Shelby County Healthy Start Program

Impact Report 2000 – 2004 (Narrative)

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by:

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HEALTHY START IMPACT REPORT

Introduction

The purpose of the Healthy Start (HS) Impact Report is to provide a written summary, from the grantee's perspective, of the experience and impact of Healthy Start. Please use the following outline in writing your project's Impact Summary. (Narrative must be limited to 100 pages).

I. Overview of Racial And Ethnic Disparity Focused On By Project

Identify the racial, ethnic or other disparities that your project focused on. Highlight from your initial community needs assessment the data that led to your community's decision to focus on the identified disparities.

Shelby County, which is primarily an urban area with some rural pockets, experiences racial disparities in a multitude of health outcomes. In the 1990 U.S. Census, prior to the start of the Healthy Start Initiative in Shelby County, 55% (456,421) of the population was white, 45% (372,025 of the population was non-white. The largest racial/ethnic group within the non-white population was African American (362,527). Unfortunately, African Americans suffer disproportionately from diabetes, cardiovascular diseases, HIV/AIDS, and other health conditions. Among the list of health disparities, infant mortality is a high priority for Memphis and Shelby County.

For four consecutive years, 1996 – 1999, infant mortality and low birth weight rates in the African American community in Shelby County were higher than the national average. Data from Shelby County birth and death records published by the Tennessee Department of Health showed that the infant mortality rate for white was compared to 15.9 for non-white infants. In addition, low birth weight rates were higher for non-white infants (13.1) than for white infants (6.1).

In Shelby County, prematurity has accounted for a significant portion of infant deaths. In 1996, 46 (prematurity, defined as births greater than 22-37 weeks gestational age, 46 (16.5%) child deaths in 1996, 65 (23.5%) in 1997 and 60 (20.7%) in 1998. Furthermore, infant deaths due to extreme prematurity (22 weeks gestational age or less) were 52 (19%) in 1996, 36 (16.5%) in 1997, and 67 (22%) in 1998. In 1999, the premature death rate for infants was 19.4 and the extreme prematurity infant death rate was 17.9%.

Key factors contributing to the racial disparity in infant deaths was lack of prenatal care or late start of prenatal care. In 1997, the State of Tennessee initiated a perinatal study, which involved the three largest managed care organizations that serve the Medicaid-eligible (TennCare) population in Shelby County. The study revealed that 22%-35.1% of all pregnant women covered by TennCare did not begin prenatal care in the first trimester of pregnancy. Non-white mothers averaged 10.83 prenatal visits compared to white mothers, who averaged 12.1 prenatal visits. The percentage of non-white

mothers, who received no prenatal care, was 4.4%, while 1.6% of white mothers received no prenatal care.

In addition, the study also demonstrated a disparity between racial/ethnic groups in the percentage of low birth weights and premature births. A review of TennCare data showed that 8.1% - 11.1% of babies born to African American women had low birth weights and 18.1% - 23.9% were born premature. With an overall percentage of 19.3% premature births, a clear disparity is measured.

Although lack of prenatal care, low birth weights, and premature births are significant factors in poor birth outcomes, other factors contribute to the infant mortality issue in Shelby County. They include teen births, inadequate spacing of pregnancies, and the use of tobacco and illicit drugs. To further compound the problem, many citizens in Shelby County experience extreme poverty. According to the 2000 U.S. Census, 22.1% of children under the age of 18 lived below the federal poverty level.

Because of this and other available evidence, the Memphis and Shelby County Health Department Healthy Start Initiative's primary target population was African American women at risk for adverse birth outcomes. The goal to reduce infant mortality and low birth weight was the project's main emphasis. The Shelby County Healthy Start Initiative focused on:

- Access to prenatal care
- Pre-conceptual health education
- Teen pregnancy prevention
- Birth spacing
- Domestic Violence
- Nutrition education and services
- Identification of depression
- Alcohol and substance use
- Tobacco use
- Referral to community resources

II. Project Implementation

Using as a framework the five Healthy Start Core Services (Outreach and Client Recruitment; Case Management; Health Education and Training; Interconceptional Care; and Depression Screening and Referral) and the four Core Systems-building Efforts (Local Health System Action Plan; Consortium; Collaboration and Coordination with State Title V and Other Agencies; and Sustainability) identify how your Healthy Start Project implemented each service and system intervention. For each one, answer sequentially the following:

A. Describe how you decided on your approach to each service, and each Core Systems-building efforts and the rationale for your particular approach based upon your particular community's needs, service system and its challenges

and assets. For example, you might acknowledge that in your area, improving the quality of available services was more crucial than increasing their number, and so you focused on quality improvement in your Local Health System Action Plan.

In the Memphis/Shelby County area of Tennessee, addressing the problem of infant mortality required improving access to early prenatal care, increasing awareness of available community resources, and mobilizing more community involvement. Data sources indicated that disparate populations did not seek prenatal care. Healthy Start concentrated much of its effort on educating the public about the importance of prenatal care and helping participants navigate the health care system to receive the prenatal services they needed. Because high rates of infant mortality were caused by various factors and a result of many societal issues, Healthy Start identified community involvement as a crucial strategy. The project focused on incorporating all of the five Healthy Start Core Services as well as all of the four Core Systems. The success of the Shelby County Healthy Start Program was dependent upon considering all of these components.

B. Identify the components of your intervention and the resources (including personnel) needed to implement the intervention. Note any changes over the project period and the rationale for the changes. For example, you might have decided that using indigenous community workers for outreach required a great deal of support and training, and therefore you gradually changed to an intervention where the outreach workers and case managers had more frequent contact.

Leading the Shelby County Healthy Start Team, the *Project Director* was responsible for daily operations and overall management of the project. This role included defining the Nurse Case Manager model, supervising and training staff, building a cohesive team, managing the budget, evaluating the project's impact, providing community education, interfacing with community stakeholders, establishing the Consortium, and other duties related to the successful implementation of the project. Although not funded through the Healthy Start budget, the Project Director reported to the Manager of Community Services and received direction, guidance, and support.

In addition to the Project Director, a *charge nurse* was hired in January 2001 to directly supervise the Nurse Case Managers and all field operations. In the absence of the Project Director, the charge nurse provided the necessary leadership for the Healthy Start team. This position was charged with troubleshooting, conducting home visits, and monitoring staff activities.

The project established that the clients, due to their high-risk status and potential for adverse birth outcomes, would require frequent contacts and specialized prenatal education. Because of the need for individualized attention, the Healthy Start Initiative implemented the *Nurse Case Manager* intervention model. This model utilized Nurse Case Managers to assess patients' need, monitor patients' health care needs,

coordinate appropriate services, and provide home prenatal and postpartum visits. Through the Nurse Case Managers, participants benefited from an integrated system of services.

The Nurse Case Managers Model was adopted to address the needs of high-risk pregnant women. The nurse case managers used a family approach to encourage healthy outcomes and to educate participants about their pregnancy, health, and community resources. Through an integrated system of assessment, monitoring, psychosocial support, and follow-up, participants and their families received the services, information, and care coordination that would increase the probability of a positive birth outcome.

During the project, it was determined that the model could be strengthened by the presence of Nurse Case Managers at neighborhood Health Loop OB/GYN Clinics. Health Loop OB/GYN Clinics are located in neighborhoods across Shelby County and provide services to a majority of the Healthy Start participants. After careful planning and collaboration with the Health Loop clinics, four of the Nurse Case Managers were placed in the Health Loop Clinics. Each Nurse Case Managers was assigned to staff ½ day per week at a designated clinic site.

To ensure that Nurse Case Managers were available and easily accessible to the community, a Nurse Case Manager was also stationed at the MedPlex for one 4-hour shift each week. The MedPlex, operated by the Regional Medical Center, houses a high-risk obstetrical clinic. Typically, the MedPlex Obstetrical Clinic treats patients who have not received early prenatal care, have medical conditions that might adversely affect the mother or child, and/or TennCare recipients.

Each Nurse Case Manager worked closely with the OB providers to identify high-risk pregnant women, and to enroll them into the Healthy Start program. The providers were also instrumental in making sure the patients attended the prenatal, childbirth, and parenting classes offered by the Healthy Start Initiative. A partnership was also established with WIC (Women, Infants, and Children) Coordinators to identify children who exhibited risk factors during well child checkups, EPSDT (Early Periodic Screening Diagnostic and Treatment) exams, and immunizations. During these critical visits, children with medical and/or delayed developmental milestones were identified and received services from the Healthy Start program.

The Nurse Case Managers were charged with seeking physician referrals for all teen mothers and infants who had been discharged prior to 48 hours after vaginal delivery or prior to 96 hours after a cesarean section. The purpose of this strategy was to improve the probability of healthy outcomes for high-risk clients. The Nurse Case Managers exhausted every available avenue and opportunity to locate women and children whose health and well-being could be significantly impacted by participation in the Healthy Start Initiative. Over the four-year grant period, the number of referrals to the Healthy Start Program steadily increased.

Nurse Case Managers assessed the patient's needs, monitored their health care, coordinated services, and provided home prenatal and postpartum visits. The intensity and frequency of services were based on an assessment of individual participant/family needs. Essential components of the process included universal screening and assessment of all pregnant women and infants at initial contact and on-going care coordination until the infant was two years old.

