

Final Program Plan: A School-Based Approach to Opioid Use and Misuse Prevention Among
Adolescents

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Program Mission Statement, Goals, and Objectives

Mission statement

This program seeks to mitigate opioid overdose death rates amongst adolescents (15-19 years) in Gwinnett County.

Through adequate educational lectures and materials provided by various stakeholders and pharmacy students, adolescents and their parents will be informed of the harms of opioid use, alternative pain management techniques, and constructive coping and risk aversion skills to prevent the use of opioids, whether it be medical or nonmedical use.

These weekly meetings will be separate yet simultaneous for adolescents and their parents to encourage the implementation of robust health behaviors in the home as well as to improve parental monitoring and management of behaviors.

Our vision for this intervention is to ameliorate adolescent and parental knowledge on the potential short- and long-term consequences associated with opioid use to prevent adverse health outcomes and overdose death rates in the future.

Program Goals & Objectives:

Goal 1: Equip adolescents with skills necessary to mitigate the risk of engaging in opioid misuse.

Objective 1A: Increase the proportion of adolescents who think opioid use is risky, measured at baseline and post program evaluation.

Objective 1B: Reduce the proportion of prescription pain reliever initiation in the past year, measured at baseline and post program evaluation.

Objective 1C: Reduce the proportion of adolescents who used opioids in the past month, measured at baseline and post program evaluation.

Goal 2: Develop and disseminate valuable instructional materials to provide excellence in opioid use education and prevention for adolescents and parents.

Objective 2A: Enroll at least 100 adolescents to participate in this high-quality preventative opioid use program.

Objective 2B: Increase the proportion of students with a proficient knowledge of potential harms of opioid use, alternative pain management techniques, and coping and risk aversion skills, measured at baseline and post program evaluation.

Objective 2C: Increase the proportion of parents with a proficient knowledge of potential harms of adolescent opioid use and adequate parental monitoring and behavioral management, measured at baseline and post program evaluation.

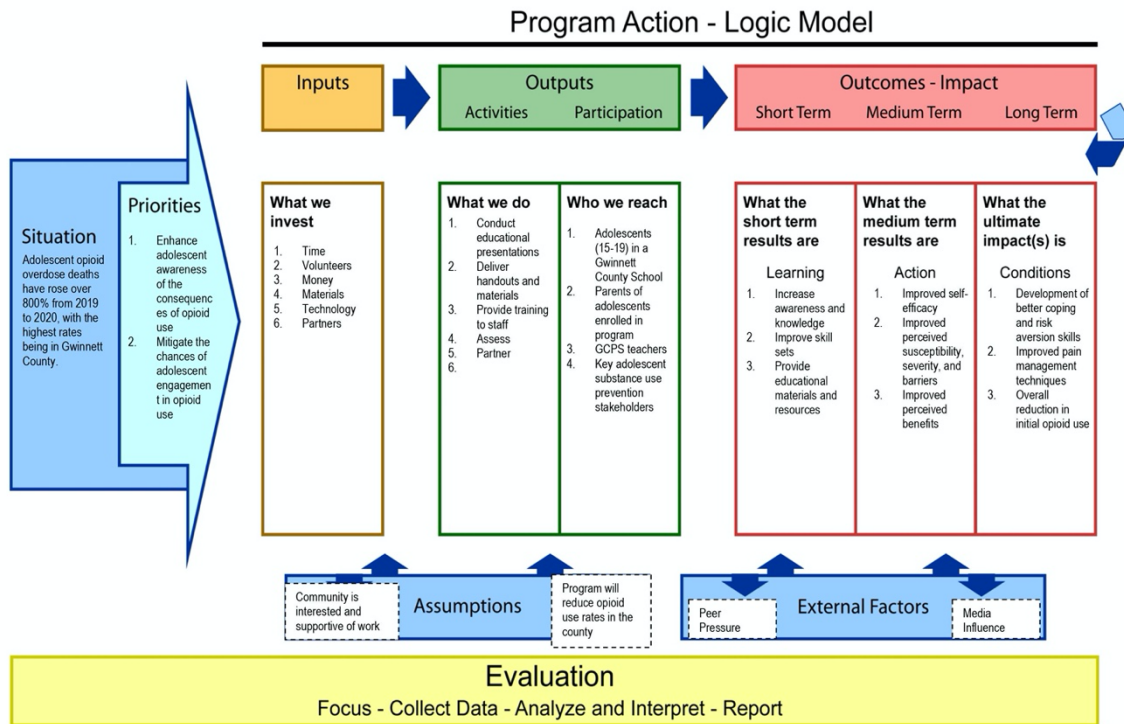
Goal 3: Recruit vital community partners and stakeholders involved in preventing adolescent opioid use.

Objective 3A: Enroll at least three community partners and stakeholders within the community.

Objective 3B: Enroll pharmacy students from the Mercer School of Pharmacy to conduct weekly presentations.

Objective 3C: Require at least two stakeholders to be present for each weekly session to enhance the provision of administration of educational materials.

Logic Model



Needs Assessment

A. Background

A.1. From 2019 to 2021, overdose death rates amongst adolescents rose by over 800% in the state of Georgia alone (Georgia Department of Public Health, 2022). Many of these deaths are associated with synthetically manufactured fentanyl's and these increases have been seen across sexes, race/ethnicities, and geographical regions, displaying the magnitude of this epidemic (Georgia Department of Public Health, 2022). Approximately 12.4% of all deaths amongst 15–24-year-olds are a direct result of opioid use (Groenewald et. al, 2020). The extensive availability of opioids and illicitly manufactured fentanyl's in conjunction with the ease of purchasing them through social media has heightened the risk of overdose and or injury for this already vulnerable group (Tanz et. al, 2021). A large contributing factor to the rise in overdose deaths and nondeaths can be attributed to the lack of education on the consequences of opioid use and misuse. Although there have been more studies conducted on adolescent opioid in recent years, there is limited knowledge on adequate preventative measures due to the stigmatization of the topic. Also, many studies have yielded contrasting results and or provide a limited magnitude of associations, thus demonstrating the grave need for enhanced research that produces results that would help public health and public policy better address the crisis (Bruzelius et. al, 2023).

Given that fentanyl related deaths are increasing at faster rates amongst adolescents compared to adults in Georgia, this needs assessment focuses on adolescents (ages 15-19) in this state (Georgia Department of Public Health, 2022). The Georgia Department of Public Health's Online Analytical Statistical Information System (OASIS) reports that Gwinnett County has seen the greatest number of opioid deaths amongst adolescents in the years 2017-2022 (Online

Analytical Statistical Information System, 2023). In these five years, there were 31 reported opioid overdose deaths with a large uptick occurring in 2020 and thereafter. Unfortunately, there is limited data on race/ ethnicity, gender, and other related risk factors which makes tailored intervention strategies less feasible (Online Analytical Statistical Information System, 2023). However, this proposal seeks to address rising opioid overdoses amongst adolescents (15-19 years) in Gwinnett County by implementing ameliorated educational and preventative strategies (Georgia Department of Health, 2022).

