

A QUALITY IMPROVEMENT APPROACH TO DEVELOPING AND PRE-
IMPLEMENTATION EVALUATION OF A SUICIDE RISK SCREENING AND CARE
CONTINUITY TOOLKIT FOR RURAL AMERICAN INDIAN YOUTH.

by

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of

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in

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DEDICATION

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ABSTRACT

Background:

Suicide remains a leading cause of death among American Indian and Alaska Native youth, with rural and reservation communities experiencing disproportionately high rates.

Local Problem:

Limited access to behavioral health services, inconsistent screening practices, and fragmented care coordination contribute to gaps in early identification and intervention for at-risk youth in rural emergency department settings.

Methods:

This Doctor of Nursing Practice (DNP) project utilized a quality improvement framework to develop and evaluate a suicide risk screening and care continuity toolkit prior to implementation in a rural Indian Health Service emergency department. The toolkit was informed by evidence-based practices and structured using standardized clinical workflows.

Intervention:

The toolkit includes universal triage screening using the Ask Suicide-Screening Questions (ASQ), a Brief Suicide Safety Assessment (BSSA) for positive screens, standardized response protocols, and locally relevant referral pathways to support continuity of care. A multidisciplinary panel of four stakeholders evaluated the toolkit using the AGREE II instrument to assess quality, clarity, and applicability prior to implementation.

Results:

AGREE II evaluation demonstrated strong overall performance, with most domains meeting or exceeding the predefined 70% benchmark. Domains scoring below this threshold were revised based on stakeholder feedback to improve clarity, feasibility, and clinical usability within the rural tribal emergency department context.

Conclusion:

This project produced a high-quality, stakeholder-informed toolkit ready for implementation. Pre-implementation evaluation supports its potential to improve standardized suicide risk identification and strengthen care coordination for rural American Indian youth in emergency care settings.

CHAPTER ONE

REVIEW OF THE LITERATURE

Introduction

Youth suicide is the second leading cause of death for individuals aged 10–24 in the United States, and the burden is disproportionately high in rural and American Indian/Alaska Native (AI/AN) populations (Akinyemi et al., 2024; Vanwormer et al., 2024). Montana consistently ranks among the highest states for suicide mortality for pediatric ages 8–24, with rates nearly double the national average. Between 2018 and 2022, Montana’s age-adjusted suicide rate reached 28.7 per 100,000, compared to a U.S. average of approximately 14–15 per 100,000 (Montana Department of Public Health and Human Services [DPHHS], 2024). Among children ages 10–17, Montana’s suicide rate (13.2 per 100,000) is almost triple the national rate of 4.7 per 100,000, underscoring an urgent public health crisis (Montana DPHHS, 2023). The disparity is even more striking for AI/AN youth in Montana, whose suicide rate is nearly three times higher than that of their White peers (Vanwormer et al., 2024).

The majority of the seven American Indian reservations in Montana are remote, medically underserved regions characterized by limited behavioral-health providers, geographic isolation, and substantial barriers to care. These structural inequities contribute to delayed identification of mental-health needs and increased suicide vulnerability among rural AI youth (Mohatt et al., 2021; Vanwormer et al., 2024; DPHHS, 2024). Workforce shortages across psychiatry, psychology, and counseling in rural Montana contribute to a crisis-driven model of

care on AI reservations; youth frequently do not encounter behavioral-health intervention until suicidal ideation or self-harm is already present (Mohatt et al., 2021; Vanwormer et al., 2024; DPHHS, 2024). Geographic isolation, transportation challenges, and persistent stigma further restrict access to timely mental health support (Oyegoke et al., 2024; Thomas et al., 2023). Emergency departments (EDs), therefore, serve as one of the few consistent points of contact for healthcare among at-risk Montanan youth, making the ED an essential setting for early suicide risk identification and intervention.

Despite increased accessibility of youth to emergency department (ED) staff, suicide risk screening is not yet universally implemented in many rural or tribal EDs, leaving a critical prevention opportunity unaddressed. Evidence and national guidelines, including the National Institute of Mental Health (NIMH) Ask Suicide-Screening Questions (ASQ) Toolkit, recommend routine suicide risk screening for patients aged 8 to 24 years in ED settings (NIMH, 2024). This recommendation is based on a three-tiered model that includes an initial brief screen, a secondary safety assessment if the initial screen is positive, and appropriate disposition planning, including behavioral health referral. Screening all youth regardless of presenting complaint is crucial because many who later die by suicide initially present with non-psychiatric concerns such as injuries, pain, or somatic symptoms (Horowitz et al., 2025; DeVylder et al., 2023).

Screening for suicide risk is a critical first step in preventing suicide-related morbidity and mortality among youth presenting to the ED. This scoping review explores the current evidence supporting the use of the ASQ universal suicide screening for individuals aged 8-17 who present to EDs, with a focus on rural, AI/AN, and underserved youth populations. Findings will inform a QI project within one Indian Health Service (IHS) ED aimed at integrating

standardized suicide screening into routine triage, clarifying clinician team roles, implementing closed-loop referral pathways, and strengthening staff and caregiver education to improve continuity of care and ultimately reduce youth suicide risk.

Methods

This scoping review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) guidelines to ensure methodological rigor, transparency, and reproducibility (Tricco et al., 2018)

Protocol and Registration: A formal review protocol was developed in advance to guide the search strategy, screening, and data charting procedures. It detailed the research questions, eligibility criteria, and the planned approach for data synthesis.

Eligibility Criteria. Studies were eligible for inclusion if they met the following criteria: (a) focused on suicide risk screening or prevention among youth aged 8–24; (b) described interventions or programs implemented in the setting of EDs, primary care, or other healthcare or community-based settings; and (c) addressed rural, Indigenous, or otherwise underserved populations. Both quantitative and qualitative studies were eligible. Only peer-reviewed articles published between 2019 and 2024 were included to ensure contemporary relevance. Studies were limited to the English language because translation services were not available for this project, and to ensure uniformity of interpretation across results.

Exclusion criteria included non-U.S. or non-Canadian settings, studies focusing exclusively on adult populations, and non-empirical articles (e.g., narrative opinion pieces without data). The

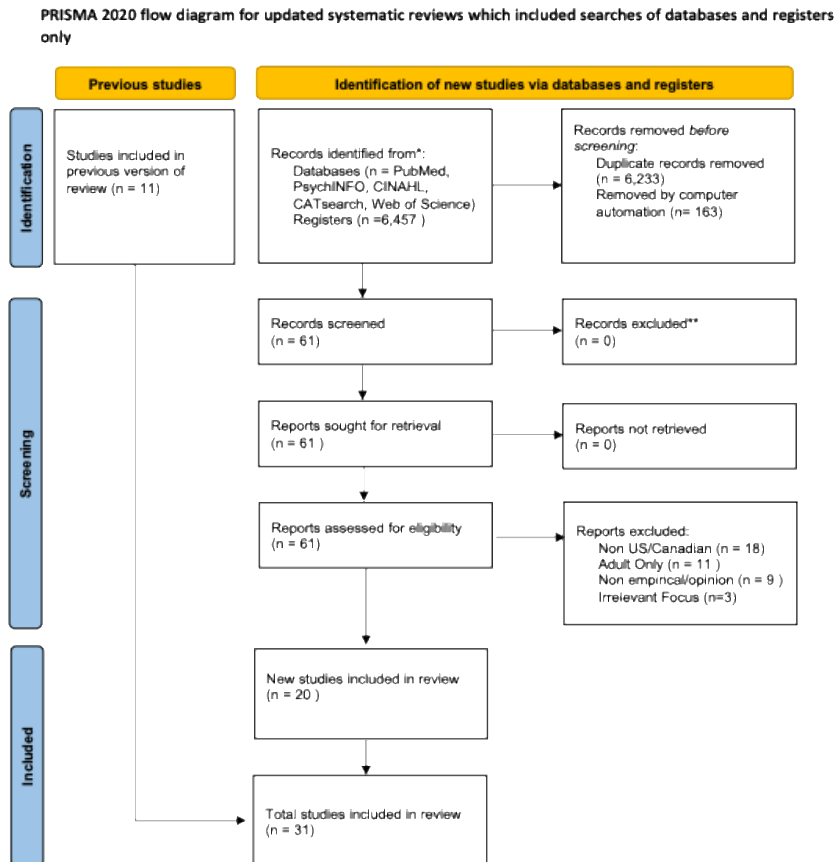
inclusion and exclusion criteria were chosen to ensure that the findings were relevant to the target population and proposed setting.

Information Sources: Four electronic databases, PubMed, PsycINFO, CINAHL, and Web of Science, through CatSearch, were searched between August 2025 and September 2026. The search range spanned from January 2020 to September 2025 to ensure comprehensive coverage. Additionally, the reference lists of included articles and relevant gray literature, such as the NIMH ASQ Toolkit and the Montana Department of Public Health and Human Services' suicide statistics, were hand-searched to identify further sources.

Search Strategy: A health sciences librarian guided the development of a comprehensive search strategy designed to optimize sensitivity and specificity. The key search terms used were: “suicide screening,” “adolescent,” “emergency department,” “ASQ,” “American Indian,” “Indigenous,” “rural health,” and “quality improvement.”

Selection of Evidence Sources: The initial search identified 6,457 records. After removing duplicates, titles and abstracts were reviewed for relevance. Of the 61 full-text articles screened, 20 met all eligibility criteria and were included in the final review. The remaining articles were excluded for one or more of the following reasons: (a) the study sample did not include youth aged 10–24; (b) suicide risk screening or prevention was not a primary focus; (c) the intervention did not occur in an ED, primary care, or community-based healthcare setting; (d) the study did not involve rural, Indigenous, or otherwise underserved populations; (e) the publication did not represent original empirical findings (e.g., reviews, commentaries, protocols without results); or (f) the article fell outside the publication time frame or English, language requirement. The

selection process for the literature review is illustrated in Figure 1.



Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71.

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Figure 1 Prisma -SCR Flow Diagram: Literature Selection Process. Note. Adapted from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines (Tricco et al., 2018). Diagram created by the author.

Data Charting Process: The quality of the included literature was evaluated using the Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) Evidence Level and Quality Guide (Dang & Dearholt, 2018). Each study was critically appraised based on research design, methodological rigor, sample representativeness, and clarity of outcomes. Of the thirty-one found, eleven were found using individual search engines on NIH, and previous study searches and the additional twenty included studies, two were Level I (systematic reviews of randomized controlled trials providing the most substantial evidence for intervention effectiveness), five were Level II (well-designed quasi-experimental or cohort studies demonstrating causal inferences without randomization), and seven were Level III (non-experimental, descriptive, or correlational studies contributing supportive observational evidence). The remaining six articles consisted of Level V expert opinions, quality-improvement reports, or policy analyses that offered valuable contextual insights into implementation challenges in rural and tribal emergency settings. This mixed-level evidence reflects the developing nature of suicide-risk screening research and the need for additional rigorous, culturally responsive intervention studies in under-resourced communities.

Data Items and Critical Appraisal: Key data items included the type of screening tool (e.g., ASQ, CASSY), delivery method (paper vs. electronic), timing of administration, referral process after positive screens, and outcomes such as connection to care or repeat ED visits. Each article was critically appraised for methodological quality based on study design, sample size, measurement validity, and relevance to rural youth populations. Although formal risk-of-bias tools were not

used, the study's rigor and relevance were considered when weighing the evidence during synthesis.

Results Synthesis: 20 of the 31 studies met the inclusion criteria for this scoping review, spanning a range of research designs and settings relevant to suicide risk screening among youth. Of these, nine studies specifically focused on AI/AN youth populations, and six were conducted in rural or frontier EDs. Four studies were situated in primary care or school-based settings but were included for their relevance to integrated screening workflows and continuity of care. Across all studies, sample sizes ranged from five participants in a qualitative pilot study to 65 participants in a multi-site implementation project, with most studies targeting individuals aged 10 to 24 years, consistent with the project's defined youth population.

The Ask Suicide-Screening Questions (ASQ) was the most frequently used instrument, appearing in 11 studies, followed by the Columbia-Suicide Severity Rating Scale (C-SSRS) in 5 studies, and other brief screeners or custom instruments in 4 studies. All studies addressed at least one component of suicide risk detection, intervention, or follow-up care, though the depth and rigor varied according to study design and setting.

A thematic synthesis approach was used to identify and compare patterns across studies. Findings were grouped into the domains of screening, team roles, referral processes, education, and utilization. Qualitative and quantitative evidence were integrated narratively, enabling comparison of agreement, disagreement, and knowledge gaps across the body of literature (Thomas & Harden, 2008)

Results

The use of a universal suicide risk screening demonstrates superior effectiveness compared to clinician-selective or chief-complaint-based approaches in identifying youth at risk for suicide, including those presenting with non-psychiatric complaints who might otherwise be overlooked (DeVylder et al., 2023; Horowitz et al., 2025). Reliance solely on presenting symptoms or provider suspicion risks under-detection, as many youths in crisis initially present with somatic or injury-related concerns (Brent et al., 2023).

Multiple validated instruments exist to detect suicide risk among youth, including the Columbia-Suicide Severity Rating Scale (C-SSRS), the Patient Health Questionnaire-9 (PHQ-9), and the Computerized Adaptive Screen for Suicidal Youth (CASSY). The C-SSRS, often considered a gold-standard structured interview, is most appropriate for secondary, in-depth safety assessments rather than rapid triage due to its length and complexity (Scudder et al., 2022). The PHQ-9, though widely implemented for depression screening, includes only one suicide-related item and may fail to identify individuals experiencing suicidal ideation in the absence of depressive symptoms (Simon et al., 2025; Scudder et al., 2022). The CASSY offers slightly higher specificity than the ASQ through its adaptive, algorithm-driven format; however, it requires digital infrastructure and licensing that limit its feasibility in resource-constrained rural emergency departments (Brent et al., 2023).

Table 1.1 compares the primary screening tools in terms of length, validation, and clinical practicality. Among these, the Ask Suicide-Screening Questions (ASQ), available via the National Institute of Mental Health (NIMH) ASQ Toolkit (NIMH, 2024), emerged from this review as the most validated, brief, and scalable option for universal screening in emergency settings. The ASQ consists of four questions, takes less than 20 seconds to administer, and

demonstrates excellent sensitivity ($\approx 96.9\%$) and negative predictive value among pediatric and emergency populations (Horowitz et al., 2012; King et al., 2025). Its brevity allows for administration by triage nurses or emergency technicians with minimal training, enabling seamless integration into high-volume workflows (Ballard et al., 2017; Wellen et al., 2023).

Table 1 Comparison of Suicide and Depression Screening Tools

Tool	Length/Time	Validation	Strengths	Limitations
ASQ (Ask Suicide-Screening Questions)	4 items, <20 seconds	Validated in pediatric & ED populations; sensitivity $\approx 96.9\%$ (Horowitz et al., 2012)	Brief, free, high sensitivity/NPV, easy to integrate at triage. Ballard et al., 2017	Requires secondary assessment (e.g., BSSA) for positive screens
C-SSRS (Columbia Suicide Severity Rating Scale)	10+ questions; 5–10 minutes	Gold-standard structured interview; highly validated. (Posner et al., 2011)	Comprehensive assessment of severity, behavior, and intent	Time-intensive; best for the secondary evaluation, not rapid triage
PHQ-9 (Depression screen)	9 items, 3–5 minutes	Widely validated depression measure; item 9 screens for suicide risk (Kroenke et al., 2001)	Useful for depression identification, common in primary care	May miss youth with isolated suicidal ideation; not suicide-specific
CASSY (Computerized Adaptive Screen for Suicidal Youth)	Variable; computer-adaptive format	Early validation in adolescent clinical populations; ongoing studies (Glenn et al., 2019).	Personalized risk score; high specificity	Requires technology infrastructure; less feasible in rural EDs

Note. Validation references: ASQ (Horowitz et al., 2012, 2025; Ballard et al., 2017), C-SSRS (Posner et al., 2011), PHQ-9 (Kroenke et al., 2001), and CASSY (Glenn et al., 2019). Recent implementation evidence also highlights ASQ’s role in improving detection rates and referral pathways in EDs (King et al., 2025; Wellen et al., 2023).

