

I. OVERVIEW OF RACIAL AND ETHNIC DISPARITIES FOCUSED ON BY PROJECT

The following information is highlighted from the initial community needs assessment in the grant application for 2001 to 2005:

During the 1996 to 1998 baseline period, Mobile County's infant mortality rate for all women of reproductive age was 12.4 (8.9 for Whites, 16.9 for Blacks). The teen (age 10 – 19) infant mortality rate was 14.1 with a significant racial disparity of 10.8 per 1,000 White and 16.2 per 1,000 Black and other, adolescent infant mortality. During these same years, teenagers accounted for 18.5% of Mobile County's births. There is a racially disproportionate distribution of births to teens. Of the 3,478 births to teens in Mobile County during 1996-1998, 1,385 (39.8%) were to Whites and 2,093 (60.2%) were to African Americans. Infants born to African American teenage mothers have tended to be lower in birth weight. Eight percent of babies born to White teens were low birth weight during 1996-1998; 12% of babies born to African American teens during the same years were low birth weight. After the infant is born, the ramifications of teen pregnancy and repeat teen pregnancy continue. The effects on educational attainment are also great. Adolescent mothers are substantially less likely to complete high school than those who delay childbearing. Few teenage mothers attend college, and less than 1% complete college by age 27.

There is a higher prevalence of births to teenagers among disadvantaged groups. There is also a link to diminished socioeconomic well-being for both children and their mothers. Younger mothers continue to have more children than those who delay childbearing. Because of their lower educational attainment, larger families and decreased likelihood of being married, teenage mothers acquire less work experience, attain lower wages and are substantially more likely to live in poverty.

In order to effectively address the multiple risk factors attendant with teenage pregnancy and teenage infant mortality rates, the TEEN Center Healthy Start project targeted African American females, age 10-19 years who reside within Mobile County.

II. PROJECT IMPLEMENTATION

Outreach and Client Recruitment:

Approach:

The Outreach and Client Recruitment activities are conducted primarily through two avenues. First, clients are recruited from referrals received from community-based organizations, such as the Department of Human Resources, hospitals, juvenile justice, private physicians, relatives/friends/parents, schools, self-referrals, TEEN Center staff, and Mobile County Health Department's Women's Center. The second Outreach and Recruitment activity involves health fairs, community outreach efforts, and community education. Through these efforts, the staff are able to inform the community about the TEEN Center services; the importance of early entry into prenatal care, and numerous other topics related to optimum pregnancy outcomes. They are also able to distribute

pamphlets, brochures, and business cards as another means of outreach and recruitment. Scheduling appointments, making phone calls, making field visits to clients' homes, following up on non-compliant clients, retrieving data on immunizations and well baby visits, sending medical release forms to private providers (for tracking), transporting clients to TEEN Center and other agencies for appointments were means of reaching the participants.

Components:

There is currently one full time Outreach and Recruitment Worker (OW), whose primary focus is outreach and recruitment. The Case Management Coordinator supervises the OW. The Outreach Worker is afforded the same intense training as the Family Support Worker. This training includes program protocols and procedures, communication skills, resource development, dealing with difficult people, defensive driving, and health department sponsored public health topics via satellite and conferences. The Outreach Worker provides support to other programs by contacting and recruiting participants that have been difficult to contact, have relocated, or are non-compliant. The Outreach Worker has seven working days to make contact with the prospective participant, either by telephone or a home visit. The OW physically escorts the client to Case Management for the intake process. The OW will give the clients an overview of every service provided by the TEEN Center, as well as introduce the client to each department during a tour of the facility. Once a potential client is recruited, the initial intake and enrollment process is initiated in the Case Management (CM) department. The process entails a one-on-one interview with a CM who completes the initial screenings and psychosocial assessments and makes referrals for appropriate services. The Outreach Worker uses forms developed by Case Management for data collection, and the Electronic Medical Record (EMR) is used to track well-baby visits, problem visits, and immunization records for the services provided by The Mobile County Health Department clinic sites.

The major barriers and challenges for TEEN Center participants include: 1) lack of safe, affordable housing away from the influence of an active drug culture; 2) limited numbers of appropriate shelters for pregnant and parenting teens in a crisis; 3) lack of affordable and accessible child care; 4) insufficient education and literacy skills to maneuver through the maze of available resources; and 5) limited employment opportunities. These are shared barriers and challenges for the pregnant participants as well as the interconceptional participants.

Resources:

Mobile County Health Department has recently incorporated the Electronic Medical Record (EMR) to track well-baby visits, problem visits, and immunization records for the services provided by MCHD clinic site.

The consortium meeting serves as a means of bringing together representatives from community health care centers, school systems, city officials and public and private agencies to address problems of teenage pregnancy, high infant mortality rate, sexually transmitted diseases (STD) and domestic violence. These meetings will allow the outreach workers and the consortium to collaborate and develop strategies to address the above problems.

Case Management:

Approach:

Case Management (CM) is designed to help teens identify and access the appropriate services that best suit their needs. It also provides assistance and support, which enables the client to become a more responsible and productive citizen. Case Management also assists the clients in enhancing their decision-making skills, communication skills and personal development. Once identified, the Case Manager will collaborate with the Mobile County Public School System, Strickland Youth Center, Municipal Court, Counselors, Department of Human Resources, community groups, Mobile Police Department Social Workers, and other agencies to maximize adolescent access and use of program services.

Components:

Case Management conducts an assessment of the participant's health, social, educational and career developmental needs. The same level of case management is provided for pregnant and postpartum/interconceptional participants. Case Management services are typically available on a walk-in basis. Prospective pregnant and/or parenting participants walk-in or are brought by the Outreach Worker daily to enroll in the TEEN Center services. Several screening and assessment tools are administered during the enrollment process. During the initial intake with the CM, the participant is actively involved in developing his/her service care plan. Based on the information gathered in the intake through screenings and psychosocial assessments, the CM determines which services the participant may need, in addition to those specifically requested by the participant. After an agreement is made between the participant and the CM, a care plan is developed. An individual care plan is created to reflect the outcome of the assessment. After the care plan is completed, the participant and CM sign an "Affirmation of Care Plan Agreement," indicating that the participant is in agreement with the services for which he/she will be referred. At the initial intake, the CM inquires as to the participants' current medical home or lack of a medical home. If a participant has a primary care physician, it is indicated on the initial intake form. If the participant does not have a medical home, the CM and Family Support Program Coordinator and Fatherhood Manager (males) will inform the participant of the benefits of having primary care physician and offer a referral to one of the Mobile County Health Department's many satellite clinics. If the participant needs assistance in making an appointment, the Case Management and/or Family Support departments will provide assistance.

The risk-assessment and screening instruments utilized in the program were previously submitted. The TEEN Center's case conferences are used to evaluate the participants' progress or lack of progress, utilization of services, disciplinary problems and concerns, and completion or termination of services. Case conferences also provide an open arena for communication and dialogue, which helps each department to fill information and service gaps that may improve the ability to serve the participant. Case conferences establish support, trust, guidance and confidence among supervisors and employees in the various departments, which produces a team approach to helping each participant. If a service is unavailable at the TEEN Center, a referral is made to an outside agency. Tools

used with the typical pregnant participant include: Stress-Risk Assessment and Social Support, Anger Management and Depression Scale (for pregnant adolescents only); 4 P's Plus Screen for Substance Abuse in Pregnancy, BDI Depression Scale, and Domestic Violence Screening Instrument. Tools used with the typical postpartum/interconceptional participant include: Stress-Risk Assessment, Social Support, Anger Management and Depression Scale (for males and non-pregnant females), BDI Depression Scale, and Domestic Violence Screening Instrument. Infants and toddlers are not screened in this program; however, screens provided by physicians, nurses, and other medical providers are tracked and recorded. Case Management receives referrals from various local agencies including: Mobile Public School System, Mobile County Department of Human Resources, Mobile County Health Department's Women's Center, University of South Alabama's Children's and Women's Hospital. Referrals are also received from churches, parents, and self-referrals.

Case Management is currently staffed with one Case Manager, one office assistant, and an outreach recruiter. The TEEN Center's CM holds a bachelor degree in the Social Sciences. While she is not licensed or certified in any area requiring continuing education or annual certifications, the CM does receive on-going education via in-house satellite conferences on various health topics, newsletters, and updates from state health agencies, statewide health publications, and other shared information from community agencies in the area such as the child protection agency.

Case Management has identified barriers common to other departments within the TEEN Center that affect the participants' ability to receive the necessary services. Age limits, lack of transportation, unemployment, lack of marketable skills, low education level, absence of social support and guidance, lack of food, clothing and shelter, and inadequate medical care and childcare are among some of the major barriers. The program has overcome many of these barriers by providing assistance to the participants in the aforementioned areas. For example, participants can obtain bus passes from Case Management to access public transportation. The TEEN Center also provides van services, which are available to transport participants to the TEEN Center, doctor's appointments, etc. The Family Support Workers also provide needed transportation for the participants. The Resource Development component of the TEEN Center assists participants in seeking housing, jobs, transportation, etc. Additionally, GED preparation classes are offered in the day program, with transportation provided to those participants in need. In the event that the center does not have a service available that can help meet the needs of the participant, referrals are completed and forwarded to other community agencies with appropriate follow-up.

Barriers identified that prevent participants from accessing a medical home may include: 1) lack of knowledge as to what defines a medical home and its benefits; 2) lack of understanding of available resources in the community; 3) lack of income or insurance; 4) lack of transportation; 5) educational deficits; and 6) lack of social support system. To overcome these barriers, the Case Manager educates and informs participants during the initial interviews and subsequent meetings about the importance of preventive care through regular medical visits. All participants accessing the TEEN Center services have

the option of establishing a medical home at the onsite Newburn clinic. The full service clinic provides adolescent and pediatric care, immunizations, well-baby visits, family planning, HIV counseling and testing, and STD screening and treatment. Finally, the TEEN Center provides transportation as needed to medical visits for all participants and their children.

Resources:

Funding cuts within the Mobile Police Precinct Program, the City Grant Program, and DHR JOBS Program led to a decline in the number of participants referred to TEEN Center programs.

The recently acquired statistical package for the Social Sciences (SPSS) Software enhanced data management and reporting capabilities.

Health Education and Training:

Approach:

The project's health education, training and outreach activities include components to address both the participants' and the community's knowledge of Perinatal health, interconceptional health practices and related health consequences. A number of healthcare providers, consisting of nurse practitioners, clinic nurses, health educators, and hospital nurses and education coordinators who serve the target population, have provided input to develop the client literature. The printing of these educational materials has been completed and over 2,700 pieces have been distributed throughout the county to health agencies, churches, schools, and community agencies. Secondly, educational programs featuring quarterly themes that relate to health care concerns of the target population have been organized and are being presented on a regular basis at the TEEN Center. Monthly meetings are held on different topics, all of which relate to the Healthy Start grant objectives. The Health Education Department also provides educational opportunities by using a multi-media approach. The classes that are taught consist of communication skills, decision making, goal setting, conflict resolution, anger management, STD's, pregnancy prevention, pregnancy care, childbirth techniques, newborn care, and labor and delivery techniques. These classes highlight information related to HIV/STD diagnosis and treatment, smoking cessation, domestic violence, reduction of risky behaviors, healthcare needs and parenting concerns.

Components:

Health Education messages for community and TEEN Center participants are disseminated in a variety of formats including physical presentations. The Health Education Department is currently staffed with three Health Educators (HE): One Health Education Coordinator (Health Educator II), two Health Educators (Health Educator I), and one clerk (Office Assistant I). Various agencies (local churches, community groups, probation officers, juvenile court system, and public and private schools) regularly contact the Health Educators requesting health education presentations. The dates and topics to be presented are coordinated and scheduled on the health educator's calendar. A confirmation call is made the day before the scheduled presentation. The demand for health education in the public and private school system remains high with the greatest

increase in Elementary and Middle Schools. When the HEs are in the schools and community, written materials that correlate with the topics being presented are distributed to attendees in the form of handouts, brochures, and pamphlets. During 2004, the HEs provided service to over 14,000 students in the community and distributed over 1,700 handouts on related topics to local participating agencies. Several students have written letters thanking the HEs for helping them make good decisions about their futures and other issues. Additionally, the presence of the HEs in the school and the community has resulted in an increase in the TEEN Center enrollment.

The Health Education Department collaborated with several agencies: the Mobile County Public School System, the private school system, and other Community Agencies (Mobile Aids Support Services (MASS), DHR, and Police Precinct, Mobile OB-GYN, Alabama Cooperative Extension Agency, Women's Center, and USA Children's and Women's Hospital) to provide awareness and prevention education programs on a variety of topics for adolescents. These efforts are aimed at reducing behaviors, which place youth at risk.

The curricula used by the HEs are *Real Talk*, *Wise Guys*, *VIBES* (Values Impacting Behaviors and Empowering Students), *Boy Scouts Learning for Life*, *Life Planning for Youth*, *Street Wise to Sex Wise*, and *Family Connection*. Volunteers from local physician's offices, USA Hospital nurses, and community leaders assist in conducting some of the educational activities. To keep abreast of current information, the HEs attend several training workshops throughout the year and regularly review peer articles, publications, and Internet sources for the latest in Health Education information.

A Career Center (CC) is located on-site and consists of a 15-unit computer laboratory. The objectives of the Career Center are to provide tutoring and one-on-one assistance to clients in all academic areas with an emphasis on math and reading. To accomplish this goal the CC utilizes the *Josten's Learning Program*, which includes: High School Reading/Writing, Mathematics, Literacy and GED Expansions Foundations in Reading, Science, Waterford Mental Math, JCAT Assessment K-8, Life and Employability skills, Microsoft Works 4.5 and Windows and Middle School Core Curriculum

With these programs the staff can easily assess individuals and integrate them appropriately into the program. This computer lab/educational setting is dedicated to providing the personal, educational, and career development skills requisite for self-sufficiency and employability for program participants. The computer programs allow the participants to work at their own pace. By combining a suitable learning environment with motivation from staff, the participants are encouraged to maximize their academic potential. The on-site GED program provides small classes and study groups that afford participants with the individualized attention they need to achieve their goal of receiving their G.E.D.

