

DIFFERENT PERCEPTIONS EXIST BETWEEN PROVIDERS AND THE GENERAL POPULATION REGARDING THE IMPORTANCE OF FINDINGS ON ADDITIONAL IMAGING FOR TRAUMA CONSULTS.

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DISCLAIMER

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BACKGROUND AND STUDY DESIGN

- » Patient-centered care and shared decision making are core to modern medicine¹
- » Our prior study focused on physician opinion of newfound injuries²
- » Current Study: Surveyed both public and providers regarding injuries found on additional scans
- » Our Question: Do providers and patients agree on the significance of injuries?
- » 6 Scenarios: Mild to moderately injured patients³

1. Barry, MJ, et al., *N Engl J Med*, 2012.
2. Plaster, AP, et al., *Am Surg*, 2018.
3. Jiang, L., et al., *SJTREM*, 2014.

339 Public Surveys, 129 Provider Surveys
(Jan-March 2019)

Demographics
6 Scenarios, 3 Questions/Scenario

Public: 310/339 (91.4%)
Providers: 116/129 (89.9%)

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Demographics:
Age, State, Type, Specialty,
Years in Training/Practice

Questions:
A. Clinically Significant?
B. Change Treatment plan?
C. Should notify patient?

Demographics:
Age, State, prior trauma,
prior family member with
trauma

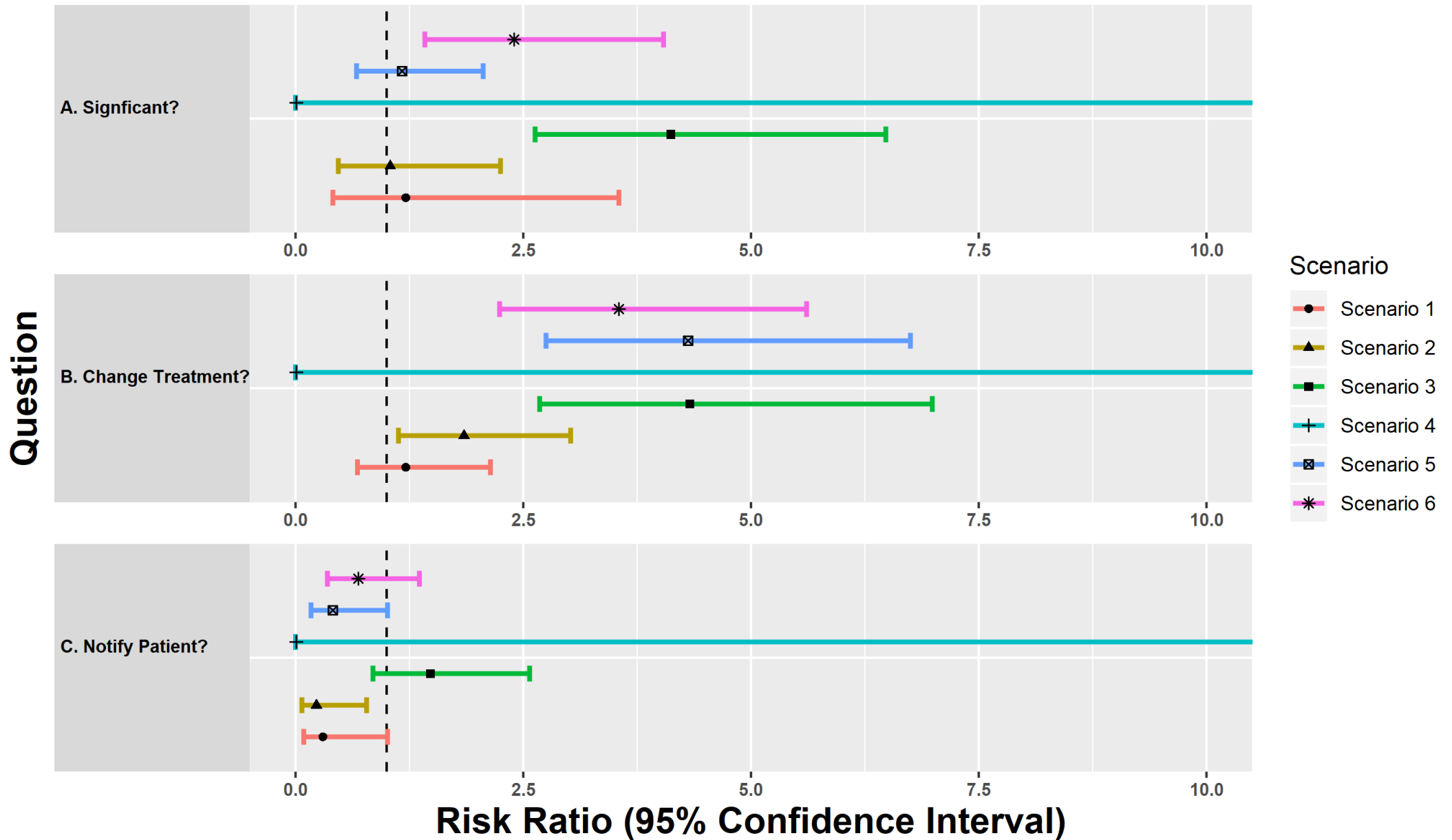
Questions:
A. Significant?
B. Change Treatment plan?
C. Wish to be notified?