In practice, the ASQ is designed as the first tier of a structured, two-step screening model. Patients with a positive ASQ proceed to a secondary assessment using the Brief Suicide Safety Assessment (BSSA), a clinician-administered tool that evaluates suicide risk level, protective factors, and immediate safety needs (Horowitz et al., 2025). This tiered approach enhances both predictive validity and resource efficiency, ensuring that high-risk youth receive comprehensive evaluation while minimizing unnecessary psychiatric consultations for low-risk cases.

For rural and AI/AN populations, this process is fundamental. “Limited representation” refers to the underrepresentation of AI/AN populations in large-scale predictive algorithms and EHR-based risk models, resulting in lower accuracy and potential bias when such tools are applied to these groups (Haroz et al., 2024). In contrast, direct, human-administered screening using validated instruments such as the ASQ ensures equitable identification of risk by relying on clinical interaction rather than algorithmic prediction. Implementing universal ASQ screening within a rural IHSED, thus addresses a critical care gap, offering an evidence-based, culturally responsive strategy for early suicide-risk detection among high-risk AI/AN youth.

Team Roles

A clear delineation of professional roles and standardized workflows improves program fidelity in suicide risk screening. Evidence indicates that triage nurses are the most effective providers of universal screening tools, such as the ASQ, because of their frontline position and ability to incorporate screening into routine intake procedures (Horowitz et al., 2025; Scudder et al., 2022). This approach aligns with the American Nurses Association (ANA) Code of Ethics for Nurses (2025), which highlights nurses’ ethical duty to protect patient well-being by

recognizing and intervening early in cases of suicide risk, regardless of specialty or practice setting. The Emergency Nurses Association (ENA) similarly emphasizes the emergency nurse's role in identifying, assessing, and responding to behavioral health crises as part of comprehensive patient safety.

When an ASQ screen is positive, a provider-led suicide risk assessment (e.g., the BSSA) is completed by a medical provider, typically a physician, nurse practitioner, or physician assistant, followed by collaboration with behavioral-health staff for safety planning, crisis intervention, and referral coordination (Horowitz et al., 2025; Sullivant et al., 2021; LeCloux et al., 2022). Programs that clearly defined these interdisciplinary roles showed stronger adherence to protocols, quicker intervention responses, and less variability in patient disposition. However, limited information is available regarding the training and competency standards of both behavioral health and general-practice nursing staff, which highlights a gap in workforce readiness for suicide-specific care.

Including cultural stakeholders such as Tribal leaders, cultural liaisons, and community health representatives in screening and referral processes within AI/AN populations enhances trust, engagement, and continuity of care (Thomas et al., 2023; McDougal et al., 2025). However, operational guidance remains limited on how to formally incorporate these cultural representatives into ED workflows. Overall, the evidence indicates that suicide-screening programs are most effective when professional roles are clearly defined, all nurses are trained and ethically empowered to participate in suicide prevention, and culturally responsive partnerships are intentionally integrated as essential components for advancing practice and research in rural and Tribal emergency settings.

Referral Process

Universal suicide risk screening is most effective when backed by a reliable, closed-loop referral system. Studies consistently highlight the importance of completing same-day secondary assessments, creating personalized safety plans for those identified as high risk, offering safety plans for moderate-risk patients, and ensuring that youth are linked to appropriate mental health services before discharge (Cafferty et al., 2025; Horowitz et al., 2025). Programs that include these practices show better compliance with mental health follow-up care and higher caregiver satisfaction than systems that rely solely on resource lists or delayed referrals.

A common theme in the literature is the use of tiered procedures following a positive ASQ screen. In this approach, secondary tools like the BSSA are used to improve risk stratification and inform subsequent clinical treatment (Horowitz et al., 2025). The secondary assessment prompts behavioral health professionals to work with patients and families to create personalized safety plans, which have been associated with reduced suicidal thoughts and fewer repeat ED visits. Safety plans that include both crisis management strategies and scheduled follow-up appointments produce greater adherence to the safety plan than those that provide only crisis contact information (Marshall et al., 2022).

Geographic isolation and workforce shortages in rural areas continue to delay timely mental health referrals. Integrating tele-behavioral health consultations and establishing structured collaborations with school-based mental health counselors have been shown to reduce these barriers, decreasing missed follow-ups and improving continuity of care (Wellen et al., 2023). Among AI/AN youth, culturally responsive referral models that involve Tribal leaders

and community health representatives foster trust and enhance adherence. However, few studies describe how these partnerships are initiated or maintained (McDougal et al., 2025).

Despite increasing agreement on the importance of closed-loop referral systems, using mental health services after a positive suicide-risk screening remains a persistent challenge. While several studies report reductions in repeat ED visits and improvements in outpatient follow-up after implementing integrated mental health interventions, results are inconsistent due to differences in staffing, measurement tools, and local resource availability (Wellen et al., 2023). Additionally, few studies have systematically examined how utilization patterns differ between rural and urban areas or among racial and ethnic groups, a gap especially relevant for AI/AN youth in Montana and other frontier regions (McDougal et al., 2025; Haroz et al., 2024). Addressing these disparities through standardized outcome measures and culturally grounded implementation strategies will be crucial to creating equitable, sustainable systems for suicide prevention and ongoing care.

Education

Education and structured training for clinical staff are vital parts of effective suicide-risk screening programs. Evidence consistently shows that when nurses, providers, and behavioral health professionals receive targeted instruction in suicide risk assessment, therapeutic communication, and cultural humility, both screening accuracy and family acceptance of results improve significantly (Molock et al., 2023; King et al., 2025). Comprehensive clinical education also boosts adherence to established protocols, reduces false positives, and enhances clinician confidence in using validated tools, such as the ASQ and BSSA.

Healthcare staff training programs that incorporate cultural responsiveness are crucial when working with AI/AN youth and families. Curricula that include modules on cultural humility, historical trauma, and mental health stigma demonstrate higher caregiver engagement and increased follow-through on referrals (Molock et al., 2023). However, few studies outline the ideal content, duration, delivery method, or frequency of such training programs, highlighting a gap in the evidence base for best practices in clinical education within diverse rural settings.

Education must also extend beyond clinical staff to include patients and caregivers, ensuring a shared understanding of suicide risk and safety planning. Research indicates that families prefer to receive collaborative psychoeducation that explains screening results, outlines next steps, and identifies available community resources before discharge (Cafferty et al., 2025). Structured education sessions involving both clinical staff and caregivers have been associated with better adherence to follow-up appointments and reduced caregiver anxiety (Horowitz et al. 2025). Programs that supplement verbal communication with written materials, such as individualized safety plans, crisis hotline information, and step-by-step follow-up instructions, have achieved greater continuity of care than those relying solely on verbal discharge education (Cafferty et al., 2025). However, few studies have systematically compared educational approaches, leaving an essential gap in identifying the most effective strategies for staff and family education following a positive suicide-risk screen.

Utilization

The most effective method for behavioral health services inclusion after a positive suicide-risk screen remains unclear in the literature. Incorporating behavioral health into ED

workflows is shown to enable timely intervention before discharge and decrease repeat ED visits and hospitalizations related to suicide by enabling timely intervention before discharge (Wellen et al., 2023). This integrated-care model allows for immediate safety planning, brief counseling, and patient/ family connection to follow-up resources, effectively bridging the gap between screening and ongoing care.

Evidence also suggests that culturally tailored services enhance engagement and usage rates. Programs developed collaboratively with community members and adapted to the cultural context of their populations, especially those serving AI/AN youth, show higher participation, fewer missed appointments, and better treatment adherence (McDougal et al., 2025; Haroz et al., 2024). These findings emphasize the importance of involving Tribal leadership, community health representatives, and culturally appropriate practices in both program design and implementation.

Nonetheless, findings on service utilization outcomes remain inconsistent. While several studies have shown decreases in repeat ED visits and improvements in outpatient follow-up after implementing integrated behavioral health interventions, few have employed standardized measures that enable meaningful comparisons across different sites. Moreover, limited data exist on how behavioral health utilization patterns differ between rural and urban areas or among racial and ethnic groups, a gap particularly relevant for AI/AN youth in Montana and other rural communities. Addressing these disparities will be essential for developing equitable, sustainable suicide-prevention systems of care.

Conclusion

Across the reviewed studies, universal suicide-risk screening using the ASQ consistently improved early detection of at-risk youth in ED setting, especially in rural and underserved areas. The evidence indicates that screening alone is insufficient; clinical outcomes improve only when a positive ASQ is followed by a structured, provider-led BSSA screening, which clarifies risk levels and guides subsequent steps. Studies also emphasized that clearly defined roles—nurses administering the ASQ during triage and medical providers (MDs/NPs/PAs) conducting the BSSA, enhanced workflow efficiency and reduced delays in behavioral health evaluations. The integration of standardized referral processes, coordinated safety planning, and behavioral health consultations increased outpatient follow-up and reduced repeat ED visits. Additionally, staff and family education improved screening accuracy, intervention acceptability, and engagement with behavioral health service referrals. Overall, the evidence supports a model where universal ASQ screening, prompt BSSA follow-up for positive screening, and coordinated referral systems work together to enhance youth suicide prevention in resource-limited, high-risk ED settings.

CHAPTER TWO

QUALITY IMPROVEMENT PROPOSAL

Introduction

Youth suicide remains one of the most urgent global public-health challenges, with suicide ranked among the leading causes of death for adolescents and young adults worldwide (World Health Organization, 2025a, 2025b). In the United States, suicide ranks as the second leading cause of death for individuals ages 10 to 24 (CDC, 2024). Montana continues to rank among the highest in the nation for suicide mortality, and youth suicide represents a persistent and escalating public health crisis, especially for rural and Indigenous populations (DPHHS, 2024; National Center for Health Statistics, 2023; Vanwormer et al., 2024; Manzo et al., 2020). Between 2011 and 2020, the suicide rate among Montana youth ages 11 to 17 was 13.9 per 100,000 (Montana Legislature, 2023), as compared to the national average of 11.9 for the same time. Youth suicide in Montana reflects clear and persistent disparities, with American Indian and Alaska Native (AI/AN) youth bearing a disproportionately higher burden of risk compared to the statewide youth population. These inequities are linked to systemic barriers to behavioral health care, rural and frontier geography, and culturally incongruent models of care (DPHHS, 2024; Manzo et al., 2020; Vanwormer et al., 2024). This disproportionate burden of suicide among AI/AN populations underscores the urgent need for a proactive, culturally responsive suicide-risk screening and referral process within health care systems that serve these youth.

Emergency departments (EDs) are a critical access point for early detection of suicide risk among adolescents, particularly in rural and medically underserved regions where youth are

more likely to seek acute care than outpatient behavioral-health services. Evidence demonstrates that universal suicide-risk screening paired with a structured referral pathway can improve identification, safety planning, and follow-up care for youth at elevated risk. In both rural EDs and Indian Health Service (IHS) facilities, nurses can administer evidence-based screening tools at triage, followed by provider-led suicide-risk assessment and coordination with behavioral-health professionals for crisis stabilization and linkage to outpatient services. When screening and referral workflows are standardized, ED settings become a reliable safety net for adolescents who might otherwise remain unidentified until a crisis occurs.

Although the selected ED has adopted the Ask Suicide Questions (ASQ) as the standard screening tool for youth suicide-risk detection, implementation fidelity remains inconsistent. Despite the ASQ being validated for youth and specifically designed to trigger an immediate provider-led Brief Suicide Safety Assessment (BSSA) to guide risk stratification and disposition, chart audits and staff feedback indicate these screenings are frequently omitted or incompletely documented. Positive screens are not consistently followed by timely completion of BSSA, behavioral health referral, or individualized safety planning. These inconsistencies result in missed opportunities for early intervention and disrupt continuity of care for at-risk youth. The absence of a standardized suicide screening workflow, staff accountability structure, and systematic referral tracking contributes to practice variability and reduced overall effectiveness of the youth suicide screening program. These challenges mirror broader trends in the empirical literature, which shows that suicide-risk screening produces meaningful outcomes only when coupled with clear response protocols, staff education, and embedded follow-up systems (Horowitz et al., 2025; Sullivan et al., 2021; LeCloux et al., 2022)

This quality improvement (QI) initiative aims to enhance the rate of suicide-risk screening and the effectiveness of behavioral-health referral processes by standardizing nursing documentation through consistent ASQ use, improving provider-initiated behavioral-health referral completion using the BSSA, and ensuring subsequent follow-up by behavioral-health agencies. The aim of the interventions is to reinforce staff education and standardize staff workflow within a rural IHS ED, with the target population being AI/AN youth ages 8-17.

Problem

Within the past year at the pilot site, fewer than 40% of youth ages 8–17 presenting to the ED were screened for suicide risk using the ASQ tool, regardless of national recommendations for universal screening in this age group. Nurses are not consistently administering or documenting the ASQ per ED standards, and no secondary screening process is in place for youth identified as moderate- or high-risk. Additionally, there is no standardized behavioral-health referral protocol, leading to delayed or missed behavioral-health evaluations and poor follow-through on positive screens. The lack of access to behavioral health resources in the area further limits continuity of care and prevention efforts. Collectively, these gaps highlight the urgent need for a standardized QI initiative to improve screening fidelity by nurses, strengthen referral pathways to behavioral-health resources, and enhance support for at-risk AI/AN youth within this rural IHS ED.

Aim Statement

This QI project aims to increase nurse-led suicide-risk screening completion, using the ASQ tool, from less than 40% to at least 90% for youth aged 8–17 presenting to an IHS ED in Montana. Implementation will standardize ASQ administration and documentation by nursing for all eligible patients. It will require a secondary assessment using the BSSA by either a trained RN or the ED provider for anyone who screens as high risk. A standardized, closed-loop behavioral-health referral pathway will be activated only for patients at moderate or high risk, with clear handoffs to behavioral health staff and documented follow-through. This includes initiating evaluation in the ED when available or scheduling an outpatient appointment before discharge with a warm handoff. Suicide-prevention resources from local tribal, state, and national organizations will be provided to all screened youth, regardless of their risk level. The project's immediate goals are to reliably identify at-risk patients, increase awareness of and access to behavioral health resources, and ensure timely evaluation and referral for at-risk youth. The long-term goal is to reduce suicide-related morbidity and mortality among AI/AN youth served by this rural ED.

Inquiry Question

How does strengthening an existing nurse-led ASQ-based suicide-risk-screening process, through PDSA-guided workflow standardization, staff education, integration of templated mandatory nurse documentation within the electronic health record (EHR), and structured behavioral-health referral pathways, affect suicide screening completion rates, referral follow-through, and nurse confidence in suicide-risk communication within a rural IHS ED?

Table 2 SMARTIE GOALS

Goal	Specific	Measurable	Achievable	Relevant	Time-Bound
1. Enhance nurse confidence and comfort assessing suicide risk	Implement structured educational sessions for all ED nursing staff focused on ASQ administration, communication strategies, and referral protocols.	Pre- and post-training surveys using a 5-point Likert scale will demonstrate a $\geq 30\%$ increase in self-reported nurse confidence assessing suicide risk and initiating referrals.	Training is integrated into existing staff education schedules through concise, 30-minute in-service sessions facilitated by the student investigator.	Builds nursing competence, enhances screening fidelity, and supports a culture of safety consistent with the ANA Code of Ethics.	Educational sessions completed prior to implementation with a post-training survey evaluation by week six of the PDSA implementation cycle.
2. Increase ASQ screening completion by nurses	Implement universal nursing use of the ASQ screening tool for all pediatric and adolescent patients (ages 8–17) presenting to the ED, regardless of chief complaint.	Achieve a 25% increase from 35% to 60% in documented ASQ screenings within 8 weeks of intervention. Screening completion data will be obtained through EHR reports generated from the Resource and Patient Management System (RPMS) and verified through biweekly chart audits.	Progress will be monitored using a biweekly run chart tracking the number and percentage of completed ASQ screenings, informed by RPMS data and manual verification.	Increasing ASQ completion enhances early suicide-risk identification and aligns with National Institute of Mental Health (NIMH, 2024) recommendations for universal suicide-risk screening in emergency settings.	Goal to be met within six weeks of program launch.
3. Improve accuracy and consistency of behavioral- health referral processes after positive screens	Standardize the behavioral- health referral protocol for positive ASQ results using a tiered pathway: acute $\rightarrow$ AVEL evaluation; non-acute $\rightarrow$ outpatient referral; negative $\rightarrow$ education resources offered.	Baseline referral documentation rate (40%) will increase to $\geq 70\%$ by week 8 of project completion. Data will be obtained from the EHR reports tracking completed referral documentation fields.	Improvement supported through mandatory EHR fields (closed-loop documentation prompts requiring completion before chart closure), standardized scripting for nurses and providers, and biweekly coordination with case management and Tribal behavioral-health staff.	Enhances consistency of referral documentation and ensures youth at elevated suicide risk are appropriately connected to behavioral- health services before discharge, addressing continuity-of-care gaps identified previously (Scudder et al., 2022; Wellen et al., 2023).	Target referral documentation rate of $\geq 70\%$ to be achieved by week six of the PDSA implementation cycle.

