

Improving Access to Mental Health Care for Pediatric and Adolescent Patients

Utilizing an Anonymous Texting Service

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of the requirements for the degree of Doctor of Nursing Practice  
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DNP Project Signature Page

This project was prepared under the direction of the faculty mentor and practice partner. It is accepted by the faculty mentor, practice partner, and director of the program in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice at the University of Southern Indiana.

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Student (name printed)

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Faculty Mentor (signature)

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Practice Partner (signature)

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Director of the DNP Program (signature)

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Date



### Dedication and Acknowledgement

Any work done by one is actually the work of many and is rooted in connections between people with similar passions. This capstone project is a testament to that fact. Support from the Pediatric and Adolescent Behavioral Health Team in Monroe County, Indiana was paramount to this work. The faces of this team have changed, but the mission to improve behavioral health care for the youth of our community is constant. During this project our team lost a valuable member, Josh Paul, who was instrumental in connecting me to people who had the same passion about helping kids and teens have seamless care. One of these connections was with Carter Meyer, founder of TalkAboutIt which is now TxtAboutIT, and thus provided the connection to the team at Ozark Health in Joplin, Missouri. Their trust in me to analyze data from the pilot texting service and patience with the process is truly appreciated.

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## Executive Summary

**Problem:** Children under the age of 18 in the state of Indiana received needed mental health care at a rate lower than the national average. Since rates of those with insurance coverage in Indiana are comparable to the national average, this issue is related more to factors such as lack of providers, knowledge of availability of providers, perceived need for services, and stigma related to receiving mental health services. Some communities have implemented anonymous mental health texting services to mitigate these barriers to care. Improving access to care through an anonymous mental health texting service can help decrease the number of children who need services yet don't receive them.

**Purpose:** The purpose of this capstone project was to improve access to mental health care by identifying an anonymous mental health texting service and develop a plan to implement the service.

**Project Objectives:** The objectives of this capstone project were (a) to analyze data from existing communities that utilize an anonymous mental health texting service, (b) plan for implementation of a mental health texting service in a rural Midwest community, and (c) improve access to appropriate, amenable mental health care for those children in need of services.

**Plan/Scope of Project:** Existing data was analyzed using a mixed method design and, based on the findings, implementation of an anonymous mental health texting service was recommended.

**Results:** Of the 1515 text messages, 21.7% (n = 330) were related to bullying, 2.7% (n = 41) were related to self-harm, and 3.6% (n = 54) were related to suicide. Only 31 bullying messages were requests for help, while the majority were test messages sent to ascertain if a person would respond. 68% of conversations about bullying had resolution. All text messages about self-harm and suicide were requests for help and all had some form of resolution.

**Recommendations:** Implementation of a crisis texting service has the potential to provide additional access to mental health support by using an acceptable method of communication. Utilizing a texting service based in the community has great potential to improve timeliness of resolution to crisis and connections to resources.

### **Problem Statement**

According to the World Health Organization, [WHO] (2014), pediatric and adolescent patients experience mental health disorders at a rate of 10-20% worldwide. Access to mental health care services, however, is often limited (Sarvet et al., 2010). In the state of Indiana, 41.8% of children aged 2 to 17 needed, but did not receive, necessary mental health care. (National Survey of Children's Health, (NSCH), 2012). Children in the state of Indiana are insured at a rate of 94.7% compared to a national rate of 94.5%. However, the rate of unmet mental health needs is greater in Indiana (41.8%) compared to the nation (39%). Needing but not receiving care is most likely related to lack of providers, knowledge of available services, perceived need for services and stigma related to mental illness. Access to mental health care is dependent on many factors. These include availability of providers (Thomas & Holzer, 2006), insurance coverage for needed services, acceptable methods of service delivery (Andrade, et al., 2014; Gulliver, Griffiths, & Christensen, 2010), compatibility of provider and patient (Hall, Lemak, Steingraber, & Schaffer, 2008) and reducing the impact of stigma related to mental illness (Brohan et al., 2010; Corrigan, Druss & Perlick, 2014; WHO, 2014). These conditions of access must be met by both the parent and child, which adds complexity to utilization of these services. When a need for mental health care is identified, it is imperative to have timely utilization of services (Kelleher, Campo, & Gardner, 2006). The purpose of this capstone project was to improve access to mental health care by identifying an anonymous mental health texting service and develop a plan to implement the service

A literature search was performed using PsycINFO, CINAHL Plus with Full-Text, ProQuest Health and Medical Complete, and Google Scholar. Information on access to care was plentiful; however few studies were specific to pediatric and adolescent mental health. There is

also a dearth of literature regarding methods to improve timely access to and utilization of services. A gap in the literature exists related to methods to increase practicing mental health providers for this population since there is a current shortage in the number of mental health providers. In fact, in 2011 there were only 7,418 child and adolescent psychiatrists in practice with the projected need of 12,624 by 2020 (NAMI, 2011). While psychiatric mental health-advanced practice registered nurses (PMH-APRN) are able to provide psychiatric care, the number of practicing PMH-APRNs are limited and unevenly distributed (Ghosh, Sterns, Drew, & Hamera, 2011). No studies discussed methods to connect patients to providers taking into consideration mental health specialty, insurance or payment accepted, gender preference, location, age group served or acceptance of new patients.

Children and adolescents experienced mental illness visits resulting in a diagnosis at a rate of 15.3 per 100 children in 2010 as compared to the rate of 8 per 100 children in 1995. This is a significantly larger increase from than that of the adult population, which increased from a rate of 23 to a rate of 28 per 100 over the same time frame. (Olfson, Blanco, Wang, Laje, & Correll, 2014). Psychotherapy visits by youths also increased while adult visits decreased over the same time frame (Olfson et al., 2014). Most common child/adolescent diagnoses include bipolar disorder, attention deficit hyperactivity disorder, anxiety, depression, conduct/oppositional defiant disorder, autism, eating disorders and schizophrenia (National Alliance on Mental Illness [NAMI], 2011; Sarvet et al., 2010). Of great concern, suicide is the third leading cause of death in adolescents between the ages of 10 and 18 (WHO, 2014). U.S. teens considered suicide at a rate of 17% and had a suicide plan at a rate of 13.6% (Kann et al., 2013).

There are many short and long term consequences of untreated mental illness. Short term consequences include ineffectiveness of pharmacologic treatment, increased suicide rates, increased school difficulties, emotional suffering and alteration in family relationships (Brohan, Slade, Clement, & Thornicroft, 2010; Dell’Osso, Glick, Baldwin, & Altamura, 2012; Watkins, Burnam, Okeke, & Setodji, 2012; WHO, 2014). Chronicity of disorder, increased law enforcement involvement, decreased occupational functioning, homelessness, and decreased quality of life comprise long term consequences (Cognigni et al., 2012; Pandiani, Linehan, & Mongeon, 2006; Watkins et al., 2012; WHO, 2014).

There are many barriers to mental health care for children and adolescents. From 2001 to 2004, Merikangas et al. (2011) found only one third of youth received needed mental health services, and there was a significant incidence of racial disparity in treatment. Stigma associated with receiving diagnosis and treatment for mental illness often impedes reception of care (Brohan et al., 2010; WHO, 2014). Delay in treatment after a mental health need is identified frequently occurs in adults due to low perceived need and limited resources (Andrade et al., 2014; WHO, 2014). Given that adults are responsible for obtaining mental health treatment for their children, low perceived need and limited resources may translate to lack of mental health care for children.

In light of the barriers to traditional mental health care utilization, innovative care delivery models are necessary. Embedding mental health care within primary or specialty care improved utilization and outcomes for youth (Kuehn, 2011; Moser, Plante, LeLeiko, & Lobato, 2014). Utilization of technology via telemedicine and online support groups have the potential to improve care for those in rural or underserved communities (Cassidy, 2011; Fortney et al., 2007; Gulec et al., 2011). Finally, utilizing non-psychiatrist providers, such as pediatricians or

advanced practice nurses with specialized training for disorders such as anxiety, depression and attention deficit hyperactivity disorder may improve access to care by increasing availability (Ross, Chan, Harris, Goldman, & Rappaport, 2010; Kolko, 2010).

An innovative care model for connecting youth to mental health resources exists in anonymous mental health texting services and addresses the concepts of timeliness, cost, provider/patient compatibility, care delivery method, and stigma reduction. Mental health hotlines have been in existence in the United States since 1958, with the primary focus on suicide prevention (Office of the Surgeon General, 2012). A study by Crosby-Budinger, Cwik, and Riddle (2015) found youth are amenable to using crisis hotlines, though there is reluctance to telephone use because 63% of youth report texting is the preferred form of communication (Lenhart, 2015). Recent developments in technology have increased hotline platforms which now include text and web-based, as well as call hotlines (Evans, Davidson and Sicafuse, 2013). These platforms can be utilized via devices such as mobile phones, tablets and laptops. Access to devices is widespread; in fact, in 2015, 88% of teens had access to a mobile phone, 87% had access to a desktop or laptop computer and 58% had access to a tablet (Lenhart, 2015). Ninety per cent of teens with phones exchange texts and one-third of teens use apps outside of texting services supplied by telephone companies to exchange texts (Lenhart, 2015). Ninety-two per cent of teens report going online daily. Thus, an anonymous text or web-based mental health hotline has the potential to remove barriers to help.

### **Theoretical Framework**

Andersen's Behavioral Model of Health Services Use was developed to address ways health care is accessed (Andersen & Newman, 1973). The Behavioral Model of Health Services Use was originally developed in 1968 and has been revised numerous times with each revision

developing a new phase (Aday & Andersen, 1974; Andersen, 1995; Andersen & Newman, 1973); there are currently six phases to the model. The framework for this capstone project was Phase 4 (Appendix B). It describes utilization of health services related to multiple influences (Andersen, 1995). Environmental factors, population characteristics, and health behaviors are interrelated and lead to certain outcomes. Environmental factors include the health care system and external environments such as neighborhood, family, and support systems. Population characteristics include predisposing characteristics such as age and education level, enabling characteristics such as health insurance coverage and timeliness of referral, and need, such as existing mental health diagnosis or positive screen for mental health challenge. Health behaviors are personal health practices such as meditation, proper nutrition and exercise, and the use of health services as a response to wellness needs or illness. Outcomes that are influenced by these factors include the patient's and provider's perception of health and patient satisfaction (Andersen, 1995).

The philosophical underpinnings of this theory are based on concepts of health policy, consumer satisfaction, and utilization of services. There is specific discussion about the importance of the interrelation of these factors (Andersen, 1995). While not explicitly stated, Andersen's Behavioral Model seems to have principles derived from Gestalt theory, which states the whole is greater than the sum of its parts (Koffka, 2013). Andersen's Behavioral Model is a middle-range theory. It has guided many research studies (Babitsch, Gohl, & von Lengerke, 2012; Gelberg, Andersen, & Leake, 2000; Hochhausen, Le, & Perry, 2011). Andersen's Behavioral Model is an appropriate framework for practice issues especially related to the study of factors that influence the utilization of health care.

