

Substance Abuse Transportation Program (SATP)

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Abstract

The opioid crisis is a significant problem in multiple societies, and it has been shown that there are many barriers for individuals who are suffering from substance abuse issues to obtain treatment. Rural populations have even greater barriers due to the sheer distance to and from treatment centers that could help with their substance abuse issues, thus transportation is a large need for the rural population. This proposal seeks to implement a transportation program called the Substance Abuse Transportation Program (SATP) for individuals who are participating in substance abuse treatment from one of four different treatment centers in Ringgold, GA. A literature review was conducted and discusses the Evidence-Based Practices that will be used when implementing this program. A needs assessment was also outlined that would identify barriers to treatment and the specific transportation needs of individuals residing in Ringgold, GA. The researchers developed a mixed review that will be used to incorporate quantitative and qualitative data from individuals in one of the four treatment programs. A factor analysis was used to answer the questions: “Is there a relationship between transportation needs and substance abuse treatment dropout rate?”, and “Do substance abuse clients have access to transportation?”. The program developers also conducted a stakeholder analysis and SWOT analysis to determine resources and individuals who may be beneficial to the program, and information was gathered in a Logic Model to outline the goals of the program. These tools and techniques will be important in evaluating the feasibility and sustainability of the program.

Background of the Problem

The opioid crisis is a significant problem in the United States. The Georgia Hospital Association (2019) reports that “48.5 million Americans have used illicit drugs or misused Rx drugs, and 218,000 Americans have died from overdoses related to Rx opioids from 1999 to 2017” (Georgia Hospital Association, 2019). In Georgia specifically, opioid and heroin use significantly threatens the health, prosperity, and general wellbeing of individuals throughout the state, across almost all sectors of life and work (Langford, Abraham, Johnson, Norton, & Wrenn, 2017). Opioid abuse can cause significant strain on relationships, mental health, and emotional stability. It can also cause physical and financial damage to families and individuals who are experiencing opioid abuse, as well as emotional trauma to children of individuals with opioid addictions (Dirks, 2018).

Opioid addiction is severely damaging to individuals and their families, but there are many issues that can keep people from receiving the necessary treatment for their addictions. The National Rural Health Association (NRHA) reports several barriers to treatment including cost, transportation, individual mindset, society stigma, availability of health insurance and/or treatment centers, and community support (Hancock, et al., 2017). Studies show that lack of access to treatment centers is one of the main reasons that individuals in substance abuse programs do not complete treatment, and clients are less likely to finish their treatment if they have to travel to outpatient rehab centers (Browne, et al., 2016).

Although the opioid epidemic has ravaged many regions in the United States, it is especially calamitous to rural communities. This is in part due to lack of access to a vehicle, distance of the treatment facilities, and cost of transportation overall. According to the Georgia Department of Public Health (GDPH), there is a higher incidence of opioid-related overdoses in

individuals living in urban and rural areas in Northern Georgia (Georgia Department of Public Health, 2016). The Walker County Messenger and Catoosa County News (2019) notes that Catoosa County had over 25 million opioid pills delivered to residents over a seven-year reporting period, which is equal to 58 pills per person per year (Walker County Messenger & Catoosa County News, 2019).

For the purposes of this paper, the researchers have chosen to focus this study on the opioid crisis in Ringgold, GA in Catoosa County due to proximity and the resources available. The target population for this program would include all individuals who live in Catoosa County (especially in the rural regions), have substance abuse issues (specifically opioids), and have limited access to transportation to and from their substance abuse treatment at one of the four treatment centers in Ringgold, GA. The transportation system would be built into the outpatient treatment centers that are already established in Ringgold, GA and would provide free services to clients throughout Catoosa County.

The U.S. Census Bureau (2017) reports that Ringgold, GA has a population of over 3,500 individuals with 78% Caucasian, 9% African American, and 4% other minorities. Over 19% of the population lives below the poverty level and has a median annual household income of \$41,500 (U.S. Census Bureau, 2017). The Opioid Overdose Surveillance Report in Georgia (2016) showed that the highest rate of opioid-related overdoses were found to be in rural areas (Georgia Department of Public Health, 2016). Transportation statistics for Ringgold, GA show an average of two cars per household, with a 40-minute average daily commute (U.S. Census Bureau, 2017). Although it seems that most individuals residing in Ringgold, GA own cars, the average does not show the disbursement of the vehicles. The data also does not represent vehicles with engine failures, the ability of individuals to afford gas and other transportation

maintenance costs, or the number of individuals with substance abuse issues who have suspended/revoked licenses due to DUI or other circumstances.

Uniqueness of the Program

One of the current free transportation services in Ringgold, GA is the Catoosa County Transit System (CCTS). This service is a government-operated program that transports individuals as needed within Catoosa County. The problem with the CCTS is that it runs on a first-come-first-serve basis, the buses only run until 3:00 pm, and it transports clients to different appointments at different addresses. This could be an issue because some individuals within substance abuse programs work and their jobs may not end until 5:00 pm or later. Also, many clients may not be able to take advantage of the service due to the first-come-first-serve criteria. For individuals with opioid addiction, it is very important to attend all treatment sessions in order to avoid relapse, especially at the beginning of their treatment. Therefore, if individuals are not able to make it to and from their substance abuse treatment appointments, they may relapse.

Trans-Aid also provides transportation to residents of Ringgold, GA, but trips are also on a first-come-first-serve basis and must be scheduled up to 30 days in advance. The service has priority on doctor's appointments, but also provides transportation for shopping and employment purposes. The transit service does travel to Chattanooga Erlanger/Parkridge/Memorial area, but only for medical appointments. Substance abuse treatment is not considered to be a medical appointment, and many clients may end up failing to secure a spot on this transit system.

This proposal seeks to implement a transportation program for individuals who are participating in one of the four substance abuse treatment programs in Ringgold, GA and live in surrounding areas. The transportation program would be run by a separate non-profit

organization that provides transportation to each of the four local treatment programs in the area. The transportation system would be modeled after a flex route/vanpool transit system and would travel door-to-door to pick up clients and drive them to and from their substance abuse recovery appointments. It will provide services from 6:00 am until 7:00 pm, but it will also include an after-hours hotline that individuals can call if they have emergency substance abuse issues. The after-hours transit will be available to transport clients to the ER for overdoses/immediate attention or to an inpatient treatment center based on the assessment of the driver. The drivers will be knowledgeable about substance abuse and will be trained on what signs to look for to evaluate for drug overdoses or withdrawals. They will also be certified to use naloxone in order to reverse overdoses if necessary. The bus/van drivers may be EMTs or other volunteer individuals, which will be specified throughout this project. This transportation service would be especially beneficial for individuals living in the more rural areas surrounding Ringgold, GA. The goal of this service is to help clients get to their appointments, group meetings, and other substance abuse treatment regularly to prevent relapse and/or dropping out of their programs.

Literature Review and Evidence-Based Practices

The opioid crisis has caused devastation throughout the United States, and the focus of this literature review is to evaluate articles and research findings regarding barriers to and plans for substance abuse treatment. The review will discuss current literature findings regarding transportation to and from treatment as well as evaluate current programs that are similar.

The Center for Disease Control and Prevention (CDC) analyzed data through the National Syndromic Surveillance Program and Enhanced State Opioid Overdose Surveillance Program to track opioid overdoses in the United States (U.S.) throughout the year. The study found that there were over 142,557 overdoses in the U.S. from July 2016 – September 2017. This

was a significant increase from the previous year, which reported a total of 63,632 overdoses. Over two thirds of the population of overdoses were related to opioids, prescribed and non-prescribed (Centers for Disease Control and Prevention, 2016). The National Institute on Drug Abuse (NIDA) combined statistics from the CDC and other substance abuse reports to develop an overall perspective on the opioid crisis. The results showed that 20-30 percent of patients who are in chronic pain management misuse their prescriptions, and 4-6 percent of those patients transition to heroin (National Institute on Drug Abuse, 2019). The data collected is staggering and shows the severity and magnitude of the opioid crisis in the U.S.

Another study evaluated multiple research studies to show that over 92 million American adults used prescription opioids in 2015, and approximately 2.4 million of those individuals have developed an opioid dependence or addiction to prescription opioids or heroin. The article focused on different populations that are high risk for opioid use including individuals with the human immunodeficiency virus (HIV) and pregnant women. Studies showed that the incidence of opioid use in pregnant women has steadily increased over the past 10 years (Stuart, et al., 2018). The opioid crisis affects all walks of life, from newborns to geriatrics, although some populations are more at risk for starting opioids.

Five pathways to opioid abuse were evaluated by utilizing open-ended and structured interviews that were focused on prior opioid treatment experiences and barriers to and knowledge of treatment options. The five themes they found when organizing the data was that there were three pathways that originated with pain control, one pathway where individuals started to utilize opioids to obtain relief from emotional distress, and one pathway where individuals used opioids recreationally (Stumbo, Yarborough, McCarty, Weisner, & Green,

2017). It is discouraging to see that four out of the five pathways began with individuals trying to control their pain, whether emotionally or physically.

Physicians have played a major role in the opioid crisis as well, by nonchalantly prescribing opioids for minor pain problems in patients, and not monitoring their progress closely. Many physicians used to be able to receive “kickbacks” for referring patients for certain services or based on patient satisfaction. Thus, many of the physicians would provide opioids to help patients with pain to increase patient satisfaction, but it had detrimental cost in the long run. The Anti-Kickback Statute has been established to combat this issue, which declared providing care based on kickbacks is a felony and physicians are now prosecuted for corrupt decision-making (Tovino, 2019). There are many state and federal regulations that have been established over the past few years to help combat the opioid crisis, and many of those regulations target physicians and healthcare settings to increase awareness and make prescribers responsible for their decisions.

America is not the only country that is increasing the amount of laws regarding stringent regulation of opioids. Math, Mohan, & Kumar (2018) pointed out that in India, the Narcotic Drugs and Psychotropic Substances Act of 1985 has had many recent revisions to increase enforcement of tracking down and prosecuting illegal opioid manufacturers and traffickers. Many times, Americans do not evaluate and keep informed on what is happening in other countries, but sometimes it is important to know because what happens overseas can affect individuals in America as well. Many opioids are manufactured overseas and are brought to America, so in order to truly end the opioid crisis, the source must be cut off. Math, Mohan, & Kumar also point out that there are many different types of treatments to help opioid dependence, including medical substitutions (Math, Mohan, & Kumar, 2018).