Staffing of the Career Center includes a full time coordinator and an Office Assistant I. The coordinator, along with the Health Educators, utilizes a combination of classroom instructions and computer learning.

Resources:

Identified barriers that prevent Health Educators from being present in the school system and community include: 1) the lack of knowledge of the TEEN Center programs; 2) lack of understanding of available resources in the community; and 3) lack of social support. Challenges and barriers that prevent students from obtaining their goal of receiving their GED include: 1) lack of transportation; 2) lack of affordable and accessible childcare; and 3) family problems. All of these are shared barriers and challenges for the pregnant and parenting participants as well as the interconceptional participants. However, it has been noticed that the older participants tend to become more noncompliant and difficult to retain if they have lived on their own for some time or seek to be more independent.

The *VIBES* (Values Impacting Behaviors' and Empowering Students) curriculum used in schools and the community was developed by one of our own Health Educators. The curriculum was approved by the Mobile County Public School System Curriculum Department. The response from the schools, churches, and community agencies concerning the presentation of the *VIBES* Curriculum has been favorable and continues to be in high demand within the community.

The Health Education Department collaborated with several agencies to create educational booklets and brochures for non-pregnant girls, pregnant teens, and the new teen moms. These booklets come in tear off pads and are distributed to various participating agencies, schools, and physician's offices.

Interconceptional Care:

Approach:

The target population for the Mobile Healthy Start program is African American teenagers. The target population is characterized by being low income, having a high drop out rate, problems with substance abuse and high rates of unemployment and family problems. In addition, many of the teens that get pregnant come from families with a history of early teen pregnancies. Because of these socioeconomic issues, the approach to interconceptional care was to employ paraprofessionals to provide home visitation and parenting education to the project's clients. The paraprofessionals are able to bond with the adolescent, and advise, teach, and assist them throughout the Perinatal period. It was expected that the teen clients would be able to identify with the paraprofessional family support workers and would not be intimidated by their education and/or status. The Family Support Worker was to be a role model for the teen, not only modeling parenting skills, but also life skills. It was the hope of the project directors that the teens would see the level of success to be gained by completing high school or GED and by being gainfully employed. In addition, there was a need to work with the teen's family members (mother, father, grandmother, siblings). The paraprofessional approach has worked well with this group. The paraprofessionals that were hired were required to have some experience working with teens or youth (for example as a teacher's aid or church Sunday school teacher) and also to be familiar with the communities, neighborhoods and schools.

Another aspect of interconceptional care is to identify and track high-risk mothers who have had no prenatal care, are under age 15, are drug users, and/or delivered infants with complications or special needs. The approach to this aspect of care was to use a nurse who was already providing follow-up with health department, women's center patients. The MCHD Women's Center High Risk Care Coordinator visits the USA Children's and Women's Hospital, which houses a Level III Neonatal Intensive Care Unit, where she completes postpartum delivery information sheets.

Components:

The Interconceptional Family Support Program is a parent education program based on the Healthy Families of America Home Visitation model. The interconceptional department conducts services through home visits and intensive follow-up provided by Family Support Workers who are certified parent educators, trained to teach the nationally accredited *Parents As Teachers* (PAT) Curriculum. Interconceptional participants receive detailed instruction in parenting education and skill building techniques during each session. Participants are instructed in the normal growth and development of their child in age appropriate stages of intellectual, language, sensory, and motor skills. In addition to education, the FSWs monitor the participant's birth control method, baby's immunizations, well baby check-ups, and problem visits for compliance. Additionally, interconceptional participants receive counseling for domestic violence, substance abuse, maternal depression, anger management, and other concerns. Transportation assistance is provided by the FSWs, TEEN Center vans, and bus passes. Collaboration with other community agencies allows access to additional resources to insure the participants and their babies receive needed services. In-house Health Education and Community Professionals provide monthly Teen summits on a variety of topics such as: Healthy Relationships, Child Safety, STDs and HIV, Tobacco Cessation, Pregnancy, Labor and Delivery, Child Abuse and Neglect, Self-esteem, Domestic Violence etc. During the two years after a participant's delivery, she is assisted by the same FSW assigned upon entry into the program. The FSW conducts bi-monthly home visits.

Infants and toddlers of any client enrolled in the TEEN Center have access to onsite child care. The HUGS Room is the TEEN Center's equivalent to a learning and development center that provides childcare for parenting teens while they are attending various TEEN Center programs. The HUGS Room is manned and operated by two full time employees who are certified to conduct the *Parents As Teachers* curriculum.

The Family Support Department is currently coordinated by a Public Health Nurse with 15 years of public health experience. Also working in this department are an Assistant Coordinator, 8 full-time Family Support Workers, an Office Assistant, 2 Transportation Aides and 2 childcare workers. The Family Support program takes a team approach when working with clients. The Coordinator and Assistant Coordinator share the responsibility for program monitoring. This monitoring is on-going to: (1) ensure accuracy and accountability; (2) provide guidance in meeting the needs of the clients; (3) monitor implementation of the prenatal and postpartum curriculum; (4) monitor data collection methods; and (5) make appropriate recommendations.

To encourage participants to take advantage of the services provided by both the TEEN Center and the Family Support Worker, incentives are given. Compliance to and active participation in the program results in the client's earning of baby products, which the client selects from the "Baby Bucks Room". "Baby Bucks" are earned for program participation and "Bucks" may be redeemed for products such as diapers, infant car seats, strollers and other items.

Interconceptional health care components are coordinated in Mobile County by an integrated Perinatal health care system of which the Health Department's TEEN Center is a part. The TEEN Center provides financial support for the Women's Center's High Risk Care Coordinator to identify and track high-risk mothers. This task is accomplished by the nurse conducting daily postpartum visits to new mothers at the Children's and Women's Hospital. The nurse identifies mothers who had no prenatal care, are under the age of 15, are drug users, and/or delivered infants with complications or special needs. For infants with special needs, the Care Coordinator makes a referral to an MCHD Pediatric Care Coordinator to schedule an appointment for a two-week check up. During this check up, the infant is enrolled in the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) screening process. The Care Coordinator continues to follow mother and infant for compliance with protocol for infants with special health care needs. The nurse coordinator also sends a referral to Case Management at the TEEN Center. The mother and infant are recruited into the program during the interconceptional period (if they are not already participants at the TEEN Center). Infants needing specialty services, as identified by the EPSDT screening process, are referred to Alabama Early Intervention Services. This agency is practically on the same campus as the TEEN Center.

Changes during the project period: Some departmental reorganization occurred during the project period. During 2003 the number of Family Support Workers increased. In order to maintain quality and a high level of care, supervision became a priority. The interconceptional department was restructured to focus on parenting education, transportation and onsite childcare. Data tracking was assigned to the Case Management Department.

Resources:

Maintaining qualified FSW staff to provide services has been a challenge because of the intensive nature of the position. These individuals are called upon to assist the clients with a host of issues to lead to improved overall health and well-being. In addition, participant problems such as low self esteem, hopelessness, and lack of motivation intensify the Family Support Worker stress that often leads to emotional burnout. Various in-services are offered through the MCHD and other community agencies that address the issue of burnout. Whenever possible, staff are made aware of these seminars.

Another change has occurred within the Mobile County Public School System. With the advent of "No Child Left Behind", there has been new impetus for teens to stay in school. While this is very positive, teen participants are not available for home visits and group education until late in the afternoon. This has led to changes in staffing and

scheduling of TEEN Center services and programs. The TEEN Center is working closer with the school system to provide services in the schools.

An event that facilitated effective interconceptional care education was the opening in 2004 of a new MCHD Women's Center facility directly adjacent to the TEEN Center. The co-location of the Women's Center adjacent to the TEEN Center campus has facilitated communication and referrals.

Depression and Screening Referral:

Approach:

The Counseling Program was created to help teens improve their mental and emotional development by providing both individual and group counseling services. The Counselor conducts initial assessments for prenatal and postpartum depression participants. Nearly 25% of all teen mothers at the MCHD Women's Center reported experiencing high rates of depression at some point during and after their pregnancy. To address the problem, the project developed a plan to coordinate both medical and mental health services in order to improve accessibility and compliance with mental health appointments. The plan stated that after a positive screen for depression, the case managers would refer participants for a skilled assessment by the counselor. To further help serve participants screened as high risk, the Counselor provides life skills classes on anger management, decision-making, alcohol and drug use, teen pregnancy, self-esteem, goal-setting, money management, abstinence and premarital sex, conflict resolution, and many other topics. Participants identified as high risk are referred to the appropriate life-skills classes as a means of decreasing risky behaviors. The Counselor monitors and documents the participants' usage of mental health and referral services.

Components:

Prenatal screening for depression is conducted during the initial intake process. Participants who screen positive for depression are referred to on-site counseling services where the counselor provides further clinical assessment. There are a few other local agencies in the community, such as Mobile Mental Health and Catholic Social Services, which provide mental health services. However, for continuity of care, consistency, compliance and convenience, the TEEN Center is staffed with a full time Master's level counselor to provide individual and group counseling to participants diagnosed with Perinatal depression. The counselor works closely with the contracted psychiatrist who provides consultation services and prescribes medication to participants on an as needed basis. The tools used to screen for depression include the 4P's (Parents, Partner, Past, and Pregnancy), Screen for Substance Abuse in Pregnancy, BDI (Benders Depression Inventory), Anxiety Health Risk Assessment, Stress Risk Assessment/Anger Management and Depression Scale, Beck's Depression Inventory (prenatal participants only) and the EPDS (Edinburgh Postnatal depression Scale). If the participant is determined to be clinically depressed, a referral is made to the consulting psychiatrist for a DSM-IV diagnosis and any necessary medication.

To further aid participants screened as high risk, the Counselor provides life skills classes addressing anger management, decision-making, alcohol and drug use, teen pregnancy, self-esteem, goal setting, money management, abstinence and premarital sex, conflict

resolution, and many other topics. Participants identified as high risk are referred to the life-skills classes as a means of decreasing risky behaviors. The TEEN Center has been established in the community as a valuable resource for addressing Perinatal outcomes surrounding pregnant and parenting teens. The health education component is one of the premiere intervention/prevention teens strategies utilized by the program. As mentioned in the Health Education section, HEs provide culturally sensitive, age appropriate health education materials and presentations to schools, churches, community groups, recreation centers, and clubs on a daily basis. Maternal depression is addressed by the HEs through these venues and by the mental health therapist on-site at the TEEN Center. The TEEN Center is the only program that offers depression screening, assessments, and treatment for pregnant and parenting teens in the community.

Resources:

A critical gap in the depression screening and assessment process was identified and resolved early. There were a number of participants who had screened positive for depression during the initial intake process, but never made it to counseling for further assessment and treatment. To fill this gap, all new intakes, prenatal or postpartum, are now introduced to the counselor as a part of the intake process. With this system, participants have the opportunity to meet the counselor in person and receive pertinent information about what is offered through counseling services. The hope is that this initial meeting will make the clients more inclined to make a decision to take advantage of the mental health services available.

Other barriers identified include the lack of reliable transportation and the availability of services. To overcome these barriers, transportation is provided for participants when needed, and the TEEN Center has partnered with the University of South Alabama's Department of Psychiatry to provide psychiatric services to those clients determined to be in need of intensive mental health treatment. The Mobile County TEEN Center had originally partnered with a psychiatrist in the private sector; however, due to scheduling issues and location, a change in providers was deemed necessary. Thus, the partnership with USA, Department of Psychiatry was born. Now the new psychiatrist is closer and more easily accessible to the participants.

Local Health System Action Plan (LHSAP):

Approach:

Substance abuse among pregnant women is a major problem in Mobile County as identified by the FIMR Task Force, (known as the *Alabama Baby coalition, or ABC*), during their initial case reviews in 2000. While following up on a recommendation by the Case Review Team to assess the substance abuse screening, referral and treatment system in Mobile County, it was realized that Mobile had no formal coordinated substance use/abuse treatment network to address Perinatal substance abuse. Community awareness of the scope and size of the problem was lacking. Therefore, it was discovered that few providers were screening their patients for substance use or abuse. There was no standardized tool or method for screening clients. To compound the problem, only one treatment facility was found to provide gender-specific treatment for pregnant women, and their capacity was extremely limited. This information was shared with the TEEN

Center Consortium who unanimously agreed to address the problem. Subsequently, the initiative became the focus whereby the project established a local health system action plan.

Community awareness of the scope of the problem followed by multi-disciplinary support for improvement efforts were needed before successful development and implementation of improvement strategies could be accomplished. The Consortium and *ABC* worked together to bring Dr. Ira Chasoff, a leading pediatrician in the field of Perinatal substance abuse, to Mobile to raise community awareness of the problem. From this community awareness initiative, a core group was formed to take the lead and work closely with the TEEN Center to address Perinatal substance abuse. In December 2000, the group's official name became "*CLEAN START: A Partnership with Alabama Baby Coalition*". Committee members included the Healthy Start Project Director and Project Coordinator, a municipal court judge, the *ABC* Chairperson (OB-GYN), the Director of the Department of Human Resources, the Director of Nursing for the Public School System, the Director of Community Policing for the City of Mobile, a Junior League officer, the Director of a Substance Abuse Treatment Center, the Director of a Volunteer Organization, the Director of Mobile Mental Health, and a public health social worker. The municipal court judge served as the chairperson and the executive director of the volunteer organization served as the co-chairperson.

