

The Clarity Wellbeing Center Patient Experience: A Quality Improvement Project

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Table of Contents

Abstract	3
Introduction	5
Problem Statement	9
Problem Background	9
Problem Scope	14
Problem Consequences	15
Literature Search Process	17
Literature Matrix Table	17
Literature Synthesis	18
Knowledge Gaps	22
Proposed Solutions	22
Project Setting, Sponsor, Stakeholders, and Participants	24
Setting	24
Participants	24
Interprofessional Team	25
Stakeholders	25
Gap Analysis	26
Organizational Needs Assessment/SWOT Analysis	26
Theory Overview	30
Project Goal: Overall Goal/Mission	31
Objectives	31
Methodology and Influencing Factors	35
Pre-implementation: Protection of Human Subjects	35
Implementation	36
Post-implementation/Monitoring	36
Work Plan	37
Implementation	38
Results of Data Collection	39
Discussion of Data/Outcomes Interpretation	41
Dissemination	41
Conclusion	42
References	44
Appendices	52

Abstract

Nature and scope of the project. In the United States and within the Arrowhead region of Minnesota, there is a lack of access to mental health services for individuals experiencing an acute crisis (Falconer et al., 2018; Minnesota Department of Health, 2021). Coates (2018) describes different approaches for providing crisis care within the community. This quality improvement project aimed to develop a best practice toolkit about implementing the Living Room Model (LRM), an identified approach for crisis care in the community, at a facility that is under development.

Synthesis and analysis of supporting literature. Literature synthesis revealed that lack of access to mental health care contributed to the phenomenon of boarding in the Emergency Department. Boarding can be lengthy, detrimental to patients, and costly to facilities (Canady, 2019; Nordstrom et al., 2019). While community-based care does not have a one-size fits all approach, care in a relaxed environment is preferred by consumers. Heyland et al. (2013) describe the LRM as an approach to providing care in a homelike environment, instead of a sterile facility. Centers using the LRM can provide crisis services that negate the need for an Emergency Department visit, save money, and consumers find hope in peer support (Ashcroft, 2006; Heyland et al., 2013).

Project implementation. The principal investigator developed interview questions to interview experts in providing acute mental health crisis care, at facilities using the LRM and with local facilities who do not use the model. Two experts provided answers to the interview questions which were used to inform development of the best practice toolkit that describes appropriate triage consideration and assessments and guides patient flow using the LRM.

Evaluation criteria. The best practice toolkit was evaluated by the experts interviewed and four additional experts using a survey containing Likert-scale and open-ended questions. Survey feedback was used to revise the toolkit before it was presented for final evaluation.

Outcomes. The best practice toolkit received positive feedback from the experts with 100% reporting the recommendations were clear and feasible to implement at a facility in Minnesota.

Recommendations. Use of the LRM is recommended to the project setting.

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A 2015 report by the Minnesota Department of Human Services identified that not a single region in Minnesota met the demand for services for adult mental health services, and almost every region was missing a critical service (Werner, 2017). The report found that services for children were even more sparse (Werner, 2017). Mental health care is provided across many levels, with the goal being to provide care in the least restrictive environment necessary to ensure an individual remains safe. The Minnesota Department of Human Services (DHS) describes a continuum starting with outpatient therapy on one end and state hospitalization at the other end of the spectrum (Minnesota DHS, 2016). Outpatient therapy would be considered the least restrictive environment on the continuum and state hospitalization, on a locked psychiatric unit under commitment, would be considered the most restrictive environment on the continuum (Minnesota DHS, 2016).

Commitment is ordered by a judge and indicates an individual needs to remain at an identified location to receive treatment and it is ordered when failure to receive treatment would endanger the safety of the individual or others (Office of the Revisor of Statutes, 2021). An individual may receive a provisional discharge from the hospital to continue their commitment at a subsequent location, such as a group home, with stipulations that would necessitate return to the hospital, usually involving safety concerns or medication noncompliance (Office of the Revisor of Statutes, 2021). An individual may also have a Jarvis order placed by a judge that orders the patient to take their mental health medications, which can include the medications being administered as a forced injection instead of an oral medication (Office of the Revisor of Statutes, 2021). Individuals may fluctuate along the continuum throughout their lifetime.

The outpatient care team for an individual's mental health needs can include but isn't limited to a social worker/case manager, therapist(s) (individual, family, and group), a

medication provider comfortable with prescribing psychiatric medications, a substance abuse/chemical dependency counselor, peer support specialists, children's therapeutic services and supports (CTSS) workers or adult rehabilitative mental health services (ARMHS) workers (H. Macor, personal communication, December 1, 2021). An individual may start with an individual therapist and then end up hospitalized on an inpatient psychiatric unit. As part of discharge planning, the unit social worker may make referrals for additional supports such as a case manager and a medication provider for the individual to be able to receive medication refills after discharge (H. Macor, personal communication, December 1, 2021). The case manager can help the individual in many ways, depending on their needs, such as guiding the individual through housing applications, placing referrals for outpatient chemical dependency treatment, or assisting with transportation needs. Depending on the age of the individual, a CTSS worker or ARMHS worker may be requested to join the care team to help reinforce coping skills and life skills as extra support for the individual to be successful in the community (H. Macor, personal communication, December 1, 2021).

These professional supports may not always be affiliated with the same organization and therefore may not always appropriately coordinate care, as the individual receiving care may be unsure of the need to inform all members of the care team about the other members and sign necessary releases of information for coordination (H. Macor, personal communication, December 1, 2021). The individual receiving care may also need to expand their care team beyond its current members, but the wait times for referrals can be lengthy (H. Macor, personal communication, December 1, 2021). Factors including, but not limited to, the age of the individual needing care, their insurance coverage, the phase of their illness and symptoms (maintenance versus acute crisis, for example), or their geographical location can impact the

referral process to access mental health care (P. Svingen, personal communication, April 7, 2021). As a result, length of time from referral to the care being provided can be a prompting event in an acute mental health crisis (P. Svingen, personal communication, March 1, 2021).

Individuals struggling with homelessness, lack of food security, lack of access to transportation, or lack of social supports may find these social determinants of health impact their ability to access healthcare or follow through with scheduled follow-up appointments (Office of Disease Prevention and Promotion, 2022). The language and literacy of a healthcare provider may not be comparable to that of the individual seeking care and when paired with mistrust of healthcare providers or cultural differences in treatment preferences, these may also be barriers to participation in follow-up appointments (Office of Disease Prevention and Promotion, 2022). Healthy People 2020 has recognized that social determinants of health need addressing to move toward equity in health for all (Office of Disease Prevention and Promotion, 2022).

The United States DHS identified 4,000 underserved and rural areas that do not have adequate access to mental health care, which has been proven to be detrimental as 2.6 million rural patients suffer from depression and 1.1 million rural patients suffer from anxiety (Falconer et al., 2018). In rural areas of Minnesota, there is a ratio of 1,518 people to each mental health provider compared to 304 people to each mental health provider in urban areas (Minnesota Department of Health, 2021).

With the coronavirus pandemic, many organizations are seeking to serve patients via telehealth, and this may be the only way an individual can access their mental health provider. Dr. Sutherland, a child psychiatrist who works for the intensive outpatient partial hospitalization program Amberwing, described how the organization started to provide programming virtually at

the beginning of the pandemic and has continued to do so (personal communication, November 1, 2021). Many children referred for step-down care at Amberwing after discharging from the inpatient psychiatric unit are now not attending part or all their virtual programming. They describe not feeling connected to their peers or care providers and are not benefitting from care that was determined to be medically necessary (S. Sutherland, personal communication, November 1, 2021).

A mental health crisis has many possible precipitating factors. The children not attending their step-down care virtually may suffer from inadequate reinforcement of coping skills taught during their inpatient stay and lack of adequate medical monitoring of their newly prescribed medications (S. Sutherland, personal communication, November 1, 2021). Just as an individual with a physical health condition may have medications necessary to sustain their functioning, such as a diabetic who requires insulin, an individual with mental health conditions may start to decompensate when not consistently taking their psychiatric medications (S. Sutherland, personal communication, December 3, 2021). An individual with mental health conditions may not be taking their medications for many reasons: due to missing appointments needed for a refill; not having an established provider for office visits needed for a refill; sometimes when individuals start to feel better, they simply stop their medications from thinking they are no longer needed or an individual with paranoia might believe their medications are doing harm instead of good and stop taking them (S. Sutherland, personal communication, December 3, 2021). Whatever the reason for not taking medications consistently, this can contribute to a mental health crisis. Anniversaries of traumatic events in a person's life, current traumatic events such as domestic violence, being intoxicated, or struggling with suicidal thoughts may also lead to a mental health crisis (S. Sutherland, personal communication, December 3, 2021).

Coates (2018) identified differences in how service providers respond to an individual with urgent or emergent mental health needs. Therefore, the principal investigator developed a PICO question to explore one identified care delivery model. In serving individuals in a mental health crisis, is the Living Room Model compared to other models of acute mental health care a safe model that effectively triages patients and reduces Emergency Department visits to access care?

Problem Statement

St. Louis County, Minnesota would benefit from increased access to mental health services for its residents. Crisis services for mental health can be delivered in various formats and in varying locations (Minnesota Department of Human Services, 2015). Providing evidence-based care that is accessible urgently improves patient outcomes, is financially beneficial, and the ability to provide such care should be more widely available (Heyland et al., 2013). Creating a quality improvement initiative to guide crisis mental health care at a new local facility would be of benefit to the population. St. Louis County had an estimated population of 199,070 in 2019 based on projections from 2010 census data (United States Census Bureau, 2019).

Problem Background

According to the Centers for Disease Control and Prevention, mental health involves a person's emotional, psychological, and social well-being, and having "good" mental health is evidenced by how an individual copes with stress and times of hardship (2021a). Mental health and mental illness are often used as synonymous terms, but a mental illness is a diagnosis or disorder that can be either episodic, as in discrete periods of beginning to end, or continuous and long-lasting (Centers for Disease Control and Prevention, 2021a). Mayo Clinic describes mental illnesses as disorders that affect a person's mood, thinking, or behavior (2019). The Centers for

Disease Control and Prevention describe mental illness as common in the United States, stating more than 50% of individuals will receive a mental illness diagnosis in their lifetime (2021a). The statistics for children indicate 1 in 5 children is either currently or will in their lifetime have suffered with a seriously debilitating mental illness (Centers for Disease Control and Prevention, 2021a). A mental health crisis is a situation in which an individual's actions have the potential to cause harm to themselves or others and/or their behaviors prevent them from being able to care for themselves or function in the community (NAMI, 2018).

There is a tremendous lack of available resources to provide emergent care for those in a mental health crisis across the country. There has been a decrease of over 500,000 inpatient psychiatric hospital beds in the United States since the 1950s (Lutterman et al., 2017). The state of Minnesota saw a decrease from 206 inpatient public psychiatric beds in 2010 to 194 in 2016 (Office of Research and Public Affairs, 2016). A minimum of 50 beds per 100,000 people are necessary to provide adequate care to individuals who are severely mentally ill; the state of Minnesota only has 3.5 beds per 100,00 people (Office of Research and Public Affairs, 2016).

The 1960s saw a push towards deinstitutionalization, and the concept of managed care became popular in the 1980s, causing a shift from mentally ill patients receiving care in a state-run hospital to inpatient, outpatient, and community care (Nordstorm et al., 2019). The Community Mental Health Centers Construction Act of 1963 aimed for community-based treatment to be the standard of care for individuals with mental illness or intellectual disabilities (Pinals & Fuller, 2017). The Social Security Disability Insurance Program of 1965 established Medicaid insurance for those with low income or mental health disabilities (Pinals & Fuller, 2017). In the 1970s, there was a push to restrict civil commitment, empowering individuals (Pinals & Fuller, 2017). While these may sound like steps toward providing a full spectrum of

care for those with mental illness, the federal government then moved in the direction of reducing and finally eliminating funding for community-based mental health centers (Pinals & Fuller, 2017).

A literature review by Coates identified three distinct, yet interconnected, crisis community models “acute/crisis assertive outreach models, community crisis clinics, and joint crisis models between mental health and police and/or ambulance” (2018). Acute/crisis assertive outreach models generally provided care immediately following discharge from an inpatient setting, oftentimes using an interdisciplinary team, and in the least restrictive environment, which could include the individual’s home (Coates, 2018). The aim of care is to prevent worsening of the crisis situation which could lead to readmission (Coates, 2018). Evidence suggests that community-based crisis care is as clinically effective as inpatient care (Coates, 2018). Community crisis clinics have limited hours and attempt to stave off presentation in an Emergency Department (Coates, 2018).

Harvey and Gumport (2015) discuss evidence-based psychological treatment for mental disorders and found that sources agree mental disorders are undertreated. Their review found that 50-60% of individuals receiving treatment for their mental illness were not receiving adequate care to treat their condition (Harvey & Gumport, 2015). They describe that although pharmacological treatments receive much more marketing, evidence-based psychological treatments have results that are “arguably more encouraging” (Harvey & Gumport, 2015). This is of concern, as access to these services is declining (Harvey & Gumport, 2015).

