OUTCOMES ASSOCIATED WITH A NURSE-DRIVEN SERIOUS ILLNESS SUPPORT TRIGGER TOOL IN A SURGICAL TRAUMA ICU

DNP Scholarly Project Defense

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SCHOLARLY PROJECT TEAM

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SPECIAL THANKS

- My husband, Karl
- My family- Dad, Kathy, Mom, Keith, and sister Kaitlyn
- Mary Hutson, project improvement coordinator senior at VCUHS
- Christoph Lecznar, CNS, Interim Nurse Clinician STICU
- Toni Sperandeo and Katina Harris, STICU Care Coordination
- Dan Wilson, UVA SON Librarian
- My wonderful STICU RN colleagues

BACKGROUND

- Surgical and trauma patients frequently receive high-intensity critical care at the end of life without frank conversations regarding prognosis
- Aggressive care may not align with patient goals
- **Lack of access** to palliative care can partially be explained:
  - Patient quality of life that is medically unattainable
  - Lack of formal training of clinicians
  - Lack of time (Aslakson et al., 2014).

BACKGROUND

- Primary goal: to **prevent and alleviate suffering** in the setting of serious and life altering illness (Metaxa et al., 2021).
- **Serious illness**: condition that carries a high risk of mortality and negatively impacts a person's daily function (CAPC, 2017)
- **Incorporating palliative care into surgical and trauma critical care has been historically difficult** (Lilley et al., 2016).
- **Role of nursing** is invaluable

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REVIEW OF LITERATURE

Does a nurse-driven palliative care trigger tool increase nurses' perceived comfort in recognizing and advocating for patients who would benefit from a goals of care meeting?

1. Heterogeneity
2. Role of Nursing
3. Culture
4. Educational opportunities
5. Feasibility

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PURPOSE

To successfully **develop and pilot a nurse-driven model** in selected surgical critical care patients to prompt **multi-disciplinary discussions** regarding prognosis and **goals of care** for patients identified to be at higher risk of detrimental outcomes.

DEFINITION OF TERMS

- **Palliative care (PC)-** specialized medical care for people living with a serious illness (NIH National Institute on Aging, 2021)
  - Primary PC- delivered by healthcare professionals who are not palliative care specialists, such as primary care clinicians; physicians who are disease-oriented specialists; APPs and nurses, social workers, pharmacists, chaplains, and others who care for this population but are not certified in palliative care (NCP, 2018).
  - Secondary- specialty PC is care that is delivered by healthcare professionals who are PC specialists, such as physicians who are board certified in this specialty; palliative-certified RNs and APPs; and PC-certified social workers, pharmacists, and chaplains (NCP, 2018).
- **Hospice-** focuses on the care, comfort, and quality of life of a person with a serious illness who is approaching the end of life (NIH National Institute on Aging, 2021)

DEFINITIONS CONTINUED

- **Goals of Care (GOC) Meeting**- discussing of goals and preferences, identifying a plan, potential treatments, and discharge planning needs (Apostol et al., 2014)
- **Advance directive-** legal document that states a person's preferences about receiving medical care if that person is no longer able to make medical decisions because of a serious illness or injury (National Cancer Institute, n.d.)
- **Aggressive treatment/care**- focus is on prolonging life and correcting deviations from physiologic norm (Munro & Savel, 2018)

METHODS

Project Question

- Does implementing a nurse-driven serious illness support tool result in more goals of care meetings?

Scholarly Practice Project Design

- Evidenced-Based Practice

PROJECT SETTING

A Surgical Trauma Intensive Care Unit

- An urban, level 1 tertiary care center in Central Virginia
- 28 beds, supported by surgical intensivists, surgical residents, and several APPs
- Nursing supported by a nurse manager, assistant nurse manager, clinician, and 4 clinical coordinators
- Roughly 110 nurses on staff, usually 14-16 per shift (including CC/charge)

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ORGANIZATIONAL ASSESSMENT AND PROBLEM DESCRIPTION

Unit leaders agreed there was a practice gap in appropriateness and timeliness of goals of care conversations/palliative care consultations

PATIENT POPULATION

Patients admitted to the STICU by the AGS and trauma services

Inclusion Criteria

- Physically located on the unit
- When patients meet 2 of the trigger criteria

Exclusion Criteria

- Surgical patients are that are admitted to the STICU with a primary service outside of trauma or AGS.

