SELF CENTER: ADDRESSING TEEN PREGNANCY IN WOLFE COUNTY, KY

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The document mentioned above has been reviewed and accepted by the student’s advisor, on
behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of
the program; we verify that this is the final, approved version of the student’s capstone including
all changes required by the advisory committee. The undersigned agree to abide by the
statements above.

Lindsey Smith, Student

Corrine Williams, ScD, MS, Committee Chair

Corrine Williams, ScD, MS, Director of Graduate Studies
SELF CENTER: ADDRESSING TEEN PREGNANCY IN WOLFE COUNTY, KY

CAPSTONE PROJECT PAPER

A paper submitted in partial fulfillment of the requirements for the degree of Master of Public Health in the University of Kentucky College of Public Health

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Abstract: Teen pregnancies and births are at an all-time low across the United States. Despite this decline in rates within the last decade, the teen pregnancy rate in Kentucky remains significantly higher than that of the overall United States. Additionally, teen pregnancy still has significant economic and health impacts on both teen parents and their children. In rural communities, such as Wolfe County, KY, teen birth rates are approximately one-third higher than the rest of the country. Self Center is an evidence-based teen pregnancy prevention program that involves school-linked reproductive health services and provides participants with education, counseling, and healthcare services. The original program was found to be effective at increasing student knowledge, clinic attendance, and contraceptive use and decreased teen pregnancy by 30% in the intervention group related to the comparison. In order to reduce teen pregnancy rates in Wolfe County, the Self Center program will be taught to students in grades 7 to 12 at Wolfe County Middle School and Wolfe County High School. School-linked healthcare services will be provided through the Wolfe County Health Department. A team made up of a nurse practitioner and social worker will be assigned to the middle school and another will work at the high school to provide education and the included clinic services. Overall, the program seeks to increase knowledge, change behaviors, increase access to healthcare, and decrease the teen pregnancy rate in Wolfe County.
Project Narrative

Target Population and Need

Teen pregnancies and births are at an all-time low across the United States. In 2013, the average number of teen births was 26.5 per 1,000 teens. This is a 10% decline from 2012 when the rate was 29.4 per 1,000. In 2013 in Kentucky, the teen birth rate was 39.5 per 1,000 girls, which was a 5% decline from 2012, but is still quite a bit larger than the national average. For this year, Kentucky had the 7th highest teen birth rate and the 17th highest teen pregnancy rate in the United States. The rate in Wolfe County in 2013 was 78 births per 1,000 girls, which is significantly higher than both the state and national average for that year. Teen pregnancy has significant short- and long-term social and economic costs. Only 40% of teen mothers finish high school and 2% finish college by the age of 30. Children of teen mothers perform worse on many measures of school readiness, are 50% more likely to repeat a grade, and are more likely than children born to older mothers to drop out of high school making this issue significant for the futures of both mother and child. Adolescent mothers are two times more likely to deliver a low birth weight infant than adult females. Low birth weight infants, defined as those who weigh less than 2,500 grams or 5.5 pounds at birth, are frequently born prematurely, are more likely than normal birth weight babies to experience long-term health and developmental health risks, and are at an increased risk of dying within the first year of life. An analysis from The National Campaign to Prevent Teen and Unplanned Pregnancy reveals that teen pregnancy costs United States taxpayers around $9.4 billion per year based on the total estimated cost of teen childbearing and cost taxpayers in the state of Kentucky close to $158 million in 2010.
The high birth rate in Kentucky is likely due to a large number of present risk factors. In 2013, the percentage of high school students in Kentucky who had ever engaged in sexual intercourse was 52%, which is higher than the national average of 42%\(^3\). Of these students, 84.9% reported using contraception during their last sexual intercourse\(^3\). Interestingly, 27% of high school females used birth control pills before their last sexual intercourse, which is higher than the 23% average in the United States\(^3\). One possible issue this brings to light is a lack of knowledge regarding the appropriate usage of contraceptive methods. Kentucky teens have a lower rate of condom use, but higher usage rates of oral contraceptives, IUDs, and injections. On the opposite side, 16% of all sexually active Kentucky teens did not utilize any method of contraception, which is higher than the national average of 13%\(^3\). Given the percentage of sexually active teens, knowledge regarding reproductive health and pregnancy prevention is important for decreasing pregnancy rates, but there are additional factors influencing the teen pregnancy rate in Wolfe County and similar areas.

Wolfe County is a rural county in the eastern part of Kentucky and is home to 7,214\(^5\) individuals. According to the United States Census Bureau, the population of Wolfe County is 98.5% white and 36.2% of county residents are in poverty with a median household income of $22,574. Based on information from The National Campaign, teen birth rates in rural areas are approximately one-third higher than in the rest of the country, which has been suggested to be to be due to factors such as
poverty and lack of access to healthcare services\textsuperscript{17}. There are 0.4 primary healthcare providers per 1,000 people in this county, which is lower than the state average of 1.0 per 1,000\textsuperscript{5}. Wolfe County is provided services by the Kentucky River District Health Department along with Knott, Lee, Leslie, Letcher, Owsley, and Perry Counties. Family planning services through the local health department include physical examinations by a physician or nurse practitioner and provision of birth control supplies with counseling on contraceptive methods. These services are provided at a sliding scale fee if the patient is not covered on insurance or eligible for Medicaid. The Wolfe County Family Medical Clinic in Campton, KY also provides similar women’s health services. Otherwise, family planning services in the county are very limited\textsuperscript{6} and many residents travel over 60 miles to Lexington, KY to see a provider. The Wolfe County Health Department is located 0.5 miles from both Wolfe County Middle School and Wolfe County High School, which makes it accessible to students attending both schools. Although specific data is not available for Wolfe County, when looking at the need for publicly supported contraceptive services and supplies in the state of Kentucky, 22.9\% of women in this category were under the age of 20 and the majority of these were women who fell below the poverty line\textsuperscript{4}. Additionally, 13,460 Kentucky teens were provided with services at publicly funded clinics and an estimated 3,300 unintended pregnancies were averted\textsuperscript{4}.

In addition to healthcare services, the Kentucky River District Health Department provides two sexual health educational programs called Choosing the Best and Postponing Sexual Involvement, which are both abstinence-only initiatives. Although these programs are taught in the school system, the teen pregnancy rate in Wolfe
County is still very high. Providing comprehensive sex education and easier access to contraceptives, both over-the-counter and prescription, are both feasible solutions for impacting teen birth rates. In a review of data from the National Survey of Family Growth, researchers found that teens that received comprehensive sex education were 50% less likely to experience pregnancy than those who received abstinence-only education\textsuperscript{14}.

Creating a program that is based in the schools, has dedicated workers, and allows for collaboration with the local health department will allow for the best utilization of resources and dissemination of knowledge to teens throughout Wolfe County. In an effort to increase the number of youth who have access to both education and contraceptive methods, the Self Center program will be implemented in this county as an augment to the required school-based sex education curriculum provided in the only middle and high school in the county, Wolfe County Middle School and Wolfe County High School. The Self Center program serves to provide students with in-school education and support, as well as to help them to obtain free reproductive and contraceptive health services and counseling at a nearby health clinic. The program was successful in delaying initiation of sexual intercourse, increasing contraceptive use, and decreasing the teen pregnancy rate by 30% as related to the comparison group.