Annual patient census on the child/adolescent inpatient psychiatric unit in Duluth, MN has continued to increase since 2017 (B. Rowheder, personal communication, December 18, 2021). As patients discharge from the unit, many are in need of referrals for outpatient services,

such as therapy and medication management, and with patient census on the rise, referrals for mental health follow-up are at an all-time high (H. Macor, personal communication, February 11, 2021). Conversation with Holly Macor, social worker, revealed that outpatient therapy at Essentia, one of two major hospitals in Duluth, MN, received over one hundred referrals in a week (personal communication, February 11, 2021). With the loss of medication and therapy providers who had worked for Essentia, referrals that previously would have been made in house are being completed to other community providers (H. Macor, personal communication, February 11, 2021). Providers within the Essentia system are retiring or moving to other parts of the country, and the recruitment office has been unsuccessful in hiring new providers (B. Rowheder, personal communication, December 1, 2021).

On December 1, 2021, there were 49 job postings for positions that would provide care to patients hospitalized on a psychiatric unit, including medication providers, therapists, and registered nurses at Essentia Health facilities located in St. Louis County (Essentia Health, 2021). In February 2021, when asked about the availability of services, it was stated that the providers within St. Louis County who were able to take referrals for new patients needing adolescent psychiatric medication management were limited to one practice (H. Macor, personal communication, February 11, 2021). A local therapy provider reported opening more time in her schedule to see patients at the start of the pandemic and “it was booked almost instantly and has remained consistently full” (L. Orbeck, personal communication, December 1, 2021). Ability to accept new referrals for therapy and medication management of psychotropics is also limited at St. Luke’s, the other major hospital located in Duluth, MN (J. Johnson, personal communication, December 18, 2021). As providers leave, both Essentia and St. Luke’s are trying to attract the same pool of applicants to fill openings, since the facilities are located in such close proximity to

each other (J. Johnson, personal communication, December 18, 2021). A patient with a new referral for therapy oftentimes has to book their first appointment 6 months out and place their name on a cancellation list in hopes of obtaining an appointment sooner (J. Johnson, personal communication, December 18, 2021).

“From 2005-2014, the total number of hospital stays for all causes fell by 6.6%; for mental health/substance use conditions, hospital admissions rose by 12.2% in the United States--the only category of hospitalization that increased in the time period” (Pinals & Fuller, 2017, p.4). In a review by Coates (2018), it was found that 4-10% of all patients arriving at the Emergency Department were seeking care for their mental health which impacts patient flow, and staff members may feel ill-equipped to provide therapeutic interventions (Coates, 2018). While in the Emergency Department, patients await assessment by a mental health professional; however, assessment does not always lead to a quick transition from the Emergency Department to an inpatient psychiatric bed or to outpatient services (Coates, 2018).

This problem is evident in St. Louis County. One local hospital offers roughly 37 inpatient psychiatric beds for children and adults, with bed capacity fluctuating based on provider availability and milieu needs (B. Rowheder, personal communication, February 1, 2021). These beds are often filled which causes patients to remain in the Emergency Department, filling their eight designated behavioral health beds and often overflowing into the main Emergency Department floor. Lack of timely care can halt referrals to outpatient services or access to medication changes which could prevent decompensation in functioning if care was provided. The length of time before treatment is implemented can lead to a continued downslide in physical and mental health because of inadequate and unavailable care to address exacerbated symptoms. This downslide may end up rendering a patient as a potential danger to themselves or

others, an inability to contribute to society by means of employment, and result in a reliance on state assistance for their daily needs. While the community has various mental health service providers; with focuses such as medication management, psychotherapy, occupational therapy, case management, and chemical dependency treatment; who provide care on an inpatient and outpatient basis, further exploration of acute crisis care and collaboration of care to improve access to needed outpatient services should be evaluated.

Problem Scope

St. Louis County, MN has three hospitals with inpatient psychiatric units, but only one of these facilities has a unit that serves children/adolescents. All the facilities also offer outpatient mental health services along with various standalone providers. If an individual is detoxing from drugs or alcohol, the Center for Alcohol and Drug Treatment (CADT) has 30 beds available (CADT, 2020). Birch Tree Center has 12 beds available in their residential crisis stabilization center (RCSS) for individuals in a mental health crisis that do not meet inpatient criteria while Range Mental Health offers an 8-bed RCSS (A. Vanneste, personal communication, May 1, 2021). There are various board and lodge facilities, intensive residential treatment services, and residential treatments within St. Louis County, yet despite these efforts individuals still experience mental health and drug related crises.

“St. Louis County consists of 27 cities, 72 townships, 75 unorganized townships and portions of two Indian reservations” (St. Louis County, 2018a). St. Louis County had an estimated population of 199,070 in 2019 based on projections from 2010 census data (United States Census Bureau, 2019). Of St. Louis County’s population, 12.8% was said to be living in poverty (United States Census Bureau, 2019). Provider to patient ratio was 799 patients to one primary care provider and 472 patients to one mental health provider in 2018 (Data USA, 2018).

Problem Consequences

Fifty-four out of 164 inmates housed at St. Louis County jail on the roster as of November 2, 2021, had drug related charges. Some were charged with possession, while others were charged with distribution. First time offenders may receive leniency, but with second and subsequent offenses, movements to be tough on crime leave little option but incarceration for sentencing (Dornfeld, 2013). Oftentimes, drug users may be self-medicating past trauma or suffering from mental health concerns, so individualized treatment options are needed (Dornfeld, 2013). St. Louis County offers treatment court programs for drug/driving while impaired (DWI) and mental health where participants are supported by the prosecution and defense working together to support an individual receiving access to treatment and rehabilitation while being supervised for their offenses with frequent check-ins (Minnesota Department of Human Services, 2019). While these programs have great potential, their reach is limited, with Judge David Johnson indicating he welcomed 200 participants to the drug court he presided over in St. Louis County in a ten-year period (Olsen, 2018).

A cohort analysis by Fisher et al. (2007) examined drug-related arrests in 13,816 individuals who were receiving public mental health services. Of the cohort, 720 individuals (or 5%) had at least one drug-related arrest (Fisher et al., 2007). Ninety-five percent of individuals with a drug-related arrest also had additional charges (Fisher et al., 2007). The American Public Health Association published a policy statement in 2000 indicating that individuals with mental health disorders, substance use disorders, or co-occurring disorders are arrested at a greater rate than the general population. An estimated 3-11% of the prison population identified as “severely mentally ill” also suffer from a co-occurring substance use disorder (American Public Health

Association, 2000). In their policy statement, it is also noted that 95% of individuals who commit suicide in prison or jail suffer from mental illness (American Public Health Association, 2000).

A 2004 survey revealed that 44% of state prisoners and 32% of federal prisoners serving time for drug offenses reported being under the influence at the time of their crime (Bureau of Criminal Justice Statistics, 2021). A 2006 survey revealed that 74% of state prisoners with a mental illness also were identified as abusing drugs or alcohol (Bureau of Criminal Justice Statistics, 2021). The same 2006 survey indicated that 37% of the state prisoners with a mental health problem identified being under the influence at the time of their crime (Bureau of Criminal Justice Statistics, 2021).

Individuals with criminal history, that drug and alcohol or mental health issues may have contributed to, face many struggles. Due to their history, employment opportunities may become limited, ability to rent or purchase a home may be affected, doors may be closed on educational options, all of which can hinder forward progress in recovery and could contribute to relapse (National Conference of State Legislatures, 2018). St. Louis County has experienced an increase in opioid overdoses over recent years. In 2018, there were 151 overdoses with 13 fatalities; in 2019, there were 230 overdoses with 22 fatalities. From January to November of 2020, there were 255 overdoses, 25 resulting in death (Palacios, 2020). The Duluth Police Department received grant money to hire a second peer support recovery specialist and a licensed alcohol and drug counselor (LADC) to support their efforts of education and treatment referrals while cracking down on drug sales (Johnson, 2020). It is evident these efforts need further support.

The state of Minnesota is seeing an increase in deaths by suicide. 783 residents of Minnesota died by suicide in 2017. In 2017, St. Louis County reported a suicide rate of 18.5 per 100,000 people, higher than the state average of 13.8 per 100,000 (Kaul, 2018). Lack of access to

services, including inpatient psychiatric beds and outpatient psychiatric providers is undoubtedly contributing to this rise. The Centers for Disease Control and Prevention (2021b) identify that barriers to healthcare are a risk factor for suicide and increasing access to physical and mental health care is a protective factor to reduce risk. The Suicide Prevention and Resource Center, of the University of Oklahoma's Health Sciences Center, specifies that lack of access to behavioral health care is a risk factor for suicide (2020).

Literature Search Process

A thorough review of current literature was completed. The databases utilized were CINAHL, SOLAR, and Google Scholar. The search terms used were as follows: care delivery model AND theory, culturally competent community care, cultural care theory integrated model, mental health AND crisis AND care delivery, CAHOOTS model, CCBHC, BHH, community hub, living room model, SAMHSA, history AND mental health care AND United States, history AND mental health care delivery AND United States, outcomes AND mental health care AND crisis, substance abuse AND mental health, mental illness AND drug charges. In conducting the literature review, the goal was to exclude literature from greater than 10 years ago. The inclusion criteria were peer reviewed/scholarly articles, research articles from reputable journals, articles that were less than 10 years old, articles written in the English language, and articles with full-text available. The original literature search process yielded an abundance of articles, with 40 articles analyzed for consideration of use. The principal investigator also reviewed articles and guidelines from national mental health organizations. After review and analysis of the articles from the original search, 22 articles were compiled into a literature matrix.

Literature Matrix Table

Literature from the conducted search was organized into a literature matrix. The matrix is an organized overview of material that highlights important information from articles reviewed by the principal investigator. The matrix allows an outside viewer a glance at the breadth of articles reviewed by the principal investigator in a condensed view. The literature matrix is located in Appendix A and contains a review of 22 articles.

Literature Synthesis

Review of literature confirms that current mental health care delivery is insufficient to provide for the population. Many individuals seek access to care through the Emergency Department when in a mental health crisis as it may be the only location with immediate walk-in access. This causes financial strain and contributes to poor patient outcomes, as often they have excessive wait times until an inpatient bed is available and may not have access to any psychiatric care during their wait (Nordstrom et al., 2019). This leads to the reader to the first theme discovered during the literature review, that boarding in the emergency department is problematic.

Canaday (2019) describes boarding of patients with mental illness as the length of time a patient remains in the Emergency Department after their disposition has been determined that they need a psychiatric inpatient bed. This phenomenon has become a national crisis due to lack of affordable, comprehensive psychiatric treatment (Canaday, 2019). Canady describes that for individuals with severe mental illness, this delay in treatment can result in such deterioration that their future recovery may be less achievable (2019). Zodda and Underwood (2019) discuss that boarding in the emergency department can contribute to increased mortality rates and increased length of stay for patients once admitted to the hospital. Mortality rates increased 2.5% for patients boarded less than 2 hours and increased 4.5% for patients boarded longer than 12 hours

(Zodda & Underwood, 2019). Average length of stay in the hospital was 6 days for those boarded less than 2 hours, and it increased to 8 days for those boarded longer than 12 hours. Boarding also decreases patient satisfaction and increases the number of patients who leave without being seen, which in turn leads to worse outcomes (Zodda & Underwood, 2019).

Major et al. (2021) conducted a retrospective chart review to examine adverse events experienced by psychiatric patients boarding in the Emergency Department. Of the 200 selected patient charts, 116 patients (58%) experienced at least one adverse event while boarding (Major et al., 2021) Adverse events were defined as “unintended harms resulting from the delivery of care,” and the study included the following as examined adverse events: increasing agitation, administration of benzodiazepines, sleep problems, verbal intervention by staff members other than security, and protective services physical and/or verbal intervention (Major et al., 2021). The study recognizes that benzodiazepines may be prescribed for conditions such as anxiety, but to be considered in the count of adverse events, the medication was administered due to escalating agitation (Major et al., 2021).

A second and third theme discovered during the literature review involves the discussion on community-based care. It was found that community-based care does not have a one-size fits all approach but that care in a more relaxed environment is preferred to consumers. Sources that provided discussion on community health workers, community-based urgent care, and models of care were reviewed.

Boldt and Chung (2020) wrote about community health workers (CHW) and their role in behavioral health care. Community health workers aim to come alongside individuals and provide peer support with the hope of increasing access to care and improving outcomes by helping to facilitate relationships between individuals and providers (Boldt & Chung, 2020). “In

2007, the Minnesota legislature approved direct Medicaid reimbursement for CHW services” (Boldt & Chung, 2020). Steps were taken to ensure CHWs were qualified, requiring individuals to obtain a certificate of training or have at least five years of experience providing care working under a licensed health professional (Boldt & Chung, 2020). In 2016, Behavioral Health Home services became reimbursable through Medical Assistance, and a CHW may serve as a qualified home specialist serving on the care team for individuals with a “serious mental illness” or “emotional disturbance” (Boldt & Chung, 2020). Studies analyzed for their review found that individuals who received care from a CHW “demonstrated the same level of functional and symptom stability” compared to individuals receiving care from professional or paraprofessional staff (Boldt & Chung, 2020).