A.2. Consequences of Adolescent Opioid Use

Adolescents who report opioid misuse are also more likely to indicate prior cocaine, hallucinogen, heroin, inhalant, tobacco, alcohol, and cannabis use (Gondré-Lewis et. al, 2023). A recent South Carolina study sought to evaluate whether opioid prescription rates influenced academic performance. For many participants, higher county wide opioid prescription rates were correlated with a statistically significant decrease in student test scores. This may suggest that there will be long lasting spillover effects on educational attainment amongst adolescents (Cotti et. al, 2020). This may be due to individuals experiencing greater social consequences because of opioid use which may influence classroom attendance and interpersonal interactions (Tam et. al, 2022).

Adolescents and young adults are two foremost age groups likely to engage in the non-medical use of prescription drugs (NMUPD), which is related to engaging in other high-risk behaviors including sex and driving under the influence (Tam et. al, 2022). This is likely due to the lack of assessing potential long-term risks associated with engaging in risky health behaviors as many adolescents tend to focus more on the short-term benefits of risky behaviors (Voepel-Lewis et. al, 2018).

A.3. Risk factors

Gender, race, socioeconomic status, and familial context may influence the likelihood for adolescent engagement in opioid use. Adolescent females are at a greater risk for reporting lower perceived opioid knowledge and higher on the misuse harm scale compared to their male counterparts (Abraham et. al, 2022). Males are more likely to express opioid misuse without disorder in relation to females, thus demonstrating that adolescent females are at greater risk for developing an opioid use disorder (Gondré-Lewis et. al, 2023).

Until 2013, adolescents identifying as White, or Caucasian were more likely to report prescription opioid misuse however current findings have highlighted a demographic shift. A recent study found that Black, non-Hispanic adolescents are at 20% increased odds of using opioids and at 50% increased odds of misusing opioids compared to White, non-Hispanic adolescents (Groenewald et. al, 2020). White adolescents are also more likely to report higher rates of perceived opioid knowledge, behavioral intent, safe medication disposal, and overall opioid knowledge compared to adolescents identifying as Black and Hispanic (Abraham et. al, 2022). This may be attributed to the fact that the Black, non-Hispanic adolescents were also more likely to report prescription opioid use to relieve pain (Groenewald et. al, 2020). There is well-established literature noting racial differences in pain treatment and management which may be attributed to the lack of access to non-opioid pain relief treatment among minority adolescents (Groenewald et. al, 2020).

Parental awareness of their adolescents' behaviors, or the lack thereof, may cause parents to inaccurately think about their child's likelihood of engaging in opioid misuse (Nguyen et. al, 2020). A recent study sought to examine whether prescription opioid use amongst family members influenced adolescent opioid overdose rates. Compared with participants who had no

exposure to familial opioid prescription use, respondents with at least one family member who obtained an opioid prescription over the previous month saw a two-fold increase in the risk of overdose (Nguyen et. al, 2020). Also, concurrent prescriptions of both family members and adolescents over the previous month was associated with a thirteen-fold increase in opioid overdose risk (Nguyen et. al, 2020). These significant findings display the relationship between family exposure to opioids and subsequent adolescent misuse. In a study conducted by the National Survey on Drug Use and Health from 2002 to 2014, researchers found that adolescents whose mothers reported opioid use were at greater risk for displaying aggressive or antisocial behaviors compared to mothers who did not engage in any substance use as well as mothers who engaged in other illicit drug use or had an alcohol use disorder. These findings are noteworthy because it illustrates that maternal opioid use may have long lasting and adverse repercussions on adolescent behavior (Feder et. al, 2020).

In the same aforementioned study that assessed the influence of opioid prescription rates on educational attainment, researchers found that overdose and prescription rates were negatively associated with median income (Cotti et. al, 2020). This demonstrates a pronounced relationship between opioid prescriptions, overdoses, and socioeconomic status.

Lastly, adolescents who report their overall physical and mental health as “fair/poor” or “good” are more likely to use opioids compared to individuals who disclose their health as “excellent” or “very good” (Groenewald et. al, 2020). These individuals with poorer mental and physical health are also more inclined to develop an opioid use disorder (OUD) (Groenewald et. al, 2020). Adolescents who have experienced at least one major depressive episode are at an increased risk for all engaging in all forms of opioid use (Groenewald et. al, 2020).

A.4. Rationale for Intervention

There are various factors that create the need for this type of intervention, namely the lack of adolescent and parental education regarding the consequences of opioid use and alternative pain management techniques as well as the over prescription of opioids in healthcare settings.

A 2021 report found that a mere 27% of American adolescents reported an awareness of fentanyl being laced into counterfeit pills, compared with 50% of young adults. Thus, demonstrating the urgency to ameliorate opioid awareness amongst this cohort (Georgia Department of Public Health, 2022). The most common motivator for adolescent opioid use is self-treating pain, however it is estimated that 84-88% of adolescents have used opioids in ways other than its intended use for treating pain (Abraham et. al, 2022). A recent study found that 90% of their adolescent participants reported monthly pain and that 71% of respondents self-treated their pain with a past personal opioid prescription (Voepel-Lewis et. al, 2018). There is a myriad of other ways that adolescents can cope with pain without having to rely on prescription pills. Further educational efforts aimed at increasing adolescent knowledge surrounding pain management techniques would thus be fruitful in addressing the main motivator for engaging in opioid use.

The over prescription of opioids impacts all ages and with an estimated over 50% of prescribed opioids going unused, subsequently creating a reservoir for future opioid use (Groenewald et. al, 2020). In just one decade, the number of opioids dispensed to adolescents quadrupled (Voepel-Lewis et. al, 2018). This significant uptick in opioid prescriptions is associated with greater adverse opioid-related events, including poisonings, misuse, overdose, and the development of opioid use disorder (OUD) (Voepel-Lewis et. al, 2018). Along with pain

management, other common reasons for adolescent opioid misuse include to relieve anxiety, to want to “get high”, to sleep better, and to experiment (Groenewald et. al, 2020). The stockpile of easily accessible and unused opioids consequently enables adolescents to abuse opioids for the same reasons. This circumstance can be attributed to both adolescents' lack of knowledge surrounding the consequences of opioid misuse as well as inadequate parental awareness surrounding the ramifications of keeping unused opioids within the home.

A.5. High Schools as Critical Settings for Substance Use Interventions

Individuals who are prescribed opioids before 12th grade are at a much greater risk of misusing opioids in the future, which is why interventions aimed at 15 to 19 years are so critical in addressing the opioid epidemic (Abraham et. al, 2022). Older students are more likely to misuse opioids as a recent study found that 10.9% of 9th graders reported opioid misuse while 17.0% of 12th graders reported opioid misuse (Abraham et. al, 2022). While these numbers may seem low to a lay audience, they are quite significant and provide sufficient rationale for targeted interventions efforts amongst high school students.