There are six major assumptions of the Andersen Behavioral Model of Health Services Use (Andersen & Newman, 1973; Aday & Andersen, 1974; Andersen, 1995; Babitsch, Gohl, & von Lengerke, 2012).

Figure1: Major Assumptions of Andersen's Model

<b>Major Assumptions</b>	<b>Assumptions that apply to TxtAboutIT</b>
People seek formal health care to improve their health or alleviate illness.	People seek formal health care to improve their health or alleviate illness.
Receiving formal health care will improve the health of the population.	Receiving formal health care will improve the health of the population.
An increase in health care resources improves utilization.	An increase in health care resources improves utilization.
An increase in access to care is related to appropriate spread of resources across geographical areas.	Not applicable
Improved financial coverage of health care, including coverage of multiple diagnoses, increases accessibility to care.	Not applicable
The reduction of wait times for care further increases the ability of consumers to access care	The reduction of wait times for care further increases the ability of consumers to access care

The assumptions of this model that apply to the phenomenon of utilizing the TxtAboutIt service to improve access to mental health care are outlined in Figure 1. When a mental health need is identified, access to a timely response has the high potential to improve the health of the child. Utilization of the TxtAboutIt service will streamline the process from the time a child identifies a mental health need to the time they receive a response to that need. When children have to wait for adults to help them get help or utilize traditional crisis phone lines, it can lead to delay in services. This delay can lead to continuation of the crisis to the point that emergency care is needed. Finally, this lack of utilization can lead to poor mental health and fractured interpersonal relationships.

The Andersen Behavioral Model of Health Services Use was developed to evaluate access to medical care. However, it is appropriate to use as the theoretical framework for the capstone project because it has been successfully applied to mental health (Babitsch, Gohl, & von Lengerke, 2012; Hochhausen, Le, & Perry, 2011). Utilization of this model aids understanding of the impact of timeliness in receiving mental health assistance. Interventions improving timeliness of access to mental health assistance can positively influence patient outcomes.

### **Project Objectives**

The objective of this project is to improve linkages to crisis mental health care for pediatric and adolescent patients in need of services by utilizing an anonymous crisis texting line. TxtAboutIt provides an anonymous texting service for youth with a self-identified mental health need in a format that is frequently utilized by children 10-17 years of age. The project was to analyze data from an existing implementation site to determine if improvements could be linked to the program. In order to attain the long-term project objective, a task and timeline was completed (Table A4). The proposed objective was that nine months following the implementation, there would be a reduction in the number of visits to the emergency department for those between the ages of 10-17 for mental health crisis, drug overdose, or suicide attempts. Registered users would also be better satisfied with the crisis texting service, as assessed with the End User Computing Satisfaction (EUCS) Scale (Appendix D).

### **Project Plan**

#### **Scope of the Change**

The scope of the capstone project will involve the project planner addressing systems in Joplin, Missouri and Bloomington, Indiana. The project will entail analysis of the impact of an

anonymous mental health texting service implemented in Joplin, Missouri. If this analysis is favorable, the service will be implemented in Bloomington, Indiana. As a result of the project, youth will have improved access to mental health assistance utilizing a method identified by youth to be easier and more socially acceptable (Dietrich et al., 2014; Gold, Lim, Hellard, Hocking, & Keogh, 2010; Woodford et al., 2011; Woodford, Clark, Strecher, & Resnicow, 2010). If there are positive outcomes from this project, plans for implementation across various settings such as surrounding communities and universities will be considered.

### **Setting**

This capstone project is based on an existing program in southern Missouri which serves a community with a population of 118,000, 25% who are under 18 years of age. The setting for the capstone project is a county in south central Indiana which has a large public university. This county has a population of nearly 150,000 people. Sixteen percent of the population is under 18 years of age, most served by the county school corporation. The county also has a 251 bed community hospital with an inpatient pediatric unit as well as a private behavioral health facility offering residential, acute and outpatient care. Pediatric primary care is provided by a large practice with multiple locations.

The stakeholders of the project include the project planner, staff members of the outpatient pediatric primary care facilities, and the Pediatric and Adolescent Behavioral Health (PABH) Team. The PABH Team includes representatives from the community hospital, the pediatric primary care offices, three outpatient mental health facilities, an inpatient mental health facility and a non-profit health information exchange.

**Group**

The target population of the project includes children under the age of 18 years who self-identify a mental health need. The number of youth with a mental health need will vary during the course of the project. The number of youth registering for the anonymous mental health texting service and their method of accessing the system will vary. Counselors responding to the text messages will be identified by the PABH group and could include crisis counselors, school social workers, teachers, coaches and nurses.

**Tools/Measures**

The outcomes of this project will be measured utilizing different metrics. A qualitative, descriptive analysis of the texting conversations from the pilot implementation site was utilized to determine if a community based, anonymous crisis texting service describes access to mental health support for adolescents experiencing bullying, self-harm, and suicide. Upon that determination, local implementation was requested but has not been completed.

**Project Task**

The capstone project includes three phases: (a) analyzing data from existing communities which utilize an anonymous mental health texting service to determine if texting conversations describe access to mental health support for adolescents, (b) implementation of anonymous mental health texting service in a rural Midwest community, and (c) improving access to appropriate, amenable mental health care for children in need of services.

Initially, the PABH Team identified the need to identify a method to access mental health assistance that met the needs of the adolescent population. The group also wanted to find a service that could utilize tablets and laptops because the local school system recently implemented a student device program. The service, TxtAboutIt, met these needs. This service

allows a registered user to send an anonymous web or text message to designated counselors. This message is then opened by counselors via a secure dashboard where they reply to the message. A dialogue begins, which often leads to a face to face meeting. In the case of an emergency, such as a suicide or homicide threat or attempt, identifying information can be obtained. Students can self-classify the issue for which they need assistance, such as depression, anxiety, bullying, or substance use. If the student doesn't classify the issue, the counselor can do so. Anecdotal evidence of positive patient outcomes, including de-escalation of a crisis, referral to mental health provider and prevention of suicide exists. The impact of this intervention, however, has never been studied.

### **Resources and Supports**

Current resources and supports include the members of the PABH Team, local mental health facilities and providers, the community hospital, pediatric primary care staff, the health information exchange, the local school system, the pilot implementation site, and the anonymous crisis text line.

### **Risk and Threats**

Risks and threats include denial of access to existing data from pilot implementation site, lack of funding for implementation at capstone site, lack of use of crisis text service, competing priorities for PABH Team that reduce the involvement of this multidisciplinary team, and loss of funding for continuation of the crisis text service. Finally, the PABH Team is directed by the medical informatics council of Indiana University Health Bloomington Hospital who could decide to no longer support the group and its projects

Failure to obtain access to data from the implementation site will impede the initial data analysis to support implementation of the project in the capstone setting. However,

demonstrating a return on investment by reducing the number of inpatient admissions for suicide attempt or drug overdose may mitigate this risk. Lack of financial support from any or all potential funders could hinder implementation progress. Again, articulating potential cost avoidance and reducing resource utilization may convince entities represented on the PABH team to provide initial support. The utilization of an existing, functioning crisis texting service reduces the risk of failure due to technology issues. While there is risk that the PABH Team could have reduction in participation of team members, the level of engagement and commitment to facilitating the care of children in need of mental health services is phenomenal. Ideally, positive outcomes from the use of the crisis texting service will encourage continued participation. Finally, the support of the medical informatics council is incidental because they provide no financial or time support of the project.

### **Marketing Plan**

Written and verbal communication via flyers, presentations, reminder cards, and email will be utilized to describe the use of the TxtAboutIt anonymous crisis texting line in providing support for youth who have self-identified as having a crisis mental health need (Table A2). A benefit of the TxtAboutIT service is the marketing support that is provided. Implementation sites supply locations where marketing is desired, and the staff of TxtAboutIt provide flyers, reminder cards, web site presence, email templates, school announcement scripts and on-site presentations. Sites for flyers and reminder cards include all middle and high schools, local primary care offices, hospital emergency department waiting areas, and local mental health provider offices. Web-site link locations include desktop links on all school corporation issued tablets and laptops as well as on the websites of physician offices, local hospitals, and mental health providers. Email recipients include students and parents of the school corporation who

have requested inclusion on the school list-serv email group. School announcement sites include all middle and high schools in the school corporation. On-site presentations include school corporation staff and board meetings, child protection team and suicide prevention coalition.

### **Financial Plan**

Cost of the capstone project is outlined in Table A3. \$3000 is the annual cost for the TxtAboutIT service. This cost was initially planned to be covered by money from the local suicide coalition. However, the state of Indiana has expressed interest in funding the pilot with the goal of further research on the impact it has on mental health outcomes.

### **Timeline**

The goal of the project was to submit Institutional Review Board (IRB) proposal for project approval to University of Southern Indiana IRB by November 1, 2015. IRB approval was submitted on November 20, 2015 to Ozark Health to gain approval from the Missouri Department of Mental Health to release data for analysis. Approval from Ozark Health was received on November 24, 2015 and from the Missouri Department of Mental Health on November 30, 2015. Data was released in April, 2016. Review of data and appropriate data analysis method was identified in May, 2016. The qualitative, descriptive data analysis was completed on November 11, 2016. Findings of analysis were shared with the PABH team as well as the school board of trustees and funding sources to request financial and personnel resource support for implementation. After resources were secured, school and crisis mental health counselors would be trained to use the system, marketing to students would occur and an implementation date would be identified (Table A1).

### **Outcome Objectives**

- 1.) After local implementation, increase utilization of crisis line. Outcomes will be measured by number of texts to crisis line and number of users registered for the service.
- 2.) Four months after implementation, reduce the number of patients seen in Indiana University Health Bloomington (IUHB) Hospital emergency department with diagnosis related to a mental health crisis. Outcomes will be measured by report generated by hospital decision support based on coding.
- 3.) Four months after implementation, reduce the number of patients seen in IUHB emergency department with diagnosis of drug overdose or suicide attempt. Outcomes will be measured by report generated by hospital decision support based on coding.
- 4.) Four months after implementation, improve user satisfaction with TxtAboutIt service by 10%. Outcomes will be measured by modified End User Computing Satisfaction (EUCS) survey.

#### Process Objectives

- 1.) Maintain Task Timeline within 14 days of estimated date of completion of the project.
- 2.) Obtain IRB approval prior to accessing existing data from crisis texting service.
- 3.) Analyze existing data collected from crisis texting service.
- 4.) Communicate completion of tasks and current timeline with PABH Team and stakeholders at bi-monthly team meetings.

#### **Evaluation/Outcomes**

The Pediatric/Adolescent Behavioral Health (PABH) Team monitored the progress of this project through reports at bi-monthly meetings. The principle investigator (PI) shared initial findings from data analysis from existing crisis texting service site with the PABH team, pediatricians, and practice partner. Process evaluation was conducted after initial data analysis

and determined that outcomes at pilot implementation site were sufficient to support implementation of the service. Nine months after local implementation, the PI will conduct a summative evaluation of rates of emergency department utilization for mental health crisis or suicide attempt/drug overdose. Additionally, a summative evaluation of registered users of the TxtAboutIt service utilizing the End User Computing Satisfaction Scale will measure the effectiveness and overall outcome of the project.