RESPONSES BY SCENARIO

- Summary of public and provider responses with comparison.
- RR = Relative Risk. * = p<0.05
- Numbers correspond with Scenarios on following slides.

Scenario	Population Positive Responses	Provider Positive Responses	RR of Population vs Provider Positive Responses		
			RR	95% CI	p
1. Repeat Head CT with Worsening TBI – Patient Asymptomatic	Complete Responses 319	121			
	Significant? 308 (96.6%)	116 (95.9%)	1.21	0.41 - 3.55	0.733
	Change Care? 274 (85.9%)	101 (83.5%)	1.21	0.68 - 2.14	0.523
	Notification? 294 (92.2%)	118 (97.5%)	0.3	0.09 - 1.01	0.0527
2. CT Thoracic Spine with New Thoracic Compression Fracture	Complete Responses 315	121			
	Significant? 290 (92.1%)	111 (91.7%)	1.04	0.47 - 2.25	0.91
	Change Care? 260 (82.5%)	87 (71.9%)	1.85	1.13 - 3.02	0.0144 *
	Notification? 284 (90.2%)	118 (97.5%)	0.23	0.07 - 0.78	0.0177 *
3. CT Chest with additional Rib Fractures vs Initial Chest X-ray	Complete Responses 315	119			
	Significant? 251 (79.7%)	58 (48.7%)	4.12	2.63 - 6.48	< 0.001 *
	Change Care? 180 (57.1%)	28 (23.5%)	4.33	2.68 - 6.99	< 0.001 *
	Notification? 271 (86.0%)	96 (80.7%)	1.48	0.85 - 2.57	0.17
4. CT Abdomen and Pelvis with New Hip Fracture vs Initial X-ray	Complete Responses 313	118			
	Significant? 281 (89.8%)	118 (100%)	<0.01	0.00 - Inf	0.986
	Change Care? 258 (82.4%)	118 (100%)	<0.01	0.00 - Inf	0.985
	Notification? 271 (86.6%)	118 (100%)	<0.01	0.00 - Inf	0.986
5. CT Thoracic Spine with new Thoracic Compression Fracture	Complete Responses 312	117			
	Significant? 263 (84.3%)	96 (82.1%)	1.17	0.67 - 2.06	0.576
	Change Care? 236 (75.6%)	49 (41.9%)	4.31	2.75 - 6.75	< 0.001 *
	Notification? 276 (88.5%)	111 (94.9%)	0.41	0.17 - 1.01	0.053
6. CT Chest with New Occult Pneumothorax vs Initial Chest X-ray	Complete Responses 310	117			
	Significant? 268 (86.5%)	85 (72.6%)	2.4	1.42 - 4.04	< 0.001 *
	Change Care? 248 (80.0%)	62 (53.0%)	3.55	2.24 - 5.61	< 0.001 *
	Notification? 266 (85.8%)	105 (89.7%)	0.69	0.35 - 1.36	0.284

Relative Risk Ratios By Question



CONCLUSIONS

- » Patients showed more likely than providers to consider injuries both significant and likely to change their clinical care
- » Providers were more likely than patients to feel updating the patient on newfound injuries was indicated
- » Suggests patients don't feel the need to be informed of new injuries prior to the medical team taking action, but to be part of their care patients need knowledge of their condition
- » Our study suggests patients will find new injuries significant and requiring intervention, whether this is actually the case or not per current medical guidelines. Recognizing this can help providers remember to not only deliver injury information but also take the time to educate on treatments with their indications and risks.
- » With patients more likely to find injuries important, their opinion should be included in final decisions when weighing increased radiation exposure vs the chance of missed injuries, especially when multiple options are reasonable