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# Investigating the Impact of Outpatient Mental Health Follow-up Care on Continued Adolescent

## Suicidality: An Evidence-Based Change Project Proposal

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The University of Texas at Tyler, School of Nursing

For NURS 5382: Capstone

Dr. Nelson, PhD, RN, CNE

April 19, 2024

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#### **Executive Summary**

The escalating rates of adolescent suicide globally, coupled with the surge in pediatric hospitalization rates, underscore the urgent need for effective intervention strategies. Despite hospitalization, many patients persist in experiencing suicidal ideation and behaviors, often leading to readmissions. A significant portion of these individuals do not receive adequate outpatient mental health follow-up care post-discharge. As a leading pediatric healthcare institution committed to delivering exemplary care, particularly to those struggling with mental health challenges, the organization's commitment demands proactive measures.

#### **Objectives and Implementation Plan**

The attached proposal aims to establish an organizational policy to reduce 30-day readmission rates among adolescents with persistent suicidal thoughts and behaviors. Key strategies involve enhancing patient and caregiver education, promoting adherence to post-discharge care plans, and fostering compliance with outpatient mental health follow-up recommendations. Following the Knowledge-to-Action (K2A) model, the project spans four phases over 18 months, with phase one focusing on policy development, stakeholder engagement, and educational material creation. Pilot testing and data analysis occur during phase two, followed by policy revisions during phase three. Phases two and three are iterative, allowing for repeated cycles of implementation and refinement. The final phase includes a sustained implementation period and a comprehensive feasibility and sustainability assessment for future policy roll-out across Katy, Woodlands, and Austin community campuses.

#### **Evaluation and Continuous Improvement**

Regular assessment and feedback mechanisms will monitor policy effectiveness. Data collection and analysis will track 30-day readmission rates and employee protocol adherence. Internal stakeholder feedback will be solicited via electronic surveys to assess the policy's impact on workflow and perceived

patient benefits. Continuous quality improvement initiatives will ensure ongoing enhancement of care delivery.

#### **Outcomes and Financial Impact**

The proposed policy aims to improve patient outcomes by reducing readmission rates, enhancing patient and caregiver engagement, and promoting seamless continuity of care. The proposed project also offers a compelling cost-benefit proposition, balancing short-term investments with long-term patient outcomes and healthcare efficiency gains. While initial costs will include salary expenses related to policy development, staff training, and material creation, the anticipated reduction in readmission rates and crisis interventions will yield substantial savings over time. Additionally, the intangible benefits, such as improved quality of life for patients and families and the societal impact of preventing adolescent suicides, underscore the value of this initiative.

#### Conclusion

Establishing an organizational policy to reduce readmission rates for adolescents struggling with suicidal thoughts and behaviors represents a critical step in fulfilling our commitment to excellence in pediatric mental healthcare. Through a strategic focus on education and follow-up care, we aim to empower patients and caregivers, thus diminishing the risk of recurring crises and nurturing a resilient and well-supported community. By uniting in this effort, we can enact meaningful change and serve as a beacon of hope for those navigating mental health challenges. With a steadfast dedication to proactive mental health interventions and the cultivation of a prevention-focused culture, the organization can lead the way in addressing the global crisis of adolescent suicide and setting a gold standard for excellence in pediatric mental healthcare.

# Investigating the Impact of Outpatient Mental Health Follow-up Care on Continued Adolescent Suicidality: An Evidence-Based Change Project

Adolescent suicide has emerged as a pressing global crisis, prompting the American Academy of Pediatrics (2021) to declare a national emergency in children's mental health. Within the demographic of children and young adults aged 10-24, suicide now stands as the second leading cause of death, surpassing the toll of any singular medical condition (Asarnow, 2023; CDC, 2023). Notably, post-discharge suicide rates have witnessed an alarming 35% increase, with more than 50% of suicides occurring within seven days of discharge and 25% transpiring before the individual's first follow-up appointment (Bojanić et al., 2020; Vale, 2023).

This paper presents an evidence-based quality improvement project proposal to bridge gaps in patient and caregiver (PAC) knowledge, comprehension, and adherence to obtaining outpatient mental health follow-up care (OMHFC) post-discharge. The overarching goal is to mitigate 30-day readmission rates for continued suicidal thoughts and behaviors (STB) and enhance long-term patient outcomes. Employing a systematic approach, this paper comprehensively investigates critical aspects of improving adolescent mental health outcomes. This proposal encompasses a rationale for the project, a literature synthesis, a brief discussion of key project stakeholders, a detailed implementation plan and timetable, meticulous data collection methods, rigorous evaluation criteria, a comprehensive cost-benefit analysis, and a thorough discussion of anticipated results and suggested recommendations.

#### **Rationale for the Project**

The prevalence of mental health issues among adolescents aged 10-19 is striking, affecting one in seven individuals (CDC, 2022). The COVID-19 pandemic has worsened this issue, evidenced by a reported 37% decline in mental health among high school students (WHO, 2021). In the United States, pediatric admission rates for mental health issues have risen by over 50% in the past 15 years, with more than three million patients presenting with severe suicidal ideation during this period (Chen et al.,

2020; NAMI, 2022; Radhakrishnan et al., 2022). Gordon (2022) highlights a concerning 61% surge in psychiatric hospitalization rates for children under 19 years old from 2016 to 2021.

Despite the increased rates of emergency center (EC) visits and psychiatric hospitalizations, post-discharge OMHFC utilization has only experienced a marginal 5% increase, indicating unanticipated barriers to accessing OMHFC services (Gordon, 2022). Many patients face readmission due to persistent STB, with a significant portion failing to secure OMHFC after discharge—a critical factor in improving patient outcomes and ensuring sustained success. This concerning trend underscores the urgent need for comprehensive attention and interventions to address escalating mental health challenges among adolescents. It serves as the inspiration for the following research question: Among adolescents experiencing STB, how does the timely receipt of OMHFC compare to the absence of follow-up care after EC visits or psychiatric hospitalization influence readmission rates and persistent STB, including suicide attempts (SA), suicidal ideation (SI), and self-harming (SH) behavior, within a 30-day timeframe?

Healthcare institutions shoulder a significant responsibility to mitigate adolescent suicide deaths, and frontline healthcare providers occupy a pivotal role in effecting meaningful changes across the healthcare continuum. Through early risk identification and intervention, provision of education and resources, and consistent post-discharge follow-up contact, providers can profoundly impact the accessibility of mental health and suicide prevention services. This proactive approach seeks to enhance adherence to treatment plans, ultimately leading to better patient outcomes, decreased likelihood of readmissions, and mitigation of ongoing STB following discharge.

The organization is committed to enhancing patient outcomes and preventing adolescent suicide. However, the organization currently lacks a policy that outlines the requirements for educating PACs on mental health and suicide prevention, as well as assisting in connecting patients with community resources. While case managers currently conduct post-discharge follow-up calls, the existing policy only mandates contacting patients identified by the electronic medical records (EMR)

system as medium or high-risk for readmission. However, this risk calculation relies solely on data documented within the last 24 hours and excludes crucial psychosocial and suicide-related data, thereby leading to the oversight of critical cases. Furthermore, the current CM call template fails to adequately address suicide prevention and interventions, focusing predominantly on medical concerns and omitting patients discharged or transferred from the EC.

#### **Literature Synthesis**

The University of Texas at Tyler online library was used to find relevant literature, and databases searched include CINAHL, PubMed, PsycINFO, and Psychology and Behavioral Sciences Collection.

Google Scholar was used to locate open-access articles. The search was limited to scholarly articles using the combination of keywords and phrases: suicide risk, SA or SI or SH, after hospitalization or discharge, outpatient mental health or follow-up care, community-based or school-based and mental health programs, reducing suicide after hospitalization, and mental health or psychiatric and follow-up care.

The initial search produced a total of approximately 4,720 articles. Next, a revised search was done to include "and adolescent or child or teen," results were filtered to include only peer-reviewed articles published between 2019 and 2023, full-text articles published in English, and qualitative, quantitative, mixed-methods, systematic reviews, and meta-analysis studies. Titles and abstracts of the resulting 138 studies were reviewed to ensure studies were directly linked to OMHFC and its relation to the risk of suicide and ongoing STB among adolescents after hospitalization. Twenty-two articles were initially selected for closer examination using this methodology, and nine articles were removed as they did not pertain directly to the research question. Thirteen articles met the criteria for inclusion and are contained within this paper's literature review.

The heightened vulnerability to suicide post-psychiatric hospitalization underscores the critical role of timely OMHFC in decreasing adolescent suicide rates and the persistence of STB after discharge. Diverse OMHFC settings, such as community-based suicide prevention programs like the Wesley Life

Force (WLF) network and school-based suicide prevention programs, offer interventions encompassing crisis intervention, educational initiatives, risk identification, psychological care, routine psychiatric care, and supportive therapy (Briggs et al., 2019; Morgan et al., 2022; Walsh et al., 2022). Implementation of the WLF network has demonstrated a noteworthy 17% reduction in suicide rates. In comparison, school-based suicide prevention programs have proven effective in decreasing SA and SI by up to 34% and 15%, respectively (Morgan et al., 2022; Walsh et al., 2022).

In the initial 30 days post-discharge, suicide rates surge to levels 100 times higher than the general population, emphasizing the imperative for prompt OMHFC to mitigate suicide and STB risks (Fontanella et al., 2020; Rengasamy & Sparks, 2019). Acknowledging this urgency, The Centers for Medicare & Medicaid Services and the National Committee on Quality Assurance advocate for OMHFC within 30 days post-discharge, with global evidence favoring a narrower window of seven days (Fontanella et al., 2020; Bojanić et al., 2020). Adolescents receiving follow-up care within this timeframe exhibit a 56% reduction in suicide risk, contrasting starkly with the 3.1% suicide rate among those lacking such care (Bojanić et al., 2020; Fontanella et al., 2020). Furthermore, timely OMHFC within seven days correlates with a 40% decline in depressive symptoms and heightened adherence to subsequent OMHFC appointments over six months (Bear et al., 2020; Doupnik et al., 2020; Hoffman et al., 2023). Despite these compelling findings, only half of discharged patients receive OMHFC within the recommended timeframe, resulting in low continuity of care, increased risk of readmission, and elevated suicide risk (Choi et al., 2020; Fontanella et al., 2022; Hoffman et al., 2023).