Parker, Strunk, & Fiellin (2018) also discussed the benefits of medication-assisted therapy (MAT) in combating opioid dependence. They developed a broad survey of state policy approaches on the use of opioids provided by the National Governors Association and summarized their findings. The goal of the study was to find how accessible MAT facilities were including cost, state the treatment is in, and monitoring programs. Their findings projected that all 50 states have prescription drug monitoring programs, provide naloxone access laws, and allow the use of buprenorphine under Medicaid insurance, but only 34 states would cover methadone. They discussed how medication-based treatment is more expensive than other forms of substance abuse treatment, but it provides lower healthcare costs overall for individuals who receive the treatment (Parker, Strunk, & Fiellen, 2018). The use of medications to help wean individuals off opioids is widespread, as seen by this study. Other studies have shown the effectiveness of MAT.

Lagisetty, et al. (2017) provided a study to analyze current evidence-based MAT in eight different countries. The goal of the study was to find what medication interventions were beneficial and if it would be beneficial to implement MAT into primary care settings. They provided a randomized control to evaluate the amount of primary care physicians who used MAT in their patient care. They found that many countries have developed primary care-based treatment for individuals with substance abuse issues, which provides increased accessibility to treatment. Many individuals are afraid to self-administer MAT and find it more comforting to have the medication physician administered (Lagisetty, et al., 2017).

Alison Knopf (2015) published an article in *Alcoholism & Drug Abuse Weekly* which discussed how many substance abuse treatment centers are moving from inpatient to outpatient services to provide more accessibility and motivation for clients. The increase in community ties

and connecting outpatient services with other organizations has strengthened the treatment methods and provides better care for clients. These outpatient clinics provide MAT to clients who are then able to go about their normal lives instead of putting their lives on hold to overcome their addictions (Knopf, 2015). Outpatient services are very important for individuals with substance abuse issues because instead of trying to help them heal in a separate setting, it helps them heal in the setting they are already living in.

Medication-assisted therapy is not the only form of outpatient services that can be provided to clients with opioid dependence. Timko, Schultz, Britt, & Cucciare (2016) developed a qualitative study with a sample of 30 veterans administration provides to establish themes regarding transition facilitators from detoxification programs to substance abuse treatment facilities. They found six themes that showed transition promoters in treatment facilities including “the provision of evidence-based practice, patient-centered care, care coordination, aftercare, convenience, and well-trained staff” (Timko, Schultz, Britt, & Cucciare, 2016). These themes show that the type of care that individuals receive during their treatment can positively or negatively affect them not only during their treatment, but also when they leave treatment. Many individuals struggle with going into outpatient substance abuse treatment following inpatient detoxification, and the listed themes above are some things that help encourage patients to attend outpatient services.

A study performed by Klara Zierk (2019) showed that drug overdose is one of the leading causes of death in the United States, and many of the opioids that were overdosed on were legally prescribed. The article outlined other laws and programs that the U.S. has implemented, including the creation of drug court programs, which were created in resolution to overcrowding of jail and prison systems as well as in hopes of decreasing continuation of opioid use post-

sentence. The statistics showed over 95% of convicted drug abusers continue to abuse drugs after they are released from jail/prison. Drug courts provide a way for eligible individuals who have been convicted of possession of illicit drugs to obtain substance abuse treatment rather than being incarcerated. Drug court programs are excellent sources of treatment for individuals with substance abuse issues, but the study outlines that it is difficult for individuals who live in rural areas to meet parole requirements due to inaccessibility (Zierk, 2019). Rural areas are designated as “rural” since the population is sparse and spread out, which can lead to issues with meeting legal requirements as well as individual treatment.

Individuals living in rural areas tend to have higher risk when it comes to opioid dependence and treatment options due to several different factors. Benson, Kuehn, and Weirich (2019) state that physicians are more likely to prescribe opioids in patient treatment for pain management due to increased distance and different occupations in rural areas, as opposed to urban areas. They also showed that because physicians are more likely to prescribe opioids, patients are less likely to seek other forms of treatment for their pain. The statistics showed that 87 percent higher chance of patients receiving opioids. Benson, Kuehn, and Weirich pointed out that several factors that contribute to the higher risk of opioid use in rural areas include: economic stress/poverty levels, tightknit communities and families who may be able to provide opioids or accept the use of opioids, stigma of treatment, and lack of access to adequate healthcare and treatment for opioid dependence (Benson, Kuehn, & Weirich, 2019). These factors can significantly increase the risks for individuals to develop opioid dependence or addiction, and many individuals living in rural areas must deal with most, if not all, the risk factors listed.

Rogers, et al. (2018) also developed an ecological study to evaluate opioid use in rural areas. They created a massive literature study by assessing multiple extant empirical literature regarding the opioid crisis in America and found multiple risks. The risks included “availability and access [of opioids’], lower perceptions of harm, self-medicating for pain, more increased availability in rural rather than urban areas, out-migration of young people (rural economic declines, and via selection effect, young adults remaining in economically depressed areas may have a greater number or risk factors), differences in urban and rural social and kinship networks (importance of community investment, family ties, work over education, and local social capital in rural areas), and structural stressors of modern rural living (unemployment and economic deprivation)” (Rogers, D, & Dew, 2018). These multiple stressors outlined again demonstrate the increased issues that individuals living in rural areas face regarding opioids and access to treatment. The study shows that the mentality of individuals in society is different in rural areas, and people are more likely to attempt “do-it-yourself” methods regarding treatment for pain or emotional stressors, which may include utilizing opioids whether prescribed or not.

In a study of young adults who use prescription opioids recreationally, Liebling, et al. (2016) surveyed multiple eligible individuals in a randomized-selection process via computer-assisted interviews. Their study showed that non-medical prescription opioid (NMPO) use seems to be higher in young adults ages 18-25 years old, but they are more likely to transition to heroin use after the age of 18 years old. The study also showed that only one out of 10 youth receive treatment for their opioid dependence/addiction in the U.S., which is contributed to multiple barriers. Some of the barriers for youth include the attitude that they feel they can handle any problems on their own (increased ego among teens and young adults), the lack of knowledge of treatment options available to them, stigma of society towards treatment, prescribing practices of

physicians, waiting lists for MAT treatments, fear of confidentiality not being kept (afraid their parents will find out), fear of police and government (or incarceration), and less access to services (Liebling, et al., 2016). Taking the information from this study and previous studies evaluated in this literature review, it can be assumed that since young adults are more at risk for opioid use, young adults who live in rural areas have even higher risk based on geography.

Bunting, Oser, Staton, Eddens, & Knudsen (2018) developed a study providing semi-structured qualitative interviews with 15 social service clinicians in the Department of Corrections to determine barriers to opioid treatment at individual, interpersonal, organization/institutional, community, and system levels. By combining the themes from their interviews with the social service clinicians, they found that there were multiple barriers at the different levels, and among those barriers was the systematic barrier of transportation to and from treatment. The researchers found that individuals tend to rely on family and friends for rides, and that can deter individuals from receiving treatment due to the stigma or fear of what their family and friends will think. Clients may also have their drivers' licenses revoked/suspended due to their incarceration and DUIs. Transportation can cause significant stress on not only the client, but also their family. Due to economic strain, many households share one vehicle, and the client may not be able to have access to the vehicle regularly to attend treatment appointments (Bunting, Oser, Staton, Eddens, & Knudsen, 2018). The lack of transportation to and from appointments can cause individuals to relapse due to not being able to attend necessary appointments, or it can cause the individual to lose motivation in attending treatment at all.

A qualitative study done by Browne, et al (2016) also outlined barriers of substance abuse treatment, especially as it relates to rural regions. The barriers included lack of services

available, inability to access or use current technology, cost of services, and stigma. The article also stated that treatment in rural regions is mostly just “shuffling people around instead of providing substantive care”. It was noted that 17 percent of individuals surveyed mentioned transportation as a barrier. They reported that although some transportation services are available, they are limited in the number of trips they can make in one day, and many individuals end up walking or paying a lot of money for transportation (Browne, et al., 2016).

Research shows that the opioid crisis is a significant issue in the United States today, and although there are many treatment options available to individuals with substance abuse issues, there are still many barriers that keep individuals from receiving the treatment. People who live in rural areas seem to be higher risk for developing opioid dependence/addiction, especially young adults. Many barriers have been addressed by other agencies, but transportation continues to be a consequential obstacle to treatment, specifically in rural areas.

There are a few studies that have been done to show the need for transportation in rural areas, and different transportation programs that have been implemented. Morgan Shook (2005) provided a research study that evaluated transportation as a barrier to health care. In order to perform her study, she surveyed 75 adult patients in a community health center in Portland, OR metropolitan area. In the survey she evaluated the type of transportation barriers and how often those barriers happened. Her study found that collaboration between transit and public health agencies could provide transit services and increased access to care. She also assessed a transportation system in the area called LIFT, which is offered at minimal cost, but has enrollment criteria. She found that the enrollment criteria were lacking, and many were still unable to access treatment. She recommended that more people be allowed into the program to increase the availability of treatment resources. She also emphasized the importance of

networking and spreading the knowledge of resources to increase accessibility (Shook, 2005). Although this particular article is targeting health care access, the same knowledge can be inferred about substance abuse treatment accessibility. It showed the importance of not being too stringent with eligibility requirements, and the importance of networking with other agencies to obtain better results.

The National Center for Transit Research (NCTR) evaluated how many people in rural areas use demand-response transit. The research study utilized two different models. The first model utilized data from 731 rural demand-response transit agencies, and analyzed three variables including the geographic service coverage, amount of time used with the service, and response time. The second model used data from 68 rural transit agencies from a previous study which estimated percentages of times the services were used, advance reservation time, and cost. The results found that demographics do make a difference in accessibility to the transit services, and services were used more with older adults and individuals without vehicles. It also showed that transit services with short response time could be successful in rural areas. It was also noted that individuals were more likely to utilize fixed-route transit versus demand-response transit when fixed-route was available (Mattson, 2016). This article shows that different types of transit are used more frequently than others. The fixed route seemed to have more individuals utilizing it, and shorter reservation times had more impact. Agencies with more transportation services had less riders. This research shows that it may be more beneficial for our group to create a fixed-route transit system.

Vanpooling is another form of transit service, and a study in Kansas provided insight into some of the ways to create a vanpooling system. The results were based on a webinar that was given by Justin Rison, who is the CEO of TRANSITions Commute Solutions and Shamus Misek

who is the Statewide Rideshare Program Manager of the Washington Department of Transportation. Rison and Misek discussed some basic considerations when starting up a vanpool program including identifying customers, determining funding needed, and finding the commute route. One of the administrative aspects he outlined was a “P2” program, or public-to-private. This program would be contracted out from one agency to a specific vanpooling provider. The information provided was taken from previous studies of the Washington Transit system, which included 20 transit agencies and 3,000 vanpool operations. The study also outlined that many agencies donate retired vans to non-profit organizations. Misek recommended utilizing a flexible route for clients (Weaver, 2013). This outline of the webinar given provides valuable information based on what has succeeded and failed in the Washington transit system. The expert advice from Rison and Misek provides insight into how to start a vanpool program, including possibly looking into obtaining retired vans from other systems.