Components:

Components of the planned interventions were organized into the acronym **SART**, and included the following steps:

1. **S**creening: Identification of those women with a history of substance abuse was the first step. Recognizing differences in types of prenatal care facilities (i.e., health department and community clinic facilities, hospital clinics, and private provider offices), the need for standardized screening and assessment methodology/tool, as well as buy in from the various provider groups, would be challenging but essential to success. After searching for existing tools, *the 4P's Plus Screen for Substance Abuse in Pregnancy* method was chosen, and a license to use these materials purchased from the National Training Institute.
2. **A**ssessment on a more in-depth basis would follow for any pregnant woman screening positive on the *4 P's Plus* tool. Contracts to conduct the assessments were arranged with appropriate local treatment facilities that were able to provide pregnancy-specific treatment on either a residential or outpatient basis.
3. **R**eferral in a timely manner was to follow for any client whose comprehensive assessment indicated a need for treatment. Referrals were to be made to those facilities offering the most appropriate services based on the needs of the client.
4. **T**reatment program entry was the last step in the SART process. This phase was probably the most challenging because it necessitated convincing the client of the need for treatment, both for her own benefit and that of her family.

To support successful utilization of the process, a provider's guide to substance abuse resources in Mobile County titled "*Healthy Moms make Healthy Babies*" was developed as a joint venture of the Alabama Baby Coalition and Clean Start. Full information was

included for each facility including name, address, contact person, type of facility, target population for service, types of insurance accepted, and additional services provided for clients; copies were mailed to all providers in the area.

Through Healthy Start funding, a Coordinator was hired to facilitate the activities of the group and carry out the local action plan. An initial challenge was how to begin the SART (screen, assess, refer, treat) process in Mobile County. In 2001, an agreement was reached between the Clean Start group and Mobile County Health Department to conduct a pilot project at the Women's Center to implement the SART process for all pregnant women. Training on use of the *4 P's* screening tool was provided to Women's Center staff. A reporting/tracking system was developed for notifying the Coordinator of clients screened. Those screening at high risk for substance use/ abuse during pregnancy were referred to treatment. It was the hope of the Coordinator that the client would recognize the need and would enter treatment. This project was implemented in December 2001.

The data gathered from the pilot was as follows: 1,263 women (371 teens) were screened; 495 of the women (118 teens) screened positive for substance abuse; 491 (118 teens) of those women were assessed further and 125 (37 teens) of them assessed positive. Of these 125, twelve (7 teens) were referred to substance abuse treatment facilities; seventy-six (22 teens) of the women refused referral; thirty-seven (8 teens) of the patients were not referred; and none of the referred women entered treatment.

In October 2002, internal evaluation of the pilot project began, which identified challenges to the successful outcomes initially established. Since none of the women that assessed positive had entered treatment, the procedure by which women were screened, assessed, referred, and tracked had to be analyzed. The *CLEAN START* Coordinator was replaced with a Licensed Practicing Counselor (LPC) whose first responsibility was to assist the core group in identifying problems and finding solutions for the pilot project.

After careful review, it became clear that the nurses and social workers at the Women's Center conducting the screenings were overwhelmed and unable to perform the screens in a meaningful manner. The staff also reported that the women were denying substance abuse, or refused further assessment or referral to a treatment facility when they did admit to using alcohol or drugs. Another obstacle to treatment appeared to be fear on the part of the women as to the ramifications of admitting to illegal drug use. Focus groups revealed that many of the women were afraid they would lose their children to the Department of Human Resources. They also revealed that the women had transportation, childcare and social support problems. In addition to those barriers, many times after a referral to a program, there was no follow-up to encourage and support the women.

After ten months of the pilot project, a recommendation was made to the core group to narrow the focus to a subset of patients at the Women's Center. Because the TEEN Center had had success with teen patients at the Women's Center and could provide additional wrap-around services to the patients, a decision was made to target only teens (the local Healthy Start target population), instead of women 20 and older.

A new protocol was developed in December 2002 outlining the steps of the new pilot project procedures. Trained interviewers from the University of Alabama (local evaluators) would interview pregnant teens who present for their prenatal appointments, administer the *4 P's Plus* screening and refer those girls who screened positive for substance abuse to the TEEN Center for follow up. The potential client is assigned to an Outreach Worker who recruits the teen mother into the program. The *CLEAN START* Coordinator is given the referrals for all teens assessing positive for smoking, alcohol or substance abuse. Depending on the severity of the substance abuse problem, the prenatal client will receive either in-house treatment, referral to an intensive outpatient program, or a residential treatment facility.

This new procedure began December 9, 2002 and proved to be more effective than the previous approach. In 2003, seventy-one pregnant teens were screened with twenty screening positive for smoking, alcohol or other drugs. Of those screening positive, fourteen assessed positive and were referred into treatment. Even though more patients had been screened in the initial trial, none had entered treatment. With this new procedure, twelve pregnant teens consistently participated in substance abuse treatment. Additionally, substance abuse treatment groups were scheduled to target not only the teens then receiving individual treatment, but also other pregnant teens that are at risk for substance abuse and/or a second pregnancy. For 2004, seventy-six pregnant teens were screened and ten (13%) assessed positive. Of these, all ten were referred for counseling, and nine (90%) entered therapy.

Resources:

The technical assistance received from Dr. Ira Chasnoff of the Children's Research Triangle enabled the *CLEAN START* core group to develop a plan without any challenges. The cooperation and varied community resources represented by members of the *CLEAN START* core group was a major asset in the development of the plan; the Healthy Start Project Director and Project Coordinator, members of the Alabama Baby Coalition's Community Action Team, and the Consortium chairperson were also involved.

The primary person now responsible for the implementation of the plan is the *CLEAN START* Coordinator; this serves to provide focused efforts and helps ensure continued compliance. The Healthy Start Project Coordinator is responsible for making sure the plan's goals are monitored and achieved.

As mentioned earlier, the major challenge to achieving the project's goals was the inability to get women into treatment. The new approach adopted in December 2002 seems to be working well for TEEN Center clients. The local health system action plan was used to bring the problem of Perinatal substance abuse to the forefront within the community. Until the Healthy Start project began to address the problem, many leaders and members of the community were unaware of the impact of Perinatal substance abuse on infant mortality.

CLEAN START will continue to monitor and evaluate the success of the program. Several providers have shown interest in the program by sending their patients to the TEEN Center for screening, assessments, and/or treatment. Provision of continued community education on the subject of substance abuse in pregnancy is managed through a speaker's bureau, public service announcements, flyers, pamphlet distributions, and participation in numerous health fairs.

CONSORTIUM:

Approach:

The Consortium was established in 1997, originally as the Family Oriented Primary Health Care Clinic Governing Council. When the TEEN Center received the first Healthy Start grant the Governing Council was reorganized in order to have a separate consumer advisory council serving only the Healthy Start project, and this marked the beginning of the TEEN Center Consortium.

Components:

The Consortium has representation from grass roots organizations, churches, community volunteers, business leaders, juvenile justice system, consumers, local and state Maternal and Child Health, medical and social service providers, hospitals, governmental agencies, and community health centers. Since its inception, membership included stakeholders and collaborative partners such as March of Dimes, Mobile Housing Board, City of Mobile, Big Brother/ Big Sisters, Zeta Phi Beta Sorority, and the Drug Education Council.

Resources:

Events that facilitated implementation of the Consortium were the establishment of the State Perinatal Advisory Council, the Regional Perinatal Advisory Council and Mobile County's Children's Policy Council. These organizations focused local attention on infant mortality, low-birth weight and pre-term births and the problems of teenage pregnancy. This attention assisted in recruiting active consortium members.

Additional Elements:

During the four years of the Healthy Start grant the number of Consortium members has ranged between 40 and 45. Program participants who are members have averaged 30% of the total. African Americans who are members have averaged 55% of the group (45% have been Caucasian). Approximately, 40% of members have been men and 60% have been women. Other agencies and organizations represented include government (30%); Community based organizations (15%), providers (5%), County Health Department (13%), Community participants and parents (2%), and private agencies (5%). Throughout the four years, 85 to 90% of the members have been active.

Early in the project it was determined that the best way to involve teen consumers, was to organize a separate committee whose members would also be members of the Consortium. The original members selected the name, the "Youth Brigade", and the purpose of this group is to ensure consumer participation and input in all aspects of the TEEN Center. There was never a shortage of providers represented on the Consortium therefore the Youth Brigade facilitated consumer participation. This has proven to be

effective in that it guarantees consumers are present at all Consortium meetings. The target population for the project is African American adolescent mothers. The composition of the Youth Brigade includes nearly 50% African American teen mothers.

By-laws were adopted which state that the role of the Consortium will be to guide the framework of the program in an advisory capacity. Consortium meetings are open to the public, and meetings are held at least twice a year. Several committees were established including the Executive Committee, Sustainability Committee, Community Involvement Team, Youth Brigade, and Public Information Committee.

Activities that the Consortium has utilized to assess ongoing needs include focus groups, which are organized several times a year, and meetings of the standing committees. Questionnaires have also been mailed to members or given to members at meetings to solicit perceived needs, identify resources, establish priorities and monitor implementation. The Consortium also assisted with the 5-year Maternal and Child Health Needs Assessment for the State of Alabama. The Consortium organized and implemented three community forums in Mobile County seeking community input for the MCH Needs Assessment. The data included in the needs assessment came from many sources including focus groups of consumers, providers and Consortium members.

Other consortia serving the same population include the Alabama Baby Coalition (ABC), the Children's Policy Council, Coalition of 100 Black Men, the Women's Fund of Southern Alabama, and Alabama Campaign to Prevent Teen Pregnancy, The Education Foundation of Mobile, the Regional Perinatal Advisory Council, and the Health Partnership Coalition. The TEEN Center has relationships with all of these organizations. TEEN Center staff and/or Consortium members are members of many of these consortia. These include the ABC, Children's Policy Council, Alabama Campaign to Prevent Teen Pregnancy, and the Health Partnership (ecumenical) Coalition. The Coalition of 100 Black Men sponsors an alternative school and the TEEN Center has had a contractual relationship with this organization. A TEEN Center client received the annual \$500 grant award in early 2005 from the Women's Fund of Southern Alabama. The TEEN Center has participated in this organization's needs assessment process.

Mobile County has many strengths that have contributed to the development of such an active Consortium. First, there are many large and active African American churches that have a vested interest in the work of the TEEN Center. Second, the faculty and specialists of the University of South Alabama College of Medicine are dedicated to improving Mobile's health care system. Mobile County Public School System has a relatively new and dynamic superintendent. Finally, the City of Mobile is fortunate to have a forward looking city government which has received many federal grants to improve the community. Mobile County's economic base has also been changing. Jobs have been lost, because paper mills, chemical plants, and clothing manufacturing businesses have closed. This loss of jobs has given rise to organizations working together to bring new industry and jobs to the city. There has been a great push to increase tourism and waterfront development in Mobile. The state and county public health systems have also enhanced consortium development. The MCH Title V Director

has established and staffed a State Perinatal Advisory Council and Regional Perinatal Advisory Council. Alabama has also mandated and funded county Children's Policy Councils. Mobile County's Council has coordinated very well with the TEEN Center Consortium.

There have been no specific barriers or weaknesses in conducting Consortium activities. The TEEN Center is viewed as an asset to the community and has had no problems engaging community participation in consortium activities.

Strategies employed to increase resident and consumer participation include holding meetings in the late afternoon (after school is out) and keeping meetings to about one hour in length. Transportation and childcare are available to consumers, and refreshments are served. When possible, pre-meetings of Youth Brigade members are held to prepare them for the Consortium meeting and boost their confidence.

The Youth Brigade's Survey Committee has developed and administered two surveys to TEEN Center participants regarding their opinions of the Center's programming. Consortium members encourage Youth Brigade input on the ongoing review of TEEN Center services. At one Consortium meeting, a Youth Brigade member offered valuable advice to the group about how to get more young fathers involved in the Fatherhood Initiative. This information was shared with the Fatherhood Coordinator, and within one week four young fathers had joined the program. In 2001, a Teen Summit was held and attended by more than 200 Mobile County teenagers. The purpose was to empower the teens to make better choices and to help them develop socially, mentally, physically and spiritually. Youth Brigade members and TEEN Center participants demonstrated their leadership and organizational skills by selecting and developing the topics to be presented, creating the conference theme, organizing and conducting committee meetings and participating on the conference agenda.

Collaboration and Coordination with State Title V:

Approach:

The Mobile TEEN Center, a grantee of the Mobile County Health Department (MCHD), maintains an enviable position as a public health agency with historically close connection to the Alabama Department of Public Health (ADPH), the State Title V MCH Agency. The Mobile TEEN Center's grantee, MCHD, provides the foundation for integration into the county's Perinatal care system. Each pregnant teen that is offered services at the Mobile TEEN Center, completes a stress-risk inventory and signs a confidentiality Reciprocation Agreement, which permits incorporation of descriptive demographic data into the management information system. A close working relationship between the Women's Center and the TEEN Center aids in continuity of care and identification of potential teen participants.

Components:

The goal of the TEEN Center is to reduce the individual and familial behaviors associated with infant mortality through active programmatic intervention, and to reduce the adolescent infant mortality rate. Achievement of the first goal requires the collaboration

of multiple community agencies and programs in an innovative yet focused initiative. National, state, and local factors that are promoting program integration include welfare reform and Medicaid managed care. Both of these factors will impact this community during the project period, and both can provide positive impetus for community collaboration and accomplishment of TEEN project goals.

The MCHD opened in-kind, on-site clinics to improve adolescent accessibility to medical services. In addition, these clinics further provide the full services of a resource center to at-risk adolescents. The Teen Center Medical Service provides physicals to all girls who enter the juvenile justice system G.R.O.W.T.H. residential and day program.