Allen et al. (2002) created the Report and Recommendations Regarding Psychiatric Emergency and Crisis Services as part of the APA Task Force on Psychiatric Emergency Services. They describe how psychiatric urgent care services/clinics are an essential component in the continuum of care for mental health (Allen et al., 2002). The two main purposes of an urgent care center are to provide quick access and treatment to new patients with urgent needs as well as same day assessment for patients who already have a mental health treatment team that they either are unable to access timely or their need occurs after hours (Allen et al., 2002). The center provides care to attempt to stave off a psychiatric emergency, and they may be able to care for patients with fairly severe needs (i.e. a patient who is having self-harm urges but appears to be able to control the urges which could be additionally managed with interventions provided) (Allen et al., 2002). The center should have access to laboratory services, medications to dispense a small supply or ability to provide a prescription, and each patient should have a discharge plan with follow-up aftercare (Allen et al., 2002).

Ashcroft (2006) of META Services offered insight on how peer counselors can impact care provided at two *Living Room* centers in Maricopa County, Arizona. Besides having previously received treatment in some for their own mental health concerns, the peer employees received 70 hours of peer employment training and 35 hours of orientation training to assure their competence in providing care in an acute crisis setting (Ashcroft, 2006). The initial location in Phoenix was locked and only allowed a stay of up to 24 hours, but with the opportunity to open a space in Peoria, META Services was able to have an unlocked space, with eight beds, and stays of up to five days (Ashcroft, 2006). Before opening the Peoria location, the center in which it was located sent an average of 16 people per month to the hospital for further care (Ashcroft, 2006). A month after opening the *Living Room*, that number had dropped to 6 people, and for months 2 and 3, it was only 5 people (Ashcroft, 2006).

Ashcroft (2006) held focus group conversations on three occasions with people who had used *The Living Room* or had been hospitalized for psychiatric care to assess what they feel would promote recovery should they require crisis services in the future. Common themes emerged amongst the groups (Ashcroft, 2006). Individuals wanted a setting that felt like home, to be treated with respect and not judged, and identified preferring a normal mode of transportation, not law enforcement, such as having members of the center transport them (Ashcroft, 2006). They also identified appreciating peer support as it provided hope that they too could recover (Ashcroft, 2006). Individuals valued education, choices, creation of a recovery plan, and the ability to return if experiencing a relapse of symptoms (Ashcroft, 2006).

The project agency aims to bridge the gaps in care and provide for patients in crisis to avoid emergency department visits while still addressing their physical and mental health needs in one convenient location. The literature suggests that an integrative approach promotes positive

patient outcomes (Coates, 2018). Assessing and treating physical and mental health needs, including substance abuse concerns, of an individual in a mental health crisis outside of the hospital is feasible and has been reported to be preferable to the individual receiving care (Heyland et al., 2013). The ability to serve on the continuum of care will allow the project agency to ensure recommendations from an inpatient stay are followed with care managers supporting patients, it could provide services in the interim while awaiting an outpatient appointment, and it could address immediate needs to ensure safety. Literature supports developing individualized interventions that are patient-centered, evidence-based and trauma informed. (SAMHSA, 2014b).

When completing the literature review, the principal investigator was cognizant of the quality of the evidence being reviewed. Evidence was ranked in levels I-VII based on the rating system for hierarchy of evidence by Melnyk and Fineout-Overholt. The level of evidence for each article can be found within the literature matrix located in Appendix A.

Knowledge Gaps

There is no identified clear-cut recommendation on the best way to provide care to those in a mental health crisis found within the previously conducted literature search. Coates et al. (2018) reviewed current models of care and found there is a need for further research, especially in integrated models, connecting hospital and community care. Individuals experiencing mental health issues may fluctuate rapidly from having an urgent need to having an emergent need. Having the availability to rapidly access quality and competent care is a gap in the community that would serve many if filled.

Proposed Solutions

The health program for this project was a data gathering and analysis intervention to develop a best practice toolkit that can be utilized as a guide to inform evidence-based care at the developing project setting. For the purposes of this project, the toolkit was not utilized by the project agency as the agency was not open prior to the completion of the project. The toolkit was developed by the principal investigator and evaluated by experts in providing acute mental health crisis care. Based on feedback received, it was revised until a completed toolkit was presented to the project agency.

The specific aim of this quality improvement project was to identify, interview, and analyze gathered data from facilities currently providing acute mental health crisis care to individuals. The data gathered was on the use of the Living Room model for providing care that the project agency can use as a guide when planning to open their facility and after the facility has opened. Data on appropriate triage assessments that help determine if an individual is safe to receive care at the agency was gathered and built into the toolkit. Access to acute crisis mental health care decreases emergency department visits and improves overall quality of life.

One such facility providing acute mental health crisis care is The Living Room Center. In the first year of being opened, the center demonstrated both a financial benefit to the community as well as positive outcomes for those served (Heyland et al, 2013). Of the 228 visits to the center, 213 visits were deflected from the local Emergency Department, a savings of approximately \$550,000 to the state of Illinois (Heyland et al., 2013). The Living Room Center provides care in a setting that feels more like home and less like a sterile medical facility (Heyland et al., 2013). Heyland et al. (2013) describe previous research that individuals in an acute crisis identify desiring a safe place to go, with trained individuals they can talk to, in a location other than a hospital.

Project Setting, Sponsor, Stakeholders, and Participants

The best practice toolkit the principal investigator created was designed for the project agency, a center in St. Louis County that is under development. The principal investigator's contact and mentor at the project agency was Diane Holliday-Welsh, an individual who has been spearheading the development of the center. The population of St. Louis County was considered a stakeholder in numerous roles: as consumers of care; as supports to those consuming care, both professional and personal; local law enforcement and local government officials. Staff that serve in various roles at centers providing mental health crisis care were asked to participate in interviews to gather data to inform the best practice toolkit.

Setting

The project agency is under development. The physical location had not been finalized at the onset of the principal investigator's work, and the project agency was not open prior to this project's implementation. The lead architect was selected and was guiding the site selection process. Consideration was given to finding and expanding/redeveloping a current location (D. Holliday-Welsh, personal communication, June 1, 2021). The project agency identified a physical location in an existing building during the principal investigator's project implementation (Slater, 2022). Construction has not started to redesign the space to fit the project agency's needs (B. Rowhder, personal communication, March 31, 2022).

Participants

The participants in the intervention were staff of facilities providing acute crisis mental health care. This was proposed to include providers, therapists, nurses, peer support specialists, case managers, and administrative staff. The specifics of the participants varied based on their willingness to engage in an interview for data collection. With the project agency desiring to

utilize the Living Room Model, facilities currently utilizing that care model were included. Residential crisis stabilization centers, EMPATH units, and EDs with behavioral health zones were also considered. Exclusion criteria was any location that does not provide mental health care.

The principal investigator was not seeking patient specific information during the interviews. The aim of the interviews was gathering data from experts in the field of mental health care and leadership. The information gathered provided input and recommendations to shape the best practice toolkit that focuses on implementing the Living Room Model and effective triage and assessment of patients so care may be safely received at the project agency.

Interprofessional Team

To provide holistic care, it is important that an interprofessional team be involved in the execution of this project. Mental health prescribers and family medicine doctors, nurses, therapists, social workers, peer support specialists, local law enforcement, as well as tribal care providers were important individuals to consider speaking with. This ensured insight on the full spectrum of needs as well as cultural differences being addressed. As this project's aim was to create a toolkit, faculty at The College of St. Scholastica were requested to review the completed toolkit. As appropriate, with the project agency progressing toward opening its doors, officially hired staff were included in the interprofessional team.

Stakeholders

Upon opening, the project agency will serve the community of St. Louis County, MN, making its population a stakeholder as consumers of care. This includes both patients seeking mental health care and their families. Local mental health care providers are a collaborating stakeholder, as referrals for continued care will be made for patients. Local government and law

enforcement have a stake in ensuring laws and relevant policies are being followed. The principal investigator had a responsibility to the team working toward development and building of the project agency to aid in providing quality care to consumers.

Gap Analysis

Before the quality improvement project, the project agency had little working knowledge on the Living Room Model and if use of the model positively impacted patient outcomes. The project agency desired to use a model that was evidence based and safe for patients. The project agency also expressed being unclear on what assessments should be utilized to triage patients and guide patient flow. The project agency is not yet open, so there is no existing care model or triage flow process. Therefore, there is an organizational need to educate on how to implement the Living Room Model and triage assessments to utilize when opening the facility.

Organizational Needs Assessment/SWOT Analysis

The identified project setting had expressed a desire to utilize the Living Room Model for providing care. As the facility was not operational prior to the completion of this project, the needs of the organization that this project aimed to address revolve around education related to use of the Living Room Model and effective triage and assessment of patients so care may be safely received at their facility once open. As the project agency considered constructing a new building or renovating a purchased building, there was a need to consider how the physical environment would help serve the care the center desires to provide. Joseph and Malone (2012) describe the concept of evidence-based design being based on the body of evidence demonstrating that design plays a role in patient outcomes. The physical environment can affect patient stress, safety for the patient and those providing care, the effectiveness of those providing care and overall quality of the care (Joseph & Malone, 2012). The center hopes to carry the

calming design throughout the center, in the area where medical care is received and to the on-site temporary housing (D. Holliday-Welsh, personal communication, April 1, 2021).

In 2020, St. Louis County experienced an 18% increase in homelessness according to the annual Point in Time survey (Wasche, 2020). The CHUM Center in Duluth, Minnesota serves the homeless population in various capacities, recognizing that much of that population suffers from mental illness or chemical dependency concerns (CHUM, 2021). One of the organization's efforts, the Community Intervention Group (CIG), is a partnership of the Duluth Police Department, numerous community mental health providers, St. Louis County Human Services, and aspects of the judicial system (probation, attorneys, Arrowhead Regional Corrections) that aims to reduce contact with law enforcement and corrections and increase access to care to assist with stabilization (CHUM, 2021). Monthly meetings of the CIG members review vulnerable individuals with high law enforcement contact to plan how to best serve them (A. Vanneste, personal communication, April 1, 2021).

SAMHSA (2014a) recognizes that early detection and treatment for behavioral health conditions (mental illness and substance use disorders) leads to improved physical and community health. Promoting mental health care as a public health effort can lead to decreased homelessness and limit individuals' contact with law enforcement and child welfare (SAMHSA, 2014a). Individuals get stuck in the system, sometimes remaining in the hospital due to an incomplete or inadequate discharge plan back to the community, which in turn hinders other individuals and their progress toward treatment and recovery (St. Louis County, 2014).

The center aims to provide services that fall under components of Certified Community Behavioral Health Clinics (CCBHC) and Behavioral Health Homes (BHH) along with use of The Living Room model to provide a comprehensive set of services to the community (D.

Holliday-Welsh, personal communication, April 1, 2021). In 2014, Minnesota became one of eight states to receive federal funding to pilot the CCBHC model of providing “one-stop-shop” care to those who are underserved (Minnesota Department of Human Services, 2020). The high-level of care coordination provided by a CCBHC increases the likelihood that an individual will receive care before they reach a tipping point in a mental health crisis, which lessens the burden on Emergency Departments, law enforcement, and their families (Minnesota Department of Human Services, 2020). Behavioral Health Homes are Minnesota’s version of the federal health home for individuals on Medical Assistance (MA) that came to fruition because of the Affordable Care Act (Minnesota Department of Human Services, 2021). To have BHH designation, a facility must provide a medical assistance covered primary care or behavioral health service (Minnesota Department of Human Services, 2021). The principal investigator must consider guidelines and requirements for CCBHC and BHH designation when constructing the best-practice toolkit.

St. Louis County, MN will house the physical building of the center, but it will work in collaboration to serve the needs of the Arrowhead Region (St. Louis County, 2018b). The Arrowhead Region encompasses 7 counties in Northeastern Minnesota: Aitkin, Carlton, Cook, Itasca, Koochiching, Lake, and St. Louis (Gorecki, 2021). In 2020, 325,716 individuals lived in the Arrowhead Region with the total population of the state of Minnesota being 5,706,494 (Gorecki, 2021). The need for mental health care is said to have grown exponentially over recent years in the Arrowhead Region (Arrowhead Behavioral Health Initiative, 2022). The Minnesota State Advisory Council on Mental Health recognized that there is a lack of timely access to mental health services for those living in the Arrowhead Region and that mental health care can be fragmented if provided across organizations, such as by the county or in the schools (Treacy,

2016). Having one organization collaborating to provide care across the region will hopefully open doors for easier access.

A strength of this project was the great need for the services that will be provided by the project agency, this provided motivation for support of the project. St. Louis County received \$5,000,000 in grant funding from the state of Minnesota to aid in opening the center (D. Holliday-Welsh, personal communication, April 1, 2021). The center is one of three projects in three different counties in Minnesota working on building mental health hubs to provide care (D. Holliday-Welsh, personal communication, April 1, 2021). A weakness of this project was that due to the timeline of the project, there was limited staff available at the project agency to provide feedback on the completed toolkit. The center plans to utilize a local agency as the anchor tenant for mental health services, and that agency is currently struggling to provide care to current patients, which may point to inability to expand services (D. Holliday-Welsh, personal communication, April 1, 2021).