Another study that was done evaluated reverse commute projects to show some programs in place to help individuals get to and from work. The study (Sommes & Brown, n.d.) evaluated how rural areas implemented the federally funded Job Access and Reverse Commute (JARC) grant program. The study examined eight of the programs, and case studies were non-randomly selected. The JARC program had many benefits, but one that would affect our project is that it did not limit funding to transit agencies, rather provided funding for non-profits and other local agencies to implement transportation systems. The results showed that many of the programs that were funded developed partnerships, which strengthened their success. Some programs had door-to-door, while other programs established particular fixed routes but changed those routes as new jobs became available. They found that door-to-door pick up was the most beneficial for the individuals, and vanpool services were used more widely in rural areas. The programs also

increased public relations and obtained support from local community businesses. Some of the problems that arose with the programs were that case managers were not always involved, no fees were expected, there were no uniform reporting requirements, and electronic systems were not adaptable to rural users (Stommes & Brown, n.d.). Although the study evaluated commutes to and from work instead of substance abuse treatment, it gives invaluable information on what has worked and what has not worked in different transportation programs. The only problem is that if our program is to succeed in transporting individuals to and from substance abuse treatment, it would be illogical to expect riders to pay money for their fares. The group will need to find ways to financially fund the project, without putting the burden on the individuals needing the service.

The Twin Cities Metropolitan Council (2019) enacted a transit system performance evaluation to determine the effectiveness of multiple transit systems in the region. The report analyzed select performance measures, demographics relevant, and compared the region's performance with other regions. The study showed that majority of the transit riders were employed full-time, and there were higher rates of transit use among low-income households. It also showed that the highest rates of transit use were between the ages of 15-34 years old. The report outlined that the vanpool system used could be beneficial because it decreases the amount of traffic congestion, air pollution, and greenhouse gas emissions (Metropolitan Council, 2019). This outlines other important factors when considering starting a transportation program including evaluating environmental factors and comparing with other regions. The report also showed that individuals ages 15-34 years old were more likely to use transportation services, which is like the age group needing transportation in Ringgold, GA.

A similar evaluation was done by the National Institute for Transportation and Communities (NITC), which evaluated effectiveness of multiple transportation systems and utilized data collected from Salt Lake City Metropolitan region and Portland Metropolitan region as case studies. This study developed a framework and tools to help when evaluating performance of transit systems. The results showed that the framework and tools developed by the project were able to provide assessment in an integrated manner and able to identify the best performers. The researchers used the DEA, GIS, and spatial optimization models together to perform the study. The statistics found that there is a high chance of success in order to provide service coverage to majority of a population with fewer bus routes. The research was able to find the best route possible for fixed transit in order to perform optimal results (Wei, Golub, Liming, & Cova, 2018). This information shows a tool that was developed and how that can be beneficial to use in our group project if needed. It evaluates public transportation routes and creates the most efficient route possible.

Transportation problems are exacerbated in both urban and rural areas where insufficient transportation infrastructure and inadequate public transportation services compound access problems. Borders, Blakely, Ponder, & Raphael (2011) note that transportation (NEMT) programs meet a critical need in the areas in which they serve, directly targeting this single key access barrier to care. NEMT programs have been found to increase access to care while leading to improved quality of life and an overall decrease in healthcare costs. The savings in healthcare costs due to appropriate preventive care and proper disease management were greater than the incremental costs required to provide NEMT. In Texas, Medicaid recipients that accessed NEMT services reported significantly higher utilization of early periodic screening diagnostic and

treatment (EPSDT) checkups versus those who did not access NEMT services (Borders, Blakely, Ponder, & Raphael, 2011).

Problem Statement

From the literature, we know that there are treatments that have been said to be effective and that there are transportation options that individuals can take. However, we do not know if the current transportation options are viable, because not every individual has insurance or the option to obtain transportation to their appointment. Therefore, we would like to create a program that will be just for addicts that are trying to make it to their appointments to recover. This will be helpful for those who do not have a license as well as those who have no other way to make it to their appointments.

Needs Assessment Research Plan

A needs assessment is an important tool for program developers to find the commitment of community members and stakeholders to the proposed program. The gaps in services provided by the proposed transportation program will also be evaluated by the research team in the needs assessment. This will notify the researchers of any changes that need to be made to the program and allow for expansion of services if indicated.

Statement of Purpose

The purpose of this needs assessment is to determine the transportation needs for individuals' accessibility to substance abuse treatment centers with the rural area of Ringgold, GA. Transportation is a significant barrier to substance abuse treatment, and it can cause individuals to miss their appointments (Bunting, Oser, Staton, Eddens, & Knudsen, 2018). The

success rates of substance abuse treatments can increase or decrease based on whether individuals are able to make it to their appointments or not. It can be detrimental to the recovery of an individual with opioid addictions if they miss one even one appointment and can lead to relapse (Substance Abuse and Mental Health Services Administration, 2014). The hopes of this needs assessment is to evaluate if a transportation program would be feasible and beneficial to individuals living in Ringgold, GA and surrounding rural areas.

Research Question(s)

What are the transportation needs for individuals in substance abuse treatment in Ringgold, GA?

Research Hypothesis/es

Null Hypothesis (H₀): There is no relationship between transportation needs and accessibility to substance abuse treatment in Ringgold, GA.

Alternate Hypothesis (H₁): A transportation program will affect the accessibility to substance abuse treatment centers for individuals residing in Ringgold, GA and other surrounding areas in Catoosa County.

Research Variables

Independent Variable (IV): Transportation to and from substance abuse treatment centers.

Dependent Variables (DV): Accessibility to treatment centers for substance abuse, no-show/cancellation rates, success rates in treatment, and the number of individuals graduated from treatment.

Controlled variables (CV): Age, income, race, level of education, disability access, and quality of treatment at the treatment centers in Ringgold, GA.

Extraneous Variables (EV): Weather, van/bus repairs needed, governmental shut-downs, family matters, and personal life events of the clients.

Methodology

The researchers will be providing a mixed review study, which will include qualitative and quantitative data. The qualitative data will be obtained through an exploratory design with structured interviews, randomized controlled study, and mixed review. Interview questions will be used to determine transportation needs for clients by asking specific questions as listed (See Appendix A). The researchers will also be analyzing the relationship between statistical data collected (for example, how many cars individuals have access to or no-show/cancellation rates) and treatment success rates. They will be using surveys as a source of data, which is also provided in Appendix A. Data will also be obtained from the U.S. Census Bureau and United Nations website for overall national and regional statistical information.

The design for this study is a mixed review because the researchers are obtaining both quantitative and qualitative data by using an exploratory design with interviews, surveys, a questionnaire, and a randomized controlled study. Availability of transportation to individuals is a multi-faceted issue and it is important to obtain both quantitative and qualitative factors that affect accessibility to substance abuse treatment in order to get a full picture of the problem and need of clients.

Population and Sampling

The population targeted by this needs assessment is individuals who are in substance abuse treatment programs in and around Ringgold, GA. This population is a rural population due to its location, and there are currently four substance abuse treatment centers in the region: Ringgold Treatment Center, Crossroads Treatment Center, Northwest Georgia Treatment Center, and Lookout Mountain Treatment Services Outpatient Clinic. The inclusion criteria for the assessment includes all individuals who are over 18 years old and are participating in one of the four substance abuse treatment centers listed above. Exclusion criteria includes minors (under the age of 18 years old), individuals who are not in substance abuse treatment, and individuals who are not attending one of the four substance abuse treatment centers listed.

The selection process for the target population will be narrow, yet thorough. First, the researchers will contact each of the four substance abuse treatment centers in Ringgold, GA via phone or in person. The researchers will determine a contact liaison within each treatment center to be the go-between for the researchers and the other therapists at the treatment centers. The researchers will provide each contact liaison with a survey for all clients to fill out. The surveys will include basic non-identifiable demographic information of the clients and will ask questions regarding transportation needs, as outlined below. The surveys will then be passed out in all treatment sessions/programs for two weeks. At the end of the two weeks, the contact liaisons from each treatment center will return the finished surveys to the researchers to analyze. A brief notice of confidentiality and informed consent will be posted with the survey.

The researchers decided to exclude minors due to complications in consent and inability of minors to have their own transportation. The goal of this needs assessment is to determine the transportation needs of individuals in substance abuse treatment, so minors below the age of 18

years old would not be as beneficial to the study. The researchers decided to obtain surveys from each of the four treatment centers available to obtain more accurate information for individuals living in the area on a larger scale. The privacy of individuals is to be protected by only requesting non-identifiable information. This also helps avoid conflict of interest and provides confidentiality for each individual participating in the study. The researchers determined that two weeks would be the best timeframe to allow individuals to finish the surveys but also to evaluate if patients would benefit from a transportation program. The researchers decided that some individuals may miss the survey in one week if they miss their treatment appointment, and two weeks gives each individual time to complete the survey. Greater than two weeks would be too much time because surveys may be duplicated, and participants may feel overwhelmed.

The researchers will contact each of the four agencies via phone call and determine a contact liaison. The researchers will also provide a formal letter for each of the agencies to file for their documentation purposes if necessary. Instructions will be given over the phone, and surveys will be delivered in person directly to the facilities.

Data Collection and Analysis Plan

On November 1st, the researchers will contact the directors of the four treatment centers via phone call and determine a contact liaison for the facility. The researchers will introduce themselves and describe the purpose of the study. They will outline the goals of the transportation program they wish to start. They will then ask for permission to supply the surveys for the individuals in treatment, reiterating the confidentiality policies that are in place. The researchers will tentatively aim to drop off the surveys and informed consents in person to the directors of the four treatment centers on November 8th, pending approval from the directors for the assessment. At that time, the researchers will answer any other questions the directors and

contact liaisons may have regarding the project, informed consents, and/or surveys. The contact liaisons will be instructed to provide the informed consents to all their clients in the treatment programs during treatment sessions, and to provide surveys to everyone who agrees to participate and returns an informed consent. The surveys will be handed out at the treatment centers during treatment sessions starting on November 10th until November 24th. The researchers will stop by to pick up the surveys in person on November 24th and at that time they will request feedback from the directors and contact liaisons. Once the researchers have collected all of the surveys from each of the four treatment centers, they will evaluate the surveys to find similarities and obtain quantitative and qualitative data regarding the need for transportation to and from substance abuse treatment facilities. The data will be documented on a Google document to sort out and categorize the data. The findings will be presented to the class and will be available to all participants who wish to know the results.