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IMPLEMENTATION FRAMEWORK

Iowa Model of Evidence-Based Practice to Promote Excellence in Health Care (Iowa Model Collective et al., 2017)

A guide to use research findings to improve patient care

1. Identify an opportunity for improvement
2. Determine if this is a priority of the organization
3. Form an interdisciplinary team
4. Gather, synthesize, and appraise a body of literature
5. Pilot the change
6. Disseminate results

USING THE IOWA MODEL

1. **Identify an area for improvement**: Leadership noticed a gap in GOC meetings

2. **Determine priority**: Priority of organization to decrease length of stay and improve advance care planning

3. **Form a team**: The unit medical director, another surgical attending, the nurse clinician, the nurse manager, a surgical PC attending, a performance improvement coordinator, and a supervisor in the care coordination department

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USING THE IOWA MODEL

4. **Review of literature** identified 35 articles suggesting significant evidence for practice change and participants should design and implement the practice change

5. **Pilot the change**: staff educated, given opportunities for feedback, and tool implemented over 3 month period

6. **Share findings** through poster presentations, submitting for publication, and executive summary sent to leadership

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FOUNDATIONAL MODEL

Academic Health System Professional Practice Model

- Components of professional practice model include a culture of respect, professional recognition and reward, shared governances, and a professional practice grounded in values of caring, knowledge, leadership, and collaboration
- Components and values of the PPM drive delivery of care as relationship based

Relationship-based care

- Delivered through nurse-patient relationships, relationships with the interdisciplinary team and others, and relationship with self

DEVELOPMENT OF SIS TOOL

- Literature search conducted using the search strategy (((Adult) AND (Intensive Care) AND (Palliative Care)) AND (Trigger)
  - 67 articles retained for review
  - After full text search, narrowed to 35 articles
- Triggers presented to focus group and added based on clinical experience and expert opinion
- Created just at the beginning of covid, pilot test was desired, but priorities shifted with on-going pandemic

Tool created by site experts and stakeholders utilizing a comprehensive evidence-based literature review

Serious Illness Support (SIS)

Trauma, Burn, EGS Patients

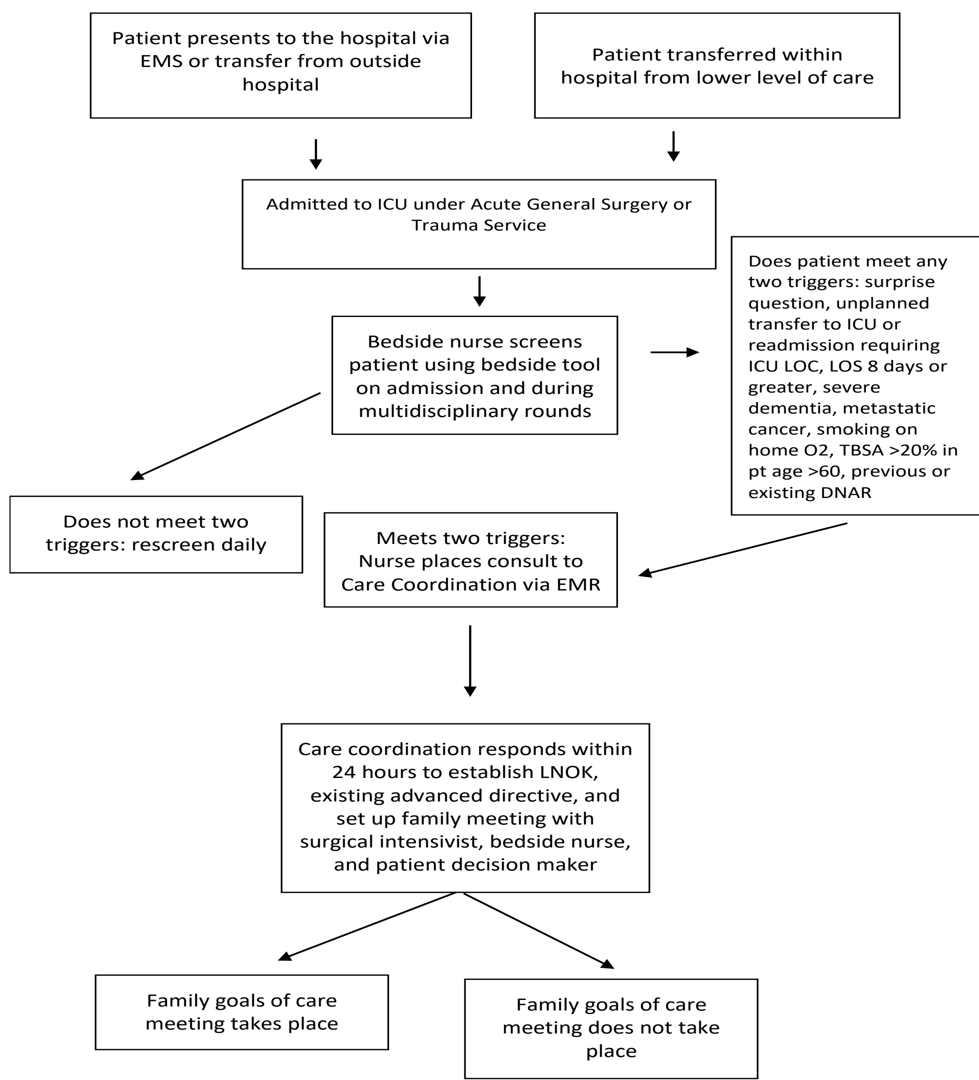
To prompt effective multi-disciplinary discussions about prognosis and care goals for patients identified to be at high risk of a poor outcome.