### **Human Subjects Protection**

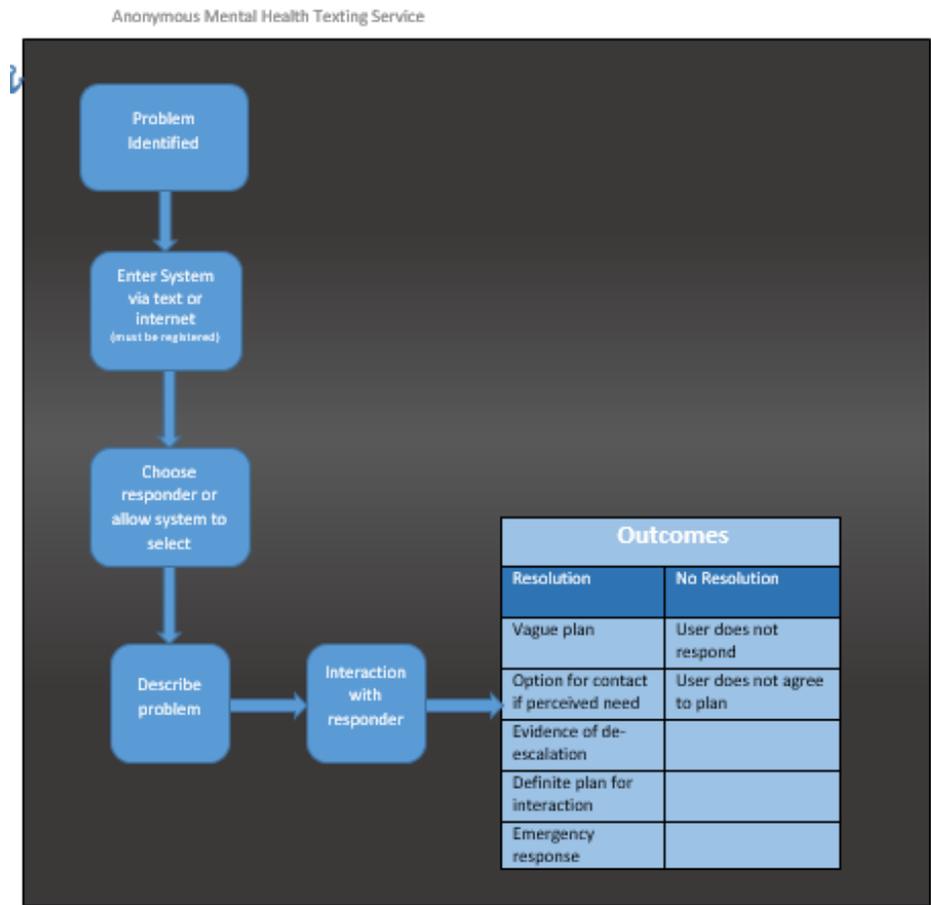
The institutional review board (IRB) application was submitted on November 18, 2015 to University of Southern Indiana (USI). After exempt approval was obtained on November 20, 2015 (Appendix E), approval from Ozark Center, the pilot site for the TxtAboutIT program, was requested and received on November 24, 2015 (Appendix F). Approval from the state of Missouri, Department of Mental Health was received on November 30, 2015 (Appendix G). An IRB extension was approved on February 4, 2016 (Appendix H)

### **Methods**

A retrospective descriptive analysis of existing data in the form of text messages was used for this capstone project. Students registered for the anonymous texting program which outlined the service provided. The program was available via two platforms: mobile phone and the internet. When students had a need for help or information, they would access the system through the desired platform. The users could select the mental health topic for which they desired a response, or the responder could classify the message. They could then select a specific responder from a list or allow any responder to reply. The text service responders were typically school counselors, principals, teachers, coaches, and mental health providers. The responders had 24 hours to respond or the message would roll over to the crisis mental health

provider. All texts were monitored by the service. In situations where the texts indicated imminent danger, the service was able to identify the user and send emergency help (see Figure 1). The focus of the topic for analysis was suicide, since the number of adolescents with suicide attempts seeking care from an emergency department in the south central region of Indiana had increased more than 50% in the previous two-year period. The addition of self-harm and bullying as topics for analysis were based on linkages in the literature between suicide, self-harm and bullying (Borowsky, Taliaferro, and McMorris, 2013, Guan, Fox, and Prinstine, 2012, Hawton, Saunders, and O'Connor, 2012, Lereya, 2013, Litwiller and Brausch, 2013, Whitlock, et al., 2013). Texts identified as test messages were removed from the analysis and remaining texts grouped into conversations. Data was provided from the pilot implementation site in an Excel database. Text messages were classified into different topics by the user or responder. The database was sorted by topic and all texts identified as Bullying, Cutting/Self-Harm, and Suicide were included in the analysis. Each text was displayed along with date, time, and user number. The anonymous texting service attached each subsequent text message in the conversation. In order to see the entire text conversation, key phrases were copied and then pasted into the Excel "find" function. Once all related conversations were identified, only the final conversation was saved. The conversations were in reverse chronological order. So as to understand the timeline of the interaction, the texts were re-organized from first to last text received. The conversations were then read and transcribed into a story. Each storied conversation was analyzed and themes for resolution were identified which included definite plan for interaction, evidence of de-escalation, option for contact if perceived need, vague plan for interaction, or no resolution identified.

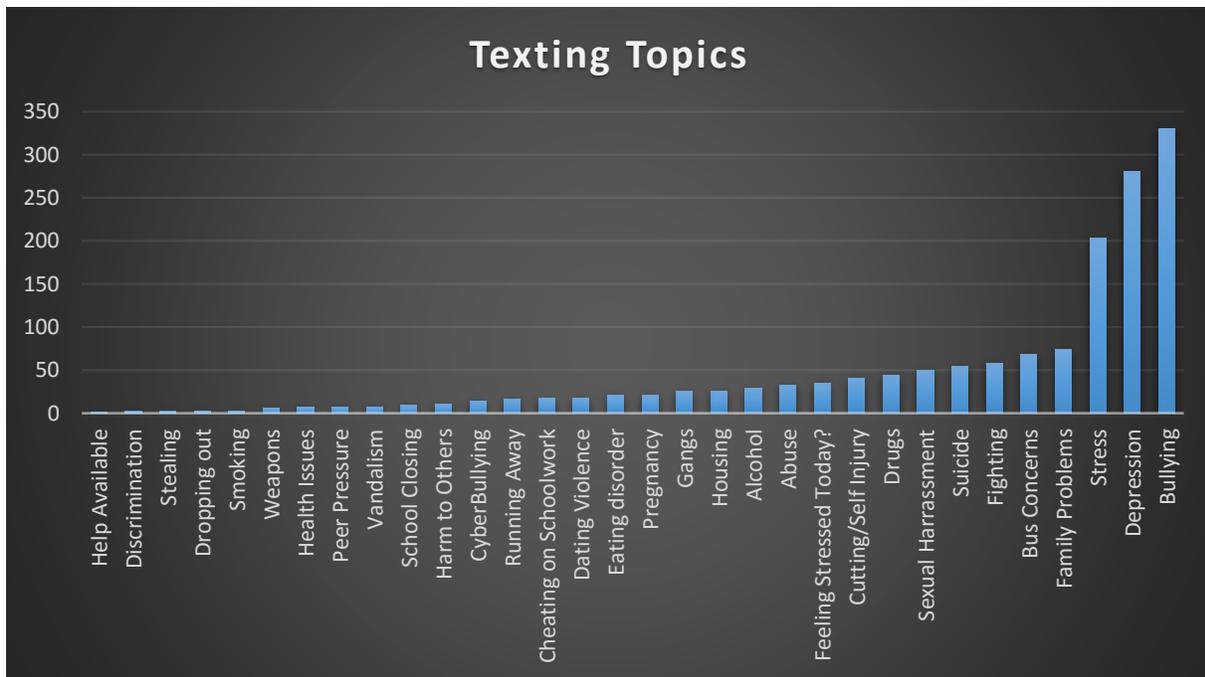
Figure 1. Anonymous Mental Health Texting Service



### Results

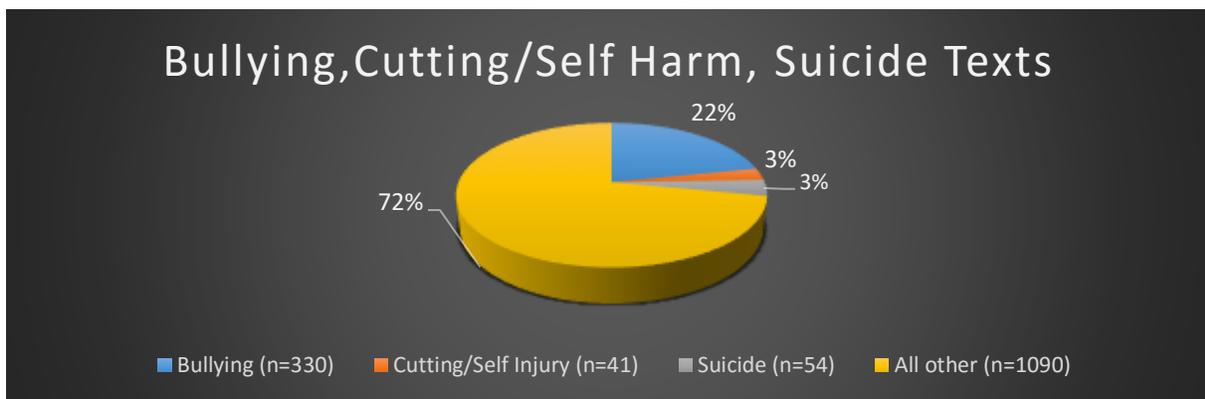
The 1515 text messages, from 2010-2014, were categorized into 32 mental health topics (see Figure 2). For the purposes of this capstone project, the text interactions related to

Figure 2. Texts Categorized into Mental Health Topics



Bullying, Cutting/Self Injury, and Suicide were analyzed. Bullying accounted for 21.7% (n = 330), Cutting/Self Injury for 2.7% (n = 41), and Suicide for 3.6% (n = 54) of all texting interactions (see Figure 3).