Note. Goals are structured according to the SMART framework (Specific, Measurable, Achievable, Relevant, Time-Bound) and align with the project’s aim to improve universal suicide-risk screening and care continuity among American Indian/Alaska Native youth in a rural Indian Health Service emergency department through PDSA-guided interventions.

Context

The project site is a rural IHS ED in Montana that serves an estimated 5,000 youth annually, including a significant proportion of AI/AN patients from surrounding Tribal communities. The department is staffed by an average of two registered nurses per shift, emergency room technicians, and a small team of advanced practice providers, including nurse practitioners and physicians. Behavioral-health collaboration occurs through the local Tribal mental health department and the telemedicine AVEL E-Care consult service team, which provides remote psychiatric consultation and crisis support.

Although organizational priorities emphasize patient safety and youth suicide prevention, consistent implementation has been hindered by high nursing staff turnover, frequent reliance on travel nurses, and the challenges of rural geographic isolation. Because the facility is in a remote area with a limited behavioral-health workforce, positive suicide screenings do not always translate into timely access to on-site behavioral-health evaluation, which reduces staff confidence in the screening process and contributes to inconsistent follow-through with risk-assessment and referral workflows (Mohatt et al., 2021; Vanwormer et al., 2024)

The interdisciplinary project team includes the Director of Nursing (DON), Registered Nurse (RN) case managers, staff nurses, ED technicians, emergency providers, and IHS administration, as well as representatives from the local Tribal mental health department and the AVEL consult service team. This diverse team oversees policy alignment, workflow refinement, and sustainability planning for suicide risk screening and referral processes.

Baseline chart audits at the chosen IHS ED revealed that fewer than 40% of eligible youth were screened using the existing ASQ tool. Of those who tested positive, only 15% underwent a provider-led BSSA evaluation or received a behavioral health referral. These gaps represent missed opportunities for early risk detection, safety planning, and follow-up care for at-risk adolescents. Enhancing screening accuracy and ensuring consistent follow-up with BSSA and referral procedures are essential to bolstering the safety net for youth served by this facility.

The project will continue utilizing the ASQ tool (Figure 2), which is currently implemented within the facility and endorsed by the National Institute of Mental Health (NIMH) as a validated, evidence-based, free-to-use screening instrument for identifying suicide risk in youth. The ASQ was selected for this setting due to its brevity, sensitivity, and applicability across diverse populations, including AI/AN youth in acute care settings. Research has demonstrated that the ASQ achieves high sensitivity (96.9%) for detecting suicide risk among pediatric emergency department patients while maintaining clinical feasibility and reducing missed opportunities for intervention (Horowitz et al., 2012; Ballard et al., 2017). The purpose of this QI initiative is to enhance fidelity, documentation, and referral follow-through rather than alter the screening process itself; the existing ASQ tool will remain unchanged. Maintaining use of this nationally recognized and NIH-supported instrument ensures consistency with best practices, facilitates benchmarking with national suicide prevention initiatives, and aligns with IHS's commitment to culturally responsive, evidence-informed care for youth in crisis.

NIMH TOOLKIT



Suicide Risk **Screening Tool**

Ask **Suicide-Screening** Questions

Ask the patient: _____

1. In the past few weeks, have you wished you were dead? ☐ Yes ☐ No
2. In the past few weeks, have you felt that you or your family would be better off if you were dead? ☐ Yes ☐ No
3. In the past week, have you been having thoughts about killing yourself? ☐ Yes ☐ No
4. Have you ever tried to kill yourself? ☐ Yes ☐ No
 If yes, how? _____

 When? _____

If the patient answers **Yes** to any of the above, ask the following acuity question:

5. Are you having thoughts of killing yourself right now? ☐ Yes ☐ No
 If yes, please describe: _____

Next steps: _____

- If patient answers "No" to all questions 1 through 4, screening is complete (not necessary to ask question #5). No intervention is necessary (*Note: Clinical judgment can always override a negative screen).
- If patient answers **"Yes"** to any of questions 1 through 4, or refuses to answer, they are considered a **positive screen**. Ask question #5 to assess acuity:
 - ☐ **"Yes"** to question #5 = **acute positive screen** (imminent risk identified)
 - Patient requires a **STAT** safety/full mental health evaluation.
 - Patient cannot leave until evaluated for safety.
 - Keep patient in sight. Remove all dangerous objects from room. Alert physician or clinician responsible for patient's care.
 - ☐ **"No"** to question #5 = **non-acute positive screen** (potential risk identified)
 - Patient requires a **brief** suicide safety assessment to determine if a **full** mental health evaluation is needed. If a patient (or parent/guardian) refuses the brief assessment, this should be treated as an "against medical advice" (AMA) discharge.
 - Alert physician or clinician responsible for patient's care.

Figure 2: Ask Suicide-Screening Questions (ASQ) from the National Institute of Mental health (NIMH) used with permission as a publicly available, non-copyrighted resource

Quality Improvement Model

This QI initiative is guided by the Plan-Do-Study-Act (PDSA) framework, a key part of the Institute for Healthcare Improvement (IHI) Model for Improvement. The PDSA cycle enables quick testing of process changes, ongoing evaluation, and continuous refinement of workflow strategies (Langley et al., 2009).

Plan: Based on findings from the literature review and local chart audits, significant gaps were identified in the consistency of suicide-risk screening, follow-up provider-led suicide assessments, and behavioral-health referral processes for youth ages 8–17. The literature consistently supports interventions that integrate EHR prompts, staff education and competency training, and standardized, closed-loop referral pathways as practical strategies to improve screening fidelity and continuity of care (Horowitz et al., 2020; The Joint Commission, 2022; U.S. Surgeon General, 2021). Guided by these evidence-based recommendations, the project will begin by collecting baseline data on ASQ completion, secondary BSSA screening rates, and behavioral-health referral follow-through. These findings will inform the implementation of a standardized suicide-risk screening workflow, supported by targeted interventions including EHR reminders to prompt ASQ completion, structured nurse training modules on ASQ and BSSA procedures, and a clearly defined referral protocol to ensure timely behavioral-health evaluation and follow-up for moderate- and high-risk youth.

Do: Educate ED nursing staff on the updated suicide-risk screening workflow, including ASQ administration, BSSA follow-up for positive screens, and the standardized behavioral-health referral process. Implement the new workflow and EHR documentation procedures during an

eight-week pilot phase, ensuring that all staff receive hands-on guidance and competency validation. Simultaneously, collect process data—including ASQ completion rates, secondary screening rates, and referral documentation—to evaluate adherence and identify early implementation challenges.

Study: Review run-chart trends, compare results with baseline data, and collect qualitative feedback from nurses pre- and post-intervention, providers, and mental health partners to identify project adaptations necessary to meet SMARTIE goals.

Act: Update ASQ screening prompts, improve training content, and revise referral scripts according to the findings to ensure ongoing adoption, sustainability and scalability to other IHS EDs.

Methods

Project Setting and Population

This QI project will be implemented in the ED of a rural IHS facility that primarily serves AI/AN youth. The ED manages an estimated 5,000 youth encounters annually and employs a multidisciplinary team that includes the DON, RN case managers, staff nurses, emergency providers, ED technicians, local Tribal mental health personnel, and the AVEL tele-behavioral consultation service. The project population includes all pediatric and adolescent patients aged 8–17 presenting to the ED for any reason during the eight-week implementation period.

Implementation Overview

The intervention phase will implement ED nurses' universal suicide-risk screening using the ASQ tool for all eligible youth ages 8–17, supported by existing but updated standardized, mandatory documentation templates within EHR. Before implementation, all ED nursing staff will complete a brief education session on the updated workflow, including ASQ administration, provider use of BSSA for moderate- and high-risk results, and the closed-loop behavioral health referral process to ensure timely outpatient follow-up. Training will also emphasize the use of culturally responsive patient and family education materials, including local tribal, state, and national suicide-prevention resources, to be provided to every screened youth regardless of risk level. Staff confidence and competence will be assessed through pre- and post-intervention surveys to measure perceived skill and comfort in screening and referral communication. After a two-week educational time, the new workflow and documentation process will be piloted over 4 weeks, encompassing two complete Plan–Do–Study–Act (PDSA) cycles to test, refine, and evaluate implementation fidelity and impact.

Intervention and Implementation Plan

Role-Based Responsibilities

DNP Project Lead: The project lead will coordinate all phases of implementation, including staff education, baseline data collection, EHR modifications, and outcome evaluation. Responsibilities performed in planning included developing the updated staff workflow process map, creating orientation materials, and recording training modules. During the do and study phases, data analysis will be conducted every 2 weeks, and the project lead will serve as a liaison between ED

leadership, nursing staff, and behavioral health services. The project lead will also oversee integration of suicide-prevention educational materials into the discharge process and ensure compliance with institutional and ethical standards.

Nursing Staff: Registered nurses will perform universal suicide-risk screening for all youth aged 8–17 using the ASQ during triage and document results within the standardized EHR assessment template. For patients screening positive, providers will initiate the BSSA and determine the appropriate referral tier:

- **Acute risk:** Immediate tele-behavioral consultation via AVEL.
- **Moderate risk:** Behavioral-health referral initiated before discharge.
- **Low/negative risk:** Distribution of culturally responsive suicide-prevention resources.

Nurses will also confirm patient contact information, complete required EHR fields before chart closure (ensuring a closed-loop referral process), and participate in biweekly interdisciplinary huddles to review performance data and barriers.

Providers: Physicians and advanced practice providers will review screening results, verify referral actions, and complete medical clearance for acute or moderate-risk patients. Providers will collaborate with behavioral health specialists to initiate or confirm referrals and ensure patients receive timely follow-up care.

Nurse Champions: Designated nurse champions, who are chosen according to time at the facility, experience with AI culture and leadership ability, will support peer adherence, reinforce training content, and serve as on-shift resources for workflow questions. They will conduct observations

of three patients per nurse in a nurse's module (seven-day stretches), assess screening accuracy, assist with onboarding new or traveling nurses, and ensure that the asynchronous training materials are available for future use.

Education and Training Plan: Within the first two weeks of project implementation, all ED nurses will complete a 30-minute structured training session, delivered in small groups of 3-4 nurses and available as a recorded module for future onboarding. The training, as seen below in Appendix E, will cover suicide prevalence among AI/AN youth, ASQ and BSSA purpose and use, EHR documentation procedures, the tiered referral pathway, communication and scripting techniques, safety planning, and culturally tailored patient/family education resources.

Competency will be verified through a post-session survey and direct observation by nurse champions. The post-session survey will be completed anonymously using Qualtrics. Staff will have the option to respond directly via email to the survey or scan a QR code at the nurses' station to complete it.

Workflow Integration: The revised workflow (see Figure 3) integrates suicide-risk screening into the routine nursing assessment. The EHR template will include mandatory ASQ prompts and automated alerts to complete the BSSA for positive screens. The system will require the provider to complete referral documentation and the RN to check the box indicating they informed the provider of the need for referral before chart closure, ensuring closed-loop accountability and accurate handoffs. Patient contact verification will be updated to facilitate follow-up. The RN documenting the patient's ASQ results will be responsible for charting this information and will be unable to pass the prompt in the EHR until it is completed.

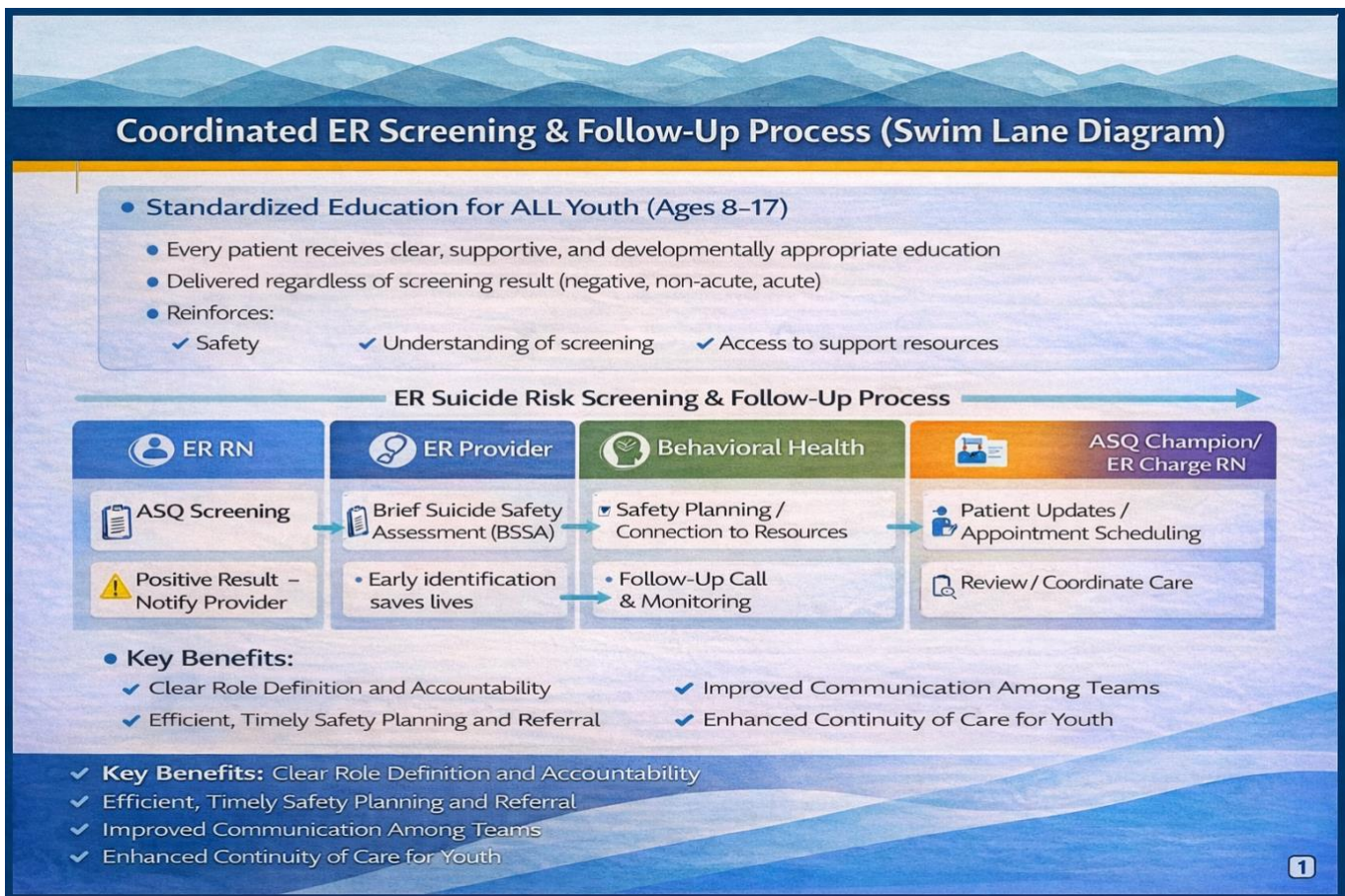


Figure 3: Interdisciplinary Swimlane Process Map for Youth Suicide-Risk Screening and Referral using the ASQ

Timeline

Table 3 Timeline

Phase	Activity	Duration / Dates
Planning (Sept–Nov 2025)	Baseline data collection, stakeholder engagement, and staff education module development.	6 weeks
Implementation (Jan–Feb 2026)	Launch of revised ASQ/BSSA workflow, standardized documentation, and closed-loop referral process.	2 weeks
Evaluation (Jan–Mar 2026)	Ongoing data review every two weeks, staff surveys, and PDSA refinement.	2 weeks
Refinement (Apr 2026)	Final data analysis, adjustments for sustainability, and preparation for site-wide rollout.	2-3 weeks

Budget

This project is designed to minimize costs by using existing resources. Staff education time is already budgeted within regular training hours.