An opportunity of this project was the ability for the project agency to utilize the toolkit once the facility opens and for a future Doctoral Nursing Student to complete further project work analyzing effectiveness of the toolkit. The center will be the first of its kind in St. Louis County, and they desire to provide high quality and evidence-based care. Having a toolkit to guide care that has been reviewed by experts in the field provides the opportunity to open the facility with action steps to follow that may lead to success. A threat of this project was the inability to gather sufficient data to create a well-informed toolkit. While it was the hope of the principal investigator that the development of the toolkit be based on evidence-based resources and expert opinion from multidisciplinary sources, there was a potential that facilities may be unwilling or unable to participate in the project.

Theory Overview

Leininger's Theory of Culture Diversity and Universality provided a theoretical framework to address the proposed problem. Leininger's Theory of Culture Diversity and Universality is a middle range theory that was applied to guide work on this quality improvement project.

McFarland and Wehbe-Alamah (2019) provided a historical overview along with applications for the future of Leininger's Theory of Culture Diversity and Universality. This theoretical framework is applicable to development of a best practice toolkit that describes providing care for mental health services. "Cultural and social structure factors such as technology, religion, family and kinship, politics, cultural beliefs and practices, economics, physical conditions, and biological factors are significant forces affecting care and influencing health/wellness patterns and well-being" (McFarland & Wehbe-Alamah, 2019, p.544). The theory aims to help discover similarities and differences amongst cultures to provide care that aligns with values, views, and practices (McFarland & Wehbe-Alamah, 2019). Leininger described three culture care modes to guide care: culture care preservation and/or maintenance, in which cultural practices are preserved to help a patient face their medical conditions or even death; culture care accommodation and/or negotiation, in which cultures are assisted with adapting in order to receive safe and effective care; and culture care repatterning and/or restructuring, in which ways of life may be changed in order to improve outcomes (McFarland & Wehbe-Alamah, 2019). Integrative care should utilize an interdisciplinary approach, and be holistic, combining generic (or folk) care with professional care (McFarland & Wehbe-Alamah, 2019).

The Donabedian model provided the conceptual framework for this project. This model focuses on structure (the setting of the project agency and what individuals are needed to facilitate care being provided), process (how will the care model transform), and outcomes (how will one measure success of the developing care model) (Moran et al., 2020). A plan, do, study, act (PDSA) cycle also guided the process of the quality improvement project (Agency for Healthcare Research and Quality, 2020). The principal investigator completed all necessary planning, which includes previously conducted literature review. The principal investigator moved on to the do phase, which started with IRB approval and culminated with the first draft of the best practice toolkit. The study phase involved requesting expert feedback on the draft, and the act phase involved revising the toolkit based on feedback received.

Project Goal: Overall Goal/Mission

The goal of this project was to develop a best practice toolkit for providing care to individuals in an acute mental health crisis. *The Living Room* provides care based on the Recovery Model's concepts of "autonomy, respect, hope, empowerment, and social inclusion" (Heyland et al., 2013). The mission of this project was to inform care that is evidence based, holistic, patient centered, and culturally competent that the project agency can utilize to guide their work once open. At the onset of the project, the principal investigator had six objectives that will be described.

Objective One

The principal investigator would request and complete interviews with staff at centers utilizing the Living Room Model along with staff at EMPATH units and residential crisis stabilization centers by the second month of the quality improvement project. Previous literature review identified 3 centers that utilize the Living Room Model, and the principal investigator has

previous experience with 2 residential crisis stabilization centers that would be contacted. There is 1 EMPATH unit the principal investigator has knowledge of and would contact. The goal was to complete interviews with staff from 6 facilities. Staff at the facilities could include, but were not limited to, nurses, social workers, therapists, medical providers, and peer support specialists. The interviewed staff will remain the same individual contacted for all subsequent objectives.

Implementation. The principal investigator created interview questions to utilize for data collection in the pre-implementation phase of the project. Interview questions focused on topics such as the process of transitioning to providing care using The Living Room model, patient outcomes before and after the transition, any future goals for care delivery, patient assessments utilized to determine patient flow and need for diversion to an Emergency Department for a higher level of care. The questions were reviewed with the principal investigator's advisor at The College of St. Scholastica and the Institutional Review Board at the College of St. Scholastica and received approval before they were utilized in an interview. The principal investigator reached out to staff at identified facilities via telephone or e-mail to request to schedule an interview. Utilizing the developed interview questions, the principal investigator conducted interviews as scheduled. In conducting these interviews, the principal investigator gathered information on providing care to individuals experiencing an acute mental health crisis in a setting outside of the hospital. This information included specifics on the care delivery model, patient flow, and evidence-based assessments utilized to develop the patient's care plan or determine the need for a higher level of care.

Outcome Measure and Evaluation. This objective was considered met once the interviews were completed. The principal investigator tracked identified assessments utilized and qualitative data collected in a word document.

Objective Two

The principal investigator would conduct additional literature review related to reliability and validity of assessments identified during the interviews by the end of the second month of the quality improvement project.

Implementation. The principal investigator conducted further literature review regarding care provided to those in a mental health crisis, including review of reliable and valid assessments of mental health symptoms. The additional literature review helped bridge any knowledge gap the principal investigator had on information gathered from the interviews of facilities after comparing answers from all contacted facilities.

Outcome Measure and Evaluation. This objective was considered met when the additional literature review was completed.

Objective Three

The principal investigator would create a best practice toolkit for providing care at a facility using the Living Room care model that includes appropriate triage consideration and assessments that guide patient flow by the end of the third month of the quality improvement project.

Implementation. The principal investigator utilized data gathered from interviews and additional literature review to create the best practice toolkit. The toolkit was typed as a document.

Outcome Measure and Evaluation. This objective was considered met when the best practice toolkit has been completed.

Objective Four

The principal investigator would gather expert opinion related to identified assessments and current best practice/guidelines for providing mental health crisis care. The toolkit was adjusted based on research, feedback, and any required assessments by the state of Minnesota's Medical Assistance (MA) program by the end of the fourth month of the quality improvement project.

Implementation. The principal investigator presented the toolkit for expert evaluation with potential evaluators including faculty from the College of St. Scholastica, Diane Holliday-Welsh from the project agency, staff from facilities where interviews were conducted, and local mental health care providers.

Outcome Measure and Evaluation. This objective was considered met once feedback had been gathered and the toolkit was revised and received expert approval.

Data Analysis Approach. The principal investigator requested expert evaluators to complete a survey regarding the best practice toolkit. Survey questions included questions with a Likert scale of strongly disagree, disagree, no opinion, agree, and strongly agree answer options as well as questions that are open-ended to provide written feedback. The survey evaluated the quality, organization, and applicability of the presented information. The survey provided quantitative and qualitative data that would inform revisions to the best practice toolkit.

Objective Five

The principal investigator would develop a PowerPoint presentation that provided education on the developed best practice toolkit by the end of the fifth month of the quality improvement project.

Implementation. The principal investigator completed the PowerPoint on the quality improvement project and the best practice toolkit.

Outcome Measure and Evaluation. This objective was considered met when the best practice toolkit education was created.

Objective Six

The principal investigator would present the developed education on the best practice toolkit to faculty from The College of St. Scholastica, staff with the project agency, and community stakeholders and disseminate as appropriate by the conclusion of the quality improvement project.

Implementation. The principal investigator presented the developed education in person, or via Zoom as appropriate to the identified individuals. The best practice toolkit was disseminated to the project agency.

Outcome Measure and Evaluation. This objective was considered met when the education was completed, and the best practice toolkit was disseminated.

Methodology and Influencing Factors

This project included three distinct phases: pre-implementation, implementation, and post-implementation.

Pre-implementation: Protection of Human Subjects

The project proposal was submitted to the institutional review board (IRB) at The College of St. Scholastica before implementation began. The review board reviewed the proposed project to ensure protection of human subjects in research according to 45 CFR 46. The principal investigator sought informed consent from facilities as part of the interview request process. The principal investigator was not seeking patient specific examples, but rather descriptions of patient outcomes as a whole (i.e. number of patients diverted from the Emergency Department after receiving services at The Living Room), so there was no risk of breaching the

Health Insurance Portability and Accountability Act (HIPAA). The health program followed the provisions of the American Nurses Association Code of Ethics by respecting patient privacy and promoting health, aiming to enhance the profession and reduce disparities (American Nurses Association, 2015).

Implementation

During the implementation phase, the principal investigator prepared for and completed interviews with facilities that provide acute crisis mental health care. Using gathered data, the principal investigator conducted additional literature review on reliability and validity of identified assessments as well as researched any requirements of Minnesota state MA. The principal investigator reviewed already completed best practice toolkits for guidance on format, such as the SAMHSA's National Guidelines for Behavioral Health Crisis Care. The principal investigator created the best practice toolkit and presented it for expert review. The principal investigator analyzed the provided feedback and completed revisions to the best practice toolkit before it was again presented for expert review. The survey utilized by the experts to review the toolkit used a Likert scale, and these quantitative results will be presented as percentages in a bar chart. The survey also had open-ended questions that provide qualitative results. These results were sorted into positive and negative/neutral results and will be presented in a pie chart. Narrative description of qualitative themes will be completed. Once the toolkit was given expert approval, education on the toolkit was developed by the principal investigator. This education was presented by the principal investigator to faculty from The College of St. Scholastica, staff with the project agency, and community stakeholders. The principal investigator disseminated the final best practice toolkit as appropriate.

Post-Implementation/Monitoring

This project was unique in that data analysis occurred simultaneously with the implementation phase of the project. The project was concluded when the principal investigator presented education on the best practice toolkit and disseminated the toolkit as appropriate. The project has the potential to be continued on by future doctoral nursing students if they desire to evaluate if the toolkit was utilized by the agency and found to be effective.

Work Plan

The health program was carried out over a period of approximately 6 months. As the project agency will not be open and providing services prior to completion of the project, the health program was concluded with the final draft of the toolkit being presented to the project agency. The toolkit provides a guideline to the project agency for opening their doors and providing care using the Living Room model.

The first and second months of the health program entailed the principal investigator completing interviews with facilities that provide care to individuals experiencing an acute mental health crisis and conducting further literature review to bridge any gaps in knowledge and assess reliability and validity of assessments utilized at the interviewed facilities. The third month of the health program entailed the principal investigator analyzing gathered interview information to construct the first draft of the best practice toolkit. The completed best practice toolkit was presented for expert review and feedback at the end of the third month and during the fourth month. The principal investigator completed revisions to the toolkit based on feedback received and prepared education on the toolkit and quality improvement project. The education was presented to faculty at The College of St. Scholastica, staff at the project agency, and additional stakeholders, and the toolkit was disseminated to conclude the project with this timeline occurring in the sixth month. This information will be detailed in an approximated gantt chart located in Appendix B-Figure 1.

A logic model was created regarding this health program. See Appendix B-Figure 2. The logic model includes both process and outcomes components (Centers for Disease Control and Prevention, 2018). In regard to process outcomes, there are inputs, activities, and outputs (Centers for Disease Control and Prevention, 2018). The inputs for this project involve no funding as the only cost of this project was time spent by the principal investigator, staff at interviewed facilities, and the experts whose opinions were sought. The materials involved were the principal investigator's cell phone, laptop, WiFi access, and the internet. The activities of the project involved conducting interviews, conducting additional literature review, creating a draft of the best practice toolkit, requesting feedback on the toolkit, analyzing the feedback, and revising the toolkit for presentation of education and dissemination. The output of the project was the completed toolkit. The outcome components involve short-term, intermediate, and long-term outcomes (Centers for Disease Control and Prevention, 2018). In the short-term, the toolkit was presented to staff at the developing facility. In the intermediate, following completion of the project, the toolkit may be utilized by staff at the project agency. In the long-term, following completion of the project, the desire is that patients receive safe and effective acute mental health crisis care in the community at the project agency. In the long-term, following completion of the project, a future student could complete their own doctoral project to evaluate effectiveness of the toolkit in action.

Implementation

Upon receiving approval from the IRB, the principal investigator was able to begin the implementation phase of the project. A copy of St. Scholastica's IRB approval can be found in Appendix C, Figure 1. The project timeline (Gantt Chart in Appendix B, Figure 1) was mostly followed with the exception of the toolkit evaluation, education development, and final product

dissemination occurring earlier than previously anticipated. The principal investigator sent out e-mails to six organizations, two Living Room Centers, one organization that runs three Living Room model programs, two Residential Crisis Stabilization Centers, and an EMPATH unit to attempt to gather interview information regarding the eight locations. The e-mail included a letter requesting a member of the organization participate in the principal investigator's project as an expert in providing mental health care. The principal investigator received a response from one organization that runs a residential crisis stabilization center and from a contact at the organization that runs 3 Living Room Model centers. The developed interview questions were sent to both experts for completion. This corresponded to objective one of the quality improvement project.

