I. Overview of Racial an Ethnic Disparities Focused on By Project

The St. Louis Maternal, Child and Family Health Coalition developed the St. Louis Healthy Start project to bridge the gaps in prenatal, perinatal and infant health care, outreach and public health education for poor women in three contiguous zip codes in St. Louis City.

The St. Louis Healthy Start project provided services to Medicaid-eligible women and infants in the 63113 and 63120 zip codes in the city of St. Louis, and the adjoining zip code of 63136 in St. Louis County. The majority of people living in this area are African-American (92 percent), and low-income. Of 4,505 births, 66.5% were to Medicaid consumers, according to 1997-99 census data (Missouri Department of Health and Senior Services, 2000). 99% of Healthy Start participants were African- American. Infant mortality rates in all three zip codes were alarming and far exceeded that of the state. The rate for project area zip codes ranged from 13.2 – 17.4 per 1,000 births. The Missouri state rate was 8.3 per 1,000 live births. (Missouri Department of Health and Senior Services, 2000).

The St. Louis area health care system overall underwent a complete change for our most vulnerable women and children in 1995 when the State of Missouri entered into contracts with managed care systems to administer the state's Medicaid program for pregnant women and children. Since then, the gaps in the system have continued to widen.
Women enrolled in the Medicaid Managed Care Plans did not consistently receive needed information and referrals. Plan case management was geared towards meeting some, but not all, of the family's needs. Fragmented health care has been identified as primary barrier to improved, maternal and infant health and a significant contributor to infant morbidity and mortality in three contiguous targeted zip codes in St. Louis City (63113 and 63120) and St. Louis County (63136). The community developed the Healthy Start project to address the effects of the fragmented system on the most vulnerable moms and babies.
These three zip codes were identified as areas of high need due to the high rates of overall infant mortality and the disparity between that of the White and African-American communities.

II. Project Implementation

Healthy Start Core Services

Outreach and Client Recruitment:

A. Approach

Since 2001 the St. Louis Healthy Start project targeted all women who were pregnant, Medicaid eligible, and who lived in one of three selected zip codes (63113, 63120. 63136) for services. These three zip codes were chosen because they had the poorest birth outcomes in the St. Louis area. Special emphasis was placed on reaching out and recruiting women early in pregnancy. However, since many high risk women did not access care until their second or third trimester of pregnancy, the decision was made early in the program to enroll and provide services to these women as well.

B. Intervention Components

The program started out with four community outreach workers. One worker was assigned to the 63113 zip code. This zip code had the smallest population of the three zip codes. The population was also very transient, making outreach and recruitment in this zip code much more difficult. One worker was assigned to the 63120 zip code. Two workers were assigned to the 63136 zip code. This zip code had the largest area and the largest population. Assignment to a specific geographic area/zip code helped the community outreach workers to build trust and establish better relationships with community agencies and informal community leaders.

At the end of calendar year 2003 the number of outreach workers was reduced from four to three. This reduction was determined to be in the best interest of the program, since three outreach workers were effectively able to work with the continuous core of active participants. One outreach worker was assigned to the 63120 area; the second to part of the 63136 area; and the third to the 63113 area and part of the 63136 area. The funds from the fourth position were then used to hire an information technology (IT) contractor to assist with entering and retrieving data in the Healthy Start database.

Efforts were made to hire community outreach workers who grew up in the target area, were residing in the target area or who had a working knowledge of the population and conditions in the target area. All of the community outreach workers were African American, reflecting the cultural composition of the community served. All of the community outreach workers received on-going training in maternal and infant health issues and job-related skills.

One of the outreach interventions implemented early on in the program was the regular placement of an outreach worker at a local community agency or school (sub-site) for a specific period each week. These sub-sites were intended as

places where the worker could have direct contact with prospective participants in the community and were easily accessible to them. Educational materials were also displayed at each sub-site.

One of the sub-sites was strategically placed at a local high school. Many pregnant teenagers were recruited at this site with the help and encouragement of the school nurse. However, in the last year, the school was less able to offer assistance and referrals. They indicated that the No Child Left Behind Act had forced them to focus almost exclusively on academics and much less on the social needs of the students.