As a result of the growing number of Latino women in Shelby County, a bilingual Nurse Case Manager was sought. Despite using several methods to hire a bilingual nurse Case Manager (multiple postings of job opening on the Shelby County website and advertising in the Commercial Appeal, Memphis' largest circulation newspaper and La Princa, the local Latino newspaper), the effort to hire a bilingual Nurse Case Manager was unsuccessful. As an alternative, another approach was developed. A *bilingual Clerical Specialist* was utilized as an interpreter/translator to overcome language barriers with Latino participants. This approach facilitated Healthy Start in meeting the needs of the two Health Loop Clinics that served a large population of Spanish speaking patients. During the last year of the project, a bilingual Nurse Case Manager agreed to work on an "as-needed" basis.

The bilingual Clerical Specialist provided assistance at the prenatal classes and accompanied the Nurse Case Managers on home visits. She was instrumental in explaining the educational material to the clients as well as determining clients' understanding of the information provided. Another layer of the outreach to Spanish speaking clients was the use of bilingual materials, brochures and pamphlets and placement of bilingual instructional signs on the importance of early prenatal care and the availability and description of the Healthy Start program. Adoption of these strategies afforded the opportunity to outreach to the Latino population.

The comprehensive team also included a *Medical* S*ocial Worker* and a part-time *Nutritionist*. Because of the diverse social needs of the target population, the Medical Social Worker provided assistance and referrals to meet clients' needs. The Nutritionist received referrals to work with clients who needed nutritional counseling on healthy eating, breastfeeding, proper techniques for mixing formula, and other topics. In addition, clients received assistance from the Nutritionist and Nurse Case Managers on accessing formula and other commodities.

To give valuable support to the program, an Organizational *Consortiu*m Model was also implemented. This intervention allowed the community to become engaged in the effort to reduce infant mortality in Shelby County. The focus of the model was to convene a Consortium to serve in an advisory capacity. The Consortium included 41 members who were a reflection of the community at large. The advisory board consisted of male and female members as well as African Americans, Latinos, and Caucasians. Representatives from government and public service agencies, business, education, civic and community groups, private organizations, and faith-based organizations were included. In addition, Healthy Start program participants and other interested

healthcare consumers were apart of the group. The diverse membership of the Consortium provided a broad perspective on issues related to infant mortality.

C. Identify any resources or events (your State experienced a budget shortfall) that either facilitated or detracted from successful initiation and implementation of each intervention.

In October 2003, the MSCHD submitted a proposal to the Health Resources Services Administration (HRSA) to re-fund Healthy Start in the Shelby County community. Despite high hopes and escalated infant mortality rates, re-funding was not awarded. Immediately, plans were set in place to re-submit the proposal in December 2004. A commitment was made by the MSCHD and several dedicated project staff members to continue providing services to the women and children enrolled in the program. Although the program reduced the number of new clients enrolled, the Nurse Case Managers and Social Worker, who remained with the program even with an uncertain employment status, toiled diligently to provide the care needed to ensure positive birth outcomes.

During this time, a new Manager of Community Services was hired. One of the manager's first assignments was to lead the charge to secure supplemental support for the lapsed funding period. Along with guidance from Shelby County's HRSA Project Officer and MSCHD Administration, the effort was successful. The carry-over and supplemental funds ($74,990.00) allowed Healthy Start to operate and serve the needs of high-risk pregnant women and their infants. Because of the unknown economic future of Healthy Start, the MSCHD faced the obstacle of filling vacant positions. During the interim, even though resources were limited, local agency nurses were utilized to deliver services. However, in the face of limited human resources, the project served and had a significant impact on infant mortality and the well-being of Shelby County's newest citizens.

D. For consortium, please address the following <u>additional</u> elements.

1) Highlight how the consortium was established and identify any barriers that emerged in its establishment and how they were addressed.

Each regional area in Tennessee has established a health council to assess and address the health priorities of its area. The Shelby County Regional Health Council (SCRHC) identified infant mortality as a critical health issue. Using the Mobilizing Action through Planning and Partnerships (MAPP) Model, the SCRHC created an Infant Mortality Committee. The committee included representatives from community-based organizations, social service agencies, hospitals, public health agencies, and other entities vested in the goal of reducing infant mortality in Shelby County. Initially, because of a shared vision and an opportunity to maximize existing resources, the SCRHC Infant Mortality Committee served as the Healthy Start Consortium.

As Healthy Start expanded and needs changed, a project-specific consortium was convened. The make-up of the Consortium was similar to the SCRHC Infant Mortality Committee, but required some additional representation. Program participants, who had received program services, were added to the roster to provide input from the client perspective. In an attempt to engage the entire community in resolving an issue that affected the entire community, the Consortium was charged with conducting public awareness and outreach activities aimed at informing the general population about community resources, serving as the voice of the community, and providing feedback on intervention strategies.

Overall, the Consortium proved to be a successful and effective endeavor. A broad scope of organizations participated. Among the organizations represented were: local hospital systems, community-based organizations, neighborhood associations, faith-based groups, philanthropic groups, academic institutions, governmental agencies, medical practices, child advocacy groups, youth outreach programs, and others.

The consortium was characterized by high attendance and participation in planned activities. The Project Director faced the difficult challenge of identifying individuals from the all of the racial and ethnic groups in the Shelby County area. Especially important because of population-growth in Memphis and Shelby County, there was a need for representation from the Hispanic population. This barrier made it difficult to have an accurate picture of the pulse of the Hispanic community and it's unique needs. To overcome the barrier, individuals from agencies and community-based organizations that served the Hispanic population were invited to participate. The Consortium held its first official meeting on March 17, 2001.

2) **Briefly describe the working structure of the Consortium, which was in place for the majority of the implementation, its composition by race, gender and types of representative (consumer, provider, government, or other). Also, please describe the size of the consortium, listing the percent of active participants.**

The working structure of the Consortium, which was in place for the majority of the project (2001 – 2004), included a Chair and general membership. The Project Director facilitated communication and completion of tasks with the help of project staff. The general membership accomplished the stated goals of the Consortium and shared the work of the Consortium with other community stakeholders. **(See Table 1 below)**

Table 1 Consortium Membership

Consortium Membership n = 35		
Organization Representation		
Membership Category	Number of Members	Percentage of Total Membership
Public agencies/organizations	5	14%
Community-based Organizations	5	14%
Private agencies/organizations	3	9%
Healthcare Providers	2	6%
Consumers	18	51%
Other	2	6%
Racial/Ethnic Representation		
Membership Category	Number of Members	Percentage of Total Membership
White	5	14%
African American	29	83%
Hispanic	1	3%

3) Describe the activities this collaborative has utilized to assess ongoing needs; identify resources; establish priorities for allocation of resources; and monitor implementation. Describe your relationship with other consortia/collaborative serving the same population.

The Healthy Start Initiative and the Consortium partnered with many agencies, programs, and other groups and individuals to identify community resources, educate the community about the importance of adequate and early prenatal care, and share information and ideas. Many of the participants in Healthy Start needed services beyond the health realm.

Participants' needs included housing, food, education, and other social services. The Memphis Interfaith Association's Estival Place and the Salvation Army provided housing. The Memphis City Schools' Vocational and Technical Programs gave assistance with education and job training. The Memphis City Schools also allowed Healthy Start participants to take advantage of services provided by the Family Life Resource Centers. The Frayser Family Counseling Center provided mental health services. New Directions, a substance abuse program, was also a valuable partner. Since infant mortality is such a large problem in Shelby County, many organizations were willing to join the effort to increase awareness of the importance of prenatal care. The Campaign for Healthier Babies, which promotes healthy pregnancy through a media campaign and distribution of book with tips and coupons, and the Regional Medical Center's Sunrise Program, which targets pregnant teens, joined forces to leverage the impact of spreading the message of prenatal and postpartum care.

With one goal in mind – to reduce infant mortality, many agencies in Shelby County pitched into to help the cause. It was clear that the needs of the program's participants were great and varied. Understanding the rationale of how factors contribute to healthy birth outcomes, agencies offered: emergency assistance (Community Services Agency), clinical services (Memphis Health Center) and coordination of services (Porter Leath's Maternal and Infant Health Outreach Workers). Each partner played a key role in saving the lives of babies.

Healthy Start was a valuable contributor to community efforts. Healthy Start received and accepted invitations to exhibit at local health fairs, conduct presentations at churches and schools, and participate in community events, such as the annual Incredible Baby Shower. During each of these collaborations, written materials were distributed, questions were answered, and feedback on the community's health needs was collected. Event planners requested information on breastfeeding, parenting, nutrition, depression, and other topics related to pregnancy and childbirth.

Although outreach activities accounted for the majority of collaborative efforts, the Healthy Start Initiative was also sought to help with other types of activities, such as research projects. One of those projects, entitled Project Blossom, allowed Healthy Start to take part in a statistical analysis to evaluate birth outcomes. Compilation and evaluation of the data provided insight into appropriate allocation of perinatal services and resources **(See VII Perinatal Periods of Risk Analysis)**.

4) **Describe the community's major strengths, which have enhanced consortium development.**

A major strength of the Shelby County community has always been its ability to pull together to solve problems and help those in need. Like other issues and challenges that have faced the Bluff City and it's surrounding areas, the people in the Mid-South live up to the nickname of "Volunteer State". A passion for saving babies was the main reason people were willing to work with the Consortium. Some members were fulfilling a professional obligation, but their dedication to the cause showed that caring and concerned individuals are typically drawn to careers involving service to others. The major strength of the Consortium was its members' commitment to reducing infant mortality and saving lives. As a result, the work of the Consortium was enhanced and the impact of the project was richer.