Upon receiving the answered interview questions, the principal investigator created the best practice toolkit. The toolkit was created using a Situation, Background, Assessment, Recommendation (SBAR) format. The principal investigator conducted further literature review regarding the assessments identified by the experts prior to recommending them in the toolkit. This corresponded to objectives two and three of the quality improvement project. The completed toolkit was sent to the interviewed experts upon completion along with the faculty chair from the College of St. Scholastica. Along with the toolkit, the evaluation survey was also included in the e-mail. Both experts completed the survey and to gather a wider range of feedback, four additional providers of mental health care known to the principal investigator were asked to complete the survey. This corresponded with objective four of the quality improvement project. A copy of the survey is in Appendix C, Figure 2 and the best practice toolkit is located in Appendix C, Figure 3.

Results of Data Collection

The interviewed experts both strongly agreed with all Likert-scale questions on the developed survey and had no suggestions for changes needed to the toolkit. One additional provider of mental health care that evaluated the toolkit suggested more granular information would be helpful to provide more details to the toolkit but appreciated that this data was not available based on initial lack of expert response. As the interviewed experts proposed no changes and strongly agreed with the toolkit, it was not revised. The expert who works for the organization with three Living Room Centers reported that their first center opened five years ago, and they are in the process of opening a fourth center to serve children/adolescents. Their organization believes in the Living Room model and their post-service surveys given to clients served demonstrate the centers' ability to prevent ED visits to access acute mental health crisis care.

The quantitative analysis of the seven Likert-scale questions is shown in a bar graph (Appendix C, Figure 4). For question 1, 100% strongly agreed that the toolkit identified the patient population who it was intended for. For question 2, 100% strongly agreed that the document provided information about clinical flexibility in applying the best practice toolkit when it is feasible for the organization. For question 3, 1/6 selected neutral, 1/6 agreed, and 4/6 strongly agreed that the toolkit described the Living Room Model in unambiguous terms. For question 4, 33.33% agreed and 66.67% strongly agreed that the toolkit described the implementation process in unambiguous terms. For question 5, 1/6 agreed and 5/6 strongly agreed that they could find the major recommendations of the best practice toolkit. For question 6, 100% strongly agreed the toolkit recommendations were consistent and did not conflict with each other. For question 7, 100% strongly agreed the toolkit had clear headings and sections to identify major topics.

Qualitative data gathered from two of the three open-ended questions was 100% positive. All six experts indicated there was enough convincing data in the toolkit for them to agree with it. All six experts indicated the toolkit seemed feasible to implement at a facility in Minnesota that provides acute mental health crisis care. The third open-ended question requested feedback if the experts would propose any changes to the toolkit.

Discussion of Data/Outcomes Interpretation

The principal investigator identified two main limiting factors of this quality improvement project. Expert input was only received from two providers of acute mental health crisis care. The lack of responding experts could have contributed to feedback from one recruited expert asked to evaluate the toolkit who stated, “the toolkit is an excellent starting place” and “more granular information is needed prior to implementation, but the toolkit gives good direction as to what services and what clinician assessment might look like.” As the project agency is under development, the toolkit will not be implemented by the principal investigator, so it is unclear if it will be effective in practice.

Despite limited expert response, both experts identified that their facilities are successful in diverting patients in crisis from the Emergency Department by providing acute mental health crisis care. This supports the literature search findings that community-based crisis care is effective. The expert from the organization that runs three Living Room Centers indicated their program is relationship-based and repeat visits are not viewed in a negative manner. This fits with the mission of the quality improvement project in aiming to guide holistic and patient-centered care.

Dissemination

The principal investigator developed a narrated PowerPoint presentation which was delivered to the project mentor at the project agency along with the developed best practice toolkit via e-mail. The project mentor identified this as the preferred method of dissemination of the principal investigator's work. A scholarly poster presenting the quality improvement project was developed by the principal investigator and can be found in Appendix C, Figure 5. A 3-Minute Ted Talk presenting the quality improvement project was created by the principal investigator and posted on Youtube. The principal investigator also completed this scholarly paper with an abstract which was submitted to the project chair and to Sigma Repository.

Conclusion

Review of literature confirms that current mental health care delivery is insufficient to provide for the population. Many individuals seek access to care through the Emergency Department when in a mental health crisis as it may be the only location with immediate walk-in access. This causes financial and resource strain and contributes to poor patient outcomes, as Emergency Departments often have excessive wait times until an inpatient bed is available and the patients may not have access to any psychiatric care during their wait (Nordstrom et al., 2019). The Emergency Department is not designed to provide care and management of chronic conditions such as mental illness, it is an access point to care meant to stabilize a patient and transfer them to a higher level of care or provide acute treatment and discharge the patient (Canaday, 2019). Overcrowding in the Emergency Department caused by boarding can have negative outcomes for the patients seeking care for physical health conditions. It has been linked to delays in administering antibiotics to individuals with severe sepsis, delays in obtaining critical imaging for those suffering a stroke, delays in administration of analgesics to individuals

in severe pain, and an increase in arrival time at the Emergency Department to needle time for those with suspected acute myocardial infarctions (Zodda & Underwood, 2019).

The project agency aims to bridge the gaps in care and provide for patients in crisis to avoid emergency department visits. The project agency aims to address physical and mental health needs in one convenient location. Assessing and treating physical and mental health needs, including substance abuse concerns, of an individual in a mental health crisis outside of the hospital is feasible and has been reported to be preferable to the individual receiving care. This health program aimed to serve the individuals of St. Louis County, MN by assisting the project agency in its goal of having a guide to providing acute mental health crisis services. The developed best practice toolkit can help the project agency in implementing the Living Room Model to provide acute mental health crisis care that can prevent Emergency Department visits.

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Appendix A

Literature Matrix

Reference	Purpose/Question	Design	Sample	Intervention	Results	Notes
<p>Allen, M.H., Forster, P., Zealberg, J., & Currier, G. (2002). <i>Report and recommendations regarding psychiatric emergency and crisis services: A review and model program descriptions</i>. APA Task Force on Psychiatric Emergency Services. https://www.psychiatry.org/File%20Library/Psychiatrists/Directories/Library-and-Archive/task-force-reports/tfr2002_EmergencyCrisis.pdf</p> <p>Evidence from the opinion of Experts/Authorities, Level VII Evidence per Melnyk and Fineout-Overholt</p>	Report starts with a review of the literature and then provides model program descriptions.	Task Force Report from the American Psychiatric Association Task Force on Psychiatric Emergency Services	n/a	Provides definition, level of care, and describes assessment, treatment planning, use of medication, seclusion and restraints, aftercare, and facility specifics (space and equipment, staffing, etc.).	Aims to provide standards for different levels of care that might assist with funding and improving patient outcomes.	Interventions Psychiatric Urgent Care section reviewed in depth, but each section could be applicable in examining the problems evident by lack of access to care.
Al-Rousan, T., Rubenstein, L., Sieleni, B., Harbans, D., & Wallace, R.B.	To identify prevalence rates for mental illness and comorbidities	Analysis was completed of cross-sectional	The sample size was 8,574 subjects.	n/a	Almost half of the inmates had a history of at least one mental illness.	Background/Scope of the Problem Large sample size

<p>(2017). Inside the nation's largest mental health institution: A prevalence study in a state prison system. <i>BMC Public Health</i>, 17(342). https://doi-org.akin.css.edu/10.1186/s12889-017-4257-0</p> <p>Cross-Sectional Cohort Analysis, Level IV Evidence per Melnyk and Fineout-Overholt</p>	<p>amongst the inmates of Iowa Department of Corrections.</p>	<p>prevalence data on all Iowa Department of Corrections inmates.</p>			<p>29% had a serious mental illness. 26% had a history of substance abuse. 48.5% had co-occurring mental illness and substance abuse concerns.</p>	<p>Statistics help paint the picture of the scope of the problem</p>
<p>Ashcroft, L. (2006). <i>Peer services in a crisis setting; The Living Room</i>. http://www.mentalhealthchallenge.org.uk/library-files/MHC73-LivingRoom.pdf</p> <p>Evidence from the opinions of Authorities/Experts, Level VII Evidence per Melnyk and Fineout-Overholt</p>	<p>The article provides description of the opening of two <i>Living Room</i> model crisis centers in Maricopa County, Arizona.</p>	<p>The executive director of META Services Recovery Education Center offers insight into the crisis care provided at their locations.</p>	<p>Review of care at two crisis respite centers.</p>	<p>Care provided focuses on use of the Recovery Model.</p>	<p>Initial concern with peer support was found to be unwarranted.</p> <p>Training provided to peer support workers to ensure competence in providing care in a crisis setting.</p>	<p>Interventions</p> <p>Those served found peer support valuable.</p> <p>Individuals were able to be diverted from the emergency department.</p>
<p>Bao, Y., Druss, B.G., Jung, H.Y., Chan, Y.F., Unützer, J. (2016). Unpacking collaborative care for depression:</p>	<p>To examine how two process tasks of the Collaborative Care Model affect depression outcomes.</p>	<p>Retrospective Cohort Analysis</p>	<p>5,439 patients had data included in the analysis.</p>	<p>Two process tasks were selected for review based on various factors: having at least one follow-up by the</p>	<p>Four-week follow-up could be associated with a greater likelihood of experiencing improvement in</p>	<p>Implementation</p> <p>Large <i>n</i></p> <p>Limited in that only two interventions were examined,</p>

<p>Examining two essential tasks for implementation. <i>Psychiatric Services</i>, 67(4), 418-424. https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201400577</p> <p>Cohort Study, Level IV Evidence per Melnyk and Fineout-Overholt</p>				<p>care manager within 4 weeks of the initial contact and having at least one psychiatric consultation between weeks 8 and 12 for patients who had not experienced improvement in their depression by week 8.</p>	<p>depression and a shorter length of time to experience said improvement. Psychiatric consultation was also found to be associated with a greater likelihood in improvement of patient outcomes.</p>	<p>but they were found to be beneficial and may garner support to convince an organization to implement the full model</p>
<p>Boldt, R.C., & Chung, E.T. (2020). Community health workers and behavioral health care. <i>Journal of Healthcare Law and Policy</i>, 23(1), 1-65. https://search.ebscohost.com/akin.css.edu/login.aspx?direct=true&db=heh&AN=147749145&site=eds-live&scope=site</p> <p>Evidence from the opinions of Authorities/Experts, Level VII Evidence per Melnyk and Fineout-Overholt</p>	<p>Description of community health workers, how their role has evolved, and descriptions specific to Minnesota.</p>	<p>Overview describes studies that discuss benefits of utilizing CHW to support individuals with mental health concerns.</p>	<p>n/a</p>	<p>Work of community health workers is reviewed with evidence of specific benefits.</p>	<p>Community health workers improve patient outcomes. The services they provide are reimbursable.</p>	<p>Interventions Offers description of billing for utilization of services for 5 states, one of which is Minnesota.</p>

<p>Carlo, A.D., Jeng, P.J., Bao, Y., & Unützer, J. (2019). The learning curve after implementation of collaborative care in a state mental health integration program. <i>Psychiatric Services, 70</i>(2), 139-142. https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201800249</p> <p>Cohort Study, Level IV Evidence per Melnyk and Fineout-Overholt</p>	<p>The study aimed to examine organizational variability in the years following implementation of the Collaborative Care Model and the effect of on process-of-care and depression outcomes.</p>	<p>Retrospective Cohort Analysis</p>	<p>Data was analyzed on 13,362 patients from 8 locations.</p>	<p>The Collaborative Care Model was implemented at the 8 facilities and data in the years following was analyzed.</p>	<p>Depression outcomes improved for the first two years after implementation and appeared to peak at year five. Process of care measures influenced depression outcomes.</p>	<p>Implementation</p> <p>Large <i>n</i></p> <p>Following initial implementation, ongoing QI is necessary, with additional staff training/learning opportunities</p>
<p>Chan, Y.F., Huang, H., Sieu, N., Unützer, J. (2013). Substance screening and referral for substance abuse treatment in an integrated mental health care program. <i>Psychiatric Services, 64</i>(1), 88-90. https://doi.org/10.1176/appi.ps.201200082</p> <p>Cohort Study, Level IV Evidence per Melnyk and Fineout-Overholt</p>	<p>To examine rates of substance abuse screening and referral to treatment in primary care settings that provide mental-health services to patients of low income.</p>	<p>Retrospective Cohort Analysis</p>	<p>Data regarding 11,150 adults was included.</p>	<p>Intake assessment included use of the Global Appraisal of Individual Needs–Short Screener (GAIN-SS) for substance use problems.</p>	<p>67% of patients were screened.</p> <p>38% of those screened had a positive screen, and 47% of those with a positive screen were referred to treatment.</p> <p>The study highlighted missed opportunities to refer to treatment.</p>	<p>Interventions</p> <p>Large <i>n</i></p> <p>Screening assessment is a self-screen that with a positive result allows opportunity for provider to refer to treatment.</p> <p>Appears to be an intervention that would not require a significant amount of time for the provider.</p>
<p>Coates, D. (2018). Service models for</p>	<p>To identify current service models</p>	<p>The review process was</p>	<p>66 articles were reviewed.</p>	<p>n/a</p>	<p>Five main urgent and emergent care</p>	<p>Background/Scope of the Problem</p>