Adolescents who reported feeling unsafe or being threatened at school are at greater risk for lifetime opioid misuse (Kalu et. al, 2022). Also, students who engaged in physical fighting at school were also more likely to engage in lifetime opioid misuse (Kalu et. al, 2022). These findings may indicate that individuals misuse opioids to cope with psychological pain because of feeling unsafe in school settings. Nonetheless, it is pertinent to promote a school atmosphere that condemns bullying and physical violence to prevent future opioid use.

A.6. Current Adolescent Opioid Prevention Strategies in Gwinnett County

Gwinnett County currently educates its students on drug prevention and control in their “Introduction to Health” class by informing students of the impacts of drug use on personal

goals, educational attainment, and future professional opportunities (Gwinnett County Public Schools). Gwinnett County Public Schools (GCPS) also promotes The Safe and Drug Free Schools Program which intends to provide preventative interventions aimed at enhancing drug-free and safe learning facilities (Gwinnett County Public Schools). The Substance Abuse and Mental Health Services Administration (SAMHSA) is the primary funder of substance use prevention services in Georgia and their Center for Substance Abuse Prevention is currently engaged in various projects aimed at preventing adolescent opioid use (Georgia Department of Behavioral Health and Developmental Disabilities). First, the Gen Rx Project targets counties that are experiencing the highest rates of prescription drug abuse within the state, which includes Gwinnett County. This project implements evidence-based approaches to reducing prescription drug abuse among 12–25-year-olds (Georgia Department of Behavioral Health and Developmental Disabilities). Also, the Georgia Teen Institute is another SAMSHA funded project that promotes adolescent leadership through summer training programs and year-round assistance to advance youth advocacy within school settings (Georgia Department of Behavioral Health and Developmental Disabilities). These two projects may mitigate adolescent opioid use and misuse in the long-term, however with opioid overdose death rates still on the rise further prevention strategies are gravely needed.

Theory, Program Description, and Implementation Plan

Theory

The Health Belief Model (HBM) functions to explain and predict health behaviors by altering individual attitudes and beliefs. The widely used model demonstrates that individuals are motivated to change their behavior only if they believe the results of their choices are significant

and can expect those results to occur. Overall, the theory illustrates the relationship between beliefs and subsequent behaviors. HBM emphasizes that individuals must be confident in their ability to engage in and carry out a new behavior, or else the health behavior is unlikely to take place. For this model to be successful, it is vital that incentives build upon the motives, needs, values, self-image, and overall health concerns of the individual or population at hand. The HBM model has been commonly used in substance use prevention programs and typically focuses on the short-term consequences of substance use, which may include the loss of friends or impact on academic performance (Fadaei et. al, 2022).

The HBM was developed in the 1950s and continues to be one of the most widely utilized models in Public Health. The model was created by the U.S. Public Health Service with the intent to understand why people do not engage in preventative services that aim to mitigate the chances of disease development. Overall, researchers wanted to gain insight as to why individuals do not engage in robust health behaviors. They hypothesized that engagement in healthy behaviors is dependent upon two ideas: the individual's value of a particular goal and their estimate of the likelihood a certain action will achieve that goal (Janz & Becker, 1984). Thus, the chances of engaging in a health behavior are contingent on an individual's belief in the threat of a disease and their belief in the effectiveness of that behavior. HBM has been increasingly used in alcohol and drug education practices in recent years and has been seen to be particularly useful (Sharma, 2011).

The dimensions of the model include the individual's perceived susceptibility, perceived severity, perceived benefits, perceived barriers, as well as cues to action and self-efficacy. Cues to action and self-efficacy are modifying variables that were added to the model in the 1980s. Perceived susceptibility explains the individual's attitude toward the risk of developing a health

disease or condition. It is worth noting that perceived susceptibility is subjective as it varies depending on personal feelings of vulnerability. Regarding this intervention, it is important to understand that adolescents will vary in their ideas of vulnerability to opioid use and misuse (Janz & Becker, 1984).

Perceived severity explains how serious the individual's perception of a disease consequence is. This may include both medical and social consequences of contracting a disease or illness. Perceived benefits illustrate the individual's opinion of the effectiveness of the health behavior on the ability to reduce the risk of a disease. Depending on how effective an individual believes a behavior is depicts their course of action. Perceived barriers explain the individual's beliefs around the costs of engaging in the health behavior, which may include tangible or psychological costs. This stage is typically when individuals engage in a cost-benefit analysis of weighing the effectiveness against the negative perceptions surrounding the health behavior. Next, cues to actions include the strategies need to "activate readiness." This stage combines the perceived levels of susceptibility, severity, benefits, and barriers with the energy to perform the health behavior. These may be internal, which includes symptoms of the disease or illness, or external, which includes interpersonal relationships and mass media (Janz & Becker, 1984).

Lastly, self-efficacy explains the confidence of the individual in their ability to engage in the health behavior (Sharma, 2011). Other modifying variables to consider in this model include demographic variables and psychological characteristics (Fadaei et. al, 2022).

In recent years, many studies have demonstrated the effectiveness of HBM in positively influencing health behaviors amongst adolescents. This is worthwhile because not all models that are effective in adult interventions are also advantageous in adolescent populations. The model has also been endorsed as beneficial in educational interventions for preventing addiction

behaviors. One recent study reported that adolescents in the intervention group had higher mean scores in perceived susceptibility, perceived severity, perceived benefits, perceived barriers, and self-efficacy for adopting preventative substance use behaviors compared to the control group. Overall, researchers found that when individuals do not have an adequate understanding of the consequences of an illness, they are less likely to engage in any measures to prevent that illness. The study also reiterates that if individuals believe certain health behaviors are useless or contain barriers, then they are more likely to avoid engagement in the preventative behavior. Studies have confirmed that HBM-centered educational programs are both sufficient and cost-effective in delivering drug abuse prevention for adolescents (Fadaei et. al, 2022).

While we are not proposing an entirely family-based therapy approach because this intervention plans to be implemented within schools, there will be familial related components woven throughout. Family-based approaches are effective in the prevention and treatment of adolescent substance use (Fadus et. al, 2019). By including parental monitoring and management of behaviors as well as encouraging positive relationships, program attendance and retention of materials may be enhanced. Studies have shown that interventions including parents can provide a greater sense of flexibility in approach and delivery, which would in turn strengthen the outcomes of the program (Fadus et. al, 2019).

Description of Program Intervention

This primary preventative intervention will include educational components aimed at enhancing both adolescent and parental knowledge surrounding the consequences of the over prescription of opioid use, alternative pain management techniques, and enhancing coping and risk aversion skills. The intervention will be delivered once a week for an hour for nine weeks and will be administered by pharmacy students at Mercer School of Pharmacy and at least two

stakeholders and key community members each week. Stakeholders and key community members will include guidance counselors from Gwinnett County Public School (GCPS), and employees from the Georgia Department of Behavioral Health and Developmental Disabilities (GDBHDD), and Substance Abuse and Mental Health Services Administration (SAMSHA), which includes employees for SAMSHA's Center for Substance Use Prevention, GenRx, and the Georgia Teen Institute. The selection of the Center for Substance Use Prevention stems from its role as the main financial supporter of substance use prevention initiatives in Georgia (Georgia Department of Behavioral Health and Developmental Disabilities). GenRx operates in Georgia counties with the highest prevalence of prescription drug use, which includes Gwinnett County. Both stakeholders implement evidence-based approaches to prevent adolescent opioid use. The Georgia Teen Institute offers programs during both summer and throughout the school year, aiming to empower adolescents and strengthen advocacy within school settings (Georgia Department of Behavioral Health and Developmental Disabilities). This will be beneficial in that students enrolled in the program may be used in subsequent years as a leader to educate peers on the consequences of opioid use among teenagers.

