

PREVENTION OF REPEAT PREGNANCY THROUGH EDUCATIONAL GROWTH (PREG) PROGRAM

A TWO-YEAR SCHOOL-BASED HEALTH PROGRAM

Lillian Russo

HPRB 4400

Final Program Plan

April 28, 2017

TABLE OF CONTENTS

PROGRAM MISSION, GOALS, AND OBJECTIVES	3
<i>Mission Statement</i>	3
<i>Goals And Objectives</i>	3
LOGIC MODEL	4
NEEDS ASSESSMENT	5
PROGRAM DESCRIPTION, THEORY, & IMPLEMENTATION	7
<i>Introduction</i>	7
<i>Theory Description</i>	7
Social Ecological Model.....	7
Social Cognitive Theory.....	9
<i>Intervention Plan</i>	12
EVALUATION	14
<i>Evaluation Mission</i>	14
<i>Evaluation Plan</i>	14
Formative Evaluation.....	14
Process Evaluation.....	15
Summative Evaluation.....	15
PROGRAM BUDGET	16
AVAILABLE RESOURCES	17
BUDGET JUSTIFICATION	18
<i>Personnel</i>	18
<i>Travel</i>	19
<i>Equipment & Supplies</i>	19
<i>Other Expenses</i>	20
MARKETING PLAN	20
<i>Community Support</i>	20
<i>Recruitment Of Participants</i>	21
REFERENCES	22

PROGRAM MISSION, GOALS, AND OBJECTIVES

MISSION STATEMENT

The Athens-Clarke County Prevention of Repeat Pregnancy Through Educational Growth (PREG) Program aims to reduce the high school dropout rate of teen mothers through the prevention of repeat adolescent pregnancy. By partnering with the local Health Department and the University of Georgia's Office of Service Learning, PREG seeks to provide counseling, sexual health education, and childcare assistance to adolescent mothers at risk of a repeat birth before the age of 20. These efforts are intended to increase the quality of life for adolescent mothers and their children.

GOALS AND OBJECTIVES

Goal 1: Reduce rates of repeat adolescent pregnancy among high school students.

- i.** By the end of the 24-month period, have a 50% attendance rate by adolescent mothers at after sexual health educational sessions held once a week by the school's Public Health Nurses (PHNs).
- ii.** By the end of the 24-month period, increase the number of adolescent mothers using effective contraceptive methods by 50%.
- iii.** By the end of the first year of implementation, provide free condoms in the nurse's office, counseling office, and in each public restroom in the high school.

Goal 2: Increase rates of graduation by adolescent mothers from high school.

- i.** Increase the high school class attendance rate of teen mothers by 60% by the end of the program.
- ii.** Require teen mothers enrolled in high school to meet with PHNs at school for a total sum of two hours each week for counseling and case management issues.
- iii.** Each week, have 70% of mothers attend their counseling and case management sessions by providing the incentive of free childcare services during the session.

Goal 3: Increase availability of affordable childcare services for teen mothers attending school.

- i.** Acquire two spaces at high school (i.e. vacant classrooms, additional outdoor trailer) available for adolescent daycare services, open from 8:00am to 3:00pm for adolescent mothers in class.
- ii.** Acquire 25 UGA services-learning students each week to observe and assist with childcare services at the high school.

Prevention of Repeat Pregnancy Through Educational Growth (PREG) Program

Situation:

Teen mothers are at high risk of having another pregnancy before they turn 20 years old. Repeated adolescent pregnancy results in increased high school dropout rates for the mother. A lack of sexual education, accessibility to sexual health services, and affordable daycare centers for children already born to adolescent mothers, feed the issue of repeated adolescent pregnancy. Athens-Clarke County has high rates of teen pregnancy.

Priorities:

- Decrease rates of repeated adolescent pregnancy
- Decrease high school dropout rates
- Increase accessibility to sexual health services
- Increase available care for children of adolescent mothers

Inputs

What we invest

- **Staff:** 2 full-time Public Health Nurses (PHNs); UGA service-learning students; liaison from local Piedmont-Athens Regional Hospital
- **Money for Supplies:** marketing the program; educational course materials; incentives for student mothers
- **Technology:** computers
- **Partnerships:** Cedar Shoals High School education board; UGA Office of Service Learning; Athens Health Department – Teen Matters Clinic
- **Facilities:** classrooms, daycare center space
- **Time:** 24 months

Outputs

Activities

What we do

- **Counseling** – Individual & group therapy for teenagers who are currently pregnant or already mothers in high school
- **Educate** – afterschool programs focused on sexual health
- **Childcare** – daycare services for children of teen mothers currently enrolled in high school
- **Referral** – make referrals for mothers and families to obtain additional health and childcare services

Participation

Who we reach

- Adolescent mothers attending Cedar Shoals High School
- Children born to adolescent mothers
- UGA service learning students

Outcomes - Impact

Short

What the short term results are

- Awareness of medical issues associated with repeated pregnancy
- Knowledge of effective contraceptive methods/how to use them