The recurrence of continued STB leading to patient readmission, coupled with the heightened susceptibility to suicide prior to attending scheduled follow-up appointments, highlights the necessity to identify individuals at elevated suicide risk and employ interventions pre-discharge (Choi et al., 2020; Fontanella et al., 2022). Conducting post-discharge patient follow-ups within a critical window of 72 hours post-hospitalization and engaging in OMHFC within seven days of discharge emerges as pivotal

components in substantially augmenting patient outcomes (Bojanić et al., 2020; Choi et al., 2020; Doupnik et al., 2021; Fontanella et al., 2020). This multifaceted approach is emphasized by its demonstrable effect in mitigating the risk of suicide, fostering elevated confidence in safety planning, enhancing adherence to scheduled OMHFC appointments, and accomplishing a discernible reduction in the rates of re-hospitalization, particularly in cases characterized by persistent STB (Choi et al., 2020; Doupnik et al., 2021; Hoffman et al., 2023; Rengasamy & Sparks, 2019).

Individuals receiving OMHFC within the initial 30 days post-discharge exhibit a noteworthy 26% readmission reduction within the subsequent five days, emphasizing the potential to mitigate adverse outcomes associated with mental health readmissions through the use of timely OMHFC and patient contact post-discharge (Bear et al., 2020; Briggs et al., 2019; Choi et al., 2020; Hoffman et al., 2023). Research demonstrates that patients who receive a sequential series of follow-up telephone calls extending over 90 days, initiated promptly post-discharge, manifest an 11% greater reduction in persistent STB than those who receive a singular call and patients who actively participate in a regimen of high continuity of care after discharge manifest a diminished risk of readmission within the span of one year, in stark contrast to their counterparts who experience low and moderate continuity of care (Choi et al., 2020; Rengasamy & Sparks; 2019). Simultaneously, this 90-day approach generates a notable 22% enhancement in safety planning confidence and proficiency levels, alongside a notable 7% increase in the utilization of OMHFC services after discharge (Gryglewicz et al., 2024; Rengasamy & Sparks, 2019).

However, it is imperative to note that extended and sustained patient contact, while yielding commendable outcomes, is not indispensably requisite for achieving measurable results - even a brief interaction with mental health professionals post-discharge can yield noteworthy benefits. One succinct encounter can facilitate heightened patient engagement, perpetuate discussions about mental health, and aid individuals in the delicate transition from inpatient to outpatient mental health settings

(Doupnik et al., 2020; Watling et al., 2022). A singular post-discharge call, characterized by effective structuring, patient-centeredness, and participatory elements, yields substantive advantages (Doupnik et al., 2020; Rengasamy & Sparks, 2019). Notably, a single post-discharge telephone call can precipitate a nearly 25% increase in compliance with OMHFC, a reduction surpassing 60% in depressive symptoms, and a substantial decrease of up to 84% in the risk of readmission, exceeding the outcomes observed among those devoid of any post-discharge follow-up (Choi et al., 2020; Doupnik et al., 2020; Gryglewicz et al., 2023; Watling et al., 2022). These results underscore the profound impact of targeted and well-conceived post-discharge interventions in mitigating adverse mental health trajectories and promoting a more robust continuum of care.

#### **Project Stakeholders**

An integrative and interdisciplinary collaborative strategy is imperative to foster transparent communication and ensure the inclusion of diverse perspectives, thereby cultivating a more comprehensive policy and enhancing staff adherence. This transformative endeavor influences a broad spectrum of stakeholders, encompassing frontline healthcare providers such as social workers (SWs), care managers (CMs), registered nurses (RNs), and medical providers (MDs). Additionally, pivotal contributors to the project's development and execution comprise the Information Technology (IT) and Quality Improvement (QI) departments, the Risk and Compliance Department, and departmental and executive leadership.

The initiative has garnered widespread support, notably from the Vice President of Nursing, who serves as the project's gatekeeper and sponsor. Furthermore, influential project champions among RNs and MDs with robust connections to the behavioral health population will further bolster the project's momentum. Beyond the healthcare professionals directly involved, other stakeholders impacted by this initiative encompass PACs, insurance companies, and the overarching organizational structure.

Navigating the delicate balance between adolescents' desire for medical autonomy and corresponding parental rights poses inherent challenges for clinicians. This complexity is further pronounced when addressing issues related to suicidality among adolescents, as they may exhibit reluctance to seek assistance and resist psychiatric interventions despite a caregiver's inclination towards treatment. Recognizing the significance of incorporating adolescent patient preferences and values into the decision-making and care plan formation process is paramount. This becomes particularly crucial in ensuring sustained adherence to OMHFC following discharge. Adopting a multidisciplinary approach to OMHFC planning emerges as a pivotal strategy, engaging diverse healthcare providers, including MDs, SWs, and CMs. Furthermore, active involvement of both PACs in the planning process is advocated, as this collaborative approach has demonstrated enhanced patient outcomes.

#### **Implementation Plan**

The project team will work collaboratively with MDs, SWs, CMs, RNs, the IT and QI departments, the RCD, and departmental and executive leadership to develop and implement a comprehensive policy mandating frontline providers, including SWs, RNs, and MDs, educate PACs on obtaining OMHFC within seven days of discharge. Furthermore, it will require frontline providers to identify and address barriers hindering timely OMHFC access and assist caregivers with referrals before discharge. Additionally, CMs will be required to conduct post-discharge follow-up calls within 72 hours to assess for ongoing STB, medication compliance, and safety plan effectiveness and provide further assistance in connecting with OMHFC providers or resources, if required.

The proposed QI project will be executed in four phases; designed to align with the Knowledge to Action (K2A) framework, the project's framework integrates knowledge with a repeatable and adaptable action cycle to ensure effective adaptation of knowledge and interventions based on barriers identified, outcomes achieved, and feedback received during project evaluation (Corey & Roussel, 2023;

Ham-Boyloyi, 2022). Phase one initiates the project with policy creation, employee education, and stakeholder engagement. This precedes a succinct pilot implementation trial in phase two, concluding with a comprehensive review of data and feedback. Phase three entails policy revision and employee education, and phases two and three may be revisited to apply revised policies for further evaluation and modification until a final policy is developed. Phase four marks the implementation of the finalized policy over an extended six-month period, during which monthly data analysis will be conducted. The feasibility and sustainability of the project will be assessed after the sixth month, with potential consideration for roll-out at community campuses in Katy, the Woodlands, and Austin.

#### **Implementation Timeline**

The participant cohort for this project initiative will encompass individuals aged six to nineteen who present in acute crisis with STB at the organization's 960-bed acute pediatric hospital in the Houston Medical Center. This targeted demographic enables a focused examination of acute crisis scenarios and provides a nuanced understanding of this critical age group's unique challenges and considerations. The project's execution will unfold through a meticulously structured framework comprising four distinct phases (see Appendix B for the project flowchart).

#### Phase One: Policy Creation, Education, and Stakeholder Engagement

Due to its complexity, six months is allotted for the initial phase of this project. Preliminary policy creation, revision, and approval will take three to four months, adhering to the procedural nuances of the organization's policy framework. The policy creation process will involve the collaborative efforts of the project team, complimented by the expertise of SWs, CMs, RNs, MDs, and department leaders, with final approval from executive leadership and the RCD. Drawing upon empirical foundations presented by Bojanić et al. (2020), Fontanella et al. (2020), and Rengasamy and Sparks (2019), the policy will articulate explicit requirements that frontline providers educate PACs on the importance of OMHFC and provide PACs with resources and OMHFC referrals before discharge.

Additionally, the policy will require CMs to complete post-discharge follow-up telephone calls with PACs within 72 hours of discharge. Subsequently, the project team will collaborate with CMs, SW, and educators over the next two months to design and create electronic training modules, printable resources, PAC education materials, and a CM post-discharge call template. Once complete, the IT department will seamlessly integrate these materials into the organization's training platform and the EMR system, and educators and departmental leadership will strategically assign training modules to pertinent staff.

Stakeholder engagement, a critical aspect of phase one, is predicted to be an ongoing process under the oversight of departmental leadership and educators. Internal and external stakeholders will be systematically notified and educated about the upcoming policy alteration. A feedback loop will be established to solicit insights, and potential barriers to implementation will be diligently identified via employee surveys. In tandem with CMs, organizational executives will orchestrate outreach activities directed at external stakeholders. This proactive engagement will acquaint external entities with the impending policy shift, illuminate the significance of OMHFC, and solicit collaborative support in facilitating timely OMHFC for discharged patients. This multifaceted approach ensures a comprehensive and academically grounded foundation for the subsequent phases of the project.

#### Phase Two: Pilot Testing, Data Collection, and Stakeholder Feedback

Moving into phase two, a two-month pilot testing of the policy is slated for the EC and inpatient units. Frontline providers will record interventions in the EMR system, ensuring meticulous documentation of the implemented measures. Concurrently, the QI department will gather EMR data weekly, while departmental leadership and educators will obtain employee feedback during the final week of phase two. At the conclusion of this pilot testing phase, the QI department and the project team will collaboratively analyze the collected data, culminating in the creation of a comprehensive report, which will be presented for executive leadership review during phase three. This review process

is designed to critically evaluate outcomes to determine if policy adjustments are necessary based on the efficacy and viability of the implemented policy. The academic rigor of this phase is emphasized through the comprehensive integration of empirical evidence and stakeholder perspectives, thereby facilitating evidence-based decision-making to enhance and optimize the implemented policy in phase three.