5) **Describe any weaknesses and/or barriers, which had to be addressed in order for the consortium to be moved forward.**

At the start of the Healthy Start Initiative, because of the shared goal of reducing infant deaths in Shelby County, a decision was made to utilize an established community collaboration - the Infant Mortality Committee of the Shelby County Regional Health Council. Although a good plan in the beginning of the initiative, as the program progressed, it was necessary to build a collaboration that focused entirely on Healthy

Start. In March 2000. The Consortium provided guidance on clarifying goals and objectives, developing strategies to meet the needs of high-risk pregnant women, and offering feedback on issues that arose over the course of the program.

E. For sustainability, please address the following <u>additional</u> elements:

1) Describe your efforts with managed care organizations and third party billing.

The only component of the program that was never an issue was recruitment. This was in large part because of the relationship with a local managed care organization. TLC Family Care Healthplan, the largest managed care organization that serves the TennCare population in Shelby County, contracted with AlphaMax, a provider of case management services. Through AlphaMax, Healthy Start received a steady flow of client referrals. The financial relationship existed solely between TLC Family Care Healthplan and AlphaMax. Because Healthy Start did not bill for services, there were no third party billing hurdles.

Healthy Start also received referrals from the Health Loop Clinics, which are located in neighborhoods across Memphis. The Memphis and Shelby County Health Department contracted with the Regional Medical Center to operate the clinics. Again, the program did not bill for services.

Healthy Start did not seek funding from third party billing because of TennCare's PCP/medical model. Since it's inception in 1994, TennCare has experienced tremendous fiscal problems. Low provider reimbursement rates, enrollee fraud, and escalating pharmaceutical and hospital costs contributed to the inability of managed care organizations to net profits. As a result, businesses like Memphis Managed Care Corporation, the parent company of TLC Family Care Healthplan and AlphaMax, were unwilling to negotiate third party payment for Healthy Start services.

2) Describe major factors associated with the identification and development of resources to continue key components of your interventions without Healthy Start funding.

The plan for sustaining Healthy Start without HRSA funding included several funding sources and several strategies. The execution of this plan became very critical during the time period between the first and second awards. The second grant submission was not successful. Shelby County received notification of "approved but not funded".

AlphaMax, the provider of case management services for pregnant women enrolled in the TLC Family Care Healthplan, was approached to support Healthy Start with a one-time lump sum contribution. If granted, the funds would be used for case management and care coordination services for women already taking part in Healthy Start. Although Healthy Start had not received any financial incentives for the referral arrangement with

AlphaMax and discussions occurred between the MSHCD and AlphaMax, financial support did not come to fruition.

The Healthy Start Program was housed at the Regional Medical Center through a lease agreement. The hospital was approached and willing to support the program by forgiving the lease arrangement if the second grant application failed. The deduction of rent payment from the budget would have increased the amount of carry-over funds available for service provision.

The final source approached was the State of Tennessee Department of Health Maternal Child Health Bureau (MCH). Like the others, the MCH Bureau was approached to support not only the "approved, but not funded" time period, but also, to be a long-term partner. The request sought a one-time lump sum contribution and/or support for salary and benefits for a Case Manager/Care Coordinator,

None of the requests were granted. Carry-over funds and additional funds from HRSA sustained the program throughout the "approved, but not funded" period. However, all of the organizations approached for financial support remained important partners in the Healthy Start Program. Each continue to provide support and services to program participants.

3) Describe whether or not you were able to overcome any barriers or to decrease their negative impact.

The "not funded" score received on the second grant submission created difficulty in retaining staff, inability to recruit new staff members, and a tight budget. Initially, these barriers had a slight negative impact on the program. During the carry-over year, the program had a lower caseload. However, the program was able to overcome these barriers. Strong relationships with community partners sustained the program and allowed participants to receive all of the services needed for positive birth outcomes. Through the support and encouragement of these partners, the program was able to overcome the barriers it faced and services were provided with no interruptions. Participants, remaining staff members, MSCHD administration, and community partners were enthused and energized to continue the goal of reducing infant mortality in Shelby County with plans to re-submit the grant.

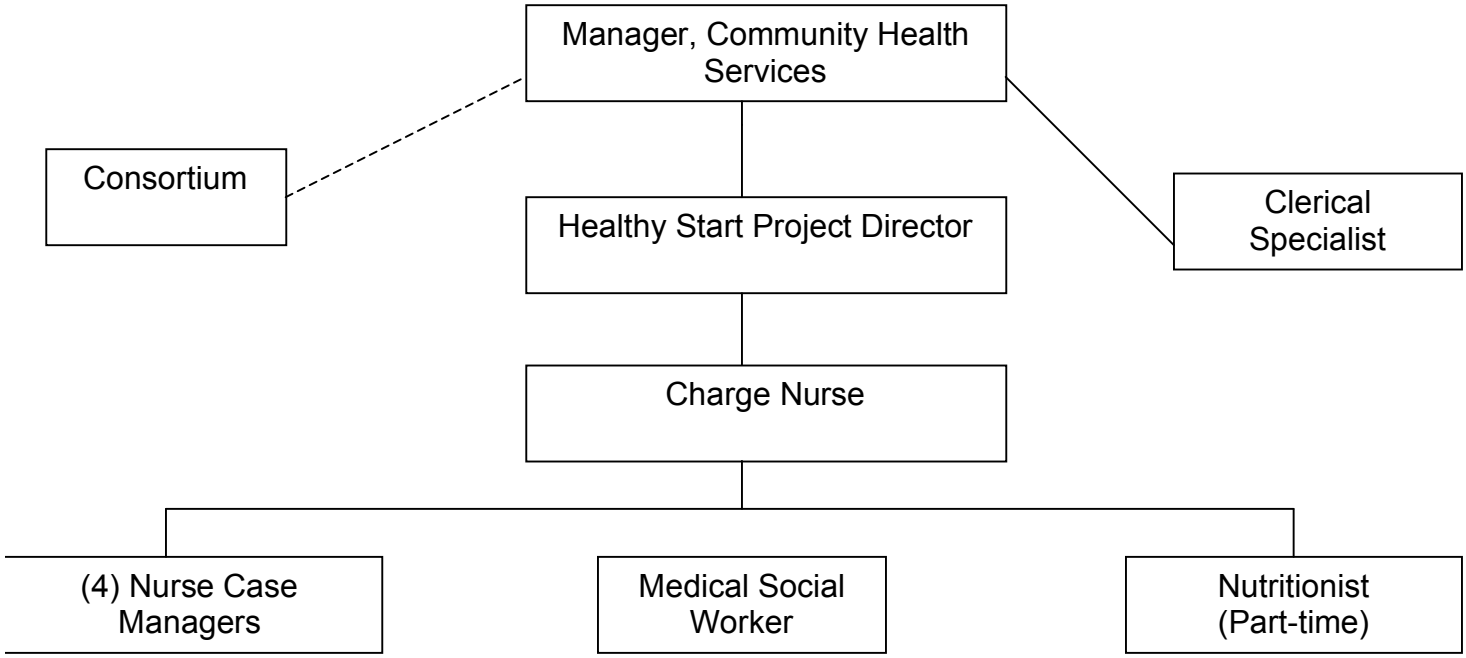
III. Project Management and Governance

A. Briefly describe the structure of the project management, which was in place for the majority of the project's implementation. The structure of the project management included a Project Director, a Charge Nurse; four staff Nurses, a Social Worker and clerical support staff. The Project

Healthy Start was a program housed within the Community Health Services Section. The team was lead by a Project Director, who reported to the Manager. The Project Director was responsible for the management of all of the components of the program,

including fiscal, administration, evaluation, and coordination of the Consortium. The Charge Nurse, who supervised the daily activities of the nurse case managers, social workers, and nutritionist, assisted the Project Director and served in her absence. The Consortium, which was coordinated and facilitated by the Project Director, served in an advisory capacity to the program. Each component of the Healthy Start team had a specific function with the expectation of filling in gaps, when required. **(See Diagram 1 below)**

Diagram 1 Healthy Start Organizational Chart



B. Describe any resources available to the project, which proved to be essential for fiscal and program management.

Traditionally, the Memphis and Shelby County Health Department has worked together with the Regional Medical Center to serve the health care needs of the public, in particular the medically underserved. Healthy Start was no exception. The value of the resources made available to the program by the Regional Medical Center and its Health Loop Clinics was immeasurable. Prenatal and postpartum care, diagnostic services, medications, treatments, and many, many other services contributed to the core interventions of the program. In addition, Shelby County received an additional $25,000 during the first grant year to support salary/fringes for an additional Nurse Case Manager.

C. What changes in management and governance occurred over time and what prompted these changes?

There were no changes in the management and governance of the program. The initial structure for both of these components remained the same throughout the length of the 4-year project period.

D. Describe what process had to be developed to assure the appropriate distribution of funds and what happened with the process over time.

No particular process had to be developed to assure appropriate distribution of funds for the Project. The grantee, the MSCHD, which is a part of Shelby County Government, is run by the local County mayor, has a finance/accounting department. This department was responsible for all contracts, budgets, payments, and for all grants and programs within the MSCHD. The Project Director was responsible for daily expenditures and keeping track of expenditures and checking her records against monthly statements provided by Shelby County Government.

E. As the project moved forward with implementation, what additional (non-HS) resources obtained for quality assurance, program monitoring, service utilization, and technical assistance became important especially as contractors were funded or additional staff members were hired?