Medium

What the medium term results are

- Increased use of the most effective contraceptive methods among adolescent mothers
- Increased knowledge positive mental health strategies for pregnant or nursing mothers

Long

What the ultimate impact is

- Decrease the rate of repeat pregnancy among adolescent teen mothers
- Decreased number of teen mother dropouts from high school
- Decreased number of premature babies born to adolescent mothers

Assumptions:

- Teen mothers are available in school and willing to work with PHNs
- Cedar Shoals School Board is supportive of this program and willing to implement it.
- UGA service-learning students are willing to volunteer

External Factors:

- All year financial support from funders
- Social support from school staff and community
- Adolescent mother's perceived view and use of contraceptives

NEEDS ASSESSMENT

1. PURPOSE AND SCOPE

Although rates of teen pregnancy have been on the decline over the past 20 years, the United States continues to have the highest prevalence rate of adolescent births among the developed nations.¹ In 2010, over 365,000 teen mothers, ages 15-19 years old gave birth. As there continues to be a large prevalence of adolescent births, one in five pregnancies to teen mothers is a repeat birth. Repeat teen pregnancy is defined as the second or more pregnancy resulting in a live birth by an individual before age 20.² Of the births to adolescent mothers in 2010, 66,761 (18.3%) represented repeat pregnancies. A majority of adolescent mothers with subsequent pregnancies were for a second child (85.7%), but 12.6% of teens gave birth to a third child, and 1.7% gave birth to a fourth to sixth child.³

Teen pregnancy alone is accompanied by negative physical, emotional, social, and financial outcomes that can put both the mother and child at risk.² On top of the costs that accompany adolescent pregnancy, each additional teen birth carries increased burdens. Adolescent mothers who experience a repeat pregnancy are at increased risk of receiving poor prenatal care.⁴ Health complications in children who are born from a repeat teen pregnancy often occur due to the increased risk of being born prematurely or with low-birth weight.² In 2010, of the infants who were the second birth of adolescent mothers, 17% were born preterm compared to 12.6% of adolescent first births born preterm. As for those born with a low birth weight, 11% were second adolescent pregnancies compared to 9% that were first births. Additional teen births also impact the mother's chances of attending school or acquiring a job, thus hindering her social and financial opportunities.⁴

2. INFLUENCING RISK FACTORS

One explanation for repeat teen births is the low rates of contraceptive use among teen mothers after they have given birth. Only one in five teen mothers who are sexually active use the most effective form of contraception after their first pregnancy.² In 2010, 91.2% of sexually active teen mothers were using contraceptive methods after giving birth, but only 22.4% were using the most effective methods.³ There is variability in effectiveness between the different contraceptive methods on reducing rates of repeat adolescent pregnancy. Data collected from the Pregnancy Risk Assessment and Monitoring System (PRAMS) in 2006-2008 recorded that teen mothers who use long-acting reversible contraception (LARC) have lower rates of rapid repeat pregnancy than those who use other methods. Yet only 12% of the 3,207 adolescent mothers included in the assessment were using LARC at this time.⁵

Socioeconomic status and race/ethnicity are also correlated with rates of repeat teen pregnancy.⁴ Teen mothers are more likely to come from poor families and to be living in areas of socioeconomic disadvantage.⁶ When taken as a group, American Indian, Alaska Native, Hispanic, and Black teens are about 1.5 times more likely to have a repeat teen birth compared to White teens². In 2010, the percentages of repeated teen births by race were as

follows: American Indian/Alaska Native adolescent mothers made up 21.6%, Hispanic mothers made up 20.9%, Black mothers made up 20.4%, and White mothers made up 14.8%.³ This racial disparity in rates of repeat teen pregnancy may be a result of disparities in the use of most effective forms of contraception. White and Hispanic teen mothers are almost twice as likely as Black teen mothers to use the most effective types of birth control, with 24.6%, 27.9%, and 14.3% of each race using the most effective method, respectively.^{2,3}

3. FOCUSED PRIORITY POPULATION

In 2011, the U.S. teen birth rate was 31.3 births per 1,000 females ages 15-19. That same year, the state of Georgia had a teen birth rate of 37.9/1,000 births and Athens-Clarke County, GA had a rate of 48/1,000 births – both significantly higher than the national average at the time.⁷ Regarding repeat teen pregnancy, Georgia is ranked third among states with the highest percentages of repeat adolescent births, with over 20% of their teen pregnancies being repeated.^{2,3} Clarke County is the smallest county (by square miles) in the state of Georgia, but its central city of Athens is the fifth most populous of Georgia's cities.⁸ Several demographics of Clarke County are associated with increased risk factors for repeat teen births, including a large percentage of low-income residents, high teen pregnancy rates, and increased proportion of racial/ethnic minority groups. In reference to socioeconomic level, about 38.1% of residents in Clarke County are living in poverty and the median household income is \$34,162.⁹ The rate of teen pregnancy is estimated to be 65 per 1,000 births among women ages 15-19 years old.¹⁰ When discussing the specific population of adolescents in Clarke County, the Behavior And Risk for Teens Survey (BART) recorded demographics and risk behavior among middle and high school students. Out of the 2,686 students surveyed, 70% have had sex, 7% became pregnant, and 6% had a child.¹¹ Surveys of teens in the Northeast Health District show that teens become more sexually active as they move through high school, from 25% as freshman to 65% as seniors in each of the district's counties.⁷