#### **Phase Three: Policy Revision and Staff Education**

In the one-month timeframe of phase three, executive leadership will assist the project team in a rigorous policy revision process, using the insights gained from meticulous data analysis and stakeholder feedback obtained in phase two. Any policy revisions will require RCD approval to uphold compliance with legal, ethical, and regulatory guidelines. Once approved, the revised policy will be seamlessly integrated into the organizational framework through upload to PolicyTech by the IT department. Concurrently, departmental educators will adjust training modules to reflect policy revisions. Department leaders will then disseminate additional training to ensure staff readiness and compliance with the updated policy.

In alignment with the scholarly foundations of this QI project initiative, it is noteworthy that phases two and three are cyclical, and they may be repeated if additional policy refinement and testing are required. This iterative approach draws inspiration from Gilbert's (1999) scholarly work on policy implementation and assessment, establishing an adaptive approach to achieve key measures and benchmarks while allowing for ongoing improvements and adjustments.

#### **Phase Four: Sustained Implementation and Evaluation**

Subsequently, during phase four, the operational policy, meticulously crafted, tested, and officially sanctioned, will undergo a sustainable implementation over six months. This implementation phase represents a critical juncture where the policy's effectiveness is subjected to real-world application and scrutiny. During this phase, frontline providers will continue to record interventions

within the EMR for each patient. Additionally, CMs will initiate follow-up telephone calls within 72 hours of discharge, ensuring comprehensive documentation of post-discharge assessments for ongoing STB and OMHFC compliance.

The QI department will conduct monthly data collection and analysis, providing the project team with periodic results for presentation to both departmental and executive leadership. During the sixth month, departmental leaders and educators will obtain employee feedback. The project team will generate a comprehensive report for executive leadership review, combining data and feedback from the six-month implementation period. Aligned with the scholarly principles of evidence-based decision-making, executive leadership will meticulously evaluate the project's efficacy, compliance, and feasibility for sustained application and potential expansion. This evaluative process gauges the project's effectiveness in realizing anticipated outcomes, contributing substantively to organizational policy implementation and QI initiatives.

#### **Data Collection Methods**

Periodic data collection and analysis will be integral throughout the project's implementation, primarily emphasizing evaluating progress toward attaining desired outcomes. This evaluation will systematically compare the collected data against the baseline data, providing a comprehensive assessment of the project's advancement. To ensure adequate data collection, frontline providers will thoroughly and accurately document interventions in the EMR, including education and resources provided, assistance with OMHFC appointments and referrals, and completion of post-discharge follow-up telephone calls. Employee feedback will be collected electronically through a Qualtrics survey consisting of 14 questions (see Appendix C). The survey will utilize Likert scales and include opportunities for qualitative responses. The QI department will utilize the EMR's internal data exploration tool, Slicer-Dicer, to conduct regular extractions from the EMR system, performing weekly extractions during phase two and monthly extractions during phase four. Slicer-Dicer will allow the QI

department to retrieve de-identified patient clinical-epidemiological data from a large population and conduct preliminary data analysis (Saini et al., 2021).

The efficacy of this policy will be validated by demonstrating a 90% adoption and compliance rate, as evidenced by the fact that 90% of frontline healthcare providers have disseminated educational information to PACs. Furthermore, a notable achievement will be observed, with 90% of patients being linked with OMHFC resources before discharge. Lastly, a key metric for success will be the facilitation of post-discharge continuity, with 90% of discharged patients receiving a follow-up telephone call within 72 hours after discharge.

#### **Evaluation**

During the preliminary data analysis phase, data will be thoroughly and systematically examined to categorize the dataset and to identify any discernible trends and patterns. This comprehensive process includes exploring participant characteristics, including age, gender, ethnicity, diagnosis, and administered treatments and assessing compliance with OMHFC appointments, frequency of continued STB, and 30-day readmission rates. Moreover, the descriptive analysis will intricately quantify employee adherence to established policies and procedures and assess interventions implemented. Frequencies and percentages will be calculated and presented in tabular and graphical formats to enhance clarity.

The QI department will utilize Stata 14.1 to conduct inferential statistical analyses to investigate relationships and effects within the dataset. Multivariate analyses will be undertaken to determine the effectiveness of interventions in improving OMHFC adherence and reducing 30-day readmission rates. Multiple linear regression analyses will be performed to examine the impact of interventions on the rates of continued STB leading to readmission within the 30-day timeframe. Logistic regression analysis will assess whether pre-discharge interventions influence OMHFC compliance following discharge. Furthermore, the project team will explore associations between categorical variables, such as patient demographics and adherence to OMHFC standards, through Chi-square testing. This methodologically

rigorous approach will provide a comprehensive understanding of the project's impact and effectiveness by systematically evaluating the complex interplay of variables and their influence on OMHFC compliance and readmission rates.

In order to conduct a comprehensive assessment of individual and organizational policy adoption, the QI department will extract employee performance data from the EMR system.

Quantitative measures will be employed to evaluate the rate of policy adoption and how clinicians integrate interventions into their day-to-day clinical practices. It is essential to emphasize that this analysis' primary aim is not punitive; instead, it is focused on evaluating adherence metrics and identifying areas for improvement. To uphold confidentiality and protect the privacy of individuals, all collected data will undergo de-identification before being systematically organized in a contingency table. Subsequent analysis will be facilitated through the utilization of Microsoft Excel.

#### **Cost/Benefit Analysis**

The primary resource needed for the successful execution of this project is interdepartmental personnel, encompassing IT and QI departments, SWs, CMs, MDs, educators, and departmental leaders. Training materials and patient resources will be formulated and stored electronically to optimize fiscal efficiency, mitigating tangible material costs. Existing organizational platforms, including the EMR system, Microsoft Excel, and Stata, will be utilized for data collection and analysis to minimize software expenditures. Consequently, the financial requisites for this project will be nominal. Preliminary estimates project salary costs to approximate \$250,000 throughout the project's duration, encompassing contributions from all participating departments.

According to McEnany et al. (2020), the average daily hospital cost is approximately \$4,300.

Organizational data demonstrates that approximately 200 behavioral health patients seek treatment each month, one-third of whom are discharged home, and the average boarding time while awaiting psychiatric hospital placement is approximately three days. Therefore, assuming two-thirds of patients

require inpatient psychiatric hospital placement and an average daily boarding time of three days, the average monthly caseload is approximately 400 patient days per month. Therefore, current hospital boarding costs are in excess of \$20.6 million per year. Fontanella et al. (2020) accentuate a 60% reduction in readmission rates for continued STB with adherence to recommended OMHFC guidelines. Anticipating equivalent outcomes with extended integration of the new organizational policy, the institution can realize estimated annual savings exceeding \$12.4 million annually, potentially mitigating unreimbursed hospital costs associated with 30-day readmissions. After implementation, the ongoing expenses are anticipated to be minimal, rendering this organizational change highly advantageous for both patients and the institution.

#### **Discussion of Results**

This proposal outlines a theoretical project for development and implementation at a leading pediatric hospital in the Texas Medical Center. Due to the organization's intricate policy creation process, demanding a substantial time commitment, implementing this policy within the designated course timeframe was not feasible. Nevertheless, upon the successful implementation of the policy, a projected 25% reduction in 30-day readmission rates for persistent STB is anticipated within six months, supported by Choi et al. (2020). Extended policy adoption may yield a substantial decrease of up to 60% in readmission rates, as evidenced by Fontanella et al. (2020).

Change initiatives face challenges such as conflicting demands, limited resources, staff resistance, and communication gaps. Multiple concurrent improvement projects and conflicting demands can strain resources, underscoring the importance of having a clearly defined project scope and accurate cost assessment before initiation. Operating within the project scope and adhering to budget constraints are pivotal to mitigating the impact of resource limitations. Another hurdle is employee resistance, influenced by perceived loss and inadequate planning. Project transparency, clear and timely communication, and proactive employee engagement and involvement can enhance the

likelihood of successful project implementation, fostering a sense of value and inclusion. (Nilsen et al., 2020).

Leaders must recognize the critical importance of fostering innovation and encouraging team members' creativity, which is often how topics and ideas for change in EBP are identified. Successful EBP implementation relies heavily on creativity and innovation, and leaders must prioritize knowledge transfer and behavior change to effectively implement change while acknowledging that steps in the EBP process may coincide (Melnyk, 2010; Titler, 2008). Innovative thinking and creativity become paramount when existing policies prove unsuitable for modification to align with project requirements.

As Green (2019) highlights, the team leader's role is critical in ensuring project success, necessitating adopting a leadership approach that effectively addresses the diverse motivational factors impacting individuals and teams. A participative leadership style is particularly advantageous, as it fosters interdepartmental collaboration, facilitates shared decision-making, and enhances interpersonal communication within the team. Furthermore, recognizing the pivotal role of end-users in driving successful project design and implementation, the team leader will strategically employ a transformational and democratic leadership style. This approach aims to nurture a culture characterized by trust, support, and the absence of hierarchical barriers, empowering team members and end-users to collaborate, think innovatively, and communicate candidly. By integrating participative, transformational, and democratic leadership styles, the project leader will establish a trusting environment that fosters collaboration, motivating end-users to pursue shared project goals.

#### **Conclusion and Recommendations**

The organization is responsible for delivering high-quality care to all patients, especially those struggling with mental health issues. This paper has presented a comprehensive proposal for an 18-month EBP QI initiative to enhance adolescent compliance with the timely receipt of OMHFC services post-discharge. Given the time and interdisciplinary collaboration required for the policy drafting

process, it is recommended that the organization establish a workgroup to commence immediately. This approach will enable phase two to commence during the first month of fiscal year (FY) 2025, with the project potentially concluding by the end of FY 2025.