Figure 3. Texts Related to Bullying, Cutting/Self Harm and Suicide

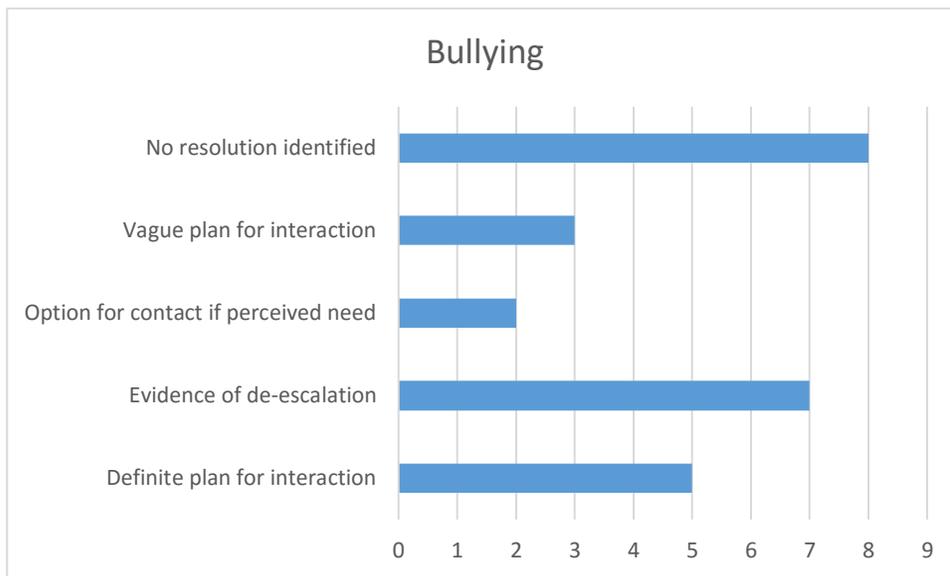


### Bullying

Of the 330 text messages related to bullying, only 31 messages (9.3%) were requests for assistance. The remaining messages were test messages that the users logged under the topic of bullying. The requests for assistance were then grouped into 25 conversations between users and

responders. The majority of these conversations (22/25) were users requesting assistance for themselves, while the remaining conversations (3/25) were students reporting that another student was being bullied. Themes of resolution within the bullying group were as follows: no resolution identified due to no user response (n = 8), vague plan for interaction (n = 3), option for contact if perceived need (n = 2), evidence of de-escalation (n = 7), or definite plan for interaction (n = 5) (See Figure 4). In conversations where no resolution was identified, a user posted a text and a responder followed up, but the user did not continue the conversation.

*Figure 4. Bullying Themes of Resolution*

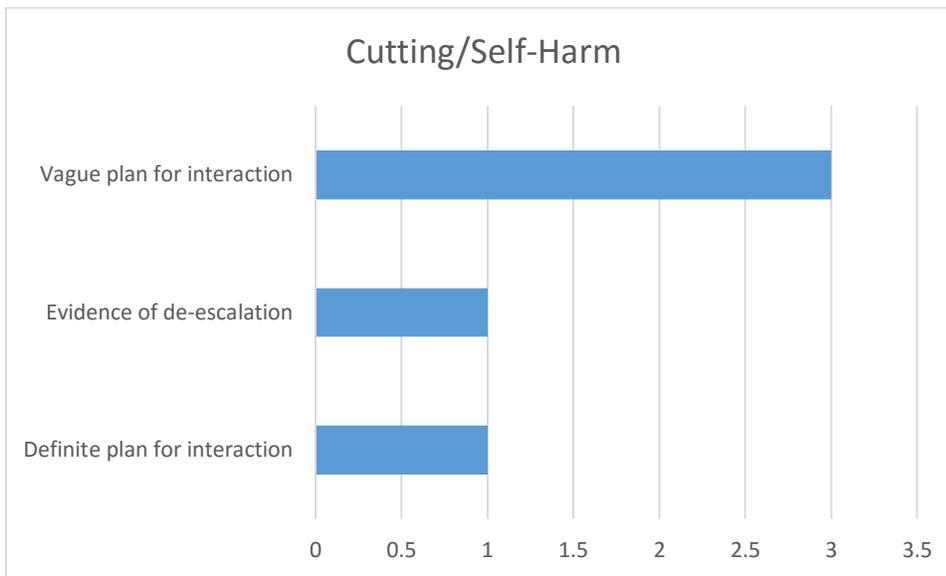


### **Cutting/Self Harm**

Of the 41 text messages related to cutting/self-harm, all messages were requests for assistance. The requests for assistance resulted in 4 conversations between users and responders. The majority of these conversations (3/4) were users requesting assistance for themselves, while the remaining conversation (1/4) was a student reporting that another student disclosed self-harm thoughts. Themes of resolution within the cutting/self-harm group were as follows: vague plan for interaction (n = 3), evidence of de-escalation (n = 1), or definite plan for

interaction ( $n = 1$ ) (See Figure 5). Total number of themes of resolution ( $n = 5$ ) is greater than the number of conversations ( $n = 4$ ) because one conversation had two themes, evidence of de-escalation and definite plan for interaction.

*Figure 5. Cutting/Self-Harm Themes of Resolution*



## **Suicide**

Of the 54 text messages related to suicide, all messages (100%) were requests for assistance. The requests for assistance resulted in 8 conversations between users and responders. All of these conversations (8/8) were users requesting assistance for another student who disclosed suicidal thoughts. A single theme of resolution within the suicide group was a definite plan for interaction ( $n = 8$ ).

## **Discussion**

Based on the limited number of studies related to mental health crisis texting services, the objectives of the capstone project were to describe texting interactions in order to determine whether a community-based crisis texting service would be appropriate to implement in the south central region of Indiana. One concept noted in the analysis of the texts was that students

in the bullying and self-harm groups self-advocated for help 86 % of the time, while all texts related to suicide were initiated by friends of the person threatening suicide. This finding supports current knowledge that most adolescents disclose suicidal ideation and attempts to peers, not trusted adults (De Luca and Wyman, 2012, Hom, Stanley and Joiner, 2015, Marohn, 2013, Michelmore, and Hindley, 2012). Having an anonymous way for an adolescent to get assistance for a suicidal friend has the potential to improve outcomes.

Further analysis of the texting conversations described the following attributes: Ability for user to connect with trusted resource, ability for responder to connect user to appropriate level of care, potential for intervention during acute episode, and potential for face to face interaction at identified time of need.

Students seeking assistance via the anonymous mental health texting service had the option to choose the type of responder they wanted. Adolescents with mental health needs do not frequently seek help from adults who could give assistance due in part to embarrassment and fear of overreaction by the adult (Evans, Davidson, and Sicafuse, 2013). The texting interactions allowed for anonymity and showed a level of existing trust between chosen responders and users. Statements give the impression that the user has communicated to the responder at an earlier time and that a relationship exists. This allows the user to choose someone they feel can help them, removing a barrier to help-seeking behaviors. A text from the self-harm/cutting group illustrates this.

*“Hello there Mr.L. I hope you’re doing well, I ‘m not to be honest. I ‘ve been having this tough time with not relapsing and cutting again.”*

Another attribute of the community-based crisis texting service was that the responder was able to connect user to appropriate level of care. Timely intervention reinforces benefits of

help-seeking behaviors (Andersen, 1995) and can de-escalate the crisis to allow for non-emergent care (Crosby-Budinger, Cwik, and Riddle, 2015). Text interactions from the bullying group supports this.

*User: Dear Mrs.F, I wanted to tell you that a kid next to me is picking on me. She is poking me even when I tell her to stop. She also is copying me on my work.*

*Responder: Have you used the options on the Wheel of Choice to attempt to resolve the conflict yourself? Have you explained that it bothers you and asked her to stop? Have you tried to remove yourself from the situation? Have you told your teacher? If you are comfortable telling me who the student is, I can ask Mr. F to keep a close eye on it. I need you to speak up when it is happening and make sure that you have communicated clearly to the student that you are bothered by her behavior. Here are some things you could say: "When you poke me it distracts me from my work, please stop." or "Please stop poking me, if you want my attention, I would prefer that you say my name."...*

*User: I have told my teacher and its starting to stop. Thank You!!!!*

Text interactions from the self-harm/cutting group highlight de-escalation and follow-up plan.

*Responder: Are there things going on in your life that bring up the urge to self-harm?*

*User: No honestly I have a great time at school, then at practice everything is good, but i just get it when I am sitting in my room.*

*Responder: Have you talked to anyone else about this?*

*User: Only my best friend*

*Responder: Can you talk with your parent(s) or a trusted adult at school?*

*User: my parents are split up. I'm with my mom and stepdad but they wouldn't understand. I have guidance counselors at school I could talk to.*

**Responder:** *Good idea. As much as I can help and want to help, the best help you can get is someone that you can sit down with and see regularly. Can you tell me what you use to self-harm?*

**User:** *I honestly would love to be able to talk to someone regularly but I can't talk myself into going into the counselor office. and a razor blade*

**Responder:** *I think I can understand the difficulty of seeking out help like that. Maybe your best friend would be willing to go with you. I would like to know if you currently have razor blades in your room and if you are willing to get rid of those blades. This is where it is helpful to have an adult. All I can do is encourage you to get rid of the blades. I can't come and get them:)*

**User:** *I just don't know if he would go with me. he honestly gets so upset when he finds out I self-harm. that's what I'm gonna do but what if I have all of them and I get the urge?*

**Responder:** *It doesn't hurt to ask if he'll go with you. And he may be willing if he knows that you are trying to get help. It seems that he cares a great deal about you. That's where him being "upset" is coming from. He does not want his friend to hurt like that. I can see what your concern is with the blades. That is why I would want someone to come along side you and help you through this. These are the kinds of things we should not try to go at alone. You need support. I am a part of the Ozark Center Crisis team and you can talk to us 24/7 via text or phone at 417-347-7720*

**User:** *I just don't know how to ask him if he will go with me. I think tomorrow I will see if he will come over to help*

**Responder:** *Good. Proud of you for trying to involve others. I really want to encourage you to find an adult to bring in to this. Your friend is a good resource but an adult will have a little more maturity in dealing with these things and more resources to help you out. Again, don't forget, the crisis team is here 24/7 to help if you need us.*

**User:** *thank you for your help it really did help*

**Responder:** *Thank you. I do hope I helped. I thank you being willing to share. Can you tell me that you will be safe and will contact us again if you start to feel like you want to harm yourself?*

**User:** *I will most definitely contact you guys again if I do want to*

Seeking help via a community-based mental health crisis texting service allows the responder to deliver an intervention during an acute episode. Timeliness of interventions provides initial support during the time when support is most needed and facilitates the movement toward mental health (Andersen, 1995, Crosby-Budinger, Cwik, and Riddle, 2015). Timeliness also builds trust in the responder and the values of the service. A text conversation seeking assistance with friends who are suicidal illuminates this point.

**User:** *2 of my friends want to do suicide what should i do?!?!?!? (Crying\_Smile gif)*

**Responder:** *Thank you for letting me know. I will help you with this. I know you are worried about them. Would you consider letting me know who they are without sharing your identity with me?*

**User:** *they dont go to this school but its vxxx and mxxx they go to east vxxx in 7th and i believe mxxx is in 8th*

**Responder:** *Thanks for letting me know. I will work on this today! You did the right thing*

**User:** *yeah can you leave me anonymous please*

**Responder:** *Thanks! We followed up on it. Your friends are OK.*

Finally, the crisis texting service has the attribute of facilitating face to face meetings. The service opens the door to needed interactions and, because it is based in the community, users can have face to face meetings if they would like. Adolescents desire anonymity during the initial steps of help-seeking, however once trust is established, adolescents may choose to share contact information in order to meet with the responder.