Table 4 Budget

Category	Estimated Cost	Notes
Printing (education packets, workflow posters)	\$100	Funded by facility's ER/education budget.
Staff training time (0.5 hr × 15 nurses @ \$30/hr)	\$0	Covered under regular education hours.
Suicide-prevention resource materials	\$0	Provided by this RN, Tribal Health and SAMHSA.
Total Estimated Cost	\$100	Student contribution: 270 volunteer hours (~\$8,100 value).

Anticipated Barriers and Mitigation

Table 5 Anticipated Barriers and Mitigation

Barrier	Mitigation Strategy
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High staff turnover	Develop asynchronous orientation modules and designate nurse champions to ensure continuity.
Limited behavioral-health coverage	Partner with AVEL telehealth and Tribal behavioral-health services for 24/7 support.
Competing ED priorities	Embed ASQ screening into existing triage assessments to minimize added workload.
Documentation fatigue	Simplify with EHR automation, pre-filled prompts, and mandatory completion fields.

Evaluation and Analysis

Outcome Measures: Each goal will be evaluated using the operational definitions established in the SMART(IE) goals (Appendix A). Quantitative data will be collected through the EHR and securely analyzed to assess changes across the eight-week PDSA cycle.

Table 6 Outcome Measures

Goal #	Measure	Data Source	How to Measure/Calculate	Tracking/Frequency	Dissemination to Stakeholders	Adaptation Plan
Increase nursing ASQ Screening Completion	Percent-age of completed ASQ screenings for youth ages 8–17	EHR Audit logs	$\# \text{ of patients screened} \div \text{total eligible patients}) \times 100 = \% \text{ ASQ completed}$	Bi-Weekly EHR data pull reviewed by nurse champion; visualized on run chart Qi Coordinator	QI Coordinator: Weekly emailed dashboard summary to DON, nurse champions, and QI committee; monthly PDSA meeting report	Adjust workflow prompts, reinforce education, or add staff reminders if < 25 % improvement by week 4
Improve Referral Accuracy and Consistency	Percent-age of documented referrals after positive ASQ screens	EHR referral tracking form and BSSA documentation ASQ screens	$(\# \text{ of referrals completed} \div \# \text{ of positive ASQ screens}) \times 100$	Bi-weekly data extraction and verification) $\times 100$	Bi-weekly during QI champion chart audits and data extraction.	Modify referral pathway or scripting; provide targeted coaching if completion rate < 70 % by week 8
Enhance Nurse Confidence Discussing Suicide Risk	Mean change in confidence scores (5-point Likert)	Anonymous pre/post survey using QUALTRICS secure survey system	Anonymous pre/post survey	Calculate % change in mean pre/post scores and run paired-sample t	Surveys administered week 1 (pre) and week 8 (post); results compiled in Excel	

Note: Table 5 provides a detailed measurement, tracking, and adaptation schedule for each SMART(IE) goal

Data Safety and Confidentiality

Data will be aggregated weekly or biweekly, depending on the measure. Descriptive statistics (means, percentages, and frequency distributions) will summarize baseline and post-intervention outcomes.

- ASQ screening completion rates will be analyzed using a run chart to visualize trends across both PDSA cycles and assess improvement stability.
- Referral documentation rates will be compared to baseline using a chi-square test of independence to determine whether the observed change is statistically significant.
- Nurse confidence scores will be analyzed using a paired-samples t-test to compare pre- and post-training mean scores, and the effect size and direction will be determined.

Results will be compiled in Microsoft Excel and reviewed during weekly Nurse Champion-led emails to ED staff and administration. Emerging trends will guide real-time workflow adjustments, such as modifying EHR prompts, updating scripts, or scheduling additional training. Summative results will be presented at the monthly IHS QI Committee meeting with IHS local administration upon project completion, and a concise report will be shared with the Montana State University (MSU) faculty mentor and relevant stakeholders.

This project involves minimal risk and complies with all MSU internal review board (IRB) and IHS confidentiality standards. Data will be obtained solely from de-identified EHR records and aggregated before analysis. No protected health information (PHI) will be exported, emailed, or stored outside the facility's encrypted network.

The QI lead will maintain password-protected Excel spreadsheets of raw data stored on the facility's secure server, accessible only to authorized project personnel. Pre- and post-training surveys will be anonymous and free of identifiable information. Any printed materials, such as education packets or data summaries, will be stored in locked administrative offices and shredded after the project is completed.

Since this initiative is a QI process using de-identified, retrospective, and process-based data, it does not require additional IRB approval through the IHS or Tribal system. Oversight is provided through the MSU IRB under the university's exemption criteria for minimal-risk QI activities.

The IHS facility maintains an internal QI review process for all departmental initiatives; this project will adhere to local reporting requirements and obtain administrative approval before results are shared. No individual staff performance data will be publicly disclosed.

Conclusion

This QI initiative uses the PDSA framework to address inconsistent nurse-led suicide risk screening and referral procedures for AI/ AN youth ages 8-17 presenting to a rural IHS ED. The iterative approach, grounded in evidence from NIMH, Horowitz et al. (2025), and Wellen et al. (2023), aims to increase the nurses' confidence, standardize documentation, and enhance the continuity of mental health care for AI/AN youth. The project's success will be measured through process and outcome metrics aligned with SMART goals, supporting its scalability and sustainability in other rural and Tribal IHS EDs.

CHAPTER 3

QUALITY IMPROVEMENT MANUSCRIPT

Contribution of Authors and Co-Authors

Manuscript(s) in Chapter(s) [3]

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Contributions: Project design, literature review, toolkit development, data collection, data analysis, interpretation of results, manuscript preparation, and final approval.

Co-Author: Dr. Amanda Lucas

Contributions: Faculty Supervision, project guidance, methodological support, manuscript review, and editorial feedback

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Contributions: Content expertise, project feedback, editorial feedback, and manuscript review

Manuscript Information

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- ☒ Prepared for submission to a peer-reviewed journal
- ☐ Officially submitted to a peer-reviewed journal
- ☐ Accepted by a peer-reviewed journal
- ☐ Published in a peer-reviewed journal

CHAPTER 3

QUALITY IMPROVEMENT MANUSCRIPT

IntroductionProblem Description

Suicide has historically remained, and continues to be, a leading cause of death among American Indian and Alaska Native (AI/AN) youth in the United States, highlighting the urgent need for early identification and intervention strategies within healthcare settings (CDC, 2024; Horowitz et al., 2012; DPHHS, 2024). AI/AN youth in rural and reservation communities are experiencing disproportionately high rates of suicide compared to their urban counterparts. (Montana Department of Public Health and Human Services [DPHHS], 2024; Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). In Montana, youth suicide rates consistently rank among the highest in the United States, with rural and Tribal communities facing additional barriers, including limited access to behavioral health services, workforce shortages, and fragmented care systems (DPHHS, 2024). In resource-limited settings, Emergency Departments (EDs) often serve as the primary point of access to healthcare for at-risk youth, positioning them as critical sites for early identification and intervention. National organizations, including the National Institute of Mental Health and the American Academy of Pediatrics, recommend universal suicide risk screening for youth ages 8–17, paired with timely, risk-stratified interventions for those who screen positive (Horowitz et al., 2020; AAP, 2022). Without standardized screening and clear pathways for rapid assessment and intervention, at-risk youth may go unrecognized, increasing the likelihood of missed opportunities for prevention,

delayed care, and progression to suicidal behavior in an already vulnerable population (Horowitz et al., 2012; The Joint Commission, 2022; Wellen et al., 2023).

Available Knowledge (Literature Review)

Current empirical evidence aligns with national organizations in supporting universal suicide risk screening in ED settings as more effective than reliance on presenting complaints or clinician judgment alone (DeVylder et al., 2019; Brent et al., 2023). Many at-risk youth present with non-psychiatric complaints, such as abdominal pain, headaches, minor injuries, or common medical concerns like upper respiratory infections, which can result in missed opportunities for suicide risk identification, limiting the effectiveness of symptom-based identification strategies (Horowitz et al., 2025). Evidence and national guidelines further emphasize the importance of normalizing suicide screening as a routine component of care and incorporating patient and family education to reduce stigma and improve engagement (American Academy of Pediatrics [AAP], 2022; The Joint Commission, 2022). Validated screening tools such as the Ask Suicide-Screening Questions (ASQ) demonstrate high sensitivity and feasibility for rapid, nurse-led administration in pediatric populations (Horowitz et al., 2012; Ballard et al., 2017). Best practices support a tiered approach, in which a positive ASQ is followed by the Brief Suicide Safety Assessment (BSSA), a clinician-administered secondary assessment used to stratify risk and guide next steps in care (National Institute of Mental Health [NIMH], 2024).

The BSSA is designed for use by trained clinical providers, including physicians, nurse practitioners, physician assistants, and mental health clinicians, supporting its feasibility within interdisciplinary ED workflows (NIMH, 2024). For youth identified as high risk, immediate

safety precautions and urgent behavioral health evaluation, including tele-behavioral health when on-site resources are limited, are recommended (The Joint Commission, 2022). For those at moderate risk, safety planning, counseling, and rapid referral to behavioral health services are supported to promote continuity of care and reduce risk escalation (Stanley & Brown, 2012; NIMH, 2024). Clear role delineation, standardized pathways, and structured documentation processes are also supported in the literature as key components of effective implementation, as they reduce variability, enhance interdisciplinary collaboration among nurses, providers, behavioral health specialists, and community partners, and improve the timeliness and consistency of suicide prevention efforts (NIMH, 2024; The Joint Commission, 2022).

Rationale and Gap

Despite strong evidence supporting universal youth suicide screening, there remains a critical need for standardized, feasible, and culturally responsive tools to support early identification of suicide risk and coordination of care. At the project site, a nurse-driven suicide screening process was in place; however, retrospective review revealed only 40% completion and documentation of screenings within the 2024 fourth quarter numbers. Presently, no standardized secondary suicide risk assessment by a provider has been implemented for youth who screened positive, and referrals to behavioral health services were variable, resulting in inconsistent follow-up care. These gaps reflect a failure to align with evidence-based recommendations for universal screening, risk-stratified interventions, and coordinated care pathways (National Institute of Mental Health [NIMH], 2024; The Joint Commission, 2022). In response, a pre-implementation evaluation of a suicide risk screening and care continuity toolkit was developed to address these deficiencies and support standardized, timely, and coordinated

suicide prevention efforts. This project addresses this practice gap by developing and conducting a pre-implementation evaluation of a suicide risk-screening and care-continuity toolkit tailored to a rural Indian Health Services ED.

Methods

Context

This project was conducted within a rural Indian Health Services (IHS) ED serving a predominantly AI/AN population in Montana. At the project site, suicide risk screening for youth ages 8–17 was inconsistent, with no formal requirements or standardized protocols in place. Furthermore, implementation efforts were constrained by insufficient staff training within a high-turnover workforce, including both permanent staff and traveling registered nurses. These system-level barriers contributed to challenges in the early identification of those at risk for youth suicide. When appropriate screening and identification for at-risk youth was present, continuity of care was complicated by variability and uncertainty in behavioral health referral pathways, including inconsistent use of behavioral health counselors located on the reservation versus those off the reservation or in surrounding communities. Staff lacked clear knowledge of appropriate outpatient psychiatric referral pathways for youth, including where to refer based on American Indian beneficiary status. This gap created challenges in ensuring timely and appropriate follow-up care within a system serving both AI and non-AI patients.

Intervention

A suicide risk screening and care continuity toolkit was developed using evidence-based practices informed by a PRISMA-ScR-guided scoping review to address identified practice

gaps. This toolkit included (1) integration of ASQ screening into triage workflows (Appendix C), (2) a secondary suicide risk assessment algorithm (Appendix D), (3) standardized behavioral health referral pathways (Appendix D), (4) staff training materials (Appendix E), and (5) patient education resources (Appendices F–G). These components were developed through a structured evidence translation process to ensure alignment with clinical workflow and local resource availability.

The toolkit aimed to support standardized identification of youth suicide risk within a rural emergency department (ED) environment and improve staff coordination of post-discharge follow-up care.

Research evidence supported the selection of the Ask Suicide-Screening Questions (ASQ) as the primary screening instrument. The toolkit incorporated a tiered triage process in which a positive ASQ screen is followed by the Brief Suicide Safety Assessment (BSSA) to stratify risk and guide clinical decision-making. Youth identified as high risk were directed to immediate safety interventions and behavioral health evaluation, while those at moderate risk received safety planning and timely referral to outpatient behavioral health services, consistent with national recommendations from the National Institute of Mental Health (2024) and The Joint Commission (2022). Standardized patient and family education was integrated into the workflow for all youth to normalize screening, reduce stigma, and improve engagement in follow-up care, consistent with guidance from the American Academy of Pediatrics (2022).

The BSSA was selected as the secondary assessment following a positive ASQ screen due to its role in further stratifying suicide risk and guiding clinical decision-making. The ASQ toolkit recommends a brief suicide safety assessment conducted by a trained clinician after a

positive screen to determine acuity and appropriate next steps in care, including safety planning, referral, or emergency intervention (National Institute of Mental Health, 2023). The BSSA is designed to be efficient and feasible in ED settings while providing a structured approach to evaluate suicide risk severity, protective factors, and the need for immediate intervention (Horowitz et al., 2012; National Institute of Mental Health, 2023). Incorporating a standardized secondary assessment aligns with best practices by reducing variability in provider responses and supporting appropriate triage and continuity of care (The Joint Commission, 2022).

Multidisciplinary stakeholder engagement—including ED nursing staff, providers, and Tribal behavioral health professionals—supported iterative refinement of toolkit materials to improve clarity, acceptability, and operational feasibility. During finalization, additional feedback was obtained from providers at other rural IHS facilities in Montana. This systematic development approach strengthened the toolkit’s methodological integrity and enhanced its potential for adaptation and replication in similar rural and Tribal ED settings

Study Design

This project employed a quality improvement (QI) design informed by Plan-Do-Study-Act (PDSA) principles (Langley et al., 2009). Initial planning was conducted in alignment with the Plan-Do-Study-Act (PDSA) methodology. Following completion of the Plan phase, full implementation was deferred due to Tribal governance considerations and feasibility constraints. The project subsequently shifted to a pre-implementation evaluation of toolkit quality using the Appraisal of Guidelines for Research and Evaluation II (AGREE II) instrument (Brouwers et al.,

2010). Additionally, the stakeholders and the project coordinator worked to develop a plan for the toolkit's future implementation.

AGREE II Evaluation

The AGREE II instrument is a validated framework for assessing the methodological quality and implementation readiness of clinical practice guidelines (Brouwers et al., 2010). The AGREE II instrument evaluates six domains: scope and purpose, stakeholder involvement, rigor of development, clarity of presentation, applicability, and editorial independence. Each of the 23 AGREE II items was rated on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree). Domain scores were calculated using AGREE II methodology and expressed as a percentage of the maximum possible score. A benchmark score of $\geq 70\%$ was established to indicate acceptable quality and readiness for implementation (Brouwers et al., 2010).

Ethical Considerations

This project was conducted within a rural Tribal healthcare system and incorporated principles of cultural responsiveness and community engagement, supported by active buy-in from Indian Health Service (IHS) leadership. Stakeholder consultation prioritized input from healthcare professionals with both clinical expertise and familiarity with the local community, ensuring that toolkit development reflected cultural considerations, community needs, and structural barriers to care.

Formal evaluation using the AGREE II instrument was limited to IHS federal employees in accordance with Tribal policies and federal regulations. Despite this limitation, participating

stakeholders provided meaningful insight into the toolkit's feasibility, cultural relevance, and applicability within the local context.

The project was reviewed by the Montana State University Institutional Review Board (MSU IRB) and determined to meet criteria for quality improvement, exempting it from full IRB review. No identifiable patient data was collected, and all stakeholder participation was voluntary.

Data Collection and Outcome Measures

Four interdisciplinary stakeholders ($n = 4$), including two ED nurses, a provider, and a quality improvement nurse within the IHS system. These stakeholders used the AGREE II instrument to independently appraise the toolkit over a two-week period. Stakeholders were selected for clinical expertise and familiarity with the local practice environment. Stakeholders also provided qualitative feedback on clarity, feasibility, workflow integration, and cultural appropriateness. This evaluation served as a structured pre-implementation quality-assurance step to strengthen methodological rigor and contextual fit for future implementation cycles.