<p>urgent and emergency psychiatric care: An overview. <i>Journal of Psychosocial Nursing & Mental Health Services</i>, 56(8), 23-30. http://dx.doi.org.akin.css.edu/10.3928/02793695-20180212-01</p> <p>Literature Review, Level V Evidence per Melnyk and Fineout-Overholt</p>	<p>providing urgent or emergent response to those in mental health crisis, identify strengths and weakness of said models, and identify direction for the future.</p>	<p>iterative and informed by narrative. It utilized scoping review methodologies.</p>	<p>Medline, PsycINFO, CINAHL, Embase, EBM Reviews (including Cochrane Library), and PubMed were searched for articles from 2002 onward. Empirical and theoretical articles were included.</p>	<p>From each article, information pertaining to the research question was extracted and analysis was conducted on this information.</p>	<p>models were identified across community and hospital settings. There is a need for further research, especially in integrated models, connecting hospital and community care.</p>	<p>Decent number of articles reviewed, $n=66$</p> <p>Scoping methodology has been demonstrated to be beneficial in identifying gaps</p> <p>Implications for future research suggest looking at implementation barriers and measuring consumer outcomes and perspectives</p>
<p>Frauenholtz, S., & Mendenhall, A.N. (2020). "They'll give you a second chance": Perceptions of youth and caregivers regarding their experiences in a community-based mental health system of care. <i>Child and Adolescent Social Work Journal</i>, 37, 477-485. https://doi.org/10.1007/s10560-020-00654-8</p> <p>Single Qualitative Study, Level VI</p>	<p>To narrow the gap in research by examining the viewpoints of youth and their caregivers related to their care experiences.</p>	<p>Eight semi-structured interviews were utilized.</p>	<p>Seven families were asked to participate in interviews. A total of two children and six caregivers completed the interviews.</p>	<p>Following the interviews, analysis was conducted, and primary themes were identified.</p>	<p>Discussion of implications for future research and practice efforts were included.</p> <p>The themes identified were negative previous treatment experiences, satisfaction with the child and family-centered system of care approach, quality of relationship children and families experienced, usefulness of the</p>	<p>Outcomes Measures</p> <p>Limited n</p> <p>Results did match previous research pointing to individualizing care increasing satisfaction</p>

Evidence per Melnyk and Fineout-Overholt					approach in identifying and developing a treatment plan and skills for each youth, and a sense of empowerment related to participating in the program.	
Heyland, M., Emery, C., & Shattell, M. (2013). The living room, a community crisis respite program: Offering people in crisis an alternative to emergency departments. <i>Global Journal of Community Psychology Practice</i> , 4(3), 1-8. https://www.gjcpp.org/pdfs/2013-007-final-20130930.pdf Evidence from the opinions of Authorities/Experts, Level VII Evidence per Melnyk and Fineout-Overholt	To describe <i>The Living Room</i> , a crisis respite center that services mental health needs in the community in attempt to stave off use of emergency services to access care.	Nursing faculty from two universities partnered with the Assistant Program Director of <i>The Living Room</i> to provide this overview.	Review of one crisis respite center.	The article offers a review of the first year of service.	In the first year, 228 visits by 87 distinct individuals occurred. On 213 of those visits, the individuals were deflected from the ED, saving approximately \$550,000 to the state of Illinois.	Implementation Demonstrates cost savings Also addresses improved patient outcomes Center was set up in an existing community health center, suggests opportunity to reallocate a centralized location to provide improved care
Hiott, D.B., Phillips, S., Amella, E. (2017). Adolescent risk screening instruments	The authors aim was to evaluate adolescent risk screening instruments	The authors conducted an integrative	The following databases were utilized: CINAHL,	The 16 screening tools were reviewed for concerns with	Many screenings have cost and length concerns that may inhibit use	Conceptual Framework Analysis of many available screening tools

<p>for primary care: An integrative review utilizing the Donebidian Framework. <i>Comprehensive Child and Adolescent Nursing</i>, 41(4), 255-275. https://www-tandfonline-com.akin.css.edu/doi/full/10.1080/24694193.2017.1330372</p> <p>Literature Review, Level V Evidence per Melnyk and Fineout-Overholt</p>	<p>that primary care providers in the United States might utilize with use of the Donabedian framework.</p>	<p>literature review.</p>	<p>Academic Search Premier, Health Source Nursing Academic Ed, Medline, PsycINFO, the Psychology and Behavioral Sciences Collection, and PubMed.</p> <p>25 manuscripts were reviewed, and 16 screening tools were included.</p>	<p>structure, process, and outcomes.</p>	<p>by the primary care provider. These were identified as structural issues.</p> <p>Process issues related to administration format and report method were also identified.</p> <p>The Pediatric Symptom Checklist was found to be free and short, but also valid and reliable.</p>	<p>Finding a tool that is reliable, valid, and not time consuming, such as the Pediatric Symptom Checklist is beneficial to providers concerned with time constrains and reimbursement for behavioral health care.</p>
<p>LaBelle, C.T., Han, S.C., Bergeron, A., & Samet, J.H. Office-based opioid treatment with Buprenorphine (OBOT-B): Statewide implementation of the Massachusetts collaborative care model in community health centers. (2016). <i>Journal of Substance Abuse Treatment</i>, 60, 6-13. https://doi.org/10.1016/j.sat.2015.06.010</p>	<p>To provide description of the implementation and subsequent results/patient outcomes.</p>	<p>Review and analysis of data regarding the implementation of OBOT-B in Massachusetts following its development with use of the collaborative care model to guide care.</p>	<p>Data from 14 locations were examined.</p>	<p>The Collaborative Care Model was applied at community health centers and utilized to provide care to patients receiving Buprenorphine in the primary care office.</p>	<p>An increase from 24 to 114 waived prescribers occurred during the six years that data was reviewed from. (375% increase)</p> <p>The model holds promise for expansion of treatment for those with opioid use disorders.</p>	<p>Interventions</p> <p>Use of grant funding to provide in office opioid treatment</p> <p>Beneficial intervention for patients who may be unwilling or not need an inpatient chemical dependency program</p>

Evidence from the opinions of Authorities/Experts, Level VII Evidence per Melnyk and Fineout-Overholt						
Major, D., Rittenbach, K., MacMaster, F., Walia, H., Vandenberg, S.D. (2021). Exploring the experience of boarded psychiatric patients in adult emergency departments. <i>BMC Psychiatry</i> . 21(473). https://doi.org/10.1186/s12888-021-03446-1 Cohort Study, Level IV Evidence per Melnyk and Fineout-Overholt	This study aimed to quantify the frequency of adverse events (AEs) experienced by psychiatric patients while boarded in the emergency department.	Retrospective chart review	N=200	n/a	58% of boarded patients experienced at least one adverse event during their time in the Emergency Department waiting for an inpatient bed. 38%-increasing agitation 34%-benzodiazepine use 21.5%-sleep problems 20.5%-non-security verbal intervention 14%-Protective services verbal and/or physical intervention	Background/Scope of the Problem Utilized 50 patients each from 4 different hospitals which contributes to a variety in the sample.
McFarland, M.R., & Wehbe-Alamah, H.B. (2019). Leininger's theory of culture care diversity and universality: An overview with a historical retrospective and a view toward the	The authors provide a historical overview of Leininger's Theory of Culture Care Diversity and Universality also known as the Culture Care Theory (CCT) along with descriptions of the	This article provided knowledge of experts with an overview, definitions, and additional literature demonstrating	n/a	Recent writings provide a guide to applying the theory constructs.	Research, practice, education, and health policy are amongst areas where additional writings demonstrating application of the theory are discussed.	Theoretical Framework Offers application to various arenas (research, practice, health policy, grants/leadership) Historical overview showed the progression of Leininger's work

<p>future. <i>Journal of Transcultural Nursing</i>, 30(6), 540-557. https://journals-sagepub-com.akin.css.edu/doi/pdf/10.1177/1043659619867134</p> <p>Evidence from the opinions of Authorities/Experts, Level VII Evidence per Melnyk and Fineout-Overholt with additional literature reviewed</p>	<p>theory purpose, goal, tenets, basic assumptions, major core constructs, and orientational definitions.</p>	<p>application of the theory.</p>				
<p>Moses, T., & Claypool, E.J. (2018). Adolescents' perceptions of post-treatment change: Making progress toward a developmentally-sensitive evaluation process. <i>Journal of Child and Family Studies</i>, 27, 3922-3934. https://doi.org/10.1007/s10826-1213-2</p> <p>Single Qualitative Study, Level VI Evidence per Melnyk and Fineout-Overholt</p>	<p>To identify adolescents' perceptions of mental health status, in their own words, as well as any specific change following a brief psychiatric hospitalization.</p>	<p>Mixed-methodology exploratory study</p>	<p>74 adolescents</p>	<p>Qualitative measures were a follow-up on mental health status assessed with open-ended questions.</p> <p>Quantitative Measures utilized standardized scales to assess depression, self-esteem, and personal control.</p>	<p>Use of qualitative measures can help identify what adolescents find therapeutically useful and will use to support change.</p> <p>There was consistency between self-reported change and standardized assessments of wellness.</p>	<p>Outcome Measures</p> <p>Qualitative measures corresponding to quantitative measures points toward need for more inclusion in evaluation of treatment provided</p> <p>Helpful to look at the adolescents' perspective as they may be more reluctant to pursue/participate in mental health care</p>

<p>Munea, A.M., Alene, G.D., & Debelew, G.T., (2020). Quality of youth friendly sexual and reproductive health Services in West Gojjam Zone, north West Ethiopia: with special reference to the application of the Donabedian model. <i>BMC Health Services Research</i>, 20(1), 245. https://bmchealthservres.biomedcentral.com/akin.css.edu/trac/pdf/10.1186/s12913-020-05113-9.pdf</p> <p>Cross-Sectional Cohort Analysis, Level IV Evidence per Melnyk and Fineout-Overholt</p>	<p>To assess quality of service provided using the Donabedian model.</p>	<p>This was a cross sectional-based study with assessment involving multiple methods: simulated client study; structured interviews with healthcare providers; observations at the healthcare facility, along with interview of additional experts and informants.</p>	<p>The researchers made 54 visits to 18 randomly selected health facilities, and three trained individuals presented 3 different cases to the service providers.</p>	<p>Suggestions are made in the writing to improve care provided.</p>	<p>None of the facilities achieved 75% or greater in all three components of quality measurement. 33% of facilities provided low quality in all domains.</p>	<p>Conceptual Framework</p> <p>Provides specifics on how a facility may improve quality of care provided in relation to structure, process, and outcomes of the framework.</p>
<p>Nordstrom, K., Berlin, J.S., Nash, S.S., Shah, S.B., Schmelzer, N.A., & Worley, L.L.M. (2019). Boarding of mentally ill patients in emergency departments: American psychiatric association resource document. <i>Western Journal of</i></p>	<p>To describe the phenomenon of boarding patients awaiting inpatient psychiatric stabilization in the emergency department.</p>	<p>The article offers background information on the problem of lack of available inpatient beds creating the phenomenon of boarding.</p>	<p>n/a</p>	<p>n/a</p> <p>Experts on the topic share insight on lack of avenues to access care that increase emergency room utilization as a point of access, stressing the need for improved</p>	<p>Recommendations to avoid/decrease boarding are provided.</p>	<p>Background/Scope of Problem</p> <p>Offers suggestions on both the ED and community level to decrease boarding.</p> <p>Statistics demonstrate gap in mental health care.</p>

<p><i>Emergency Medicine: Integrating Emergency Medicine with Population Health</i>, 20(5), 690-695. https://escholarship-org.akin.css.edu/uc/item/71z0q1n8</p> <p>Evidence from the opinions of Authorities/Experts, Level VII Evidence per Melnyk and Fineout-Overholt</p>				outpatient services.		
<p>Patel, M., Head, S., Dwyer, J. & Preyde, M. (2018). Youth transition home from residential mental health treatment: Caregivers' perspective. <i>Child and Adolescent Social Work Journal</i>, 36, 485-494. https://doi.org/10.1007/s10560-018-0572-2</p> <p>Quantitative Study that is part of an ongoing longitudinal project, Level VI Evidence per Melnyk and Fineout-Overholt</p>	To explore the perceptions of caregivers' on the immediate transition from residential treatment to home.	Mixed-methodology exploratory study	10 mothers	Data from interviews with the mothers was analyzed and synthesized to provide recommendations and implications for practice and research.	The interviews revealed a perceived lack of professional support and the need for continuity of care in the step-down from residential treatment back to outpatient services.	<p>Outcome Measures</p> <p>Small <i>n</i></p> <p>Only presented caregiver perspective, may be skewed if caregivers were not as invested</p> <p>Does not examine youth's perspective</p>
Pinals, D.A., & Fuller, D.A. (2017).	To provide an overview of the	This is a joint report from	n/a	Ten policy recommendations	n/a	Background/Scope of Problem