**User:** *ok so i like a guy and i tell people who i like but they make fun of me and i hate it and i hate it people who make fun of me is t ,k i dont know what do do can u help me*

**Responder:** *Sometimes just sharing how you are feeling helps out. Letting people know something personal about yourself is a part of developing a friendship. It's a risk.*

*REALLY good friends will stil support you. If they tease you or make fun of you, take a moment and think why... do they like him too? Do they think there is someone better for you? Do they just not know what else to say? As we grow up (especially in middle school) we sometimes forget to be supportive friends...and don't always react the positive way. Hope this helps!*

**User:** *but i am really sensitive so alot of things bother me and i try to act like it dosent bother me but sometimes people take it to far so i get mad and it makes it feel like i dont matter anymore and thank u for always help me*

**Responder:** *I totally understand that The key is not keeping things bottled in. I am available and my office is--just to come in a scream or vent. Then you can walk out like nothing happened :) You do matter! You are someone who is special and has a lot to offer!*

**User:** *ok i will see if i can stop by during 3rd hour or 4th hour*

### **Recommendations**

The findings from the descriptive qualitative analysis support the use of an anonymous, community-based crisis texting service. Some areas of Indiana use a call/text service that is answered by non-local volunteers. In situations where a local, timely, intervention would be helpful, such as ongoing bullying, the non-local volunteers are able to give suggestions about how to cope. The community-based texting service, however, provides almost real-time support and allows for adults close to the situation to monitor and facilitate resolution.

The reluctance of youth to seek help in situations where they are embarrassed or when a peer has requested secrecy about a crisis situation, like suicidal ideation, can impede help-seeking behaviors. Anonymous crisis texting services allow adolescents to seek necessary assistance in a manner that provides privacy and connects them to resources that can help. By using trusted adults, such as teachers, school counselors and principals, barriers to support are removed.

The persons staffing crisis hotlines are frequently answering calls from a national call center; thus responders may not be aware of local mental health resources available. In these instances, hotline users are directed to the nearest emergency department for assessment. The TxtAboutIT hotline responder, conversely, can direct the user to the school nurse or another trusted adult in order to assess severity of crisis and appropriate level of care.

In situations where the mental health crisis holds a risk for harm to self or others, anonymous crisis texting services must have a safety net that can provide emergency response. The TxtAboutIT program provides monitoring that allows for rapid deployment of emergency personnel that is not available with other texting programs.

## **Tools and Measures**

Additional tools and measures are recommended after implementation of TxtAboutIt. The number of registrations of MCCSC students age 10-17 should be measured on a monthly basis to determine what percentage of students are able to use the service. Also, an empirical tool, the End-User Computing Satisfaction (EUCS) scale, should be used to measure the satisfaction with computer-based applications (Doll & Torkzadeh, 1988) (Appendix D). The original study by Doll & Torkzadeh (1988) found the EUCS to be both reliable and valid. The Cronbach Alpha coefficient for the 12 item scale was .92, which shows high reliability (Doll & Torkzadeh, 1988). Validity was assessed using the multitrait-multimethod (MTMM) approach, and while the correlations between the criterion and the scale were consistently greater than .5, there were still some instances of variation depending on the type of application used and experience of user, thus indicating the need for further validity testing (Doll & Torkzadeh, 1988). A modified EUCS tool was shown to be concurrently valid by Abdinnour-Helm, Chaparro, & Farmer (2005). There was significant positive correlation with task success ( $r=.33, p<.001$ ) and intention to return to website again ( $r = .59, p < .001$ ). There was significant negative correlation with task duration ( $r = -.28, p < .001$ ) (Abdinnour-Helm, Chaparro, & Farmer, 2005).

## **Lessons Learned**

Many barriers were experienced during the course of this capstone project. Analysis of existing data from pilot crisis texting site had to be completed in order to make a case for utilizing the TxtAboutIt service. The raw data included over 31,000 individual texts. Group texts to all registered users accounted for 90% of the messages and had to be removed manually from the spreadsheet. Texts then had to be grouped and manually manipulated in order for them

to be arranged conversations that were in chronological order. A descriptive, qualitative data analysis had to be completed, which took additional time and resources.

Another barrier, obtaining funding for implementing the project, was unresolved. While the cost was not excessive, funding sources were scarce. State funding is available for suicide prevention programs, but the application and decision process is lengthy and not yet decided.

Delay in implementation occurred due to 2016 November elections, which included school board elections and a school funding referendum. Implementing a project that requires personnel support from the community school corporation prior to a vote on a ballot measure to increase property taxes to fund the school corporation did not seem prudent. Now that the school board has been elected and the tax ballot measure has passed, a proposal to the school board to support this project is underway (Appendix I).

Finally, one of the best lessons that was learned was that working with an existing, dedicated team helps to mitigate the pitfalls. While team members were lost to unexpected death, relocation and job changes, the team continued to work together through the process. Without this structure, implementing a project of this nature would be impossible.

### **Maintaining and Sustaining Change**

Successful implementation of a capstone project includes a plan for sustainment. However, most science about implementation of evidence-based practice focuses on the initial planning, trial phase, and spread of innovation (Titler, et al, 2002). In fact, personnel who monitor quality outcomes of clinically based change have noted a lack of continued improvements after initial success has been experienced. A study by Martin et al. (2012), identified attributes of clinical projects that sustained quality improvement. These attributes comprised networks of support that include different clinical settings and disciplines, embedding

the change in a clinical system, utilizing patient satisfaction as an outcome measure, and responding to change in a proactive manner. Utilizing Lean methodology, an embodiment of these attributes, can assist with planning a project in such a way to ensure quality improvements continue to be responsive to the population served by the innovation (Toussaint & Berry, 2013).

Lean principles were first utilized in manufacturing and based on Japanese business practices that reduced waste, improved quality and moved decision making to the workers (Womack, Jones, and Roos, 1990). Health care organizations began to apply Lean methodology after the Institute for Healthcare Improvement (IHI) published a white paper (Miller, 2005), which focused on value for patients, a clear purpose, a culture of continuous improvement, and respect. Lean is not a program but an entire change in culture for an organization. It requires all involved in the work to discover, implement and maintain improvements (Toussaint & Berry, 2013; Miller, 2005). Lean utilizes a Plan, Do, Study, Act (PDSA) method to engage employees and to facilitate advancements (Toussaint, 2013). Additionally, A3 thinking, an extension of PDSA, is employed to clearly define the problem and gather and display data to monitor progress (Toussaint, 2013).

### **Dissemination of Project and Outcomes**

The implementation of a text crisis line is a novel and practical approach to accessing mental health services for youth. Due to the originality of this project, as well as the impact it could have on multiple disciplines, a variety of methods will be used to share the process and outcomes. Manuscripts and abstracts for poster and podium presentations were submitted describing the analysis of existing data from a pilot text crisis line program, use of Lean methodologies for project implementation, and findings from completed project.

Two presentations at University of Southern Indiana's annual research conference were included in the dissemination plan. The first incorporated the background information, project

plan, and implications for practice of the capstone as a poster presentation on April 13, 2016. In April of 2017, a podium presentation, which includes the outcomes of the project, will be delivered.

The Society of Pediatric Nurses offers an opportunity to present at an annual conference with a high attendance of pediatric nurses. An abstract for a poster presentation of the project process and findings was accepted for the 2017 annual conference. Manuscript submissions will be to multidisciplinary journals including *Child and Adolescent Mental Health* and *The Journal of School Health*. Submitting to these varied journals has the potential for spread of knowledge and improves likelihood of implementation of the project in other areas.

### **Conclusion**

The literature has shown that access to mental health services for adolescents is needed and often limited (Andrade, et al., 2014; Brohan et al., 2010; Corrigan, Druss & Perlick, 2014; Gulliver, Griffiths, & Christensen, 2010; Hall, Lemak, Steingraber, & Schaffer, 2008; Kelleher, Campo, & Gardner, 2006; National Survey of Children's Health, (NSCH), 2012; Sarvet et al., 2010; Thomas & Holzer, 2006; WHO, 2014). Mental health services that are accessible and amenable are needed to address this crisis. Lack of such services can lead to negative short and long term effects on adolescent mental health (Brohan, Slade, Clement, & Thornicroft, 2010; Colognori et al., 2012; Dell'Osso, Glick, Baldwin, & Altamura, 2012; Pandiani, Linehan, & Mongeon, 2006; Watkins, Burnam, Okeke, & Setodji, 2012; WHO, 2014). Utilization of technology in the form of an anonymous mental health crisis texting service at a pilot implementation site describes themes of resolution for those registered users with issues related to Bullying, Cutting/Self-Harm, and Suicide.

Based on the findings from the capstone project, recommendations are to implement the anonymous mental health texting service locally in order to reduce the number of mental health crises requiring emergency department care. The DNP prepared nurse has the knowledge and skill set needed to assist in improving access to mental health care for the adolescent population. By doing so, we provide a safety net for adolescents and facilitate support in a manner that fits the way they communicate.

### References

- Aday, L. A., & Andersen, R. (1974). A framework for the study of access to medical care. *Health Services Research, 9*, 208-220.
- Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior, 36*, 1-10.
- Andersen, R., & Newman, J. F. (1973). Societal and individual determinants of medical care utilization in the United States. *Milbank Memorial Fund Quarterly: Health and Society, 51*(1), 95-124. doi: 10.2307/3349613
- Andrade, L.H., Alonso, J., Mneimneh, L, Wells, J.E., Al-Hamzawi, A., Borges, G.,...Kessler, R.C. (2014). Barriers to mental health treatment: Results from the WHO World Mental Health surveys, *Psychological Medicine, 44*, 1303–1317.  
doi:10.1017/S0033291713001943
- Arbaje, A. I., Kansagara, D. L., Salanitro, A. H., Englander, H. L., Kripalani, S., Jencks, S. F., & Lindquist, L. A. (2014). Regardless of age: Incorporating principles from geriatric medicine to improve care transitions for patients with complex needs. *Journal of General Internal Medicine, 29*, 932-939.
- Babitsch, B., Gohl, D., & von Lengerke, T. (2012). Re-revisiting Andersen's Behavioral Model of Health Services Use: A systematic review of studies from 1998–2011. *GMS Psycho-Social-Medicine, 9*, 1-15
- Borowsky, I. W., Taliaferro, L. A., & McMorris, B. J. (2013). Suicidal thinking and behavior among youth involved in verbal and social bullying: risk and protective factors. *Journal of Adolescent Health, 53*(1), S4-S12.