The data analysis used for the overall research question is factor analysis because it will allow the researchers to condense a large set of variables to a smaller manageable number of factors. It also allows the researchers to summarize the underlying patterns of correlation between individuals with transportation needs. Because there are multiple variables that go into transportation needs, factor analysis is the best way to analyze the data collected overall. The factor analysis will be used to answer two questions: “Is there a relationship between transportation needs and substance abuse treatment dropout rate?”, and “Do substance abuse clients have access to transportation?”. The technique used in this analysis will be the Chi Square Test for Relatedness or Independence. This will be used to explore the relationship of whether transportation influenced clients’ dropout rates from the substance abuse treatment program or ability to attend treatment.

The researchers have used a survey to obtain information from the participants, and each research question will be analyzed differently based on the type of question asked. Each question is listed below with the specific type of question and method used to evaluate the data received:

1. **How many members in each household own a working vehicle?** This question is a closed question and will have a numerical response. The data collected will be quantitative and researchers will obtain an average for household members who own a working vehicle. The variables will be a ratio, and therefore will be parametric.
2. **What times are transportation options (organizations and/or personal) available to clients?** This question is also a closed question and clients will choose specific times available. The data collected will also be quantitative, and researchers will find where the times overlap to see the greatest need during the day. The variables are also ratio and will be parametric.
3. **How far of a distance (in miles) do clients need to travel to get to their substance abuse treatment appointments?** This question is closed and has a numerical response. The data collected is again quantitative, and the researchers will obtain an average of miles traveled to substance abuse treatment. The variables are again ordered as ratio, and therefore parametric.
4. **Are clients able to afford transportation costs (such as gas, maintenance fees, etc.)?** This question will require a yes/no answer, and therefore will provide quantitative data. The researchers will tally the “no” and “yes” responses to find if cost is an issue. The variables will be categorical and therefore will be nonparametric.
5. **How many clients have an active driver’s license that has not been suspended or revoked?** This question will also require a yes/no answer and will have quantitative

responses. The researchers will again tally the responses to find if clients have an issue with licensure. The responses will be ordered as ratio and will be parametric.

6. **How many clients know about transportation options in the area?** This question is an open question and will report qualitative data to the researchers. The variables will be categorical and thus nonparametric. The researchers will evaluate the data to find patterns in the responses to determine if more education on resources is necessary and what options are available to clients.

Ethical Considerations

Ethical considerations have been made when creating the needs assessment. Individuals who participate in the survey are to remain anonymous and will only provide non-identifiable demographical information (such as age and gender) along with answers to the survey questions. The assessment will be a blind study, where the contact liaisons in the treatment centers will be the ones to pass out the surveys, and the researchers will not have any direct contact with participants of the survey. A confidentiality statement and informed consent will be provided with the surveys, and participants will be notified that the survey is not mandatory and can be withdrawn at any time if needed. The answers to the surveys will not be shared with the treatment providers to avoid conflict of interest, and participants' treatment will not be affected by their answers. The researchers are not targeting a vulnerable population, and all individuals who are participating in the survey will consent on their own volition. Everyone in the treatment center will be able to choose to participate, to avoid leaving anyone out that may want to participate. The data will be analyzed by the students, who again will not have any direct contact with individuals in treatment. Data will be stored on a document that is only accessible to the researchers and professor, and individual survey results will not be shared. The averages from

the surveys and overall findings will be available to the participants if they would like to have copies. HIPAA guidelines will always be followed, and no identifiable information will be used in the results of this study.

Program Goals and Objectives

The Substance Abuse Transportation Program (SATP) would provide rides to individuals to and from their substance abuse treatment appointments at one of the four treatment centers in Ringgold, GA. It will be a non-profit organization that will partner with the four treatment centers in Ringgold, GA to provide best care to the clients. As noted previously, it will be modeled after a flex-route/vanpool transit system and will be available from 6:00 am until 7:00 pm. It will also include an after-hours hotline for individuals to call in if they have an opioid-related emergency, where on-call volunteers will transport them to the ER for overdoses/immediate medical attention or to an inpatient treatment center for mental health and other concerns.

There are multiple goals for the program including decreased recidivism in substance abuse clients, decreased no-show/cancellation rates, less deaths from overdoses, decreased stigma in the community regarding substance abuse/transportation issues, building strong partnerships with substance abuse agencies as well as community members, and expansion of the program as indicated. Clients will be more likely to graduate from their substance abuse treatment programs and less likely to fall back into opioid use because they will not miss as many substance abuse treatment appointments due to transportation. The volunteers/program staff will be required to be certified in the use of naloxone, which can be used to reverse overdoses. This will be used if the volunteers end up picking up a client for substance abuse treatment that may have overdose, or during after-hours emergencies. This will increase safety of

the clients and the community overall. As relationships in the community and with clients and local businesses/agencies are built, the stigma towards opioid abuse will hopefully decrease. With increased awareness comes decreased fear and stigma. And finally, after partnerships are built in the community and more funding is obtained over time, the hope is to expand the program to other areas that need transportation for opioid treatment.

Stakeholder Analysis

A stakeholder analysis was done by the researchers to determine the significant opposition and/or contribution to the program from individuals, groups, and organizations in the community. It allows the developers to realize the highest and lowest amount of influences it takes to have a transportation program with volunteers, and what is necessary to monitor each level of influence. Listed below is each stakeholder that was analyzed and the results of the analysis (Also, see Appendix B & C):

Stakeholder 1: Donors

Some of the largest stakeholders for the transportation program would be the possible donors. The funding for the project would be dependent on grants and individual donations, therefore the donors could make or break the entire project. Each donor would have different interests based on individual personalities and companies, but some of the interests may be similar, especially when it comes to the project. Some of the main interests of the donors that would relate to substance abuse and a transportation program would be the well-being of the community, feasibility of a transportation project, long-term benefits, and preventing substance abuse. The concerns of the donors would naturally be like the interests, including possible cost and feasibility of the project. In order to address these concerns, the researchers would present a

cost analysis and long-term projections to the donors. This would be presented at a community meeting as well as individual meetings with each donor. The program developers would work towards keeping the donors satisfied and inform them of any new developments in the program.

Stakeholder 2: Mayor Nick Millwood

Nick Millwood is the current mayor of Ringgold, GA. According to reported Tamara Wolk (2019), one of Nick Millwood's visions for the City of Ringgold would be to incorporate more low cost/high benefit projects, as well as taking advantage of the location of Ringgold, GA in relation to interstate transport (Wolk, 2019). This shows that he would most likely be interested in a transportation program for individuals in substance abuse treatment centers, as long as it is cost-effective and feasible. The program developers would use a similar approach to what was used with donors to access the mayor and persuade him to be in favor of the project. They would present cost analysis and feasibility projections as well as the goals of the program and impact it would have on the City of Ringgold as a whole. They would meet with the mayor in person to discuss the feasibility and benefits of the program and would continue to keep him informed of any progress with the development of the project.

Stakeholder 4: Substance Abuse Treatment Centers

The individuals in substance abuse treatment centers that would be the targeted stakeholders would be the therapists, counselors, and addiction specialists. The main interests of these stakeholders would be to prevent recidivism rates in their clients, to optimize treatment, to increase awareness of the opioids crisis and solutions in the general public, to decrease substance abuse in the community, and to help their clients become productive members in society. It is assumed that the substance abuse treatment centers will have some concern about the funding

and feasibility of the project but will also be excited about the prospects of the program. The program developers will contact the directors and/or a liaison from each of the four treatment centers in Ringgold, GA. They will keep the directors/liasons informed of any new developments in the program, will keep in regular close contact with the liasons, and will involve them in the planning of the program as well as delegate them to pass out the surveys to participants.

Stakeholder 4: Volunteers/Staff

This includes volunteers that would qualify as well as want to participate in driving the transportation vans. Access to the community is having access to volunteers and staff working within the treatment centers. The largest concerns of the volunteers/staff would most likely include funding of the project, improving the community, preventing recidivism rates in substance abuse clients, and what certifications are necessary to implement the program. The program developers will manage these individuals closely and keep them informed of any and all new developments within the program. The engagement strategy is to talk with the staff about how they feel about a transportation program to treatment centers. Volunteers will come when a community meeting about the program itself is hosted. The community gathering will not occur until all of the results from surveys are evaluated. Once volunteers have come forward, the program developers will initiate an interview process as well as inform the treatment centers to run background checks and drug screens on each of the volunteers.

Stakeholder 5: Clients/Patients

Some of the main stakeholders for the transportation program are the clients/patients. Each client is receiving treatment for their substance abuse issue, so they are the ones that

participate in the treatment and ones that would be benefiting from the transportation program. Giving the clients the opportunity to have reliable transportation can reduce their stress and help them be more successful during treatment. The participation of the clients is important to the program because without their participation it would be difficult to have a successful program. The program developers plan on keeping the clients informed by passing along the information about the program through the treatment centers.

Stakeholder 6: Transportation Companies in the Region

Some of the transportation companies in Ringgold, GA might be against the Substance Abuse Transportation Program. Some of the clients might be using the transportation companies for transportation on a regular basis. The companies might be hesitant to support the program because it can have a negative impact on their finances. The community is already working on increasing awareness of the opioid crisis and substance abuse issues, and if they continue to do this the other transportation companies might be more supportive. The program developers can communicate with other transportation companies to discuss the benefits of the program and the progress being made.

As of now, the only stakeholder who may have a negative outlook on the program would be transportation companies, due to the decreased business they may or may not have. The program developers would make sure to clarify with the transportation companies that the only individuals who would use the program would be individuals in substance abuse treatment programs. Most of the stakeholders seem to come from a neutral standpoint but could be persuaded to be opposed to or in favor of the project based on presentations and projected cost, feasibility, and benefit to the community. If any stakeholders voice opposition to the project, the developers will address the opposition based on the problems that are voiced.

SWOT Analysis

A SWOT Analysis was also conducted by the program developers to determine the strengths, weaknesses, opportunities, and threats that may arise with the program. The information gathered was included in a SWOT chart (see Appendix D), as well as listed below:

Strengths

The Substance Abuse Transportation Program (SATP) has many different strengths. The program will be partnering with the four local substance abuse agencies and the services will be contracted out. The four substance abuse treatment centers contain trained mental health professional staff and have property. The treatment centers are already well established with a client based, and the community has knowledge of the programs available. There are many ties that the treatment centers have with the community, and this could be beneficial to the program development. Recently, the public has had increasing awareness of the opioid crisis and the harms of substance abuse, which could cause more individuals to provide their support of the project. The SATP would differ from other transportation services because it would be free to clients. The Catoosa County Transit Service also provides free transportation services for individuals, but it is only available during specific times and runs on a first-come-first-serve basis. The SATP would be available from 6:00 am – 7:00 pm and would have a 24/7 hotline for individuals to call if needed for emergency situations. The SATP would be available for all individuals in the treatment centers, rather than on a first-come-first-serve basis.