4. RESOURCES AND PROPOSED INTERVENTIONS

Interventions found to positively impact the rates of repeat teen pregnancy include aspects that provide personalized support, counseling, and education to adolescent mothers, as well as access to low-cost contraceptives. Examples of these programs include home visits by state and local health agencies and counseling about birth spacing and importance of contraceptive use by hospital workers after the adolescent mother's delivery.³

The Northeast Health District oversees Clarke County's local Department of Public Health. This Health District has implemented a family planning program that focuses on reducing teen pregnancy by emphasizing the importance of spacing out births and planning intended pregnancies when desired. They have reduced the number of teen pregnancies by an estimated 5,639 births over the past five years. Within their five-county sphere, the Health District has also planted six clinics, called Teen Matters, which are intended to provide sexual education, resources, contraceptives, and health services to teens in the area.⁷

PROGRAM DESCRIPTION, THEORY, AND IMPLEMENTATION

PROGRAM INTRODUCTION

The PREG Program aims to assist currently pregnant or previously pregnant adolescent mothers through the challenges faced in high school, in hopes that they will have the education and resources to prevent a repeat teen pregnancy and graduate from high school. This program will take place in Cedar Shoals High School and will implement two full-time Public Health Nurses (PHNs) who will be in charge of counseling, educating, and making medical referrals for students who are adolescent mothers. PREG will also include the installment of a childcare facility within the walls of the high school so that student mothers have a place to house their children while attending classes. Our program will be teaming with various organizations throughout the local community, including the local Health Department and the University of Georgia.

The framework for the PREG program is based off of two theories, the Social-Ecological Model and the Social Cognitive Theory. The PREG program uses the Social-Ecological Model to identify behavior influences that increase the risks of repeat adolescent pregnancy among teen mothers enrolled in formal education in the Athens-Clarke County area, and discusses an action to intervene at each level. The second half of the framework for the proposed intervention uses aspects of the Social Cognitive Theory, which incorporates the influences that the cultural norms, personal factors, and behaviors regarding self-efficacy have on the development of particular behavior.

THEORY DESCRIPTION AND COMPONENTS

SOCIAL-ECOLOGICAL MODEL



The Social-Ecological Model (SEM) is a multi-level approach that displays various groups of influence on a particular health behavior. Examination of these social levels can be used to identify risk factors present at each stage and can assist in deciding at which level an intervention should be conducted. The SEM has five levels of influence, including: individual, interpersonal, organizational, community, and public policy. Table 1.2 displays examples of risk factors and intervention actions that can be taken at each level within the priority population for the PREG program and what actions will be implemented at each stage.

FIGURE 1.1 – SOCIAL-ECOLOGICAL MODEL ¹²

Program Implementation Model

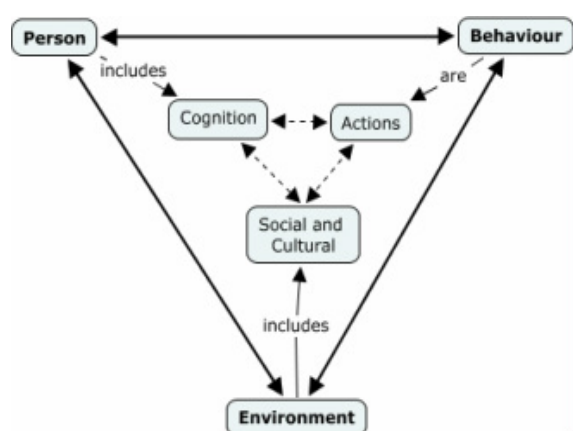
TABLE 1.2 – SOCIAL-ECOLOGICAL MODEL WITHIN PREG PROGRAM

Level	Risk Factors	Action
<i>Individual</i>	<ul style="list-style-type: none"> • <i>Knowledge</i> – lack of sexual health knowledge • <i>Attitudes</i> – negative views towards contraceptives, parenting • <i>Skills</i> – not educated on how to appropriately use contraceptives, parent, change a diaper, etc. 	<ul style="list-style-type: none"> • Education courses taught after school that focus lessons around necessary parenting skills and positive sex education. • Increase awareness by adolescent mothers of the resources available to them in their close proximity.
<i>Interpersonal</i>	<ul style="list-style-type: none"> • <i>Family & friends</i> – lack of presence of support from close social relationships 	<ul style="list-style-type: none"> • Develop support groups of adolescent mothers experiencing similar situations • Have 1 in-house family counseling session each month to work on familial relationships at the home.
<i>Organization/ Institutional</i>	<ul style="list-style-type: none"> • <i>School</i> – lack of facilities on-site for adolescent mothers to use while in school • <i>School board policies</i> – parenting students receive same number of unexcused absences as non-parenting students, resulting in increased rates of school violations given to student teen mothers 	<ul style="list-style-type: none"> • Establish on-site daycare facility for student mothers to keep children in close vicinity for low cost. • Convert one unisex bathroom in the school into a private breastfeeding station for breastfeeding mothers. • Allow student mothers increased number of unexcused absences in the case that they have to react to prenatal and child health emergencies
<i>Community</i>	<ul style="list-style-type: none"> • <i>Access</i> – lack of access to free contraceptives and primary health care check-ups for pregnant or nursing teen mothers from school • <i>Connectedness</i> – lack of connections between school and referrals to local hospitals, 	<ul style="list-style-type: none"> • Provide maps and free bus passes to any pregnant or nursing adolescent students who need transportation to local health clinics. • Connect the high school with local hospitals and pregnancy and maternal health clinics in