The MSCHD utilizes PTBMIS (Patient Tracking Billing Management Information System and VERSYS for several clinics and patient services. PTBMIS tracks patient demographics and patient utilization of services. VERSYS, a primary care enterprise practice system, is used to set and track appointments. Both systems provided the Healthy Start program with vital program participant information. The reports generated by the systems provided the Project Director with a mechanism to monitor quality standards and service delivery for the program.

Healthy Start, also, contracted with the University of Tennessee Health Sciences Center (UTHSC) Department of Preventive Medicine to evaluate the program's achievement of goals, effectiveness, and impact. An evaluation plan was developed by UTHSC and presented to the Consortium. Although some data was collected, the activities outlined in the evaluation plan were not completed. **(See Section VI)**

F. To what extent was cultural competency of contractors and of project staff an issue? If cultural competency was an issue, how was it addressed, and were any noticeable benefits realized?

Because the project staff had experience with the various cultures and populations residing in Shelby County, cultural competence was not an issue. However, the Project Director did take advantage of several professional development opportunities in areas related to cultural competency. Staff members participated in an 8-session Spanish course, conducted by the Regional Medical Center and a 2-month course presented by the Tennessee Linguistic Association, Nashville.

III. Project Accomplishments

A. Describe each major strategy implemented, with its goals and objectives and accomplishments for this project period. Within the narrative describe in quantitative and qualitative terms the degree of success in achieving the goals and objectives. Describe any barriers that had to be dealt with during implementation and how they were addressed. Summarize all lessons learned. Strategies and goals and objectives that were commonly used across services can be cross-referenced. You may wish to use the Suggest Format, in attachment A for this part of your report.

The Healthy Start Program had a significant impact on infant mortality in Shelby County. In addition to raising the community's awareness of the problem and forming new partnerships, children's lives were saved. Any life lost is too many. Healthy Start had two babies of the # served by Healthy Start. During the first grant year, the project focused on planning and developing the program, which would eventually serve 1,023 high-risk pregnant women. The accomplishments of the program were numerous and many women and infants experienced positive birth outcomes as a result of Healthy Start.

Project Period Objectives	Strategies and Activities	Accomplishments
By 12/31/02, 81% (304) of 375 pregnant women in the targeted area will enter prenatal care in the first trimester	Work with partnering agencies and the Health Loop clinics to increase awareness of the importance of early prenatal care. Create a data base to tract all prenatal enrollees using Kessner's Index	As of August 31, 2002, 171 women received prenatal care during their first trimester. Among the 179 African American women, 95 (53%) received prenatal care during their first trimester.
By 12/31/02, the consortium, based on the analysis of year 1 findings on definitions of women receiving no prenatal care, will have identified best practices, and developed and implemented strategies for increasing percentage of target population women who enter prenatal care in the first trimester	Conduct internet research, and library searches. Consult and network with health care providers, community-based organizations and projects. Utilize mentor site (Detroit).	Completed.
By 6/01/04, increase to 85% the percentage of pregnant women in the targeted areas entering prenatal care in the first trimester	Aggressive promotion of program and case finding of pregnant women in first trimester. Outreach and recruitment in primary care Health Loop clinics.	98% of the pregnant women received prenatal care during first trimester. (CY 1 objective reflected 6 months of project data - June 2001 to December 2001- according to data reporting guidelines). Total of 235 enrolled with 179 prenatal women enrolled; 56 postnatal women enrolled.

By 6/1/04, decrease the percentages of women in the neighborhoods surrounding the Health Loop clinics who receive no prenatal care prior to delivery	Nurse Case Managers developed a database to define demographics and socioeconomic characteristics including behavioral risks to receiving no prenatal care.	During the first year, only 4 out of 52 postpartum women did not receive prenatal care prior to delivery. All women received adequate prenatal care. The database of demographic information was completed.
By 6/1/04, increase the percentage of postpartum women attending MSCHD family planning clinics of targeted population	Discuss appropriate spacing of children during home visits. Assist client in scheduling appointments after delivery.	147 women received family planning services after delivery.
By 6/01/04, increase the number of pregnant women and families' resources through increased distribution of the Happy Birthday Baby Book and associated coupons	Contact coordinator of the Campaign for Healthier Babies to receive applications for the Happy Birthday Baby Books. Include a coupon in each enrollee folder during home visits. Take coupons to prenatal and parenting classes to distribute. Assist clients in completing information on coupons. Develop a database to track each client who received a book.	Based on baseline data of 8,476 books distribution, there was a 3% increase (280) in 2001 and a 3% increase (254) in 2002.
By 12/31/04, increase to 60% (180) of 300 perinatal African American women who will make at least one visit to a health care provider for comprehensive preventive care services.	Include component on importance of primary health care in home visitation curriculum.	Among the 546 (cumulative by 2003) perinatal African American clients in 2003, 243 (52%) reported making at least one visit to a health care provider for comprehensive primary preventive care services.
By 12/31/04, 75% (225) of 300 perinatal women and in need of other services will receive completed referrals.	Conduct needs assessment of clients. Document referrals. Track progress of referrals. Contact resource agency to verify completion.	Among the 725 (cumulative by 2003) perinatal women enrolled in the program, 178 were referred for community resources; 125 (70%) referrals were completed.
By 12/31/04, increase to 82% (246) of 300 perinatal women who are enrolled in case management will receive interconceptional care	Collaborate with family planning program to provide in-services to clients regarding interconceptional care	80% (568) of the perinatal clients (cumulative by 2003) reported receiving interconceptional care.

By 12/31/04, increase to 75% (188) of 250 children 0-18 years of age who have a medical home	Partner with WIC and the Immunization Program to identify children without a medical home. Screen new mothers/guardians to determine the status of identification of a medical home for their children. Partner with Department of Human Services to identify se families without a medical home. Assist clients with selecting primary care provider for children. Assist clients in scheduling well-child care appointments for their children.	108 (70%) of children in the program were identified as having an established medical home.
By 12/31/04, increase the number of pregnant women in Shelby County receiving Presumptive Eligibility	Use Presumptive Eligibility baseline of 297 Shelby County residents were certified to receive TennCare Presumptive Eligibility coverage. Facilitate program participants in scheduling appointment, locating necessary documentation, and completing application.	From June 2000 – July 2001, 971 were certified to receive TennCare under Presumptive Eligibility.

B. For those projects that received mentoring or technical assistance from another site, please discuss any activities/lessons learned form those projects that you utilized in your project. If you provided technical assistance, describe your activities, feedback received on them, and any other lessons learned.

As a new site, Shelby County was assigned a mentor site – Detroit. Shelby County experienced difficulty with hiring a bilingual (English-Spanish) Nurse Case Manager. Detroit was contacted to provide technical assistance on strategies to recruit and retain a bilingual clinical staff member. Detroit's recommendations included advertising in the local Hispanic newspaper and seeking referrals from agencies, which served the Hispanic population. Shelby County had already attempted these strategies, but none of them were successful. The mentor site was also contacted for information and guidance on intervention modifications to better meet client needs and development of job descriptions for program staff. Detroit shared their experience with appropriate caseloads and geographical distribution of field staff. In addition, Shelby County received copies of job descriptions used by the Detroit Healthy Start Program.

V. Project Impact

Based on a review of all of your project's HS grant submissions during the project period, and the services and strategies implemented, describe the impact of Healthy Start on your Project Area and community. Please organize your description using the outline below.

A. Systems of Care: Describe how the project has enhanced collaborative interaction among community organizations and services involved in promoting maternal and infant health and social support services.

1) Describe the approaches utilized to enhance collaboration.

The approaches utilized to enhance collaboration included a system of networking and collaborating with local organizations that served the same target population. Sharing data and outreach plans, developing a community-wide media campaign, conducting presentations, supporting events sponsored by Consortium organizations, encouraging listening to Consortium members during stressful times, and referring clients for services were several of the strategies used. The venue for the majority of exchanges was Consortium meetings, telephone and email contact. Collaboration opportunities were numerous. Key partners included the Department of Human Services, Baby Love Program, TLC Family Care Health plan, the Regional Medical Center, March of Dimes, Memphis City Schools, and many, many other organizations.

In addition to community partners, Healthy Start was able to work with programs within the MSCHD. Referring program participants, sharing of resources and information, and brainstorming innovative ways to meet the needs of Shelby County citizens occurred with other MSCHD programs including: WIC (Women, Infants, and Children), Campaign for Healthier Babies, Infectious Diseases, Family Planning, TennCare Presumptive Eligibility, Newborn Screening, Health Promotions, Immunizations Nutrition, and Community Development. Other approaches included speaking at local community in-services and luncheons.

2) Identify the extent to which structured changes, such as procedures or policies, have been established for the purpose of system integration.

Prior to Healthy Start, there was limited access to home visitation services and case management for medically underserved women with high-risk pregnancies. Integration of the services offered by Healthy Start Program was not difficult. Providers were easily convinced of the benefits to their patients and readily referred patients to the program.

One altered system was the provision of case management for TLC Family Care Healthplan (TLC) enrollees. As the largest TennCare managed care organization in West Tennessee, TLC provided medical coverage for most of the medically underserved women in Shelby County. Previously, TLC enrollees received case management services from AlphaMax, a case management provider. Upon the start of Healthy Start, many TLC enrollees with high-risk pregnancies were referred and

followed up by Healthy Start. This arrangement allowed more women to receive case management through home visits and to prolong home visitation for others.