The primary agency/program collaborators include: United Way Mobile Can Project, Mobile County Health Department (MCHD), Family Oriented Primary Health Care Clinic (FOPHCC), BAY Health Plan, Mobile Medicaid Maternity Waiver Program, University of South Alabama Department of Pediatrics, Southwest Alabama Early Intervention Council, Mobile County Public School System (MCPSS), Strickland Youth Center, Drug Education Council, Catholic Social Services, Deep South Girl Scout Council, YMCA Big Brothers/Big Sisters Mentoring Program, and CONTACT Mobile Helpline.

Through monthly administrative meetings with the Alabama Department of Public Health, the Mobile County Health Officer (also the TEEN Center Project Director) is able to remain current on initiatives and program policies and procedures. The working relationships between the State Title V initiatives and the local MCH programs are very close. The Health Department's Community Health Center (CHC) has a commanding presence in the delivery of medical and oral health services to the Medicaid population as well as to those children on the State Child Health Insurance Program. The Community Health Center's Director (former Healthy Start Project Director) maintains close working relationships with the Alabama Medicaid Agency as well as the Alabama Department of Public Health, the administrative arm for the SCHIP Program.

In October 2002, the agency's Women's Center began its participation in the statewide Medicaid Maternity Care Program, MOM Care. MOM care-eligible moms are provided with a choice of provider at enrollment. The Mobile County Health Department will continue to provide prenatal care and case management as a subcontractor to the University of South Alabama Hospital, the prime Medicaid contractor in Mobile County. In 2003, a new Women's Center facility was built adjacent to the TEEN Center.

The Alabama Department of Public Health (ADPH) has primary responsibility for the Children's Health Insurance Program (SCHIP). As of October 1, 2002, the State Child Health Insurance Program (SCHIP) became a totally private plan, with Alabama Blue Cross/Blue Shield the only provider of the plan under the product name, ALL KIDS. At the end of fiscal year 2002, Alabama had an in-need population of approximately 135,000 children and the program had enrolled 43% of eligible individuals.

Children's Trust Fund of Alabama- The Mobile TEEN Center continues to receive financial support from the Children's Trust Fund (CTF). CTF funds the home visitation program for first-time mothers, and currently provides annual funding in the amount of \$65,000 to serve young mothers and fathers. The Children's Trust Fund continues to be a significant collaborator and sustainability asset in the Healthy Start initiative. The Children's Trust Fund and the Governor's Office identified the Mobile TEEN Center as one of seven successful projects in the State of Alabama that serve young people.

Mobile County Public School System (MCPSS) - The MCPSS continues as a collaborative partner in the Healthy Start project through multiple divisions including: Student services, Guidance and Counseling, Health Services, and Attendance. They maintain an active role on the Consortium and have facilitated the referral process of adolescents to the TEEN Center. The TEEN Center partnered with MCPSS and secured a contract to provide services to 30 additional young mothers living in the service area. The program is aimed at increasing the literacy of the young mothers through education and empowerment. As mentioned earlier, the school system provides an excellent venue by which HEs are able to conduct mass pregnancy prevention education to adolescents. Schools with high rates of teen pregnancies are identified and targeted for risk prevention and intervention education on a weekly basis.

Department of Human Resources (DHR) – DHR is the local child protection agency for the county and is an ongoing referral source for the TEEN Center. Staff of DHR serve on the Consortium, ABC (FIMR), and CLEAN START. Mobile County DHR collaborated with our Family Support and activities and funded a Parenting Program which consists of two aids who provide in-home services to families who have had children removed. The Mobile TEEN Center has also signed a contract with Mobile County DHR to provide a work setting for their welfare-to-work program participants. The TEEN Center provides on-site referral training of all new Children and Family Services and Foster Care Workers. As a result of the partnership with DHR, the primary care clinic at the TEEN Center became the primary provider of health care for the children in the foster care system in Mobile County in the Summer of 2000. Many teen mothers under DHR's custody are referred to the TEEN Center for parenting education, job preparation, academic assistance, and GED preparation.

Mobile County Truancy Program- The Truancy Program for Mobile County was relocated from the Juvenile Justice Processing Center to the TEEN Center. Truants are picked up daily by police and brought to the TEEN Center for processing. After assessment of the truant, those demonstrating a need are referred to the TEEN Center for services.

Children's Policy Council- Communities that Care- The Children's Policy Council is the result of a legislative mandate for every county in Alabama to address issues surrounding children and youth. The TEEN Center Project Coordinator is a member of Mobile County's Children's Policy Council. In 2004, the Mobile Children's Policy Council received funding from Purdue Pharma, the Corporate Foundation for Children/FACTS, The Channing Bete Company, Inc. and Mobile Works, Inc. to

administer the *Communities That Care Youth Survey*. More than 8,300 school students were surveyed. After reviewing the results, the Policy Council has selected three risk factors which scored high in Mobile County to target: friends who engage in problem behaviors, family management problems, and low neighborhood attachment and community disorganization. One of the adolescent problem behaviors that result from these risk factors is teen pregnancy. In 2005, the Policy Council will develop a three-year plan, which will identify resources, activities and strategies to impact these three risk factors.

University of South Alabama Children's and Women's Hospital (USAC&W) - The USAC&W has collaborated with the TEEN Center since its inception. It is conveniently located next door to the TEEN Center, which allows for ongoing collaboration in a number of areas. The staff of Labor & Delivery, NICU, Social Services, and High Risk OB make weekly referrals to the TEEN Center of teen mothers who had no prenatal care, test positive for drugs, have low birth weight babies, or have no social support. USAC&W also provides an excellent source of educators for the Healthy Start Program. Nurses, residents, medical students, nursing students, and physicians teach a variety of health education classes at the TEEN Center to participants and program staff.

Resources:

The TEEN Center has established relationships with the agencies described above and numerous others involved with the Healthy Start target population. The leaders of these entities along with the Project Director and Project Coordinator are members of the Children's Policy Council. The mandate of the Council is to address issues surrounding children and youth. The group meets quarterly. These meetings give the Healthy Start leadership an opportunity to coordinate efforts with other agencies and to disseminate information about program outcomes.

Sustainability

Approach:

The Health Start project plan primarily provides for enabling services for participants and infrastructure building within the community. Therefore, the approach to sustainability has been to apply for grant funds to support the enabling and infrastructure building services. In many cases, the TEEN Center has teamed with other agencies or community organizations to apply for funds.

The project has also worked with numerous entities to facilitate the direct care services for all TEEN participants. The MCHD Community Health Center provides primary care services at the Newburn Clinic, co-located with the TEEN Center facility, for participants and their children. They can receive immunizations and well baby checks, STD exams and treatment, HIV testing and counseling and family planning services. A Medicaid Out Station Worker is also located at the TEEN Center site for the convenience of the participants. The MCHD Women's Center is adjacent to the TEEN Center and this clinic provides prenatal and family planning services to program participants. Participants can also receive oral health through the agency's dental clinic, and WIC services at the TEEN Center and several other sites. Because the TEEN Center is an entity of the Mobile County Health Department, its participants are already integrated into all services

provided through public health. The uniqueness of the health department-sponsored Healthy Start program is that this relationship allows the program to utilize grant funds to provide services not traditionally funded by public health.

Components:

The TEEN Center has applied for many grants from public and private funding sources. Grants that have been received throughout the Healthy Start project years include the following:

The Children's Trust Fund- State of Alabama Child Abuse and Neglect Prevention Board (CTF) - The Teen Center has received funding from 2000 to 2004. The last two years the TEEN Center received \$65,000 each year. One grant for \$35,000 assisted the interconceptional home visitation program. The other grant for \$30,000 supported the Fatherhood program.

The Alabama Department of Public Health- Grants have been received over the duration of the Healthy Start project. In 2004, \$30,000 was earmarked for the TEEN Center for the tobacco prevention and control initiative to provide education to schools, students and program participants to reduce smoking. In 2002 and 2003, ADPH provided \$60,000 for the S.T.O.P. (Staying Thoughtful of Prevention) program. This program was implemented in a rural area of Mobile County, and the goal was to reduce unwed pregnancies among teenagers.

The Mobile County Public School System (MCPSS) - The Mobile County School System provided \$20,000 in 2004 for the tobacco education programs.

The March of Dimes- Provides \$10,000 for a Perinatal public education campaign to improve birth outcomes. Billboards were used throughout Mobile County to provide education on breastfeeding, folic acid, family planning and spacing, and smoking cessation during pregnancy.

U.S. Department of Education - From 2000 to 2004, the TEEN Center teamed with the Mobile County Public School System and received more than \$500,000 from the U.S. Department of Education for the FUTURES program. This program provided recreational opportunities and tutoring to schools in low-income areas to reduce drop out rates and encourage learning.

DeBakey Foundation - Grants totaling \$10,000 were received in 2004 for education in the schools.

Infirmiry Hospital Foundation - Received a grant totaling \$10,000 for sustainability to provide education in the schools to reduce risky behaviors.

In order to enhance the services provided at the TEEN Center and to reach into the community, additional grant funding must be sought. In order to find such supplemental funding, it takes expertise of administrative staff members to locate funds and research to prepare proposals. This process takes a great deal of time. It has been the experience of

the TEEN Center that networking with Consortium members and other organizations in the community helps with this process. The resources necessary to obtain sustainability grant funds are mainly administrative staff members who have the time and expertise to prepare grant applications.

The TEEN Center has not sought third party reimbursement for the enabling services provided by the project. However, the Health Department does receive third party reimbursement for the traditional public health services provided to the participants (i.e. immunizations, well baby check ups, family planning, prenatal care, dental care, care coordination services, etc.).

Managed Care Organizations: MOM Care is the Medicaid maternity care program for Mobile County. MOM Care is a network of physicians, clinics and hospitals dedicated to ensuring that all expectant mothers and their babies have access to quality health care. There are 14 prenatal care sites, and patients can choose from OB-GYN specialists, family practice physicians or certified nurse midwives. There are three delivering hospitals. Because the TEEN Center only provides enabling services, it is not a part of the MOM Care program. The MCHD's Women's Center serves as one of the participating prenatal sites. The TEEN Center works closely with all the MOM Care providers. Upon receiving a referral from a provider, the TEEN Center provides education to the teenage MOM Care patients as well as transportation and childcare support services.

Resources:

Major factors that affect the identification and development of resources are, first, the time required to do this. Secondly, funding priorities have changed, and there are more organizations applying for fewer dollars. This is especially true in the area of health education. One possibility in the next year is to work with Medicaid to provide third party reimbursement for prevention education services. The hope is that Medicaid will reimburse educators for childbirth education classes and teenage pregnancy prevention classes attended by MOM Care enrollees. These are both courses provided by the TEEN Center for program clients who receive Medicaid.

The state of Alabama experienced a large budget shortfall during the last three years, which has effected funding from the Children's Trust Fund and the Alabama Department of Public Health. The funding from Children's Trust Fund fell from \$137,000 in 2002 to \$65,000 the last two years. Despite the state's budget shortfalls, the positive relationship that the Healthy Start project has with state organizations such as ADPH and CTF should facilitate the project's receipt of funds in future years. Additional barriers to receiving sustainability funding are having the training, experience and expertise necessary to locate, apply and receive grants.

III. PROJECT MANAGEMENT AND GOVERNANCE

A. The following narrative outlines the structure of the project's management for the majority of the project implementation. Administrative responsibility for the TEEN Center was assigned to the MCHD Director of Family Health Clinical Services (FHCS)

who also served as the original Project Director for the Healthy Start grant. The Health Officer of the MCHD assumed responsibilities as Project Director during the last year of the grant period. The TEEN Center Director serves as the Project Coordinator and allocates 100% of her time to the project. During the grant period, a new Project Coordinator assumed responsibilities for grant related activities.

The TEEN Center Project Director manages all federal programs for the MCHD totaling \$11 million dollars. She has a Master's in Education and has been employed by the agency for 25 years. As project Director for the Healthy Start grant, she is responsible for monitoring program expenditures, serving as liaison between the project and the Alabama Department of Public Health, State Title V Agency and Medicaid, and facilitating the coordination of primary health care services at the Newburn Clinic located at the TEEN Center. The Project Coordinator has a Master's in Public Health and 25 years experience in maternal and child health. The Project Coordinator is responsible for managing the grants and budgets, monitoring contracts, completing reports, supervising staff at the TEEN Center, facilitating Consortium activities, and enhancing awareness of TEEN Center services. The Program Manager is an African American Master's Level Counselor who has been employed with the TEEN Center for six years. Her responsibilities include managing the day to day activities of the TEEN Center, developing programmatic procedures, and providing technical assistance to a team of coordinators. Seven coordinators maintain program integrity, supervise department staff, implement programs as outlined in the procedural manual, and work collaboratively with community resources to maximize the impact of the TEEN Center's goals and objectives. The project's administrative staff meets weekly to address programmatic, fiscal, evaluative, implementation and sustainability issues. Regular meetings are also held with the Comptroller, local evaluator, Women's Center and Newburn Clinic Director, and Director of Social Services to provide ongoing input and program updates.

B. The Mobile County Health Department has experienced seasoned administrative staff capable of large program and grants management. The Director of Family Health Clinical Services has been employed with MCHD for 24 years and manages federal programs for the Health Department totaling more than \$11 million dollars. Resources made available to the project that were essential for the fiscal and program management include:

In-kind Resources – The salaries of the project Director and the Comptroller (fiscal administration) are provided in-kind by the Mobile County Health Department.

Medical Services – The MCHD provides a medical clinic (Newburn) onsite at the TEEN Center to include family planning, immunizations, well baby/child, pediatric, and STD services. A Medicaid Outstation worker is located in the clinic for easy access for clients to sign up for Medicaid and SCHIP. The Women's Center, a new facility recently relocated adjacent to the TEEN Center during the grant period, provides prenatal care and family planning services. During the grant period, a new

WIC clinic has also been located within the TEEN Center facility to provide nutrition education and supplements to eligible TEEN Center clients.