	Planned Parenthood sites, Teen Matters Clinic, and community organization to assist in/volunteer at in-school daycare facility.	the area; partner with UGA Service-Learning Center to recruit college students as daycare supervisors.
--	---	--

SOCIAL COGNITIVE THEORY

FIGURE 2.1 – SOCIAL COGNITIVE THEORY



Source:

<http://teachingadolescents.weebly.com/bandura.html>

Social Cognitive Theory (SCT) was an expansion off of *social learning theory*, which was developed by scientists Bandura and Walters in 1963. Social learning theory was based on the notion that learning a behavior was done through imitation, and positive or negative reinforcement of that behavior drove adoption of the behavior. In 1986, Bandura published his Social Cognitive Theory (SCT), which maintained the theoretical aspect of learning through observation, but emphasized the

influence of personal cognitive processes, rather than reinforcement, to adopt a behavior.^{13,14}

SCT is a theory of learning that assumes individual behavior change is primarily learned

through the observation of others' behavior. The theory states that the development of an observed behavior is influenced by the interaction of three key determinants: personal, behavioral, and environmental factors (as shown in *Figure 2.1*). The interaction of these factors is called *reciprocal determinism*, and they impact how an individual perceives an observed behavior, as well as influence the individual's decision to imitate said behavior. SCT has four theory components that are needed in order for an observer to produce/learn a desired behavior: modeling, self-efficacy, outcome expectancies, and identification (*Table 2.1*). This theory relies on the influences of cultural norms, imitation, behavior capability, and support.¹⁴

TABLE 2.1 – RECIPROCAL DETERMINISM: THREE DETERMINANTS OF SCT¹³

Personal	<ul style="list-style-type: none"> • Also called "Cognitive Factors" • Includes knowledge, expectations, attitudes, thoughts, feelings, and traits. • Self-efficacy plays a major role
-----------------	---

Behavioral	<ul style="list-style-type: none"> • Includes overt actions • How others respond when they perform a behavior
Environmental	<ul style="list-style-type: none"> • Includes both physical and social ecology • Aspects of surroundings that influence an individual's ability to successfully complete a behavior

TABLE 2.2 – FOUR THEORY COMPONENTS OF SCT ¹⁵

Modeling	<p>Observational learning of models, which helps develop skills and competencies needed for behavior change.</p> <ul style="list-style-type: none"> • Direct (live or through media sources) or indirect (verbal or written behavior) observation of a model • Four mediators need for successful modeling: <i>attention, retention, production, and motivational process.</i>
Outcome Expectancies	<p>The individual anticipates what the outcome will be if she chooses to imitate the observed behavior; outcome is expected to be similar when imitating the behavior.</p> <ul style="list-style-type: none"> • If a reward is given after completing observed behavior, this reinforces observer to imitate behavior. • If a punishment is given after completing observed behavior, this inhibits observer from imitating behavior.
Self-Efficacy	<p>The observer's belief that they are capable of performing the actions needed to conduct the observed skill/behavior.</p> <ul style="list-style-type: none"> • These self-beliefs influence the observer's: <ul style="list-style-type: none"> ○ Effort toward imitating behavior ○ Length/willingness to persevere through difficulties ○ Thought patterns, being either self-hindering or self-aiding • Developed or increased by: <i>mastery experience, social modeling, improving physical and emotional states, and verbal persuasion.</i>
Identification	<ul style="list-style-type: none"> • Individuals are more likely to imitate a desired behavior when they can identify with the person who is modeling the behavior. • The more the observer has in common with or an emotional attachment to the individual modeling the behavior, the more likely the observer will imitate said behavior.

Program Implementation Model

The ways in which the PREG program aims to incorporate the SCT into their model is summarized in the following tables (*Table 2.3 & 2.4*), and will be further explained in the intervention curriculum.

TABLE 2.3 – RECIPROCAL DETERMINISM WITHIN THE PREG PROGRAM

Personal	<ul style="list-style-type: none"> • Evaluate adolescent mothers' baseline: <ul style="list-style-type: none"> ○ Parenting skills ○ Attitudes towards contraceptive use, sexual behavior, and continuing formal education ○ Thoughts/feelings about being a mother and student
Behavioral	<ul style="list-style-type: none"> • Determine the responses of adolescent mothers to overt actions (such as using a condom properly, taking birth control, staying enrolled in school, etc.)
Environmental	<ul style="list-style-type: none"> • Identify accessibility to contraceptives, childcare, counseling, support group, etc.