The biggest system change was collaboration among community resources. Working together to improve the infant mortality rate in Shelby County set the foundation to increase the community's awareness of the problem and to develop new strategies.

3) **Describe key relationships that have developed as a result of Healthy Start efforts covering the following areas:**

   a. **Relationships among health service agencies; between health and social service agencies; and with community-based organizations.**

Key relationships were developed between Healthy Start and the Health Loop Clinics, the Quick Care Clinic, Christ Community Medical Services, and the Church Health Center. Health Loop Clinics are spread throughout neighborhoods in Shelby County. The clinics offer primary care services through an Integrated Delivery System. The MSCHD contracts with the Regional Medical Center, the local public health hospital, to operate and staff the 11 clinics. In addition to primary care services, three of the clinics provide obstetrical and gynecological services. Because almost all of the Healthy Start program participants received care from the Health Loop Clinic, it was imperative that the Healthy Start Program establish an effective relationship with the Health Loop Clinics. As a result of this relationship, a Nurse Case Manager was stationed on-site several times a week and women identified with high-risk pregnancies were able to learn about Healthy Start and quickly take advantage of the Healthy Start Program.

The Quick Care Clinic, also a part of the Regional Medical Center, treated urgent medical needs. Through this relationship, Healthy Start participants, who sought care at the Quick Care Clinic, were eligible for the program.

A relationship with private, not-for-profit clinics was formed. With the mission of providing care to the uninsured, working poor, the Church Health Center was a key community healthcare provider and advocate for equal, quality access to healthcare services. Christ Community Medical Services was an important partner because of their outreach to the Hispanic community. Located in an area highly populated by Hispanic residents, one of Christ Community's clinics primarily focuses on obstetrical and gynecological care. Another partner in delivering care to the medically underserved was the Memphis Health Center, a federally funded clinic, which provides comprehensive ambulatory care services to the medically indigent. All of these healthcare providers played a crucial role in integrating and coordinating care for the women and infants in the Healthy Start Program.

<u>Health and Social Service agencies</u>: The Department of Human services and the TennCare Eligibility Program facilitated TennCare coverage for the women in Healthy Start. TennCare, the Medicaid insurance plan, covers at least one comprehensive prenatal visit to include appropriate laboratory work and an ultra sound, if indicated.

The 45-day benefit period provides diagnostic services and treatment for pregnant women. The relationship with TLC Family Care Healthplan, a local managed care organization for the Bureau of TennCare, laid the foundation for easier pre-certifications and referral of TLC members.

Community Based Organizations: The success of Healthy Start largely depended on saturating the community with information about the program. Organizations like Memphis Healthy Churches, the Stork's Nest, the Sunrise Program, 10-Point Coalition, the Hollywood Neighborhood Council, and local churches were integral partners.

Memphis Healthy Churches, which has a membership of more than 150 African American congregations, organized and supported wellness programs and activities. Healthy Start not only requested involvement from various organizations on the Consortium, but it also, served in the same capacity on several coalitions, such as the Hollywood Neighborhood Council and the 10-Point Coalition. Healthy Start was able to give input and guidance on economic, health, and social issues affecting Memphis and Shelby County.

Although some organizations were public, governmental, or even private entities, they served the community-at-large. The Community Nurses Program, the Community Services Agency, Hopeworks, Exchange Club, Memphis City Schools and the Tennessee Early Intervention System are examples of organizations committed to helping in the effort to reduce infant mortality in Shelby County.

The MSCHD Community Nursing Program, which contracted with TLC Family Care Healthplan to provide prenatal and postpartum home visits for its members, was only authorized to provide two visits. Healthy Start was able to fill the gap in services for high-risk pregnant women with follow-up case management services up to 1-year after delivery.

The Community Services Agency arranged assistance with utilities, prescription medications, and rent/mortgage. The Exchange Club Family Center and Shelby County Victims Assistance Center addressed needs associated with domestic violence and abuse, such as counseling, victim compensation, court accompaniment, and emergency sheltering. Through Title I, the Memphis City Schools collaborated with Healthy Start by making available the services of its Center for Parental Involvement, Family Resource Centers, and Adolescent Parenting Programs. A representative from each of these areas participated on the Healthy Start Consortium and actively worked to promote the Healthy Start Initiative among the adolescent parents in Memphis. The partnership with Memphis City Schools allowed program participants to access all of these services and programs. The Tennessee Early Intervention System, a service provided by the Tennessee Department of Education, offered information, referrals and support for children and families with special health care needs. Emotional, mental, and behavioral health needs were met by the Midtown and the Whitehaven Southwest Mental Health Centers. "BabyLove", a residential substance-abuse treatment center for pregnant women provided outpatient mental health services and housing. Healthy Start Nurse

Case Managers and Social Workers coordinated care and linked services with the various agencies.

One of the most successful collaborations was a mass media campaign on issues related to infant mortality: sleep position, nurturing relationships, and "shaken baby syndrome. Healthy Start and the Shelby County Regional Health Council's Infant Mortality Committee, with the assistance of other partners, developed a media campaign, using the Honorable A.C. Wharton, Shelby County Mayor, Yvonne Madlock, Division Director of the MSHCD, and other prominent local figures. Each media spot highlighted a different message and included actors who reflected the community's demographics. Assisted by a local public relations company, Lasting Perceptions, to produce the television ads and to work with local stations to leverage additional time slots.

4) Describe the impact that your HS project has had on the comprehensiveness of services, particularly in the following areas.

a. Eligibility and/or intake requirements for health or social services

Healthy Start referred patients to and received enrollees from the MSCHD's Presumptive Eligibility Unit. This unit has workers from the Department of Human Services and is a gateway to TennCare enrollment.

The Nurse Case Managers, located in neighborhood health care clinics, assessed patient's needs, monitored patient's health care, and coordinated appropriate services. Services were integrated and coordinated to deliver the highest level of quality care. Flexibility was a core characteristic of the program. Clients' eligibility was determined at the most appropriate and convenient location for the client.

When referrals to other community resources were needed, client information was transferred to the service provider. In these instances, standards and procedures were followed to maintain confidentiality. Transferring client information expedited clients' receipt of services and reduced duplication of services.

b. Barriers to access and service utilization and community awareness of services.

Fortunately, Healthy Start proactively dealt with community awareness of program services. The approach included wide distribution of written materials, public speaking engagements, strong collaborative relationships, and broader knowledge about providers and service agencies, and communication of infant mortality data and the scope of associated issues.

c. Care coordination including descriptions of mechanisms implemented to assure continuity of care, quality improvement and follow-up systems(s) for client referrals.

Different levels of case management were established. The levels were based on an assessment of the risk level for each client. An assessment of risk was determined for the infant and family, as well. Medical record guidelines were followed to assure that clients were matched to the appropriate level. The first step in the intake and enrollment process was receiving a client-consent-to-contact form. A tickler system was used to maintain and track referrals received in the program. Referrals were divided into two (2) categories: executed referrals and incomplete referrals. Typically, there was a two-week interval between receiving the referring and contacting the potential client and/or the referral agency. Often, the client would schedule an appointment at one of the Health Loop clinics or be referred to the program at discharge after delivery.

Medical records were reviewed and updated each week. A weekly audit of medical records to monitor accuracy and completeness was conducted. Information from the medical record was entered into an Excel database. A backup system was instituted to store client information. Patient contact information and basic demographics were captured and filed on index cards. A notebook with the original consent-to-contact forms and birth data was also maintained.

d. Efficiency of agency records systems and sharing of data across providers (within the confines of confidentiality rules) to reduce the need for repetition.

The partnerships, which have been formed between the Grantee and the Health Loop clinics and other community-based agencies serving the targeted population, allowed for sharing of information across data systems, particularly the PTBMIS and the VERSYS data systems. The Nurse Case Managers maintained open communication with the clinics and the referring provider to ensure continuity of care and patient. The Nurse Case Managers were able to access the clinic medical records to update the Healthy Start medical records. The program established a system to alert staff of participants who had not received prenatal care. The system included both an electronic database and a paper component.

An example of the benefit of data sharing was found in the collaborative relationship between Healthy Start, the Campaign for Healthier Babies, and TLC Family Care Healthplan (TLC). Program participants were cross-referenced with a database of women enrolled in the TLC Family Care Healthplan, a TennCare managed care organization. TLC allowed Healthy Start to refer their pregnant clients to the Campaign for Healthier Babies. This system facilitated program participants in taking advantage of the Campaign for Healthier Babies' Happy Birthday Baby Book quicker.

Healthy Start was also able to share data within the MSCHD. Programs, such as WIC, Immunizations, and Family Planning, were able to reduce duplication of services and streamline collection of demographic information. Data sharing increased efficiency and reduced data entry errors. After each home visit, the Healthy Start medical records were updated and other MSCHD programs could utilize the information.

5) **Describe the impact on enhancing client participation in evaluation of service provision in the following areas:**

a. **Provider responsibility in maintaining client participation in the system and provider sensitivity to cultural, linguistic and gender (especially male) needs of the community.**

The providers were instrumental in contacting Healthy Start when a high-risk pregnant woman was identified in their facilities. The providers maintained contact with the Nurse Case Managers assigned to their patients' cases. Often, the providers gave the Nurse Case Managers information on missed appointments and shared specific concerns about their patients. During home visits, the Nurse Case Managers relayed messages from providers to patients who did not have telephones. Because of the home visitation component and the Nurse Case Managers' frequent contact with patients, providers relied on Healthy Start to assist them in communicating with their patients.