In order to estimate the number of teens that will be served through this program, the numbers in the table below must be considered.
The proposed program will be taught to 7th through 12th grade students in the county over the three-year period, so the majority of enrolled students will participate in the program for multiple years. The program will begin in August at the start of the academic school year when students will be given information about the program during the first homeroom meeting of the semester. Prior to August, a letter will be mailed to the home address of each student with an option for a parent or guardian to opt the child out of the program. This will be done in order to gain consent for all students who are under the age of 18, which will be the majority of students. All students who do not opt out will be enrolled in the program and be considered as eligible to receive reproductive medical services at the health department clinic. Due to the dropout rate and assuming that some students will opt out of the program, it is assumed that around 500 students (91%) will participate in the in-school educational program each year.

**Program Approach**

The program implemented will be based on the Self Center program, which was created by Zabin, et al. in 1981. This program involves school-linked reproductive health services and provides participants with healthcare services, counseling, and education. The main goals of this program are to address physical and reproductive health, as well
as teen sexual behaviors, and to prevent teen pregnancy. The Self Center program was originally studied in a group of low-income, inner-city, African-American students in a middle and high school in Baltimore, Maryland. In the program, students were provided with in-school support and education and were given access to free reproductive and contraceptive health services at a health clinic adjacent to the schools. The program’s curriculum included topics such as contraceptive use, STI and HIV education and prevention, and sexual abstinence. Lessons were conducted at least once per semester throughout the program during homeroom. In addition to the formal classroom sessions, students could voluntarily participate in small group educational sessions at the school, seek out in-school counseling, and obtain reproductive services and counseling at the adjacent health clinic. Compared with the students in nonparticipating schools, significantly more girls in the program schools were likely to delay the start of sexual intercourse and more students in the program schools attended a health clinic before becoming sexually active and during the first months of sexual activity. Additionally, by the program’s third year, the pregnancy rate dropped 30% among the high school girls in the program schools, while it rose 58% among students who were not in the program schools.

Implementation of this program in Wolfe County will require some adaptation to the program. In the model program, a team made up of a nurse-midwife or nurse practitioner and social worker with an interest in teen health worked together to provide students with in-school support and education at each school and helped them to obtain contraceptive services at the adjacent clinic. The proposed program will be implemented at Wolfe County Middle School and Wolfe County High School. There are
currently limited healthcare services in Wolfe County, so the health department will be providing clinic services to teens in the program. The original Self Center program showed that the accessibility of the clinic made students more likely to use contraception, so the provision of these services is a necessary component to this program’s success in Wolfe County. The health department is located 0.5 miles from both schools. Although the clinic is not adjacent, this is within walking distance given the weather and other conditions, but it is still a limitation that must be addressed. The social worker and nurse practitioner teams will set up an abbreviated clinic one afternoon at the middle school and one at the high school each week and provide basic services including counseling, initial assessments, and free condoms. Additional services such as the provision of prescription contraceptive methods and more extensive one-on-one counseling will be available only at the health department. This is one component that will be closely evaluated after the first semester of the program to ensure that transportation is not creating a barrier to access.

In Wolfe County, the population is mostly made up of low-income, Caucasian individuals from a rural area. For this reason, the program will also require minor adaptations to the specific culture of the area and to address the difference between an urban area and a rural one, which will require minor changes to the program. In the Self Center program’s original study, educational sessions were taught during homeroom as an addition to a comprehensive sexual education curriculum that was already present in the schools. In order to make the Self Center program successful in Wolfe County, the existing curriculum will have to be adapted to include more information regarding safe sexual behaviors, which will be a major adaptation. The two educational programs that
are currently being taught in Wolfe County are Choosing the Best and Postponing Sexual Involvement and both programs focus solely on abstinence. Due to the culture and conservative nature of Wolfe County, changing the curriculum will require a large amount of collaboration with the school board, community partners, and parents of students. All mentioned adaptations will be addressed during the planning period and additional details are outlined below.

The program’s planning period will start near the end of the academic year in May prior to the school year when the program will start. The planning period will last 4 months and will involve development of the program using the model set forth by the Self Center program with the addition of appropriate adaptations. In order to appropriately assess the cultural adaptations mentioned above that will need to be made to the existing program and to change the program’s focus from urban teens to rural teens, focus groups will be conducted by the program leadership. Student focus meetings will help assess the needs and desires of the students who will be participating in the program and will include students from all involved grade levels. Parent focus meetings will help determine the needs that the parents see and answer any parent questions that may arise. Parent focus groups will also be important in gaining support to change the curriculum in the county and will help create an age-appropriate curriculum for each grade level. The nurse practitioners on the program team will be responsible for ensuring that the program materials are medically accurate.

Since abstinence-focused initiatives are what the Wolfe County School Board has approved in the past, the health department will work with the UK College of Public Health and the school board to adjust the curriculum to one that still includes
information regarding abstinence, but also looks at safe sex practices and education. As mentioned above, this will be a major adaptation. The state of Kentucky requires sexual education to be taught in schools, but the school board in Wolfe County is the entity with the power to determine what type of sexual education is taught. Wolfe County has traditionally been a very conservative county and has avoided teaching anything other than abstinence education in schools. Karen Wallace, a member of the Wolfe County Board of Education, is a big proponent of incorporating more information about safe sexual behaviors into the curriculum because her daughter gave birth to a child while in high school. She will be integral in getting the board to approve this change. Ms. Wallace is very active in the community and is someone who has the ability to have a huge impact on the decisions made. In order to create a curriculum that will also be accepted by parents and the community as a whole, information from the focus groups will be utilized, as well as input from a Community Action Group. The Community Action Group will meet for the first time early in the planning period to provide input for program development and to share ideas regarding the needs of the community. The group will be made up of at least one representative from each of the organizations or groups listed in the following table. Each member brings a specific component of experience and diversity to the group.

<table>
<thead>
<tr>
<th>Group</th>
<th>Expertise/Role in the Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wolfe County School Board</td>
<td>Responsible for determining what curriculum is taught in the classroom; experience in educating students and working with parents in the Wolfe County community</td>
</tr>
<tr>
<td>University of Kentucky College of Public Health</td>
<td>Integral in creating a program that will effectively reach the target community; extensive experience in implementing evidence-based programming throughout the state of Kentucky</td>
</tr>
<tr>
<td>Organization</td>
<td>Description</td>
</tr>
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<td>------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Kentucky Teen Pregnancy Coalition</td>
<td>Experience working directly with the target population with the goal of reducing teen pregnancy; knowledge in effective methods used to reduce teen pregnancy and connections to other organizations with the same goal</td>
</tr>
<tr>
<td>East Kentucky Reproductive Health Project</td>
<td>Work to address the specific reproductive needs of women and men in eastern Kentucky; experience in creating media that reaches this specific population</td>
</tr>
<tr>
<td>Wolfe County Middle School and Wolfe County High School Parent-Teacher Association</td>
<td>Involves parents in the decision-making process and gives parents an opportunity to share concerns and areas for improvement in regards to pregnancy prevention</td>
</tr>
<tr>
<td>Wolfe County Middle School and Wolfe County High School Student Councils</td>
<td>Students will be integral in program development and will also serve as liaisons between the students and program leadership</td>
</tr>
<tr>
<td>Wolfe County Chamber of Commerce</td>
<td>Important representation of well-respected leaders in the community</td>
</tr>
<tr>
<td>Teen mothers and fathers</td>
<td>Provision of first-hand experience regarding what life is like from both the female and male perspective</td>
</tr>
</tbody>
</table>

After the initial program materials are created, the materials will be sent to a consulting public health communications specialist. This individual will review the materials to ensure that the program is linguistically and age appropriate for the students in the program. The Community Action Group will also come together at the end of the planning period to provide early feedback for the proposed program.