C. MCHD organizational changes during the four years of the project required the following changes in management: The Health Officer became the Project Director of the Healthy Start project replacing the Director of Family Health Clinical Services. The previous Project Coordinator and Program Manager resigned and were replaced by the present Coordinator and Manager.

D. Fiscal management is maintained through the MCHD's Office of the Comptroller. The MCHD uses funds and an account group to report its financial position and the results of its operations. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain government functions and activities. After notice of grant award, an MCHD budget is established based on the budget in the grant application. The grant is given a unique fund number. Each core functional department is given a unique cost center number. Personnel and expense categories and items are entered reflecting the budget in the proposal. An electronic computerized requisition system facilitates purchases by each department. Each department coordinator completes requisitions for purchases and the Project Coordinator must approve all requisitions. Monthly and cumulative budget reports are available electronically so that expenses can be monitored throughout the grant period. MCHD conducts an independent audit each year to ensure appropriate distribution of grant funds. Financial management of the TEEN Center funds through the Healthy Start grant is monitored through this system and subject to all established safeguards and financial management principles. The only changes made in these processes during the four years of the grant were to move to an improved computerized accounting system.

E. Mobile County Health Department divisions which were made available to the TEEN Center and assisted in quality assurance, program monitoring, and service utilization were the Management Information Systems department which provided expertise in installing Microsoft Windows, Access programs and other data management systems to collect and report on program data. MCHD participates in an Alabama Department of Public Health computerized immunization reporting system known as IMMprint. This system and all of its immunization information was made available to the TEEN Center Healthy Start project. MCHD has also initiated an electronic medical record (EMR) system in its primary care clinics. The EMR system has been added to several of the TEEN Center computers so that risk factors and treatment information on TEEN Center pregnant and parenting clients can be accessed. MCHD also has a staff development program which assists the TEEN Center in technical assistance and training new and veteran staff members. Lastly, the MCHD has a public information department and a graphic artist. These resources have been extremely useful in assisting with the development of materials, brochures and public information messages.

F. The target population of the Mobile TEEN Center is African American teenagers between the ages of 10 to 19 years. The Healthy Start project staff is 89% African

American. The staff members who have the greatest contact with the adolescent pregnant and parenting teens are paraprofessional family support workers (FSW). The job description for these staff members does not require them to have any college education or medical training. It does require them to be from the Mobile County target communities and to have worked with children and/or adolescents in the past. This high level of cultural competency enhanced the FSWs abilities to communicate, empathize, educate, guide and assist the teenagers. The psychiatrist on contract during the entire four years grant was an African American female. It is believed that having a provider of similar race to the majority of the participants helped the provider establish rapport with the teenagers. Following that vein of thought, it was also surmised that the teens were more likely to be open with this provider than if the provider had been male or Caucasian. The evaluation contractor employed a young African American woman to conduct evaluation interviews with program participants. The project also benefited from this cultural competency by enhancing the ability to communicate with the target population.

IV. PROJECT ACCOMPLISHMENTS (SEE IMPLEMENTATION TABLE)

The Mobile TEEN Center has aimed to reduce the local infant mortality rate through intervention in the lives of the highest risk group, low income adolescent minorities. Many of the goals for the 2001-2004 project period were met, and identification of programmatic problems has enabled the Center's staff to modify each service to better address the needs of the participants. The following narrative summarizes a description of data collection tools and methodology. The Evaluation Plan assessed the productivity, change and success of the Mobile TEEN Center. Participants were interviewed upon referral to the program, and were subsequently interviewed at intervals to assess programmatic progress based on trimester of pregnancy and postpartum status (interviews conducted during the first and third trimesters and six months postpartum). Outcome data are collected from the participants' medical records and include information such as the baby's date of birth, sex, gestational age, birth weight and mother's prenatal and reproductive history. In addition, attendance records of TEEN Center participants are used to evaluate each program.

Referring to the Goals and Objectives table, a brief description of the data source and methodology for each goal will be presented. Objectives 1, 2a-2b and 4a-4b were assessed utilizing the data collection sheets implemented in the Family Support component of the TEEN Center. Objective 2b, to increase adequate prenatal care was determined as defined by Kotelchuck Index. This measure will be explained later in the narrative. Objectives 3a-3c were assessed using the data collection outcome forms. Objective 5 was based on attendance records and minutes recorded during Consortium meetings. Objectives 6a-6d and 7a-7b were measured with the intensive interviewing of adolescents both referred to and participating in TEEN Center activities. Finally, Objectives 8a-8g were assessed using attendance records and minutes of FIMR meetings. Variables describing the effectiveness of services are measured by collection of program-specific data from each program coordinator and attendance records of participants. All performance indicators were tracked using the methodology described in the approved

Evaluation Plan and also the previous text. Data was stored in SPSS files for future analysis.

The Kotelchuck Index measures the adequacy of prenatal care by examining the initiation of prenatal care, the number of visits and the length of pregnancy. This index was used to determine the number of participants delivering an infant who received adequate prenatal care. The index uses two crucial elements obtained from birth certificate data: when prenatal care began (initiation) and the number of prenatal visits from when the prenatal care began until delivery (received services). To determine adequacy, the number of prenatal visits is compared to the number of expected visits. The expected number of visits is based on recommendations from the American College of Obstetricians and Gynecologists prenatal care standards for uncomplicated pregnancies and is adjusted for gestational age when care began and gestational age at delivery. A ratio of observed to expected visits is calculated and grouped into 4 categories: Inadequate (received <50% of expected visits); Intermediate (50%-79%); Adequate (80%-109%); and Adequate Plus (110% or more).

The Evaluation Plan adequately assessed all required variables plus additional variables of interest. Some of the variables included a measure participants' knowledge of specific risk behaviors such as gang affiliation, poor nutrition, the selling of narcotics and physical and verbal abuse. Also, due to the lower referral rates of at risk adolescents, the targeted number of intensive interviews per year was modified from 100-200 interviews to 75-100 interviews. During the project period, the program averaged 122 interviews annually. A client satisfaction survey was included in the one-on-one interviews of participants at time of referral, third trimester and six months postpartum.

RESULTS/ OUTCOMES: The evaluation team collected all the data from the various TEEN Center program records (Case Management, Family Support, etc.) and from the participants' medical charts at the Health Department. For those participants with a provider not located at the Health Department, medical charts were requested for review. This situation was occasionally problematic for the data collection process, as many physicians would not release the medical charts to our evaluation experts because of regulations set forth by the Health Insurance Portability and Accountability Act (HIPAA). When evaluators had access to medical charts, the chart review covered prenatal flowcharts, social worker and physician notations, home visitation records and birth outcome printouts from the obstetrical hospital. The evaluation plan also included three intensive interviews with a sub sample of referred program girls – once during the first half of the pregnancy (Time1), once during the last half of the pregnancy (Time 2) and once at six months postpartum (Time 3). A pregnant girl's eligibility for becoming part of the sub sample group was her gestation age (20 or less weeks into the pregnancy) (Time 1). Time 2 interviews took place between the participant's 28th and 36th week of pregnancy. Time 3 interviews, which are the final interviews, took place six months after the participants gave birth.

Health Outcomes:

Many of the objectives set forth for the project period were accomplished. The roles of the Family Support Workers (FSW) and Health Educators (HE) are crucial the success of this program. Many of the following objectives would not have been met, and in some cases surpassed, were it not for the close tracking of the participants by the FSWs; the continuous education of participants as to the risks of various behaviors to their health and the health of the infant. Objective 1 pertained to the immunization rates of infants 0-24 months of participants. This objective was accomplished with 83.3% (640/768) of infants receiving age-appropriate immunizations. Close tracking by the Family Support Workers and education of the mothers on the importance of immunization surely contributed to this success. Regarding Objective 3c, twelve percent (28/237) of participants who delivered during the project period gave birth to pre-term babies. This figure was 3 percentage points lower than the project period objective. Objective 4a was accomplished with 58 of the 1,142 (5%) postpartum participants having a birth interval less than the recommended 24 months.

Often to have participant “buy-in” and support of a program, it is important to have the participation of the consumers in the planning and implementation of the program. Therefore, it was deemed necessary to have consumers attend and participate in the Consortium meetings by offering their opinions, concerns and interests regarding TEEN Center programming. Objective 5 addresses this need. For 2001-2005, consumers attended 100% of the Consortium meetings. The Youth Brigade, a consumer group, was instrumental in accomplishing the objective through the administration of surveys, leadership workshops, community outreach and volunteer activities.

The Family Support Program focused on recruitment of “high risk” female adolescents that were under the age of fifteen during their pregnancy, initiated prenatal care late in their pregnancy, or exhibited signs of depression or lack of anger management. Mental health issues such as depression, substance abuse and domestic violence can have devastating effects on the overall well-being of an individual; therefore, the TEEN Center offers mental health services both in-house and via referral to address these issues. Objective 6b recommended that 50% of the pregnant participants screening positive for alcohol abuse would enter treatment. Of the 63 pregnant participants who screened positive for alcohol abuse, 56 (89%) entered treatment. Healthy Start evaluators screened the pregnant participants and referred those screening positive to Family Support so treatment services could be arranged with a substance abuse therapist. Like alcohol abuse, depression can be damaging to the health of the mother and child. Therefore, Healthy Start evaluators are on staff to screen all pregnant participants for depression so that those screening positive could be assessed and referred to appropriate mental health therapists. Objective 7a stated that 60% of pregnant participants screening positive for depression would enter mental health counseling. This goal was surpassed with 92% (55/60) of pregnant adolescents screening positive for depression entering treatment. Additionally, objective 7b was accomplished. Sixty-three percent (11/18) of the pregnant adolescents screening positive for domestic violence received mental health therapy.

Statistics have shown that the infant mortality rate in Mobile County is disproportionately high among African American women. Therefore, it was deemed necessary to establish a task force to investigate this issue. The Fetal and Infant Mortality Review Task Force (FIMRTF), sponsored by the Mobile County Health Department, goaled to have representation by 6 groups on its Case Review Team (CRT) (Obstetrics, Pediatrics, Administration, Medical Records, Neonatology and Social Services). This objective (8a) was accomplished with each of the 6 named groups having representation on the task force. The Case Review Team is charged to review the infant mortality cases in Mobile County to see where gaps in services exist. Objective 8b stated that of all the infant mortality cases in Mobile County during the project period, 25% would be reviewed by the CRT. For 2001-2005, the CRT reviewed 87% (261/300) of the cases. Objective 8c stipulated that of the infant mortality cases reviewed by the CRT, 75% would have completed abstracts by 5/31/2005. In actuality, the CRT completed abstracts on 80% (266/334) of the reviewed cases. Objective 8f was an off-shoot of the previously listed objectives pertaining to the Case Review Team in that it dictated that 70% of the recommendations presented by the CRT would be completed by the Community Action Team. In fact, during the 2001-2005 project period, 79% (38/48) of the recommendations presented to the Community Action Team were completed. Additionally, Objective 8g pertained to the completion of the CRT's recommendations by the Consortium. Seventy-nine percent (38/48) of the recommendations presented to the project's Consortium were completed.

Barriers to Achieving Objectives:

There were several barriers that the project encountered that prevented the achievement of some of the objectives. While the TEEN Center has made some headway with a number of these barriers, there is still work to be done to overcome them. One barrier that affected several objectives was late entry into prenatal care by the participant. The TEEN Center had no control over when the teen entered care, thus delaying the referral process. Another barrier to some of the objectives was consumer compliance with the program. Teens are a special population and require constant motivation and monitoring to complete any task. This type of support is necessary not only for participation in TEEN Center programming but also in keeping medical appointments. The lack of knowledge surrounding interconceptional care and its importance presents another barrier to the selection of a family planning method at the 6 weeks postpartum mark. One final barrier to the achievement of some of the objectives is the readiness for those participants screening positive for smoking and/ or substance abuse to enter treatment. Each of the barriers listed above has affected various performance objectives for the project period. They will be discussed in detail in the following paragraphs.

The program had no control over when the teens entered prenatal care. For that reason, there were many objectives that were dependant upon and related to when the teens entered prenatal care. The TEEN Center received referrals from the Women's Center only after the teen entered their care. When the TEEN Center began, only 27% of the participants entered prenatal care in the first trimester. (O2a) While the project did not achieve the goal of 66%, it has shown an increase to 40% (103/257) of participants entering prenatal care in the first trimester. Adequacy of prenatal care goes hand-in-hand

with the aforementioned objective, leading us to Objective 2b. With some participants not entering the TEEN Center program and thusly entering prenatal care after the first trimester, they automatically fall into a category of less than “adequate” prenatal care, according to the Kotelchuck Index. Therefore, only 55% (118/214) of the participants received adequate prenatal care. The project staff and Consortium continued to address the problem through an aggressive public information campaign that included public service announcements, billboards in the target community, media coverage of program events, mail outs to schools, churches, medical providers and social service providers. Due to the fact that many of the participants reported learning they were pregnant in the Emergency Room, TEEN Center staff plan to reach out to local ERs to educate staff on the TEEN Center and the services offered to increase the referral rate. Objectives 3a and 3b addressed the numbers of low birth weight and very low birth weight births to participants who delivered during the project period, respectively. Objective 3a had a goal of 8% of program participants delivering a low birth weight baby during the project period. The actual percentage of low birth weight births was 11.4% (27/237). Likewise, Objective 3b had a goal of 1% of program participants delivering a very low birth weight baby during the project period. This objective was narrowly missed with 2% of participants delivering a very low birth weight baby (5/237).