To assess the quality of the 23 items across the six AGREE II domains, scores were calculated by summing item-level ratings within each domain and standardizing the total as a percentage of the maximum possible score. This approach enables equitable comparison across domains despite variation in the number of items per domain.

A priori, the benchmark for acceptable toolkit performance was defined as a standardized domain score of $\geq 70\%$ across all six domains, consistent with thresholds used to indicate high methodological rigor, stakeholder relevance, clarity of presentation, and applicability for clinical implementation (Brouwers et al., 2010). As shown in Figure 4, mean domain scores among

stakeholders met or approached this threshold, while Figure 5 presents individual stakeholder ratings across domains, illustrating variability in perceptions of the toolkit's quality.

In addition to quantitative scoring, qualitative stakeholder feedback provided critical contextual insight and informed iterative refinement of the toolkit prior to dissemination and implementation.

Results

AGREE II domain scores were calculated by the Doctor of Nursing Practice (DNP) student for the four interdisciplinary stakeholders ($n = 4$) in accordance with the AGREE II methodology (Brouwers et al., 2010).

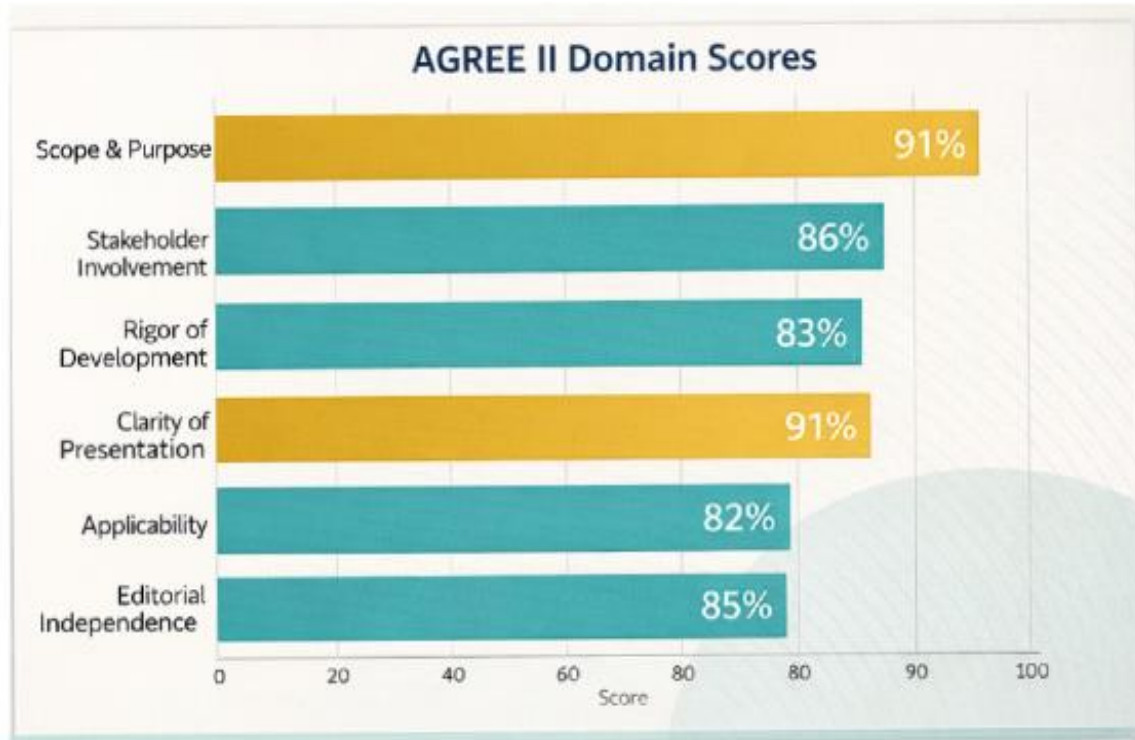


Figure 4: Mean of AGREE II scores by stakeholders

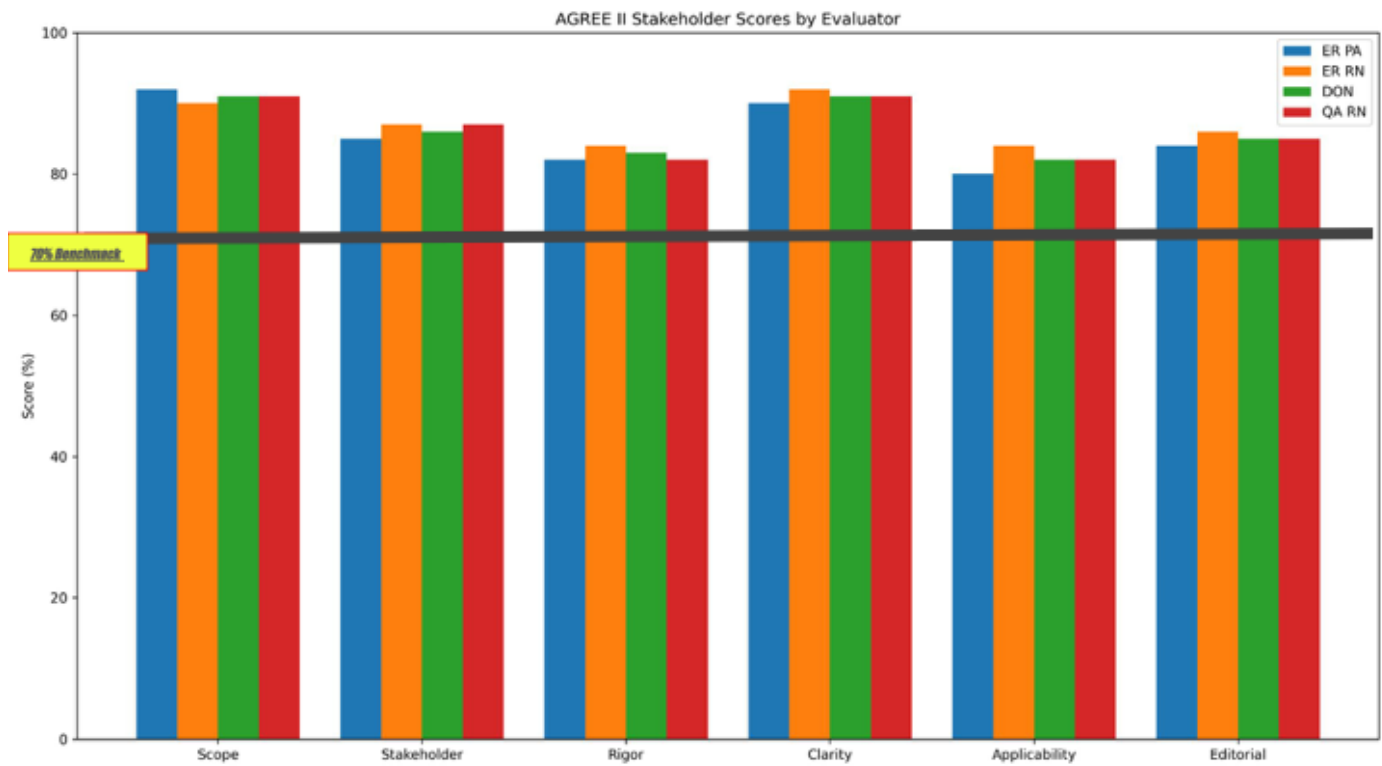


Figure 5 Individual stakeholder scoring across AGREE II Domains

Qualitative Feedback

Table 7: Qualitative Feedback from Stakeholders

Strength	Areas for Improvement
• Clear and standardized integration into ED triage workflows • Strong clinical relevance and applicability within a rural, resource-limited setting • Inclusion of locally relevant behavioral health referral pathways • Alignment with evidence-based screening practices, including ASQ and secondary assessment processes • Practicality of nurse-led screening and workflow integration	• Need for enhanced clarity in secondary risk assessment decision pathways • Expansion of guidance related to referral and follow-up processes • Greater specificity in role delineation within interdisciplinary teams • Minor formatting and usability adjustments to improve workflow efficiency

Interpretation of Domain Scores

Table 8: Domain Scores and What they mean

Domain	Score (%)	Interpretation
Scope and Purpose	90–95	Strong—clearly defined objectives and population
Clarity of Presentation	88–92	Strong—clear, actionable recommendations
Editorial Independence	72–80	Acceptable—transparent, no funding bias
Stakeholder Involvement	65–72	Moderate opportunity for more patient/community input
Rigor of Development	62–70	Moderate—needs stronger methodological transparency
Applicability	55–65	Lower—implementation and sustainability challenges

Table 9 Key Findings

Category	Key Findings
Strengths	Clear workflow; easy integration into ED triage; strong evidence base; practical tools
Barriers	Limited behavioral health resources; staffing variability; rural access constraints
Suggested Improvements	Enhance audit/monitoring systems; strengthen sustainability planning; improve workflow integration

Discussion

Summary of Findings

This quality improvement project evaluated the pre-implementation readiness of a suicide risk screening and care continuity toolkit designed for use in a rural IHS ED for youth ages 8-17. AGREE II results indicate the toolkit is high-quality, evidence-informed, and demonstrates strong readiness for implementation as scores exceeded the $\geq 70\%$ benchmark across all six domains.

Stakeholder feedback further supported the clinical relevance and usability of the toolkit while identifying opportunities to refine workflow clarity, role delineation, and referral processes. Recommendations for improvement, as summarized in Figure 3, include enhancing audit and monitoring systems, strengthening sustainability planning, and improving workflow integration. These findings suggest that although the toolkit is methodologically sound, successful implementation will depend on effective integration into existing clinical workflows and ongoing evaluation processes (Wellen et al., 2023).

Interpretation of Findings

The findings suggest that the toolkit's structured approach was both feasible and appropriate for a rural ED setting, combining nurse-driven universal suicide risk screening with a tiered response process that included provider-administered BSSA for youth identified at moderate to high risk. The inclusion of interdisciplinary role delineation and standardized patient and family education further strengthened the toolkit's potential to support consistent identification, intervention, and continuity of care. High AGREE II scores indicate strong

alignment with best practices in guideline development and support the toolkit's suitability for clinical adoption (Brouwers et al., 2010).

Importantly, stakeholder feedback (see Figure 8) highlights that implementation success depends less on the strength of the well-established evidence base and more on operational factors such as staffing capacity, workflow efficiency, and communication pathways. This reflects known challenges in rural healthcare settings, where process variability and limited behavioral health resources can affect the uptake of standardized interventions (Molock et al., 2023). After the initial feedback, a stakeholder discussion ensued to identify revisions to the toolkit and processes.

Comparison to the Literature

Stakeholder feedback supported implementing mandatory nurse documentation of the ASQ tool, along with a secondary assessment using the BSSA for youth who screened positive. This stepwise, tiered approach aligns with existing literature supporting universal, nurse-driven, standardized suicide risk screening in emergency departments for youth ages 8–17, paired with risk-stratified clinical response pathways (Horowitz et al., 2012; Ballard et al., 2017; National Institute of Mental Health [NIMH], 2024). The ASQ enables quick identification of at-risk youth without placing excessive strain on workflow and documentation, which stakeholders require and support to increase screening rates (Horowitz et al., 2012).

National patient safety guidelines emphasize the importance of standardized suicide risk assessment procedures and clearly defined care pathways to reduce variability in clinical decision-making and differences in provider perception of risk, ultimately supporting more

consistent identification and intervention (The Joint Commission, 2022). Standardization of screening and response processes has also been associated with improved consistency in care and a potential reduction in missed opportunities for intervention among at-risk youth. Consistent with this project's findings, prior studies further demonstrate that successful implementation depends not only on the use of validated screening tools but also on effective integration into clinical workflows, staff education, and well-defined referral systems that support timely and coordinated care (Wellen et al., 2023). Additionally, site stakeholders have highlighted implementation challenges, including limited staffing, delays in accessing behavioral health services, and fragmented care coordination. These issues are common in rural and Tribal healthcare settings (Molock et al., 2023; King et al., 2025). Recognizing these parallels underscores the need to develop implementation strategies that effectively address both clinical and system-wide challenges.

Implications for Practice and Implementation

The findings from this project support the feasibility and value of implementing a standardized, nurse-led suicide risk screening process in a rural emergency department, reinforced by both evidence and stakeholder input. Stakeholder feedback emphasized the importance of a team-based, multifaceted approach. The toolkit extends beyond screening to include a tiered response process with provider-led secondary assessments, clearly defined interdisciplinary roles, standardized patient and family education, and structured referral pathways. Together, these components promote a more consistent and coordinated approach to identifying and responding to youth suicide risk.

Successful implementation will require integration into existing clinical workflows and organizational infrastructure. Embedding tools within the electronic health record and aligning processes with existing protocols can improve adherence and reduce variability in care delivery (The Joint Commission, 2022). Leadership engagement and the use of clinical champions, such as an ASQ Champion, are critical to supporting staff, reinforcing practice change, and addressing barriers in real time (Damschroder et al., 2009).

Implementation should follow an iterative quality improvement approach using Plan-Do-Study-Act (PDSA) cycles to refine workflow integration, address barriers such as staffing constraints, and adapt processes in response to real-time feedback (Langley et al., 2009). A 6–8-week pilot phase is recommended to evaluate feasibility and effectiveness. Key outcome measures should include ASQ screening completion rates, identification of moderate- and high-risk patients, completion of Brief Suicide Safety Assessments (BSSA), and rates of behavioral health referrals and follow-through.

Audit-and-feedback strategies, including chart reviews, run charts, and performance dashboards, are essential for monitoring performance, improving adherence to screening protocols, and sustaining practice change over time (Ivers et al., 2012; Wellen et al., 2023). Additionally, ongoing staff education and interdisciplinary collaboration are necessary to maintain engagement and ensure long-term success (Molock et al., 2023; King et al., 2025).

While implementation will require local leadership, resource allocation, and system-level support, this toolkit provides a structured, evidence-informed foundation for advancing suicide

prevention efforts in rural and Tribal healthcare settings and is well-positioned for adaptation and broader dissemination in similar contexts.

Future Directions

For long-term sustainability, it is crucial to evaluate how well the toolkit integrates into routine care to understand the enduring effects of positive changes. Expanding the toolkit to additional rural and IHS Tribal healthcare settings will help assess its scalability and adaptability across diverse communities. Gathering feedback from patients and families is vital for developing more patient-centered care and improving follow-up after ED visits. With follow-up care being the biggest gap, it is important to closely monitor this metric, given the high turnover rate at an HIS, so that ongoing adaptations can be made. Using technology to support clinical workflows, such as embedding screening tools in EHR systems and sending follow-up prompts to the appropriate staff, can boost efficiency and enhance continuity of follow-up. Evidence indicates that aligning interventions with existing clinical infrastructure leads to more consistent implementation and better coordination among providers (The Joint Commission, 2022; Wellen et al., 2023). These strategies are especially important in rural areas, where system-level solutions are necessary to close persistent gaps in behavioral health services (Wellen et al., 2023). Lastly, ongoing collaboration with Tribal communities and local stakeholders is critical to ensure that our efforts respect cultural differences, are appropriate to the context, and remain sustainable over time (Molock et al., 2023).

Conclusion

Overall, the use of the AGREE II instrument to quantify stakeholder feedback of a suicide screening process and toolkit indicates a potential strategy beneficial to youth ages 8 to

17 who are seen in one rural IHS ED clinical setting. Implementing a mandatory nurse ASQ screening administration, secondary triage systems, and monitoring of behavioral health on-site use and community referrals can better support rural AI/AN youth in recognizing suicide risks early and delivering consistent care. Through a coordinated, interdisciplinary approach, the aim is lasting positive changes, including decreased suicide rates among AI youth.

CHAPTER FOUR

DOCTORAL REFLECTION

Advanced Nursing Essentials Reflection

The AACN Essentials (2021) offers a framework for competency-based nursing education and sets expectations for advanced nursing practice across ten core domains. These domains highlight essential competencies for professional nursing and equip nurses to tackle complex healthcare issues across diverse patient groups and healthcare settings.

Throughout the DNP program and while implementing the suicide risk screening toolkit in a rural Indian Health Service emergency department, I demonstrated and built upon several AACN Essentials competencies. This chapter explains how my doctoral coursework, clinical training, and leadership experiences contributed to the development of my advanced nursing skills. The key competency areas I focused on include Population Health (Domain 3), Quality and Safety (Domain 5), Interprofessional Partnerships (Domain 6), and Personal, Professional, and Leadership Development (Domain 10).