The social workers and nurses who will be conducting the program at the middle and high school will be trained during the planning period. There will be two 8-hour training sessions conducted late into the planning period once the program has been developed. Training sessions will be conducted by the health educator and project coordinator and will focus specifically on the Self Center program and content, as all team members have a background in adolescent health. The biostatistician and
graduate student will be given information regarding outcome evaluation and the data that will need to be reported. The student representatives who will help with program recruitment and throughout the program will also be trained over one full day during this time. Student representatives will be recruited from the Wolfe County Middle School and Wolfe County High School Student Councils. Student representatives will be trained in the services available to students and will serve as representatives of the program. At least one student representative will be present during each homeroom session where the representative may help by passing out materials or through other small tasks. Additionally, these students will be promoted as program liaisons and other students will be encouraged to go to them with questions or concerns, which can then be shared with the program leadership.

Lastly, the health teachers responsible for sexual education courses will be trained during the planning period. This training will prepare them to teach the new curriculum involving more information about making informed sexual decisions. The program coordinator and health educator will also conduct these training sessions, which will also take place over two different 8-hour periods of time.

During this period, resources will be gathered for both the educational programming and the provision of healthcare services at the health department. The health department already provides these services to the community, but an expansion of the number of teens who are being served will require additional resources and the number of teens that will be enrolled will require staff training in working directly with this population. The existing health department staff will be educated on the program and will be given information about referring students to the appropriate person whether it is
a nurse practitioner or social worker, as well as information about signing these students in appropriately to get the necessary documentation. All services provided will be done so at no charge to the student. A decision to visit the local health department for clinic services would be left up to each individual student, but all students enrolled in the program and remaining in school will be eligible for such visits.

The health educator and program coordinator will work with the East Kentucky Reproductive Health Project to create educational materials to support the lessons developed both for the Self Center program and for the adjusted school curriculum. The East Kentucky Reproductive Health Project has volunteered services at no cost. The consulting public health communications specialist will also review these materials.

Letters to students’ parents will be sent at the beginning of the final month of the planning period once the program has been developed. The letter will provide details to the parents regarding the program content and information about student survey participation and program evaluation. In the state of Kentucky, minors are not required to have parental permission to obtain contraceptives, so no additional consent will be required for those teens who choose to utilize clinic services. In order to reach the maximum number of students possible, the educational portion of the program will be implemented during homeroom. All students at both schools in grades 7 through 12 will be enrolled in the education portion of the program unless their parent or legal guardian chooses for the student to opt out through signing the form enclosed in the letter sent home during the planning period. On the first day of homeroom for the semester, each student enrolled in the program will receive an assent form to be signed, as well as the initial survey to be filled out and collected during this class period. No formal needs
assessment has been conducted in the county regarding teen pregnancy, so this initial survey will serve as both a pre-test and a needs assessment to help determine the knowledge, attitudes, and behaviors of current students in Wolfe County and will be utilized as a baseline for the program when looking at program impact. The high rates of teen pregnancy and sexual activity make a clear case for the need for a program to address reproductive knowledge and health even in the absence of a formal needs assessment, but conducting one will provide the program leadership with a better picture of the current attitudes of the enrolled students.

The pilot period of the program will be initiated at the start of the academic school year the August following the planning period. The in-class portion of the program will be conducted by the social worker and nurse practitioner team assigned to each school and will take place during homeroom twice per semester totaling at least one entire homeroom period (60 minutes of instruction). These lessons will be structured and didactic in nature, but will also include interactive portions and discussion related to values clarification, decision-making, and reproductive health. A part of this education only at the high school level will be about the types of contraceptives that are available including condoms, oral contraceptives, and other methods and proper use of each method. The high school team will also focus on educating students on the reproductive services provided by the local health department. At least one student representative will be present during each session to help answer questions and serve as a liaison to the students and program leadership. The program coordinator will work directly with homeroom teachers to set up a schedule that works with them. In the case of a school
delay or cancellation because of weather, the class will be rescheduled for later in the semester.

Throughout the program, the nurse practitioners and social workers will be available daily during lunch in the health suite on the school campus to answer questions, provide counseling, or lead small group discussions at the students’ requests. In the original Self Center program, students initiated the vast majority of encounters, so this is an important component of the program. One afternoon per week, one nurse practitioner will set up a clinic at the middle school and one will be at the high school from the end of school until 6 PM to provide basic reproductive services and a social worker will be present for group discussions and counseling. The other afternoons, the two nurse practitioners will be available at the Wolfe County Health Department to provide the more extensive services outlined above. Individual counseling will be required for all students receiving contraceptive methods from the clinic. The clinic at the health department will have hours each weekday during the summer. Although no formal classroom instruction will be provided during this time, the project team will still provide education, reproductive services, and counseling at the health department.

Evaluation will start immediately when the program begins by looking at the number of students enrolled in the program and the number who are starting to utilize services at the health department with the expectation that this number will increase significantly at the beginning of the program, although later success will be defined as a consistent number of visits. Detailed records of lesson plans will be kept and post-lesson checklists will be filled out by each social worker and nurse practitioner to ensure
that the same material is taught across classes within each grade level. Additionally, the program coordinator and health educator will attend at least two educational sessions conducted by each of the two teams each semester and will fill out a similar survey form and provide feedback to the educators at these times. More extensive evaluation will be conducted through student surveys and clinic logs, which will be discussed in the following section.

As another component of evaluation, the Community Action Group will meet regularly and results will be shared with the group. The partners will be given the opportunity to share opinions, identify areas of improvement, and make suggestions as to how these improvements should be made. This group will meet at the conclusion of each semester (December and June) throughout the program duration when all members are able to be present, as well as all members of the project team.

At the end of the three-year funded period, the program will undergo extensive evaluation to determine the overall impact of the program in order to determine if it is worth the cost to continue. If found to be effective in reducing the number of teen pregnancies by more than 20%, the program will be continued indefinitely with the same setup and evaluation as outlined above on an annual basis. Even if the program has not yet shown this significant reduction, but has shown a modest reduction and has indicated that a larger number of sexually active teens are using contraception appropriately, it will be continued for at least one additional cycle. Funding is expected to come from the school system, as well as from the state and local government through funding provided to the local health department in order to promote teen health and prevent teen pregnancy in the county. The health department will also look for
opportunities to apply for additional grants to continue the program. To help cover the costs of clinic services and contraceptives, billing student insurance may also be an opportunity in the future.

This program’s overall success depends on the participation and commitment of students. If students do not show up for educational sessions and do not receive the provided material, the program cannot be successful. In order to encourage students to attend classroom sessions, ability to obtain services from the health department will be dependent on attendance of the educational portion of the program, but students will not be required to utilize these services at any point during the program. Additionally, parents may not want their children to participate in this program because they may feel that it encourages teens to engage in sexual intercourse. In order to overcome this obstacle, the program directors will involve parents in the planning process, allow them to understand what will be taught through the program, and to address concerns that parents may have prior to program initiation. Program leadership will practice transparency and will communicate program changes and developments throughout the program during Community Action Group meetings, which parents will be invited to attend.

The program will include the involvement of many different parties and will lead to a variety of positive outcomes, as outlined in the logic model in the attached appendix. The program strives to protect the mental health and well being of all students involved. The program will take a trauma-informed approach where the program leaders will be transparent in all processes and decisions. Additionally, all student answers and information will be kept confidential and will not be shared with any
identifying information attached. Trauma screening and assessment will occur throughout the program as a part of the surveys given to participants and students will be encouraged to seek help if they ever experience any sort of trauma, emotional, sexual, or otherwise and know that counseling services are available to them as a part of this program. Specific questions in the evaluation tool will be created to directly measure emotional health. Those students who seek services will be referred to the Bluegrass.org Community Mental Health Center or a similar facility in a neighboring county for appropriate follow up and support. Additionally, students may be referred for follow-up services if their answers to specific questions raise concern for the program leaders. Teenagers who become pregnant will also be referred to the health department or a healthcare provider in a neighboring county for additional information, counseling, and access to prenatal care services.