TABLE 2.4 – SCT FOUR THEORY COMPONENTS WITHIN THE PREG PROGRAM

Modeling	<p>Adolescent mothers will be provided with models of how to appropriately take care of a child, learn positive sex behaviors, balance school and family.</p> <ul style="list-style-type: none"> • Models will be observed directly through role playing during after-school courses • Models will be observed indirectly through reading and watching interviews of single mothers who have experienced teen pregnancy and continued with formal education, and observe the behaviors that have produced positive outcomes in the past. • Mediators for successful modeling will be kept through incentives provided at after-school programs and mandatory sessions that require attendance in order to stay in the program.
Outcome Expectancies	<p>Adolescent mothers will expect to avoid unintended pregnancies if they imitate women who use contraceptives and do not get pregnant.</p> <ul style="list-style-type: none"> • If a woman does not get pregnant while using contraceptives, adolescents who do not want children will be more likely to use them.

	<ul style="list-style-type: none"> If a woman who is using contraceptives experiences negative side effects, such as nausea, cramping, etc. this may dissuade adolescent from imitating the behavior of using contraceptives.
Self-Efficacy	<ul style="list-style-type: none"> Measure each adolescent mother's personal belief that she has the capabilities to complete and perform the behaviors that she is observing in the program. Increase their self-efficacy through counseling, support groups, mastering of certain skills, etc.
Identification	<ul style="list-style-type: none"> In order for the adolescent mothers in the program to identify with the PHNs who they will be working with a majority of the time, PREG will try to recruit PHNs that have either personally experienced being a single mother, had a child when they were an adolescent, or have worked extensively with adolescent mothers in the past.

INTERVENTION

TABLE 1.1 – PROGRAM INTERVENTION COMPONENTS

Intervention Components	Method of Implementation	Description
<i>PHNs Counseling & Case Management Sessions</i>	Cedar Shoals High School – Athens, GA	<ul style="list-style-type: none"> Each adolescent mother enrolled in high school will be paired with one of the PHNs stationed at the school. Participants must complete a minimum of a 1-hr weekly counseling/case management session with assigned PHN. <ul style="list-style-type: none"> One session each month will be an at-home visit where the PHN will visit the participant's home and do a counseling session that includes other individuals in the home. Each participant will be given the cell phone number of their PHN so

		<p>that they have 24/7 access to ask questions, receive educated advice, request referrals to alternative organizations, etc.</p> <ul style="list-style-type: none"> • PHNs will conduct a survey evaluation of sessions to test for any necessary improvements or changes that need to be made during sessions with participants.
<i>After-School Parenting Skills & Sexual Health Education Classes</i>	Cedar Shoals High School – Athens, GA	<ul style="list-style-type: none"> • A required after-school club for all participating adolescent mothers that meets once a week for 1 hr. • Two after-school meetings/month = dedicated to education over parenting skills and sexual health • Two after-school meetings/month = dedicated to holding support groups and acting out role play scenarios to increase effectiveness of modeling • There will be an option for students to stay later, after these sessions at the school and receive some extra study time to catch up on necessary schoolwork.
<i>In-School Daycare Facility</i>	<p>Cedar Shoals High School – Athens, GA</p> <p>UGA Service-Learning Office – Athens, GA</p>	<ul style="list-style-type: none"> • Full-time in-school daycare facility will be developed in a rentable classroom trailer that is attached to the school, as to not take up a previously used classroom. • Students from the University of Georgia will sign up through a service learning class to obtain training and begin volunteering at the daycare facility during the day. • One overhead childcare specialist will be in charge of training and overseeing the daycare center.

EVALUATION

EVALUATION MISSION

Evaluations will be conducted for our program in order to improve the overall quality of our intervention plan and to ensure that our program is effective, ethical, and achieves its initial goals and objectives.

EVALUATION PLAN

The program's evaluation plan will include both formative and process evaluations and will use the assistance of both external and internal evaluators. An external data analyst will be brought in to make and produce both the formative and process evaluation components. Then, an internal staff member will administer the evaluation plan. This will prevent bias during the production of the evaluation, but will include the provision of an internal staff member who is familiar with the program and population during the implementation of the plan.

FORMATIVE EVALUATION

In order to prevent major loss of money, materials, or time, we will use the first semester of the participants' high school year (the first five months) as a pilot test for the program. This type of formative evaluation is used to help execute necessary changes to program's methods and improve the way that data is collected, so the program is as efficient and effective as possible. The formative evaluation of the program will continue after the first semester/pilot-test to ensure that all necessary changes are made and implemented appropriately.

This evaluation plan will be developed by an external data analyst, but will be conducted by the same PHN for both the pilot-test and the duration of the program. The same PHN will be used for both the pilot test and the duration of the actual program because they will be familiar with what changes were made and the methods that need to be used/corrected.