- Brohan, E., Slade, M., Clement, S., & Thornicroft, G. (2010). Experiences of mental illness stigma, prejudice and discrimination: A review of measures. *BMC Health Services Research, 10*(1), 80. doi: 10.1186/1472-6963-10-80
- Cassidy, L. (2011). Online communities of practice to support collaborative mental health practice in rural areas. *Issues in Mental Health Nursing, 32*(2), 98-107. doi: 10.3109/01612840.2010.535648
- Child and Adolescent Mental Health. (2014). Retrieved August 27, 2014, from [http://www.who.int/mental\\_health/maternal-child/child\\_adolescent/en/](http://www.who.int/mental_health/maternal-child/child_adolescent/en/)
- Chorpita, B. F., & Daleiden, E. L. (2009). Mapping evidence-based treatments for children and adolescents: Application of the distillation and matching model to 615 treatments from 322 randomized trials. *Journal of Consulting and Clinical Psychology, 77*, 566-579. doi: 10.1037/a0014565
- Colognori, D., Esseling, P., Stewart, C., Reiss, P., Lu, F., Case, B., & Warner, C. M. (2012). Self-disclosure and mental health service use in socially anxious adolescents. *School Mental Health, 4*, 219-230.
- Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest, 15*(2), 37-70.
- Crosby-Budinger, M., Cwik, M. F., & Riddle, M. A. (2015). Awareness, attitudes, and use of crisis hotlines among youth at- risk for suicide. *Suicide and Life-Threatening Behavior, 45*(2), 192-198.

- Dell’Osso, B., Glick, I. D., Baldwin, D. S., & Altamura, A. C. (2012). Can long-term outcomes be improved by shortening the duration of untreated illness in psychiatric disorders? A conceptual framework. *Psychopathology, 46*(1), 14-21.
- De Luca, S. M., & Wyman, P. A. (2012). Association between school engagement and disclosure of suicidal ideation to adults among Latino adolescents. *The journal of primary prevention, 33*(2-3), 99-110.
- Dietrich, J. J., Coetzee, J., Otwombe, K., Hornschuh, S., Mdanda, S., Nkala, B., . . . Miller, C. (2014). Adolescent-friendly technologies as potential adjuncts for health promotion. *Health Education, 114*(4), 304-318. doi: 10.1108/HE-08-2013-0039
- Evans, W. P., Davidson, L., & Sicafuse, L. (2013). Someone to listen: Increasing youth helpseeking behavior through a text-based crisis line for youth. *Journal of Community Psychology, 47*1-487.
- Fortney, J. C., Pyne, J. M., Edlund, M. J., Williams, D. K., Robinson, D. E., Mittal, D., & Henderson, K. L. (2007). A Randomized trial of telemedicine-based collaborative care for depression. *Journal of General Internal Medicine, 22*, 1086-1093. doi: 10.1007/s11606-007-0201-9
- Gelberg, L., Andersen, R. M., & Leake, B. D. (2000). The behavioral model for vulnerable populations: Application to medical care use and outcomes for homeless people. *Health Services Research, 34*, 1273-1302
- Ghosh, D., Sterns, A., Drew, B., & Hamera, E. (2011). Geospatial study of psychiatric mental health-advanced practice registered nurses (PMH-APRNs) in the United States. *Psychiatric Services, 15*06-1509.

- Gold, J., Lim, M. S., Hellard, M. E., Hocking, J. S., & Keogh, L. (2010). What's in a message? Delivering sexual health promotion to young people in Australia via text messaging. *BMC Public Health* 10, 792. doi:10.1186/1471-2458-10-792
- Green, L.W., & Kreuter, M.W. (2005). *Health Promotion Planning: An Educational and Ecological Approach* (4th ed.). New York: McGraw-Hill.
- Guan, K., Fox, K. R., & Prinstein, M. J. (2012). Nonsuicidal self-injury as a time-invariant predictor of adolescent suicide ideation and attempts in a diverse community sample. *Journal of Consulting and Clinical Psychology*, 80(5), 842.
- Gulec, H., Moessner, M., Mezei, A., Kohls, E., Túry, F., & Bauer, S. (2011). Internet-based maintenance treatment for patients with eating disorders. *Professional Psychology: Research and Practice*, 42, 479-486. doi: [10.1037/a0025806](https://doi.org/10.1037/a0025806)
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health seeking in young people: a systematic review. *BMC Psychiatry*, 10. doi: 10.1186/1471-244X-10-113
- Gulzar, L. (1999). Access to health care. *Journal of Nursing Scholarship*, 31(1), 13-19. doi: 10.1111/j.1547-5069.1999.tb00414.x
- Hall, A. G., Lemak, C. H., Steingraber, H., & Schaffer, S. (2008). Expanding the definition of access: It isn't just about health insurance. *Journal of Health Care for the Poor and Underserved*, 19, 625-638. doi: 10.1353/hpu.0.0011
- Hawton, K., Saunders, K. E., & O'Connor, R. C. (2012). Self-harm and suicide in adolescents. *The Lancet*, 379(9834), 2373-2382.

- Hochhausen, L., Le, H. N., & Perry, D. F. (2011). Community-based mental health service utilization among low-income Latina immigrants. *Community Mental Health Journal*, 47(1), 14-23.
- Hom, M. A., Stanley, I. H., & Joiner, T. E. (2015). Evaluating factors and interventions that influence help-seeking and mental health service utilization among suicidal individuals: a review of the literature. *Clinical Psychology Review*, 40, 28-39.
- Kann, L., Kinchen, S., Shanklin, S. L., Flint, K. H., Hawkins, J., Harris, W. A., . . . Zaza, S. (2014). Youth risk behavior surveillance- United States, 2013. (Center for Disease Control Morbidity and Mortality Weekly Report). Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6304a1.htm>
- Kelleher, K. J., Campo, J. V., & Gardner, W., P. (2006). Management of pediatric mental disorders in primary care: Where are we now and where are we going? *General Pediatrics*, 18, 649-653.
- Khan, A. A., & Bhardwaj, S. M. (1994). Access to health care: A conceptual framework and its relevance to health care planning. *Evaluation & the Health Professions*, 17(1), 60-76. doi: 10.1177/016327879401700104
- Koffka, K. (2013). *Principles of Gestalt Psychology*. Routledge.
- Kolko, D. J., Campo, J. V., Kelleher, K., & Cheng, Y. (2010). Improving access to care and clinical outcome for pediatric behavioral problems: A randomized trial of a nurse-administered intervention in primary care. *Journal of Developmental & Behavioral Pediatrics*, 31, 393-404. doi: 10.1097/DBP.0b013e3181dff307

- Kuehn, B. M. (2011). Pediatrician-Psychiatrist partnerships expand access to mental health care. *JAMA: The Journal of the American Medical Association*, 306, 1531-1533. doi: 10.1001/jama.2011.1444
- Lenhart, A. (2015, April 9). Teens, Social Media & Technology Overview 2015. Retrieved from <http://www.pewinternet.org/2015/04/09/teens-social-media-technology-2015/>
- Lereya, S. T., Winsper, C., Heron, J., Lewis, G., Gunnell, D., Fisher, H. L., & Wolke, D. (2013). Being bullied during childhood and the prospective pathways to self-harm in late adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry*, 52(6), 608-618.
- Litwiller, B. J., & Brausch, A. M. (2013). Cyber bullying and physical bullying in adolescent suicide: the role of violent behavior and substance use. *Journal of youth and adolescence*, 42(5), 675-684.
- Marohn, R. C. (Ed.). (2013). *Adolescent Psychiatry, V. 20: Annals of the American Society for Adolescent Psychiatry (20)*. Routledge.
- Martin, G. P., Weaver, S., Currie, G., Finn, R., & McDonald, R. (2012). Innovation sustainability in challenging health-care contexts: embedding clinically led change in routine practice. *Health Services Management Research*, 25(4), 190-199.
- Mateo, M. (2014). Establishing and sustaining an evidence-based practice environment. In *Research for advanced practice nurses from evidence to practice (2nd ed.)*. New York: Springer Pub.
- Mccarty, C. A., Russo, J., Grossman, D. C., Katon, W., Rockhill, C., Mccauley, E., ... Richardson, L. (2011). Adolescents with suicidal ideation: Health care use and functioning. *Academic Pediatrics*, 11, 422-426. doi: 10.1016/j.acap.2011.01.004

- Merikangas, K. R., He, J., Burstein, M., Swendsen, J., Avenevoli, S., Case, B., ... Olfson, M. (2011). Service utilization for lifetime mental disorders in U.S. adolescents: Results of the National Comorbidity Survey–Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(1), 32-45. doi: 10.1016/j.jaac.2010.10.006
- Merikangas, K. R., He, J., Rapoport, J., Vitiello, B., & Olfson, M. (2013). Medication use in US youth with mental disorders. *JAMA Pediatrics*, 167(2), 141. doi: 10.1001/jamapediatrics.2013.431
- Michelmore, L. and Hindley, P. (2012), Help-seeking for suicidal thoughts and self-harm in young people: A systematic review. *Suicide and Life-Threatening Behavior*, 42, 507–524. doi:10.1111/j.1943-278X.2012.00108.x
- Moser, N. L., Plante, W. A., LeLeiko, N. S., & Lobato, D. J. (2014). Integrating behavioral health services into pediatric gastroenterology: A model of an integrated health care program. *Clinical Practice in Pediatric Psychology*, 2(1),1-12. doi: [10.1037/cpp0000046](https://doi.org/10.1037/cpp0000046)
- National Alliance on Mental Illness [NAMI]. (2011). Workforce development: Policy brief. *NAMI State Advocacy*. Retrieved from [http://www.nami.org/Template.cfm?Section=About\\_the\\_Issue&Template=/ContentManagement/ContentDisplay.cfm&ContentID=114129](http://www.nami.org/Template.cfm?Section=About_the_Issue&Template=/ContentManagement/ContentDisplay.cfm&ContentID=114129)
- National Survey of Children’s Health. (2012). Data query from the Child and Adolescent Health Measurement Initiative. Data resource center for child and adolescent health website. Retrieved from <http://childhealthdata.org/browse/survey/results?q=2504&r=1&r2=1>

- Office of the Surgeon General (US); National Action Alliance for Suicide Prevention (US). 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action: A Report of the U.S. Surgeon General and of the National Action Alliance for Suicide Prevention. Washington (DC): US Department of Health & Human Services (US); 2012 Sep. Appendix C, Brief History of Suicide Prevention in the United States. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK109918/>
- Olfson, M., Blanco, C., Wang, S., Laje, G., & Correll, C. (2014). National trends in the mental health care of children, adolescents, and adults by office-based physicians. *JAMA Psychiatry*, *71*(1), 81-90. doi: 10.1001/jamapsychiatry.2013.3074
- Pandiani, J., Linehan, E., & Mongeon, J. (2006). State Hospital and Incarceration Rates. *Vermont Mental Health Performance Indicator Project*. Retrieved from [http://mentalhealth.vermont.gov/sites/dmh/files/pip/DMH-PIP\\_May\\_12\\_2006.pdf](http://mentalhealth.vermont.gov/sites/dmh/files/pip/DMH-PIP_May_12_2006.pdf)
- Public Health Data Standards Consortium. (2014). Health information technology standards. Retrieved from [http://www.phdsc.org/standards/health-information/S\\_Harmonization.asp](http://www.phdsc.org/standards/health-information/S_Harmonization.asp)
- Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Advances in Mental Health*, *4*(3), 218-251.
- Rosato, N. S., Correll, C. U., Pappadopulos, E., Chait, A., Crystal, S., & Jensen, P. S. (2012). Treatment of maladaptive aggression in youth: CERT Guidelines II. Treatments and ongoing management. *Pediatrics*, *129*, E1577-E1586. doi: 10.1542/peds.2010-1361
- Ross, W. J., Chan, E., Harris, S. K., Goldman, S. J., & Rappaport, L. A. (2010). Pediatrician-psychiatrist collaboration to care for children with attention deficit hyperactivity disorder, depression, and anxiety. *Clinical Pediatrics*, *50*(1), 37-43. doi: 10.1177/0009922810379499