Community outreach workers also distributed Healthy Start flyers throughout the three zip codes at local businesses and meeting areas frequented by women in the community (e.g. stores, laundromats, beauty salons, etc.). Flyers were also placed at public and private agencies serving potential participants (e.g. health care facilities, medical offices, day care centers, schools, food pantries, churches, etc.). Healthy Start staff also participated in community health and resource fairs. Since the fairs often targeted broader geographical areas, however, they were not the most effective outreach strategy.

The Healthy Start project established some working relationships with healthcare providers who serve pregnant women. It was able to establish a reciprocal relationship where the healthcare provider referred potential participants to the Healthy Start project and Healthy Start was able to refer its participants to the healthcare providers. For example, the teen clinic at BJC (Barnes-Jewish-Christian) Hospital made regular referrals to Healthy Start, and Healthy Start referred teen participants to the clinic. Almost all of the Healthy Start participants were already enrolled in MC+ (Missouri's managed care Medicaid program), and the managed care plan referred women to their contracted providers. Some outreach was attempted with the federally-qualified healthcare clinics in the area, but more attention could have been paid to this potential source of participants.

The Healthy Start project developed linkage agreements with community programs as well. In these agreements, the community agency agreed to publicize and make referrals to the Healthy Start project when appropriate; likewise, the Healthy Start project agreed to work closely with the community agency and make referrals to them when appropriate. Information was shared, and fewer participants fell through the cracks.

Outreach and recruitment also included community participants. Through Neighborhood Councils, Community Advisory Board, and Healthy Start Advisory Council, the program reached out to community agencies and the residents of the community to educate them about the program and enlist their assistance in referring potential participants. Approximately 10 to 15 agencies participated in meetings to share information about community needs and resources and develop referral relationships.

In the fall of 2004, the St. Louis Maternal, Child, and Family Health (MCFH) Coalition led an effort to consolidate three groups focused on Healthy Start to improve community participation: the Neighborhood Councils, the former Advisory Board and the MCFH Coalition Healthy Start Committee. The newly formed Healthy Start Advisory Council (HSAC) allowed for more cohesive planning and monitoring of the project. It also placed a strong value on equal participation by consumers and providers. The Council served as an opportunity for community involvement and a focus for outreach and recruitment. The role of the HSAC was to develop the scope of services, review outcomes and evaluation, assist with outreach and marketing and link the program with other community resources. The HSAC met monthly and included program participants, representatives of community agencies based in the project area, and representatives from the broader MCFH Coalition.

The innovative monthly Book Club, established in 2002, served multiple purposes. The Club met to discuss a book selected by the Healthy Start staff and women participants, in a non-threatening, supportive environment. It also provided an opportunity for health education, regular personal contact outside the home, promotion of lifestyle changes, monitoring health information (e.g., birth records, immunization records, etc.), and eliciting program feedback.

Social work services were added to the Healthy Start project in January 2005. These services were funded through a grant from a private foundation. The social worker assisted with resources and referrals, conducted in-depth depression screenings when needed, provided transitional mental health services until a community provider was in place, and provided parenting counseling and education, including developmental assessments for preschool age children.

The Healthy Start project helped to address their clients' need for baby supplies and used these as incentives for program participation. When available, baby clothing and supplies, car seats, cribs, layettes, emergency food and holiday assistance were provided. The program was aware that these incentives are powerful tools in outreach and recruitment, as well as in retention efforts.

C. Resources/Events

One of the main challenges in finding and retaining program participants was the transient nature of the residents in this geographical area. Often, initial contact was made, a relationship initiated, and then the participant moved to another area. In addition, it was often difficult to maintain regular contact with participants. While many would be initially engaged, they would eventually become difficult to reach, either through not returning telephone calls or canceling home visits. While attempts were consistently made to re-engage the participants, this was too often unsuccessful.

In addition to the challenge of retaining participants, the Healthy Start office was forced to move locations at the end of 2004. The Healthy Start office was originally

located in a professional office building in the 63136 zip code. In addition to the Healthy Start office, this building contained medical offices often frequented by potential participants and by Healthy Start participants. In November 2004 it was necessary to move the Healthy Start office because of the planned demolition of the professional office building. The Healthy Start project had to find a new home within a short period of time that was also financially feasible. The new office chosen was in a church building in an adjoining zip code (63108). Potential participants were unable to walk into this office seeking services as they did in the old building, and relationships with the medical providers in the old building were weakened as the medical providers scattered to various other locations.