Surveys and focus groups will be conducted by the internal staff to evaluate how the participants view the program and whether they believe changes should be made. This portion of the evaluation will be conducted internally because participants will be more comfortable sharing the truth about the effectiveness of the program with staff members who they have built a relationship with rather than an external evaluator who they do not know. Also, the internal staff members are more likely to see the participants on a regular basis and can ensure that the process evaluations are completed. This process evaluation will not change the path or methods of the program while the program is implemented, but will be used to alter future interventions/programs.

PROCESS EVALUATION

As a form of process evaluation, we intend to conduct interviews and distribute surveys to the staff members of our program. These evaluations will identify specific components of the intervention that are effective, who they are effective for, and the environment they are most effective in. These evaluations will be conducted and distributed externally by MPH students at the 3, 6, 12, 18, and 24-month markers.

The project coordinator will assess recruitment techniques and reach of the program, as well as observe the overall internal distribution of the evaluation. The project coordinator can evaluate understanding the effectiveness of the intervention's recruitment and what proportion of the priority population participated in the program because they are familiar with the organization and history of the program.

SUMMATIVE EVALUATION

Impact Evaluation

An evaluation of the program's impact on behaviors, attitudes, and feelings of the participants towards sexual health, parenting, and staying in school will be administered. A survey that asks participants about their views and behaviors surrounding sexuality, contraceptives, adolescent mothering, dropping out of school, and counseling will be conducted within the first three months of the program and again 6 months after the program is complete. This survey will check for behavior and attitude change as a result of participating in the program. The latter survey will also ask about the participants' pregnancy rate and school attendance since participating in the program.

Outcome Evaluation

This form of evaluation will be conducted 12 months after the initial program as completed. For this assessment, an external evaluator will analyze the overall repeat adolescent pregnancy rate and dropout rate at the setting of the original program plan, Cedar Shoals High School. This evaluation will measure the lasting effects of the program and if it was able to achieve the overall goals for the population set in the original program plan.

PROGRAM BUDGET

Project Title: Prevention of Repeat Pregnancy Through Educational Growth (PREP)							
Period of Performance: August 2017 - July 2019							
Personnel	Salary	% effort	Calendar Months	Year 1	Year 2	Total	
Meshell McCloud	51,000		3.6	15,300	15,759	31,059	
Public Health Nurse	benefits @	43%		6,579	6,776	13,355	
Jaeda Bennet	42,000		3.6	12,600	12,978	25,578	
Health Educator	benefits @	53%		6,678	6,878	13,556	
Tessa Conners	50,000		2.4	10,000	10,300	20,300	
Project Coordinator	benefits @	43%		4,300	4,429	8,729	
Lauren Howard	45,000		1.2	4,500	4,635	9,135	
Data Analyst	benefits @	53%		2,385	2,457	4,842	
Kevin Roughgarden	20,000		3.6	6,000	6,180	12,180	
Childcare Worker	benefits @	60%		3,600	3,708	7,308	
Total Personnel				71,942	74,100	146,042	
Equipment				700	-	700	
Computers (2)				700		700	
Travel				1,296	1,296	2,592	
Foreign							
Domestic				1,296	1,296	2,592	
Supplies				1,300	1,300	2,600	
Marketing Supplies (Flyers, Crafts, Printing, etc.)				500	500	1,000	
Daycare Supplies				800	800	1,600	
Other Expenses				6,040	6,040	12,080	
After-School Meetings (Snacks/Incentives)				800	800	1,600	
Training				1,000	1,000	2,000	
Child Daycare Modular Classroom Space				4,240	4,240	8,480	
Total Direct Costs				81,278	82,736	164,014	
Indirect Costs @	26%			21,132	21,511	42,644	
Total Costs				102,410	104,248	206,658	

AVAILABLE RESOURCES

CEDAR SHOALS HIGH SCHOOL

The PREG program will be implemented at Cedar Shoals High School in Athens-Clarke County, GA. This high school is located in a central area of Athens and has easy access to a local Teen Matters Clinic provided by the local Health Department. Cedar Shoals has the primary population and resources needed for the PREG program. It is a Title I school and is located in a city that has unusually high rates of teenage pregnancy. Cedar Shoals has also previously implemented a similar childcare program, but this was defunded with the hiring of a new principal a few years ago.

HEALTH DEPARTMENT'S TEEN MATTERS CLINIC

The local Teen Matters Clinic will be used in the program as a resource for adolescent mothers who are seeking preventative or primary medical care and education. Teen Matters provides forms of birth control, free condoms, testing or treatment for sexually transmitted diseases, and advice on overall health. The TM Clinic is located directly adjacent to the Cedar Shoals High School, where the program is being implemented.

SERVICE-LEARNING STUDENTS, THE UNIVERSITY OF GEORGIA

The University of Georgia has a strong partnership with the Clarke County School District and has already developed several service-learning programs with schools in the area. Our PREG program would utilize that partnership by developing a service-learning project at Cedar Shoals High School that allows undergraduate students in the major of Human Development and Family Sciences to acquire service-learning hours by volunteering at our in-school daycare center. Through this, we hope to not only provide childcare services to our teen mothers in school, but also to educate undergraduate students at UGA about the struggles of adolescent mothers and prepare students for their future career goals.