Sarvet, B., Gold, J., Bostic, J. Q., Masek, B. J., Prince, J. B., Jeffers-Terry, M., ... Straus, J. H. (2010). Improving access to mental health care for children: The Massachusetts Child

Psychiatry Access Project. *Pediatrics*, *126*, 1191-1200. doi: 10.1542/peds.2009-1340

Stirman, S. W., Kimberly, J., Cook, N., Calloway, A., Castro, F., & Charns, M. (2012). The sustainability of new programs and innovations: A review of the empirical literature and recommendations for future research. *Implementation Science*, *7*(1), 17.

doi:10.1186/1748-5908-7-17

*The family experience with primary care physicians and staff* (Rep.). (2011, May). Retrieved from National Alliance on Mental Illness website:

<http://www.nami.org/template.cfm?template=/contentmanagement/contentdisplay.cfm&contentid=120671>

Thomas, C. R., & Holzer, C. E. (2006). The continuing shortage of child and adolescent psychiatrists. *Journal of the American Academy of Child and Adolescent Psychiatry*, *45*, 1023-1031. doi: 10.1097/01.chi.0000225353.16831.5d

Titler, M. G., Kleiber, C., Steelman, V. J., Rakel, B. A., Budreau, G., Everett, L. Q., ... & Goode, C. J. (2002). The Iowa model of evidence-based practice to promote quality care. *Critical Care Nursing Clinics of North America*, *13*, 497-509.

Watkins, K. E., Burnam, M. A., Okeke, E. N., & Setodji, C. M. (2012). *Evaluating the Impact of Prevention and Early Intervention Activities on the Mental Health of California's Population*. Rand Corporation.

Whitlock, J., Muehlenkamp, J., Eckenrode, J., Purington, A., Abrams, G. B., Barreira, P., & Kress, V. (2013). Nonsuicidal self-injury as a gateway to suicide in young adults. *Journal of Adolescent Health*, *52*(4), 486-492.

- Woodford, S. J., Barr, K. L., Derry, H. A., Jepson, C. M., Clark, S. J., Strecher, V. J., & Resnicow, K. (2011). OMG do not say LOL: Obese adolescents' perspectives on the content of text messages to enhance weight loss efforts. *Obesity, 19*, 2382-2387. doi: 10.1038/oby.2011.266
- Woodford, S. J., Clark, S. J., Strecher, V. J., & Resnicow, K. (2010). Tailored mobile phone text message as an adjunct to obesity treatment for adolescents. *Journal of Telemedicine and Telecare, 16*, 458-461. doi: 10.1258/jtt.2010.100207
- World Health Organization (2014). Mental Health Issues. *Health for the world's adolescents: A second chance in the second decade*. Retrieved from <http://apps.who.int/adolescent/second-decade/section4/page1/Mental-health-issues.html>
- Yeo, M., Berzins, S., & Addington, D. (2007). Development of an early psychosis public education program using the PRECEDE–PROCEED model. *Health Education Research, 22*, 639-647.
- Zalsman, G., Hawton, K., Wasserman, D., van Heeringen, K., Arensman, E., Sarchiapone, M., ... & Purebl, G. (2016). Suicide prevention strategies revisited: 10-year systematic review. *The Lancet Psychiatry, , 646 – 659*.

## Appendix A

Table A1

## Project Tasks and Timeline

<b>Task</b>	<b>Estimated Date of Completion</b>	<b>Date of Completion</b>
1.) Seek permission from Carter Myers from TxtAboutIt to analyze existing data.	August 15, 2015	August 15, 2015
2.) Carter Myers to contact Ozark Center to plan partnership to study efficacy of TxtAboutIt	September 15, 2015	September 3, 2015
3.) Initiate contact with Debbie Fitzgerald, Director of Crisis Services, Ozark Center, Joplin MO	October 10, 2015	October 1, 2015
4.) Submit IRB application to USI	November 1, 2015	November 1, 2015
9.) Submit IRB approval to Debbie Fitzgerald for submission to Missouri Department of Mental Health	November 15, 2015	November 20, 2015
10.) Analyze data from Ozark Center Crisis Texting Line	April, 2016	November, 2016
11.) Disseminate findings to PABH group	November 30, 2016	December 7, 2016
12.) Disseminate findings to funding sources	December 6, 2016	December 16, 2016
13.) Send letter requesting support of implementation to school board of trustees	December 6, 2016	December 10, 2016

Table A2

*Marketing Plan*

<b>Target/Stakeholder</b>	<b>Message</b>	<b>Vehicle/location</b>	<b>Timeline</b>
<b>Pediatric Primary Care: Pediatricians/ Pediatric Nurse Practitioners/ Office Managers/Nursing Staff</b>	Aid in participant recruitment	1. Flyer – patient waiting room 2. Website – link to TxtAboutIt website 3. Flyer- staff bulletin board 4. Reminder cards- distributed at office check out	January 2017
<b>Intake coordinators at Outpatient Behavioral Health providers</b>	Aid in participant recruitment	1. Flyer – patient room 2. Reminder cards- distributed at intake appointment	January 2017
<b>School Corporation: Principal, Assistant principals, guidance counselors, teachers, social workers, board of trustees</b>	Aid in participant recruitment	1. Presentation – staff meetings 2. Presentation – board meeting 3. Flyer- staff bulletin board 4. Flyer – Student areas 5. Reminder cards- distributed during home room 6. Website – link to TxtAboutIt website 7. Daily Announcements – overhead and email communication	January 2017 and again August 2017
<b>Inpatient Mental Health Facility: Discharge coordinator</b>	Aid in participant recruitment	1. Reminder cards – distributed during discharge education	January 2017
<b>Inpatient Pediatric Unit at Community Hospital: Nurses</b>	Aid in participant recruitment	1. Reminder cards – distributed during discharge education	January 2017
<b>Child Protection Team</b>	Aid in participant recruitment	1. Presentation - at bi-monthly meeting	January 2017
<b>Suicide Prevention Coalition</b>	Increase awareness	1. Presentation - at monthly meeting	September 2017

Table A3

Item	Budgeted Amount	In Kind Donation	Source of Funding	Direct Cost
<b>TxtAboutIt One year contract</b>	<b>\$3000. 00</b>	<b>Pending</b>	<b>IU Health Bloomington, Meadows and MCCSC</b>	

*Financial Plan*

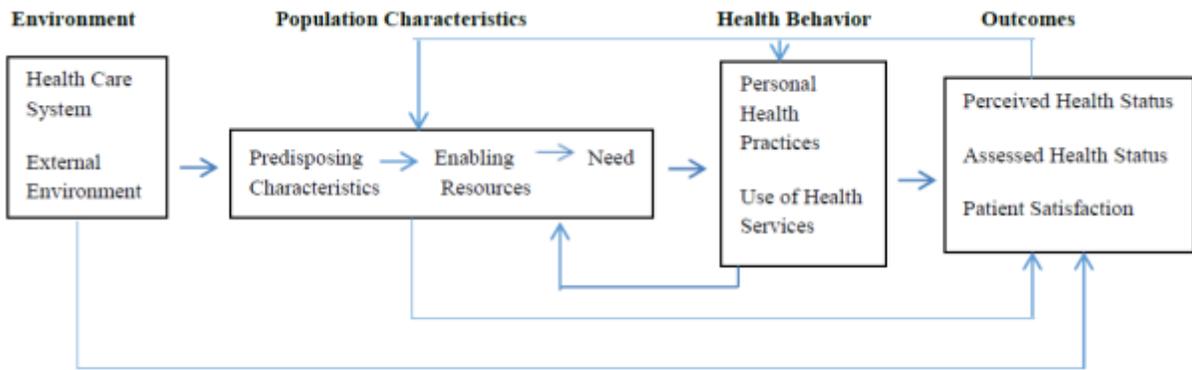
Table A4

*Project Objectives*

<b>The overall objective of this project is that utilization of the TxtAboutIt service will improve access to appropriate mental health crisis response.</b>				
<b>Objectives</b>	<b>Measures</b>	<b>Expected outcomes</b>	<b>Data Source</b>	<b>Timeline</b>
Immediately after the marketing plan is implemented, 50% of MCCSC students age 10-17 will register for TxtAboutIt	Number of registrations/ number of MCCSC students age 10-17	Improved access to crisis support	TxtAboutIt	TBD
3 months after initial implementation, 25% of registered users will have utilized TxtAboutIt service	Number of users/number of registrations	Improved utilization of TxtAboutIt service	TxtAboutIt	TBD
1 month after initial utilization of TxtAboutIt, participants will rate satisfaction with TxtAboutIt service greater	Texting service satisfaction questionnaire	Satisfaction with responses received	End User Computing Satisfaction Scale via text	TBD

Appendix B

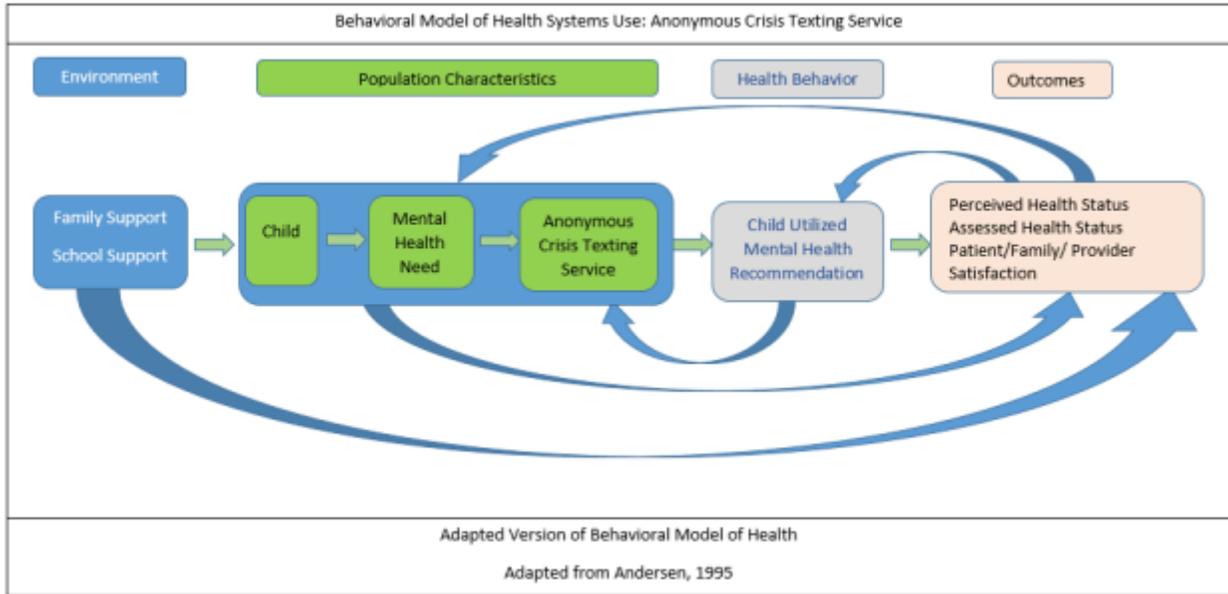
*Andersen's Behavioral Model of Health Services Use*



(Andersen, 1995)

Appendix C

*Adaptation of Andersen's Behavioral Model of Health Systems Use*



## Appendix D

*End User Computing Satisfaction (EUCS) Scale*

Item	Question	Dimension
EUCS1	Does the site provide the precise information you need?	Content
EUCS2	Does the site information content meet your needs?	Content
EUCS3	Did the site provide help that seemed to be just about exactly what you need?	Content
EUCS4	Did the site provide sufficient information?	Content
EUCS5	Was the site accurate?	Accuracy
EUCS6	Were you satisfied with the accuracy of the site?	Accuracy
EUCS7	Did you think the site information is presented in a useful format?	Format
EUCS8	Was the site information clear?	Format
EUCS9	Was the site user friendly?	Ease of Use
EUCS10	Was the site easy to use?	Ease of Use
EUCS11	Did you get the site information you need quickly?	Timeliness
EUCS12	Did the site provide up-to-date information?	Timeliness

Scaling: 1 = almost never; 2 = some of the time; 3 = about half of the time; 4 = most of the time; 5 = almost always.

