Supplement 3. Sensitivity analyses, using patients not self-reporting chest pain (N=530)

Table S3-1. Patient characteristics at baseline, by pain self-reported one month after discharge: TRACE-CORE, 2011-2013

Variable, n (%) or mean [SD]	All Patients	Categories of Self-Reported Pain after Discharge				
		No pain	Mild-moderate pain, documented in EHR	Mild-moderate pain, NOT documented in EHR	Severe pain	*P* value[1]
	N = 530	N = 255	N = 60	N =191	N = 24	
	N (%)	N (%)	N (%)	N (%)	N (%)	
Age						0.24
<50	70 (13.2)	28 (11.0)	6 (10.0)	31 (16.2)	5 (20.8)	
50-64	218 (41.1)	108 (42.4)	31 (51.7)	69 (36.1)	10 (41.7)	
≥65	242 (45.7)	119 (46.7)	23 (38.3)	91 (47.6)	9 (37.5)	
Gender						0.08
Male	386 (72.8)	194 (76.1)	48 (80.0)	128 (67.0)	16 (66.7)	
Female	144 (27.2)	61 (23.9)	12 (20.0)	63 (33.0)	8 (33.3)	
Race						0.43
White	503 (95.8)	242 (95.7)	59 (100.0)	180 (95.2)	22 (91.7)	
Black	4 (0.8)	3 (1.2)	0 (0.0)	1 (0.5)	0 (0.0)	
Hispanic	18 (3.4)	8 (3.2)	0 (0.0)	8 (4.2)	2 (8.3)	
Education						0.45
≤High school	191 (36.0)	100 (39.2)	18 (30.0)	62 (32.5)	11 (45.8)	
Some college	157 (29.6)	69 (27.1)	17 (28.3)	64 (33.5)	7 (29.2)	
≥College graduate	182 (34.3)	86 (33.7)	25 (41.7)	65 (34.0)	6 (25.0)	
Low Social Support						0.99
No	501 (94.5)	240 (94.1)	57(95.0)	181 (94.8)	23 (95.8)	
Yes	29 (5.5)	15 (5.9)	3 (5.0)	10 (5.2)	1 (4.2)	
Live Alone						0.86
No	427 (80.6)	206 (80.8)	46 (76.7)	156 (81.7)	19 (79.2)	
Yes	103 (19.4)	49 (19.2)	14 (23.3)	35 (18.3)	5 (20.8)	
Low Health Literacy						0.71
No	379 (71.9)	182 (71.7)	39 (66.1)	140 (73.7)	18 (75.0)	
Yes	148 (28.1)	72 (28.3)	20 (33.9)	50 (26.3)	6 (25.0)	
Heavy Drinker						0.88
No	441 (90.9)	233 (91.4)	53 (88.3)	174 (91.1)	22 (91.7)	

Yes	44 (9.1)	22 (8.6)	7 (11.7)	17 (8.9)	2 (8.3)	
Current Smoker						0.03*
No	432 (81.5)	210 (82.4)	51 (85.0)	157 (82.2)	14 (58.3)	
Yes	98 (18.5)	45 (17.6)	9 (15.0)	34 (17.8)	10 (41.7)	
Where to seek health care						0.15
No places	56 (10.6)	25 (9.9)	7 (11.7)	21 (11.1)	3 (12.5)	
Clinic or doctor office	426 (81.0)	209 (82.9)	47 (78.3)	153 (80.5)	17 (70.8)	
Other places	24 (4.6)	8 (3.2)	2 (3.3)	13 (6.8)	1 (4.2)	
Emergency department	20 (3.8)	10 (4.0)	4 (6.7)	3 (1.6)	3 (12.5)	
ACS type						0.005*
STEMI	123 (23.2)	65 (25.5)	5 (8.3)	46 (24.1)	7 (29.2)	
NSTEMI	314 (59.2)	156 (61.2)	37 (61.7)	106 (55.5)	15 (62.5)	
Unstable angina	93 (17.5)	34 (13.3)	18 (30.0)	39 (20.4)	2 (8.3)	
History of PCI						0.37
No	422 (79.6)	208 (81.6)	47 (78.3)	161 (79.1)	16 (66.7)	
Yes	108 (20.4)	47 (18.4)	13 (21.7)	40 (20.9)	8 (33.3)	
History of CABG						0.64
No	481 (90.8)	231 (90.6)	52 (86.7)	176 (92.1)	22 (91.7)	
Yes	49 (9.2)	24 (9.4)	8 (13.3)	15 (7.9)	2 (8.3)	
Comorbidity [a] (mean [SD])	1.9 [1.6]	1.8 [1.6]	2.2 [1.8]	1.9 [1.5]	2.5 [1.5]	0.06
Reporting generic pain						<0.001*
No	145 (27.6)	94 (37.2)	7 (11.7)	40 (21.2)	4 (16.7)	
mild to moderate	299 (56.8)	129 (51.0)	41 (68.3)	119 (63.0)	10 (41.7)	
severe	82 (15.6)	30 (11.9)	12 (20.0)	30 (15.9)	10 (41.7)	