**Performance Measures & Evaluation**

The primary goal of this program is to decrease teen pregnancy rates in Wolfe County through increasing student knowledge regarding reproductive biology and pregnancy, to postpone the onset of intercourse, to increase the level of appropriate contraceptive use, and to encourage teens to utilize more effective methods of birth control. These outcomes will be evaluated through multiple methods including student questionnaires, staff logs recording the number of clinic visits and counseling sessions, counting the numbers of students participating in the classroom sessions, and tracking the number of classroom sessions taught. Additionally, the amount of money spent toward the program for both educational and medical purposes will be recorded.
separately to determine the average cost per participant. The collected data will be reported to the funder on a semi-annual basis.

Performance Measures

Each year, the number of students who participate in the program will be tracked and broken down by location and type of interaction whether it be in the classroom, counseling at the school, counseling in the clinic, or a visit to the clinic in the school or at the health department. The project team will count students present in each classroom session and each clinic or counseling visit will be tracked at sign in by the nurse practitioner, social worker, or health department staff. This data will be stratified by gender, age, and grade. These numbers will be compared to the total number of students enrolled in each of the schools and in the program to determine the percentage of students reached each year with a goal of reaching 90% of all students. Additionally, the number of training sessions conducted involving the social worker, nurse practitioner, and student representatives will be recorded, as will the number of classroom sessions taught per semester. The number of contraceptives prescribed will be documented by the nurse practitioners. They will also track when a student changes from a less effective contraceptive method to one that is more effective.

Implementation Evaluation

Implementation evaluation will begin as soon as the program is initiated. In order to assess program fidelity, the nurse practitioner and social worker will complete a standardized checklist after each classroom session to track the information provided.
In addition, the program coordinator and health educator will observe and assess two different classroom sessions per team during each semester and will fill out an evaluation form that will assess both program fidelity and opportunities for additional training.

At the close of each classroom session, the students present will be given an evaluation form where they will be able to provide feedback regarding the specific class session, which will be used to improve future classes. These, like the outcome questionnaire, will be completely anonymous. The social worker, nurse practitioner, program coordinator, health educator, and program director will review these surveys once a month so that continuous quality improvement to the classroom curriculum may occur.

Participating students will also be surveyed at the end of each semester for outcome evaluation and a portion of this form will be geared toward gathering overall student feedback about the entire program such as why students did or did not choose to utilize a certain service provided through the program. This feedback will be compiled and reviewed by the program team in order to look for ways to improve program participation. The nurse practitioners and social workers will also be asked to complete an implementation evaluation at the end of each semester, which will provide each worker an opportunity to reflect on personal performance, as well as to share thoughts on program successes and failures. Once the team has met to discuss the semester and made plans for improvements, they will meet with the Community Action Group to discuss their findings and to look for feedback from the group and community.
One thing that will be closely reviewed throughout the program will be participation rates of male students. These will be assessed to determine if males are utilizing services and the team will discuss additional ways to engage male participants, if necessary. The team will also closely review clinic participation and student evaluations to determine if the clinic’s distance from the schools was a barrier to students utilizing services.

**Outcome Evaluation**

The program will be considered successful if there is an increase in knowledge, contraceptive use, and the effectiveness of the chosen contraceptive methods from the baseline survey and evaluation. In the later years of the program, success will be defined as an increase or maintenance of these measures. An overall decrease in teen pregnancy is the ultimate goal, which will also be evaluated. In regards to teen pregnancy, the pilot study saw a 30% decrease over the three-year program period. With the proposed adaptations, the goal of the program will be a 20% decrease over the program period.

Student surveys will be a major method used for outcome evaluation. These will be administered at the start of the program as part of the needs assessment to determine baseline knowledge, and then at the end of each semester throughout the program to determine current level of knowledge and current sexual practices. The start of the program will be defined as the start of the academic year and any newly enrolled students will be given the initial survey at the start of the semester in which they enroll. Those students who drop out of school will be documented and will no longer be eligible
to receive services or followed up with after they leave the program. The program
director will follow up with the youth school coordinators to determine if the student
dropping out was due to a pregnancy or another factor and these coordinators will help
the program leadership track teen pregnancies in the schools.

Survey questions will come from the Youth Risk Behavior Surveillance System’s
(YRBSS) section on sexual behaviors. Additional questions will be added to the survey
so that it will address teen knowledge regarding pregnancy prevention, contraceptive
use, and teen pregnancy rates, as well as rates of contraception utilization and
information regarding sexual behaviors. Examples of questions that will be added
include the following:

For each of the questions below, indicate whether you strongly agree, agree, disagree,
or strongly disagree.

1. I understand the sexual behaviors that lead to pregnancy.
2. I feel confident that I can discuss preventing pregnancy with a sexual partner.
3. I feel that I have access to the methods necessary to prevent myself or my
   partner from getting pregnant.
4. I believe that using condoms will prevent pregnancy.
5. I think that using a condom is the only way to prevent pregnancy if I engage in
   sexual intercourse.

For those students who are not present on the day the outcome questionnaire is
administered, a follow-up survey will be left with the school guidance counselor to be
distributed to these students when they arrive back to school on a subsequent day.
Counselors will have a list of students who are enrolled in the program and will use the school roll to determine the students who will need to be given a survey. In order to keep all information confidential, each student will be provided with the blank survey and a pre-addressed and stamped envelope so the survey can be sent directly to the program administrators.

The graduate student hired will be responsible for entering all survey data into SPSS for evaluation. A biostatistician from the University of Kentucky, Dr. Jones, will analyze the outcome measures outlined above and will present the data results to the program leadership at the end-of-semester meetings. Dr. Jones will also review the data and share ways that the evaluation methods could be improved.

In order to determine the success of goals such as delay to time of first sexual intercourse and to have a comparison group for knowledge and teen pregnancy rates, a comparison group from Powell County Middle School and Powell County High School in Powell County, KY will be utilized. Compared to the rate of 78 births per 1,000 girls in Wolfe County in 2013, the rate in Powell County was 75 births per 1,000 girls\(^\text{11}\), which provides a close comparison to the intervention group. Powell County is also in the eastern part of Kentucky and is similar to Wolfe County in regards to health behaviors, demographics, and access to healthcare, which makes it an ideal comparison group. The sexual education in this school district is similar to the current program in Wolfe County and teaches abstinence, but also teaches students to make informed sexual decisions. This is important because it will allow for the determination of whether any changes may be due to the change in curriculum versus the addition of the program with additional school-linked services. The comparison group will be evaluated for
knowledge and behaviors at the same times as the research group. In addition, the program coordinator will work with the youth school coordinators at the middle and high school to get accurate information about teen pregnancy rates in the school system over the program duration. The evaluators will look at the comparison group in the neighboring county and compare the rate of teen pregnancy each year in Powell County to Wolfe County, as well as how rates and education have changed in the two counties. The program will be deemed as successful if teen pregnancy rates start to decrease in Wolfe County both compared to historical rates in Wolfe County or relative to the group in Powell County.

