Beyond 30 days: Patient oriented outcomes among older adults after emergency general surgery

Beeson Graduating Scholar presentation

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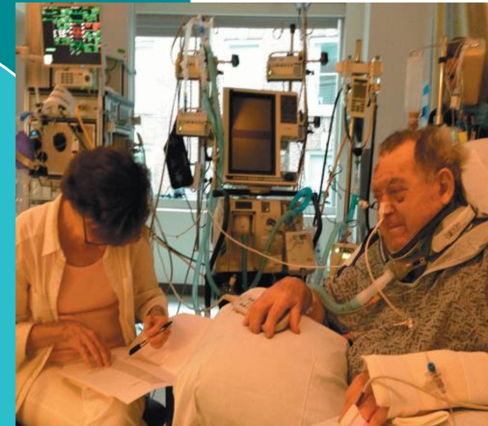
Emergency Surgery

Geriatrics



Palliative Care

Overarching goal: Develop the evidence base supporting the integration of palliative care into routine care for vulnerable older surgical patients

Project goal: Identify opportunities to improve the care of older EGS patients by fully characterizing their clinical trajectories and care needs beyond 30-days after surgery

Aim 1 Medicare Claims	Aim 2 Phone surveys	Aim 3 Semi structured interviews
• Outcomes: • Survival • Healthcare utilization • End of Life care • H1a. Older EGS patients will have higher mortality and healthcare utilization, as well as lower hospice use compared to propensity-matched non-EGS patients.	Symptom burden • Function and cognition • Quality of life • Advance care planning • Healthcare use • End of life care • **H2a**. Modifiable factors independently associated with fewer hospital transfers will be identified • **H2b**. Modifiable factors associated with improved quality of life will be identified	• Phenomenological qualitative analysis will reveal key themes illustrating the patient and proxy experience that will directly inform future palliative care interventions to improve quality of surgical care.

Aim 1

After ED admission…

Methods:
100% Medicare Claims 2016-2018
66+y
Laparotomy, bowel resection, ulcer vs. AMI, Pneumonia, CHF

Results:

- In both groups, 1-year mortality $\geq$ 29.7% or higher
- $\geq$ 56% had a hospital encounter in the year after discharge
- $\geq$ 56 days away from home

No. at risk	0	90	180	270	360
Medical	481 417	390 274	362 176	341 630	324 109
EGS	481 417	389 113	367 165	351 919	339 359

Lee KC, et al. *JAMA Surg*. 2020;155(3):216-223.