The primary objectives of this project are to diminish persistent STB, mitigate 30-day readmission rates, and enhance long-term patient success. Adhering to the K2A framework, completing the project's four phases is anticipated to culminate in a policy that provides frontline providers with guidelines for connecting PACs with OMHFC services, providing education and resources, and conducting post-discharge follow-up telephone calls. The escalating global adolescent suicide rate underscores the urgency of such initiatives. By implementing this initiative, patients are expected to experience improved outcomes, with a targeted 25% reduction in 30-day readmission rates for persistent STB within the first six months and a 60% reduction with sustained long-term policy adoption.

#### References

- American Academy of Pediatrics. (2021). AAP-AACAP-CHA declaration of a national emergency in child and adolescent mental health. <a href="https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/">https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/</a>
- Asarnow, J.R. (2023). Suicide: Pediatric mental health minute series. American Academy of Pediatrics.

  <a href="https://www.aap.org/en/patient-care/mental-health-minute/suicide/">https://www.aap.org/en/patient-care/mental-health-minute/suicide/</a>
- Bear, H.A. et al. (2020). Systematic review and meta-analysis: Outcomes of routine specialist mental health care for young people with depression and/or anxiety. *Journal of the American Academy of Child & Adolescent Psychiatry*, *59*(7), 810–841. https://doi.org/10.1016/j.jaac.2019.12.002
- Bojanić, L., Hunt, I.M., Baird, A., Kapur, N., Apple, L., & Turnbull, P. (2020). Early post-discharge suicide in mental health patients: Findings from a national clinical survey. *Frontiers in Psychiatry, 11*. <a href="https://doi.org/10.3389/fpsyt.2020.00502">https://doi.org/10.3389/fpsyt.2020.00502</a>
- Briggs, S., Netuveli, G., Gould, N., Gkaravella, A., Gluckman, N.S., Kangogyere, P., Farr, R., Goldblatt, M.J., & Lindner, R. (2019). The effectiveness of psychoanalytic/psychodynamic psychotherapy for reducing suicide attempts and self-harm: Systematic review and meta-analysis. *The British Journal of Psychiatry*, *214*. https://doi.org/10.1192/bjp.2019.33
- Centers for Disease Control and Prevention (CDC). (2022). New CDC data illuminate youth mental health threats during the COVID-19 pandemic. U.S. Department of Health and Human Services.

  https://www.cdc.gov/media/releases/2022/p0331-youth-mental-health-covid-19.html
- Centers for Disease Control and Prevention (CDC). (2023). *Disparities in suicide*.

https://www.cdc.gov/suicide/facts/disparities-in-suicide.html

- Chen, A., Dinyarian, C., Inglis, F., Chiasson, C., & Cleverley, K. (2022). Discharge interventions from inpatient child and adolescent mental health care: A scoping review. *European Child & Adolescent Psychiatry, 31*. https://doi.org/10.1007/s00787-020-01634-0
- Choi, Y., Nam, C.M., Lee, S.G., Park, S., Ryu, H.-G., & Park, E-C. (2020). Association of continuity of care with readmission, mortality and suicide after hospitalization discharge among psychiatric patients. *International Journal for Quality in Health Care, 32*(9), 569–576.

  <a href="https://doi.org/10.1093/intqhc/mzaa093">https://doi.org/10.1093/intqhc/mzaa093</a>
- Corey, J.S. & Roussel, L.A. (2023). Translational nursing: Leading implementation for sustainable changes. In L.A. Roussel, P.L. Thomas, & J.L. Harris (Eds.), *Management and leadership for nurse administrators* (9<sup>th</sup> ed., 307–324). Burlington, MA: Jones and Bartlett Learning.
- Doupnik, S.K., Rudd, B., Schmutte, T., Worsley, D., Bowden, C.F., McCarthy, E., Eggan, E., Bridge, J.A., & Marcus, S.C. (2020). Association of suicide prevention interventions with subsequent suicide attempts, linkage to follow-up care, and depression symptoms for acute care settings: A systematic review and meta-analysis. *The Journal of the American Medical Association*Psychiatry, 77(10), 1021–1030. https://doi.org/10.1001/jamapsychiatry.2020.1586
- Doupnik, S.K., Passarella, M., Terwiesch, C., & Marcus, S.C. (2021). Mental health service use before and after a suicidal crisis among children and adolescents in a United States national Medicaid sample. *Academic Pediatrics*, 21(7), 1171-1178. <a href="https://doi.org/10.1016/j.acap.2021.04.026">https://doi.org/10.1016/j.acap.2021.04.026</a>
- Fontanella, C.A., Warner, L.A., & Steelsmith, D.L. (2020). Association of timely outpatient mental health services for youths after psychiatric hospitalization with risk of death by suicide. *The Journal of the American Medical Association Network Open, 3*(8): e2012887.

  https://doi.org/10.1001/jamanetworkopen.2020.1288
- Gilbert, T.T. (1999). How to evaluate and implement clinical policies. *Family Practice Management, 6*(3), 28-33. https://www.aafp.org/pubs/fpm/issues/1999/0300/p28.html

- Gordon, D. (2022). *The kids are not alright: New report shows pediatric mental health hospitalizations*rose 61%. Forbes. <a href="https://www.forbes.com/sites/debgordon/2022/09/30/the-kids-are-not-alright-new-report-shows-pediatric-mental-health-hospitalizations-rose-61">https://www.forbes.com/sites/debgordon/2022/09/30/the-kids-are-not-alright-new-report-shows-pediatric-mental-health-hospitalizations-rose-61</a>
- Green, C. (2019). Workplace incivility: Nurse leaders as change agents. *Nursing Management, 50*(3), 51–53. <a href="https://doi.org/10.1097/01.NUMA.0000550455.99449.6b">https://doi.org/10.1097/01.NUMA.0000550455.99449.6b</a>
- Gryglewicz, K., Peterson, A., Nam, E., Vance, M.M., Borntrager, L., & Karver, M.S. (2023). Caring transitions—A care coordination intervention to reduce suicide risk among youth discharged from inpatient psychiatric hospitalization. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 44*(1). https://doi-org.ezproxy.uttyler.edu/10.1027/0227-5910/a000795
- Ham-Baloyi, W. (2022). Assisting nurses with evidence-based practice: A case for the Knowledge-to-Action Framework. *Health SA*, 27. https://doi.org/10.4102/hsag.v27i0.2118
- Hoffmann, J.A., Krass, P., Rodean, J., Bardach, N.S., Cafferty, R., Coker, T.R., Cutler, G.J., Hall, M., Morse, R.B., Nash, K.A., Parikh, K., & Zima, B.T. (2023). Follow-up after pediatric mental health emergency visits. *Pediatrics*, *151*(3). <a href="https://doi.org/10.1542/peds.2022-057383">https://doi.org/10.1542/peds.2022-057383</a>
- McEnany, F.B., Ojugbele, O., Doherty, J.R., McLaren, J.L., & Leyenaar, J.K. (2020). Pediatric mental health boarding. *Pediatrics*, *146*(4). <a href="https://doi.org/10.1542/peds.2020-1174">https://doi.org/10.1542/peds.2020-1174</a>
- Melnyk, B.M., Fineout-Overholt, E., Stillwell, S.B., & Williamson, K.M. (2010). Evidence-based practice:

  The seven steps of evidence-based practice. *The American Journal of Nursing, 111*(1), 51-53.

  <a href="https://doi.org/10.1097/01.NAJ.0000366056.06605.d2">https://doi.org/10.1097/01.NAJ.0000366056.06605.d2</a>
- Morgan, A. J., Roberts, R., Mackinnon, A. J., & Reifels, L. (2022). The effectiveness of an Australian community suicide prevention networks program in preventing suicide: A controlled longitudinal study. *BMC Public Health, 22*, Article 1945. <a href="https://doi.org/10.1186/s12889-022-14331-1">https://doi.org/10.1186/s12889-022-14331-1</a>

National Alliance on Mental Illness (NAMI). (2022). *Mental health by the numbers*. https://www.nami.org/mhstats

- Radhakrishnan, L., Leeb, R. T., Bitsko, R. H., Carey, K., Gates, A., Holland, K. M., Hartnett, K. P., Kite-Powell, A., DeVies, J., Smith, A. R., van Santen, K. L., Crossen, S., Sheppard, M., Wotiz, S., Lane, R. I., Njai, R., Johnson, A. G., Winn, A., Kirking, H. L., . . . Anderson, K. N. (2022). Pediatric emergency department visits associated with mental health conditions before and during the COVID-19 pandemic United States, January 2019-January 2022. *Morbidity and Mortality Weekly Report, 71*(8), 319–324. Centers for Disease Control and Prevention. http://dx.doi.org/10.15585/mmwr.mm7108e2
- Rengasamy, M & Sparks, G. (2019). Reduction of postdischarge suicidal behavior among adolescents through a telephone-based intervention. *Psychiatric Services, 70*(7). https://doi.org/10.1176/appi.ps.201800421
- Saini, V., Jaber, T., Como, J.D., Lejune, K., & Bhanot, N. (2021). Exploring 'Slicer Dicer,' an extraction tool in EPIC, for clinical and epidemiological analysis. *Open Forum Infectious Diseases, 8*(1), S414-S415. <a href="https://doi.org/10.1093/ofid/ofab466.821">https://doi.org/10.1093/ofid/ofab466.821</a>
- Titler, M.G. (2008). The evidence for evidence-based practice implementation. In R.G. Hughes (Ed.),

  Patient safety and quality: An evidence-based handbook for nurses. Agency for Healthcare

  Research and Quality. <a href="https://www.ncbi.nlm.nih.gov/books/NBK2659/">https://www.ncbi.nlm.nih.gov/books/NBK2659/</a>
- Vale, A. (2023). *The U.S. teen suicide rate is on the rise*. Charlie Health. https://www.charliehealth.com/research/the-us-teen-suicide-rate-is-on-the-rise
- Walsh, E.H., McMahon, J., & Herring, M.P. (2022). Research review: The effect of school-based suicide prevention on suicidal ideation and suicide attempts and the role of intervention and contextual factors among adolescents: A meta-analysis and meta-regression. *Journal of Child Psychology and Psychiatry*, 63(8), 836–845. https://doi.org/10.1111/jcpp.13598