A reflection and overall program evaluation will occur once a year and will involve all members of the project team. This will be an in-person meeting with the program director’s supervision where the team will reflect on all evaluations, suggestions, and results obtained for the entire year. The team will also utilize this meeting to discuss opportunities for sustainability and ways to involve other members of the community, if possible. At the end of each academic year, a reflection meeting will also occur with the school system and the University of Kentucky College of Public Health. Since the program takes place in the school system, it is important that the school system be informed of results, planned updates, and given the opportunity to have input in the future direction of the program. Separate from the meeting with the school, the Community Action Group will meet each December and June to hear the results from the semester and provide feedback on both outcome measures and implementation. These meetings with the Community Action Group will be open to parents and the community as a whole in order to encourage transparency.
Capacity and Experience of the Applicant Organization

The Wolfe County Health Department is a component of the Kentucky River District Health Department, which serves six additional counties including Knott, Lee, Leslie, Letcher, Owsley, and Perry. The mission of the Kentucky River District Health Department is to "protect, maintain, and promote the health of the people of the community" and as a part of this mission, the Kentucky River District Health Department provides preventive health programs and information to various communities including programs for children, as well as adults. The Kentucky River District Health Department has received money through the Title X Family Planning Program and the Abstinence Education Grant Program (AEGP) to use evidence-based models to promote abstinence by strengthening beliefs supporting abstinence and increasing skills to negotiate abstinence and resist peer pressure. Participation in these programs requires the health department to meet certain standards including providing information that is medically accurate and reporting outcome measures on a regular basis. Through these experiences, as well as others, the umbrella organization has the knowledge and expertise to meet the criteria for budget management and outcome reporting as required by the grant application.

At the Wolfe County Health Department, family planning services are already offered including, but not limited to, Pap and breast exams, provision of birth control, and patient counseling. The health department is one of the only organizations in the county offering these services, so the organization has an extensive amount of experience in providing these services to individuals within the community. The expansion of these services to reach a larger number of teenagers falls within the
mission of the health department and is something the health department is already trained to do. Additional training will be provided to the health department staff solely for the purpose of teaching them how to sign students in and direct them to the appropriate personnel within the health center.

Another focus of the Wolfe County Health Department is on health education. Currently, the institution teaches two in-school programs: Choosing the Best and Postponing Sexual Involvement. Postponing Sexual Involvement is provided to middle school students. Choosing the Best includes programs for both middle and high school students. Each of these programs is evidence-based and promotes abstinence. Together, these programs have reached around 500 adolescents and teens each year throughout the county. Through the implementation of these programs, the health department has been able to maintain a relationship with the school system and meets regularly with the school system to discuss what is being taught to the students through these programs and to improve the existing programs. The health educator employed by the Wolfe County Health Department currently teaches both of these courses and will be involved in planning the Self Center program, as well as training the social workers, nurse practitioners, and student representatives.

The Wolfe County Health Department also offers the HANDS program, which stands for Health Access Nurturing Development Services. HANDS is an evidence-based program that provides families with information and resources available in the community for new parents. All services are provided with the goal of supporting healthy pregnancies and births, encouraging healthy child development, and creating self-sufficient families. This program has been successful and has received grant money in
past years from the Kentucky Department of Public Health and the Cabinet of Health and Family Services. Each year, the HANDS program is evaluated based on the program’s impact on measures such as preterm birth, low birthweight, child maltreatment, and maternal morbidity. This program has been sustained since 2004 and has seen successes each year.

As a part of the Kentucky River District Health Department, the Wolfe County Health Department is overseen by the District Director, Karen Cooper, who was raised in Hazard, KY. The Director of the Wolfe County Health Department, Jeannie Scott, has been with the organization in this role for the last 10 years. Most of the employees hired to be a part of the Wolfe County Health Department are from the area and employee turnover is relatively low. Staff performance is evaluated on an annual basis to determine if staff members are performing effectively and interacting with the community appropriately. The majority of those employed at the health department are intimately familiar with the needs of the community and have connections to various community organizations and institutions and have the ability to mobilize community members through close personal connections.

The Wolfe County Health Department does not discriminate on the basis of race, color, national origin, sex, religion, sexual orientation, or disability in employment or the providing of services. The agency will arrange, by request, reasonable accommodation necessary to provide individuals with disabilities equal opportunity to participate in all programs and activities.
Partnerships & Collaboration

A key partner in the success of this program is the Wolfe County Board of Education. Kentucky state law requires that sex education be taught in schools, but the subjects that this education covers are left up to the local school board. The Wolfe County Board of Education’s mission statement is “To Care, To Teach, To Learn." According to the superintendent of the school system, they are “committed to engaging as many community partners as possible to provide the highest standard of teaching and learning." Through collaboration with the school system at the middle and high school levels, the target population will be identified and reached, resources will be available, and the school system will be able to help guide the direction of the program. Through experience in curriculum development and adherence to strict guidelines set forth by the state and federal government, the school system has extensive experience in developing and implementing programs. Additionally, the Wolfe County Health Department and the school system already have a connection and the health department provides a school nurse to Wolfe County High School who is on school grounds on a regular basis. As an incentive to work with the Self Center team to implement this program, the program will pay for the updated materials that will be necessary for the new comprehensive sex education curriculum.

Another key partner will be the University of Kentucky College of Public Health. The College of Public Health has a long history of implementing evidence-based programs within communities and schools including providing a wide variety of training in programs to prevent teen pregnancy such as Reducing the Risk, Safer Choices, and the Self Center program in schools throughout the state of Kentucky. The College of
Public Health will serve the purpose of helping with program development including the adaptation of programs to fit the Wolfe County culture and community and to address the disparities that exist within the target population. In addition, the College will assist with creating a plan for evaluation that encourages continuous quality improvement and looks at evidence-based methods to improve the program, which the College has experience in implementing. The College of Public Health works with the Kentucky River District Health Department each year to assess and improve existing educational programs. Additionally, the biostatistician employed is from the College of Public Health. The College of Public Health will participate in Community Action Group meetings and an annual, more extensive meeting with the program team and Wolfe County School Board. Other contacts may occur through e-mail and phone calls throughout the program for support and to seek answers to questions as they arise.

The East Kentucky Reproductive Project has experience in creating media that focuses on the reproductive health of individuals in this specific region. They have a website where they share stories from people in the community and have a presence throughout eastern Kentucky. They also have ties to many organizations throughout the region including the Kentucky River District Health Department, as well as various hospital systems, primary care offices, and community groups such as the Kentucky Religious Coalition for Reproductive Choice. They have agreed to help create brochures, handouts, videos, and other media that may be required for success throughout the program duration and have offered this service at no cost. These materials will be created during the planning period of the program, but additional materials may be added or updated throughout the program duration.
In addition to the partners mentioned above, the table below outlines the other partners. Representatives from each of these organizations will be included in the Community Action Group.

<table>
<thead>
<tr>
<th>Partner</th>
<th>Experience of the Organization</th>
<th>Role or Relationship to the Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wolfe County Middle and Wolfe County High School Student Councils</td>
<td>Provide peer leadership within the school system</td>
<td>Provision of input regarding student preferences and needs; serve as a liaison to students</td>
</tr>
<tr>
<td>Kentucky Teen Pregnancy Coalition</td>
<td>Working with teenagers to prevent teen pregnancy</td>
<td>Provide guidance and experience in program development and implementation and targeting program toward teens</td>
</tr>
<tr>
<td>Wolfe County Middle School and Wolfe County High School Parent-Teacher Associations</td>
<td>Knowledge of the school system; parents to involved program participants</td>
<td>Help implement the program in the school system in a way that works and is accepted by parents</td>
</tr>
<tr>
<td>Wolfe County Chamber of Commerce</td>
<td>Involvement and experience with local businesses</td>
<td>Will provide support for the program from a community focus</td>
</tr>
</tbody>
</table>

The Wolfe County School Board, University of Kentucky College of Public Health, Wolfe County Middle School and Wolfe County High School Student Councils, and East Kentucky Reproductive Health Project will sign letters of commitment during the planning period. The Kentucky Teen Pregnancy Coalition, Parent-Teacher Associations, and Chamber of Commerce will each sign a memorandum of understanding.