Aim 1

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Original Article

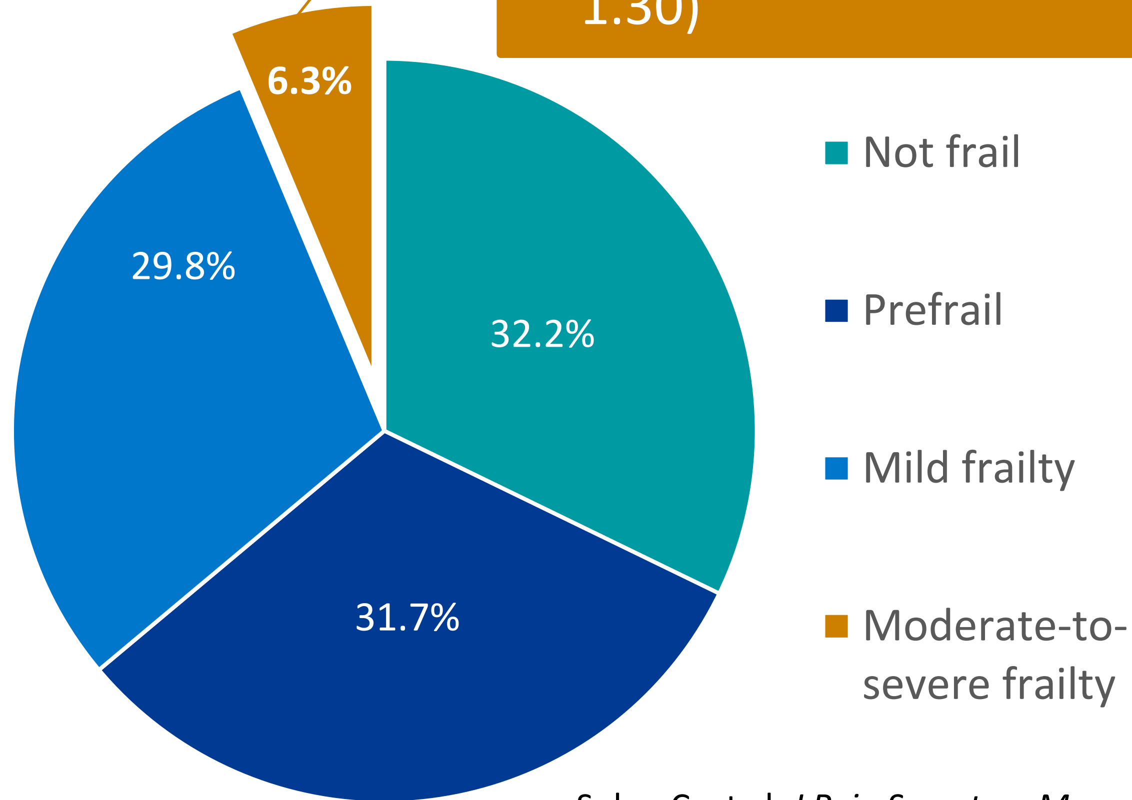
Preoperative Frailty Status and Intensity of End-of-Life Care Among Older Adults After Emergency Surgery

Claire Sokas, MD, Katherine C. Lee, MD, MSc, Daniel Sturgeon, MS, Jocelyn Streid, BS, Stuart R. Lipsitz, PhD, Joel S. Weissman, PhD, Dae H. Kim, MD, PhD, and Zara Cooper, MD, MSc

Highest odds of (in last 30d of life):

- **visiting ED** (OR = 1.19, CI = 1.13-1.27)
- **Rehospitalization** (OR = 1.23, CI = 1.16-1.31)
- **ICU admission** (OR = 1.22, CI = 1.13-1.30)

Examined the association of frailty with intensity of end-of-life care (EOLC) for older adults with and without frailty who undergo EGS but die within one year



Sokas C, et al. *J Pain Symptom Manage*. 2021;62(1):66-74.e3.

Aim 1

High Burden of Palliative Care Needs of Older Adults During Emergency Major Abdominal Surgery

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Characteristic	High Illness Burden (n=231) %
Age*	
65-74	**29.4**
75-84	**45.0**
>85	**35.5**
Female	**63.4**
White	**76.6**
ADL Dependence*	**32.5**
Helpers*	**45.9**
Dementia*	**24.7**
Charlson > 2*	**90.9**
High Healthcare Use*	**81.0**
Lee Index > 14*	**19.1**

Cooper Z, et al. *J Am Geriatr Soc.* 2018;66(11):2072-2078.

Aim 2

Quarterly Surveys

a) Symptom burden
b) Function and cognition
c) Quality of life
d) Advance care planning
e) Healthcare use
f) End of life care

Recruitment data	N (%)
Eligible	207
Enrolled	31 (15.0)
Completed all timepoints	6 (2.9)
Of enrolled, missing data at	
3mo:	15 (48.4)
6mo:	16 (51.6)
9mo:	19 (61.3)
12mo:	16 (51.6)
Not enrolled	176
Declined	54 (30.7)
Failed MoCA	13 (7.4)
Non-English Speaking	27 (15.3)
Missed – Weekend	12 (6.8)
Missed – Holiday	16 (9.1)
Other	29 (16.5)
Surgeon Did Not Approve	10 (5.7)
Could Not Reach By Phone	3 (1.7)
Proxy Declined/Could Not Reach	10 (5.7)
Trauma Patient	2 (1.1)