BUDGET JUSTIFICATION

PERSONNEL

Meshell McCloud, MSNP, Public Health Nurse – 3.6 calendar months (30% effort) in Years 1-2

- Year 1 & 2: Ms. McCloud will be in charge of recruitment for the program during its first year of implementation. Her role is to engage with the high school students on a daily basis and form relationships, especially with students who are pregnant or have children. Ms. McCloud is in charge of providing counseling and case management for all students involved in the program.

Jaeda Bennet, MPH, Health Educator – 3.6 calendar months (30% effort) in Years 1-2

- Year 1 & 2: Jaeda Bennet will be our Teen Matters coordinator and after-school program health educator. Ms. Bennet will be in charge of developing a curriculum for the after-school health education program that will be held once a week.

Tessa Conners, MPH, Project Coordinator – 2.4 calendar months (20% effort) in Years 1-2

- Year 1 & 2: Tessa will connect the program with local school officials and organizations within the community. She will be our contact person for both the Office of Service-Learning at the University of Georgia and the Department of Public Health Teen Matters Clinic. Ms. Conners will be in charge of ensuring that the program is marketed well to the community so that the school can be supported by its surrounding residents. Ms. Conners will lead team meetings once a month in order to evaluate and discuss the program and delegate duties or implement changes if necessary.

Lauren Howard, MPH, Data Analyst – 1.2 calendar months (10% effort) in Years 1-2

- Year 1 & 2: Lauren will handle all issues concerning the collection and evaluation of data accumulated throughout the program. She will prepare the material needed for the IRB and assist in the conduction of data checks and analysis. At the end of the program, she will conclude the results of the program and write up an extensive evaluation of it.

Kevin Roughgarden, CDA, Childcare Worker – 3.6 calendar months (30% effort) in Years 1-2

- Year 1 & 2: Kevin will be in charge of overseeing the daily daycare center at the school. Mr. Roughgarden is also in charge of training the service-learning students in how to effectively work in the childcare environment.

Travel

In-State Travel in the Athens-Clarke County Area (\$1,296 each year, Years 1-2)

- In Years 1 and 2, we requested funds in order to reimburse program personnel for travel within the Clarke County district. These funds are the summation of \$0.54 per mile. Funding for travel is necessary because personnel will be required to travel to and from Cedar Shoals High School, Teen Matters Clinic, UGA, and other community meetings. This budgeted amount is enough for members to collectively travel around 50 miles each week, and because the Athens-Clarke County area is relatively small, we assume this budget would cover all necessary travel costs.

Equipment & Supplies

Computers (2) (\$700, Year 1)

- We request funds to purchase two desktop computers (\$400 per computer) in Year 1. These computers will be 100% dedicated to this project. They will be used for collecting data about the program, as well as used to store information about participants.

Marketing Supplies (\$500 each year, Year 1 and 2)

- We request \$500/year for marketing supplies. This project requires proper marketing in order to inform possible participants and community members about the program. These supply costs would cover the making, printing, and distributing of informative flyers, posters, and brochures.

After-School Meeting Supplies (\$800 each year, Year 1 and 2)

- We request \$800/year to purchase supplies for the after-school programs and meetings. These supplies include incentives for participants, snacks, supplies for activities and educational lessons. Also covers any undocumented cost required by the Public Health Nurse or Health Educator when stationed at the school.

Daycare Supplies (\$800 each year, Year 1 and 2)

- We request \$800/year to fund supplies needed for the daycare services at the school. These costs would go to toys and craft supplies used to engage the children throughout the day.

Other Expenses

Evaluation (\$1,000 each year, Year 1 and 2)

- We request \$1,000/year to pay Masters of Public Health students to act as external evaluators for our program. Masters students are required to conduct evaluations as part of their education, so we will provide them with a small compensation for their work and data collection.

Child Daycare Modular Classroom Space (\$4,240 each year, Year 1 and 2)

- We request \$4,240/year to cover costs of renting a modular classroom space that will be used to hold the daycare at the school. This rental space will provide a cheap and inexpensive area daycare center that is separated from the school building, in order to avoid causing distractions by the children to neighboring classrooms/students.

Total personnel costs are \$206,658 for Year 1 and 2, and include an annual fringe benefit rate of 43% for all staff making an annual salary between \$50,000-\$70,000, and 53% for all staff making an annual salary between \$35,000-\$49,999.

Indirect costs are \$21,132 in Year 1 and \$21,511 in Year 2 at the negotiated facilities and administration rate of 26% through the University of Georgia.

MARKETING PLAN

COMMUNITY SUPPORT

In order to obtain individuals for our program, we must first ensure that we have full support from the three major institutions within the community that will be involved in the program. Those three institutions are Cedar Shoals High School, the Office of Service Learning at the University of Georgia, and the local Health Department.