**Project Management**

The project team will be made up of a program director, program coordinator, health educator, two social workers, and two nurse practitioners dedicated to providing reproductive services to teens. A statistician and a graduate student will be hired from
the University of Kentucky College of Public Health for survey entry and to assist with program evaluation. In addition, the staff of the health department will assist with registering students at the health department for clinic visits. All members of the program team have strong ties to the Wolfe County community. Additionally, the nurse practitioners and social workers all have training in adolescent health. Each personnel member has a particular expertise that they bring to the role and program as a whole.

The program director for this program will be the Director of the Wolfe County Health Department, Jeannie Scott. Ms. Scott has been with the Wolfe County Health Department in this position for the last 14 years and has been responsible for existing family planning programming, educational programs, and health services provided through the local health department. She reports directly to the District Director of the Kentucky River District Health Department. Her role will be administrative in nature and she will be responsible for oversight of the entire program including staff progress, program fidelity, and ensuring that all evaluations are completed on time. She will review all final reports prior to submission to the funder. In addition, she will serve as the contact person for the program with all community organizations, will serve as the face of the program in the community, and will lead the meetings where results are disseminated to the Community Action Group and community.

The program coordinator position will be hired specifically to work on this project. The individual hired for this position must have a Master of Public Health degree and experience working in health education and program development and evaluation. The program coordinator’s role will be to organize and coordinate all evaluation meetings with the program team, create detailed plans for all training sessions, and work directly
with the school and homeroom teachers to coordinate the program schedule. This individual will also be responsible for working with the health educator to teach all training sessions, perform evaluations regarding program fidelity, and will regularly visit the school and clinic to oversee the day-to-day program operations. The program coordinator will report directly to Ms. Scott and they will meet to discuss program operations on a weekly basis.

The health educator, William Todd, will serve the specific purpose of assisting with program development, training the nurse practitioner and social worker to serve as educators, and will assist with program integrity and continuous quality improvement. He will also assist with adapting the material to the middle and high school students and will continuously evaluate adaptations to the program to ensure that the program is maintaining its integrity.

Two social workers, Anita Moore and Joan Smith, and two nurse practitioners, Jessica Davis and Natalie Bell, have been hired as team members for this project. Ms. Moore and Ms. Davis will be assigned to high school students, while Ms. Smith and Ms. Bell will work with the middle school students. Each team will be responsible for teaching the in-class educational portion. The nurse practitioners will be responsible for setting up the abbreviated clinic during lunch and one afternoon in the schools, as well as providing the clinic services at the health department the other afternoons during the week. The social workers will be responsible for individual and group counseling both during lunch at the schools, during the in-school afternoon clinic, and at the health department the other afternoons. Both teams will also attend meetings and planning sessions and will help develop and revise the curriculum throughout the program.
duration. They will have monthly meetings with the entire program staff to discuss the evaluations received throughout the month and to gauge program progress.

The program team will hold a formal meeting with the program director once each year to assess program status, review results, and look for opportunities to improve and add community partners to the program. Additionally, the program director will receive feedback from each team member at this time to ensure team members have an opportunity to express how they feel the program is going and address potential improvements to the workflow or concerns about staff responsibilities. By utilizing feedback from team members to drive program updates and improve job satisfaction, team member turnover can be reduced.

The implementation of a program that revolves around reproductive health and education in this conservative community does have potential roadblocks. One such is that parents may be concerned about the goals of the program or feel that students will be encouraged to engage in sexual intercourse. Through parental involvement in program planning and organizing meetings with the parents in the community, this issue can be minimized. Information from studies will be shared with parents through the consent process about the success of such programs in other areas and the data that supports that these types of programs actually help delay initiation of sexual activity. The program staff includes people who have strong ties to the community, which will help with acceptability. Another potential issue involving parents relates to the culture of the county. Many parents in the community gave birth as teens and may see feel that they are being criticized. In order to combat this, meetings involving parents will also
have a focus on creating a better future for their children and the other positive benefits of prevention of teen pregnancy.

Additionally, the success of this program depends on whether or not students choose to utilize the associated clinic services. This will be encouraged through making these services free of charge and through making this decision private to where other students will have no way of knowing who chooses to use the services. Students have a right to access these services and the program will serve to increase awareness of the available services while increasing student knowledge regarding how to make informed decisions and utilize contraception appropriately, when that is the student's decision.
Reference List


9 Promising Practices Network. (2009). *Self Center (School-Linked Reproductive Health Services)*. Retrieved from:


12 Kentucky River District Health Department. (2015). Retrieved from:

13 Wolfe County Schools. *Wolfe County Superintendent*. Retrieved from:


### Appendix

#### Annual Budget

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Percent Effort</th>
<th>Salary</th>
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<tbody>
<tr>
<td>Program director</td>
<td>30%</td>
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<tr>
<td>Program coordinator</td>
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</tr>
<tr>
<td>Nurse practitioner (high school)</td>
<td>75%</td>
<td>$75,000</td>
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<tr>
<td>Social worker (high school)</td>
<td>75%</td>
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<tr>
<td>Nurse practitioner (middle school)</td>
<td>50%</td>
<td>$50,000</td>
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<tr>
<td>Social worker (middle worker)</td>
<td>50%</td>
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<tr>
<td>Health educator</td>
<td>25%</td>
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<td>Biostatistician</td>
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<td>Graduate student</td>
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<td>Fringe benefits</td>
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#### Consultant Costs

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<td>Public health communications specialist</td>
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#### Equipment

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<tr>
<td>Laptop computers (one-time expense, year one)</td>
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<tr>
<td>Laptop computers for evaluation (one-time expense, year one)</td>
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<td><strong>Total</strong></td>
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#### Supplies

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<tbody>
<tr>
<td>Educational materials</td>
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</tr>
<tr>
<td>Consent forms and mailing supplies</td>
<td>$550</td>
</tr>
<tr>
<td>Questionnaires and mailing expenses</td>
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<tr>
<td>Birth control methods</td>
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<tr>
<td>Clinic supplies</td>
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#### Travel

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<td>Nurse and social worker gas reimbursement ($0.56 per mile)</td>
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<td>Description</td>
<td>Amount</td>
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<tr>
<td>----------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Gas money for statistician and graduate student (70 miles x $0.56 x 4 trips)</td>
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<td>Project director annual meeting</td>
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<td>Regional training (2 staff members, one-time expense, year two)</td>
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<table>
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<th>Other</th>
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<tbody>
<tr>
<td>Funding to update existing sex education materials (one-time expense, year one)</td>
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<tr>
<td><strong>Total</strong></td>
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**Total Expenditure:** $497,635 (Year 1)

**Budget Justification**

**Personnel**

*Program Director (30%)*

**Jeannie Scott, MPA,** will serve as the program coordinator for the Self Center program. Ms. Scott is the Director of the Wolfe County Health Department and has served in this role for the last 14 years. Prior to this position, she worked in administration at the Wolfe County Health Department for 10 years. In her current role, she has been responsible for the development of existing family planning programming, educational programs, and health services. She reports directly to the District Director of the Kentucky River District Health Department. Over her 14-year tenure, Ms. Scott has worked closely with the Board of Education, Parent-Teacher Association, and the Wolfe County Chamber of Commerce. She will provide oversight for the entire program, work closely with community partners, and be responsible for reporting all evaluation data to the funder.
Program Coordinator (100%)

The project director role is one that will be hired specifically to work on this project. The individual hired for this position must have a Master of Public Health degree. Experience in health education and program development, as well as the desire to work closely with teenagers are integral to this position. The program director will be hired by Ms. Scott directly prior to planning activities and will be responsible for the day-to-day operations of the program including program improvement and evaluation.