Case Management:

A. Approach

During the past four years the St. Louis Healthy Start project provided case management services to Healthy Start participants utilizing nurse care coordinators. It was determined that nurses were best able to coordinate the health care services needed by participants and provide the health education and training required by the Healthy Start project.

As the program developed, adjustments and improvements were made to the case management system. For example, the program revised its risk level system. In the beginning, the St. Louis Healthy Start project had four levels of service, based on potential risk. Level 1 was for participants who had a medical provider and no other significant needs. Level 2 was for participants who needed assistance with finding a health provider, prenatal assistance, housing, utility assistance or other services. Level 3 was for participants who needed referral to an outside agency to address a particular, significant need (e.g. substance abuse, alcohol abuse, etc.). Level 4 was for participants who, for one reason or another, were currently inactive because they were not responding to outreach efforts. The number of contacts with participants was expected to increase as the risk level increased, but was not clearly delineated.

In the fourth year the program redefined the risk levels. Level 1 (Low Risk) was now defined as: prenatal care is current, no complications, not a first time mother, not a teenager; Level 2 (Medium Risk) as some/late prenatal care, few medical complications but under a doctor's care, first time mother; Level 3 (High Risk) as late/no prenatal care, elevated blood pressure, teen mother, history of miscarriage, social problems (abuse, drugs, complications).

The schedule of contacts was changed to match the risk level and the trimester of pregnancy or the postpartum period. In general, the frequency of contacts was expected to increase both as the risk level increased and as the participant moved closer to her due date.

For example, when the program first started, a Level 1 (Low Risk) participant received two initial home visits in the first month (one for enrollment, one for the

nursing intake). Throughout the rest of the pregnancy and interconceptional period, the program expected to have at least one monthly contact with the participant (a contact could be a workshop, home visit, office visit, face to face contact on the street, or a telephone call.) After the risk levels were revised, the program was expected to have the two initial visits in the first month (one for enrollment, one for the nursing intake). Then during the first trimester of pregnancy a home visit was to be scheduled every other month. When the second trimester began, the program would schedule a monthly home visit. During the third trimester, the program would schedule a monthly home visit plus monthly phone contact. During the interconceptional period the nurse care coordinator was expected to schedule a postpartum/newborn assessment home visit within two weeks of delivery with regular home visits to be scheduled quarterly in addition to monthly phone contact up to the child's second birthday.

The revised risk level system ensured that the participant was receiving contact on a level that matched her need. The revised risk level also included more structured content for health education and home visits appropriate to the participant's stage of pregnancy or interconceptional care. Trimester-specific and interconceptional health education folders were given to each participant, and a trimester- specific and interconceptional agenda for health education by the nurse care coordinator was also spelled out.

Case management services were provided through home visits supplemented by telephone contacts.

B. Intervention Components

The Healthy Start project utilized two full-time registered nurses as the nurse care coordinators for case management. The role of the nurse care coordinator was to ensure that the participant and infant had a medical home and were receiving appropriate and timely health care. The nurse care coordinator also assessed the participant's (and her family's) social needs, and worked with the participant to address and manage these needs. This position also managed the participant's health education, and developed a care plan in conjunction with the participant.

The community outreach worker and the nurse care coordinator worked together to maintain contact with the family based on the participant's risk level. The schedule of contacts was designed to meet the needs of participants and to ensure frequent interactions to promote the development of a trusting relationship. However, this "ideal" schedule frequently had to be adapted based on the difficulty in reaching participants, no shows, loss of contact, last minute emergencies, etc.

The nurse care coordinator completed a formal risk assessment during her first home visit. If a risk factor was discovered during this visit, the nurse care coordinator made appropriate referrals to address the risk factor(s), and followed up with additional visits to continue to assess the risk factors identified.

Postpartum/interconceptional participants were assessed during the postpartum/newborn visit by the nurse care coordinator. If a risk was identified, appropriate referrals were made, the level of service adjusted, and follow-up risk assessments were performed by the nurse care coordinator. If the mother and/or the child were at high risk, continuous assessments were made during home visits and with contact by the nurse care coordinator and the community outreach worker assigned to the participant.

The nurse care coordinator and the participant discussed in detail the participant's health, mental health and social needs. Based on this discussion and the participant's input, a written service plan was drawn up by the nurse care coordinator. A copy of the service plan was placed in the participant's case record. New goals were added as needed, and the service plan revised as needed.