In the area of gender and cultural sensitivity, Healthy Start co-hosted a conference with the Title I Center for Parental Involvement. The focus of the conference was male involvement. Understanding the role of the male in non-white populations, Healthy Start co-sponsored the conference by supporting lunch, door prizes, and souvenir Healthy Start caps. Over 200 males attended and participated in workshops about fathers' involvement in their children's lives and education.

Healthy Start provided linguistic services through a bilingual staff member, who periodically worked at the clinic sites. One of the clinics, the Hollywood Clinic, provided prenatal care to many of the Hispanic population in Shelby County. The bilingual staff member facilitated communication between the healthcare provider and the patient.

b. Consumer participation in developing assessment and intervention mechanisms and tools to serve perinatal women and/or infants, and the extent of implementation and utilization of these tools or mechanisms.

Consumer involvement in Healthy Start was limited to participation in the Consortium. In their role as members of the Consortium, consumers provided suggestions on media message design, new sources of client referrals, outreach plans, and written materials. In an effort to be inclusive and avoid singling out consumers, their input was not collected in a separate fashion. Consumers also were exposed to information about community resources, which could be shared with their friends, family members and neighbors. Thus, adding community voice to their list of contributions to the Healthy Start Program.

B. <u>Impact to the Community:</u> Describe the impact the project has had on developing and empowering the community, at a minimum in the following areas:

1) **Resident's knowledge of resources/service availability, location and how to access these resources.**

A comprehensive directory of resources was created and given to clients when they entered into the program. Updates were provided during home visits or were available upon request. The information in the directory was reviewed with each client by the Social Worker. The review included explanations of steps to access services. Program staff documented all referrals and followed up with clients to obtain progress reports.

2) Consumer participation in establishing or changing standards and/or policies of participating service providers and local governments, that affect the health or welfare of the community, and have an impact on infant morality reduction.

Based on consumer feedback, changes were made in the scheduling and availability of appointments. Allowing consumers to seek two-week well child check-ups on a "walk-in" basis was instituted to meet consumer need for more flexibility.

3) Community experience in working with divergent opinions, resolving conflicts, and team building activities.

The Consortium was an ideal venue for proactively dealing with differing opinions, resolving conflicts and building effective teams in the community. Continuously, the Project Director communicated a message of collaboration, common goals, and collective strength. The common goal of "saving babies" was a cause that everyone believed was important and could easily endorse. The shared mission of reducing infant mortality laid the foundation for mutual partnerships. Given the enormity of the issue of infant mortality, all of the stakeholders understood that any individual or organization could not tackle the problem alone.

One monthly meeting facilitated consistent contact and communication. Members had an opportunity to voice their suggestions and opinions. Understanding that the membership of the Consortium was diverse and that it was not feasible for all ideas to be executed fostered a non-threatening environment. An additional benefit of the monthly meetings was the opportunity for fellowship and networking during the meal portion of each meeting.

The positive interaction between Consortium members affected working relationships outside the Consortium. Members contacted each other for information, data, and participation in events. Healthy Start was an example to the Shelby County community of the power of partnerships.

b. Creation of jobs within the community.

Healthy Start did not bring a large number of employment opportunities to Shelby County. The project supported salaries for 8.5 FTE positions. Tentative plans to add small business listings to the resource directory and to serve as a referral source for employment were not actualized. Barriers to these plans were lack of community interest and lack of devoted staff time for recruitment and coordination of the activities.

C. Impact on the State:

Over the past four years Healthy Start has supported activities to strengthen and develop relationships with the State Title V program. In some states where there was more than one HS project, the Division of Healthy Start and perinatal Services (DHSPS) encourage coordinated activities across these sites. Describe the activities and impact that this approach has had on your relationship to the State Title V Agency, State Children with Special Health Care Needs Programs(s), your state Medicaid and SCHIP programs, your State Early Intervention Program and other state programs. Highlight any benefits and lessons learned from these relationships.

There is a strong collaborative relationship between the Memphis and Shelby County's Healthy Start Initiative and Tennessee Department of Health (TDOH) Maternal Child Health (MCH) programs. The MSCHD serves as a Regional Office of TDOH and contracts with TDOH. to provide numerous programs supported by MCH funds. These programs include Children's Special Services, Project HUG, the Lead Poisoning Prevention Program and Newborn Screening. In addition, the Child Fatality Review Board and Adolescent Pregnancy Council were supported by Title V funds. The following information provides examples of these collaborative efforts and activities:

1. SCHIP – Because of its 1115 Medicaid waiver program (TennCare), Tennessee did not have a SCHIP program. Shelby County residents could apply for Medicaid/TennCare insurance. Residents could qualify for one or more of the 42 Medicaid categories and/or TennCare Standard Insurance. The Healthy Start Initiative made referrals and assisted any uninsured client with the TennCare enrollment process. Assistance with enrollment aided clients in accessing health care services.

2. Teen Abstinence - The TDOH MCH division established a new abstinence education program as part of the 1996 welfare reform legislation, Public Law 104-103. With the goal of promoting abstinence from sexual activity, the law allowed for the provision of abstinence education, mentoring programs, counseling services, and adult supervision. In addition to information about contraception choices, included in its programmatic activities abstinence-based education. All of the information was included to provide clients with adequate knowledge to make informed decisions. The State Title V program provided educational materials, which assisted program staff in educating program participants.

3. Back to Sleep – The Healthy Start Initiative promoted the Back to Sleep Campaign by including its message of placing babies to sleep on their backs during home visits and the prenatal/parenting education classes. The Healthy Start Project Director received curriculum materials as a member of the Infant Mortality Subcommittee, which was a part of the state-mandated regional health council. The local campaign, entitled "This Side Up," targeted area clinics, television media, local newspapers, and Title V programs.

4. HUG Program - Tennessee's Title V Help Us Grow (HUG) Program offered services to pregnant and postpartum women, and infants and children up to age six. Offering assistance to women and infants up to infants' second birthday, this program assisted clients in gaining access to medical, social, and educational services. Implemented by the MSCHD Community Nursing Program, this program partnered with the Healthy Start Program. The mutually beneficial partnership maximized available resource and minimized duplication of services.

5. Childhood Lead Poisoning Prevention Program - The MSCHD Childhood Lead Poisoning Prevention Program, which is partially supported by the TDOH, provided blood lead level screening to children between the ages of 1 and 5 years of age. The Healthy Start Initiative provided participants with information about lead poisoning and its effects on the growth and development of children. Lead abatement in homes and referral for further testing and treatment were available for program participants.

6. Children's Special Services - Children's Special Services (CSS), a state-mandated program, provided medical services to eligible children with special health care needs. The Healthy Start program participants, who had been assessed and identified as potential enrollees into CSS, were referred for assistance. As CSS clients, children received medical services, case management, therapy, durable medical equipment, and corrective surgeries.

7. Success By Six – Realizing the importance of parental involvement, the Success by Six Initiative provided information on techniques parents could use to have a positive impact on their child's development. Ideas and strategies developed by the Success by Six Initiative were incorporated into the Healthy Start Program. Healthy Start families were taught techniques to stimulate the cognitive, language, and motor skills of their children.

8. EPSDT – Early Episodic Screening Diagnostic and Treatment provided well-child exams to children enrolled in the TennCare program from birth to age 21. The Healthy Start case managers monitored each child to ensure that he/she received well-child check-ups and immunizations according to the EPSDT recommended schedule. These services were received at no cost to TennCare enrollees. All of the Healthy Start children were enrolled in TennCare.

9. Families First Program – Tennessee's comprehensive welfare-to-work program, the Families First Program mandated work requirements, time limits, and parental responsibilities on welfare recipients. Many clients in the Families First Program received services from the MSCHD Community Nursing Program. Upon the benefit period for home visitation services by the Community Nursing Program, Families First clients were referred to Healthy Start for continuation of home visits and post-partum follow-up care.

10. Title X Family Planning Program – Comprehensive family planning services were provided through the Title X Family Planning Program. With the goal of informing

program participants of appropriate spacing of children, the Healthy Start Program referred all clients to the Memphis and Shelby County Family Planning Clinics.

11. The Tennessee Breast and Cervical Cancer Early detection Program – Healthy Start worked closely with the Tennessee Breast and Cervical Cancer Program to link services for pregnant women who had been diagnosed with breast and/or cervical cancer. Program participants were also informed about the importance of early detection and screening. During the grant period, three clients were referred to the TBCC Program for comprehensive services.

12. Child Car Safety Seat Program – Memphis receives funding from the local city budget to operate the Child Car Safety Seat Program. The program is supported by revenue from fees assessed to motorists with child safety seat and seat belt violations. Community residents can receive a child car safety seat for a minimal cost ($5 – premature size, $10 – infant size) or free of charge, depending on ability to pay. The Child Safety Seat Program works collaboratively with the Campaign for Healthier Babies to include a $5 coupon in the Happy Birthday Book. An average of 3,000 seats are distributed each year.

D. Local Government Role: Highlight activities/relationships at the state and local level that facilitate project development. Briefly describe barriers at the state and local level, and the lessons learned in dealing with these barriers.