Aim 3

Emotions associated with in-the-moment decision making

Regret

I wish I had... when I wou... cramps b... cramps for about a week before I ever went to the hospital. Maybe if I had gone to the hospital sooner about the cramps I was having and problem about not having a bowel movement then maybe it wouldn't have happened that way. So I think

If I had gone to the hospital sooner

Fear

Cause I was scared to go to go um under and through all that stuff again, but um like I said, the ...tor, I don't remember his ... but he was awesome, he ...n and talked to me and I ...nd cried, and he talked ...and I cried and cried, and ...old me not to worry cause ...know he'd do everything, ...ou know, I'm in the best place, which I believe, it's true—*MQ-002, 68 YF*

I cried and cried…. He told me not to worry because they would do everything…

Desired outcome

I just wanted it fixed and they fixed it—*BQ-006, 66 YM*

Patient perception of decision for surgery

No choice

I don't think I decided at all. I think the... a perfor... leaking i... body, so... thing—...

I don't think I decided at all. They decided…

There was no way I could not have the surgery

Well it was, ... I could not have surgery ...as something that I didn't really ...because if I ...would ...YF

Value prolonging life

...if it's a ...the end ...my life then I would like to live—*BQ-012, 67 YF*

Everybody loves life so I would like to live

Barriers to participation i... preoperative decisi... Acuity/emergenc...

…We had to move fast I guess so I don't think there is anything different they could have done

...on't ...think there was anything different they could have done—*BQ-008, 80 YM*

Symptom burden

I had no choice, I was in constant pain with my stomach not able to move my bowels … and nothing helped me … And so they put an NG [naso-gastric] tube in, probably the worst thing I've ever experienced in my life—*BQ-003, 65 YF*

I had no choice….I was in constant pain…

Aim 3

Sometimes patients are too sick to let their care team know their treatment preferences…what did you have in place to let the type of care you would want…?

Advance Care Planning

My daughter has all the rights to say yes or no…

Sometimes patients are too sick to let their care team know their treatment preferences when they are hospitalized. Before surgery, what did you [illegible] of care you would want if you became too sick to speak for yourself?	
Previous ACP	
Documentation of ACP	I have a living will, everything is spelled out, signed legally, from a lawyer, so it's all very clear—*BQ-019, 76 YM*
Transfer of responsibility to surrogate decision maker	My daughter has all the rights to say yes or no. I took care of her when she was a child, she takes care of me now—*MQ-006, 84 YF*
During the treatment episode	
No recollection of review of goals of care	I mean I think I have a DNR, I have a health care proxy. But my husband said [these documents] really wasn't discussed—*BQ-003, 65 YF*
Future ACP	
Reflections on mortality	So, it was emergency, you know it wasn't planned, and i[illegible] that it [illegible] me from dying so that's a really good thing [la[illegible] When you reach our age, you know you bury paren[illegible] you you've you know you've buried friends, you've exp[illegible] e and friend circles. These are conversations that my gener[illegible]
Avoidance of future	Oh god I don't even want to contemplate the possibility. I have no idea—*BQ-009, 83 YF* I don't want to think about it. I've had three surgeries, believe me I don't think I would survive another one, but hopefully I won't need one—*BQ-020, 85 YF*

ACP = advance care planning; DNR = do not resuscitate.

It wasn't planned and it wasn't welcomed….

I don't want to think about it…

Implications and Future Directions

Aim	Implication	Future Directions
Aim 1	• Due to high baseline palliative care needs, high perioperative morbidity and mortality all older EGS patients have palliative care assessments and palliative care available to them • Frailty is an important screening tool to identify patients at highest risk	• ACS/ AAST EGS palliative care guidelines • Serious Illness communication training • ACS Geriatric Surgery Verification 2.0 with standards for palliative care
Aim 2	• Recruiting seriously ill older surgical patients immediately after is challenging and introduces selection bias	• Better resourced study • Ethnographic Observations
Aim 3	• High quality in-the-moment decision is confounded by symptom burden, fear, confusion and patients don't feel they have a "choice." • Despite a near-death experience, advance care planning is remote for most patients	• Reconsider "shared decision making." • Teachable moment • Social worker conversation

Thank you

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