Consumer compliance continues to be a challenge for the program. Due to the young ages of participants and the various other demands on their time, it is difficult to maintain compliance with the program. Objective 4b addressed the receipt of the 6 weeks post-partum check-up by those participants who delivered. The goal stated that 88% of post-partum participants would keep their 6 weeks post-partum check up for family planning services. In actuality, 71% (257/362) of that group kept the appointment. While this statistic is not too far from the goal, TEEN Center staff recognize that they must be vigilant in tracking and monitoring participants’ involvement in the program to maximize benefits for the client. Staff continue to educate participants on the importance of appointments relating to prenatal, interconceptional, neonatal and post-neonatal health.

Health behavior is an extremely difficult area in which to affect change. Behaviors relating to the use and/ or abuse of alcohol, tobacco or other drugs are very complex. Similarly, behavior related to unsafe sexual practices is also difficult to change. As was previously mentioned, the TEEN Center was successful in connecting participants screening positive for alcohol abuse with treatment. However, the same results were not experienced with smoking or substance abuse. Objective 6a addressed smoking. The goal for this objective was that 50% of the pregnant participants screening positive for smoking will receive smoking cessation education. For 2003-2005, only 6% (5/83) of those individuals entered treatment. Similarly, objective 6c proposed that 50% of the pregnant participants screening positive for substance abuse would enter treatment. During the same project period, only 22% (18/83) entered treatment. Objective 6d dealt with unsafe sexual practices. A goal was set stating that unsafe sexual practices would be reduced to 31% among adolescents actively participating in TEEN Center activities. Based on 2003 data from the Mobile Youth Survey, 44.7% of sexually active youth (10-18 years) reported not using a condom during intercourse. While some progress was

made from the baseline percentage of 54%, there is still work to be done concerning this issue.

Support from the community is crucial to addressing complex issues, such as fetal and infant mortality. The Fetal and Infant Mortality Review (FIMR) team, locally known as the Alabama Baby Coalition, has been very successful in getting support. The achievement of objectives 8a -8c and 8f-8g demonstrate that commitment. The two objectives that were problematic to this group were 8d and 8e. Objective 8d pertained to the completion of maternal interviews for 30% of the mortality cases reviewed. This objective is problematic, because it is completely dependant upon the mother's willingness to be interviewed following the death of her child. While efforts are made to make the mother feel comfortable in sharing her experience, few are willing to participate. Only 11% (31/272) of the mothers were willing to be interviewed. Objective 8e addressed the number of cases that the Case Review Team expected to review by the end of the project period. Seventy percent of the cases were goaled to have been reviewed; however, only 45% (127/282) were actually completed with reports and recommendations. Perhaps these numbers will rise as the mission of the Alabama Baby Coalition and its workgroups become more well-known in the community.

Activities/ Lessons Learned:

This Healthy Start project was fortunate to be involved in the receipt of technical assistance both from Healthy Start and City Match. The Perinatal Periods of Risk analysis was applied to the target community to identify the current gaps in healthcare for women and children. By identifying these gaps, the project was better able to develop a local health system action plan to benefit the community. In response to a number of the Healthy Start participants screening positive for domestic violence, the Mobile TEEN Center partnered with the University of South Alabama, the Mobile Police Department, Alabama Baby Coalition and Penelope House in June 2004 to host a Domestic Violence Conference. National Healthy Start sent two keynote speakers to present at this conference: Rebecca Whiteman, M.A. and Linda Burgess Chamberlain, Ph.D. Both the PPOR involvement and the Domestic Violence conference were extremely beneficial to the forward progress of the Mobile TEEN Center.

This Healthy Start project has worked closely with leaders in the community to address the high fetal and infant mortality rate experienced in Mobile County. The Case Review Team, a work group of the Alabama Baby Coalition (ABC), the project's Fetal and Infant Mortality Review Task Force (FIMRTF), had collected data regarding the mortality rates in Mobile County and the State of Alabama. The gathering of this data only led to more questions centering on where the gaps in services existed. Therefore, in 2003 the local Healthy Start Evaluator and Project Coordinator attended Perinatal Periods of Risk (PPOR) Training through City Match in Tempe, Arizona. After conducting PPOR Phase I and Phase II analysis on the existing FIMR data, it was revealed that our community was deficient in the areas of preconception health and infant health. With an ultimate goal of reducing fetal and infant mortality to its lowest possible rate, this simple and standardized approach helps identify gaps in the community, target resources for prevention activities and mobilize the community to action through communication with

community partners and members. Further analysis utilizing the Kitagawa Analysis was completed. The Kitagawa Analysis helps a community to determine whether the community is experiencing a high number of low birth weight births in the population, or if it is a population where the low birth weight babies that are born are likely to die. This analysis revealed that our community was one in which there are high number of low birth weight births. This data was presented to the ABC, and they decided to focus on the issue of preconception health. In September 2004, the ABC Chair and another ABC member were asked to present the Kitagawa Analysis that had been done in Mobile, AL at the City Match conference in Oregon. Overall, this process allowed us to further understand what is happening in our community in the way of feto-infant mortality. With this detailed information, we were able to establish a local health system action plan to serve as a path to address the deficiencies identified.

As was previously mentioned, the Mobile TEEN Center received technical assistance from National Healthy Start to put on a Domestic Violence Conference in the community. Domestic violence is highly prevalent in Mobile County and more so among those individuals utilizing the TEEN Center. Therefore, the Mobile TEEN Center partnered with the Mobile Police Department, Alabama Baby Coalition, the University of South Alabama and Penelope House (a local shelter for women and children escaping violent households) to host this conference for the area's medical providers. Continuing Education Units were provided. Those in attendance were instructed on how to screen for and identify domestic violence in patients. The Police Department reviewed the legal aspects of domestic violence and the role of law enforcement. The two experts provided by National Healthy Start spoke about projects that were taking place across the United States that worked.

At the close of the Domestic Violence Conference, attendees were asked to complete an evaluation of the overall conference and the individual presenters. Results of the evaluation showed an overwhelmingly positive response from the attendees. The majority of attendees (86%) said that the content contributed to their knowledge of domestic violence. Eighty-seven percent of those in attendance felt that the conference identified current topics of clinical and social relevance. Additionally, 87% felt that new information on sexual assault, domestic violence, etc. had been presented. Many attendees felt that they had learned some key information after the conference: 82% felt that they could define the causes and diagnostics of Post Traumatic Stress Disorder; 84% felt that they could define the incidence of violence in Mobile County; 80% felt that they could discuss the phases of sexual assault and care for the patient; and, 81% reported that they could describe the role of Law Enforcement and 3 elements of sex crimes. Finally, 79% of those responding felt that they had received the necessary training to be able to synthesize information regarding Universal Screening for abuse and implication in a healthcare setting.

V. PROJECT IMPACT

A. Systems of Care

1. Systems building has been a significant factor in local efforts to date. The Fetal Infant Mortality Review (FIMR) Task Force represents a successful public/private

cooperative effort to enhance the system of care for pregnant women in Mobile County. Mobile County Health Department, through funding from Healthy Start, facilitated the establishment of the FIMR process in the community in 1999. Since its inception, the Mobile County FIMR, known as the *Alabama Baby Coalition: A Campaign for Healthier Babies in Mobile* has been meeting twice a year. Three subcommittees meet quarterly. They are the Data Collection Team, the Case Review Team, and the Community Action Team. The Data Collection Team is responsible for identifying data elements to be collected for the case review and community report. The Case Review Team composed of interdisciplinary health care and social services providers, reviews death cases based on case abstraction summaries. This team also recommends community wide improvement strategies and programs. The Community Action Team, composed of community health and social service professionals, prioritizes identified needs and makes recommendations for interventions to improve service systems and resources. The Information Sharing Committee, which meets rarely, was responsible for the development of confidentiality and interagency agreements along with future legislative needs. The Alabama Baby Coalition is composed of 20 to 30 physicians, nurses, social service professionals, and other health and human services representatives. Traditionally, a physician serves as the chair of the Community Action Team for one year. After this experience and term of office, this provider chairs the overall ABC group the next year.

2. The ABC has been instrumental in affecting the following changes in procedures and policies in the Perinatal system in Mobile County:

- The Baby Rest program was started which provides free burial when families choose hospital disposition of fetal and infant remains. An annual memorial service was initiated, hosted by the four delivering hospitals on a rotating basis.
- Domestic violence screening instruments were introduced and are being used at all four delivering hospitals.
- Patient education materials were developed and have been distributed to clinics and physicians offices throughout Mobile County.
- A Shaken Baby Syndrome brochure was developed and has been made available to all delivering hospitals and other providers in Mobile County. The ABC has considered adopting a policy that would require Shaken Baby information be given to all new parents after delivery.
- The FIMR process found a relationship with undiagnosed/untreated UTIs and infant deaths in the County. The ABC has promoted a delivering hospital policy for standing orders for urine drug screening on all “no prenatal care” patients. As a result, three of the four local hospitals have standing orders of urine drug screens on “no prenatal care” patients.

3. The ABC identified substance abuse among pregnant women as a major problem in Mobile County. The Consortium and ABC worked together to bring Dr. Ira Chasnoff to Mobile to raise community awareness of the problem. Community decision makers including a municipal court judge, Director of Department of Human Resources, the Public School System nursing director, ABC chairperson, Police Department representative, Junior League officer, Director of Mobile Mental Health, and Director of a substance abuse treatment center formed the core group which addressed Perinatal

substance abuse. The group's name became "Clean Start: A Partnership with Alabama Baby Coalition". Clean Start created a provider's guide of substance abuse resources; purchased licensure to utilize the *4P's Plus* screening instrument to screen pregnant women for substance abuse; provided continuing education training for implementing screening, assessment, referral, and treatment; and created a database for tracking data to be used for evaluation purposes.

a. The TEEN Center has developed relationships with Drug Education Council, Crittenton Youth Services, Inc, GROWTH, Boys and Girls Club, and public and private school systems to provide pregnancy prevention education to students in schools, in churches, and other community settings. The relationship with Drug Education and Crittenton has been to collaborate on the curriculum and teaching. The other organizations were the recipients of the educational programs.

b. Other Relationships: The TEEN Center has received financial and/or consumer volunteer support for special events held for TEEN Center clients. Relationships were developed with members of Olive Branch Lodge #1 and Rho Nu Assembly 17. These organizations, consumer members and other parent volunteers helped with holiday parties and picnics for TEEN Center participants. These organizations have also provided consumers who volunteered to teach GED classes.

4. Impact on comprehensiveness:

a. There is a great need for transitional housing in Mobile for pregnant teens who, because of their pregnancy or other reasons, can no longer live at home. The Sybil Smith Transitional Housing Program provides a very structured living arrangement for young women over the age of 19. The TEEN Center worked with the program and was able to get it to change eligibility requirements to allow younger women to stay at its facility.

b. The TEEN Center has had an impact on the school system to get the system to accept pregnant adolescents and encourage them to stay in school. At the inception of the Healthy Start program there was reluctance by the school system to keep the pregnant teens in school. This has changed over time. The barrier the TEEN Center is presently working on is to provide childbirth education classes in the schools to pregnant clients.

c. The TEEN Center case management core service has had an impact on the coordination of care. Case management conducts a thorough needs assessment on every pregnant client. Referrals are made to the TEEN Center Family Support Program, prenatal clinic or provider (if there has been no prenatal care), WIC, housing programs, if needed, job programs, and many other social service agencies. Feedback on these referrals is requested within ten days. Follow-up is made when feedback is not received in the prescribed time. The TEEN Center case manager works closely with Medicaid case managers, such as the SOBRA MOM Care case manager, the EPSDT case manager, and the family planning case manager. This communication facilitates coordination of care.

d. When a teen first enters the TEEN Center program a release of information form is signed which allows the healthy start program to receive care information on risk factors, prenatal visits, well baby visits and immunizations. TEEN Center staff members visit Mom Care providers' offices and pediatrician's offices to facilitate the sharing of information. The MOM Care prenatal record is contained on one sheet, which provides all the reporting information that Healthy Start requires. The MOM Care providers are

now copying this form for the TEEN Center. The Mobile County Healthy Department has launched an electronic medical record system. The TEEN Center has access to this system so that data can be shared between the health department clinics and the healthy start program.

5. Client participation in evaluation of service provision:

a. The TEEN Center primarily provides for enabling services for participants and infrastructure building within the community. For this reason, the impact on provider responsibility in maintaining client participation in the system has not been measured. Likewise, provider sensitivity to cultural, linguistic, and gender needs, has not been measured. Consortium meetings and other professional training opportunities have been used to educate providers concerning cultural sensitivity. The ABC Community Action Team has also considered cultural sensitivity when developing patient education programs on Shaken Baby Syndrome and domestic violence screening tools.

b. Consumer participation was used in developing the patient education tear off prenatal and postpartum materials. When these materials were developed they were pre-tested for content and readability by TEEN Center participants. Participants also review group education topics at the beginning of every project year and make suggestions and changes to the topics. Annually, the FIMR coordinator conducts maternal interviews with about 10% of the mothers who have experienced a fetal or infant loss. As a result of these interviews, the Baby Rest program was instituted which is an annual memorial service for grieving families sponsored by Mobile's delivering hospitals. In addition, the Bereavement Program began which includes increased bereavement counseling, and the provision of the infant's picture, footprint, etc.

B. Impact to the Community

1. It is difficult to measure residents' knowledge of resources and service availability other than through the number of participants using services, phone calls and referrals to the program, and other indirect measures. A recent indication of the program's effect on the community and resident's knowledge came from the Alabama Fetal Alcohol Spectrum Disorder Initiative Needs Assessment Report. A state wide in-depth needs assessment on AFI was conducted by Auburn University. Mobile was one of four cities in the state where consumer and provider focus groups were organized. Consumers and service provider participants in the focus groups mentioned the TEEN Center programs frequently. Several TEEN Center clients participated in the consumer focus groups and their knowledge of the affects of alcohol during pregnancy was outstanding. One of the authors of the Needs Assessment stated at a recent community meeting that Mobile skewed the results of the needs assessment based on the answers that TEEN Center participants gave during the focus group meetings.