Pharmacy students were chosen due to the effectiveness of another similar intervention program in increasing the knowledge regarding the risks of the nonmedical use of opioids (Tam et. al, 2022). By using students, the instructors will be closer in age to participants which may potentially cause adolescents to be more receptive to the lectured materials. We believe this will be especially beneficial for female participants as one recent study indicated improved self-esteem, communication, and understanding of consequences related to substance use for both mothers and daughters enrolled in the same program (Tam et. al, 2022).

The intervention will be delivered through an in person after school program for adolescents. School-based programs are effective due to their ability to engage large numbers of students. The program will primarily focus on the risk and protective factors associated with opioid use as to prevent the initiation of this activity (Griffin & Botvin, 2010). Regarding the parental component, online lecture and seminar activities will be hosted each week. These live sessions for parents will include relevant and appropriate information explaining what their adolescent will be learning as well as tips for parental monitoring and behavioral management (Fadus et. al, 2019). The materials will be online and posted each week so that parents or guardians can fit it in around their work schedule and complete the activities in their own time. In doing so, we hope to mitigate any barriers and enroll the largest number of parents and guardians possible. Interventions that incorporate parenting skills as well as promoting family bonding have seen tremendous success in mitigating the chances of adolescent substance use (Griffin & Botvin, 2010). Training for pharmacy students and key stakeholders is required and will be delivered by trained employees at the Substance Abuse and Mental Health Services Administration.

We hypothesize that these intervention methods will promote a greater understanding of the consequences of opioid use, substituted pain management techniques, and the overall augmentation in coping and risk aversion skills as means to prevent opioid and further substance use and abuse (Tam et. al, 2022). In doing so, we hope to mitigate increases in adolescent opioid overdose death rates within Gwinnett County.

Curriculum

Since the program will be nine weeks long, the information will be broken down into three overarching themes each consisting of three weeks that focus on harm reduction education,

alternative pain management techniques, and coping and risk aversion skills. Successful substance use intervention programs incorporate three main components, including social resistance skills, normative education, and competence-enhancement skills (Griffin & Botvin, 2010). All these components match up directly with our three goals.

The first three weeks will focus on social resistance skills by educating adolescents on the harms of opioid use. This section seeks to increase adolescent awareness of social factors that may influence engagement in substance use by including common scenarios where adolescents are likely to experience peer pressure to engage in opioid use. They will also be taught skills to resist social and media pressures associated with engagement in opioid use. This will include ways to directly respond to these pressures through refusal messages and the most effective delivery methods. Interventions that incorporate ways to enhance adolescent awareness around how substance use advertisers promote the sale of the substance will also be included so that we can educate participants on counterargument techniques to combat advertisers misleading messages (Griffin & Botvin, 2010).

The next three weeks will focus on normative education surrounding alternative pain management techniques. A recent study found that 90% of their adolescent participants reported monthly pain and that 71% of respondents self-treated their pain with a past personal opioid prescription (Voepel-Lewis et. al, 2018). There is a myriad of other ways that adolescents can cope with pain without having to rely on prescription pills. Further educational efforts aimed at increasing adolescent knowledge surrounding pain management techniques would thus be fruitful in addressing the main motivator for engaging in opioid use. First, we will begin by including activities that demonstrate the inaccuracies adolescents typically attain regarding the high prevalence of substance use. This will be done by providing data from national survey data

to participants that report the actual prevalence rates of opioid use among adolescents.

Prevalence rates of substance use are typically much lower than what most adolescents believe demonstrating the effectiveness of normative education approaches on increasing adolescent awareness. The next component of this step is to educate participants on other forms of pain management, such as exercise, meditation, massages, etc. (Griffin & Botvin, 2010).

The final three weeks of the intervention plan will target the development of coping and risk aversion skills through a competence-enhancement approach. This component functions to teach participants about key life skills in preventing substance use, including 1) general problem-solving and decision-making skills 2) general skills to resist social and media influences, 3) skills for increasing self-esteem and self-control, 4) coping strategies to relieve stress and anxiety associated with pain, and 5) general assertive skills (Griffin & Botvin, 2010). Regarding coping strategies to relieve pain related stress and anxiety, this may include behavioral relaxation techniques. General assertive skills are valuable because they function to educate adolescents to speak up for themselves if they are experiencing pain in hopes to diminish the chances of them seeking out opioids for pain management. Overall, this section of the program hopes to provide materials for adolescents to better handle the stressors of everyday life as to mitigate the chances of engaging in opioid use in the first place (Griffin & Botvin, 2010).

For parents, the same three overarching goals and materials will be incorporated throughout, however additional sections will be woven into their curriculum. This includes materials to address family opioid use, the availability of opioids, and social and media pressures that influence adolescent attitudes of opioid use. We will also provide tips on ways to improve parental monitoring, family support, effective communication, and rule settings to reduce the likelihood their adolescent will engage in opioid use (Griffin & Botvin, 2010).

Curriculum Table

Weeks	Focus	Activities
1-3: Harm Reduction Education	<ul style="list-style-type: none"> -Harms of Opioid Use -Teaching skills to resist social and media pressures associated with engagement in opioid use -Awareness around how substance use advertisers promote the sale of the substance 	<ul style="list-style-type: none"> -Acting out common scenarios where adolescents are likely to experience peer pressure to engage in opioid use -Hypothesizing direct responses and refusal messages -Teaching of counterarguments to combat misleading advertisements
4-6: Alternative Pain Management Techniques	<ul style="list-style-type: none"> -Normative education surrounding alternative pain management techniques -Overview of Pain and common motivators of Pain -Various methods 	<ul style="list-style-type: none"> -Provision of activities that demonstrate the inaccuracies adolescents typically attain regarding the high prevalence of substance use -Provision of national survey data to participants that report the actual prevalence rates of opioid use among adolescents -Demonstration of exercises, meditation, massages, etc.
7-9: Coping and Risk Aversion Skills	<ul style="list-style-type: none"> -General problem-solving and decision-making skills -General skills to resist social and media influences Skills for increasing self-esteem and self-control -Coping strategies to relieve stress and anxiety associated with pain -General assertive skills 	<ul style="list-style-type: none"> -Demonstration of behavioral relaxation techniques -Provision of materials for adolescents to better handle the stressors of everyday life

Adolescents and parents enrolled in the program will be administered a pre and posttest HBM questionnaire that will consist of 53 items with seven sections including items pertaining to “knowledge (10 items), perceived susceptibility (eight items), perceived severity (11 items), perceived benefits (six items), perceived barriers (five items), cause to action (five items), and self-efficacy (eight items).” Each question will be scored on a Likert scale with ranges from one

to five. This test has been utilized in previous interventions gauging opioid use and has rendered effective results. We will pilot the test at another Gwinnett County school to establish content validity. The test is also deemed reliable as it has a Cronbach's alpha of .87 (Fadaei et. al, 2022).