The SATP would use the trained staff at the substance abuse treatment centers to act as volunteers for the transportation service if willing. The treatment centers are already established, and the community knows about the services available, so it would not be as difficult to educate

the community on another additional program. The partnerships with other agencies could also provide additional resources and/or volunteers for the program as needed. The program developers could use the knowledge of the gravity of the opioid crisis in the general public to persuade individuals to be involved in the transportation program. The availability of the program and cost would be used to benefit the clients in the maximum way possible.

Weaknesses

The treatment centers in Ringgold, GA currently do not provide transportation for their participants which can be challenging for some clients. Implementing a transportation program might take time to be successful and the resources available for the program might not be used to their full capacity. Some of the clients could refuse to participate in the treatment centers due to the stigma of the community or the quality of the program. The SATP will receive funding from grants and donors, and if unable to receive money from them, could be a failure.

The program will be working with the four local substance abuse transportation programs; the treatment centers are well known in the community and have established clients. The treatment centers have ties with the community which could be beneficial for the program, the community might provide more support for the program. Working closely with the community and keeping them informed on the progress the program is making is a good way to keep communication growing and increasing the support from them. The awareness on opioid crisis and substance abuse has been increasing in Ringgold, GA. Supporting the awareness in the community can help reduce the stigma in the community. The treatment centers have trained staff, if they spend some time educating the clients on the benefits the center provides the clients might see the program differently. The clients could begin to see the program as a beneficial resource in the community and high-quality program. The Substance Abuse Transportation will

be available from 6:00am-7:00pm and provide a hotline number for clients in case of an emergency. The SATP does not requiring scheduling in advance and is not a first-come-first serve program. By emphasizing on the benefits of the program and reporting the progress to the donors there's a chance that they will continue supporting the program.

Opportunities

Grant opportunities could help to keep the transportation services going as well as help to service the vans. The program is between urban and rural areas close to the interstate, which helps to have many resources for substance abuse treatment centers. Patients will be able to make it to their scheduled appointments as well as meetings from the surrounding areas. With the transportation program in track, it helps to decrease the substance abuse within the area hopefully. The patients will have greater opportunity to make it to their appointments, having transportation opportunities. Increased funding to the program could help expand the program to other regions and provide necessary maintenance to vans. Increased education and awareness in the community about the program could also help increase funding from donations. Providing a transportation service to and from substance abuse treatment programs as well as raising awareness of the effects of the opioid crisis and transportation as a need in general could help possibly lessen stigmatization in the community due to the focus on the opioid crisis.

To exploit each opportunity, the transportation program will have to be in full affect. The program will have to be showing a change in the attendance of the substance abuse programs. Once the change is noticed then the program directors will be able to write grant wishes so that the volunteers could be paid as well as services on the vans could stay up to date better. With rural and urban areas are close it would be easier to get a community together to educate them on the nee transportation program and how it could help decrease substance abuse as well as

increase the attendance to treatment centers. Each opportunity can become a strength with the program directors working with the community, volunteers, and substance abuse Treatment centers.

Threats

The threats that potentially face the SATP are possible lack of funds, volunteers, vans, and interest/participation. The group members may not be able to raise the money needed to keep the program going if the substance abuse treatment centers are not interested in funding the program. A threat of not having access to vans is possible. There could be a lack of participation from volunteers, patients, and the community as well.

The program will defend any threats that come about. The transportation program is a great idea to help clients make it to appointments when often they lack interest in going due to needing a ride, but being unable to get one when it is needed. Getting the community involved and education will help to keep the treatment centers interested in the program if they truly want a difference to be made for individuals that need the help. Volunteers will be individuals that would like to see a decrease in the substance abuse population. The program will stand up for the cause and make it known within the community.

Evaluation Plan

The objective of the Substance Abuse Transportation Program (SATP) is that at least 75% of clients in the four substance abuse treatment centers in Ringgold, GA will use the transportation services provided, which will lead to a 50% decrease in no-show rates at the four substance abuse treatment centers after 6 months. This will lead to an increase in attendance to substance abuse treatment and decreased recidivism in the community. The program developers

used a logic model (see Appendix E) to determine the goals of the program and the steps needed to attain those goals. This model includes inputs, outputs (activities and audience), and outcomes (initial, intermediate, and long-term):

Inputs

The scope of activity includes six different inputs, and each input is valuable to the long-term outcomes of the transportation program. The inputs consist of volunteers/program staff, substance abuse agency staff, vans/buses, budget, time, and community members/clients. Each play an impacting role to the program itself. Without these specified inputs, the transportation program would not be able to even come close to working.

Outputs

The output activities come from the six different inputs. Volunteers/program staff are needed to drive the vans, perform maintenance on the vans, attend trainings, encourage clients to share knowledge of the program, and answer calls for non-life threatening emergency transportation needs for clients. Substance abuse agency staff are asked to attend workshops, communicate with program staff, and include the transportation program in their resources for clients. The vans/buses are very important to have for the transportation program and they require regular maintenance and will be driven by volunteers/program staff to and from substance abuse treatment agencies. Budgeting holds an important role for the transportation program so that it will be funded and continue to be implemented. The funding will be obtained by grants related to transportation needs and substance abuse, as well as donations. The times for the transportation program to operate will be from 6 am until 7 pm, but there will be an after-hours hotline for emergencies. Community members as well as clients will raise/spread

awareness, donate time and money so that the transportation program will be enough.

Workshops and meetings will be provided for community members and clients to attend to stay up to date on the program as it becomes implemented.

The researchers will measure the outputs in the Logic Model by communicating with the substance abuse agency staff and volunteers for the program. Volunteers and drivers will keep detailed logs of the trips taken to and from clients' appointments to document the use of the program. A budget will be created by program developers and will be kept by the substance abuse treatment center staff. Maintenance logs will be kept to continue to evaluate the condition of the vans.

Outcomes

There are several intermediate outcomes and goals that the program developers hope will happen after one year of the program being implemented. The developers realize that many goals take years to accomplish, so the largest intermediate goals would be to obtain at least 1-2 vans, have volunteer staff to run the program, and have some sort of funding sources through grants, donations, and/or the substance abuse treatment centers. After one year, the developers hope that awareness of the program will be spread to other individuals and communities, especially in the rural population surrounding Ringgold, GA. Relationships with the four substance abuse treatment centers and other community partnerships will hopefully be solidified to have substantive resources for clients. The program will have a solid base of 3-4 volunteers who will rotate out to provide transportation to clients, and each volunteer will have his/her certification to use Narcan if necessary. The program will also hopefully have at least 1-2 vans to be able to transport clients to and from their substance abuse treatment. These vans will hopefully be donated by community members or purchased through cash donations and will be maintained by

volunteers. The hope is that by providing transportation to clients, the no-show rates to their substance abuse appointments will lessen, and more clients will graduate from their programs.

Transportation rates will be evaluated by a substance abuse agency staff who will keep up with patient attendance to substance abuse treatment services. The amount of patient no-shows each will be documented for 6 months prior to and 6 months after the program is established to determine the effectiveness of the program in decreasing no-show rates. Volunteers and agency staff will fill out satisfaction surveys every 6 months to a year to determine rates of satisfaction. Maintenance logs will be kept by drivers and volunteer maintenance staff to continue to evaluate the condition of the vans. A budget will be kept with each expense and will be evaluated by staff every 6 months. Community involvement and increased participation of community members and donors will be noted. By evaluating each of these outcomes, the researchers will be able to gauge how effective the program is in decreasing recidivism and no-show rates of clients to substance abuse treatment.

The long term end goals of the program will be to decrease recidivism in substance abuse treatment, decrease no-show appointments to client substance abuse treatment, decrease stigma in the community towards substance abuse, build partnerships with other agencies in the community, decrease the amount of deaths from overdoses, and expand the program to other regions. If volunteers and program staff are implemented, then the ability to provide transportation will increase, and more clients will be able to attend their substance abuse treatment, which will decrease recidivism in the clients. If volunteers are trained to use Narcan, then the risk of overdose will decrease, and the clients will have less deaths from overdoses. If the program strengthens ties with the substance abuse treatment centers, then the agencies will be able to fully participate with the program and possibly fund the program. If individuals in the

community are able to donate vans to the project, then the vans will be maintained by volunteers, and will be able to function at optimum level to transport clients to and from appointments. If the volunteers are able to use the vans and pay for maintenance costs and fuel, then more individuals in the community may be willing to donate, then the volunteers could receive a consistent income for their services, and then the program could be expanded to other agencies in other regions that could benefit. If partnerships are built with community members, then awareness of the program and opioid issues will be addressed, then the stigma of substance abuse treatment will be lowered in the community, then more clients may benefit from services and more programs may be enacted to help clients with substance abuse issues.

Proposed Program Resources

The Substance Abuse Transportation Program (SATP) will need human capital, material, and other resources in order to be feasible. There will be 5-7 volunteers who are possible EMTs or mental health professionals who will rotate schedules to drive the transportation vans. The volunteers will drive the vans from 6:00 am - 7:00 pm Monday-Friday on a rotating schedule, and one volunteer each night will be available to answer the emergency calls. All new volunteers will need to attend a one-time training workshop over one weekend regarding crisis management, specifically as it relates to issues that may arise with substance abuse. Volunteers will also need to receive certification to utilize Narcan if a situation that necessitates its use arises, which can be obtained online or comprehensive in a 45-minute class session. The program will also consist of 4 vans (2 of which will be used at any given time), and all maintenance and travel expenses will be kept in a log each day. The vans will be kept at each of the four substance abuse treatment centers.

Proposed Sustainability Plan

The program developers will make brochures to pass out to local businesses and agencies in the community of Ringgold, GA. One program developer will attend each monthly community/council meeting to educate community members about the program and develop partnerships with local agencies. The program developers will also continue to strengthen relationships with the Ringgold Treatment Center, Crossroads Treatment Center, Northwest Georgia Treatment Center, and Lookout Mountain Treatment Services Outpatient Clinic. The program developers will also educate the staff at the four substance abuse treatment centers in Ringgold, GA to raise awareness of the program for their clients. Fundraising events will be held once per year to obtain donations and grants will be requested from federal and nonprofit organizations.

Limitations

Some of the limitations of this proposal include possible funding, volunteers willing to participate, training of volunteers, ability to obtain/maintain vans, and willingness and participation of the four substance abuse treatment centers. To begin with, the program will mostly be funded by the substance abuse treatment centers or grants/donations, and if unable to obtain funding, the program will be infeasible. Volunteers will need to be vetted and trained in the use of naloxone, and it may be difficult to find enough volunteers willing to work the hours necessary. Vans will need to be obtained and maintained, and if unable to find donated vans and/or purchase used vans through donations, then the program will be infeasible as well.

Conclusion

The opioid crisis is a very big topic in the media today, and it has been shown that there are many barriers for individuals who are suffering from substance abuse issues to obtain treatment. Rural populations have even more barriers than urban populations due to the sheer distance to and from treatment centers that could help with their substance abuse issues, thus transportation is a large need for the rural population. The Substance Abuse Treatment Program (SATP) would be possible solution to the transportation needs of clients who reside in in rural areas surrounding Ringgold, GA and are participating in substance abuse treatment.