At the beginning of his appointment, the Commissioner of the Tennessee Department of Health stated three goals for his administration: reduction of infant morality, elimination of health disparities, and reduction in teenage pregnancy. The Shelby County Mayor, a champion improving the lives of children in Shelby County, was a leader in the quest to reduce infant mortality. Serving their first terms, both high profile individuals were spokespersons for our cause. Commissioner Robinson, an internal medicine physician, highlighted access to prenatal care in his state health plan. Mayor Wharton, a former Assistant Attorney General, brought to the forefront the importance of early childhood interventions and programs. The project continuously focused on and nurtured relationships at the state and local levels.

The most challenging barrier encountered was keeping abreast, understanding, and navigating TennCare, the Tennessee Medicaid-waiver program. On both the state and local level, Healthy Start had to overcome obstacles. Like other programs and health care providers, Healthy Start was confronted by reductions and elimination of benefits, eligibility requirements, managed care organizations' limited network providers, and other program changes. Locally, due to reimbursement rates, program participants could not utilize all of the hospital systems for prenatal care, delivery, and postpartum care. Although addressing these challenges was beyond the scope of the program, Healthy Start learned a valuable lesson.

E. <u>Lessons Learned</u>: If not discussed in any sections above, please describe other lessons learned that you feel would be helpful to others.

Shelby County's Healthy Start Program experienced some valuable lessons: 1) the importance of contracting with an evaluator, who has experience and a strong work history in community-based projects; 2) the importance of having access to medical records; and 3) the benefit of a large pool of high-risk patients. The project learned that evaluation of a community-based service delivery program was different than evaluation of a research project. The components of the evaluation plan, the strategies for data collection, and the role of program participants in plan design were factors that would be approached in a different manner. Coordination of care was vital to the success of the program. Without access to medical records, it would have been more difficult for the Nurse Case Managers to provide comprehensive case management. Also, having access to a large number of pregnant women with high-risk pregnancies was valuable. Community partners, such as the Regional Medical Center, the Health Loop Clinics, and other safety net providers, referred clients to the Healthy Start program. As a result, the program did not experience any problems with locating participants. All of these lessons had an impact on the program.

VI. Using the suggested format in Attachment C, submit a copy of the Healthy Start Local Evaluation Report for each local evaluation conducted

The Shelby County Healthy Start Program contracted with the Department of Preventive Medicine at the University of Tennessee Health Science Center to develop and implement an evaluation plan. The evaluation plan was created and presented to the Consortium.

FINAL LOCAL EVALUATION REPORT INSTRUCTIONS

In order for the Division of Healthy Start and Perinatal Services (DHSPS) to have a concise and complete record of all local evaluation and studies conducted; please submit the following information as part of the final report. The information requested corresponds with previous local evaluation information requested in the past. Please note that a separate COMPLETED LOCAL EVALUATIONREPORT MUST BE SUBMITTED FOR EACH LOCAL EVALUATION CONDUCTED. Identify the project's name, title of Report and the Authors for the particular local evaluation conducted.

PROJECT NAME: _____The Healthy Start Initiative_____

TITLE OF REPORT: __Program Evaluation Report_____

AUTHORS: __Kimberlee Norwood, M.S. and Lisa M. Klesges, Ph. D_____

Section I: Introduction

In March of 2000, the Department of Preventive Medicine at the University of Tennessee Health Science Center was contacted by the Memphis & Shelby County Health Department to consult on a Healthy Start grant proposal. Dr. Lisa Klesges agreed to design an evaluation plan and to write the evaluation sections for this

proposal. The project was submitted to HRSA and subsequently funded. The first steps of the evaluation process involved obtaining approvals to conduct the Healthy Start evaluation and to obtain vital statistics data. These activities included: drafting a scope of work and contract that was submitted to Memphis & Shelby County Health Department, obtaining research approval by the University of Tennessee Institutional Review Board to conduct analyses of birth certificate and other vital statistics records, applying to the State of Tennessee to obtain vital statistics data, obtaining research approval by the University of Tennessee Institutional Review Board to conduct evaluation of the Maternal and Infant Health Consortia, and drafting a research agreement with Memphis & Shelby County Health Consortium.

The evaluation is conceptualized with three major elements and activities. The first is the evaluation of the process and activities of the Maternal and Infant health Consortium. The second element is to assess the intervention delivery and pregnancy outcomes of women enrolled in the Healthy Start Program. The third element is the assessment of vital statistics information to determine if changes in pregnancy outcomes are related to the implementation of Healthy Start. The evaluations of the Case Manager Model intervention will consist of prospective analyses to consider improvements in the specific objectives and is conceptualized with two specific aims: 1) evaluate the efficacy and effectiveness of the modes and 2) evaluate the effectiveness of the community-based consortium in improving access to prenatal care, resource materials, and family planning education. The broad goal of statistical analysis will be to ascribe any change in major endpoints to the initiative. To accomplish this, we will triangulate changes related to our initiative by analyzing data in several ways and to several nonequivalent outcomes. Additionally, since community-based interventions are susceptible to biases, we will also scrutinize our implementation and process measures to ascertain potential “error of attribution” in this program. Appropriate confounding and moderating variables will be considered by analyzing data in relevant subgroup analyses, for example by race/ethnicity, age and parity.

Section II: Process

Evaluators have designed evaluation forms to administered to the MIHC consortium and now to the newly formed Healthy Start consortium and have programmed a database for entering and storing these data. Questionnaires have been collected on several measurement occasions from MIHC. This information has been collated, entered into the database and is being maintained for future analysis. The evaluators have maintained member sign in logs for consortium meetings and these logs are also part of the evaluation database.

Relevant to assessing the intervention impact, the evaluators attended meetings every other week with the Healthy Start staff and advisors. These meeting were designed to prioritize, organize, and help launch the Healthy Start Initiative. Initial meetings focused on the following objectives: designing a screening and referral system for Healthy Start enrollees, choosing a program or intervention curriculum, defining specifics intervention

objectives, specifying training requirements for HS staff, and outlining a process to monitor delivery of the intervention.
Plans are to analyze indicator data from the targeted neighborhoods surrounding the Health Loop Centers offering new intervention services. Zip code data will be used to define these targeted areas. Census tract information will be used to ascertain these matching characteristics proposed as: median age, female head of household, non-white race, and below poverty index. Statistical analysis will proceed by comparing time series trends of our primary outcomes. For each outcome, regression slope coefficients will be calculated on quarterly intervals through the baseline period and following introduction of the new intervention strategy. For example, first trimester prenatal care will be calculated from vital statistics records each quarter over the three-year baseline period and the 4-year follow-up intervention period. Regression slope coefficients will be tested to establish significant change over time. Regression slope coefficients for the intervention and control neighborhoods will be compared using a two-tailed t-test.

The program will also be responsive to potential problems related to implementation of the Healthy Start program. The process measures of implementation at the intervention clinics will be collected from clinic records; the prenatal home visit forms, and other relevant intervention tracking forms. The Project Manager will be responsible for coordinating the collection of data from the nurse case managers and clinic personnel.

Assessments of community-based interventions present many challenges. Fortunately, monitoring and evaluation methods are available to assess community-based health promotion correlations (Bracht, 1990; Francisco, Paine, Fawcett, 19893; Goodman, Wandersman, Chinman, Imm & Morrisey, 1996).

These methods form our analytic framework and will be used to gauge the effectiveness of our community-based intervention objectives. Specifically, efforts of the consortium will be considered effective if the following objectives are demonstrated: I) ethnic/racial diversity is representative of Shelby County demographics: II) representation of civic/organization will increase over baseline; III) representation of consumer groups will increase over baseline levels; IV) increase the capacity (knowledge and skills) of consortium members; V) increase community-based outreach strategies by the consortium. The Demographic

Forms will be used to identify the type of organizations represented at consortium meetings and will be graphed to demonstrate potential increases in the percentage of civic organizations and private consumers that are represented on the consortium. Pre to post comparisons in percentages will be analyzed using McNemar's test for Nonparametric data. Increased capacity of consortium members will be specifically measured as sustained membership, involvement in decision-making, conflict resolution, and meeting productivity. These elements will be measured by analyzing quarterly information from the Meeting
Effectiveness Inventory. Quarterly assessment of member's activities will be measured on the Tracking of Actions Form. The Tracking of Actions Form will be used to classify involvement of community agencies and private citizens. For example, data on financial

resources generated, training provided, and joint agreements will be analyzed to show change from baseline in number of outreach strategies to improve access to early prenatal care. Particular attention will be paid to the number and type of training opportunities provided to the community. We will compare the percentage increase in the number and type of consortium activities from baseline to each subsequent year and across the 4-year period of this initiative. For project measures, the Project Manager is responsible for attending each consortium meeting and collecting the relevant meeting forms on the proposed timeline. Data Forms will be collated following each meeting and entered into the project database. The local evaluator will conduct data cleaning, management and analysis.

Section III. Findings/Discussions

The evaluator administered a meeting effectiveness inventory at the Maternal and Infant Health Consortium Meeting. The Meeting Effectiveness Inventory includes questions on the clarity of the goals of the meeting, the leadership in the meeting, the quality of decision making at the meeting, the level of cohesiveness among the members at the meeting, the presence and resolution of conflict at the meeting, the organization of the meeting, the productivity of the meeting and what could have been done to make the meeting more effective. A total of 16 out of 19 attending consortium members responded to the inventory. In response to the clarity of goals from the agenda of the meeting, 18.75% reported that clarity was excellent, i.e., the goals were clear, shared by all and endorsed with enthusiasm while 68.75% reported that the clarity of the goals was good. 12.50% reported that the clarity of the goals was fair. In response to their general level of participation in the meeting, 25.00% reported that their level of participation was excellent, 56.25% reported that their level of participation was good and 18.75% reported that their level of participation was satisfactory.