<p><i>Beyond Beds: The Vital Role of a Full Continuum of Psychiatric Care.</i> https://www.treatmentadvocacycenter.org/storage/documents/beyond-beds.pdf</p> <p>Policy Recommendations (Reports of Expert Committees), Level VII Evidence per Melnyk and Fineout-Overholt</p>	<p>current state of services along with recommendations to support creating an integrated system of psychiatric care across the continuum.</p>	<p>National Association of State Mental Health Program Directors and the Treatment Advocacy Center.</p>		<p>were made in the report along with presentation of background information regarding lack of services.</p>		<p>Case Study example of a sample patient and how each policy recommendation could contribute to better outcomes</p>
<p>Powers, D.M., Bowen, D.J., Arao, R.F., Vredevoogd, M., Russo, J., Grover, T., Unutzer, T., (2020). Rural clinics implementing collaborative care for low-income patients can achieve comparable or better depression outcomes. <i>Family Systems Health, 38(3), 242-254.</i> https://pubmed.ncbi.nlm.nih.gov/32700931/</p> <p>Cohort Study, Level IV Evidence per</p>	<p>To evaluate treatment outcomes, care processes, and experience of primary care providers utilizing the Collaborative Care Model.</p>	<p>Retrospective Cohort Analysis</p>	<p>Information regarding 5,817 patients was analyzed.</p>	<p>The Collaborative Care Model was implemented at rural clinics and subsequently patient care was evaluated.</p>	<p>Patients saw improvement in their mean depression scores and a reduction SI, with statistical significance.</p>	<p>Implementation Large <i>n</i> Collaborative Care model found to beneficial in improving patient outcomes.</p>

Melnyk and Fineout-Overholt						
Shahid, S., & Thomas, S. (2018). Situation, background, assessment, recommendation (SBAR) communication tool for handoff in health care- A narrative review. <i>Saf Health, 4</i> , 7. https://doi.org/10.1186/s40886-018-0073-1 Literature Review, Level V Evidence per Melnyk and Fineout-Overholt	To discuss the challenges of communication amongst health care professionals, use of SBAR for effective handoff, to compare SBAR to other tools, and to evaluate effectiveness and limitations SBAR.	This article provides a narrative review.	12 articles that discuss use of the SBAR were reviewed when compiling the narrative.	Comparison, analysis, and discussion of SBAR tool provided.	SBAR is a validated handoff tool.	Interventions Valid tool Promotes common language amongst interdisciplinary team members Helps improve patient outcomes and reduce risks
Shojania, K.G., McDonald, K.M., Wachter, R.M., Owsn, K.D. (Eds.) (2007). <i>Conceptual Frameworks and Their Application to Evaluating Care Coordination Interventions</i> . (Technical Reviews, Volume 7, Number 9). Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services.	The editors aimed to define care coordination, to apply their definition to a review of systematic reviews, and identify theoretical frameworks that might predict how care coordination can affect patient outcomes.	The project utilized literature databases, internet searches, along with personal contacts.	The following sources were searched: CINAHL, Cochrane database of systematic reviews, American College of Physicians Journal Club, Database of Abstracts of Effects, PsychInfo,	Literature was reviewed to create a definition of care coordination and apply it to evaluating how care coordination can influence patient outcomes.	Four conceptual frameworks were utilized in the analysis and synthesis of gathered data.	Conceptual Framework Search strategy reviewed many works initially (4730) and found 75 suitable for review.

<p>https://www.ncbi.nlm.nih.gov/books/NBK44015/pdf/Bookshelf_NBK44015.pdf</p> <p>Literature Review, Level V Evidence per Melnyk and Fineout-Overholt</p>			<p>Sociological Abstracts, and Social Services Abstracts.</p> <p>4730 articles were reviewed with 75 fully meeting inclusion criteria.</p>			
<p>Substance Abuse and Mental Health Services Administration. (2014). <i>SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach</i>. https://ncsacw.samhsa.gov/userfiles/files/SAMHSA_Trauma.pdf</p> <p>Evidence from the opinions of Authorities/Experts, Level VII Evidence per Melnyk and Fineout-Overholt</p>	<p>To provide a review of the concept of trauma, key assumptions, and principles, how to implement a trauma-informed approach, and how to do so within the community.</p>	<p>This article is a narrative review of the concepts.</p>	<p>n/a</p>	<p>The review provides guidance to providers and organizations on understanding and implementing a trauma informed approach.</p>	<p>Numerous implementation domains are reviewed to provide a thorough overview for the provider.</p>	<p>Interventions</p> <p>4 assumptions, 6 key principles, and 10 implementation domains discussed</p>

Appendix B

Figure 1. Project Timeline

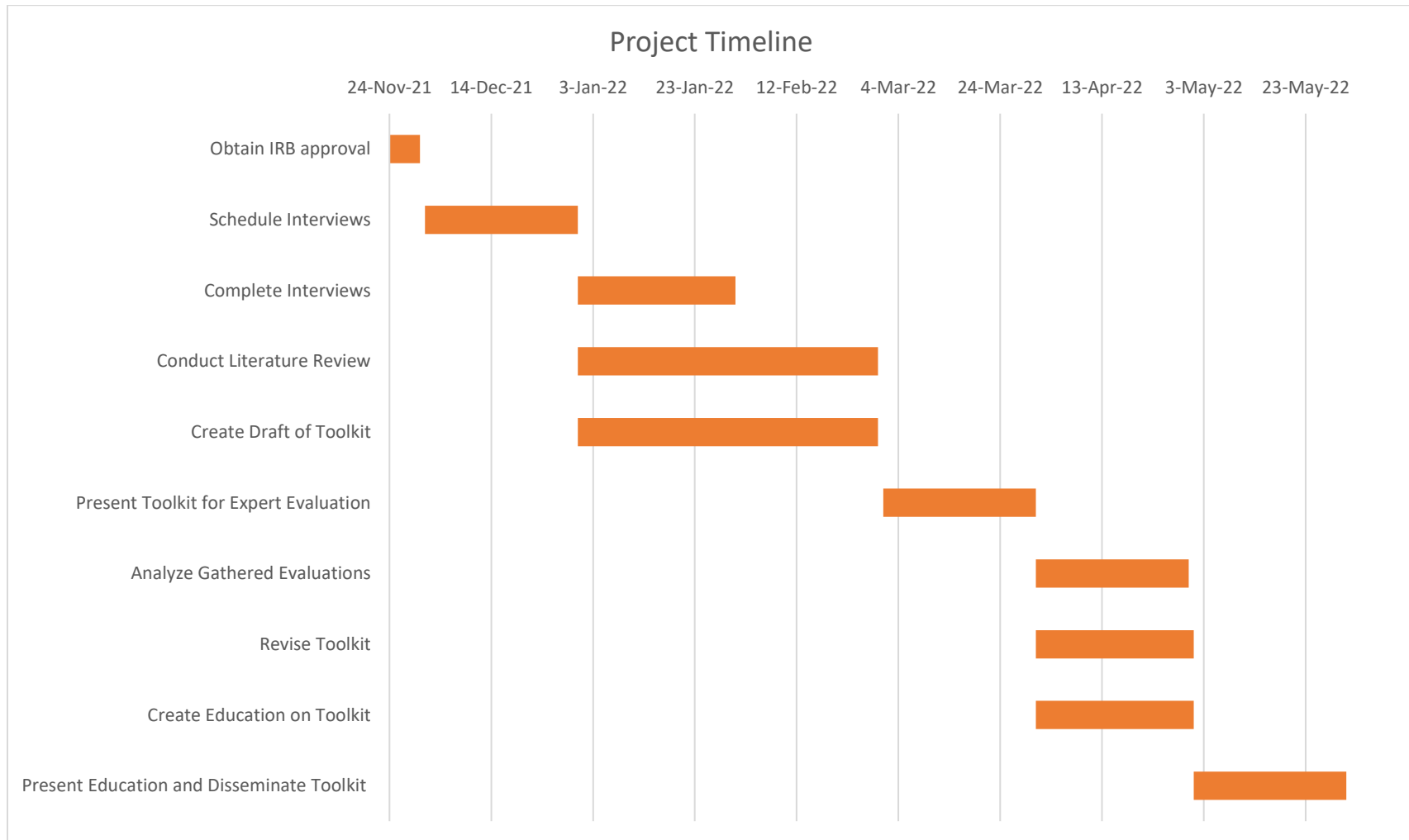
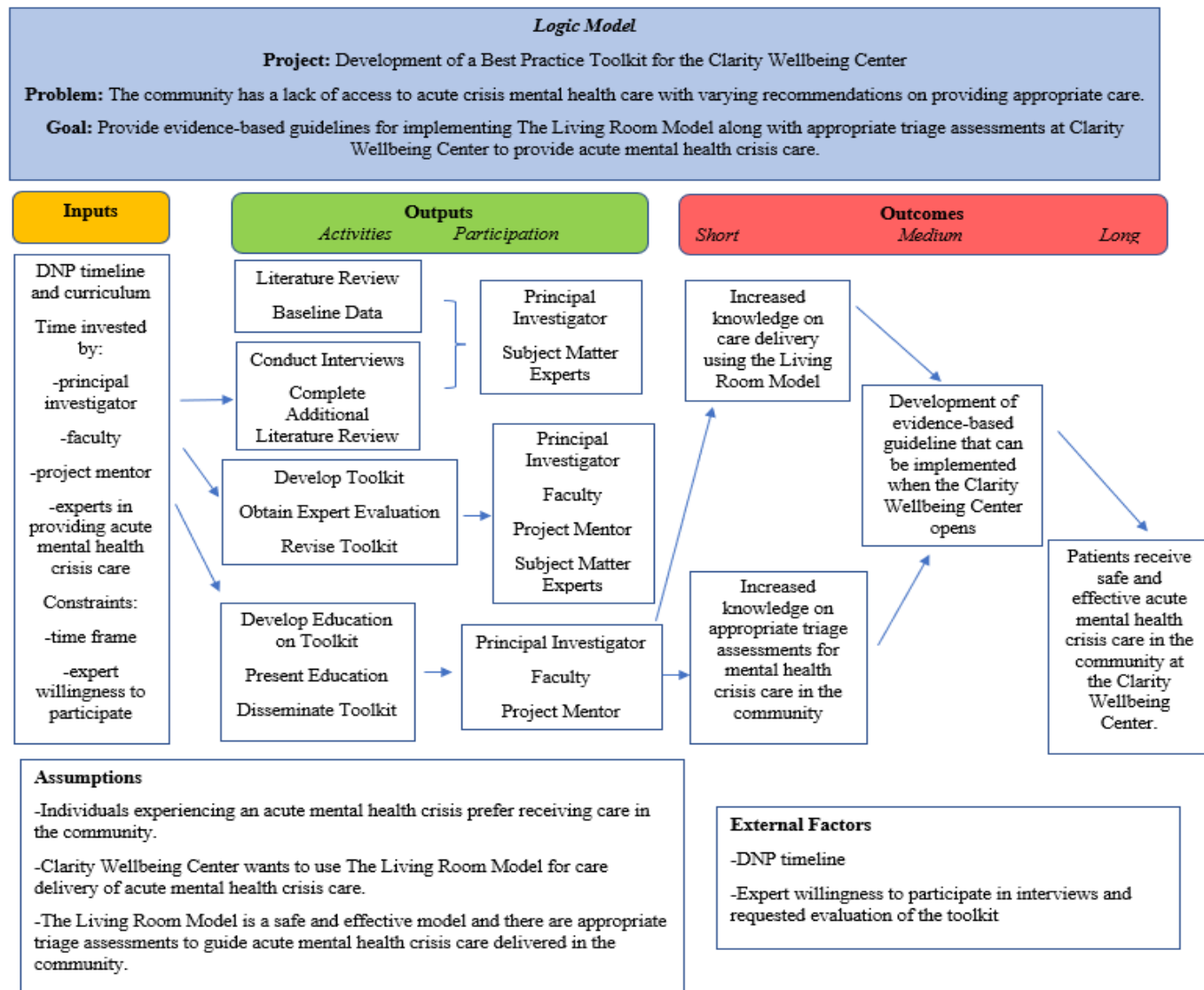


Figure 2. Logic Model



Appendix C

Figure 1. IRB Approval Form



Institutional Review Board

DATE: December 21, 2021

TO: Rachel DeBruyne and [Dr. Rhea Ferry]

FROM: The College of St. Scholastica, Institutional Review Board

RE: Developing a Best Practice Toolkit for Implementing the Living Room Model: A Quality Improvement Project

SUBMISSION TYPE: New Project

ACTION: NOT RESEARCH

REVIEW TYPE: Expedited Review

Thank you for your submission of materials for your project. The College of St. Scholastica Institutional Review Board has reviewed your application and determined that the proposed activity does not meet the definition of research under the Code of Federal Regulations 45 Part 46.102 provided by the Department of Health and Human Services. As such, your project does not require ongoing review or approval from The College of St. Scholastica Institutional Review Board. We will retain a copy of this correspondence within our records.

Any modification to your project procedures that could change the determination of "not research" must be submitted to the IRB before implementation.

When your project is complete, submit a protocol closure form by following these steps: (1) log in to your project in IRBNet, then create a new package (not project), (2) download the protocol closure form from the Forms and Templates menu, (3) complete, sign and submit the protocol closure form.

If you have any questions, please contact Nicole Nowak through the project email function in IRBNet or nnowaksaenz@css.edu. Please include your study title and reference number in all correspondence with the IRB office.

