post-protocol 1.82%, p > .05
		Another acute care facility	Pre-protocol 0.22%; post-protocol 0.26%, p > .05

		Floor	Pre-protocol 67.29%; post-protocol 68.08%, $p > .05$
		ICU/CCU	Pre-protocol 10.42%; post-protocol 11.68%, $p > .05$
		OR	Pre-protocol 10.09%; post-protocol 10.38%, $p > .05$
		23 hour observation	Pre-protocol 2.55%; post-protocol 6.75%, $z(2, 035) = 4.273, p \leq .05$
		Other or unknown	Pre-protocol 6.43%; post-protocol 0.00%, $p \leq .05$
Saillant, 2017 [55]	Definition of an older adult		Age ≥ 65 years of age at 77 % of the surveyed centres
	Adoption of Trauma Quality Improvement guidelines		Rates of individual process adoption ranged: 4% (geriatric unit) to 85% (routine discussion of code status on admission)* including high frequency of involvement of primary care (58 %) and palliative care providers (58 %); only one centre incorporated all of the guidelines.
	Association of summed score for best practice processes with risk adjusted mortality outlier status (observed to expected mortality ratios), adjusted for age, injury severity, comorbidities, admission physiology, mechanism of injury, and transfer status		Low outlier status: 8 (IQR 7–10.5) Medium outlier status: 7 (IQR 5–9) High outlier status 8 (IQR 6–14), $p = 0.50$
Bradburn, 2018 [54]	Mortality	Unadjusted	Baseline $n=136$ (7.24%), high-risk geriatric protocol (HRGP) $n=208$ (6.13%), HRGP + anticoagulation and trauma Alert (ACT) $n=128$ (4.0%)
		Adjusted (age, ISS, GCS, RTS)	Baseline (referent), HRGP OR 1.01, 95% CIs 0.74-1.38, $p=0.942$; HRGP + ACT Alert OR 0.67, 95% CIs 0.47-0.94, $p=0.021$
	Complications -occurrence of one or more specific complications: ARDS, acute respiratory failure, pneumonia, embolus, myocardial infarction, acute renal failure, progression of neurologic insult, CVA/stroke, sepsis.	Unadjusted	Baseline $n=23$ (1.28%), HRGP $n=52$ (1.57%), HRGP + ACT Alert $n=51$ (1.64%)
		Adjusted (age, ISS, GCS, RTS)	Baseline (referent), HRGP OR 1.37, 95% CIs 0.80-2.32, $p=0.248$; HRGP + ACT Alert OR 1.53, 95% CIs 0.89-2.61, $p=0.120$
5. PALLIATIVE CARE $n= 2$ studies			

Kupensky 2015 [43]	Palliative medicine consultation (PMC), mean time from admission to PMC 2.91 days		48.0% (97/202) overall
	Symptom management (evidence of management of pain, constipation, nausea/vomiting, and anxiety/agitation)		PMC 3.65 of 4 symptoms vs. no PMC 3.47; p=.023
	Advance care goals	Evidence of an advance directive discussion	Overall 50.5% (102/202); PMC 93.1% vs. no PMC 6.9%; p<.001
		Update or change in code status	Overall 28.7% (58/202); PMC 84.5% vs. no PMC 15.5%; p<.001
	Length of stay in surgical ICU (days)		PMC m=6.40 vs. no PMC m=11.81; p = 001
	Length of stay in the hospital (days)		PMC m=7.92 vs. no PMC m=13.11; p = 001
	Discharge disposition	Home or rehab	PMC 17.5% vs. no PMC 49.5%; p<.001
		Skilled nursing facility or long-term acute care facility	PMC 47.4% vs. no PMC 43.8%; p<.001
Death or hospice		PMC 35.1% vs. no PMC 6.7%; p<.001	
Lilley, 2016 [37]	End-of-life decision making processes documented	Family meeting	Recorded for 43 (93%) of the 46 patients who had life-sustaining treatments withdrawn or withheld and for 38 (72%) who had changes in their initial code status. Non-responders 79% vs responders 25%; p < 0.001
		Palliative care consultation	Non-responders 13.8% vs. responders 3.1%; p 0.13
		Final code status at discharge of death	Full code status: Non-responders 31% vs responders 75% Do not resuscitate/Do not intubate: Non-responders 17.2% vs responders 15.6% Comfort measures only: Non-responders 51.7% vs responders 9.4% p < 0.001.