The program developers hope to build partnerships with the four treatment centers in Ringgold, GA as well as other agencies and businesses in the community. By building these partnerships, the developers hope to raise awareness of the issue of transportation to and from treatment appointments in an effort to gain support for the program. The program will consist of volunteers who will drive the vans to and from individuals' substance abuse appointments. These volunteers will be certified and equipped to use Narcan if necessary, to prevent overdoses in clients. There will also be a 24-hour hotline that will be used for non-life threatening emergency situations with clients, to help decrease the load on EMS drivers in the region and provide immediate care to the client in need. Emergency calls will be rotated through volunteers each week and the volunteers will transport the individuals to inpatient facilities or the hospital as needed.

The hope is that this program will help decrease no-show rates to and from substance abuse treatment for clients, which will in turn allow more clients to graduate from their programs. This will hopefully decrease recidivism and eventually opioid use in the community. If successful, the program will be able to expand to other regions as able in order to bring

transportation services to a larger population and continue to decrease recidivism and lessen the use of opioids.

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Appendix A

Transportation for Substance Abuse Treatment Survey

Age: _____

Gender (circle one): male female unspecified/do not wish to provide

- 1. How many members in your household own a working vehicle? _____
- 2. What times are transportation options (organizations or personal) available to you (check all that apply)?

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6:00 am - 7:00 am		11:00 am - 12:00 pm		4:00 pm - 5:00 pm	
7:00 am - 8:00 am		12:00 pm - 1:00 pm		5:00 pm - 6:00 pm	
8:00 am - 9:00 am		1:00 pm - 2:00 pm		6:00 pm - 7:00 pm	
9:00 am - 10:00 am		2:00 pm - 3:00 pm		7:00 pm - 8:00 pm	
10:00 am - 11:00 am		3:00 pm - 4:00 pm			

- 3. How far of a distance (in miles) do you need to travel to get to your substance abuse treatment? _____
- 4. Are you able to afford transportation costs (such as gas, maintenance fees, etc.)?
Yes / No
- 5. Do you have a valid driver's license that has not been suspended or revoked?
Yes / No
- 6. Do you know about transportation options in the area? Yes / No
If yes, what options do you know about?

- 7. Please list any other information or concerns you have about transportation access to and from substance abuse treatment.

Appendix B

Stakeholder Analysis Matrix

Project Title: Substance Abuse Transportation Program (SATP)

Group Members: Brianna Cheever, Allison Durham-Grady, Nora Amador-Vieyra

Stakeholder	Characteristics	Main Interest	Fears and expectations	Potential impact	Priority	Recommendations	Responsibility
<i>Identity of individual or group/s.</i>	<i>What sort of person or group are they?</i>	<i>What are their main interests and/or motivations?</i>	<i>What is their potential reaction to the project? What do they expect from the project?</i>	<i>How important is their impact on the project? (low, med, high, critical)</i>	<i>Rank the importance of the stakeholder to the success of the project (critical, high, med, low).</i>	<i>Implications for your project planning. (e.g. keep informed, involve in planning, etc.)</i>	<i>Who in your cohort will implement the recommendations?</i>
Donors	Individual donors, grants, inter-agency funding	Cost, community well-being, feasibility of the project, long-term benefits, prevention of substance abuse	Individual reactions based on multiple factors, most likely concerned about funding and feasibility	High	Critical	Keep satisfied, keep informed	All members of the program development team will work to keep the donors interested and satisfied, and will provide updated info on the project
Mayor Nick Millwood	Mayor of Ringgold, GA	Community well-being, incorporating more low cost/high	Most likely interested in the project, would expect lower recidivism rates	High	Critical	Keep satisfied, keep informed, involve in planning	All members of the program development team will work towards keeping the

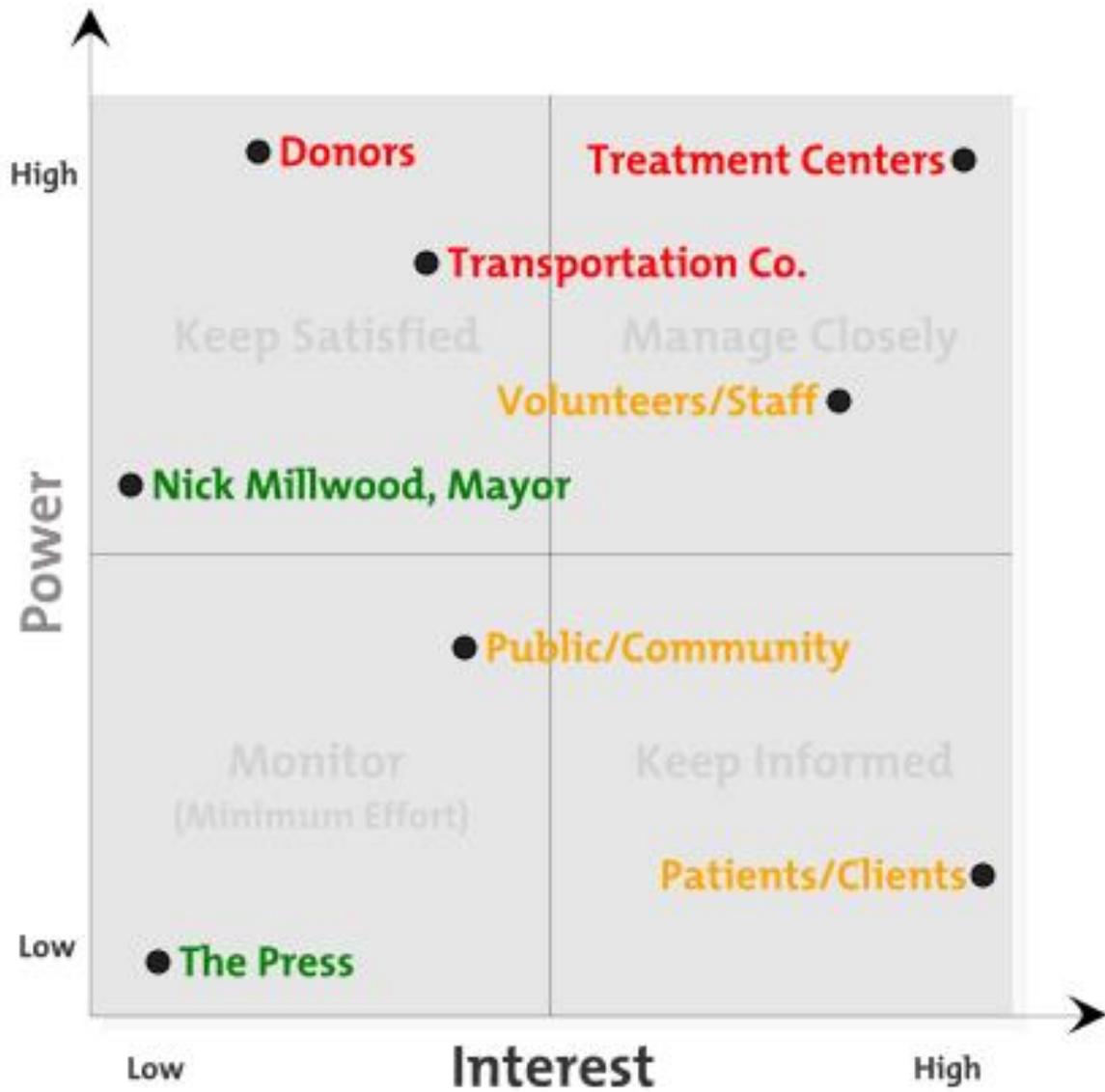
		benefit projects, taking advantage of Ringgold resources	for substance abuse in the community				donors interested/satisfied and provide updated info on the project. Will have him involved in the planning process to maximize benefits for the community and know resources available
Substance Abuse Treatment Centers	Therapists, counselors, addiction treatment staff	Prevent recidivism of substance abuse clients, optimize treatment, increase awareness about opioid substance abuse, decrease substance abuse in the community, help patients become productive members of society	Increased attendance to treatment programs, alleviate stress and outside factors, may have some concern about funding and feasibility, excited about prospects	High	Critical	Staff at the Substance Abuse Treatment Centers will pass out the surveys to participants, keep informed, manage closely, close contact, involve in planning	Each group member will have one treatment center that she will stay in contact with, and all group members will stay in contact with the largest treatment center.

<p>Volunteers / Staff</p>	<p>Drivers, Maintenance</p>	<p>Funding, helping community members, may be interested in preventing recidivism rate, may be sponsors from the substance abuse treatment programs (will not be driving for the same group they are sponsoring for), certifications necessary</p>	<p>Optimistic, concerned about feasibility, concerned about certifications, necessary times available</p>	<p>Critical</p>	<p>Critical</p>	<p>Manage closely, keep informed</p>	<p>All members of the program development program will participate in an interview process of the volunteers as well as inform treatment centers to run background checks/drug screens. They will keep the volunteer/staff updated on new developments</p>
<p>Clients/Patients</p>	<p>Substance abuse clients, recovering addicts</p>	<p>Recovering from addiction, participating in the community, learning about resources available, improving skills related to addiction, funds</p>	<p>Excited about the project, may have expectations that are too high to use transportation for anything anytime</p>	<p>High</p>	<p>Medium</p>	<p>Keep informed, monitor responses to surveys</p>	<p>All members will produce information passed along through the treatment centers</p>