2. Consumer participation has had an impact on changing school policies on allowing pregnant teens to stay in school and not be segregated into special pregnancy classes. These policies have been slow to change, because the schools do not want to be perceived as condoning teen pregnancy. At the same time, consumer participation has assisted in allowing the TEEN Center to participate in the schools by providing life skills classes to promote decision-making and reduce risky behavior. In 2004, the TEEN

Center received \$20,000 from the Mobile County Public School System for risk reduction education classes.

3. The TEEN Center hosted a summer consumer conference to empower teens to make better choices and to help them develop socially, mentally, physically, and spiritually. Youth Brigade members and other teens spent many months preparing for this event and the participants were challenged encouraged, motivated and entertained.

4. The TEEN Center works closely with Mobile Works Inc. job development program. Mobile Youth Works has funded several community job training and placement programs for adolescents aged 16 to 21, and the TEEN Center has referred participants to these programs. The TEEN Center Career Center and GED preparation program assist teens in receiving their high school diplomas and becoming ready to apply for jobs and go to work.

C. Impact on the State:

There are two Healthy Start programs in the state of Alabama; the Mobile TEEN Center and Birmingham Healthy Start. The Alabama Title V agency has not coordinated activities across these two programs. The Title V agency has developed a State Perinatal Advisory Council (SPAC) and Regional Perinatal Advisory Councils (RPAC) both of which meet quarterly. The Mobile TEEN Center is a member of the Regional Perinatal Advisory Council, and, although not a member, the Healthy Start Coordinator attends the State Perinatal Advisory Council meetings. The State and Regional Perinatal Councils share data, research information, and program initiatives. Participation with these two groups has benefited the TEEN Center by providing up to date state and local information on infant mortality status, low birth weight and other factors impacting mortality. The TEEN Center has also been able to take advantage of state and regional resources to assist with programming such as the breastfeeding initiative and folic acid committee.

D. Local Government Role:

One of the major organizations at the state and local levels that has facilitated project development is the Children's Policy Council. The State Children's Policy Council's purpose is to reduce duplication and to promote information sharing so that the state and counties can better serve children's needs. Every county in Alabama also has a Children's Policy Council with fiscal and programmatic responsibilities. The Mobile Children's Policy Council, of which the Mobile County Health Department and TEEN Center, are members, has been a very active and effective organization. The Mobile Council sponsored the *Communities that Care* strategic planning process for positive youth development in Mobile County in 2004. Project objectives are to identify and prioritize underlying risk and protective factors present in the community, family, schools and among peers that are predictive of youth problem behaviors; and to reduce priority risk factors and increase protective factors through the use of "best practice" prevention models that have been proven effective through national evaluation. The Mobile Policy Council, as a result of this process, has identified risk factors and problem youth behaviors including teen pregnancies. The Council has also identified best practice programs to impact the risks and behaviors. The TEEN Center will participate with other

Council members in preparing grant proposals and receiving grant monies, which fund programs to reduce the risks and problem behaviors.

The TEEN Center Coordinator is also a member of the Board of the Alabama Campaign to Prevent Teen Pregnancy. This organization serves as a catalyst for the development and implementation of Alabama county prevention projects. Participation has provided valuable information and helped with prevention efforts by the TEEN Center.

The major barrier experienced at the state and local levels has been with the FIMR project. The state and county Child Death Review organizations are very slow in sharing information and data on infant deaths. In some cases, the FIMR coordinator has never received a cause of death from the Child Death Review Committee.

E. Lessons Learned:

Data management and record keeping: the database is very large and unwieldy; a computer specialist should have been used at the beginning of the project to assist in establishing an effective data management system. Initially, the project used Excel, Microsoft Windows and Access software programs to keep data. Presently, the project is converting to SPSS, which is much better, easier to use and provides better reports than the other software. Also, there are two client records maintained on participants; one in case management and the other in interconceptional care. These are now being converted to one system, which will delete much duplication of effort and paperwork.

The teenage population presents unique cultural challenges. The clients are children having babies. Frequently, there is a delay in beginning prenatal care. This may be due to lack of knowledge, denial of the pregnancy, or lack of having a “medical home”. Once the teens get into prenatal care they are more motivated to get care and follow protocols and attend group education than they are during the postpartum period. After the baby is born, many times the girls are ready to resume other teen activities and do not want to participate in project activities and educational classes.

There is an ongoing need to train providers to be sensitive to the cultural needs of the teen population and to facilitate communication with this population. At the same time, because of demands on their time, it is difficult to get physicians to attend this type of education and training.

VI. LOCAL EVALUATION

HEALTHY START LOCAL EVALUATION REPORT

PROJECT NAME: Mobile County Health Department TEEN Center

TITLE OF REPORT: TEEN Center Evaluation Report

AUTHORS: Brad Lian, PhD

Section I: Introduction

The local evaluation was designed by John Bolland and Kathy Oaths, both from the University of Alabama (located in Tuscaloosa, 200 miles north of Mobile). When the grant was awarded, the evaluation was contracted out to the Institute for Social Science Research at the University of Alabama, and directed by Bolland.

Brief History

The University hired a full-time evaluator and full-time evaluation assistant, with the overall project being directed from Tuscaloosa. The local evaluation staff were charged with several responsibilities, including (a) collecting data required by HRSA based on chart reviews and analysis of other client records; (b) conducting three interviews with each of a number of program participants, and reporting the results of these interviews; (c) meeting regularly with other Healthy Start staff; and (d) conducting other analyses of data as requested by the Healthy Start Program Director. The impetus for (b), which required considerable time on the part of the local evaluation staff, was to collect data describing the clients who participated in the program, their attitudes, behaviors, and beliefs, and how those were affected by their participation.

Several aspects of the local evaluation plan were modified after the project actually began. The two most important modifications involved (a) the number of program participants interviewed, and (b) collection of interview data from a control group. First, the difficulty in contacting program participants and setting up interviews had initially been underestimated. In the end, it was determined that the most effective way to reach the participants was to spend time at the clinics and interview them after their prenatal visits. This endeavor was also challenging because of the substantial no-show rate for prenatal visits and other scheduling problems that prevented participants from spending time with the evaluators following their prenatal visits. Thus, the sample size was considerably smaller than originally anticipated. Second, the way the program evolved prevented the identification of an effective control group.

Study Type

Given the problems associated with the interview data, a decision was made to use a correlational design to analyze these data, with appropriate controls for age and level of prenatal care.

Key Questions, Hypotheses, and Findings

The local evaluation is based on 2 sets of interviews. The first set with 176 program participants, using a questionnaire developed for this purpose. Each program participant was interviewed three times, twice prenatally and once post-partum. Each interview lasted approximately 45 minutes, and participants were paid \$5 for each interview. While this represents a small change from the originally-proposed evaluation, the data that were collected nonetheless allowed for the development of several important conclusions about the Healthy Start Program in Mobile, the factors that affect birth outcomes for its participants and factors that affect utilization of program services. The second set of interviews relied upon 314 program respondents, using a questionnaire developed in conjunction with the TEEN Center staff. The data included program participation rates, screening practices, and family support activities.

Overview of the Respondents

The majority of the respondents are single (93%) and African American (88.5%). They were referred to the TEEN Center through a variety of channels, the most frequent being the Mobile County Health Dept. (12.6%) or a relative (11.7%). Many (16.4%), though, came to the TEEN Center without a referral. The average age of the respondents was approximately 17 (16.93), with a range of 12-22. Only about one-third (32.7%) entered the TEEN Center during the first trimester of their pregnancy, 41.7% and 25.6% entered during their second and third trimesters, respectively.

Although 22.9% of the respondents reported being self-sufficient, only 15.2% reported having a paid job, and most (68.3%) lived at home and always stayed with their mother. Very few (9.9%) reported never or almost never staying with their mother. The overwhelming majority (93.3%) indicated that they informed their mother of their pregnancy and that they can count on their family for help. Moreover, 97.7% feel safe at home. Apparently, however, the respondents do not isolate themselves at home; 24% reported carrying a knife or razor during the “past 3 months” and 23.6% had been involved in a fight during that time period. And 26.1% reported ever being arrested, with 48.9% reporting that a neighbor had been arrested within the past year.

Nearly 96% of the respondents are also dating the father of their baby; but only 59.1% think their baby definitely has a future with him, 31.8% simply “Don’t know”. Only 9.3% of the respondents reported that the baby was planned. Perhaps such uncertainty among many of the respondents is related to the fact that 52.6% of them reported having negative mood swings—in that they have felt depressed, angry, or emotional—since they became pregnant, while 32.9% reported having no change in their moods. Nevertheless, approximately 80% of the respondents indicated that they can depend on their partner during the pregnancy (77.9%) and after the birth (83.6%) to some extent, and only 5% reported that their partner was “unhappy” regarding the pregnancy, while 90.6% claimed their partner was “happy”. About one-third (36.7%) reported wanting to have more children. Most of the respondents (64.4%) had had sex by the time of their sixteenth birthday.

The respondents generally reported feeling good about themselves. For instance, 84.4% were “usually happy” with themselves, 95.3% “like” themselves, 89% reported that they “make good decisions,” and 81.4% stated that they “liked the way they were leading their lives”. These figures obscure somewhat the fact that some of the respondents are clearly depressed and unhappy, 6.4%, for instance, reported having suicidal thoughts during the past year and 15% reported feeling depressed “most of the time”.

The majority of the respondents reported being alcohol- and marijuana-free during the past 3 months (80.9% and 85.9%, respectively). Many reported having smoked cigarettes during the past 3 months though, despite reporting (at a nearly 99% rate) that they knew cigarettes were bad for both their own health and the health of the baby.

Factors Associated with Birth Weight

Efforts in this and other analyses are limited somewhat by the sample sizes and by the large amount of missing data—either in the form of “Don’t Know” or “No Answer” responses or because of skip patterns.

Bivariate correlations controlling for age (i.e., partial correlations) were used to assess the relationships between several psychosocial variables that are theoretically important risk factors for neonatal health and birth weight (in grams). The measures were based on participant responses during either the first or second prenatal interview. The mean age of respondents during the first interview was 16.3 years old, with a standard deviation of 16.6 months. The birth weight distribution is described in Table 1a. The mean birth weight of babies born to the 255 respondents with available data was 3042.99 grams, with a standard deviation of 599.64 grams and range between 538.64 and 4649.32 grams. Five babies (2%) had very low birth weights (i.e., less than 1500 grams) and another 35 babies (13.7%) had birth weights categorized as low (i.e., between 1500 and 2500 grams).

The set of measures included feelings regarding depression and hopelessness; whether or not the mother blames herself and/or the father for the pregnancy; and whether the participant likes herself. As reported in Table 1b, less than half of the respondents (48.6%) reported never feeling depressed during the past week, while 15% of the respondents felt depressed most of the time. The numbers are similar regarding feelings of hopelessness, where 36.4% reported feeling hopeful about the future most of the time or always during the past week and 16.2% reported that they never felt that way. Table 1b indicates that 4.7% of respondents indicate that they never get what they want so it’s dumb to want anything; 3.5% report they don’t expect to live a very long life; and 9.8% report they do not have good luck now and that there is no reason to think that they will when they get older. The blame measure is a dichotomous variable that equals 1 if the mother blamed herself or the baby’s father for the pregnancy and 0 if no blame was attributed. A little over half on the respondents (51.7%) assigned blame to the pregnancy, and the other 48.3% believed that it is just one of those things that happen. Finally, Table 1a shows that respondents made an average of 5.61 visits to seek prenatal care; actual numbers of visits showed considerable variability however, with a standard deviation of 4.59 and a range from 0 to 22.

Table 1a: Distributions of Variables for Correlations

	N	Mean	Std.dev.	Minimum	Maximum
Age	311	16.93	1.60	12	22
Birth weight (grams)	228	3049.60	592.56	538.64	4649.32
Number of prenatal visits	248	5.64	4.60	0	22

Birth weight and Number of completed prenatal visits BY Age

Age	Variable	Mean	Std.dev.	Minimum	Maximum	N
12	Birth weight (g)	2551.46	0	2551.46	2551.46	1
	# of prenatal visits	4.50	3.54	2	7	2
13	Birth weight (g)	3713.78	721.66	3203.49	4224.08	2
	# of prenatal visits	6.60	5.98	0	14	5
14	Birth weight (g)	3059.17	606.24	1927.77	4025.63	11
	# of prenatal visits	5.67	5.40	0	15	12
15	Birth weight (g)	3001.78	446.62	2041.16	3968.93	26
	# of prenatal visits	5.13	5.04	0	18	30
16	Birth weight (g)	3069.38	491.77	1162.33	3827.18	39
	# of prenatal visits	4.84	4.68	0	15	44
17	Birth weight (g)	2995.31	630.99	1502.52	4649.32	53
	# of prenatal visits	6.23	4.95	0	22	60
18	Birth weight (g)	2962.00	720.77	538.64	4110.68	54
	# of prenatal visits	5.70	3.93	0	15	53
19	Birth weight (g)	3308.39	457.45	1927.77	4053.98	30
	# of prenatal visits	6.03	4.32	0	16	34
20	Birth weight (g)	3090.10	608.91	2494.76	4252.43	7
	# of prenatal visits	7.20	4.27	0	11	5
22	Birth weight (g)	3345.24	0	3345.24	3345.24	1
	# of prenatal visits					0

Table 1b: Distributions of Variables for Correlations

	N	Percent
Feeling depressed past week	173	48.6 “never”, 15.0 “most of the time”
Feeling hopeless past week	173	36.4 “never”, 16.2 “most of the time”
Blame associated with pregnancy	172	51.7 yes
Like self	172	95.3 yes
I never get what I want so it’s dumb to want anything	172	4.7 yes
I don’t expect to live a very long life	173	3.5 yes
I don’t have good luck now and there’s no reason to think I will when I get older	173	9.8 yes

The bivariate correlations between the psychosocial measures and birth weight are reported in Table 2. Not surprisingly, the correlations are in line with expectations. For instance, the number of prenatal visits is positively associated with birth weights, meaning that typically as visits increase, birth weights increase, and vice-versa. Depression, on the other hand, is negatively associated with birth weights. That is, increases in depression scores typically correspond to decreases in birth weights. The one anomaly to this pattern is mother’s age. Generally the literature suggests that young girls are more likely to have low birth weight babies than older girls; these results show that younger girls are less likely to have low birth weight babies than older girls. Several possible factors may explain this unexpected relationship. First, the younger girls may have received more nurturing care from program providers during their pregnancies, given their greater risk. Second, younger girls are less likely to use alcohol or cocaine than older girls, and they are less likely to have contracted HPV; these are all risk factors for unhealthy babies. Third, younger girls are more likely to be under parental supervision than older girls, and therefore may eat more nutritious meals, get more sleep, and generally take better physical care of themselves.