Watling, D.P., Preece, M.H.W., Hawgood, J., Bloomfield, S., & Kõlves, K. (2022). Developing a post-discharge suicide prevention intervention for children and young people: A qualitative study of integrating the lived-experience of young people, their carers, and mental health clinicians. *Child and Adolescent Psychiatry and Mental Health*, 16(24).

https://doi.org/10.1186/s13034-022-00460-3

World Health Organization (WHO). (2021). *Adolescent Mental Health*. <a href="https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health">https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health</a>

#### Appendix A

#### **Evidence Table**

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
1.	Conceptu	MA	N=38 (of	IV: TAU	Data	Data	DV(1): g = -0.89,	LOE: I
Bear,	al		initial 6,350	(eclectic or	extracted	analyzed	95% CI = -1.04 to -	
H.A. et al.	framewo	Inclusion	studies;	IDT ITVNs)	using a	using Stata	0.73	Strengths: high methodological quality;
(2020).	rk: N/A	criteria:	published		standardized,	14.1		high interrater agreement; high validity
Systemati		• CYP	from	DV(1):	pre-piloted		DV(2): g=-0.6 (3	and reliability; thoroughly described
c review	Purpose	<ul><li>Using</li></ul>	inception to	depression	extraction	DV(1): pre-	mo) and -1 (18	process; study replicable
and	of study:	MH	01/2019)	symptom	table	post ES	mo); BIC= -219.5	
meta-	to	services		improveme		using		Limitations: poor quality of data due to
analysis:	determin	for	Characteristi	nt	Multilevel	Hedge's g,		missing information and lack of detail
Outcome	е	depressio	cs		random	CI		regarding TAU ITVNs and fidelity, large
s of	outcome	n	• 11,739	DV(2):	effects			geographical skew towards North
routine	S	•	CYP	symptom	univariate	DV(2):		American studies
specialist	following	assessed	<ul> <li>Participant</li> </ul>	reduction	models,	Hedge's g,		
mental	TAU by	TAU	size from 6-	over time	consistency	BIC		Bias: funnel plots to assess for sample
health	MH	outcome	4,659	(3 mo, 18	(CI),			size and publication bias
care for	specialist	(specialist	• 7-20 yrs	mo)	longitudinal			
young	services	MH care)	old		trend			Feasibility: applicable to improve timely
people	among				analysis of			OMHFC after discharge, to encourage

IIIVESTIGAT	1110 11112 11111	7.01						
Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
with	CYP with	Original	• M age =		standardized	•	, ,	continuity of care for a minimum of 3
depressio	depressi	research	13.8 yrs		change			months after DC.
n and/or	on at		• 61.65%		(Hedge's g)			
anxiety.	individua		female		using mixed-			Conclusion: SIG RED in symptoms when
•	l level		• 33 studies		effects MR			receiving TAU in specialist mental
			used		and BIC			health services over time (33-40%
			diagnostic					showed improvement/recovery); initial
			or cut-off					large RED within the first 3 months
			inclusion					then gradual deceleration thereafter;
			criteria					higher rates of improvement in clinician
			• 4 – 196					reporting versus patient reporting
			treatment					
			sessions (M					Recommendation: further studies to
			= 26.8)					investigate specific and detailed ITVNs
								to improve recovery rates; patient
								views need to be considered and
			Databases					incorporated; shared decision-making
			(3):					treatment models necessary
			MEDLINE     Embase					
			• PsycInfo					
		1	- PSychilo					

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
			Setting: US, UK, Germany, Australia, Canada, Sweden, Denmark, Norway, Finland, New Zealand, Italy, Ireland, and India Attrition: NR					
2.	Conceptu	QUAN; DS	N = 826	IV: DC from	Count	DV(1 & 2):	IV: 26,426 deaths	LOE: VI
Bojanić, L., et al.	al			IP psychiatric	obtained from the			

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
(2020). Early	framewo rk: N/A	Inclusion criteria:	All ages; England &	hospitalizat ion	NCISH (1997- 2016), Office	Descriptive analysis (#	DV(1): 428 (51.8%)	Strengths: 20 years of data; diagnosis & most frequently used means to commit
post-		• DBS	Wales;		for National	and %)		suicide identified; increased risks
discharge	Purpose	within 1	1997-2016	DV: after IP	Statistics, &		DV(2): 398	identified among specific populations
suicide in	of study:	week of		psychiatric	clinical data	Comparison	(48.2%)	
mental	to	DC from	Attrition: NR	hospitalizat	via	s (chi-		Limitations: exploratory & uncontrolled
health	examine	IP		ion, DBS	questionnair	square)	Comparison:	retrospective study; inability to draw
patients:	factors	psychiatri		within	es completed		X <sup>2</sup> =0.18	etiological conclusions; possible
Findings	associate	c care			by patient's			clinician bias; possible missed DBS;
from a	d with	• Formal		(1) 0-3 days	clinician			inability to confirm patient diagnoses
national	suicide	DC & DC		post DC				(provided by clinicians); unable to
clinical	after DC	date		(2) 4 7 4				obtain hour of DC & subsequent death
survey.	from	recorded		(2) 4-7 days				Discountial for division him on
	psychiatr ic IP care			post DC				Bias: potential for clinician bias on
	ic ip care							questionnaires Conclusion: Risk of DBS is SIG INC in the
								7 days after DC; safety planning and FU
								appointments essential to reduce risk
								of DBS

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
								Recommendation: further QUAL and QUAN study into DC planning needed; should focus on specific needs based on diagnosis
3.	Conceptu	SR & MA	N=17 out of	IV: PSYAN	Data	Analysis	DV(1): SIG RED at	LOE: I
Briggs, S.,	al		3304		extracted by	conducted	12 months (OR=	
et al.	framewo	Inclusion	potential	DV(1):	2 authors	with Stata	0.469; 95% CI	Strengths: overall low risk of bias, large
(2019).	rk: N/A	criteria:	studies	occurance	independentl	version 14.2	$0.274-0.804$ ; $I^2 =$	participant population included, variety
The		• RCT	(1970-2017)	of	y using form		0.0)	of settings and countries included
effective	Purpose	•		repeated	adapted			
ness of	of study:	Comparin	All ages	SA	from the		DV(2): SIG RED at	Limitations: moderate quality of
psychoan	To assess	g PSYAN	included:		Cochrane		6 months (OR=	evidence, limited sample size, diverse
alytic/	whether	to TAU	• Adult = 9	DV(2):	Data	SR:	0.27; 95% CI	ITVNs (intensity, content, duration),
psychody	PSYAN is		• < 18 years	occurance	Extraction	<ul><li>Primary</li></ul>	0.109–0.668, I <sup>2</sup> =	majority of studies on adults & results
namic	more		old =3	of	and	outcomes:	82.7%)	grouped
psychoth	effective			repeated	Assessment	SA and SH		
erapy for	than TAU		Databases	SH (incl. SA	Template	<ul><li>Secondary</li></ul>	DV(3): SIG RED at	Bias: possible reporting bias in 9
reducing	to		(6):	and self-	2011	outcomes	12 months (SMD=	studies; low risk of selection,
suicide	prevent		<ul> <li>PubMed</li> </ul>	injury)		(risk	-0.505; 95% CI -	performance and detection, and
attempts	SA and		<ul> <li>PsycINFO</li> </ul>		Random	factors):	0.7630.246; I <sup>2</sup> =	attrition bias
and self-	SH				effects model	depression,	0.0%)	

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
harm: Systemati c review and meta- analysis.			Psycharticle S CINAHL EMBASE CCRCT Setting: inpatient, outpatient, community, and emergency, home; USA, UK, Europe, Australia	DV(3): number of admissions	for MA with fixed effects model for subgroup comparisons  HGNY (I²) relative importance guided by Cochrane handbook	anxiety, psychosocial functioning, admissions  MA: • DV(1): OR, CI, I <sup>2</sup> • DV(2): OR, CI, I <sup>2</sup> • DV(3): SMD, CI, I <sup>2</sup>		Feasibility: treatment and FU at stated intervals to maximize impact of PSYAN to RED SA and SH  Conclusion: PSYAN shows SIG treatment effect for number of SA, SIG RED of SH, SIG RED of admissions  Recommendation: further study needed with increased sample size; consider specific diagnostic and problem categories for more specialized ITVNs; study longer FU intervals (>12 months) after treatment ends
4. Choi, Y., et al.	Conceptu al	Nested CCS	Attrition: NR N=18,702 Sample:	IV: continuity of care	Data obtained from	Analysis conducted	DV(1): n = 8,022; 42.9%	LOE: IV