<p>Transportation Companies</p>	<p>Catoosa County Transit, Uber/Lyft services, Taxi</p>	<p>Transportation, Uber/Lyft/Taxi is concerned w/ funds and business being affected</p>	<p>Catoosa County Transit would be excited because will not have to transport as many people to substance abuse and can use services for other necessities, Uber/Lyft/Taxis may be upset due to decreased business since program will be free</p>	<p>High</p>	<p>Low</p>	<p>Keep informed</p>	<p>All members of the cohort will provide updated information to the companies</p>
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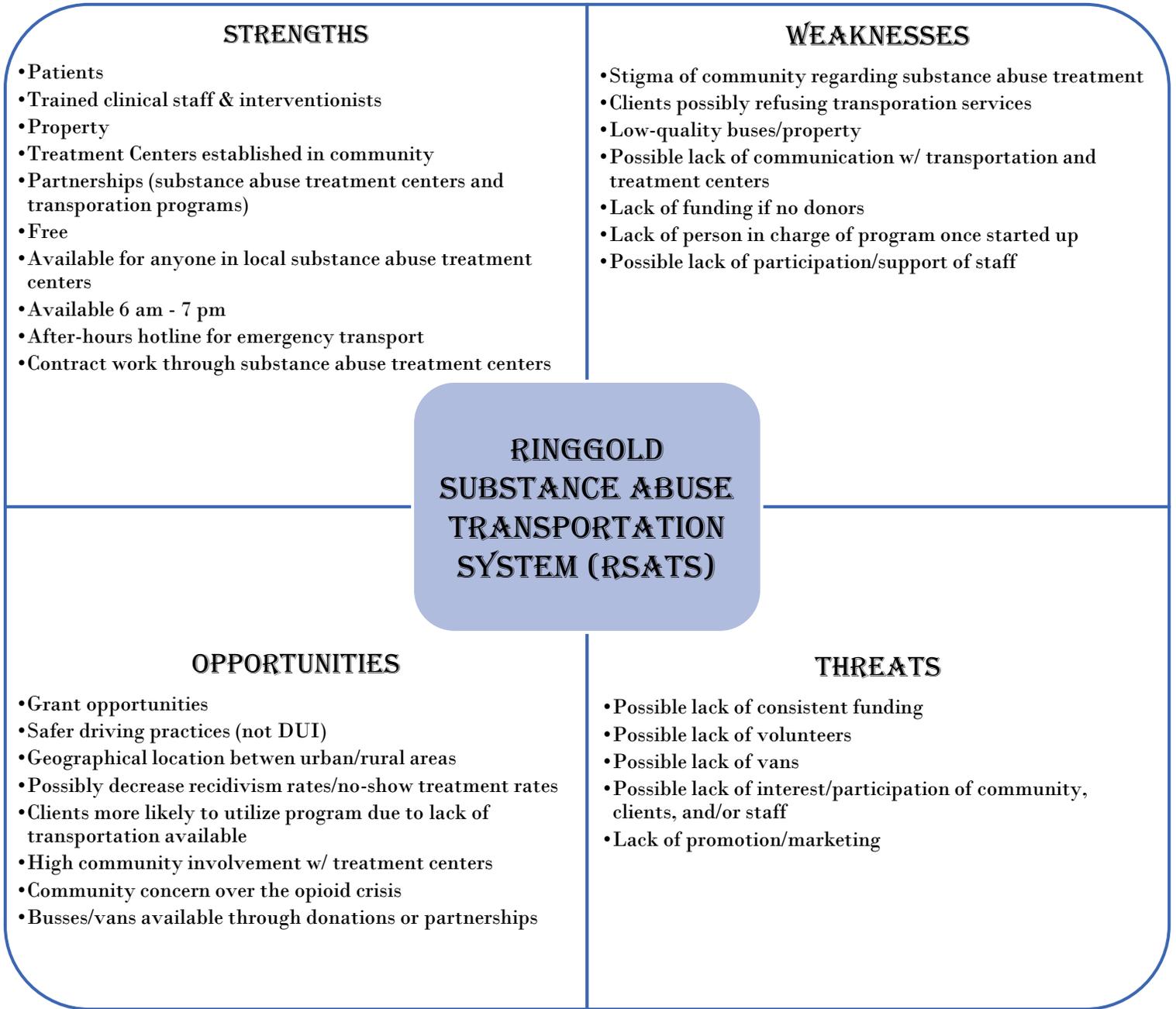
Appendix C

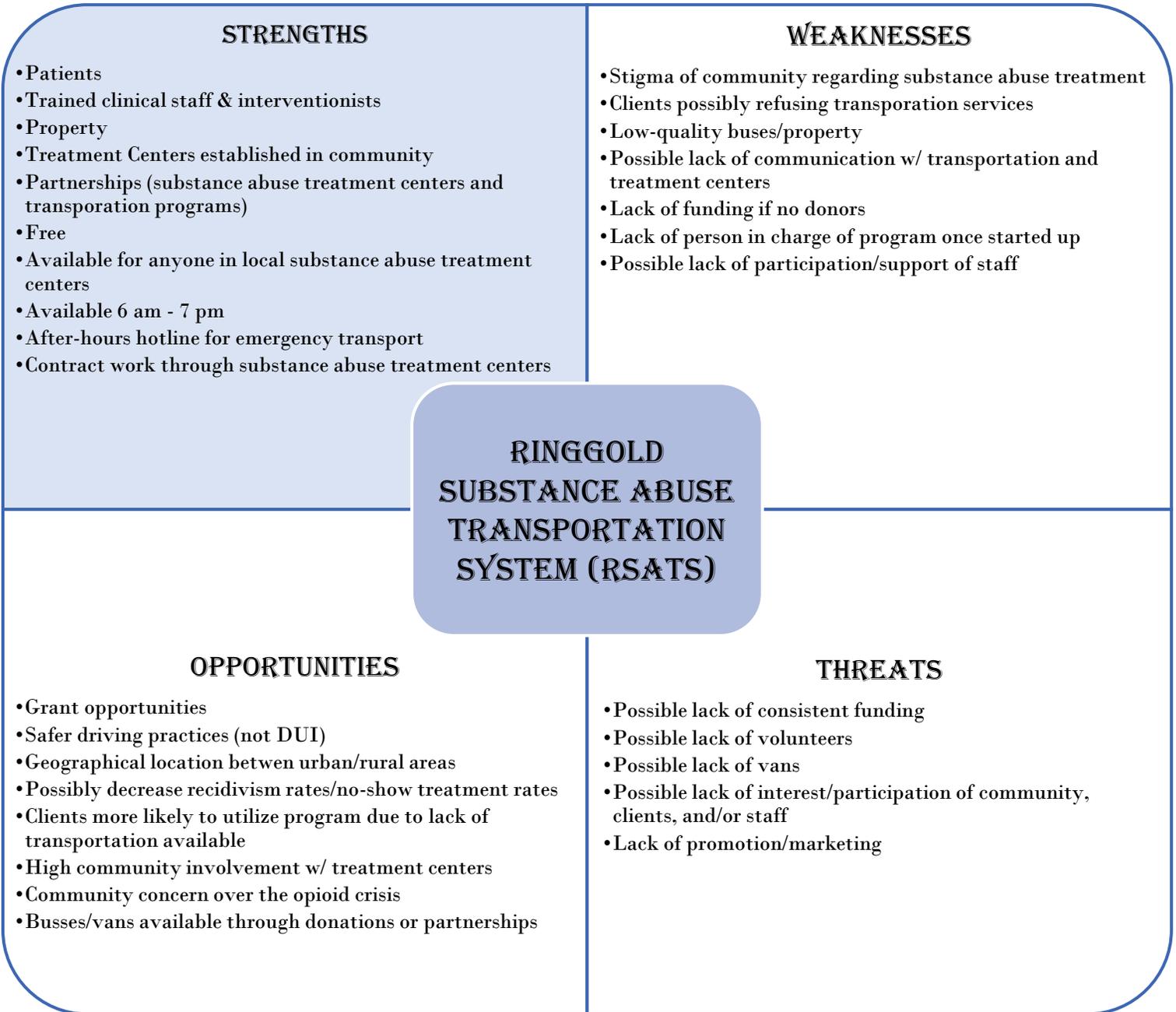
Stakeholder Power-Interest Grid



Appendix D

SWOT Analysis Chart





STRENGTHS

- Patients
- Trained clinical staff & interventionists
- Property
- Treatment Centers established in community
- Partnerships (substance abuse treatment centers and transportation programs)
- Free
- Available for anyone in local substance abuse treatment centers
- Available 6 am - 7 pm
- After-hours hotline for emergency transport
- Contract work through substance abuse treatment centers

WEAKNESSES

- Stigma of community regarding substance abuse treatment
- Clients possibly refusing transportation services
- Low-quality buses/property
- Possible lack of communication w/ transportation and treatment centers
- Lack of funding if no donors
- Lack of person in charge of program once started up
- Possible lack of participation/support of staff