Domain 3: Population Health

Population health focuses on improving community well-being by addressing health disparities, social determinants of health, and systemic barriers. Advanced practice nurses play a vital role by integrating epidemiologic data, engaging with communities, and respecting cultural differences to help reduce health inequities among vulnerable groups (AACN, 2021). During my DNP studies, I demonstrated my skills in population health through designing and implementing

a suicide risk screening toolkit for youth aged 8–17 at a rural IHS emergency department. Youth suicide remains a serious public health concern in rural areas and among American Indian and Alaska Native populations, where challenges like geographic isolation, shortages of behavioral health professionals, and stigma around mental health can delay the identification and treatment of suicide risk.

In Chapter 2 of my project, I carried out a comprehensive review that gathered evidence indicating that universal suicide screening in emergency departments can greatly improve early detection of suicide risk and facilitate quick referrals to behavioral health services. This valuable information helped us develop a culturally sensitive screening toolkit, which includes the Ask Suicide-Screening Questions (ASQ) and structured secondary risk assessments. By focusing on early identification of suicide risk among youth in a high-risk population, this project addresses an important community health issue in the rural tribal healthcare setting.

In this project, I also had the opportunity to work closely with community partners, including tribal healthcare leaders, behavioral health specialists, public health nurses, and emergency department teams. Building these relationships allowed us to create a toolkit that thoughtfully considers clinical screening needs alongside the community and cultural aspects that are vital for preventing suicide among American Indian youth. This experience truly broadened my understanding of how advanced practice nurses can make a positive difference in population health. By applying evidence-based interventions, we can address upstream risk factors and improve access to mental health services in underserved communities, making a meaningful impact.

Domain 5: Quality and Safety

Quality and safety are essential components of advanced nursing practice, with a focus on creating and implementing systems that improve and make healthcare safer for everyone. The AACN Essentials emphasize the importance of nurses taking the lead in improving quality, carefully evaluating healthcare processes, and using evidence-based practices to keep patients safe (AACN, 2021).

The suicide risk screening toolkit project provided a valuable opportunity to highlight our expertise in quality and safety. By developing a well-structured intervention, we aimed to improve our ability to detect suicide risk in the emergency department. Before we created the toolkit, screening methods were inconsistent and largely based on providers' or nurses' suspicions or on patients' presenting complaints. Research shows that relying solely on clinical suspicion can often miss young people who are having suicidal thoughts. Our efforts are all about making a difference and ensuring better care for those in need.

During the project development, I examined current screening workflows, reviewed documentation methods, and talked with nursing staff about challenges they face when evaluating suicide risk. These insights uncovered system-level issues, including inconsistent use of screening tools, the absence of standardized secondary assessment procedures, and unclear referral processes for behavioral health follow-up by emergency department staff.

Building on insights from existing studies and the AGREE II framework, I developed a comprehensive toolkit to make suicide risk screening during triage more consistent and effective. This toolkit includes easy-to-follow screening algorithms, additional safety checks, clear referral

procedures, and helpful staff training resources, all designed to help healthcare professionals accurately identify and address suicide risk with confidence.

This process really helped me grow in applying quality improvement methods in real healthcare environments. I discovered how well-organized interventions can make a positive difference in clinical decisions and patient safety. It also highlighted the vital leadership role that advanced practice nurses play in efforts to improve healthcare quality.

Domain 6: Interprofessional Partnerships

Interprofessional collaboration plays a vital role in addressing complex healthcare challenges and improving patient outcomes. The AACN Essentials emphasize that nurses collaborate effectively with interdisciplinary teams to coordinate care, share knowledge, and overcome systemic barriers in healthcare (AACN, 2021).

During the development of the suicide risk screening toolkit, collaboration among healthcare professionals was essential to ensure the intervention was both feasible and sustainable. The project brought together a diverse team, including emergency department nurses, doctors, behavioral health providers, quality improvement specialists, and administrative leaders within the IHS healthcare system.

In addition to clinical stakeholders, feedback was collected from public health nursing teams and outpatient clinic staff who frequently work with youth and families in the community. These discussions provided valuable insights into gaps in behavioral health referral processes and highlighted challenges in ensuring continuity of care following emergency department visits.

As project leader, I engaged stakeholders to understand system barriers and develop solutions for suicide risk detection and referrals. This teamwork united diverse expertise, ensuring the toolkit was effective for the rural emergency department. The experience enhanced my skills in interdisciplinary communication, collaboration, and shared decision-making, crucial for advanced practice nurses in complex healthcare settings.

Domain 10: Personal, Professional, and Leadership Development

Domain 10 of the AACN Essentials highlights the importance of ongoing growth in leadership skills, the development of a strong professional identity, and reflective practice. It's inspiring to see how advanced practice nurses are encouraged to demonstrate accountability, resilience, and leadership as they address healthcare challenges and work towards improving patient outcomes (AACN, 2021).

Developing the suicide risk screening toolkit was a wonderful opportunity that really helped me grow as a leader during my DNP studies. As the project lead, I enjoyed engaging with stakeholders, reviewing the latest research, and transforming those insights into a useful tool for the emergency department. A major part of this journey was engaging frontline nursing staff in heartfelt discussions about their experiences caring for youth at risk of suicide. Many nurses kindly shared their worries that the current system sometimes lacks the tools or workflow support needed for effectively identifying suicide risks. By listening attentively and incorporating their valuable feedback into the toolkit's development, I aimed to foster a sense of shared ownership and boost staff involvement, making everyone feel more connected and empowered.

Additionally, this project strengthened my ability to navigate complex healthcare systems and to advocate for evidence-based improvements in patient care. Working in a rural tribal healthcare setting required me to pay close attention to cultural sensitivity, build strong community relationships, and overcome structural challenges to mental health services. This process really boosted my confidence in leadership and gave me meaningful experience directing healthcare improvement projects.

Conclusion

These experiences will continue shaping my journey as a dedicated psychiatric mental health nurse practitioner. I am passionate about improving health outcomes for underserved and rural communities. My focus will be on early detection and prevention of mental health crises through evidence-based screening, culturally sensitive care, and seamless care transitions across different systems. Collaboration across disciplines is at the heart of my approach, involving nursing staff, emergency department teams, behavioral health experts, school mental health programs, and community and Tribal health organizations to provide holistic, patient-centered care. I am deeply committed to ensuring that all care is safe, effective, and compassionate. To keep improving, I plan to use helpful tools like Plan-Do-Study-Act (PDSA) cycles and incorporate data monitoring methods such as audits and feedback. I also believe in creating sustainable workflows within clinical settings. By regularly reviewing our results, engaging everyone involved, and aligning our practices with the needs of organizations and communities, I aim to deliver mental health care that is not only safe and effective but also fair—especially for those who need it most.

References

- American Nurses Association. (2025). *Code of ethics for nurses*.
<https://codeofethics.ana.org/provisions>
- Brent, D. A., Horowitz, L. M., ... King, C. A. (2023). Prediction of suicide attempts and suicide-related events among adolescents seen in emergency departments. *JAMA Network Open*, 6(2).
- Brouwers, M. C., Kho, M. E., Browman, G. P., Burgers, J. S., Cluzeau, F., Feder, G., Fervers, B., Graham, I. D., Grimshaw, J., Hanna, S. E., Littlejohns, P., Makarski, J., & Zitzelsberger, L. (2010). AGREE II: Advancing guideline development, reporting, and evaluation in health care. *Canadian Medical Association Journal*, 182(18), E839–E842.
<https://doi.org/10.1503/cmaj.090449>
- Cafferty, R., Klott, A., ... O’Leary, S. T. (2025). A qualitative study exploring adolescent and caregiver perspectives of emergency department response after a positive suicide screen. *Annals of Emergency Medicine*.
- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4, 50.
- Ehlers, C. L., Gilder, D. A., ... Bernert, R. (2023). Comorbidity of anxiety/affective, conduct/antisocial, attention deficit, and alcohol use disorders with suicidal behaviors in an American Indian community sample of adults and adolescents. *Journal of Psychiatric Research*, 167, 63–70.
- Hackfeld, M. (2020). Implementation of a pediatric/adolescent suicide risk screening tool for patients presenting to the emergency department with nonbehavioral health complaints. *Journal of Child and Adolescent Psychiatric Nursing*, 33(3), 131–140.
- Haroz, E. E., Rebman, P., ... Adams, R. (2024). Performance of machine learning suicide risk models in an American Indian population. *JAMA Network Open*, 7(10).
- Heid, O., Khalid, M., ... Wekerle, C. (2022). Indigenous youth and resilience in Canada and the USA: A scoping review. *Adversity and Resilience Science*, 3(2), 113–147.
- Horowitz, L. M., Lowry, N. J., ... Bridge, J. A. (2025). Detecting suicide risk among pediatric patients: Screening, clinical pathways, and care. *Annual Review of Clinical Psychology*, 21, 305–325.
- Horowitz, L. M., Bridge, J. A., Teach, S. J., Ballard, E., Klima, J., Rosenstein, D. L., Wharff, E. A., Ginnis, K., Cannon, E., Joshi, P., & Pao, M. (2012). Ask Suicide-Screening Questions (ASQ): A brief instrument for the pediatric emergency department. *Archives of Pediatrics*

& *Adolescent Medicine*, 166(12), 1170–1176.
<https://doi.org/10.1001/archpediatrics.2012.1276>

Indian Health Service. (2023). *Suicide prevention and Zero Suicide initiative*.
<https://www.ihs.gov/suicideprevention/>

Ivers, N., Jamtvedt, G., Flottorp, S., Young, J. M., Odgaard-Jensen, J., French, S. D., & Oxman, A. D. (2012). Audit and feedback: Effects on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*, (6).

Kahn, G., Tumin, D., ... Buckman, C. (2022). Prior health care utilization among adolescents treated for a suicide attempt at a rural emergency department. *Journal of Rural Health*, 38(4), 748–753.

King, C. A., Harness, J., ... Czyz, E. (2025). Suicide prevention in youth. *Current Psychiatry Reports*, 27(9), 500–508.

Korczak, D. J., Finkelstein, Y., ... Szatmari, P. (2020). A suicide prevention strategy for youth presenting to the emergency department with suicide-related behaviour: Protocol for a randomized controlled trial. *BMC Psychiatry*, 20(1).

LeCloux, M. C., Aguinaldo, L. D., ... Horowitz, L. M. (2022). Provider opinions of the acceptability of Ask Suicide-Screening Questions (ASQ) tool and the ASQ Brief Suicide Safety Assessment for universal suicide risk screening in community healthcare. *Journal of Behavioral Health Services & Research*, 49(3), 346–363.

LeCloux, M., Aguinaldo, L. D., ... Horowitz, L. M. (2021). PCP opinions of universal suicide risk screening in rural primary care: Current challenges and strategies for successful implementation. *Journal of Rural Health*, 37(3), 554–564.

Manzo, K., Hobbs, G. R., ... Knox, S. S. (2020). Reservation-urban comparison of suicidal ideation/planning and attempts in American Indian youth. *Journal of School Health*, 90(6), 439–446.

McDougal, E., Sheikh, A., ... Thompson, A. (2025). Rural community-based interventions to improve the mental health and wellbeing of children and young people: A rapid scoping review. *Journal of Community Psychology*, 53(7), e70037.

Molock, S. D., Boyd, R. C., ... Miller, A. B. (2023). Culturally responsive assessment of suicidal thoughts and behaviors in youth of color. *American Psychologist*, 78(7), 842–855.

Mohatt, N. V., Kreisel, C. J., ... Beehler, S. J. (2021). A systematic review of factors impacting suicide risk among rural adults in the United States. *Journal of Rural Health*, 37(3), 565–575.

- Montana Department of Public Health and Human Services. (2022). *Montana suicide prevention strategic plan 2022–2025*. <https://dphhs.mt.gov/suicideprevention>
- Montana Department of Public Health and Human Services. (2024). *Suicide among children in Montana, 2013–2022: Ages 10–17 years* [Report]. https://dphhs.mt.gov/assets/publichealth/Epidemiology/VSU/Child_Suicide_2013_2022_final.pdf
- National Center for Health Statistics. (2023, June). *Suicide and homicide death rates among people aged 10–24: United States, 2001–2021* (NCHS Data Brief No. 471). U.S. Department of Health and Human Services.
- National Institute of Mental Health. (2023). *Ask Suicide-Screening Questions (ASQ) toolkit*. <https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit>
- National Institute of Mental Health. (2023, May 1). *Suicide prevention research: Opportunities and challenges*. <https://www.nimh.nih.gov/news/science-news/suicide-prevention-research>
- Ogrinc, G., et al. (2022). *Fundamentals of health care improvement: A guide to improving your patients' care* (4th ed.). Joint Commission Resources.
- Pennington, M. L., Ylitalo, K. R., ... Gulliver, S. B. (2023). Suicides among American Indian/Alaska Native firefighters: Data from the National Violent Death Reporting System, 2003–2017. *Psychiatry Research*, 330.
- Scudder, A., Rosin, R., ... Larkin, C. (2022). Suicide screening tools for pediatric emergency department patients: A systematic review. *Frontiers in Psychiatry*, 13.
- Scudder, A., Jay, S., ... Wilcox, H. C. (2021). Lowering the age limit in suicide risk screening: Clinical differences and screening form predictive ability. *Journal of the American Academy of Child & Adolescent Psychiatry*, 60(5), 537–540.
- Simon, G. E., Stewart, C. C., ... Hoopes, A. J. (2025). Accuracy of self-report questionnaires and records-based risk scores to identify adolescents' risk for self-harm. *Psychiatric Services*, 76(6), 554–562.
- Sullivant, S. A., Brookstein, D., ... Goggin, K. (2021). Implementing universal suicide risk screening in a pediatric hospital. *Joint Commission Journal on Quality and Patient Safety*, 47(8), 496–502.
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8(1), 45. <https://doi.org/10.1186/1471-2288-8-45>

- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., & Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467–473. <https://doi.org/10.7326/M18-0850>
- Vanwormer, J. J., Berg, R. L., ... Weichelt, B. P. (2024). Race, rurality, and suicidality in children and adolescents. *American Journal of Preventive Medicine*, 66(5), 883–887.

APPENDICES

APPENDIX A

ASQ TOOL KIT



Ask Suicide-Screening Questions

NIMH TOOLKIT

ASQ Toolkit Summary

The ASQ toolkit is organized by the medical setting in which it will be used: **emergency department, inpatient medical/surgical unit, and outpatient primary care and specialty clinics.**

While the toolkit materials are mostly the same for all ages, there are **Youth** and **Adult versions** of some of the tools: Brief Suicide Safety Assessments (Guides and Worksheets), Nursing Scripts, Suicide Risk Screening Clinical Pathways and Training Videos.

All toolkit materials are available on the NIMH website at www.nimh.nih.gov/asq. Questions about the materials or how to implement suicide risk screening can be directed to Lisa Horowitz, PhD, MPH at horowitzl@mail.nih.gov or Debbie Snyder, MSW at DeborahSnyder@mail.nih.gov.

ASQ Tools for all Ages and Medical Settings

- Information Sheet
- Screening Tool
- Screening Tool (foreign languages)
- Toolkit Summary
- Patient Resource List
- Training/Educational Videos

Tools Specific to Medical Settings:

Emergency Department, Inpatient/surgical, Outpatient/specialty clinics

Youth versions can be used for individuals ages 8 to 24 years, and Adult versions can be used for ages 18 years and older. There is overlap and that is left to the discretion of the clinician using the tools.