SIS trigger includes any 2 of the data points below:

- ❑ Surprise question: *I would NOT be surprised if this patient were to die within the next year or two*
- ❑ Unplanned transfer to the ICU level of care and/or readmission requiring ICU level of care
- ❑ LOS 8 or greater days
- ❑ Severe dementia defined as pre-trauma dependence for ADL due to that dementia
- ❑ Metastatic cancer
- ❑ Smoking on home O2 mechanism of burn
- ❑ TBSA > 20% in patients age 60 or older
- ❑ Previous or existing DNAR order

Steps when SIS triggers are met:

1. RN identifies when SIS triggers are met during Rounds/Fast Hugs
2. RN enters a **Care Coordinator Consult** and in **Reason for Consult** enter "**SIS Alert**" along with the specific triggers that were met
3. Care Coordinator/SW discusses SIS Alert with Provider within 24hrs M-F of consult
4. Care Coordinator/SW coordinates a Family Meeting with the Provider's schedule and the LNOK or appointed Healthcare Agent
5. Family meeting includes a multidisciplinary team and prognosis discussion
6. Provider and Care Coordinator/SW documents Family Meeting conversation in the EMR
7. As appropriate, consult with Palliative Care or Geriatric Services



INTERVENTION STEPS

OUTCOME MEASURE

- Incidence of family GOC meetings
- Did a family meeting occur after placement of a serious illness consult?
  - This was tracked with the help of the care coordinators; when a consult was placed, CC would print out a face sheet of the patient and inform project leader whether a meeting occurred or not

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IRB DETERMINATION AND PROTECTION OF HUMAN SUBJECTS

Project determined non-human subjects research by the Nursing and Health Professions Translation Initiative Review and Oversight Committee (IROC) at the Academic Health System project was implemented

ETHICAL CONSIDERATIONS/DEI PERSPECTIVE

- **Equity**- the project was applied to all patients who could receive maximum benefit
- **Autonomy**- respect for patient's right to choose or refuse any treatment
- **Beneficence**- a duty to the patient to weigh the risks and benefits and act in a way to prevent and remove harm from the patient

RESULTS

- **Descriptive data**

  - 144 trauma patients and 38 acute general surgery patients admitted to the STICU between July 18th and October 18th, 2023