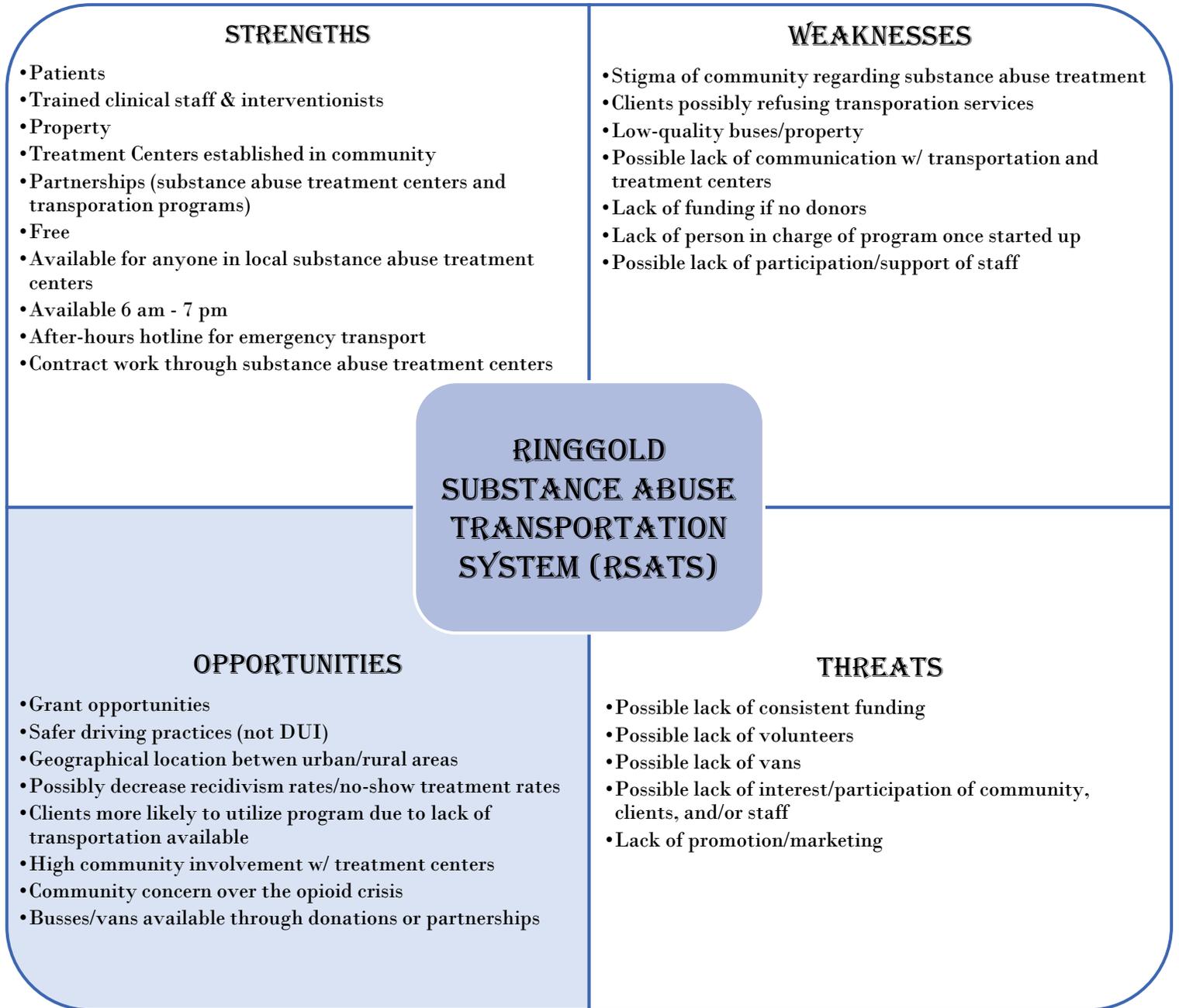
**RINGGOLD
SUBSTANCE ABUSE
TRANSPORTATION
SYSTEM (RSATS)**

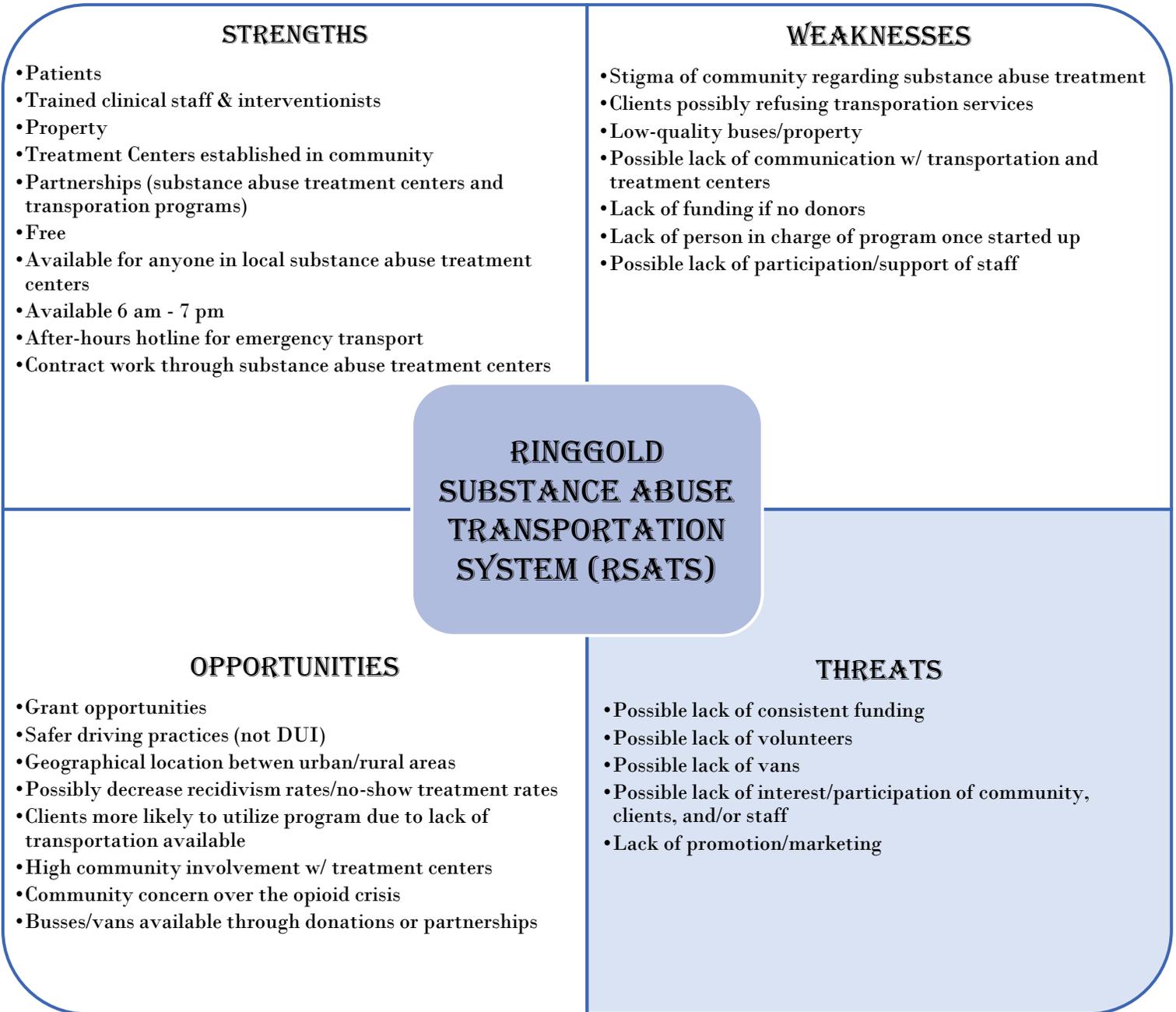
OPPORTUNITIES

- Grant opportunities
- Safer driving practices (not DUI)
- Geographical location between urban/rural areas
- Possibly decrease recidivism rates/no-show treatment rates
- Clients more likely to utilize program due to lack of transportation available
- High community involvement w/ treatment centers
- Community concern over the opioid crisis
- Busses/vans available through donations or partnerships

THREATS

- Possible lack of consistent funding
- Possible lack of volunteers
- Possible lack of vans
- Possible lack of interest/participation of community, clients, and/or staff
- Lack of promotion/marketing





Appendix E

Program Title: Substance Abuse Transportation Program (SATP)

Team Members: Brianna Cheever, Allison Durham-Grady, Nora Amador-Vieyra

Statement of Problem: Transportation need in Ringgold, GA for individuals in substance abuse treatment programs

Inputs	Outputs		Outcomes (Impact)		
	Activities →	Participants	Short Term →	Medium Term →	Long Term
Volunteers/Program Staff	Drive vans, maintain vans, attend trainings, encourage clients to share knowledge of the program, answer calls for transportation needs	2-7 volunteers who have been vetted by the four substance abuse treatment agencies. Possibly EMTs/mental health professionals. All volunteers must be certified to use Narcan if needed.	Transportation for clients to and from their appointments, clients share knowledge of the program to others, and increased knowledge of the program and needs of the clients is obtained in the community.	Full-time staff start to become implemented as funding is obtained. Re-evaluation of the program is achieved over time and volunteer satisfaction is increased. Provide non-life threatening emergency transportation to substance abuse clients	Decreased recidivism in clients, decreased no-show rates to appointments, less deaths from opioid overdoses, increased ability for patients to attend in-patient services in emergencies and outpatient services regularly

Substance Abuse Agency Staff	Attend workshops, communicate with program staff/volunteers, include the transportation program in resources given to clients	Staff from the four substance abuse treatment centers in Ringgold, GA. Most are mental health professionals with substance abuse treatment knowledge	Obtain knowledge of the program and its benefits, provide awareness of this program to clients, and create a partnership with the program staff	Strengthen partnership with the program staff, implement the program consistently with clients, increased satisfaction with the program.	Strong partnership with the program, participate fully with the program, provide more resources for the program (including possible funding).
Vans/Buses	Maintenance, driven by volunteers/program staff, drive to and from substance abuse treatment centers	Obtain 2-4 working vans and have the volunteers to drive and maintain those vans.	Vans will function well and will hopefully be donated/loaned to the program.	Vans will be kept maintained, and hopefully all vans will be able to have heat and A/C.	Obtain newer and more vans as program expands, vans will continue to function at optimum level to transport clients to and from appointments.
Budget	Grants will be obtained related to transportation needs and substance abuse, and individual donations will be obtained. Eventually may be funded by the substance abuse treatment centers.	Federal grants, nonprofit grants, individual donors (businesses/people in the community), and possibly eventually funded by the four substance abuse treatment centers in Ringgold, GA.	Funding used to obtain vans, pay for maintenance and fuel for those vans, and any other additional costs of the program.	Consistent income obtained for the maintenance of the vans, and possibly funding to pay program staff.	Consistent income for hiring full-time staff, expand the program to other agencies in other regions that may benefit.
Time	6 am – 7 pm transportation to and from substance abuse treatment, after-hours hotline for non-life threatening	Volunteers provide the transportation between 6 am – 7 pm as well as answer after-hours calls for non-life threatening	Clients will have transportation to and from substance abuse treatment appointments during the hours the	Less no-show rates to appointments at substance abuse treatment centers, decreased load on EMS services for	Decreased recidivism in clients, less deaths from opioid overdoses, increased ability to attend inpatient services if

	<p>emergencies for clients.</p>	<p>emergencies related to opioid use. Clients would use the transportation services provided.</p>	<p>appointments occur, and clients will have non-life threatening emergency transportation as needed that is related to opioid use.</p>	<p>non-life threatening emergencies.</p>	<p>needed in emergency situations and outpatient services regularly.</p>
<p>Community Members/Clients</p>	<p>Raise/spread awareness of the program, donate time and money to the program, and attend workshops about the program</p>	<p>Individuals and clients in the community of Ringgold, GA and surrounding areas, and patients of the four substance abuse treatment centers in Ringgold, GA.</p>	<p>Awareness of the program will expand, and money will be obtained through donations and grants to start the program.</p>	<p>More individuals in the community will donate time and money to the program, more clients will utilize the transportation services provided by the program, and the program will begin to expand to other regions.</p>	<p>Stigma of substance abuse and substance abuse treatment will be lowered in the community, more clients will benefit from transportation services, decreased recidivism in the clients, partnerships are built with individuals and other agencies/businesses in the community.</p>

Appendix F



Completion Date 27-Sep-2019
Expiration Date N/A
Record ID 33506265

This is to certify that:

Brianna Cheever

Has completed the following CITI Program course:

Responsible Conduct of Research (Curriculum Group)
Responsible Conduct of Research (Course Learner Group)
1 - RCR (Stage)

Under requirements set by:

Southern Adventist University



Verify at www.citiprogram.org/verify/?w4f0169e5-e4a6-423e-9401-482657a53739-33506265



Completion Date 09-Sep-2019
Expiration Date N/A
Record ID 33208499

This is to certify that:

ALLISON DURHAM

Has completed the following CITI Program course:

Responsible Conduct of Research (Curriculum Group)
Responsible Conduct of Research (Course Learner Group)
1 - RCR (Stage)

Under requirements set by:

Southern Adventist University



Verify at www.citiprogram.org/verify/?w4efe4d3c-d3e6-4fd1-916c-c4665930a99c-33208499



Completion Date 14-Sep-2019
Expiration Date N/A
Record ID 33283848

This is to certify that:

Nora Amador

Has completed the following CITI Program course:

Responsible Conduct of Research(Curriculum Group)

Responsible Conduct of Research(Course Learner Group)

1 - RCR

(Stage)

Under requirements set by:

Southern Adventist University



Verify at www.citiprogram.org/verify/?wd5af5268-883b-4efd-a51d-ac0b049d219a-33283848