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
(2020).	framewo	Inclusion	• all ages	(OP) visits	National	using SAS	DV(2):	Strengths: large sample population
Associati	rk: N/A	criteria:	• IP	after DC	Health	version 9.4	(a) AOR = 1	with control group; 11 years of data;
on of		• IP	hospitalizati		Insurance		(b) AOR = 1.519;	nationwide study; high validity and
continuit	Purpose	claims	on for MH	DV(1): 1	Service-	DV(1): n, %	95% CI = 1.250-	reliability; thoroughly described
y of care	of study:	1/1/02 –	disorders	year	National		1.845; p<0.0001	process
with	to	12/31013	2002-2012	readmissio	Sample	DV(2):	(c) AOR = 1.789;	
readmissi	identify	• seen		n rate	Cohort	(a) AOR	95% CI = 1.425-	Limitations: possibility of coding
on,	associati	primarily	Setting:		(NHIS-NSC)	(b, c, d):	2.263; p<0.0001	inaccuracies; some covariates unable to
mortality	ons	for	• South	DV(2): risk	2002-2013	AOR; CI; p	(d) AOR = 1.116;	be identified; inconsistent
and	between	psychiatri	Korea	readmissio			95% CI = 0.975-	measurement methods for continuity
suicide	continuit	С		n within 1	Risk-set	DV(3): n, %	1.278; p=0.112	of care; difference in study designs;
after	y of	disorders	Attrition: NR	year for	sampling	(a & b) AOR;		some small sample sizes
hospitaliz	OMHFC	• with		continuity	method;	CI	DV(3): n = 108;	
ation	after DC	national		of care	patient-		9.1%	Bias: possible immortal time bias;
discharge	and	health		index:	based	DV(4):		confounding bias minimized by
among	readmissi	insurance		(a) high	measuremen	(a) AOR	DV(4):	calculating AOR
psychiatri	ons,			(0.75-1)	t method;	(b, c, d):	(a) AOR = 1	
С	mortality	Exclusion		(b) medium	continuity of	AOR; CI; p	(b) AOR = 2.709;	Feasibility: feasible for implementation
patients.	and	criteria:		(<.75)	care index;		95% CI = 1.168-	with focus on improving continuity of
	suicide	<ul><li>without</li></ul>		(c) low	conditional		6.284; p=0.012	care
		informati		(<0.4)				

publicati	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
	within 1 year	on about IP days  discharge d or admitted in 2013 died in hospital with medical aid		(d) no FU visits  DV(3): 1 year rate of DBS  DV(4): risk of DBS within 1 year for continuity of care index: (a) high (0.75-1) (b) medium (<.75) (c) low (<0.4)	logistic regression		(c) AOR = 3.839; 95% CI = 1.351- 10.914; p=0.020 (d) AOR =	Conclusion: continuity of OMHFC after DC associated with lower risk of readmission and suicide; medium and low continuity of care associated with high risk of readmission within 1 year of DC; suicide risk for medium and low continuity of care greater than high continuity of care  Recommendation: need efforts to improve continuity of care (improving patient awareness of importance of OMHFC; implement policy to promote continuity)

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		7101						
Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions (d) no FU visits	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
5.	Conceptu	SR & MA	N=14	IV: brief	Data	Analysis	DV(1): 3.5% RED	LOE: I
Doupnik,	al		studies	suicide	extracted	conducted	(pOR = 0.69; [95%	
S.K., et al.	framewo	Inclusion	(4270	prevention	and reviewed	using Stata	CI = 0.55-0.87];	Strengths: risk bias assessed/rated for
(2020).	rk: N/A	criteria:	patients)	ITVNs	by 2 study	version 15	Hedges g = 0.21	each study to assign bias score;
Associati		•			authors		[95% CI = 0.08-	techniques to account for studies with
on of	Purpose	published	Databases	DV(1):	independentl	DV(1 & 2):	0.33])	small sample sizes
suicide	of study:	01/2000 –	(5):	subsequent	y; PRISMA	pooled OR		
preventio	to	05/2019	MEDLINE	SA	guidelines	(pOR), CI,	DV(2): 22.5% INC	Limitations: limited to English
n	examine	<ul><li>clinical</li></ul>	• Scopus			Hedges g	(pOR = 3.04 [95%	publications, did not include
interventi	the	trials of	• CINAHL	DV(2):	Random-		CI = 1.8-4.17];	unpublished findings, small sample size
ons with	associati	single in-	PsychINFO	linkage to	effects		Hedges g = 0.55	with one study accounting for large
subseque	on of	person	• Embase	FU care	models		[95% CI = 0.32-	proportion of study participants,
nt suicide	brief	encounter			(pooled		0.78])	unable to examine if ITVN ultimately
attempts,	acute	suicide	Setting:		effect size			reduced DBS if study did not include
linkage to	care SI	preventio	Acute care		estimates			death as an outcome
follow-up	ITVNs	n ITVNs	EDs and MH		weighted for			
care, and	with	<ul><li>directly</li></ul>	clinics in		inverse			Bias: low risk of bias; bias risk assessed
depressio	subseque	assessed	USA, UK,		variances of			using Cochrane Risk of Bias tool and
n	nt SA and	SI risk,	Malaysia,					publication bias assessed using Peter

							<u> </u>	
Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
symptom	linkage	promoted	and US		individual			regression tests and contour-enhanced
s for	to FU	continued	military		effects)			funnel plots
acute	care	MH care,	installations					
care		or both						Feasibility: implement brief suicide
settings:		• included	Attrition:					ITVNs to reduce future SA and improve
Α		comparis	NR					OMHFC compliance
systemati		on group						
c review		•						Conclusion: Brief suicide prevention
and		measured						ITVNs RED subsequent SA; prevention
meta-		patient						ITVNs delivered in single encounter
analysis.		outcomes						RED SA and ensure engagement in
		•						OMHFC
		available						
		in English						Recommendation: integrate brief suicide prevention ITVNs into acute
		Exclusion						care encounters; identify at-risk
		criteria:						patients; test ITVN implementation
		• ITVN						strategies; identify barriers to improve
		consisting						the continuity of OMHFC
		only of 1						

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method brief FU	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
		contact						
6. Doupnik, S.K., et al. (2021).	Conceptu al framewo rk: N/A	Retrospec tive CS	N=92,451 Included: • 6-17 yrs	IV(1): ambulatory MH care encounter	Data extracted from Medicaid	Analyses conducted at level of individual	Analysis conducted in SAS version 9.4 (dataset mgmt.),	LOE: IV  Strengths: high probability and statistical significance, large sample
Mental health service	Purpose of study:		old (M=15 yrs) • 54%	in 30 days preceding ED visit	Analytic EXtract dataset	ED visit  Predictions	Stata 16 (models), GraphPad Prism 8 and R version 3	size, methods clearly described for replication in future studies
use before and after	to examine the		female • diagnosis of SI (38%)	IV(2):	DV(1 & 2): AOR & CI	determined using mixed-	(figures)  DV(1a): AOR =	Limitations: study utilized administrative claims data; may have missed services provided for which
a suicidal crisis	impact receiving ambulato		or SA (62%) • treat-and-release ED	general healthcare visit in 30	(predition of completion)	effects logistic regression	11.01; 95% CI = 9.82-12.35	MCD was not billed; unable to adjust for possible contributing clinical factors; 2009-2012 data may not reflect
among children	ry MH care or		visits (67%) or ED-to-	days preceding		model	DV(1b): AOR = 4.6; 95% CI = 3.16-6.68	more recent data
and adolesce nts	general healthcar e in the 30 days		hospital admissions (33%)	ED visit  DV(1): likelihood			DV(2a): AOR = 1.17; 95% CI = 1.09-1.24	Bias: Possible sampling bias; attempted to limit by sampling from states with highest quality MCD data

,		7.0.						
Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
in a	before		between	of				Feasibility: relevant and applicable to
United	an ED		2009-12	obtaining			DV(2b): AOR =	practice; need to identify barriers to
States	visit for			OMHFC			1.25; 95% CI =	obtaining OMHFC
national	SI/SA has		Excluded:	after DC			1.17-1.34	
Medicaid	on the		• <6 yrs old	(a) ED treat				Conclusion: ambulatory MH visit within
sample.	likelihoo		• adults 18+	and release				30 days before MH ED visit strongest
	d of		<ul><li>those not</li></ul>	(b) ED to				predictor of 30-day post-DC OMHFC
	completi		eligible for	hospital				compliance; 80% with pre-ED MH visit
	ng		MCD in 3					compliant with OMHFC versus 44% of
	OMHFC		months	DV(2):				those without; those with accessibility
	visit after		before and	likelihood				to OMHFC demonstrate higher
	DC		1 month	of				rate/compliance with OMHFC after DC
			after ED	obtaining				for SI/SA; on 25% of those without MH
			visit	OMHFC				visit 30 days before ED visit had OMHFC
				after DC				after DC
			Data	(a) ED treat				
			sources:	and release				Recommendation: investigate
			<ul> <li>Medicaid</li> </ul>	(b) ED to				barriers/accessibility to obtaining
			claims	hospital				timely/regular OMHFC; focus on
			identified by					increasing continuity of MH care after
			specified					

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
			(N=20) diagnosis codes  Setting: • 29 states • EDs at US acute care hospitals  Attrition: NR					DC; assist with/coordinate OMHFC if no previously established MH care
7.	Conceptu	QUAN;	N = 139,694	IV:	Suicide	Poisson	IV: 56.5% received	LOE: IV
Fontanell	al	Populatio	• 10-18	receiving	within 8-180	regression,	FU	Character and and ideatified
a, C.A., et	framewo	n based,	• 51.9%	MH FU within 7	days post-DC measured	ARR, 95% CI, P values	DV: lower odds of	Strengths: assessed and identified
al. (2020).	rk: N/A	retrospect ive,	female	days of DC	using the	r values	suicide: ARR =	specific factors that DEC/INC risk/timeliness of OMHFC compliance
Associati	Purpose	longitudin	Hospitalized	days of DC	International		0.44; 95% CI=	risky differiness of Olviri C compliance
on of	of study:	al CS	for STB 2009	DV: odds of	Statistical		0.83; p=0.01	Limitations: focus on Medicaid-enrolled
timely	to		- 2013	suicide for	Classification		, , , , , , , , , , , , , , , , , , ,	youths (excluded uninsured/privately
outpatien	determin		Medicaid	8-180 days	of Diseases			insured); possibly excluded
t mental	e effect		data from	post DC	and Related			ITVN/factors affecting receipt of