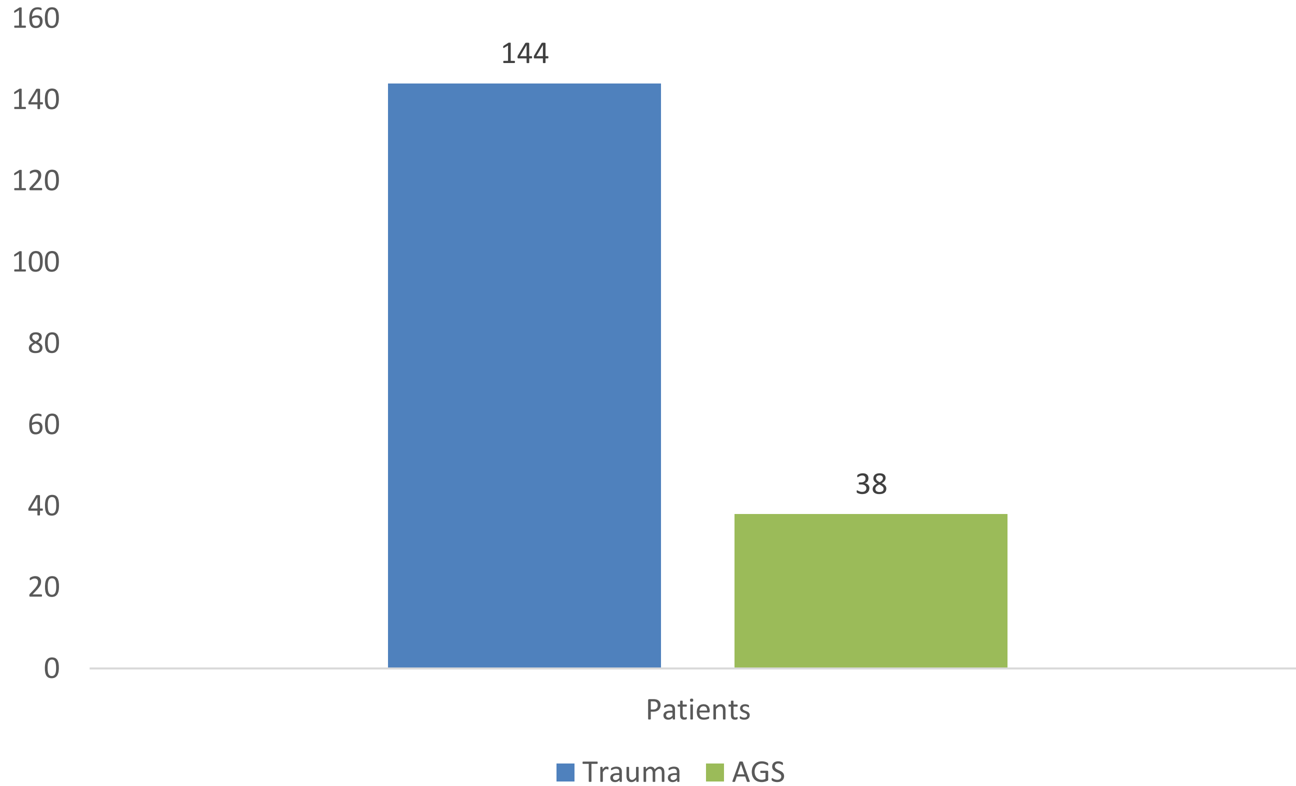
  - Average age, gender, LOS

- 6 patients had a serious illness consult placed

  - 4 of these patients had documented goals of care discussions

  - 15 patients total had documented GOC discussions (4 SIS + 11 Non SIS patients)