Cedar Shoals High School is where the proposed program will take place. Gaining full support from this institution is necessary for our program to thrive because without their support, potential student subjects may sense a lack of trust in our program and refuse to participate. In order for us to obtain support for our program from Cedar Shoals High School, we will discuss the needs that we have found within their community with the principal of the school and the Board of Education. Additionally, we will provide data that displays how positively influential a program like ours can be on the overall representation of the school and its values to potential students.

To supply volunteers for our daycare center, we will use the incentives provided by the Office of Service Learning at the University of Georgia (UGA) to recruit college students to work as daycare supervisors at the high school. UGA has a university-wide experiential

learning requirement for all students that must be fulfilled before graduation. Having first-hand experience in one's related field outside of the classroom can complete this requirement. This program will require the assistance of service-learning students who are interested in childhood development, early childhood education, or childhood psychology. These students will obtain the experiential learning requirement they need by volunteering at the daycare center that is being implemented at Cedar Shoals High School.

Partnering with the Health Department for the county is also crucial to our program's evolution. We will recruit Public Health Nurses (PHNs) who have experience working for the department and who have a solid background/foundation in health education, counseling, and case management. Support from the local Health Department is also needed because we will be working heavily with health educators at their Teen Matters Clinics. PHNs will refer participant adolescent mothers to the nearby Teen Matters Clinic to obtain birth control, free condoms, testing or treatment for sexually transmitted diseases, and additional advice on overall health. The Teen Matters Clinic in Athens is located directly across the street from Cedar Shoals High School, so they are already heavily invested in and have connections with the students of this high school.

RECRUITMENT OF PARTICIPANTS

Participants for this program will not be recruited until after the PHNs have been implemented in the school for at least three months. The PHNs will be the primary recruiters for the adolescent mother component of the program. During the first three months, PHNs will be expected to build relationships with the female students at the school. In order to gather an understanding of who may be interested, a flyer will be put up in every girls bathroom and locker room at the school inviting every and any female student to attend a general body meeting for an after school program that talks about sexual health issues pertaining to girls. This program will include an incentive of free pizza and possibly extra credit for a class for any female high school student who attends the initial meeting. In addition to using flyers to promote an after-school educational session, PHNs will also recruit female students who have visited the school nurse or counselor within the past four years. PHNs will compile medical and counseling files of female students who have either had a child, discussed having a child, or are at risk of becoming pregnant.

Once these two modes of recruitment are complete, the PHNs will create a list of all subjects who are eligible for participating in our program and will begin the initial phases of our implementation and program plan.

References

1. Martin JA, Hamilton BE, Osterman MJ, Curtin SC, Matthews TJ. Births: final data for 2012. *National vital statistics reports : from the Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System*. 2013;62(9):1-68.
2. Center for Disease Control and Prevention. *Preventing repeat teen births*. National Center for Chronic Disease Prevention and Health Promotion - Division of Reproductive Health;2013.
3. Vital signs: Repeat births among teens - United States, 2007-2010. *MMWR Morbidity and mortality weekly report*. 2013;62(13):249-255.
4. Raneri LG, Wiemann CM. Social ecological predictors of repeat adolescent pregnancy. *Perspectives on sexual and reproductive health*. 2007;39(1):39-47.
5. Wilson EK, Fowler CI, Koo HP. Postpartum Contraceptive Use Among Adolescent Mothers in Seven States. *Journal of Adolescent Health*. 2013;52(3):278-283.
6. Lewis LN, Doherty DA, Hickey M, Skinner SR. Implanon as a contraceptive choice for teenage mothers: a comparison of contraceptive choices, acceptability and repeat pregnancy. *Contraception*. 2010;81(5):421-426.
7. Kudon L. District targets teen pregnancy with family planning. 2013; <https://dph.georgia.gov/blog/2013-11-12/district-targets-teen-pregnancy-family-planning>.
8. Athens Clarke County. *Athens-Clarke County by the numbers*. Athens-Clarke County Unified Government: Athens-Clarke County Unified Government;2016.
9. U.S. Census Bureau. QuickFacts - Clarke County, Georgia. In: Commerce USDo, ed2015.
10. U.S. Census Bureau. 2013 American Community Survey: Selected social characteristics in the United States - Clarke County, Georgia. In: Commerce USDo, ed. American FactFinder: U.S. Census Bureau; 2013.
11. Northeast Health District. *Clarke County middle and high schools: Behavior and risk for teens survey*. Northeast Health District;2011.
12. Heise L, Ellsberg M, Gottemoeller M. Ending violence against women. *Population reports*. 1999;27(4):1-1.
13. Kihlstrom JF, Harackiewicz JM. An evolutionary milestone in the psychology of personality. *Psychological Inquiry*. 1990;1(1):86-92.
14. Bandura A. Health promotion by social cognitive means. *Health Education & Behavior*. 2004;31(2):143-164.

15. Bandura A. Organisational Applications of Social Cognitive Theory. *Australian Journal of Management (University of New South Wales)*. 1988;13(2):275.