PROJECT PROFILE Zuckerberg San Francisco General Hospital and Trauma Center

Partner service line	Trauma surgery service
Target audience	Trauma surgeons, surgery residents, fellows, nurse practitioners (NPs)
Target population	Seriously injured trauma patients
Palliative care process	Goals of care – American College of Surgeons Trauma Quality Improvement Program (TQIP) Palliative Care Guidelines
Target behavior	Identification of a health care proxy and existing advance directive and POLST (Physician Orders for Life-Sustaining Treatment) within 24 hours of admission, completion of American College of Surgeons TQIP palliative care prognostic screening for trauma patients admitted to the intensive care unit (ICU), and hold- ing and documenting a goals of care conversation within 72 hours of admission for patients screened as Categories I and II (reflects a positive screen).

Training (provided to trauma surgeons, residents, fellows, NPs)

- Internally developed palliative care presentations. Two presentations were given to trauma surgery staff. The first addressed the TQIP palliative care bundle, new workflows, tertiary screen, prognostic screen, and Epic advance care planning (ACP) activity and documentation. The second addressed communication: VitalTalk skills, talking maps, and NURSE (naming, understanding, respecting, supporting, exploring) responses. The trainings were recorded and will be incorporated into the medical center surgery resident didactic curriculum. The team also plans to create a streamlined video introducing the TQIP palliative care bundle, the goals of the project, and the use of the ACP dot phrase in the Epic electronic health record (EHR).
- **Discipline-specific training.** Additional project and generalist palliative care training sessions were provided to certain disciplines throughout the project period.

Identification (patient target population)

Trauma service patients. Patients age 14 and older who met TQIP admission criteria, who were admitted to the trauma surgery service, and who had an ICU stay of at least one day during their hospitalization, were identified as the project target population.

Documentation

- **Epic SmartLists and ACP dot phrase.** Project team created SmartLists and an ACP dot phrase in Epic to ensure project elements were embedded into trauma documentation.
- Key project elements embedded in history and physical (H&P) template. Documentation of health care proxy and existing ACP documents were embedded into the H&P template completed by residents.
- TQIP prognostic screen template. The project team incorporated the TQIP trauma prognostic screen to document a patient's traumatic injury severity, disability, previous functional status, and their provider's response to the "surprise question" ("Would you be surprised if the patient died in the next year?"). Patients screened in Categories I and II (positive screen) trigger timely goals of care conversations. Trauma fellows complete the screen.

Lessons Learned

CHALLENGES

- COVID-19 challenged implementation of the project. The pandemic impacted project staff, time, and bandwidth to dedicate to the project. It also reduced information technology and administrative support and available project resources. These factors led to a shorter pilot project period six months instead of a full year.
- Specialty palliative care program was disbanded. Issues compromising the palliative care program impacted the way inpatient consults were provided during most of the grant period, leading to a reduction in subspecialty palliative care accessibility. Ultimately, these issues caused the unexpected disbanding of the palliative care program at the end of the project period. Despite this challenge, the objectives of the generalist intervention with the trauma service were largely met, and key elements of the TQIP Palliative Bundle were sustainably embedded into the trauma workflow.

KEY INGREDIENTS AND TAKEAWAYS

- Identify a motivated partner champion. The palliative care service lead found a strong and engaged service line champion partner interested in and committed to building on earlier collaborations between palliative care and trauma and using trauma surgery's established and successful quality improvement infrastructure to support embedding project elements into trauma workflows.
- ▶ Embed EHR tools and processes or system metrics. The project team successfully developed and incorporated necessary documentation elements into note templates and within trauma team member workflows. The team additionally embedded routine monitoring of project metrics five new elements related to the palliative care bundle into existing manual chart reviews completed by the trauma service (trauma quality nurses) for submission to the American College of Surgeons National Trauma Data Bank.

PROJECT LEAD TAKEAWAYS

- Palliative care lead. "When you change workflows, you need to make them as automated as possible. We learned you have to build these changes into templates in order to prompt people. It is also helpful if you can create hard stops where people have to answer something before closing the note. When we added the ACP dot phrase to the template, the trauma residents wrote their note, and key components were automatically placed into the ACP activity, so they did not have to remember to do that."
- Service line lead. "I was working on several research and quality improvement projects aimed at geriatric trauma care, and this project seemed to fit neatly into this area. The other thing that drew me to this project is that palliative care in the surgical realm has become a much more recognized and accepted focus in the last decade, particularly within the trauma surgery world. People within my profession are finally recognizing that this is a really important piece of patient care. So it seemed like the right time to try and push this forward."

Measures and Key Outcomes

In the first six months of the post-implementation period:

- > 147 patients met inclusion criteria (average of 25 patients/month).
- 27% of patients (40 of 147) had documented attempts to identify health care proxies within one hospital day of admission.
- 22% (33 of 147) had documented attempts to identify existing advance care planning materials within the first day of admission.
- > 44% of the patients (65 of 147) had a prognostic screen completed within the first hospital day.
- > 12% of patients (18 of 147) had a documented goals of care conversation within the first three days of admission.
- > 16% of patients who screened positive (9 of 56) had documented meetings.

Provider confidence:

Per responses to surveys conducted pre- and post-intervention, there was an increase in the proportion of providers that felt comfortable leading goals of care meetings. Pre-intervention, 55% of providers were "somewhat" or "very" confident conducting these meetings; post-intervention, this number increased to 69%. The shift was most pronounced in surgical residents and nurse practitioners (62% pre-intervention vs. 84% post-intervention for both groups combined).

PROJECT TEAM

Palliative care lead	Heather Harris, associate medical director, supportive and palliative care
Trauma surgery lead	Rebecca Plevin, trauma and surgical critical care physician
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