The program will be conducted in a classroom setting where participants will be broken down by each grade. Each week, the four Mercer pharmacy students will rotate to each grade's classroom providing relevant educational materials. Individuals who are prescribed opioids before 12th grade are at a much greater risk of misusing opioids in the future, which is why interventions aimed at 15 to 19 years are so critical in addressing the opioid epidemic. Older students are more likely to misuse opioids as a recent study found that 10.9% of 9th graders reported opioid misuse while 17.0% of 12th graders reported opioid misuse (Abraham et. al, 2022).

We will provide training for pharmacy students and stakeholder in a two-day workshop that seeks to equip instructors on the mission, goals, and objectives of the program as well as the curriculum content and included techniques. Adolescents will be taught through facilitated discussions, small group activities, and role-playing scenarios. In doing so, the program hopes to provide a participatory and interactive program that enhances the acquisition of skills to resist opioid use engagement. In an intervention that incorporated these components, researchers reported a 25% reduction in hard drug use amongst adolescents in their one year follow up, demonstrating the effectiveness of this approach in teaching (Griffin & Botvin, 2010). We will purchase and utilize well-developed booklets for substance use prevention among adolescents based on the HBM model. In a previous study aiming to reduce the onset of smoking among adolescents, researchers incorporated a similar booklet model and reported a 16.4% reduction of

adolescent initiation of smoking compared to the control group (Griffin & Botvin, 2010). This indicates the strength of booklets in these types of intervention programs for this demographic.

Implementation Plan

This program will last for nine total weeks and will begin on March 20th, 2024 and end on May 1st, 2024. However, the entire project will last from July 1st, 2024-June 30th, 2026. The reason for administering the program at the end of the year is to educate students on the harms of opioid use before the start of summer when adolescents may have more free time to engage in risky behaviors. This will also give the team the entirety of the school year to dedicate further time to planning the program. This process will begin with the recruitment of GCPS teachers, Mercer Pharmacy students, and the key stakeholders and community members. Stakeholder donations will be accepted at this time, as well as throughout the first year. Additional start-up activities will include obtaining classroom rentals for both the training days as well as for each of the nine weeks the program will be administered. Next, the team will secure and print the SAMSHA “Substance Misuse Prevention for Young Adults” booklet. While the title includes “young adults,” there is helpful information and data pertaining to adolescents aged 15-19. The 53 item pre and posttest HBM questionnaires will also be secured and printed, and all printing materials will be included in the budget. The questionnaire will be piloted at another GCPS school to ensure content validity around this time as well. The pretest surveys will be administered before the first session and must be completed to attend. This will enable the program to be more tailored based off these results. The next step will be planning the two-day training program so that instructors will understand the mission, goals, and objectives of the program as well as foster relationships between all those involved with the actual training to occur around October or November of that school year. Around November we will secure the

Zoom online domain to provide the online live sessions for parents. Once we have gathered all materials, equipment, and instructors, we will then begin to recruit and enroll participants in the school roughly around December and January. We will have all participants enrolled by February 1st, 2024, so that we can finalize the number of materials and plan each week accordingly with adequate time. We will post flyers around the school and advertise the program on the school announcements each week beginning in November until February 1st to recruit a goal of 100 adolescent participants. Parents will be incentivized to enroll themselves and their adolescents with the provision of a \$30 gift card.

The program will be conducted on Wednesdays each week for an hour for nine weeks. If any students require transportation, GCPS will partner with the program to provide a late bus to drop off these students to address any transportation barriers. Depending on how many students need afternoon transportation will determine how many buses we will need. During the recruitment and enrollment process, we will have a box to check if a student may need this service. At the end of the program, we will administer the same 53 item posttest assessment and gather the subsequent results for the next year's program.

Evaluation Plan

Evaluation Plan

This program will include an effective evaluation plan to assess the overall efficiency of the program. The evaluation process will occur throughout the entirety of the program; however, the bulk of this process will happen at the beginning and end of the program. The data analyst will play the lead role in data analysis and work closely with the project coordinator to establish a strategic approach to data collection and establish more accurate findings. They will also work

hand in hand to develop appropriate evaluation methods. Formative evaluation will take place before the program starts to ensure that the intervention design is adept and will include all members of the team. Process evaluation will be conducted at various points within the implementation of the program to determine whether any changes need to be made to administer appropriate and relevant information and to analyze participant retention rates. The project coordinator will play a large role in this area of evaluation. Outcome and summative evaluation will occur after the program is completed and will evaluate the overall impact of the program. This program will be evaluated internally by all team members. The pre-test questionnaire will be provided at the start of the program, while the post-test questionnaire will be provided at the end of the program. Team members will evaluate the changes in scores, which will enable a sufficient assessment of the efficacy of the program. This model of design will facilitate the comparison of the relevance of the program at the beginning and end of the program.

Program Evaluation

Formative Evaluation

This process will take place before the program begins. The initial meetings will include the key stakeholders and community partners to establish cooperation early on. It is essential to include stakeholders in this process because they are most likely to use the results of the program, provide the time and funding for the program, and hold the responsibility of applying the findings of the program. We will also incorporate separate meetings with each of the stakeholders and team members to further discuss their roles and hopes for the program. These meetings will be conducted similar to focus groups where the stakeholders will be asking questions to ensure they are receiving all of the relevant information they would like. Their opinions and questions will be taken into consideration throughout the final editing process of

the program. The 53-item HBM questionnaire will be tested by staff members to establish appropriateness. After these meetings are conducted, the team members will finalize all program materials to make sure all components are sufficient in curriculum and delivery. Program recruitment will begin around December and January, and we will have all participants enrolled by February 1st.

Process Evaluation

This process will take place at various checkpoints throughout the program to oversee and to establish that the program is aligning with the intended outcomes. This will include sending out surveys to parents and their adolescents regarding their understanding of the materials presented thus far, their level of comfort with the administration of materials, and leaving space for any concerns or questions that may arise. This approach will also be conducted after the 6-week mark. Retention will be measured by the Excel File Tracker which will monitor weekly attendance. Also, the project coordinator will make sure that all participants are kept up to date on materials and progress of the program to maintain high retention rates. Once the program is halfway through, team members will assemble a report that includes relevant information regarding the program process based on the surveys previously administered and any other helpful information gathered to evaluate the effectiveness of the program. This report will be given to the key stakeholders and community members to include them in the process and share the program's current accomplishments. All team members will meet to discuss their opinions on the delivery of the program thus far and outline areas where they believe could use improvement, if necessary. The project coordinator will randomly select parent participants to gauge their comfortability with the program's materials and delivery.