Both the nurse care coordinators and the community outreach workers referred participants to other community services. The Healthy Start staff person who made the referral followed up with the participant to ensure that the participant had completed the referral. With the participant's permission, the staff person contacted the other agency to ensure that the referral was completed, and a note was to be placed in the case record when a referral was completed.

C. Resources/Events

Recruiting and retaining qualified nurses with some maternal and child health background proved to be extremely difficult. The high demand for nurses meant that salary expectations had increased, and it was very difficult for the Healthy Start project to match what the competing health care job market were offering. Turnover in nursing staff influenced the quality of case management since it took time to orient new staff to the Healthy Start project and to allow time for the nurses to establish working relationships with the participants.

Since most Healthy Start participants already had a medical home prior to enrollment in Healthy Start and most of the newborns also had medical homes, the Healthy Start staff turned their focus to educating participants about the importance of keeping prenatal visits, postpartum visits and well baby check ups

Health Education and Training:

A. Approach

From the beginning, the St. Louis Healthy Start project used a variety of methods to conduct health education for program participants. The program focused on one-on-one discussions in the home with culturally appropriate literature as the primary source of education. In addition, the program implemented the monthly Book Club meetings for group education in an informal and safe environment.

B. Intervention Components

The main vehicle for participant health education was the nurse care coordinator. This education was provided during home visits or when the participants visited at the

Healthy Start office. Each participant received one-on-one health education from the nurse care coordinator. Starting in January 2005 the Healthy Start social worker was able to provide more extensive one-on-one mental health education (including pre-natal and post-natal depression) when that need was identified and the participant agreed to accept the service.

The monthly Book Club meetings were also a key channel for participant health education. Each Book Club meeting included a section on some aspect of health education. Either one of the Healthy Start nurse care coordinators or a community provider addressed a specific health topic. All active Healthy Start participants were invited to these meetings; transportation was provided; approximately 10 to 15 participants attended each of these meetings.

Throughout the four years a variety of special events were also scheduled either at the Healthy Start office or at a local community center. The social activity (e.g. a baby shower) was combined with a health education component. Approximately 30 to 40 participants attended these activities.

All Healthy Start participants received a large variety of printed health education materials. At the first home visit the community outreach worker provided the participant with a folder of appropriate health education materials. Throughout the course of services, printed health education materials were distributed to and discussed with participants relevant to the participants' stage of pregnancy or interconceptional care. Materials were also provided relating to well-baby care.

If a particular risk factor or need was identified, specific printed materials related to that risk or need were delivered to the participant. Information was mailed to families who could not attend group activities or who missed scheduled home visits.

Most of the participants reported that they were also receiving some health education from their community providers outside of the Healthy Start project. Usually, this was not general information, but information about specific risks or needs that the provider had identified. Sometimes, the participant reported that the community health care provider was in a hurry, and did not spend a great deal of time providing the education or provided the education in a way that was difficult for the participant to understand. The participant would make this known to the Healthy Start nurse care coordinator or the community outreach worker, and the Healthy Start nurse care coordinator would then provide the needed health education in a more comprehensive manner that was compatible with the participant's level of understanding. Some of the participants were "afraid" to tell the community provider that they did not understand; they had a more trusting relationship with the Healthy Start staff.

The Healthy Start project did not provide community wide and/or provider education during the grant period. The St. Louis MCFH Coalition provided

various training opportunities for its members and Healthy Start staff at its meetings.

C. Resources/Events

The Barnes College of Nursing and Health Studies at the University of Missouri-St. Louis produced a training manual for Healthy Start staff, funded by the Healthy Start grant. The manual addressed the following topics: Community Organizing, Personal Health and Safety, Behavior Change, Alcohol, Tobacco and Other Drug Use in Pregnancy, Changes of Pregnancy, Warning Signs of Pregnancy, Family Planning, Nutrition During Pregnancy, Sexually Transmitted Diseases, Suspected Domestic Abuse or Violence, Depression in Women, Suicide, Postpartum Health, Making the Home Safe for Baby, Growth and Development (Birth to 24 Months), Infant Nutrition, Childhood Immunizations, Child Abuse and Neglect, Lead Exposure in Children and Pregnant Women, Environmental Exposure (Hazardous Products, Pesticides and Poisons).