- Brief Suicide Safety Assessment Guide
- Brief Suicide Safety Assessment Worksheet
- Nursing Scripts
- Parent/Guardian Flyers
- Suicide Risk Screening Pathways (flow charts)
- Telehealth Suicide Risk Screening Pathways (flow charts)





NIMH TOOLKIT

Suicide Risk Screening Tool

Ask Suicide-Screening Questions

Ask the patient:

1. In the past few weeks, have you wished you were dead? ☐ Yes ☐ No
2. In the past few weeks, have you felt that you or your family would be better off if you were dead? ☐ Yes ☐ No
3. In the past week, have you been having thoughts about killing yourself? ☐ Yes ☐ No
4. Have you ever tried to kill yourself? ☐ Yes ☐ No

If yes, how? _____

When? _____

If the patient answers **Yes** to any of the above, ask the following acuity question:

5. Are you having thoughts of killing yourself right now? ☐ Yes ☐ No

If yes, please describe: _____

Next steps:

- If patient answers "No" to all questions 1 through 4, screening is complete (not necessary to ask question #5). No intervention is necessary (*Note: Clinical judgment can always override a negative screen).
- If patient answers "Yes" to any of questions 1 through 4, or refuses to answer, they are considered a **positive screen**. Ask question #5 to assess acuity:
 - ☐ **"Yes"** to question #5 = **acute positive screen** (imminent risk identified)
 - Patient requires a **STAT** safety/full mental health evaluation.
 - **Patient cannot leave until evaluated for safety.**
 - Keep patient in sight. Remove all dangerous objects from room. Alert physician or clinician responsible for patient's care.
 - ☐ **"No"** to question #5 = **non-acute positive screen** (potential risk identified)
 - Patient requires a **brief** suicide safety assessment to determine if a **full** mental health evaluation is needed. If a patient (or parent/guardian) refuses the brief assessment, this should be treated as an "against medical advice" (AMA) discharge.
 - Alert physician or clinician responsible for patient's care.

Provide resources to all patients

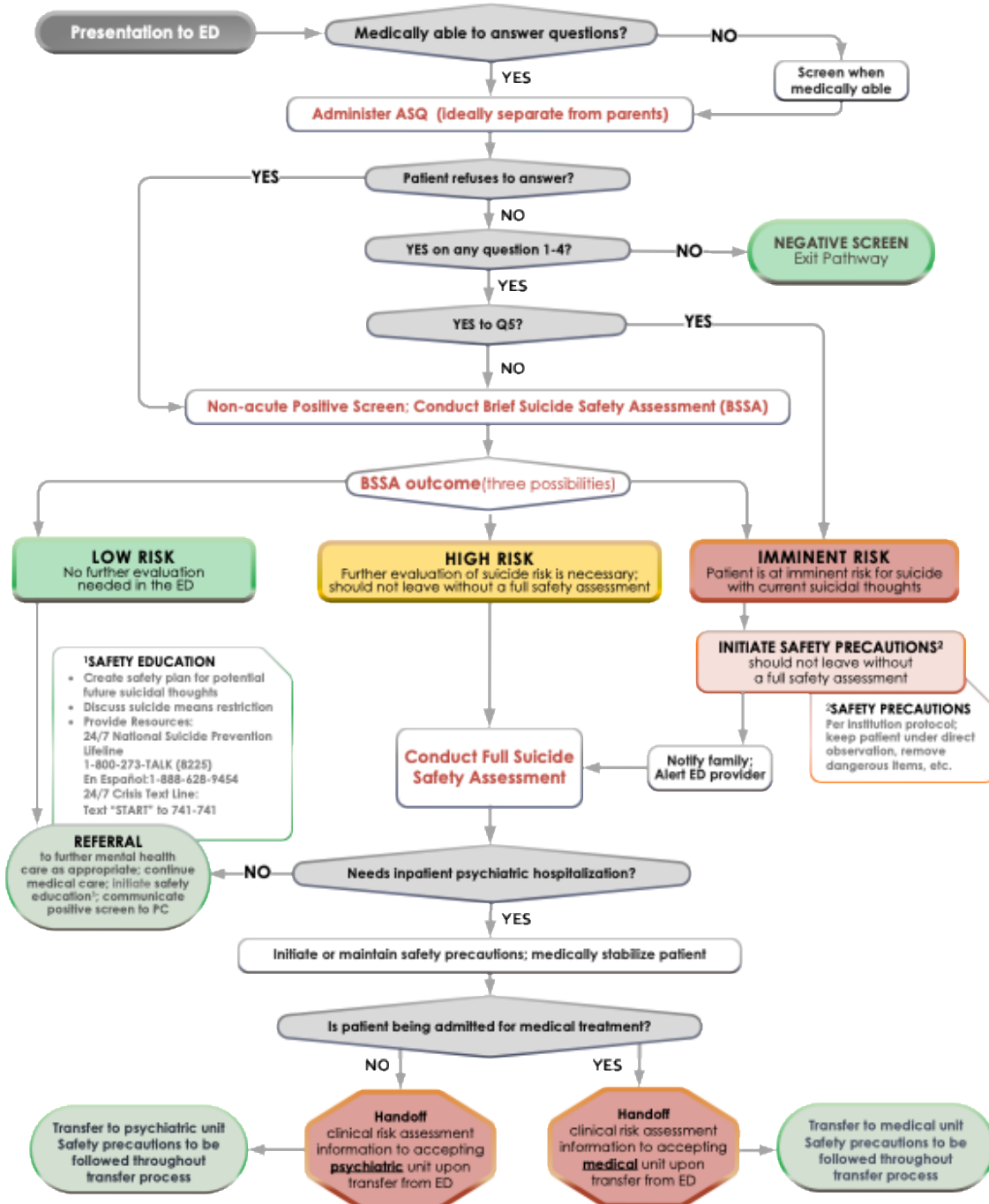
- 24/7 National Suicide Prevention Lifeline, 988
- 24/7 Crisis Text Line: Text "HOME" to 741741

SUICIDE RISK SCREENING PATHWAY

EMERGENCY DEPARTMENT

[See accompanying text document]

Sponsored by AACAP's Abramson Grant. Created by PaCC workgroup of Physically Ill Child Committee.



APPENDIX B

BRIEF SUICIDE SAFETY ASSESSMENT (BSSA)



NIMH TOOLKIT: ADULT EMERGENCY DEPARTMENT

Brief Suicide Safety Assessment

Ask Suicide-Screening Questions

What to do when an adult patient screens positive for suicide risk:

- Use after a patient (18+ years) screens positive for suicide risk on the asQ
- Assessment guide for mental health clinicians, MDs, NPs, or PAs
- Prompts help determine disposition

1 Praise patient *for discussing their thoughts*

"I'm here to follow up on your responses to the suicide risk screening questions. These can be hard things to talk about. Thank you for telling us. I need to ask you a few more questions."

2 Assess the patient *Review patient's responses from the asQ* *Interview the patient alone; ask any visitors to leave the room*

Frequency of suicidal thoughts

Determine if and how often the patient is having suicidal thoughts.

Ask the patient: "In the past few weeks, have you been thinking about killing yourself?" If yes, ask: "How often?" (once or twice a day, several times a day, a couple times a week, etc.) "When was the last time you had these thoughts?"

"Are you having thoughts of killing yourself right now?" (If "yes," patient requires an urgent/STAT mental health evaluation and cannot be left alone. A positive response indicates imminent risk.)

Suicide plan

Assess if the patient has a suicide plan, regardless of how they responded to any other questions (ask about method and access to means). **Ask the patient:** "Do you have a plan to kill yourself? Please describe." If no plan, ask: "If you were going to kill yourself, how would you do it?"

Note: If the patient has a very detailed plan, this is more concerning than if they haven't thought it through in great detail. If the plan is feasible (e.g., if they are planning to use pills and have access to pills), this is a reason for greater concern and removing or securing dangerous items (medications, guns, ropes, etc.).

Past behavior

(Strongest predictor of future attempts)

Evaluate past self-injury and history of suicide attempts (method, estimated date, intent). **Ask the patient:** "Have you ever tried to hurt yourself?" "Have you ever tried to kill yourself?" If yes, ask: "How? When? Why?" and assess intent: "Did you think [method] would kill you?" "Did you want to die?" **Ask:** "Did you receive medical/psychiatric treatment?"

Symptoms

Depression: "In the past few weeks, have you felt so sad or depressed that it makes it hard to do the things you would like to do?"

Anxiety: "In the past few weeks, have you felt so worried that it makes it hard to do the things you would like to do or that you feel constantly agitated/on-edge?"

Impulsivity/Recklessness: "Do you often act without thinking?"

Hopelessness: "In the past few weeks, have you felt hopeless, like things would never get better?"

Isolation: "Have you been keeping yourself more than usual?"

Irritability: "In the past few weeks, have you been feeling more irritable or grouchy than usual?"

Substance and alcohol use: "In the past few weeks, have you used drugs or alcohol?" If yes, ask: "What? How much?"

Other concerns: "Recently, have there been any concerning changes in how you are thinking or feeling?"

Support & Safety

Support network: "Is there a trusted person you can talk to? Who? Have you ever seen a therapist/counselor?" If yes, ask: "When and for what purpose?"

Safety question: "Do you think you need help to keep yourself safe?" (A "no" response does not indicate that the patient is safe, but a "yes" is a reason to act immediately to ensure safety.)

Reasons for living: "What are some of the reasons you would NOT kill yourself?"

3 Determine disposition *After completing the assessment, choose the appropriate disposition.*

☐ **Emergency psychiatric evaluation:** Patient is at imminent risk for suicide (current suicidal thoughts). Urgent/STAT page psychiatry; keep patient safe in ED

☐ **Further evaluation of risk is necessary:** Request full mental health/safety evaluation in the ED

☐ **No further evaluation in the ED:** Create safety plan for managing potential future suicidal thoughts and discuss securing or removing potentially dangerous items (medications, guns, ropes, etc.)

- ☐ Send home with mental health referrals, or
- ☐ No further intervention is necessary at this time

4 Provide resources to all patients

- 24/7 National Suicide Prevention Lifeline: 1-800-273-TALK (8255), En Español: 1-888-628-9454
- 24/7 Crisis Text Line: Text "HOME" to 741-741



NIMH TOOLKIT: ADULT EMERGENCY DEPARTMENT

Brief Suicide Safety Assessment

Ask Suicide-Screening Questions

- Use after a patient (18+ years) screens positive for suicide risk on the asQ
- Assessment guide for mental health clinicians, MDs, NPs, or PAs
- Prompts help determine disposition

What to do when an adult patient screens positive for suicide risk:

WORKSHEET

page 1 of 3

Patient name: _____ DOB: _____

Interviewer name: _____ Assessment date: _____

1 Praise patient *for discussing their thoughts*

"I'm here to follow up on your responses to the suicide risk screening questions. These can be hard things to talk about. Thank you for telling us. I need to ask you a few more questions."

2 Assess the patient *Review patient's responses from the asQ Interview the patient alone; ask any visitors to leave the room*

☐ Frequency of suicidal thoughts

Determine if and how often the patient is having suicidal thoughts.

Ask the patient: "In the past few weeks, have you been thinking about killing yourself?"

If yes, ask: "How often?" _____ (once or twice a day, several times a day, a couple times a week, etc.)

"When was the last time you had these thoughts?"

- ☐ "Are you having thoughts of killing yourself right now?" (If "yes," patient requires an urgent/STAT mental health evaluation and cannot be left alone. A positive response indicates imminent risk.)

☐ Suicide plan

Assess if the patient has a suicide plan, regardless of how they responded to any other questions (ask about method and access to means). **Ask the patient:** "Do you have a plan to kill yourself? Please describe." If no plan, ask: "If you were going to kill yourself, how would you do it?"

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NIH

 National Institute
of Mental Health

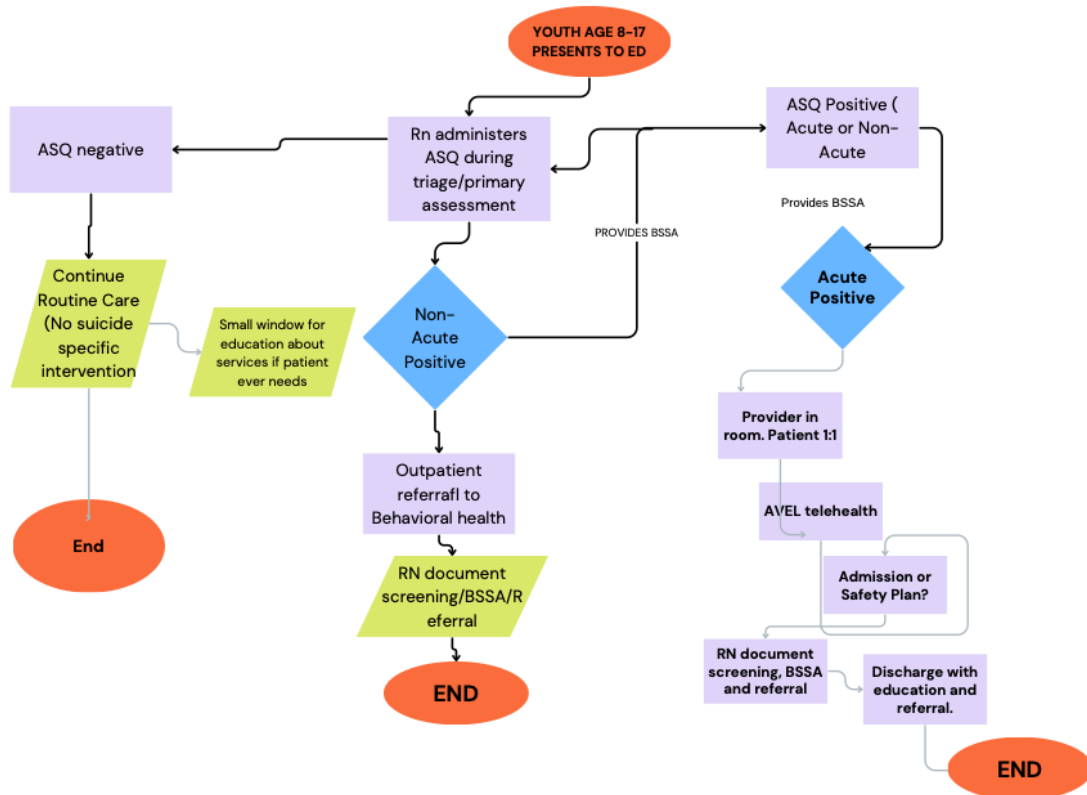
asQ Suicide Risk Screening Toolkit

7/1/2020

APPENDIX C

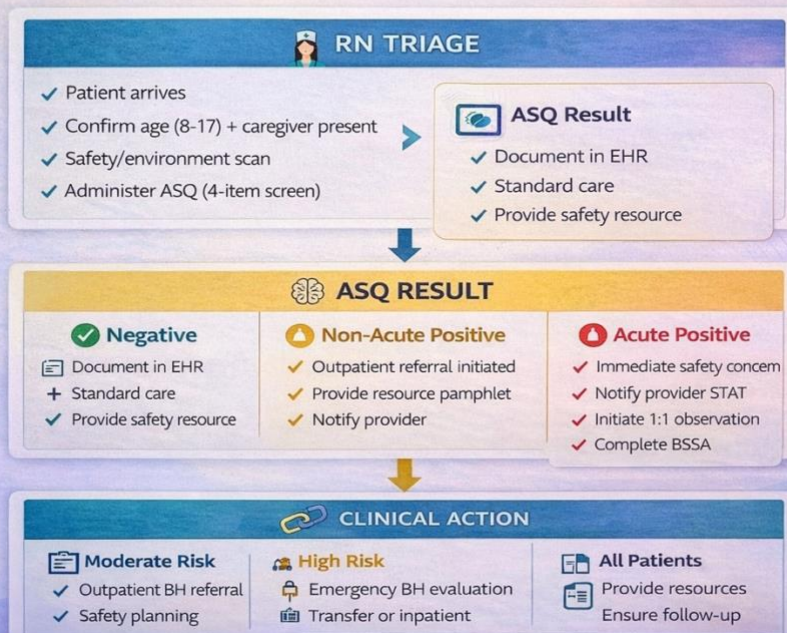
NURSE EDUCATION: ASQ FLOW SHEET

Process Flow Sheet



RN Suicide Risk Screening Workflow (Ages 8-17)