Impact Evaluation

Outcome Evaluation will be analyzed by the pre and post HBM questionnaires. These surveys will be administered using the Qualtrics software and will be emailed to all participants at each respective time of evaluation.

Short Term:

- Did the program effectively educate participants on the harms of opioid use and misuse?
- Did the program effectively provide appropriate pain management techniques and do participants know where to find the associated resources?
- Did the program effectively equip adolescents with skills necessary to mitigate the risk of engaging in opioid use and misuse?

Long Term:

- Did the program offer an effective system of delivery?
 - Adolescents will be asked about the effectiveness of a school setting.
 - Parents will be asked about the effectiveness of the online Zoom setting.
- Do participants report a higher understanding of the
 - Harms of opioid use and misuse?
 - Alternatives to pain management techniques?
 - Coping and risk aversion skills to avoid opioids?
- Do participants know where to obtain necessary resources if faced with an opioid crisis?
- Do participants know the appropriate behaviors to engage in when faced with an opioid crisis?

Impact Evaluation:

- Do participants attain a higher self-efficacy to engage in necessary behaviors to avoid opioid use?
- Did the program encourage the school to provide more educational materials on the harms of opioid use?
- Did the school atmosphere improve regarding opioid use?

Summative Evaluation

Summative evaluation will include the analysis of participant feedback. Quantitative analysis will be conducted to evaluate the changes in perceived susceptibility, perceived severity, perceived barriers, perceived benefits, cues to action, and self-efficacy at both pre and post test timeframes. Overall, this process intends to gauge the changes in knowledge, attitudes, and self-efficacy. Questions will be asked regarding:

- Participant's perceived susceptibility to opioid use.
- Participant's perceived severity of opioid use.
- Participant's perceived barriers to opioid use.
- Participant's perceived benefits to not engaging in opioid use.
- Participant's awareness of the cues to action of opioid use.
- Participant's self-efficacy in avoiding opioid use.

It bears mentioning that each of the evaluation components will include a written report that will be sent to the key stakeholders and community members so that they can disseminate the relevant findings.

Evaluation Chart

Objective	Evaluation Type	Indicator	Evaluation Tool	Time Frame
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Goal 1: Equip adolescents with skills necessary to mitigate the risk of engaging in opioid misuse.

1.1-Increase the proportion of adolescents who think opioid use is risky, measured at baseline and post program evaluation.	Process	Survey result yield higher scores on the HBM questionnaire post-program	Pretest/Posttest	First Workshop-Last Workshop
1.2- Reduce the proportion of prescription pain reliever initiation in the past year, measured at baseline and post program evaluation.	Process	Survey result yield higher scores on the HBM questionnaire post-program	Pretest/Posttest	First Workshop-Last Workshop
1.3- Reduce the proportion of adolescents who used opioids in the past month, measured at baseline and post program evaluation.	Process	Survey result yield higher scores on the HBM questionnaire post-program	Pretest/Posttest	First Workshop-Last Workshop

Goal 2: Develop and disseminate valuable instructional materials to provide excellence in opioid use education and prevention for adolescents and parents.

2.1- Enroll at least 100 adolescents to participate in this high-quality preventative opioid use program.	Formative	100 participants are logged on the Excel File Tracker	Excel File Tracker Attendance Sheet	Before Program Start
2.2- Increase the proportion of students with a proficient knowledge of potential harms of opioid use, alternative pain management techniques, and coping and risk aversion skills, measured at baseline and post program evaluation.	Impact	Responses indicate that participants found the program to be highly effective	Pretest/Posttest	1 year follow up of program
2.3- Increase the proportion of parents with a proficient knowledge of potential harms of adolescent opioid use and adequate parental monitoring and behavioral management,	Impact	Responses indicate that participants found the program to be highly effective	Pretest/Posttest	1 year follow up of program

measured at baseline and post program evaluation.				
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Goal 3: Recruit vital community partners and stakeholders involved in preventing adolescent opioid use.

3.1- Enroll at least three community partners and stakeholders within the community.	Formative	Efficient communication and partnerships are established	Excel File Tracker Attendance Sheet	Before the Start of the Program
3.2- Enroll pharmacy students from the Mercer School of Pharmacy to conduct weekly presentations.	Formative	Efficient communication and partnerships are established	Excel File Tracker Attendance Sheet	Before the Start of the Program
3.3- Require at least two stakeholders to be present for each weekly session to enhance the provision of administration of educational materials.	Process	At least two stakeholders show up each week the program is administered	Excel File Tracker Attendance Sheet	Before and After Each Workshop

Marketing Plan

To engage in and provide an effective opioid use prevention program for adolescents, it is essential to inherently understand their behaviors, attitudes, and preferences related to opioid use. This program seeks to include both male and female adolescents aged 15-19 years old at one Gwinnett County Public School (GCPS). Thus, our inclusion criterium includes being 15–19 years old and enrolled at the specific GCPS school. Our intervention is mainly focused on a preventative approach, so we want to target adolescents who are not known to engage in opioid use, but that may be at heightened risk for use. To engage in this exclusionary analysis, we will utilize the guidance counselors at the school to educate any adolescents they believe may be at greater risk, whether it be due to poor academic performance or known parental use, on the program. We will ensure that the counselor is made more aware of the eligibility criteria and is

given recruitment materials. Counselors may encourage enrollment by providing these materials to students and their parents. Also, we will require that participants and their parents sign an informed consent document. Thus, our exclusion criterium includes individuals outside the ages of 15-19, adolescents with a known opioid use disorder (or are known to partake in opioid use), and those that are not able to provide informed consent.

We will reach our target population through initiatives within the school setting. The morning announcements for school generally provide the student population with relevant and important messages about happenings around the school. Keeping this in mind, we will curate a morning announcement message with a shocking statistic about adolescent opioid use each morning because we believe that it is a beneficial way to grab our target audience's attention by hearing startling data early in the day. Hopefully, if students hear these messages each day for months at a time, their interest will be piqued. We will also create posters to be hung up around the school that highlight the purpose of the intervention and include a QR code that provides further information on the program and how to sign up. On these flyers we will also include the contact information of the program director, including his phone number and email. We will have to get these flyers approved by the school to hang them up in the hallways. We will create pamphlets with the same information and QR codes to display at the front of the school to recruit parental participants. Furthermore, we will also send emails out to parents encouraging them to sign up. Since we will be discussing opioids and the prevention of overdoses, ethical considerations may arise. It is essential that we create these flyers with the appropriate audience level in mind. Overall, we will ensure that the language used on posters, emails, and within announcements is not misleading nor coercive to improve our overall sample set.

To adequately retain participants in our program, it is vital that we incorporate methods to track enrolled participants. First, we will incentivize parents to enroll with their adolescent children by providing a \$30 Amazon gift card. Next, we will use an Excel file tracker to monitor attendance and demonstrate parental and adolescent progress throughout the program. This will incorporate each point of contact made, including which after-school activity practice any program coordinators spoke at, phone calls, emails, etc. that were sent out. If parents choose to enroll, we will have to obtain their email address to include them in our purchased group Zoom plan, which provides an extra benefit in that we will be able to contact the parents of participants who do not show up to the weekly meeting in a facilitated manner. We will administer a follow-up survey to both adolescents and parents to measure their perspectives on barriers that may have influenced their ability to attend the weekly meetings, and if so, how significant these barriers were. We will also ask if there is any room for improvement in this regard and leave space for specific ideas for enhancement.