Adapted from “The Measurement of End User Computing Satisfaction” Doll & Torkzadeh, 1988

Appendix E

*IRB Approval*



Office of Sponsored Projects and Research Administration  
 5500 University Boulevard ~ Evansville, Indiana 47712 ~ 812-465-1125  
[www.usi.edu/ospira](http://www.usi.edu/ospira) - [ospira@usi.edu](mailto:ospira@usi.edu)

DATE: November 20, 2015

TO: Julie Kathman  
 FROM: USI Office of Sponsored Projects and Research Administration

PROJECT TITLE: [726518-1] Utilizing an Anonymous Crisis Texting Service to Improve Access to Mental Health Information and Services

REFERENCE #: 2015-174-NH  
 SUBMISSION TYPE: New Project

ACTION: APPROVED  
 IRB APPROVAL DATE: November 20, 2015  
 EXPIRATION DATE: March 4, 2016

REVIEW CATEGORY: TYPE 1 RESEARCH - Exempt Category # 4

The above project has been approved by USI's IRB under the provision of Federal Regulations 45 CFR 46.

This approval is based on the following conditions:

1. The materials you submitted to the IRB (through IRBNet) provide a complete and accurate account of how human subjects are involved in your project.
2. You will carry on your research strictly according to the procedures described in the materials presented to the IRB.
3. If any changes are made, you will submit the Amendment Form through IRBNet.
4. You will immediately report to the Office of Sponsored Projects and Research Administration any problems or adverse events encountered while using human subjects.
5. Prior to expiration, you will submit a Continuing Review Form through IRBNet.

This project requires continuing IRB review on an annual basis. Please use the Continuing Review Form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of March 4, 2016.

To renew this project or make a modification, please see the IRBNet User Manual on our website at [usi.edu/ospira](http://usi.edu/ospira) for step-by-step instructions on submitting the Continuing Review Form or the Amendment Form.

If you have any questions, please contact us at 812-465-7000 or [ospira@usi.edu](mailto:ospira@usi.edu).

Please include your project title and reference number in all correspondence with this committee.

A handwritten signature in blue ink that reads "Dr. K. Draughton".

Dr. Katherine A. Draughton  
 Executive Director - OSPIRA

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within The Office of Sponsored Projects and Research Administration's records.

Appendix F

*Ozark Center Approval*

Fitzgerald,Deborah L <DLFitzgerald@freemanhealth.com>

Tue 11/24/2015, 3:27 PM

Julie,

Yes, the meeting here went well and the Administrative Council at Ozark Center approved our participation in your project but now we need to send the full proposal on to the Missouri Department of Mental Health for their blessing/final approval.

*Debbie Fitzgerald, Ed.S, LPC, NCC*

Director of Crisis Services

Region 5 Suicide Prevention Coordinator

Ozark Center

P.O. Box 2526, Joplin, Mo. 64803

(417) 347-7720 or (800) 247-0661

## Appendix G

*State of Missouri Department of Mental Health Approval*

JEREMIAH W. (JAY) NIXON  
GOVERNOR



MARK STRINGER  
DIRECTOR

STATE OF MISSOURI  
DEPARTMENT OF MENTAL HEALTH  
1706 EAST GUM STREET, P.O. BOX 697  
JEFFERSON CITY, MISSOURI 65102  
PHONE: (573) 751-4122 FAX: (573) 751-4224  
[www.dmh.mo.gov](http://www.dmh.mo.gov)

November 30, 2015

Julie Kathman  
600 N. Lower Birnie Galvan Rd.  
Bloomington, IN 47408

Dear Ms. Kathman:

After review of the material on the study entitled "The Effectiveness of an Anonymous Crisis Texting Service for Youth in Need of Mental Health Information and/or Services", it has been determined that the proposal is purely retrospective chart review, does not involve direct contact with clients and will not contain confidential information. Therefore, no further authorization or approval is needed from our agency.

Although not required, I would appreciate a copy of your findings. Good luck with your project.

Sincerely,

A handwritten signature in black ink that reads "L. Young-Walker".

Laine Young-Walker, MD  
PRC Chairperson

A redacted signature consisting of the letters "LYW" in red.

*In Equal Opportunity Employer; services provided on a nondiscriminatory basis.*

Appendix H

*IRB Extension*



Office of Sponsored Projects and Research Administration  
 5900 University Boulevard ~ Evansville, Indiana 47712 ~ 812-465-1128  
[www.usi.edu/ospra](http://www.usi.edu/ospra) - [ospra@usi.edu](mailto:ospra@usi.edu)

DATE: February 4, 2016

TO: Julie Kathman  
 FROM: USI Office of Sponsored Projects and Research Administration

PROJECT TITLE: [726518-2] Utilizing an Anonymous Crisis Texting Service to Improve Access to Mental Health Information and Services

REFERENCE #: 2015-174-NH  
 SUBMISSION TYPE: Continuing Review/Progress Report

ACTION: APPROVED  
 IRB APPROVAL DATE: February 4, 2016  
 EXPIRATION DATE: August 17, 2016

REVIEW CATEGORY: TYPE 1 RESEARCH - Exempt Category # 4

The above project has been approved by USI's IRB under the provision of Federal Regulations 45 CFR 46.

This approval is based on the following conditions:

1. The materials you submitted to the IRB (through IRBNet) provide a complete and accurate account of how human subjects are involved in your project.
2. You will carry on your research strictly according to the procedures described in the materials presented to the IRB.
3. If any changes are made, you will submit the Amendment Form through IRBNet.
4. You will immediately report to the Office of Sponsored Projects and Research Administration any problems or adverse events encountered while using human subjects.
5. Prior to expiration, you will submit a Continuing Review Form through IRBNet.

This project requires continuing IRB review on an annual basis. Please use the Continuing Review Form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of August 17, 2016.

To renew this project or make a modification, please see the IRBNet User Manual on our website at [usi.edu/ospra](http://usi.edu/ospra) for step-by-step instructions on submitting the Continuing Review Form or the Amendment Form.

If you have any questions, please contact us at 812-465-7000 or [ospra@usi.edu](mailto:ospra@usi.edu).

Please include your project title and reference number in all correspondence with this committee.

A handwritten signature in blue ink that reads "Dr. K. Draughon".

Dr. Katharine A. Draughon  
 Executive Director - OSPIRA

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within The Office of Sponsored Projects and Research Administration's records.

*School Board of Trustees Letter*

November 29, 2016

Board of School Trustees  
 Monroe County Community School Corporation  
 315 E North Drive  
 Bloomington, IN 47401

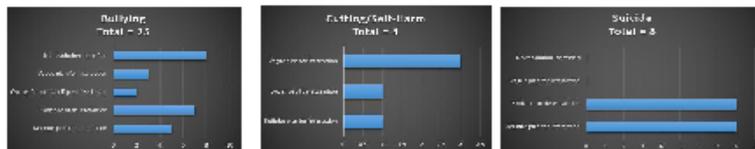
Dear Board Members:

On behalf of the Pediatric and Adolescent Behavioral Health (PABH) Team, I am writing to request your support of an innovative program to provide mental health support to the students of Monroe County.

The PABH Team is comprised of members of the community representing many organizations, including MCCSC, Riley Physicians at Southern Indiana Physicians, Indiana University Health Bloomington Hospital, Meadows Hospital, Catholic Charities, Centerstone, Milestones, Department of Children’s Services, and HealthLinc. This team works together to identify opportunities to collaborate to improve the mental health of youth in our community and recognizes the impact each one of us has on that goal.

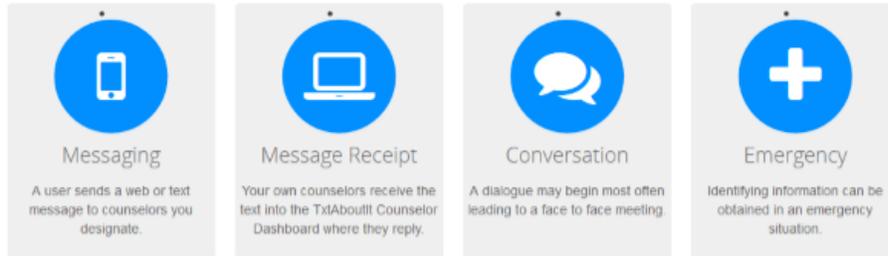
Over the last three years we have seen a significant increase in youth seeking crisis mental health care. In fact, those under the age of 18 seeking care at IU Health Bloomington for a suicide attempt have increased from 29 in 2015 to over 42 as of October of 2016. Our team is aware of many situations where access to care is limited by lack of providers and parental engagement. As well, access to smart phones, tablets and laptops has increased the instances of cyber-bullying nationally.

We have a potential solution to these issues. TxtAboutIT is a secure, anonymous mental health texting service that provides access to community responders. In communities that have implemented TxtAboutIT, these responders are school counselors, teachers, principals, and crisis mental health counselors. This service supports texting and online platforms, thus desktop access to this site through the MCCSC would be a great use of the 1:1 technology initiative. A descriptive, qualitative study of data from a pilot implementation site describes the following findings related to resolution of bullying, self-harm and suicide:



Board of School Trustees  
Monroe County Community School Corporation  
Page 2

How it works...



The PABH Team is in the process of securing funding for \$3000 to implement this service at a pilot school corporation.

Would you be willing to support this valuable initiative?

Members of the PABH Team and a TxtAboutIT representative are happy to attend a school board meeting to provide further information.

Sincerely,

Julie Kathman, MSN, RN, CNS-BC, CPN  
Director, Women and Children's Services  
IU Health Bloomington

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