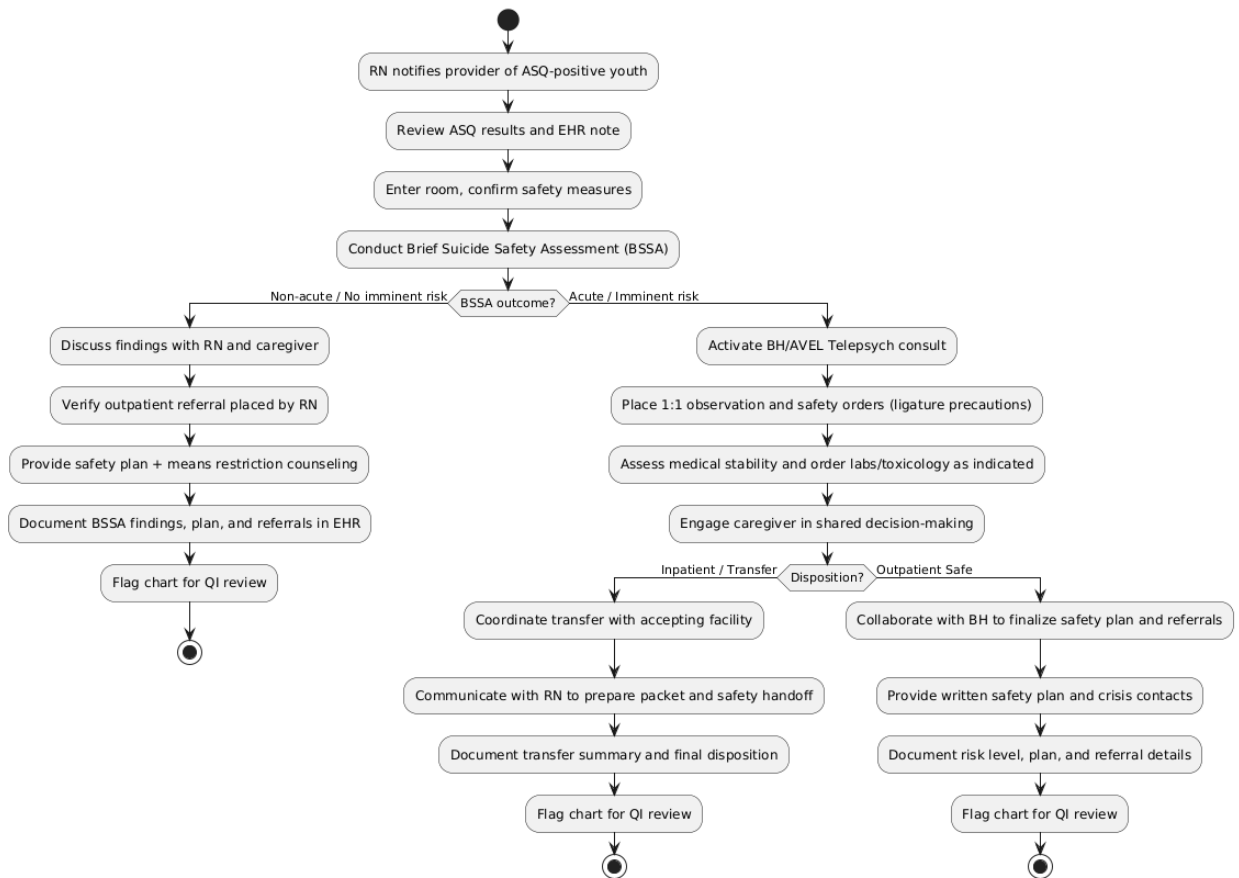
Standardized RN-led screening ensures consistent identification, risk stratification, and care continuity.



APPENDIX D

PROVIDER EDUCATION: ASQ/BSSA FLOW SHEET

ER Provider Flow for Youth Suicide-Risk Screening and Referral (Ages 8-17)



ER Suicide Risk Response Workflow (Ages 8–17)

Standardized provider response ensures accurate risk stratification, safety intervention, and care continuity.



ER ASSESSMENT



IMMEDIATE ACTION

- ✓ AI notifies provider of positive youth
- ✓ Review ASQ & BSSA results
- ✓ Enter safety measures in EHR
- ✓ Conduct Brief Suicide Safety Assessment (BSSA)



Non-Acute (Moderate Risk)

- ✓ Discuss findings with RN and caregiver
- ✓ Verify outpatient referral placed by RN



Acute (High Risk)

- ✓ Activate BHA/ME Telepsych consult
- ✓ Place 1:1 observation and safety orders (ligature precautions)



IMMEDIATE ACTION

- ✓ **Non-Acute**
(Moderate Risk)
- ✓ Discuss findings with RN and caregiver
- ✓ Verify outpatient referral placed by RN



STABILIZATION

- ✓ **Acute**
(High Risk)
- ✓ Activate BHA/ME Telepsych consult
- ✓ Place 1:1 observation and safety orders (ligature precautions)



TRANSITION & DISPOSITION

- ✓ **Coordinate** transfer with accepting facility / Inpatient BH placement
- ✓ Communicate with RN to prepare ad safety handoff
- ✓ Document encounter summary and final disposition



All Patients

- Provide written safety plan and referrals
- ✓ Document discharge plan and outcomes

APPENDIX E

RN EDUCATION

5-Minute Staff Education Script

Opening

“Hey guys, this will be quick. I just want to introduce the ASQ suicide screening tool we’re rolling out in triage. This is something simple, fast, and honestly one of the most impactful things we can do for our kids coming through the ER.”

Why It Matters

“In our rural setting, limited access, and a lot of psychosocial stress, many kids don’t come in saying they’re suicidal. They come in for stomach aches, injuries, or random complaints.

But here’s the reality:

☞ Many youth who die by suicide were seen in healthcare within the last month.
So if we don’t ask—we miss it.”

What the ASQ Is

“The ASQ is:

4 yes/no questions

Takes less than 20 seconds

Done at triage for ages 8–17

That’s it. No long assessment. No extra chart digging.”

How It Fits Into Your Workflow

“You’re already doing triage.

Now it’s just:

Ask the 4 ASQ questions

Chart it

If it’s positive → notify provider

That’s where your main role ends. You are identifying risk—not managing it.”

Address the Real Concerns

“I know what you’re thinking:

☞ *‘I don’t have time’*

It’s literally under 20 seconds.

☞ *‘It’s awkward’*

Totally fair, but it gets easier fast. It’s scripted. If you’re still uncomfortable, let’s talk about it and get some additional resources to get you comfortable

☞ *‘What if they say yes?’*

That’s the point. We want to catch it. You’re not alone—there’s a next step.

☞ *‘Am I putting the idea in their head?’*

No. Research shows asking actually reduces risk—and kids often feel relieved.”

Close

“In this community, you might be the only person who asks that question.

That one moment could change everything for that kid.

So really the takeaway is:

👉 Every patient. Every time. It's quick, but it matters."

■ ASQ: Quick, Powerful, Life-Saving Screening

A Nurse-Led Approach to Protecting Our Youth

■ Why This Matters

- Suicide is a leading cause of death in youth
- Many at-risk patients present for non-mental health concerns
- You may be the only chance to catch it

■ What is ASQ?

- 4 yes/no questions
- Takes < 20 seconds
- Used for all patients ages 8–17
- Done at triage

■ Workflow

1. Triage as usual
 2. Ask ASQ questions
 3. Document result
- Positive: notify provider

■ Asking does NOT put the idea in their head. Most kids feel relieved someone asked.

Concern	Reality
No time	< 20 seconds
Awkward	Gets easier quickly
Not my role	Nurses are frontline prevention

■ You Are the Difference

Every patient. Every time. One question could change everything.

APPENDIX F

PATIENT EDUCATION PAMPHLET



WILL THIS GO ON MY RECORD?

Yes, it will be documented like any other health screen



It does not affect school, insurance, or legal records



Information is confidential. unless safety requires parental/guardian notification

MT annotated code age of consent for mental health services is 12 years old



WHAT TO DO IF YOUR FEELINGS CHANGE

- Talk to a trusted adult
- Tell a nurse, doctor, school counselor, or family member
- It's always okay to ask for help
- You deserve safety and support

YOU ARE NOT ALONE

Asking for help shows strength

National suicide prevention: 1-800-SUICIDE (784-2433)



YOUTH SUICIDE-RISK SCREENING IN THE ER

Quick, Safe, and Supportive



WHY AM I BEING SCREENED?



*Keeping our youth safe
is our highest priority*



*Suicide is preventable- and
early identification saves lives*



*Screening is recommended for
all youth (just like checking
blood pressure or pain)*



WHAT IS THE ASQ?

*The Ask Suicide- Screening
Questions (ASQ) is a short,
evidence-based tool*

*Designed specifically for ages 8-
24*

*4 Yes/No questions that take
less than 2 minutes*

**Help us understand if a
young person may be having
thoughts of suicide**



WHAT HAPPENS AFTER SCREENING?

*Screening Results range from negative,
Positive (non-acute), and Positive (acute).
All three provide us different routes of
care*

SCREENING RESULTS

- 1** **NEGATIVE:** No safety concerns identified. You can continue usual care. Please tell us anytime if feelings change.
- 2** **POSITIVE (non-acute):** You're NOT in trouble. We will connect you with resources, support, and outpatient therapy. You will receive a list of services and a safety handout.
- 3** **POSITIVE (acute):** A trained provider will complete a Brief Suicide Safety Assessment. Safety planning and support will begin right away. We'll make sure you are not alone and are safe.

APPENDIX G

PATIENT RESOURCES HANDOUT



For Friends

Don't keep it a secret — tell a trusted adult immediately.

What if someone tells me they are struggling?

- 1 "Thanks for telling me. I'm here."
- 2 "Let's get help together."
- 3 "You don't have to deal with this alone."



National 24/7 Resources

Call or Text 988 (Suicide & Crisis Lifeline)

Chat 988lifeline.org

Text HOME to 741741- Crisis Text Line

Trevor Project (LGBTQIA+ youth) 1-866-488-7386 or text START to 678678

Veterans Crisis Line (if caregiver or parent is military): Dial 988, then press 1

**You are important.
Your life matters**



Patient Information + Resources

You Matter. You Belong. You Are Needed.

Suicide Safety & Support Resources for Youth



When to get help

You deserve support if you ever feel:

- *Hopeless, sad, or overwhelmed*
- *Like you want to disappear or give up.*
- *Like you're a burden or don't matter*
- *Unsafe with your own thoughts or actions*

It's not attention-seeking- it's reaching out.

**There is always hope-and
there is always help.**



What you can do

Tell someone you trust: parent, teacher, coach, counselor, nurse, friend

Ask directly for help: "I'm not okay. Can you stay with me?"

It's okay to cry, feel scared, or not know what to say.

You don't need to have the answers- you just need support



Stay near people you trust

Avoid being alone when you feel unsafe



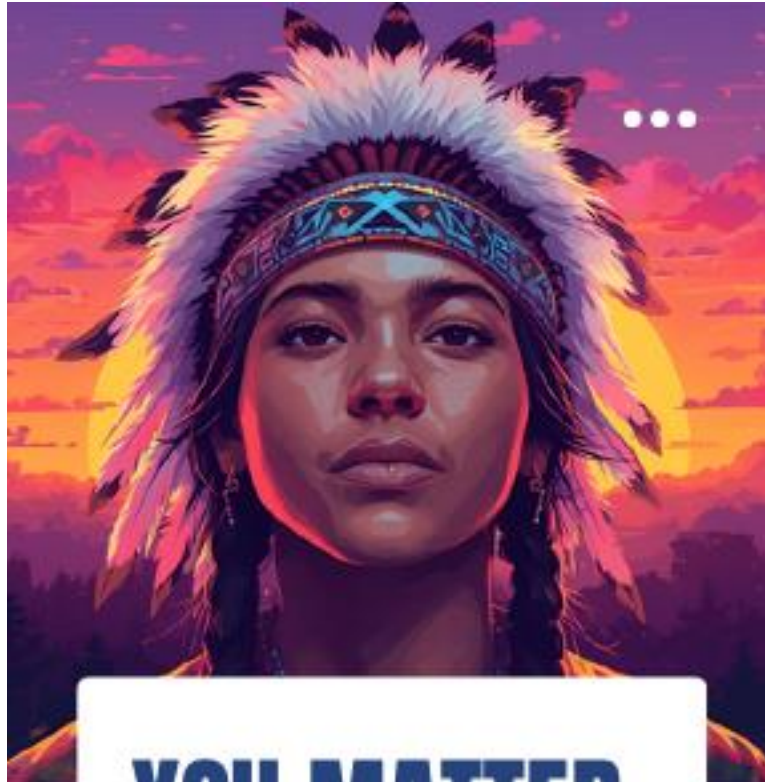
Remove or avoid things that could be used for self-harm

Make a list of people who make you feel safe and keep it with you



If you feel unsafe: call, text, or tell someone immediately.

Rooted in a holistic well-being, connection to tradition, connection to land and nature and wisdom of Elders.



**YOU MATTER.
YOU'RE NOT
ALONE**

Support for Youth Mental Health
& Well-Being

[Redacted] & Surrounding
Communities

Emergency Numbers

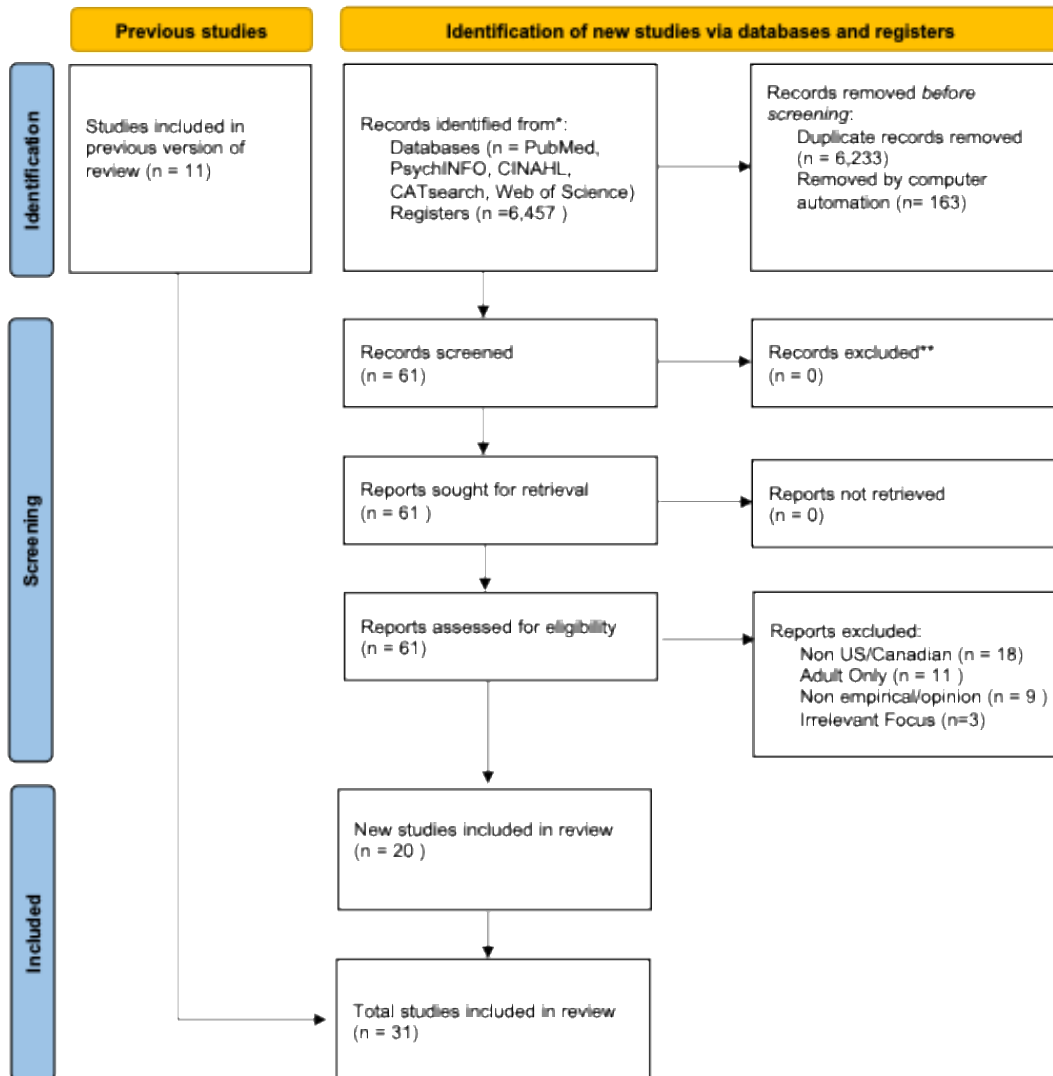
 **[Redacted]** 2 Emergency Room

 **[Redacted]** 3 Police Department

APPENDIX H

PRISMA-SCR

PRISMA 2020 flow diagram for updated systematic reviews which included searches of databases and registers only



Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71.

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