In 2002 and 2003 Barnes College staff trained the initial Healthy Start staff in the following areas: Lead Exposure in Children and Pregnant Women, Smoking Cessation, Maternal and Early Childhood Nutrition, Sexually Transmitted Diseases, Community Organizing, Perinatal Substance Abuse, Assessment of the Home Environment, Finding and Utilizing Community Resources, and Warning Signs in Pregnancy. The goal was to educate the Healthy Start nurse care coordinators and the community outreach workers, and to increase their knowledge and skills in providing appropriate health education to Healthy Start participants.

Interconceptional Care:

A. Approach

The Healthy Start nurse care coordinators coordinated provision of interconceptional care. It was determined that nurses could best coordinate the interconceptional care services needed by participants and provide the interconceptional health education required by the Healthy Start project.

B. Intervention Components

The nurse care coordinators began interconceptional care as soon as possible after the delivery of the baby, normally within two to three weeks. The nurse made home visits to assess and monitor the mother's basic health and social needs. After January 2005, the social worker made a home visit if the nurse care coordinator identified a need for more in-depth resources, or if depression or another mental health issue was identified. The community outreach workers assisted by bringing diapers, baby supplies, baby clothing, a crib, a layette or other needed items.

Healthy Start staff collected needed information (birth information, dates of well baby check-ups, immunizations, etc.). The nurse care coordinator conducted a postpartum depression screening, and if the screen was positive, made a referral to an appropriate community mental health program. After January 2005, the nurse

was also able to offer a more in-depth assessment of the participant's depression with the social worker.

Postpartum education folders were given to program participants, and interconceptional participants were invited to the monthly Book Club meetings.

The amount of contact with an interconceptional participant was based on the participant's individual medical and social needs.

The Healthy Start project tracked participant's postpartum physician visits; the nurse care coordinator emphasized the importance of making this visit. The program also tracked whether the participant had a medical home for primary care. If the participant stated that she did not have a medical home, the nurse care coordinator stressed the importance of having a medical home and offered to help find a medical home to fit her needs.

The Healthy Start project and the nurse care coordinators discussed family planning options with each participant. Family planning options were formally discussed at the postpartum visit. The nurse care coordinator provided information on the common methods of family planning, and offered to help the participant determine the best option if the participant had not already chosen a method. The nurse care coordinator also offered to assist the participant in securing family planning services, either from her medical provider or from another source.

Interconceptional services also included services for the infant/toddler until two years of age. The nurse care coordinator also monitored the health and well-being of the child. The nurse care coordinator provided information to the parent to ensure that the baby remained healthy, and instructed the parent in behaviors and skills needed to monitor the baby's health. The nurse care coordinator monitored the baby's weight, feeding patterns, immunizations, well baby care and other developmental milestones. If there was a concern, the nurse did an assessment and encouraged the parent to seek appropriate care for the child from the child's pediatrician or another community provider. If the parent did not know where to get the help needed, the nurse worked with the parent until the child received the appropriate care needed.

After January 2005 the Healthy Start social worker was available to work with parents on child development and parenting issues. The social worker was also able to conduct developmental assessments using the Denver II Screening Tool.

The Healthy Start project tracked the infant's newborn visit, normally two to three weeks after return from the hospital. The nurse care coordinator initially assessed the infant and asked for the date of the baby's first pediatric visit. The importance of keeping well baby appointments was reinforced by all Healthy Start staff during home visits or in telephone contacts. Help with overcoming any barrier (e.g. lack of transportation) was provided. The Healthy Start also encouraged the parent to

secure a medical home for well child care and assistance was offered to help find a medical home, if needed.

The Healthy Start project also emphasized the importance of getting all the necessary immunizations and keeping up with the recommended schedule of immunizations. Healthy Start staff collected information on the dates of well baby care and immunizations received, when possible. Small incentives, such as tickets to children's entertainment events, were given to the parent when this information was collected.

C. Resources/Events

The Healthy Start project collaborated with several community programs to provide participants with free cribs when needed, and supplies such as layettes, car seats, baby clothing and diapers. The crib and car seat program included instruction in their proper set-up and operation. Many of the participants needed these items, and the provision of the items acted as incentive for participants to continue in the Healthy Start project.