Table 2: Bivariate Correlations

	Birth weight (grams)
Age	$r = -.12$ ($p = .21$)
Number of prenatal visits	$r = .40$ ($p < .00$)
Depression	$r = .05$ ($p = .59$)
Hopelessness	$r = -.07$ ($p = .47$)
Blame	$r = -.16$ ($p = .10$)
Likes oneself	$r = .06$ ($p = .55$)
Never get what I want	$r = .06$ ($p = .56$)
Don’t expect long life	$r = .24$ ($p < .05$)
No good luck now or ever	$r = -.06$ ($p = .57$)

A regression analysis, using Ordinary Least Squares (OLS), was performed to help illuminate the influence of the prenatal visits on birth weights. To do so, we regressed birth weight on our measure of completed prenatal visits, while simultaneously controlling for such other important confounds as age, insurance coverage, and education level of the respondent. The results of this analysis are reported in Table 3. Taken together, the independent variables account for approximately 14% of the variance (adjusted $R^2 = .135$) in birth weight.

Table 3. OLS Regression
Dependent Variable: Birth weight (grams)

	<i>B</i>	Std. Error	Beta	Level of Significance
(Constant)	1862.60	916.17		.044
Mother's age	21.72	42.48	.06	.610
Medicaid	-421.50	238.86	-.15	.080
Education level	-16.81	29.26	-.06	.567
Number of prenatal visits completed	80.67	19.17	.53	<.000
Repeat pregnancy (24 mos.)	54.66	155.39	.03	.726
Self-sufficient	62.71	140.45	-.04	.656

Adjusted $R^2 = .135$

The number of prenatal visits is very important. It is a statistically significant predictor, with more visits associated with higher birth weights. Its relative importance among all of the predictors in the model, shown by Beta coefficients (which are standardized values of *B*, the larger the value, the greater the influence), suggests that it may be the most important predictor of all here.

The results reported here should be interpreted cautiously however, since they are subject to several limitations. One of the most important of which is substance usage, a known risk factor for neonatal health but not included in the analysis reported above. The reason for its omission is missing data: Although respondents were asked during the second prenatal interview to indicate their levels of substance usage during the previous three months, the majority did not answer those questions. Table 4 summarizes their responses.

Table 4: Substance Use During Previous Three Months

	N	Percent "Yes"
Smoked cigarettes during past 3 months	65	43.1%
Used alcohol during past 3 months	94	19.1%
Used marijuana during past 3 months	64	14.1%

Although missing data are rampant, we were able to glean some information from the substance usage data. We find, for example, that use of different substances is correlated during pregnancy. The correlation between alcohol use and marijuana use, controlling for maternal age, is substantial ($r = .37$, $N = 49$, $p < .01$), as is the correlation between alcohol use and tobacco use ($r = .45$, $N = 53$, $p < .01$). Correlations between substance use and birth weight, again controlling for maternal age, are much more modest, with r s ranging between .39 and .53; all of the relations are positive, as expected. Thus, although these results should be interpreted cautiously, they suggest that the regression model tested above is not misspecified by the non-inclusion of the substance usage measures.

Factors Associated with Prenatal Visits

In the previous section we identified the importance of prenatal care as a predictor of birth weight. In this section, we consider an equally important issue: the factors associated with completed prenatal visits by program participants. As in all of the previous tests, we again consider maternal age in this analysis.

As before, the number of completed prenatal visits was regressed on the independent variables using OLS. As Table 5 shows, the overall fit of the model is very good, with an adjusted R^2 of .577. Only a few of the independent variables are statistically significant predictors of prenatal visits however. The trimester one enters the TEEN Center is an important factor, with later entry being related to a lower number of completed prenatal visits. It is important to get the expectant mothers into the TEEN Center early on in their pregnancy. Evidently, TEEN Center programs and/or employees are helpful in some manner in that they clearly facilitate or encourage pregnant women to complete prenatal visits. Interestingly, expecting mothers who report not being self-sufficient are more likely to complete prenatal visits. This may be because such mothers may be more accepting of their need to receive more nurturing care from program providers during their pregnancies. Or, they may be more likely to be under parental supervision than their self-sufficient counterparts, and therefore may be reminded more often about—and perhaps strongly encouraged to attend—appointments and commitments. They may also simply have more time and flexibility for prenatal visits.

Table 6. OLS Regression
Dependent Variable: Number of prenatal visits completed

	<i>B</i>	Std. Error	Beta	Level of Significance
(Constant)	14.13	4.07		.001
Mother's age	.04	.21	.02	.831
Trimester entered TEEN Center	-3.99	.36	-.71	<.000
Education level	.01	.13	.00	.961
Number of prenatal visits attempted	.36	.15	.16	.019
Repeat pregnancy (24 mos.)	.99	.74	.09	.186
Self-sufficient	-1.26	.70	-.13	.076

Adjusted $R^2 = .577$

Again, it is important to consider how recent levels of substance use may affect prenatal care. These were not included in the regression analysis because of high levels of missing data. When we examine the correlations among the non-missing data, we again find modest relationships, this time between substance usage during the previous three months and number of prenatal visits ($-.204 < r < -.052$; all $ps < .30$). Thus, while the relationships are in the expected direction, they suggest that recent substance use is not a substantial predictor of prenatal care. We should therefore conclude that the regression model is not misspecified.

Measures Used

Copies of the three interview questionnaires are included in Appendix A.

VII. FETAL AND INFANT MORTALITY REVIEW (FIMR)

FIMR Report:

Mobile County Health Department, through funding from Healthy Start, facilitated the establishment of a Fetal and Infant Mortality Review (FIMR) Task Force in 1999. Now known as the *Alabama Baby Coalition: A Campaign for Healthier Babies in Mobile*, this effort represents a successful cooperative venture of private and public providers and agencies to enhance the health care system for pregnant women in Mobile.

The ABC focuses on fetal deaths > 20 weeks gestational age and infant deaths up to one year of age. Although maternal health and associated factors are a significant part of the reviews, our FIMR process does not review maternal death cases.

Components of the local FIMR process:

A registered nurse was hired for the position of ABC Coordinator, and four teams were organized to implement the FIMR process. These groups and their roles are as follows:

1. The Information Sharing Team was responsible for development of initial confidentiality and interagency agreements to enable exchange of information. At this time, the group is utilized only as needed to add or enhance forms and agreements required to meet federal privacy laws or other confidentiality requirements.
2. The Data Collection Team identifies those data elements to be collected each year. Numbers of data items have increased each year in efforts to identify more detail or underlying factors involved in these fetal and infant deaths. Members also analyze the data and develop reports for the bi-annual Task Force meetings.
3. The Case Review Team (CRT), composed of multidisciplinary health care and social services providers, meets quarterly to review death cases based on (de-identified) case abstraction summaries prepared by the ABC Coordinator. Based on findings, the CRT makes recommendations for community-wide improvement efforts and submits them to the Community Action Team (CAT).
4. The CAT, also composed of community professionals including health educators, nurses, social workers, and social service agencies, is responsible for developing and pursuing improvement efforts for the received recommendations.

Another facet of the FIMR process is the conduction of maternal interviews through home visits by the ABC Coordinator. This perspective offers a much-needed glimpse into social and service related issues so important to improvement efforts.

Challenges/changes over time:

A major change in the program since its inception has been the incorporation of our FIMR data into the Perinatal Periods of Risk (PPOR) model supported by the Centers for Disease Control and March of Dimes. Not only has use of PPOR enabled the Coalition to identify and focus efforts on those periods of risk with greatest excess death rates for our community (i.e., preconception health and post-neonatal infant care), it provides a wonderful benchmarking and ideas-sharing network with other national FIMR groups.

Another change has been in the number and types of data indicators abstracted from maternal and infant records. Beginning with < 30 items in the early years, more detailed / specific information was added to the data list as trends were noted and new issues were reported nationally. For example, measuring the % of moms with a maternal infection evolved into measuring % for UTIs, specific types of STD's including trichomonas, and chorioamnionitis. History of colposcopy was added when CRT members questioned a possible link between colposcopy and preterm labor. Cause of death and type of anomaly lists were expanded over time to easier identify details in trend changes. And, after ABC's FIMR data was incorporated into the City Match's Perinatal Periods of Risk (PPOR) model, both gestational age and weight groups were adjusted to coincide with theirs. More recently, a significantly rise in obesity has led to the addition of a data item for preweight groupings which correspond to WIC guidelines.

More recently, we have undertaken efforts to increase involvement of CAT members, (and thereby, ownership in the Team), through greater distribution of project workloads. Work sub-teams have been formed targeting various focuses including legislative support, development of provider, client, and community education materials, community education / outreach, and improvement/maintenance of the Coalition's website. Although communication and coordination will be required between these sub-teams, it enables members to utilize their specific strengths and preferences. Additional work teams can be added as needed for future projects.

Although overall support from the community has been excellent, there have been challenges. Two of these were identified early, and have proven difficult to resolve. First is the lack of available prenatal care records when hospital charts are reviewed. Almost each year, the current ABC Chairperson has drafted letters to all community OB providers requesting better compliance with sending this information to delivering hospitals; more recently, due to the limited success of these past efforts, a letter was sent from the ABC chair, CRT chair, and the Public Health Officer requesting access to records in their respective clinics and offices by the ABC Coordinator when information was missing or incomplete. Follow up will be more persistent as 2005 record reviews begin.

Another problem is completion of maternal interviews. Several issues impact this problem. One is the delayed receipt of fetal and infant death certificates; due to the more transient residence habits of many lower socio-economic moms, this often results in difficulty locating them months after the fact. Some do not wish to discuss the deaths of their baby because it is so painful. Still another problem is failure of some to keep scheduled appointments for the interviews. Efforts continue to improve this process in order to achieve a greater % of completed interviews.

Finally, maintaining professional involvement and support from the community is an ever present challenge. In order to feel their limited time and effort is validated, Coalition members need communication about meetings, as well as accomplishments and improvements in community outcomes due to ABC's work. This is accomplished through Medical Society Newsletter articles, provider mailings, and semi-annual breakfast meetings of the entire Task Force with presentations and reports of FIMR data and trends over time. Another positive is the local support we receive from the American College of Obstetrics and Gynecology.

Accomplishments to date:

Almost all grant goals related to FIMR have been met and significantly exceeded since the program's inception. These include:

- *100% representation on FIMR's Case Review Team from obstetrics, pediatrics, administration, medical records, neonatology, and social service providers;*
- *Review of nearly 100% of death cases annually (exception for 2003 cases (62% of cases were reviewed) due to vacancy in the ABC Coordinator's position for several months);*
- *Completion of >95% of record abstractions and summaries for death cases annually;*
- *Continued attempts to increase % of completed maternal interviews from 7% (2003 deaths) to 25% by 5/31/06; (for 2004 deaths reviewed to date, 9.8% have completed interviews); and*
- *Implementation of >85% of recommendations presented to the CAT by the CRT.*

These recommendations generally fall into one of several categories: education of providers on current trends, encouragement of providers on best practice for specified topics, community education about topics related to FIMR findings, support for legislation aimed at factors associated with infant mortality, enhancement or implementation of needed support services identified through maternal interviews, and miscellaneous items.

Some of the more significant accomplishments from the FIMR process include:

- Improved bereavement support for mothers and families through social services and bereavement counselors at all hospitals;
- The Baby Rest program, which provides free burial when families choose hospital disposition of fetal and infant, remains. In addition, an annual memorial service is held, hosted by the four delivering hospitals on a rotating basis.

- Increased awareness of the problem of prenatal substance use and referral options for treatment through development and distribution of a referral directory for providers, identifying all local facilities, types of programs, and insurance / payment methods accepted;
- Increased awareness of the problem of teen pregnancy and the overall problem of fetal and infant mortality through print and television media;
- Addition of domestic violence screening, referrals, and follow-up at all four delivering hospitals;
- Patient education materials were written and made available to all providers for high volume prenatal health concerns identified through FIMR data.

Additional efforts are underway for community education / awareness on topics such as nutrition, importance of preconception health, SIDS prevention, Shaken Baby Syndrome, and prenatal substance use effects. The Coalition is also currently pursuing legislation support for stay-in-school initiatives, tobacco and clean air reform, and mandatory education of all new parents on SIDS prevention and Shaken Baby Syndrome. Finally, a long-standing suggestion to find daycare solutions for NICU siblings in proximity of the Level III hospital continues to be explored. Due to the many financial and legal concerns with childcare provision, this may not be a possibility in the near future.

VIII. PRODUCTS (See Attachments)

IX. PROJECT DATA (See Attachments)