Nurse Practitioner – High School (75%)

Jessica Davis, APRN, currently works as a part-time employee for the health department and has held this position for the last 6 years. Her position will change to full time with the implementation of this program. Prior to starting with the Wolfe County Health Department, Ms. Davis practiced at an adolescent health center in Richmond, KY for 10 years, which has given her a lot of valuable expertise in working with the target population. Ms. Davis will teach the educational portion related to contraceptives methods at the high school level and will be responsible for provision of services at the clinic to high school students. Because students will only be able to come to the clinic outside of school hours, her afternoon hours will be reserved for appointments with students.

Social Worker – High School (75%)

Anita Moore, LCSW, MSW is a social worker currently employed by the Wolfe County Health Department. She was born in Campton, KY and has lived in Kentucky all of her
life. She graduated from the University of Kentucky with a Master of Social Work and her training focused in developing healthcare-associated social work services, as well as child development and adolescent health. Ms. Moore worked for the Lake Cumberland Health Department to develop the Teach Me, Love Me, Care for Me Project, which provides education to parents during each stage of child development before moving home to Wolfe County and taking her current position.

**Nurse Practitioner – Middle School (50%)**

**Natalie Bell, APRN,** has worked in eastern Kentucky for the last 8 years. After receiving her Doctor of Nursing Practice degree, she moved to Hazard, KY with her husband, who was raised in eastern Kentucky. Ms. Bell has a training certificate in pediatric health and travels to various health departments in the Kentucky River District Health Department system in order to assist with pediatric services. She will split her time between continuing to travel and spending her time in Wolfe County for the Self Center program. Ms. Bell has been responsible for assessing the accuracy of the medical information provided through Kentucky River District Health Department programs for the last 4 years and will be an important addition to the team.

**Social Worker – Middle School (50%)**

**Joan Smith, LCSW, MSW,** has worked as a social worker in school systems for 25 years. She has worked closely with a research team studying teen pregnancy and its psychological impacts on teens in rural communities. Her professional experience involves counseling children who have been sexually abused or have experienced
some other sort of trauma. She has strong ties to the Wolfe County community through her years of practice in the eastern Kentucky region, which makes her an ideal candidate for this position.

Health Educator (25%)

William Todd, CHES, currently oversees health education initiatives for Wolfe County and assists with developing and teaching health education programs throughout the Kentucky River District area. He spends a portion of his time working directly with the Wolfe County Health Department to teach Cooper-Clayton Method Smoking Cessation classes each week, which serve 10 people each session. In addition, he has experience in coordinating the First Steps program for the Kentucky River District Health Department. First Steps is a statewide early intervention system that provides services to children with developmental disabilities from birth to age 3 and their families. Each year, the First Steps program serves 150 children in the Kentucky River District and 4,000 children across the state. Mr. Todd played a role in developing the program and implementing it in Wolfe County and personally conducts the educational portion of the program. Mr. Todd guest lectures in the Department of Health Behavior at the University of Kentucky College of Public Health and has developed close relationships with many professors and researchers in the department.

Biostatistician - Evaluation (10%)

Robert Jones, DrPH, will serve as the Biostatistician for the program. Dr. Jones is an Assistant Professor in the UK College of Public Health. His research interest focuses on
applications of innovative statistical and epidemiological methodologies and study designs relevant to adolescent health. Dr. Jones works with health departments throughout the state of Kentucky and surrounding regions. He will be responsible for evaluating the data collected from the clinic visits and student surveys and will report this data quarterly to the program coordinator.

**Graduate Student - Evaluation (20%)**

A graduate student will also be hired for this project with the role of entering student surveys. This graduate student will be from the College of Public Health and will be focused in Health Behavior with training in biostatistics and experience in appropriate research methods. The graduate student will be trained during the planning part of the program and will be involved in quarterly meetings regarding program evaluation.

**Fringe Benefits (25%)**

**Consultant Costs**

A public health communications specialist will be contracted at various times throughout the project as determined by the program coordinator. This individual will be responsible for reviewing educational and promotional materials created by the program team to verify that the materials are age appropriate. Additionally, this specialist will help prepare materials for community meetings to make sure that the results are clear and will be understood by the general public. At least 3 years of experience in communications will be required for this position and experience with adolescents will
be preferred. This position will be compensated at a rate of $20/hour with a maximum of 200 hours throughout the year.

**Equipment**

**Laptop Computers**

One laptop computer will be provided to each social worker/nurse practitioner team. These will be utilized for tracking the necessary evaluation data throughout the program such as keeping logs of clinic and counseling encounters both at the school and at the health department. This is a one-time expense that the program will incur in the first year.

**Computers for Evaluation**

Two laptop computers will be purchased for the graduate student and statistician to use when entering and analyzing survey data. This will be a one-time cost during year one and the equipment will be utilized throughout the program duration. The biostatistician has access to SPSS software through the University of Kentucky, which will be utilized in evaluation.

**Supplies**

**Educational Materials**

Educational materials will be provided to program participants as a part of the classroom sessions and pamphlets will be created to enhance student knowledge. These materials will have to be printed at the beginning of the program and additional
materials may be printed and distributed throughout the year. The East Kentucky
Reproductive Health Project has agreed to help with the creation of these materials, so
this will not incur any additional cost. In the pilot program, students who only
participated in the educational portion cost $13.20 on average, so $8,000 budgeted
takes this number into account.
$25/student x 500 students = $12,500

Consent Forms and Mailing Supplies
Consent forms will be mailed to the parent of each student prior to the program initiation
in order to give parents the opportunity to opt students out of the program. This takes
into account the price of printing the letters and mailing them to student homes.
$0.50 to print + $0.49 to mail/student x 546 students = $540.54

Questionnaires and Mailing Expenses
Questionnaires will be utilized for evaluation throughout the program. Each student will
fill out pre-test at the start of the academic year, an evaluation after each classroom
session, and an end-of-semester outcome survey. If a student is absent the day of the
outcome survey, it can be mailed to the program office when they return to school.
Mailing expenses have been added into this cost assuming that no more than 15% of
students will be absent on any single day. In addition, the comparison school will fill out
the pre-test and end-of-semester outcome surveys.

Study group: $0.50 per survey x 7 surveys/year x 500 students = $1,500
Comparison group: $0.50 per survey x 3 surveys/year x 500 students = $750
Mailing expenses: 75 students/semester x 2 semesters x $0.65 for stamp & envelope = $97.50

Total: $2,347.50

Birth Control

Birth controls methods including condoms, oral contraceptives, injectable contraceptives, birth control implants, and IUDs will be provided to participants at no out-of-pocket cost. Although some of these methods will cost more than others, the average amount spent per student in the pilot study was $122, which included all costs including fees for educational services. Due to the uncertainty of how many students will utilize contraception and which methods will be utilized most frequently, $125 will be budgeted per each student.

$125/student x 500 students = $62,500

Clinic Supplies

In addition to contraception, there will be additional clinic costs associated with visits including things such as gloves, instruments, pap smear kits, pregnancy tests, and other items.