Depression Screening and Referral:

A. Approach

The Healthy Start nurse care coordinators organized all of the depression screenings. It was determined that nurses were best able to coordinate these services since they were the main health care contact for each participant. The Edinburgh Postnatal Depression Scale served as the standardized screening tool for both perinatal and postnatal depression screenings since it was short, easy to administer and easy to score.

B. Intervention Components

The nurse care coordinator conducted an initial perinatal depression screening at the first visit. If the score was indicative of serious depression or if the participant expressed the need to see someone for depression, the nurse care coordinator referred the participant to her primary care physician or, more usually, to a community mental health provider. The nurse care coordinator followed up with the participant to monitor the participant's progress.

In January 2005 a social worker was added to the Healthy Start staff. The social worker was available to do a more in-depth depression assessment or mental health assessment if needed. The social worker was able to administer the Beck Depression Inventory to provide additional information concerning the participant's level of depression. The social worker also followed up with the participant to monitor the participant's progress.

The nurse care coordinator also screened interconceptional participants during the first postpartum visit. If postpartum depression was indicated, the same steps were followed as above.

The Healthy Start project attempted to educate all participants, both prenatal and interconceptional, about the signs and symptoms of depression. Educational materials about depression were given to participants, depression was discussed at one or more Book Club meetings, and one-on-one education was provided during home visits.

Program participants were given information about the two mental health telephone crisis lines in the St. Louis area.

If the participant refused or denied the need for mental health services, the Healthy Start staff would continue to restate their concern regarding the participant's depression and would discuss the participant's reluctance to accept the needed services. The staff offered assistance to overcome any barriers and provided support as needed.

C. Resources/Events

Family Support Network, the community agency contracted to provide outreach and recruitment, case management, participant health education, and interconceptional care, was able to secure a grant from a private St. Louis foundation to add a licensed clinical social worker to the Healthy Start project in January 2005. This grant enabled the program to provide more in-depth assessment of a participant's possible depression, to offer transitional mental health services as needed, and to address other mental health issues as well.

Core Systems-Building Efforts

Local Health System Action Plan (LHSAP):

A. Approach

The St. Louis metropolitan area has been described as resource rich and service poor. The unequal distribution of resources, lack of accessibility and coordination, exacerbated by poverty, contribute to poor perinatal outcomes and high infant mortality rates. The Maternal, Child and Family Health Coalition is the primary catalyst for a coordinated approach to MCH delivery in the area. There is no regional or countywide analysis of the social, emotional and medical contributors to infant mortality. Therefore, it was unrealistic for a community-based consortium to develop evidence-based interventions when data was not available in a useable, meaningful format. It was difficult to assess the impact of service utilization patterns, the content of medical care and the quality of supporting services such as transportation, translation, child care, housing and mental health without reviewing cases in depth. As a result, the MCFH Coalition identified the need for a Fetal Infant Mortality Review program, based on the national model, to serve as the needs assessment foundation and the organizing structure of the development of a Local Health System Action Plan (LHSAP). The MCFH Coalition utilized FIMR as a mechanism to build relationships with local providers and engage them in discussions during the review process that would lead to service improvement and integration.

B. Intervention Components

Establishing a FIMR program to facilitate the development of the LHSAP involved researching the FIMR model, building community support, maintaining a committed planning group, developing infrastructure and capacity in partnership with the Department of Health and Senior Services, funding, staff coordination, and cooperation from medical records departments of health care institutions. One full-time coordinator was planned, but reduced to part-time when the project was awarded fewer funds than requested. The project eventually found supplemental funds to return the position to full-time.

C. Resources/Events

Volunteer members of the MCFH Coalition, all of whom were employed in full-time positions in their own agencies, worked diligently to supplement paid staffing or fill in when no staff was available. They regularly attended and facilitated meetings with the Department of Health and Senior Services, meetings with local hospitals to ensure access to medical records, and meetings with local health care providers and community members to build support. They also interviewed candidates for the FIMR Coordinator position and recruited members to serve on the Community Action and Case Review Teams. The community, political, and stakeholder support has remained high over the three years it took to develop the program. These strengths allowed the project to weather staffing and bureaucratic delays.

