Screening for and Assessment of Suicide Risk in Patients with Medical Illness: A Quality Improvement Initiative

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Significance

- Suicide is a major public health problem in the United States and is currently the 10th leading cause of death in the general population (1)
- Medical illness itself is a risk factor for suicide (2)
- There is compelling justification for screening for suicide risk in medically ill patients in a compassionate, non-stigmatizing, and yet resource-conscious way.

Background

- Objective:
  - Change the suicide-risk screening process at UNC Health, an 18-hospital healthcare system by implementing new screening and assessment tools.
- Rationale
  - 3 years after implementation of our prior process, several challenges had been identified:
    - Poor resource utilization: staff time and energy, use of 1:1 sitters
    - Overburdensome process of "rescreening" without clear justification
    - Patient care: inability to discern acute risk vs chronic risk
- The New Process (3)

ASQ — **Screened by:** Ask Suicide Screening Questions (ASQ), administered by patient's RN

+/- BSA — If necessary, **assessed by** a brief safety assessment (BSA), which is a semi structured conversation completed by (ideally) a Licensed Clinical Social Worker (LCSW)

+/- Full mental health evaluation — If necessary, **evaluated by** a mental health professional as part of a full psychiatric consult

asQ Ask Suicide-Screening Questions

1. In the past few weeks, have you **wished you were dead**?
2. In the past few weeks, have you felt that you or your family would be **better off if you were dead**?
3. In the past week, have you been having **thoughts about killing yourself**?
4. Have you ever **tried to kill yourself**?

If the patient answers Yes to any of the above, they are asked the following acuity question:

5. **"Are you having thoughts of killing yourself right now?"**

3 outcomes:

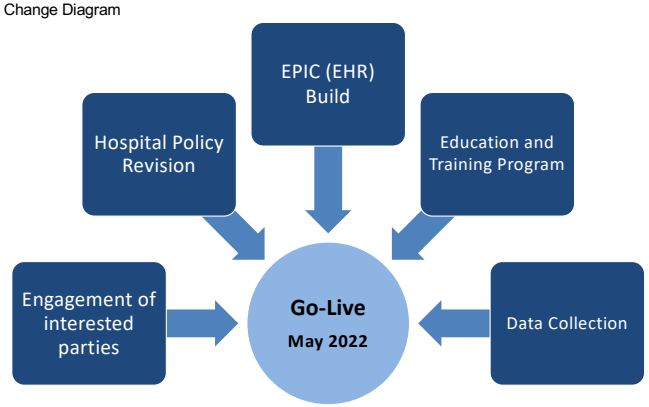
No to questions 1-4 = Negative Screen	YES to any questions 1-4 but NO to question 5 = Non-acute Positive Screen	YES to any questions 1-4 AND YES to question 5 = Imminent Risk
↓	↓	↓
No further Intervention needed	Primary team performs BSA to assess risk and determine next steps	Suicide Precautions 1:1 Sitter Psychiatry Consult

Methods

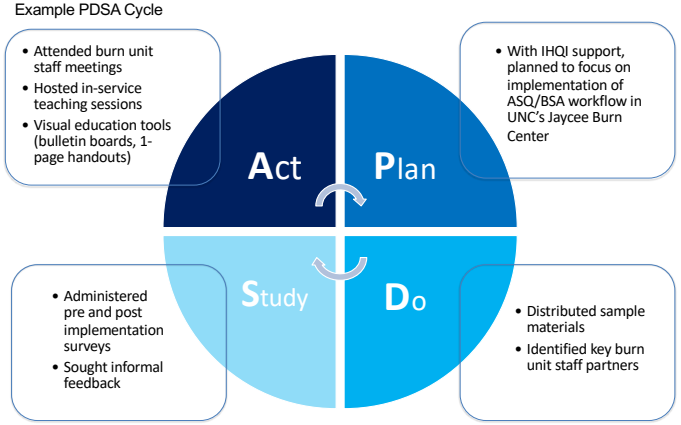
It takes a village: Building the team

- Content experts (CL psychiatrists and nurses)
- Hospital leadership
- Site-specific representatives
- IT / EHR personnel
- Accreditation consultants
- Risk management / legal
- Data collection
- Quality improvement office
- Nurse education specialists

Change Diagram

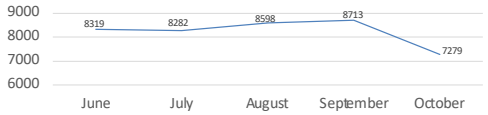


Example PDSA Cycle

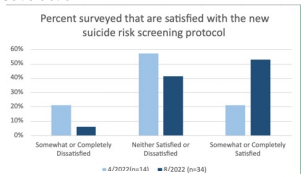


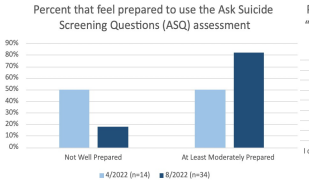
Results

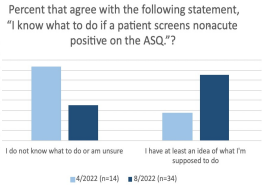
ASQs Performed by Month at UNC Medical Center



Burn Unit Staff Satisfaction







Conclusions

Lessons learned:

- System-wide implementation is difficult. targeted education interventions in the Burn Center lead to increased staff satisfaction and competency in that area of the hospital, but confusion and frustration still exist.
- Shifting away from a policy that requires "rescreening" has been challenging: we are hopeful that the decrease in ASQs in October reflects effective education targeted at reducing multiple screens for the same patient
- **Challenges:**
  - Tension between hospital administration's wish to achieve "zero-risk", and the inevitable risks of suicide in clinical medicine
  - Any screening tool is dependent on honest patient disclosure
- **Successful implementation depends on:**
  - Upfront investment of resources in the BSA
  - Support from top hospital leadership and a clear chain of decision-making command
  - Hospital policy that supports the correct use of any screening and assessment tool
- **Next Steps**
  - Ongoing education
  - Investment in BSA
  - Policy change

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References

1. CDC, National Center for Health Statistics. Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, released in 2020. Accessed at https://wonder.cdc.gov/ucd- icd10.html on Feb 3, 2021
2. McFarland D, Walsh L, Napolitano S, et al. "Suicide in Patients with Cancer: Identifying Risk Factors". *Oncology* Vol 33, No 6. 19 June, 2019
3. 2. Horowitz, LM, Snyder DJ, Boudreaux ED, et. al. Validation of the Ask Suicide-Screening Questions for Adult Medical Inpatients: A Brief Tool for All Ages. *Psychosomatics*. 2020; 61(6):713-722.