Pain category was defined using pain self-reported for the first month after discharge from index hospitalization (using SF-36 survey distributed at one month post-discharge) and electronic health record (EHR) documentation of pain extracted by natural language processing from patient's clinical notes created within 30 days post discharge and before readmission to the hospital (if any). *TRACE-CORE* Transitions, Risks, and Actions in Coronary Events Center for Outcomes Research and Education, *STEMI* ST-segment elevation myocardial infarction, *NSTEMI* non-ST segment elevation myocardial infarction, *PCI* percutaneous coronary intervention, *CABG* coronary artery bypass graft, *SD*, standard deviation

[a] The number of diseases from the following 14 conditions in patient's medical history: atrial fibrillation, Alzheimer or dementia, anemia, cancer, congestive heart failure, chronic kidney disease, chronic lung disease, Type 2 diabetes, dialysis, hypertension, peripheral vascular disease, valvular heart disease, coronary heart disease or myocardial infarction, transient ischemic attack or stroke.

Table S3-2. Association of self-reported pain status at one month with 30-day rehospitalization: TRACE-CORE, 2011-2013

Pain condition	Incidence of 30-day rehospitalization	Model 1[a]: Unadjusted		Model 2[b]: Adjusted for baseline characteristics	
	n/N (%)	OR (95% CI)	*P* value	OR (95% CI)	*P* value
General pain by severity					
Reporting no pain	17/255 (6.7)	Reference		Reference	
Reporting mild to moderate pain	23/251 (9.2)	1.41 (0.74-2.71)	0.3	1.43 (0.73-2.82)	0.30
Reporting severe pain	4/24 (16.7)	2.80 (0.86-9.12)	0.09	2.55 (0.73-8.93)	0.14

Patient-self-reported pain status was collected for the first month after discharge from index hospitalization (using SF-36 survey distributed at one month post-discharge).

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[a] Model 1: logistic regression, unadjusted for covariates.

[b] Model 2: multivariable logistic regression, adjusted for generic pain, smoking status, acute coronary syndrome type, and healthcare seeking behaviors reported at index hospitalization.

* indicates statistically significant ($P<0.05$).

Table S3-3. Association of pain category (combining self-report with EHR data) with 30-day rehospitalization: TRACE-CORE, 2011-2013

Pain condition	Incidence of 30-day rehospitalization	Model 1[a]: Unadjusted		Model 2[b]: Adjusted for baseline characteristics	
	n/N (%)	OR (95% CI)	P value	OR (95% CI)	P value
Generic pain					
Reporting no pain	17/255 (6.7)	Reference		Reference	
Reporting mild to moderate pain, documented in EHR	5/60 (8.3)	1.27 (0.45-3.60)	0.65	1.27 (0.43-3.74)	0.67
Reporting mild to moderate pain, not documented in EHR	18/191 (9.4)	1.46 (0.73-2.91)	0.29	1.48 (0.73-3.02)	0.28
Reporting severe pain	4/24 (16.7)	2.8 (0.86-9.12)	0.09	2.54 (0.73-8.90)	0.14

Patient-self-reported pain status was collected for the first month after discharge from index hospitalization (using SF-36 survey distributed at one month post-discharge). Electronic health record (EHR) documentation of pain was extracted by natural language processing from patient's clinical notes created within 30 days post discharge and before readmission to the hospital (if any).

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[a] Model 1: logistic regression, unadjusted for covariates.

[b] Model 2: multivariable logistic regression, adjusted for generic pain, smoking status, acute coronary syndrome type, and healthcare seeking behaviors reported at index hospitalization.

[*] indicates statistically significant (P<0.05).