40

Citation: (i.e., author(s) , date of publicati on, &	Concept ual Framewo rk	Design/ Method	Sample/	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data	Chudu Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths
title)		Method	Setting	Delilitions		Analysis	Study Findings	and weaknesses])
health	of		33 states		Health			OMHFC, did not assess/consider
services	OMHFC		linked with		Problems,			availability/adequacy/effectiveness of
for	within 7		National		Tenth			OMHFC services; limited statistical
youths	days of		Death Index		Revision			power
after	hospital		data		codes X60 to			
psychiatri	DC on				X84, Y87.0,			Bias: possible selection bias
С	suicide		Attrition: NR		and U03 as			
hospitaliz	risk and				primary			Conclusion: OMHFC within 7 days of DC
ation	continue				cause of			SIG DEC risk of DBS/SI/SA during first 6
with risk	d STB				death			months post-DC
of death								
by								Recommendation: ensure
suicide.								receipt/scheduling of OMHFC within 7
								days of DC; facilitate/improve
								transitional ITVNs (IP to OP); identify
								patients at INC risk of not receiving FU
								care
8.	Conceptu	QUAN;	N=460	IV: LINC	Coordinators	Stata SE	DV:	LOE: III
Gryglewic	al	QE;		ITVN	contacted	15.1 used	(1) increased from	
z, K., et	framewo	Longitudi	10-17 yo;		participants	for data	79% to 86% at 90	
al.	rk: N/A	nal	75% F,		by phone at	analysis	days; p<0.05	

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
(2023).	_		82.5%	DV1 – OP	30, 60, and		(2) 2 2 2 4	Strengths: low cost, easily replicable,
Caring	Purpose		heterosexua	service	90 days post-	DV1&2 -	(2) 84% not	testing used has high reliability and
transition s—A care	of study:		l, 80% non- hispanic;	usage	DC	descriptive statistics, X2	readmitted	validity
coordinat	evaluate		>86% with	DV2 - 90	DV1 -	tests, t-tests	(3) M=5.88;	Limitations: absence of comparison
ion	utility		mood d/o	day	measured	(2313, 1 12313	SD=5.43; DEC by	group, low participation rate from
interventi	and			readmissio	using LINC	DV3&4-	65% from baseline	initial group
on to	potential		Setting: IP	n rate	Care	mixed		
reduce	effective		psychiatric		Coordination	effects	(4) M=0.42;	Bias: participation bias
suicide	ness of		hospital &	DV3 -	Monitoring	linear	SD=1.06; DEC by	
risk	the LINC		OP settings	depressive	Form	regression	86% from baseline	Feasibility: relevant and sustainable
among	in IP		(after d/c)	symptoms	(yes/no)			findings but need to investigate
youth	settings			D)/4	DV/2 mate			reasons for non-participation and
discharge d from	providing care to			DV4 – continued	DV2 – rate obtained via			expand focus on cultural groups
inpatient	suicidal			SI	agency			Conclusion: LINC ITVN DEC risk of
psychiatri	youth			31	records			suicide/depression and INC
C	, , , , , , , , , , , , , , , , , , , ,							engagement/use of OP services post-
hospitaliz					DV3 -			DC; highlights importance of immediate
ation.					measured by			and intensive OMHFC after DC
					PHQ9; M, SD			

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
					DV4 – measured by C-SSRS; M, SD			Recommendation: examine adaptations to delivery mode and length of services (e.g. telehealth & longer FU periods); explore impact of ITVNs on diverse cultural groups/settings
9. Hoffman n, J.A., et al. (2023). Follow- up after pediatric mental health emergen cy visits.	Conceptu al framewo rk: health equity framewo rk  Purpose of study: to evaluate the associati on	Retrospec tive CS  Included: • enrolled in MCD • at least 1 MH ED visits 01/2018-06/2019  Excluded: • no MH coverage	N=28,551  Characteristics  • 6-11 yrs (24.5%)  • 12-17 yrs (75.5%)  • 51.6% female  • 57% non- Hispanic White; 31.7% non-	IV: timely OMHFC (within 5 days) after ED DC  DV: risk of return for acute MH care encounter (ED or hospitalizat ion)	Cox proportional hazards multivariable models, adjusted for socioeconom ic and clinical characteristic s (determined using x² tests), and empirically	DV: % risk reduction, HR, CI	Analyses performed using SAS 9.4 DV: 27% DEC risk of return; HR=0.74; CI=0.63- 0.91	LOE: IV  Strengths: clearly stated objectives and hypothesis; significant and valid results applicable to the population; results comparable to previously completed studies with comparisons provided  Limitations: data only from 11 US regions; may not be generalizable to all states; limited continuous MCD enrollment period (6 months) after ED DC, unable to determine which OP MH visits were scheduled specifically in response to the ED visit (versus

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
	between timely OMHFC after ED DC and risk of return for MH acute care within 6 months	CHD without continuou SMCD enrollmen t for 6 months after ED visit CHD with only MH ED visits that resulted	Hispanic Black  MH diagnoses:  depression- related (39.1%)  disruption, impulsivity, conduct related (25%)  trauma,		stratified into 2 groups			previously scheduled), unable to assess quality of OMHFC (only attendance)  Bias: possible selection bias (only 11 US regions included); possible assumption bias (assumed visits with ED claims within 24 hours represented transfers to acute psychiatric hospitals and were excluded)  Feasibility: information can help identify patients with increased risk of not receiving OMHFC after DC: remove barriers to access, provide resources,
		in admission	stressor- related (14.2%) Databases: • IBM Watson					provide education  Conclusion: FU within 7 days of DC increases length of continued OMHFC for 6 months; connection to OP care within 30 days of DC DEC the risk of repeat ED visits or admission in the 5

Citation:								
(i.e.,				Major				
author(s)				Variables				
, date of	Concept			Studied				
publicati	ual			and	Measuremen			Strength of the Evidence (i.e., level of
on, &	Framewo	Design/	Sample/	Their	t of Major	Data		evidence + quality [study strengths
title)	rk	Method	Setting	Definitions	Variables	Analysis	Study Findings	and weaknesses])
			MarketScan					days after DC followed by increase
			MCD					thereafter – highlights need for OMHFC
			database					within 5 days of D/C; those with
								previous MH care visits in year prior to
								the ED visit more likely to FU OP after
			Setting:					DC; non-Hispanic Black CHD less likely
			11					than White CHD to receive timely
			dispersed					OMHFC
			and					
			deidentified					Recommendation: further research
			US states					needed: investigate how OMHFC use
			Attuiti and NID					after DC varies based on predisposing
			Attrition: NR					factors, enabling factors, and need for
								ongoing MH care; assess how
								type/quality of OMHFC influences returns/readmissions; assess if specific
								ITVNs to promote OMHFC and reduce
								readmission
10.	Conceptu	QUAN	N=60 WLF	IV: WLF	Count	MELM for	DV:	LOE: IV
Morgan,	al		networks &	network	obtained	count data		
A.J., et al.		CS; CLS			from the	model.		

Citation: (i.e., author(s) , date of publicati on, &	Concept ual Framewo	Design/	Sample/	Major Variables Studied and Their	Measuremen t of Major	Data	Charles Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths
title)	rk	Method	Setting	Definitions	Variables	Analysis	Study Findings	and weaknesses])
(2022).	framewo	_	60 control	implement	National	Counts	Post WLF IRR =	Strengths: 17 years of suicide data,
The	rk: none	Exclusion	areas	ed	Coronial	modelled as	0.93 (p=00.25)	multiple community suicide networks
effective		criteria:			Information	a Poisson	(7% decrease)	(120 total communities included),
ness of	Purpose	networks	50%	DV:	System	distribution.		analysis of a suicide prevention
an	of study:	establiste	regional,	changes in	(2001-2017);		Peak in 3rd	program with evidence of success and a
Australia	to	d before	30% in	ADOL	mapped	Linear &	quarter: IRR =	whole-of-community approach
n	examine	2001 or	major cities,	suicide	using	quadratic	0.86 (p=0.030)	
communi	the	after 2017	20% in	rates after	Geographic	models to	(17% decrease)	Limitations: Inability to include the
ty suicide	effect of		remote	WLF	Information	determine		most recent data or account for impact
preventio	WLF		areas	established	System	trend		of alternative suicide prevention
n	network							program use; program analyses lacked
networks	establish		Attrition: NR			DV: Post		uniform structure; reliability and
program	ment on					WLF IRR		validity not discussed
in	ADOL							,
preventin	suicide							Conclusion: WLF shows decrease in
g suicide:	rates							suicide rates with implementation
A								, , , , , , , , , , , , , , , , , , ,
controlle								Recommendation: further research
d								needed to evaluate utilization of
longitudi								alternative programs within
nal study.								accomance programs within

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
								communities that may influence the RED of suicide rates
11.	Conceptu	QUAN; QE	N = 142	IV(1): SCI at	Identified by	Basic linear	DV(1): IV2/MCI	LOE: III
Rengasa	al			90 days	medical	regression	(6%) versus	
my, M. &	framewo	Inclusion	• 12-18;	post DC	record	analysis,	IV1/SCI (17%);	Strengths: sample size strongly
Sparks,	rk: N/A	Criteria:	2017-2018		census or	linear and	(OR=0.28, 95% CI	representative of target population,
G. (2019).		• ADOL	<ul><li>Pittsburg</li></ul>	IV(2): MCI	notification	logistic	= 0.09-0.93,	used electronic medical records with
Reductio	Purpose	•	metro area	(6 calls) at	of IP staff;	regression,	p=0.037) &	access to multiple health systems, no
n of	of study:	Hospitaliz	• 70%	1, 7, 14, 30,	quasi-	Kaplan-	Kaplan-Meier	differences in suicide risk factors
postdisch	to	ed for SI	female	60, and 90	randomized	Meier, IRR,	IV1/SCI higher risk	among sample, cost effective ITVN
arge	determin	& SA	• 74%	days post	design into IV	log-rank	of STB than	
suicidal	е		white, 22%	DC	groups on	(LR).	IV2/MCI (IRR =	Limitations: limited sample size, unable
behavior	effective	Exclusion	black, 13%		day of DC	Wilcoxon	$3.73$ , LR- $X^2 = 4.4$ ,	to contact all families/patients, did not
among	ness of	criteria:	Asian, 1%	DV(1): Rate		(W) tests	p=0.036; W-X <sup>2</sup> =	use true randomization schema, no
adolesce	FU	• DC to	Native	of	Participant		4.32, p=0.038)	baseline suicide severity for most
nts	phone	long-term	American	continued	assignment	DV(1): OR,		sampled
through a	calls	care		STB	stratified by	CI, p, IRR,	DV(2): IV2/MCI	
telephon	after DC	facility	Attrition: NR		reason of	LR-X <sup>2</sup> , W-X <sup>2</sup>	(95.4%) versus IV1	Bias: low likelihood of assignment bias
e-based	to reduce	•		DV(2):	admission &		/SCI (73.6%); (β =	
interventi	STB and	Transferre		confidence	ITVN	DV(2): β, CI,	21.81, 95% CI = 9-	Feasibility: FU telephone calls after DC
on.	increase	d		in safety	recipient	р	34.6, p = 0.001)	feasible in adolescent population