It was more difficult to secure the legal authority to abstract private health information to conduct FIMR than originally anticipated. The Department of Health and Senior Services (DHSS) was instrumental, however this process was lengthy. This was partly due to the time needed to negotiate through many layers of authorization and also partly due to multiple staffing interruptions at DHSS. Staff turnover within the project also led to delays. Originally, the project planned to hire a full-time coordinator. When the grant was not funded at the requested level, the position was reduced to part-time. Until January 2003, the project did not have consistent staffing. In June 2003, the project secured temporary funds to increase the position to full-time which was helpful in making the final arrangements for implementing FIMR. The position was reduced again to part-time in January 2004 until new funds were secured in June 2004.

Consortium:

A. Approach

The MCFH Coalition was formed in 1999 because there was no coordinated approach to the health care system for women and children. The formation of the coalition was a result of the desire to achieve results that no one agency could achieve individually. In 1998 the St. Louis Children's Agenda identified the creation of a maternal and child health coalition as a priority strategy. The

Children's Agenda was the culmination of planning by over 200 agencies from across the metropolitan area. The planning provided a framework for the St. Louis area to pursue strategic, coordinated community action that promotes the well being of all area children. The MCFH Coalition served as the lead agency for the coordinating action around improving maternal and child health. The MCFH Coalition was identified as the Healthy Start Consortium for the purposes of leveraging regional resources to support the project and to provide an opportunity to sustain and perhaps even expand the Healthy Start project through collaboration with coalition members.

To provide a localized consortium the project planned to implement Neighborhood Councils in each targeted zip code that would be linked to the broader coalition. This structure was designed to help identify and build local resources for program participants, to help market the program, and provide a venue for program participants to contribute to program development and evaluation.

B. Intervention Components

The MCFH Coalition requires staff and volunteer leadership; funding to support communication, programs and operations; community support and active members. The outreach workers assigned to the respective zip code areas staffed the Neighborhood Councils. The councils required skilled staff leadership, funding to support communication and engaged members. The Neighborhood Councils did not achieve their goals and the strategy was changed in 2004. The councils were combined into one committee of the broader coalition in the fall of 2004, the Healthy Start Advisory Council. Outside consultation and training was secured to help facilitate the transition, better define the purpose of the Council, and improve consumer involvement.

C. Resources/Events

Successful implementation of the coalition was hindered by staffing changes and lack of training for the staff responsible for the Neighborhood Councils. The original plan was to employ a Project Coordinator who would be responsible for ensuring the consortium outcomes. When the budget was reduced, the position was eliminated and it became the responsibility of the MCFH Coalition Executive Director. Insufficient staffing made it difficult to accomplish all of the objectives. Further, the outreach workers employed by Family Support Network were tasked with forming Neighborhood Councils. However, they received little if any training and direction in this task and the Councils were never well defined in scope and purpose. Finally, a coordinated plan for engaging consumers was not developed and implemented.

D. Additional elements

1. The formation of the MCFH Coalition and the Neighborhood Councils is described in the previous sections.

2. The MCFH Coalition was comprised of over 150 members representing 80 organizations. The coalition consisted of a Steering Committee, three workgroups and operational committees. In 2004, the estimated composition was 87% Caucasian and 13% African American. 22% represented state and local government, 31% were from private agencies, 20% represented providers, 10% were from community based organizations, 4% were community participants, 2% represented contractors with Healthy Start and 10% were other representatives. Approximately 30% were active members. The Neighborhood Councils were formed in each zip code area. No composition of the Neighborhood Councils for the majority of the project period is available. The councils met monthly and discussed community resources. There were several consumers who participated intermittently at this level. In 2004 the Healthy Start Advisory Council was established within the MCFH Coalition to merge the Neighborhood Councils with the broader coalition. The Advisory Council is currently comprised of 27 members; 17% state/local government, 23% private agencies, 20% program participants, 17% providers, 10% from the faith community, 10% community participants, and 3% from community based organizations. The current racial composition of the Healthy Start Advisory Council is 73% African American and 27% Caucasian.
3. The Neighborhood Councils met monthly to identify resources by sharing information among those in attendance. The project held a forum in 2002 attended by over 20 program participants and community agencies. Participants identified needs and strategies for strengthening the program. The MCFH Coalition had representation from other coalitions including the Teen Pregnancy Prevention Partnership, the St. Louis Immunization Coalition, and the Lead Prevention Coalition. Coalition staff and members also served as members of these coalitions in order to coordinate efforts.
4. The major community strength was the passion and commitment for improving maternal and child health.
5. Some barriers that were addressed to move the MCFH Coalition and the Healthy Start Advisory Council forward include: providing sufficient, consistent, and skilled staff time, improving consumer involvement, defining the role and responsibilities of the Advisory Council and its members, improving racial and ethnic diversity of the MCFH Coalition, clarifying communication between various entities, and marketing the MCFH Coalition and Healthy Start program more effectively.
6. Initially, the outreach workers were tasked with identifying program participants and residents for their Neighborhood Councils.