1. INTERVENTIONS RELATED TO THE TRIAGE OF OLDER PATIENTS WITH TRAUMA

5a. TRAUMA CENTRES VERSUS OTHER PROVIDERS, OR LEVELS/TYPES OF TRAUMA CENTRES n=3 studies

Meldon 2002 [47]	Crude hospital mortality		Trauma centre I 24% (n=9), trauma centre II 5.2% (n=10), acute care 9.9% (n=22)
	Adjusted difference in hospital mortality (adjusted for age, gender, initial CGS, ISS)		Acute setting associated with mortality OR 3.2; 95% CI 1.1-9.5
	Hospital mortality by ISS group	0-10	Trauma centre dead n=4 (2%) vs. acute care n=5 (3%), p 1.00
		11-15	Trauma centre dead n=2 (11) vs. acute care n=3 (43%), p 0.113
		16-20	Trauma centre dead n=4 (29%) vs. acute care n=1 (6%), p 0.157
		21-45	Trauma centre dead n=8 (44%) vs. acute care n=12 (92%), p 0.008
46-75	Trauma centre dead n=1 (100%) vs. acute care n=1 (100%), n/a		
Staudenmayer, 2013 [39]	60 day mortality (unadjusted)		Non-trauma centres 9.0% vs trauma centres 5.7%, p < 0.001
	Length of stay (median days)		Non-trauma centres 4.0 days vs trauma centres 3.0 days, p < 0.001
	In-hospital per patient costs (median USD)		Non-trauma centres \$9,642 vs trauma centres \$17,875, p < 0.001
	60 day mortality in patients with an Injury Severity Score of >15 (adjusted for age, sex, mechanism of injury and physiology [prehospital systolic blood pressure, heart rate and Glasgow Coma Scale])		Non-trauma centre 16.3% vs trauma centre 17.1%; OR 1.87, 95% CI 0.50, 6.95
	In patient total costs (median) in patients with an Injury Severity Score of >15 (adjusted for age, Injury Severity Score, sex, mechanism of injury, physiologic variables and having a procedure)		Non-trauma centre care \$48,682 vs trauma centre care \$71,621, p = .03
Scheetz, 2018 [46]	Sixteen specified complications		398 (22.9%) patients experienced 693 complications; Seven complications had a frequency <10 in both groups, with no further analysis. Of the nine complications with larger numbers, seven showed statistically unadjusted non-significant differences. Two showed a higher rate amongst patients treated at the trauma centre: adult respiratory distress syndrome 6.8% non-trauma centre versus 21.0% trauma centre (p <.001, effect size 0.146) and clostridium difficile infection 1.1% non-trauma centre vs. 3.5% trauma centre (p .044, effect size 0.018)
5b. TRAUMA CENTRES MANAGING A HIGHER PROPORTION OF OLDER TRAUMA PATIENTS n=1 study			
Zafar, 2015 [51]	Risk-adjusted in-hospital mortality rate (variables in the model included grouped age, sex, race/ethnicity, comorbidities, hypotension, GCS score, ISS, mechanism of injury, heart rate, and a need of ventilator	Proportion of trauma patients in the older age group <10%	7.3%
		Proportion of trauma patients in the older age group 10-20%	7.0%

	support and were adjusted for hospital characteristics and interfacility differences)	Proportion of trauma patients in the older age group 20-30%	7.1%
		Proportion of trauma patients in the older age group 30-40%	6.5%
		Proportion of trauma patients in the older age group 40-50%	6.1%
		Proportion of trauma patients in the older age group >50%	5.6% Older patients were 34% less likely to die than those presenting at the lowest-proportion centres (OR 0.66; 95% CI 0.54-0.81)
5c. TRAUMA TEAM ACTIVATION WITHIN THE RECEIVING HOSPITAL n=4 studies			
Demetriades 2002 [35]	Mortality		Pre-intervention 53.8% vs post-intervention 34.2%, p=0.003; RR 1.57, 95%CI 1.13-2.19.
	Incidence of permanent disability		Pre-intervention 16.7% vs. post-intervention 12.0%; p=0.49, RR 1.39, 95%CI 0.59-3.25.
	Duration of ICU stay (mean days)		Pre-intervention 4.5 vs post-intervention 5.2, p=0.61
	Duration of hospital stay (mean days)		Pre-intervention 10.7 vs. post-intervention 10.2, p=0.77
	Hospital charges (USD)		Pre-intervention 64,249 vs. post-intervention USD 49,644p=0.20
Rogers, 2012 [36]	Predictors of mortality (unadjusted)		Under-triage mortality 12.9% (n=87) vs. correctly triaged 5.8% (n=220); OR 2.41; 95% CI 1.85–3.14; P < 0.001 (P < 0.001)
	Predictors of mortality (adjusted for trauma score, GCS, 1+ complications, and Coumadin use)		Under-triage (mortality 12.9% (n=87) OR 1.98; 95%CI 1.41–2.78; P < 0.001. AUC 0.78
Sahr, 2013 [44]	Hospital length of stay		Decrease (unspecified) F = 7.820, p=.006.
	Hospital length of stay (mean [SD]) by number of ribs fractured	<3 fractures	Pre-protocol 4.77 [3.93]; post-protocol 4.93 [9.83]
		Three or more fractured ribs	Pre-protocol 10.24 [13.59]; post-protocol 8.74 [3.33]
		ANOVA	F = 4.254, p=.042
	ICU length of stay (mean [SD]) by number of ribs fractured	<3 fractures	Pre-protocol 0.54 [1.24]; post-protocol 1.90 [2.33]
Three or more		Pre-protocol 3.67 [7.30]; post-protocol 4.72 [6.97]	

		fractured ribs	
		ANOVA	F = 4.959; p = .028
St John, 2016 [45]	Effectiveness of trauma team activation by age (adjusted relative risk of poor outcomes defined as death during hospital admission or discharge to a skilled nursing facility)		Elderly 0.80 (95% CI 0.53-1.20) versus non-elderly 0.49 (95% CI 0.26-0.91) p = 0.024