DISTRIBUTION OF PATIENTS BY SERVICE

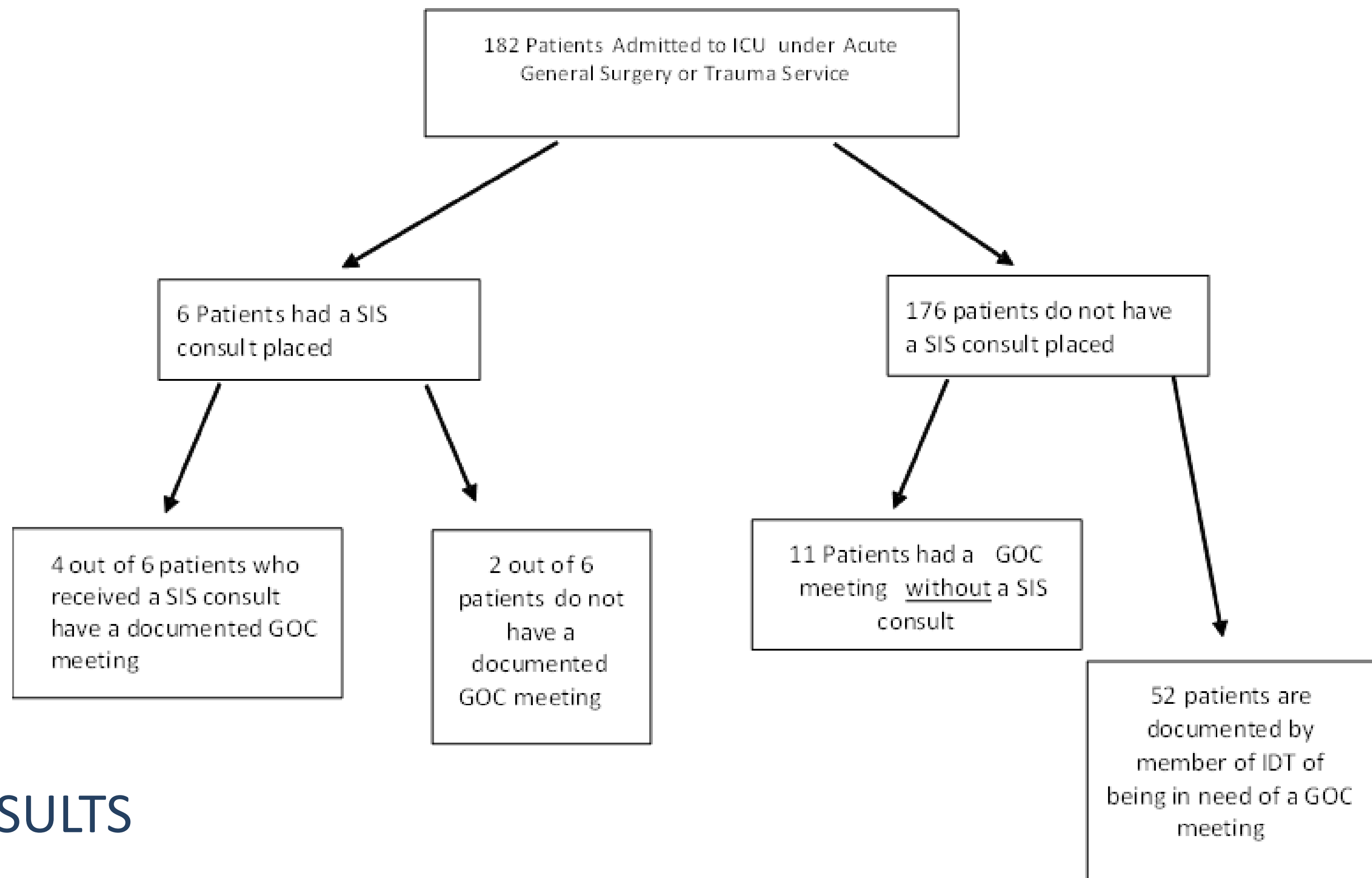


Variable	n (%)	M (SD)	Range
Age (years)	182	51.87 (20.25)	20-74
Gender			
Male	119 (65%)		
Female	62 (34%)		
Unknown	1 (.005%)		
Race			
Non-Hispanic White	83 (45%)		
Black	70 (38%)		
Unknown/Other	29 (16%)		
American Indian	1 (.005%)		
Asian	1 (.005%)		

DEMOGRAPHICS OF ALL PATIENTS

Variable	n (%)	M (SD)	Range
Age (years)	6	51.67 (19.23)	20-74
Gender			
Male	4 (67%)		
Female	2 (33%)		
Race			
Non-Hispanic White	4 (67%)		
Black	2 (33%)		
Hispanic	0		
Asian/Pacific Islander	0		

DEMOGRAPHICS OF SIS PATIENTS



RESULTS

LIMITATIONS

- Effects of the Covid-19 pandemic on the workforce
- Leadership changes
- New EMR
- Expansion of liver transplant program
- Tool included burn criteria, no burn patients
- Overall, SIS criteria was limiting for patient population at this time
- Limited time frame

CONCLUSIONS

- Many studies that provide criteria for PC utilization and utility of GOC meetings, barriers remain in the ICU setting
- Incorporating PC into critical care is important to providing patient-centered care
  - This is a marker of high-quality critical care (Nelson, 2017)
- Project/SIS tool was designed to increase GOC meetings in the AGS and trauma ICU patient population
  - Future projects would benefit from daily rounds with charge nurse or project leader
  - Further testing of inclusion criteria based on literature/unit needs
  - EMR utilization

CONCLUSIONS

- Build and implementation of this project are a step in the right direction to standardizing which patients are appropriate for GOC meetings and palliative interventions
- Nursing staff expressed interest in a trigger tool or protocol for all STICU patients
- Number of patients with unmet needs
- Site leaders plan to continue to use and refine the SIS tool to optimize GOC meetings and patient outcomes

FINANCIAL IMPLICATIONS

- Possible improvement in patient and family satisfaction with care
- Possible improvement end of life experience for patients and families
- Nursing participation could alleviate feelings of work dissatisfaction and feelings of inadequate palliative care inclusion in ICU care
- Appropriate allocation of hospital resources

Questions?

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