Due to the nature of this intervention program being focused on adolescent opioid use, stigma is likely to follow. To reduce any stigma, we will ensure that posters and flyers include a bolded section emphasizing that this is a preventative program aimed to mitigate the chances of adolescent to engage in opioid use, thereby also attempting to reduce stigma overall. We are limiting our recruitment space to just within the school to avoid any other organizational barriers or considerations. In general, it is challenging to gain approval for interventions to be conducted in schools. However, once we secure our position it will lessen the number of other potential barriers we face. We will ensure that these approaches to recruitment and retention be included in the overall budget.

Resources and Budget Justification

Project Title: Opioid Use and Misuse Prevention Program for Adolescents							
Period of Performance: July 1st, 2024- June 30th, 2026							
Personnel	Salary		% effort	Calendar Months	Year 1	Year 2	Total
Christopher Jones	75,000		10%	1.2	7,500	7,725	15,225
Project Director	benefits @	37%			2,775	2,858	5,633
Cassandra Daniels	40,000	48%	25%	3.0	10,000	10,300	20,300
Project Coordinator	benefits @				-	-	-
LaToyia Dzissah	75,000		15%	1.8	11,250	11,588	22,838
Data Analyst	benefits @	37%			4,163	4,287	8,450
	10,000		20%	2.4	2,000	2,060	4,060
Pharmacy Student	benefits @	0%			-	-	-
	10,000		20%	2.4	2,000	2,060	4,060
Pharmacy Student	benefits @	0%			-	-	-
	40,000		10%	2.4	2,000	2,060	4,060
Pharmacy Student	benefits @	0%			-	-	-
	10,000		20%	2.4	2,000	2,060	4,060
Pharmacy Student	benefits @	0%			-	-	-
	10,000		20%	2.4	2,000	2,060	4,060
GCPS Counselor	benefits @	40%			800	824	1,624
Total Personnel					46,488	47,882	94,370
Equipment					200	200	400
Zoom Business Plan Subscription					200	200	
Travel					1,555	2,333	3,888
Domestic					1,555	2,333	
Supplies					6,600	5,700	12,300
Computers (2)					3,600		
Printing/Photocopying					2,500	2,500	
Afternoon snacks						2,700	
Postage for Parent Forms					500	500	
Other Expenses					1,152	4,228	5,380
GCPS Classroom Space Rental					1152	1728	
Marketing (Flyers/ Posters)						500	
GCPS Bus Rental						2000	
Total Direct Costs					55,994	60,343	116,337
Indirect Costs @	30%				16,798	18,103	34,901
Total Costs					72,793	78,446	151,239

Personnel

Christopher Jones, Project Director – 1.2 calendar months (10% effort) in Years 1 – 2

Mr. Jones is well equipped for the role of Project Director due to his expansive professional career. He has worked for Center for Substance Abuse Prevention at SAMHSA, the Centers for Disease Control and Prevention, Federal Drug Agency, White House Office of National Drug Control Policy, and the U.S. Department of Health and Human Services. He now serves as the Director for the Center for Substance Abuse Prevention at SAMSHA. He has engaged in various “Prescription Drug Abuse Prevention Plans”, including the federal government's plan to reduce the nation's prescription drug epidemic, which has been ongoing for over 10 years now.

Mr. Jones will carry out the following duties on the proposed project:

- Year 1: Responsibilities will include communication with team members to ensure efficiency, school officials to secure classroom rental space, and community stakeholders to establish community buy-in. He will pool together materials from his projects within federal agencies to evaluate which SAMSHA toolkits and other valuable materials will be necessary for the project. He will lead bimonthly meetings with team members. He will develop training modules for the other team members and ensure that their training is adequate and runs smoothly.
- Year 2: Mr. Jones will be the point of contact for any concerns regarding the program, whether it be from parents, school officials, etc. He will lead lead meetings 3 times a month with team members. He will supervise Ms. Dzissah’s role in data collection and management. He will also ensure that the Pharmacy students are engaging with adolescents

in an appropriate and effective manner. He will oversee Ms. Daniels role as project coordinator and ensure that the intervention is running according to plan.

Cassandra Daniels, Project Coordinator – 3.0 calendar months (25% effort) in Years 1 – 2

Ms. Daniels has impressive experience working within communities, most notably Gwinnett County, where she engages with a myriad of community members to provide support and technical assistance. She serves as a Project Coordinator for the Georgia Teen Institute and will bring over 20 years of experience in substance abuse prevention. The Georgia Teen Institute provides summer and year-round leadership training programs for adolescents to enhance advocacy within schools. This will be beneficial in that students enrolled in the program may be used in subsequent years as a leader to educate peers on the consequences of opioid use among teenagers. She serves on multiple community boards and volunteers with parents and youth in Gwinnett County, thus displaying how her community involvement will play a vital role in establishing community buy-in and coalition formation.

Ms. Daniels will carry out the following duties on the proposed project:

- Year 1: Ms. Daniels will work directly with Mr. Jones to ensure that the program is implemented accordingly. She will supervise all the other team members as she will be dedicating the most time to the project. She will play a significant role in enhancing community buy-in due to her innate ties to the community. She will attend the bimonthly meetings. She will establish a rapport with parents, adolescents, and school officials.
- Year 2: Overall, she will manage the day-to-day activities of the project. She will manage participant recruitment through developing and administering flyers and posters around the school. She will attend the meetings conducted three times a month. She will oversee and approve all team members contributions, including data collection and management as well

as supervise the hour-long program conducted by the pharmacy students. She will engage in program evaluation as well as the dissemination of findings.

LaToyia Dzissah, Data Analyst – 1.8 calendar months (15 % effort) in Years 1 – 2

Ms. Dzissah currently serves as the Office and Inventory Specialist in the Operations Department of the Georgia Teen Institute. Her responsibilities within this role include oversight and management of inventory records and organization. She holds an associate degree in accounting, thus displaying her skill as a data analyst for this project. She has worked in various administrative roles as well was a document control specialist for a pharmaceutical company, so she has knowledge in the pharmaceutical industries role in the opioid epidemic.

Ms. Dzissah will carry out the following duties on the proposed project:

- Year 1: She will assist Mr. Jones and Ms. Daniels in the collection and management of data, secure adequate databases. She will attend the bimonthly meetings and foster a sense of team membership.
- Year 2: She will engage in sufficient data checks and ensure that all materials are prepped for evaluation. She will analyze the evaluation data (pre and post HBM questionnaires included). She will engage in program evaluation as well as the dissemination of findings.

Pharmacy Student #1, – 2.4 calendar months (20% effort) in Years 1 – 2

Pharmacy students were chosen due to the effectiveness of another similar intervention program in increasing the knowledge regarding the risks of the nonmedical use of opioids (Tam et. al, 2022). Utilizing students as instructors brings the advantage of a closer age proximity to participants, potentially enhancing adolescents' receptiveness to the presented materials during lectures.