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
	confiden ce in safety plan	• Placed in CPS care • Readmitt ed within 12 hours of DC • No FU contact info		plan at 90 days	(parent or parent & CHD)			Conclusion: MCI more effective than SCI in reducing continued STB and increasing confidence in safety plan (11% reduction in MCI versus SCI); MCI increases confidence in safety plan versus SCI (20% higher confidence)  Recommendation: initiate MCI early post DC from IP psychiatric hospitalization; include discussions about continued STB and review safety plans; further determine effectiveness and cost on larger scale
12. Walsh, E.H., et al. (2022). Research review:	Conceptu al framewo rk: N/A Purpose of study:	MA & MR Inclusion criteria: • CRT studies	N=12 out of 1425 potential studies (database inception to Jan 2021)	IV: PSSP  DV(1): SA  DV(2): SI	ORs, sampling variances using trial proportions, correspondin g p-values if	Data organized by PICOs, ITVN, and contextual factors; analyzed	DV(1): AOR = 0.72 [95% CI: 0.59, 0.87], p = .49 (28% lower odds) DV(2):	LOE: I  Strengths: diverse participant pool (50% in North America, others from Europe, Australia, Asia), equally distributed between male & female (M=49% male)

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
The	to	• 11-19			no trial	with R	AOR =0.85 [95%	
effect of	estimate	years old	Database		proportions	statistical	CI: 0.75, 0.95], p =	Limitations: possible increased
school-	the	• ITVN in	(6):		N4A.	packages	.93 (15% lower	sampling error in regression weights,
based	populatio n effect	PPSS	PsycINFO     Addling		MA:	metaphor	odds)	underreported school characteristics
suicide	for PSSP		Medline     Tolunation		Multilevel	and meta		across CRTs (increased variability),
preventio			• Education		random	DV 1 & 2:		moderator exclusions
n on	ITVNs on		Source		effects			Birth Collaboration and O. A. of Michigan
suicidal	ADOL SA		• ERIC		univariate	OR, CI, p		Bias: 6 studies low risk & 4 studies high
ideation	& SI and		• Web of		models,			risk of bias (based on CCRBT), no
and	explore		Science		consistency			publication bias (Egger's Regression
suicide	how		• CCRCT		(CI), HGNY (I <sup>2</sup>			Test), selection bias limited
attempts	ITVNs				statistic),			5 11111 2002 111 171 111 250 04
and the	effects		Setting:		Forest plots			Feasibility: PSSP viable ITVN to DEC SA
role of	vary		• 10 school		145			and SI in CYP
interventi	based on		• 2 class		MR:			Constant DOCD IT ALCIC DED CA
on and	ITVN and				Univariate			Conclusion: PSSP ITVN SIG RED SA
contextu	contextu		Attrition: NR		meta-			(28%) and SI (15%) in CYP with larger
al factors	al				regression			SA odds RED with 12 month FU and
among	moderat							multi-stakeholder delivery
adolesce	ors							
nts: A								

Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
meta- analysis and meta- regressio n.								Recommendation: further studies to determine how to maximize distribution of PSSP (scale, adoption, implementation, sustainability) & include a minimum of 1 year FU for SA
13. Watling,	Conceptu	QUAL	N=18	IV: post- discharge	Focus groups (10	Phenomeno logical	DV: person- centered and	LOE: VI
D.P., et al. (2022).	framewo rk: N/A	Inclusion Criteria: • lived-	Characteristi cs • 5 patients;	FU phone call	participants per group across 6-10	analysis using Colaizzi's 7	participatory in nature (being heard,	Strengths: small sample for best thematic analysis, number of focus groups held based on research data for
Developi ng a	Purpose of study:	experienc e with	17-21 yrs (M=19.2); 3	DV: important	focus groups); led	steps and Nvivo 12	understood, and active in ITVN	best results, study well-defined and well-described to be adequately
post-disc harge suicide	to integrate lived-	suicidality • limited to	male • 3 female parents	foundation al themes	by female clinical psychologist	DV: foundationa	process), phone call/FU service dynamics	replicated, Limitations: short-term study, small
preventio n interventi	experien ces into the	consumer advisory groups	•10 ED MH clinicians (6 female) - 5		with >15 yrs experience in CYP MH and	I themes	(relationship and rapport building, developing	participant pool may not reflect overall population, older aged young people, participants may not have been
on for children	design of a suicide	and Acute	RNs, 3 social workers, 2		STB		connection), and phone call	forthcoming in expressing true opinions, sample weighted towards

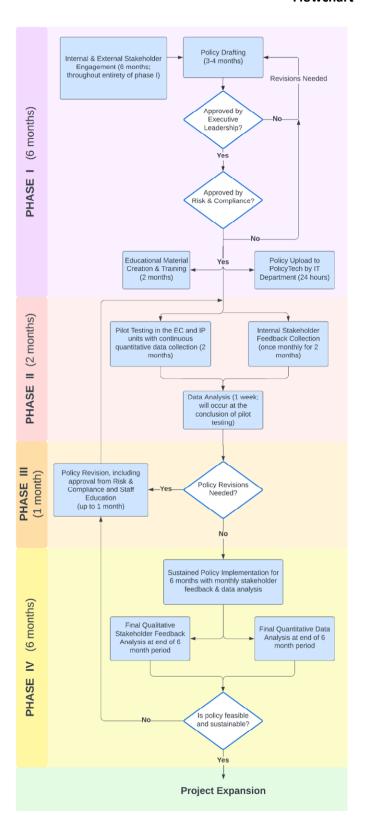
Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
and	preventi	Response	psychologist		Semi-		purpose (clear	clinicians, semi-structured format may
young	on ITVN	Team	S		structured		understanding	have indirectly influenced the
people: A	delivered	• 17-25	Clinician		recorded		and appropriate	discussion
qualitativ	by phone	yr old	experience:		interviews		support provided)	
e study	after DC	(patients),	6-20 yrs		Rcordings			Bias: possible sampling bias
of	from an	caregivers	(M=11.75)		transcribed			
integratin	ED for	, and ED			by Pacific			Feasibility: Post-DC FU phone calls are a
g the	STB	MH	Setting:		Transcription			feasible way to continue MH
lived-exp		clinicians	Queensland		s with			discussions with patients experiencing
erience			Children's		participant			STB and help transition of care (IP to
of young			Hospital,		de-			OP)
people,			Brisbane,		identification			
their			Australia;					Conclusion: Post-DC phone calls
carers,			April-May,		QUAL			effective for FU re: OMHFC compliance,
and			2019		analysis;			continue MH care discussions,
mental					phenomenol			continued symptoms/STB
health			Attrition: NR		ogical			
clinicians.					analysis;			Recommendation: need to test in
					deductive			specific settings and on larger scale
					content			with higher % of patients (vs clinicians);
					analysis			calls should be responsive to

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Citation: (i.e., author(s) , date of publicati on, & title)	Concept ual Framewo rk	Design/ Method	Sample/ Setting	Major Variables Studied and Their Definitions	Measuremen t of Major Variables	Data Analysis	Study Findings	Strength of the Evidence (i.e., level of evidence + quality [study strengths and weaknesses])
								person/situation; structured, have clear purpose, recognize individual needs, provide tailored support/guidance

## Appendix B

## **Flowchart**



## Appendix C

## **Employee Feedback Survey**

The organization values your insight and feedback. Please complete the attached survey in response to the organization's new policy for patients presenting with suicidal thoughts or behaviors.

Thinking about the new policy, please answer the following	Not at all		A little		Very Well
1. I understand the purpose of the new policy.	1	2	3	4	5
2. I understand and feel prepared to perform my responsibilities.	1	2	3	4	5
3. Interdepartmental communication and collaboration have improved.	1	2	3	4	5
4. I am satisfied with the efficiency of the new policy.	1	2	3	4	5
5. I feel the new policy adequately addresses the needs of our patients.	1	2	3	4	5
6. I feel the new processes are helping improve our patient outcomes.	1	2	3	4	5
7. I feel the policy provides adequate patient resources and education.	1	2	3	4	5

- 8. Did you receive education about the policy before the go-live date? Y / N
- 9. Has the new policy negatively affected your productivity or daily routine?  $\,\,$  Y  $\,$  N If yes, please explain.

\_\_\_\_\_

10. Do you feel there are any bottlenecks or unnecessary steps in the new workflow? Y / N If yes, please explain.

11. Are there any areas in which you feel that you would benefit from more training?  $\,\,$  Y  $\,/\,$  N If yes, please explain.

\_\_\_\_\_

- 12. Would you be willing to provide additional information detailing your experiences with the implementation of the new policy?  $\,Y\,/\,N\,$
- 13. In the future, would you be willing to participate in organizational process improvement initiatives to improve processes and workflows?  $\,Y\,/\,N\,$
- 14. Please provide any additional feedback in the space below.

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