$20/student x 500 students = $10,000

Travel

Gas Reimbursement

Gas will be reimbursed at a rate of $0.56 per mile. The nurse practitioner and social worker at the high school will have to drive 0.5 miles two times each day from the health
department to the high school each day when school is in session, which is five days per week approximately 36 weeks per year. The nurse practitioner and social worker at the middle school will drive 10 miles. The total amount calculated has been rounded up to account for additional mileage that may be incurred.

\[
5 \text{ miles} \times $0.56 \text{ per mile} \times 4 \text{ staff members} \times 36 \text{ weeks} = $403.20
\]

The statistician and graduate student will travel to Wolfe County from Lexington, KY twice per year for data analysis and meetings. Travel will be reimbursed at the same rate as outlined above.

\[
70 \text{ miles} \times $0.56 \text{ per mile} \times 2 \text{ staff members} \times 2 \text{ trips} = $156.80
\]

**Program Coordinator Meeting**

The program coordinator will attend a coordinator's meeting in Washington, DC one time each year. The $2,000 budgeted will allow for gas money, lodging for 2 nights, and a stipend for expenditures while on the trip. This trip will serve as a time when the project director can disseminate preliminary program results, learn more about effective educational methods, and open the program to input from other directors.

**Regional Training Meeting**

The health educator and one of the nurse practitioners will attend a health educator training meeting during the second year of the program. The $3,000 budgeted will allow for gas money, lodging for each team member for two nights, and a stipend for expenditures while on the trip.
Other

Educational Materials for In-School Curriculum

The program will provide updated materials for the comprehensive sex education curriculum as part of the program agreement with the school system. The East Kentucky Reproductive Health Project will help with the designing of these materials and $1,000 will be provided to each school in the program to help with the costs of printing materials or purchasing additional materials.
Logic Model

**Inputs**
- Partnerships (Community Action Group, Wolfe County School Board, University of Kentucky College of Public Health)
- Funding
- Staff
- Educational material
- Contraceptive and clinic supplies

**Activities**
- Program development
- Community Action Group meetings
- Parent and student focus groups
- Social worker, nurse practitioner, and student representative training sessions
- School classroom educational sessions
- School clinic counseling and visits
- Health department clinic visits
- Data collection through student evaluations and surveys

**Outputs**
- Number of training sessions
- Number of students enrolled in the program
- Number of classroom educational sessions
- Number of participants in classroom sessions
- Number of clinic visits in school and at the health department
- Number of counseling sessions
- Number of contraceptive methods provided
- Number of students starting contraception or changing to a more effective contraceptive method

**Outcomes**
- **Short Term**
  - Increase teen knowledge regarding safe sexual behaviors
  - Increase appropriate contraceptive use
  - Increase teen access to contraception
  - Delay sexual intercourse initiation

- **Long Term**
  - Decrease teen pregnancy rates
  - Decrease high school dropout rates due to teen pregnancy

*Data sources:
Student evaluations and questionnaires, records of classroom attendance, clinic records of number of students visiting the clinic, clinic records of number of students starting contraception or switching to a more effective type of contraception*
Goal:  
Develop a community-based approach to addressing teen pregnancy in Wolfe County.

Objective:  
Create a Community Action Group with representation of at least five diverse groups including the school board, parents, and teens during the first month of program planning to help guide successful program development.

Rationale for Objective:  
Creation of a Community Action Group will bring multiple areas of expertise to the table and will help create a program that fits the culture and specific needs of the Wolfe County community.

Measures of Accomplishment:  
- Letters of support from each group member within the first month of the planning period  
- All meetings attended by at least one member of each group  
- Successful program development and implementation with a community focus  
- Development of lasting collaboration between community partners

Activities:  

<table>
<thead>
<tr>
<th>Activities:</th>
<th>Person/Agency Responsible for Activities:</th>
<th>Activity Timeline:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letters of support acknowledging the role of each group within the Community Action Group</td>
<td>Jeannie Scott, program coordinator, will be responsible for coordinating group involvement and obtaining letters of support</td>
<td>Within the first month of the planning period</td>
</tr>
<tr>
<td>Two meetings during the planning phase, one at the beginning and one at the end of the planning period</td>
<td>Jeannie Scott will coordinate and lead both group meetings; William Todd will coordinate information from meetings into program development; all other program team members will attend all meetings to contribute to discussion and provide expertise</td>
<td>The first meeting will take place within the second month of the planning period, the second meeting will occur during month five of the six-month planning period</td>
</tr>
<tr>
<td>Meetings between each academic semester (2 times per year) throughout the program duration to review program results and make program revisions</td>
<td>Jeannie Scott will oversee all meetings and will disseminate results; Jessica Davis, Anita Moore, Natalie Bell, and Joan Smith will share program experiences; William Todd will review program suggestions and work to implement these into the educational portion of the program</td>
<td>Each June and December throughout the three-year program duration</td>
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</table>
**Goal:**
Increase the number of students correctly utilizing contraceptive methods by 20% from year one to year three.

**Objective:**
Increase the number of students correctly using contraceptive methods by increasing student access to contraceptive methods both at school and in the clinic while increasing student knowledge of correct usage through education and counseling.

**Rationale for Objective:**
Students will only be able to utilize contraceptive methods correctly when they have the knowledge about how to do so and have access to the different contraceptives.

**Measures of Accomplishment:**
- Increase knowledge as evidenced by a larger number of correct answers to questions regarding contraceptive methods on student surveys
- Increase in number of students using contraception (i.e. condoms) as evidenced by answers on student surveys
- Increase in number of students utilizing prescription contraceptive methods as evidenced by the number of students who initiate a contraceptive method through the clinic
- Students changing from a less effective to a more effective contraceptive method

**Activities:**

| Classroom educational sessions | Person/Agency Responsible for Activities: Jessica Davis and Anita Moore will teach classroom sessions at the high school; Natalie Bell and Joan Smith will teach classroom sessions at the middle school | Activity Timeline: Taught twice per homeroom per semester from program initiation throughout the duration |
|linik visits both in school and at the health department | Clinic visits will be available Monday through Friday in the afternoon at either the school or health department; the clinic will be open even during summer throughout the program duration |

| Individual and group counseling at both the school and health department | Anita Moore and Joan Smith will provide counseling at both the school and health department during clinic hours | Counseling will be available at lunch during school each day in the health suite and after school at the health department; counseling will be available at the health department during the summer |
Goal:
Increase knowledge surrounding teen pregnancy, pregnancy prevention, and safe sex behaviors by at least 40% from year one to year three.

Objective:
Increase teen knowledge surrounding sexual health throughout the three-year program through a series of educational sessions in the classroom, small group sessions, and individual educational encounters in order to decrease teen pregnancy and allow students to make educated decisions regarding sexual behaviors.

Rationale for Objective:
An increase in knowledge and understanding is integral for students to change sexual behaviors in order to encourage students to make educated decisions regarding sexual behavior and practice safe sexual behaviors to reduce teen pregnancy.

Measures of Accomplishment:
- Consistent or increasing number of students attending sessions throughout the program duration
- Increase knowledge as evidenced by a larger number of correct answers on student surveys

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<td>Classroom educational sessions</td>
<td>Jessica Davis and Anita Moore will teach classroom sessions at the high school; Natalie Bell and Joan Smith will teach classroom sessions at the middle school</td>
<td>Taught twice per homeroom per semester from program initiation through the program duration</td>
</tr>
<tr>
<td>Small group discussions and individual counseling</td>
<td>Jessica Davis, Anita Moore, Natalie Bell, and Joan Smith will teach classroom sessions at the middle school will lead small group discussions during lunch; Anita Moore and Joan Smith will provide counseling services at the school and health department</td>
<td>Monday through Friday throughout the program duration even when school is not in session</td>
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