Pharmacy Student #1 will carry out the following duties on the proposed project:

- Year 1: Pharmacy students will utilize the SAMSHA toolkits and other federal agency resources to establish the curriculum of the program. They will lead the administration of the information to adolescents and parents, so they will be engaging in substantial training programs that focus on opioid prevention tactics and how to best reach adolescent and parental populations to ensure that the program runs smoothly.
- Year 2: Pharmacy students will provide materials to adolescents and parents. One week one student will provide information to students in the classroom while the other provides information to parents over zoom and switch off every other week throughout the intervention. They will establish a rapport with parents, adolescents, and school officials. They will ensure that adolescents and parents are understanding and retaining the information provided.

Pharmacy Students #2-4, – 2.4 calendar months (20% effort) in Years 1 – 2

Three other pharmacy students will be chosen for the same aforementioned reasons. The two students will work hand in hand by engaging in the same tasks. Pharmacy Students #2-4 will carry out the same duties as Pharmacy Student #1.

GCPS Counselor – 1.2 calendar months (10% effort) in Years 1 – 2

Counselors can play a substantial role not only in interventions aimed at adolescents, but also in substance use prevention. Due to their close relationships with students, they have the power to identify students that may be at heightened risk for opioid use. They also engage with parents, school officials, and community stakeholders and have the potential to establish a greater community buy-in. They can serve as a bridge between these three groups and play a role in participant recruitment.

The GCPS Counselor will carry out the following duties on the proposed project:

- Year 1: Engage with students and promote opioid prevention strategies in the school. The counselor will monitor students who may be at greater risk for opioid use based on the trainings that the counselor will also attend. They will provide support for students as well as encourage robust health behaviors pertaining to substance use.
- Year 2: The counselor will provide a sense of support for participants enrolled in the program. They will ensure that the program follows GCPS guidelines and that appropriate materials are being taught in relation to the school and target audience. They will provide parents with assistance if necessary.

Travel

In-State Travel

We request funds to help reimburse the team members for traveling to and from the Gwinnett County Public High School at the UGA rate of \$0.54 per mile. This will occur for both Years 1 and 2.

Transportation for the Pharmacy Students (coming from the Mercer School of Pharmacy) and Program Director (coming from SAMSHA headquarters) will be roughly the same as it takes 20 miles to get from the heart of Atlanta to Gwinnett County. The math for this calculation is shown below.

- **Year 1**
 - 20 miles x \$0.54 per mile= 10.8
 - 10.8 x 2 monthly meetings x 12 months = \$259.20
 - \$259.20 x five team members = \$1,296.60
- **Year 2**
 - 20 miles x \$0.54 per mile= 10.8
 - 10.8 x 3 monthly meetings x 12 months = \$388.80
 - \$388.80 x five team members = \$1,944.00

Transportation costs for the two employees from the Georgia Teen Institute (Program Coordinator and Data Analyst) will be less than that of the pharmacy students and Program Director because the nonprofit is in Gwinnett County. Due to this, we estimated they would drive 10 miles as opposed to 20. The math for this calculation is shown below.

- **Year 1**
 - 10 miles x \$0.54 per mile= 5.4
 - 5.4 x 2 monthly meetings x 12 months = \$129.60
 - \$129.60 x two team members = \$259.20
- **Year 2**
 - 20 miles x \$0.54 per mile= 5.4
 - 5.4 x 3 monthly meetings x 12 months = \$194.40
 - \$194.40 x two team members = \$388.80

The total transportation costs for Year 1 will be \$1,555.00 while the total transportation costs for Year 2 will be \$2,332.80.

Equipment and Supplies

Laptop computers (\$3,600, Year 1)

We are requesting funds to purchase two laptops, one for the in-school component of the program and the other for the parental component. This will equate to \$3,600 as each laptop costs roughly \$1,800. We will only be purchasing laptops in Year 1. The laptops will be used for program implementation as well as data evaluation.

Printing/Photocopying costs (\$2,500 each year, Years 1 – 2)

We request \$2,500/ year to cover any materials that need to be printed or photocopied. This will enable us to produce the pre and post-test Health Belief Model Questionnaires (for both the pilot test and actual project), the Substance Abuse and Mental Health Services Administration opioid prevention toolkits for team members, and any other foreseeable materials needed for the project. We are requesting this much because the SAMSHA toolkits we plan to use as well as the HBM questionnaires will likely produce thousands of documents overall.

Zoom Business Plan Subscription (\$200 each year, Years 1-2)

We request \$200/ year to purchase the Zoom Business Plan Subscription package. This includes meetings up to 30 hours per meeting, 300 attendees per meeting, a whiteboard feature, team chat options, mail & calendar, client & services, notes, AI companion, and Cloud Storage 5GB. These features will enable us to reach many parents as well as communicate with them through email if necessary. Also, if a team member is unable to make one of the meetings, a zoom option will be set up for them.

Afternoon Snacks (\$2,700, Year 2)

We request \$2,700 for Year 2 of the project so that we can provide an afternoon snack for individuals enrolled in the program. We expect to spend \$3.00 per individual and with our target goal of 100 individuals enrolled, this will equate to \$2,700 spread throughout the 9 weeks of the program intervention.

Postage (\$500 each year, Year 2)

We are requesting \$500 for Year 2 of the project to mail consent forms to the parents of adolescents who are planning to enroll in the program. This will also help cover any instructional materials that we may need to mail to parents for the parental component of the project.

Other Expenses

Gwinnett County Public School Classroom Rental

We request a total of \$2,880 to cover classroom rental costs. To rent a GCPS classroom, it costs a minimum rate of \$48 per 3-hour session. Throughout the first year of the project, we anticipate the cost to be \$1,152 based on biweekly meetings for 12 months. Throughout the second year of the project, we anticipate the cost to be \$1,728 based on meeting 3 times a month (including the actual afternoon program) for 12 months.

Marketing (\$500, Year 2)

We request \$500 for marketing materials, including posters and flyers to hang up around the school. We will engage in school marketing tactics throughout the second academic school year of the project because the program will run in the Spring of 2026, so there is less of a need to promote the program throughout the 2024-2025 school year.

Total personnel costs are \$45,288 in year 1 and \$46,646 in year 2 and include annual fringe benefit rates of 37% for personnel making \$75,000 or more, 40% for personnel making between \$50,000 and \$74,999 and 48% for personnel making between \$35,000 and \$49,000 (the University negotiated benefit rate for TIAA-CREF).

Indirect costs are \$16,133 in year 1 and \$16,749 in year 2 at the negotiated Facilities and Administration rate of 30% for UGA Cooperative Extension locations

Gwinnett County Public Schools Bus Rental (\$2,000, Year 2)

We request a total of \$2,000.00 for the provision of busses to students who may face barriers to getting home after attending the after-school program. We estimate that it will cost roughly \$2,000 for the rental, which will include gas and payments to the driver.

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