SUPPLEMENTAL DIGITAL CONTENT

Supplemental Digital Content 1. STROBE Statement—Checklist of items that should be included in reports of ***observational studies***

	Item No	Recommendation	Complete
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	2
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	4-5
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	6-7
Objectives	3	State specific objectives, including any prespecified hypotheses	7
Methods			
Study design	4	Present key elements of study design early in the paper	7-9
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	7-11
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants	7-11
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	9-11
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	7-12
Bias	9	Describe any efforts to address potential sources of bias	8-9
Study size	10	Explain how the study size was arrived at	Figure 1
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	7-12
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	11-12
		(*b*) Describe any methods used to examine subgroups and interactions	11-12
		(*c*) Explain how missing data were addressed	Figure 1, 11-12
		(*d*) If applicable, describe analytical methods taking account of sampling strategy	11-12
		(*e*) Describe any sensitivity analyses	11-12
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	12-13 and Figure 1

		(b) Give reasons for non-participation at each stage	Figure 1
		(c) Consider use of a flow diagram	Figure 1
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	13-18
		(b) Indicate number of participants with missing data for each variable of interest	Figure 1
Outcome data	15*	Report numbers of outcome events or summary measures	13-18
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	13-18 and Tables 1–3
		(*b*) Report category boundaries when continuous variables were categorized	13-18 and Tables 1–3
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Figure 2
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	16-18, Tables 2 and 3, and Figure 3
Discussion			
Key results	18	Summarise key results with reference to study objectives	18
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	21
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	18-21
Generalisability	21	Discuss the generalisability (external validity) of the study results	22
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	N/A

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.

Supplemental Digital Content 2. Facility characteristics of the CMS patient sample, 2016 to 2020

Variables	**Facilities N=1024**
Trauma Center Level, n (%)	
I	236 (23.0%)
II	333 (32.5%)
III	455 (44.4%)
Teaching hospital, n (%)	600 (58.6%)
Bed size count, n (%)	
< 100	109 (10.6%)
100–300	374 (36.5%)
> 300	541 (52.8%)
Ownership type, n (%)	
Private, non-profit	524 (51.2%)
Private, for-profit	151 (14.7%)
Other	349 (34.1%)
Urban hospital, n (%)	857 (83.7%)

Fakhry SM, *et al. Trauma Surg Acute Care Open* 2024; 9:e001329. doi: 10.1136/tsaco-2023-001329

Supplemental Digital Content 3. Trauma patient characteristics and injury patterns by palliative care utilization of the CMS patient sample, 2016 to 2020

Variables	No PC Use	PC Use	All Trauma Pts
	n=1 401 831 (93.7%)	n=93 899 (6.3%)	N=1 495 730 (100%)
Age Grouping, n (%)			
65-69	204 819 (14.6%)	8589 (9.1%)*	213 408 (14.3%)
70-74	221 828 (15.8%)	10 752 (11.5%)*	232 580 (15.5%)
75-79	235 497 (16.8%)	13 505 (14.4%)*	249 002 (16.6%)
80-84	254 479 (18.2%)	16 819 (17.9%)*	271 298 (18.1%)
≥85	485 208 (34.6%)	44 234 (47.1%)*	529 442 (35.4%)
Female, n (%)	872 307 (62.2%)	50 152 (53.4%)*	922 459 (61.7%)
White, n (%)	1 263 098 (90.1%)	84 537 (90.0%)	1 347 635 (90.1%)
Elixhauser Score, mean (SD)	8.88 (8.52)	15.77 (9.58)*	9.32 (8.75)
Frailty Index, mean (SD)	9.49 (5.77)	13.95 (5.99)*	9.77 (5.89)
Blunt, n (%)	1 115 668 (79.6%)	64 926 (69.1%)*	1 180 594 (78.9%)
MOI, n (%)			
Same level fall	640 887 (45.7%)	34 700 (37.0%)*	675 587 (45.2%)
Other fall	367 807 (26.2%)	26 216 (27.9%)*	394 023 (26.3%)
MVC	50 480 (3.6%)	2211 (2.4%)*	52 691 (3.5%)
Motorcycle	5502 (0.4%)	159 (0.2%)*	5661 (0.4%)
Pedestrian	6686 (0.5%)	349 (0.4%)*	7035 (0.5%)
Pedal cyclist	6497 (0.5%)	120 (0.1%)*	6617 (0.4%)
Assault	3567 (0.3%)	146 (0.2%)*	3713 (0.2%)
ISS, mean (SD)	7.91 (4.10)	8.99 (5.57) *	7.98 (4.21)
AIS Head ≥3, n (%)	249 087 (17.8%)	38 252 (40.7%)*	287 339 (19.2%)
AIS Chest ≥3, n (%)	9051 (0.6%)	722 (0.8%)*	9773 (0.7%)
AIS Abdomen ≥3, n (%)	506 491 (36.1%)	23 121 (24.6%)*	529 612 (35.4%)

* indicates statistically significant difference comparisons to patients without PC utilization ($P < .001$).

Abbreviations: PC=palliative care; SD=standard deviation; MOI=mechanism of injury; MVC=motor vehicle collision; ISS=injury severity score; AIS=abbreviated injury scale