Best regards,

Nicole T. Nowak, Ph.D.
Chair, Institutional Review Board

Figure 2. Best Practice Toolkit Evaluation Survey

Best Practice Toolkit Survey

Based on your professional expertise, please answer the following questions regarding this best practice toolkit for implementation of the Living Room Model.

1. The best practice toolkit identifies the patient population who it is intended for.
Strongly disagree____ Disagree____ Neutral____ Agree____ Strongly Agree____
2. The document provides information about clinical flexibility in applying the best practice toolkit when it is feasible for the organization.
Strongly disagree____ Disagree____ Neutral____ Agree____ Strongly Agree____
3. The document describes the Living Room Model in unambiguous terms.
Strongly disagree____ Disagree____ Neutral____ Agree____ Strongly Agree____
4. The document describes the implementation process in unambiguous terms.
Strongly disagree____ Disagree____ Neutral____ Agree____ Strongly Agree____
5. I can find the major recommendations of the document.
Strongly disagree____ Disagree____ Neutral____ Agree____ Strongly Agree____
6. The recommendations are consistent throughout the document and do not conflict with each other.
Strongly disagree____ Disagree____ Neutral____ Agree____ Strongly Agree____
7. The document has clear headings and sections to identify the major topics discussed.
Strongly disagree____ Disagree____ Neutral____ Agree____ Strongly Agree____
8. What changes would you make to this best practice toolkit?
9. Was there enough convincing data for you to agree to this best practice toolkit? Why or why not?
10. Does this best practice toolkit seem feasible to implement within a Minnesota facility that provides acute mental health crisis care? Why or why not?

Figure 3. Best Practice Toolkit

A Best Practice Toolkit on Use of the Living Room Model

Including Appropriate Triage Assessments

Prepared by Rachel DeBruyne, BSN, RN, PHN, DPMHNP Student

Situation:

- In the state of Minnesota, and the Arrowhead region, there is a lack of access to acute/emergent care for individuals experiencing a mental health crisis.
- A 2015 report by the Minnesota Department of Human Services identified that not a single region in Minnesota met the demand for services for adult mental health services, and almost every region was missing a critical service (Werner, 2017). The report found that services for children were even more sparse (Werner, 2017).
- In St. Louis County, provider to patient ratio was 799 patients to one primary care provider and 472 patients to one mental health provider in 2018 (Data USA, 2018).
- The state of Minnesota is seeing an increase in deaths by suicide. 783 residents of Minnesota died by suicide in 2017 (Kaul, 2018). Deaths by suicide in Minnesota have increased over 70% in the last couple decades. (Hargarten, 2017). In 2017, St. Louis County reported a suicide rate of 18.5 per 100,000 people, higher than the state average of 13.8 per 100,000 (Kaul, 2018).
- St. Louis County has experienced an increase in opioid overdoses over recent years. In 2018, there were 151 overdoses with 13 fatalities; in 2019, there were 230 overdoses with 22 fatalities. From January to November of 2020, there were 255 overdoses, 25 resulting in death (Palacios, 2020).

Background:

- A mental health crisis is a situation in which an individual's actions have the potential to cause harm to themselves or others and/or their behaviors prevent them from being able to care for themselves or function in the community (NAMI, 2018).
- The Centers for Disease Control and Prevention (2021) describe mental illness as common in the United States, stating more than 50% of individuals will receive a mental illness diagnosis in their lifetime. The statistics for children indicate 1 in 5 children is either currently or will in their lifetime have suffered with a seriously debilitating mental illness (Centers for Disease Control and Prevention, 2021).

Lack of Access to Inpatient Care Due to Decline in Available Beds

- There has been a decrease of over 500,000 inpatient psychiatric hospital beds in the United States since the 1950s (Lutterman et al., 2017).
- The state of Minnesota saw a decrease from 206 inpatient public psychiatric beds in 2010 to 194 in 2016 (Office of Research and Public Affairs, 2016).
- A minimum of 50 inpatient psychiatric beds per 100,000 people are necessary to provide adequate care to individuals who are severely mentally ill; the state of Minnesota only

has 3.5 inpatient psychiatric beds per 100,00 people (Office of Research and Public Affairs, 2016).

Boarding

- Canaday (2019) describes boarding of patients with mental illness as the length of time a patient remains in the Emergency Department after their disposition has been determined that they need a psychiatric inpatient bed. This phenomenon has become a national crisis due to lack of affordable, comprehensive psychiatric treatment (Canaday, 2019). Canady (2019) describes that for individuals with severe mental illness, this delay in treatment can result in such deterioration that their future recovery may be less achievable.
- A survey found that the odds of boarding in the ED were 4.78 times higher for a psychiatric patient than one waiting for a medical admission (Nordstrom et al., 2019). An additional survey revealed that 62% of providers reported that there are no psychiatric services involved in the care of a patient awaiting a psychiatric admission (Nordstrom et al., 2019).

Assessment:

Crisis Care in the Community Is Not One Size Fits All

- A literature review by Coates (2018) identified three distinct, yet interconnected, crisis community models “acute/crisis assertive outreach models, community crisis clinics, and joint crisis models between mental health and police and/or ambulance”.
- Evidence suggests that community-based crisis care is as clinically effective as inpatient care (Coates, 2018).

The Living Room Model

- Heyland et al. (2013) describes previous research that individuals in an acute crisis identify desiring a safe place to go, with trained individuals they can talk to, in a location other than a hospital.
- *The Living Room* provides care based on the Recovery Model’s concepts of “autonomy, respect, hope, empowerment, and social inclusion” (Heyland et al., 2013). Those served are referred to as guests.
- In the first year that *The Living Room* was opened, of the 228 visits to the center, 213 visits were deflected from the local Emergency Department, a savings of approximately \$550,000 to the state of Illinois (Heyland et al., 2013). On average, one Emergency Department visit for psychiatric concerns was reported to cost \$2631 while care provided at *The Living Room* was reported to cost \$269 (Heyland et al, 2013).
- 84% of guests who were diverted from the Emergency Department found their crisis fully addressed at *The Living Room*, and an additional 9% of guests diverted were able to address part of their crisis and receive referrals to additional services (Heyland et al, 2013).
- Guests also saw a reduction in their score on the Subjective Units of Distress Scale (administered on intake and after receiving services) (Heyland et al, 2013).

- Ashcroft (2006) held focus group conversations with people who had used *The Living Room* or had been hospitalized for psychiatric care to assess what they feel would promote recovery should they require crisis services in the future. Individuals wanted a setting that felt like home, to be treated with respect and not judged, and identified preferring a normal mode of transportation, not law enforcement, such as having members of the center transport them (Ashcroft, 2006).
- They also identified appreciating peer support as it provided hope that they too could recover (Ashcroft, 2006). Individuals valued education, choices, creation of a recovery plan, and the ability to return if experiencing a relapse of symptoms (Ashcroft, 2006).

Recommendation:

- *For a facility serving the lifespan, The Living Room Model* can be implemented to provide relationship based, peer supported, mental health crisis care in a comfortable and welcoming environment.
- *SAMHSA's National Guidelines for Behavioral Health Crisis Care-A Best Practice Toolkit (2020) offers minimum expectation of a crisis receiving and stabilization service:*
 - There is a need for screening for suicide risk and violence risk with comprehensive risk assessments and planning completed as clinically indicated:
 - **C-SSRS** (The Columbia Lighthouse Project, 2016a)/**SAFE-T** (Jacobs, 2007), **document combining SAFE-T Protocol with C-SSRS** (The Columbia Lighthouse Project, 2016b)
 - **Broset Violence Checklist** (Woods & Almvik, 2002)/**BARS** for rating agitation (Nordstrom et al., 2011) with **IVRAM model** for comprehensive assessment (Kivisto, 2015)
 - The facility should be staffed with a multidisciplinary team that should include:
 - “Psychiatrists or psychiatric nurse practitioners (telehealth may be used)
 - Nurses
 - Licensed and/or credentialed clinicians capable of completing assessments in the region; *and*
 - Peers with lived experience similar to the experience of the population served” (SAMHSA, 2020).
 - The facility should offer both walk-in and first responder drop-off options (SAMHSA, 2020).
- *Recommendations based on expert interviews and additional literature review:*
 - A comprehensive assessment of the individual should be completed that assesses function across multiple domains, including risk behaviors, trauma exposure, behavioral/emotional needs, substance abuse, social, familial, legal, and cultural factors (Illinois Department of Healthcare and Family Services, 2020; Severson, 2020).
 - **Scales that may be utilized for evaluations:**
 - C-SSRS
 - SAFE-T

- Suicide Assessment Checklist
 - Scale for Suicide Ideation (SSI)
 - The UCLA Post-Traumatic Stress Index
 - The Structured Assessment of Violence Risk in Youth
 - The Global Appraisal of Individual Needs-Short Screener
 - The Ohio Scales
 - HEADS-ED Scale
 - Global Assessment Scale (GAS)
 - PHQ-9
 - GAD-7
 - MDQ
 - Broset Violence Checklist
 - BARS
 - IVRAM
 - Client Satisfaction Questionnaire (CSQ-8)
 - Manchester Short Assessment of Quality of Life (MANSA)
- A physical health risk assessment should also be completed including a review of medication regimen and compliance.
 - A review of past treatment history and current mental health providers should be gathered.
 - A review of strengths and resources of the person and a list of family/natural supports should be composed.
 - Staff should be trained on **mental illness, substance use, peer support, trauma informed care, goal setting, and Wellness Recovery Action Planning (WRAP)** (Copeland Center, 2020). Education on use of **therapeutic interventions** such as **E-IMR, CBT, DBT** would be beneficial (American Psychological Association, 2022; Centers for Practice Transformation, 2022; Rathus & Miller, 2015).
 - Minnesota Statutes and the Department of Human Services define qualifications for **Mental Health Professionals, Mental Health Practitioners, and Certified Peer Support Specialists** who should serve on staff at the facility (Minnesota Department of Human Services, 2016; Office of the Revisor of Statutes, 2021).
 - The **Subjective Units of Distress Scale (SUDS)** should be administered upon entry and prior to exiting the facility (Tanner, 2012).
 - The **physical environment** should be welcoming, like a living room in a residence. It should be carpeted, have comfortable furniture, and art/paintings on the walls. It should allow for private areas for assessment.
 - **Cost** should not be a limiting factor for guests to access care.

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Figure 4. Quantitative Results

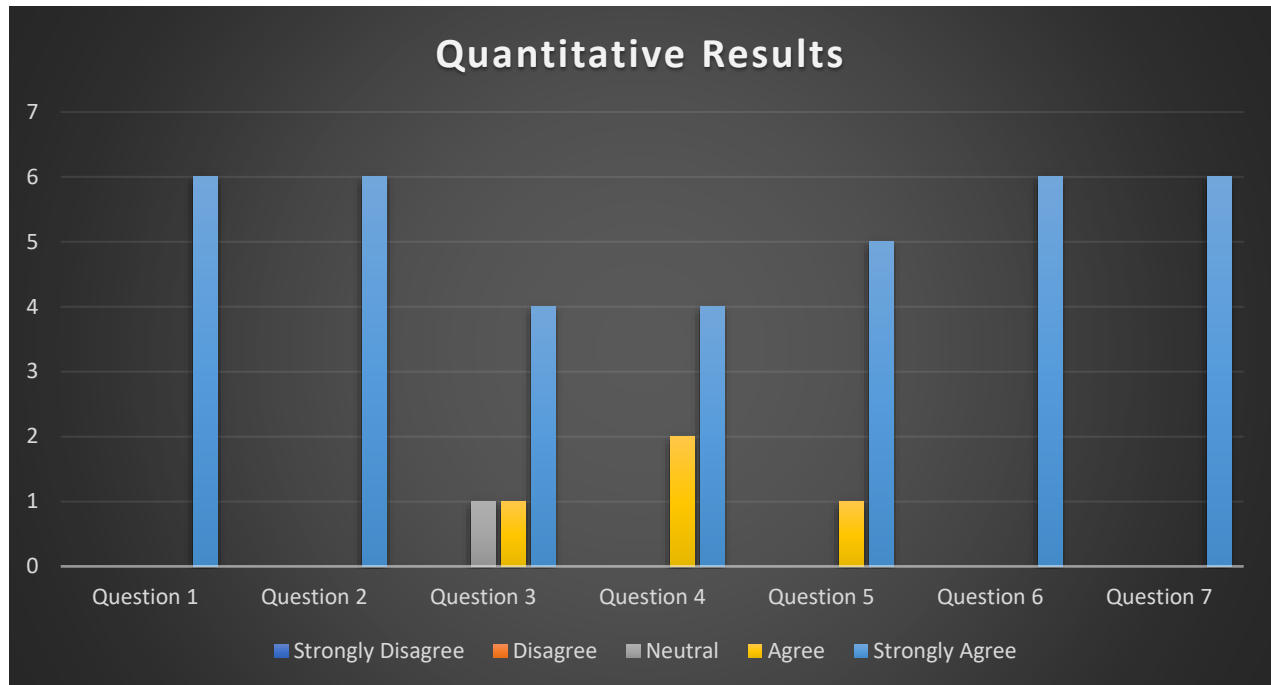


Figure 5. Scholarly Poster