There is some discordance in reporting on the leadership of the meeting in that 37.50% report that a staff member led the meeting, 6.25% report that both a staff member and a chairperson led the meeting, 18.75% report that a committee member led the meeting and 37.50% report that a chairperson led the meeting. One respondent also included a specific in the category of “other.” In response to the question “what was the leadership like in this meeting?” 31.25% reported that the leadership of the meeting was excellent, 56.25% reported the leadership of the meeting was good and 12.50% reported that the leadership was fair. 18.75% report excellent decision making gat the meeting. 62.50% report good decision making at the meeting. 12.50% report satisfactory decision making at the meeting and 6.25% report fair decision making at the meeting. 18.75% report excellent cohesiveness at the meeting, 62.50% report good cohesiveness at the meeting, 12.50% report satisfactory cohesiveness at the meeting and 6.25% report fair cohesiveness at the meeting. No one reported conflict at the meeting.

When asked about the organization of the meeting, 56.25% reported that the organization was excellent. 31.25% reported that the level of organization was good, 6.25% reported that the level of organization was satisfactory and 6.25% reported that the level of organization was fair. 25.00% reported that the level of productivity at the

meeting was excellent, 56.25% reported that the level of productivity was good, 12.50% reported that the level of productivity was satisfactory and 6.25% reported that the level of productivity was fair.

The meeting effectiveness inventory was also administered at the close of the Healthy Start consortium meeting (held May 10, 2002) and led by Beverly Watkins, Project Director. Twelve people responded to the inventory out of 15 consortium members in attendance. In response to clarity of goals from the agenda of the meeting, 41.67% reported that clarity was excellent, i.e., the goals were clear, shared by al and endorsed with enthusiasm while 58.33% reported that the clarity of the goals was good. In response to their general level of participation in the meeting, 33.33% reported that their level of participation was excellent, 50.00% reported that their level of participation was good, 8.33% reported that their level of participation was satisfactory and 8.33% reported that their level of participation in the meeting was fair.

As we found in the Maternal and Infant Health Committee Meeting Effectiveness Inventory results, there is some discordance in reporting on the leadership of the meeting in that 41.67% report that a staff member led the meeting, 8.33% report that a committee member led the meeting and 41/67% report that a chairperson led the meeting. One respondent (6.33%) also included a specific person in the category of "other." In response to the question "what was the leadership like in this meeting?" 58.33% reported that the leadership of the meeting was excellent, 33.33% reported the leadership of the meeting was good and 8.33% reported that the leadership was fair. 16.67% report excellent cohesiveness at the meeting, 66.67% report a good level cohesiveness at the meeting, 8.33% report satisfactory cohesiveness at the meeting and 8.33% report fair cohesiveness at the meeting. Again, no one reported conflict in the meeting.

When asked about the organization of the meeting, 58.33% reported the organization was excellent, 31.33% reported that the level of organization was good and 8.33% reported that the level of organization was satisfactory. 50.00% reported that the level of productivity was good and 8.33% reported that the level of productivity was satisfactory.

Overall, response for members for both consortia indicated commonality in participation, leadership, decision-making, cohesiveness, and meeting organization. It appears that the majority of members of both rank their own participation as good or excellent. Members of both consortia have been discordant on the position of the meeting leader (e.g., staff vs. committee member, etc) while the majority of members of both consortia found the level of leadership to be good or excellent. The majority of members of both also found that the decision-making process, levels of cohesiveness and meeting organization to be good or excellent. While the majority of both ranked the clarity of the goals and the overall productivity of the meetings as good or excellent, more members of the Healthy Start consortium ranked the clarity of the goals and the level of productivity as excellent than members of the Maternal and Infant Health Consortium. Four members who were present at the July 2001 Maternal and Health Consortium

meeting were also present at the May 2002 Healthy Start consortium meeting, however, only tow can be identified as having completed both inventories. Eleven (11) maternal and Infant Health consortium meetings were held between March 14, 2000 and September 21, 2001. The range of members in range of members in attendance was 9-25 with a mean of 17. Nine (9) Healthy Start consortium were held between August 10,2001 and July 12, 2002.

Section IV. Recommendation

Recommendations that stemmed from the local evaluation include: Utilizing census tract information to ascertain matching characteristics such as median age, female head of household, non-white race, and below poverty index. Process measures of implementation at the intervention clinics will be collected to better understand the delivery of the intervention. Collecting the number of home visits per client will aid in collecting data for process measures. Recommendations also include the Project Director taking on the responsibility for coordinating and collecting the data from the nurse case managers and clinic personnel. Policy for the evaluation should be clear and concise and an agreement should be clear as to the type of evaluation that is to take place.

Evaluations and assessments of community-based interventions can present many challenges. Other recommendations will include a closer collaboration between the grantee and the evaluative source to produce more concise effective research-based data. Decide and establish a database for the evaluation as a priority for the Project. Recommend early on programming of an Access database to match data collection forms and the completion of an electronic template for the Project for collecting input client data. This would eliminate collecting chart review information or data collection as a routine part of the Healthy Start daily activities by the Project staff, and thus can help to eliminate human error in data collection.

Section V: Impact Based upon the Recommendations/Results of the Local Evaluation

One change that took place, which greatly impacted the community, includes the addition of the VERSYS and PTBMIS system to the Project. This created an active database to be used for tracking clients and monitoring demographic and clinical information. Unfortunately these systems were not used for program evaluation, however this would be strong recommendation for further evaluative use.

VII. Fetal and Infant Mortality Review (FIRM)

For those programs that developed or participated in a FIRM, please identify the length of time you have had a FIRM process; whether it includes an emphasis on maternal and child mortality as well; the components of the process (including whether it has a home visitation component) and funding sources. Indicate whether you use a two-tiered approach [e.g., community Review Team (CRT) and Community Action Team (CAT)] and what challenges and changes have occurred

over time. Describe major accomplishments on implementing recommendations arising from the FIRM process and any other lessons learned.

Locally, the Child Fatality Review Board (CFRB) conducted retrospective reviews of all deaths for children under 18 years old. All cases were examined and circumstances of the cause of death were analyzed. The Shelby County CFRB reported that prematurity was the leading cause of death for children during 1998 – 2000. Prematurity, defined as infants born between 23 weeks and 37 weeks gestation, and extreme prematurity, defined as infant s born at or less than 22 weeks gestation. When the CFRB reviewed 100 child deaths (1999) due to prematurity, the analysis revealed that there was a disparity between African American infant deaths and white deaths (53 compared to 8). The same review showed that 35 African American infants died due to extreme prematurity compared to 4 white infants.

The State of Tennessee Child Fatality Advisory Team, which focuses on prevention, reviewed the reports from the local CFRB, analyzed statistics of the incidence and causes of child deaths and made recommendations to the Governor and General Assembly to promote the safety and well being of children.

In addition, the Perinatal Periods of Risk (PPOR) indicated that the second most significant component of feto-infant death in the African American community was infant health. Infant health accounted for 112 deaths with a calculated rate of 4.5 in the African American community from 1999-2001. This was compared to 20 deaths with a calculated rate of 1.2 in the white community. **See Summary Report below.**

PERINATAL PERIODS OF RISK
Analysis of 1999-2001

Overview

The purpose of this report is to provide a description of the data analysis results for Shelby County Tennessee for the years 1999, 2000, and 2001. The analysis was conducted for overall rates in Shelby County for all races and stratified by race for black and white only. Data were obtained from Vital Statistics, Memphis and Shelby County Health Department. The methodology used to obtain these results was the Perinatal Periods of Risk (PPOR) model. The assumptions of this model are not described in this report, but limitations to interpretation of data will be noted.

Limitations

It is well documented that differences in vital statistics reporting exist between U.S. cities, particularly for certain subgroups. Therefore, any comparison with other areas must be made with this in mind, to minimize this variability; fetal deaths are limited to fetal deaths with gestational ages of 24 weeks or more. Second, fetal deaths and live births are limited to birth weights of 500 grams or more. Limitations related to each specific analysis will be included in the related section.

Overall Mortality

From 1999 to 2001, there were a total of 607 feto- deaths out of a total of 43, 543 fetal deaths and live births. This includes all feto-infant deaths for all races and where race was unknown, and the total number of fetal deaths and live births. The overall rate for 1999-2001 was 14.0.

Grantee: The Memphis and Shelby County Health Department (MSCHD)
Intervention: Outreach

VIII. Products

A copy of any materials that were produced under the Healthy Start grant funding must accompany this report. Examples of products include but are not limited to the following: brochures, booklets, posters, videotapes, audiotapes, diskettes, and CDs. These items will go to the Maternal and Child Health Library, Resource and Reference Collection that is housed at Georgetown University.

Two brochures and a compact disc were created to promote the Healthy Start Program. These materials were primarily used in the Health Loop Clinics and Regional Medical Center MedPlex, the ambulatory care facility, which houses a variety of specialty clinics.

IX. Project Data

The Healthy Start Data Reporting Requirements (HSDRR) consisted of variables that described Healthy Start Participants, major services provided by Healthy Start Programs and common project-specific performance measures. Combined the aggregated data from these variables is used to:

1. measure utilization
2. measure penetration
3. assess program outcomes
4. assess the communities=progress in meeting their objectives
5. identify potential performance, and
6. assess compliance with the requirements of the Government performance and Results Act.