7. Consumer input was obtained a number of ways, including focus groups, feedback from events, satisfaction surveys, individual surveys, and participation on Neighborhood Councils.
8. Family Support Network, the subcontractor of outreach and case management services, used feedback in making program development decisions. Information about how women learned of the program shaped outreach strategies. Results of a survey of participants were used to design strategies for increasing consumer involvement on the Healthy Start Advisory Council.

Collaboration and Coordination with State Title V and Other Agencies:

A. Approach
In recognition of the disparities that exist between races and socioeconomic levels within the St. Louis region, the Department of Health and Senior Services created a special liaison position in May 2000 as the Assistant to the Director of the Division of Maternal, Child and Family Health. The Division Director is the Title V director for Missouri and is located 120 miles away in the state capital. The liaison allows for easy exchange of information between the Director and local programs. It also improves the collaborative relationship between the Title V agency, providers and community representatives. The liaison was directly assigned to work with the MCFH Coalition. She served on the Board of Directors, workgroups and met with the Executive Director regularly to ensure good communication. She actively participated in the development of the Healthy Start project throughout the last four years. The project collaborated with the following State Title V programs; Healthy Birth Outcomes, Well Child Outreach, Home Visiting, Perinatal Substance Abuse, Prenatal Case Management, Tel-Link, Children with Special Health Care Needs, Newborn Screening, Family Planning, Alternatives to Abortion, Domestic Violence, Infant Mortality Collaborative, and the Healthy Baby media campaign. Other key partners and linkage agreements were essential to project over the past four years, primarily as resources of health education for staff and clients and sources of support services and health care for clients. In addition, collaborative partners assisted the project with outreach and marketing, especially important in the implementation of the project.
B. Intervention Components
Managing the collaborations and coordination required deliberate and strategic communication and the assistance of key stakeholders to initiate relationships. Over the course of the four-year project the Title V agency initiated quarterly meetings of all Missouri Healthy Start projects to facilitate communication about the wide range of Title V activities and Healthy Start programs. Linkage agreements in the project area needed cultivation and nurturing to maximize their effectiveness in improving maternal and child health outcomes.
C. Resources/Events
Consistent participation of the liaison from the Title V agency facilitated successful collaboration with the Missouri Department of Health and Senior Services.

Staffing turnover issues negatively impacted development of relationships with other agencies.

Sustainability:

A. Approach

Since the March of Dimes served as the lead agency on this Healthy Start grant, it worked to establish a strong relationship with the MCFH Coalition and other local organizations providing direct services to pregnant women in the community. By empowering the Coalition and the local contractors through Healthy Start funding, the prospects for long-term sustainability were increased. The Coalition is now an incorporated non-profit organization. This status allows the Coalition to diversify and expand funds by applying for private grants, raising funds in the community and soliciting in-kind donations. The Coalition will serve as the lead agency for the new round of Healthy Start funding starting July 2005.

B. Intervention Components

Throughout the project, the Coalition understood the importance of supplementing Healthy Start funds with private donations and grants. A local managed care company donated $10,000 to provide client transportation to health education classes and baby necessities used as incentives. Another local foundation provided salary support to increase the FIMR coordinator to full-time, temporarily. A local Kiwanis club adopted the Healthy Start Project through Family Support Network. Throughout 2004 they donated diapers, baby clothes and other baby care items for participants of the program. Additional in-kind support has been received from local organizations that provide free meeting space and from coalition members who provide educational workshops for participants and assistance with transportation.

Finally, by collaborating with the Department of Health and Senior Services, Title V MCH, to implement FIMR, the project saved resources that would have been needed for training and data collection and evaluation. In addition, the DHSS provided $2,999 per year toward the St. Louis FIMR program. This has provided support for brochures, supplies and meals for Case Review Team Meetings.

C. Resources/Events

Staff turnover at both the March of Dimes and the Coalition resulted in challenges with creating a more cohesive relationship between these two organizations. The Coalition also struggled with establishing a strategic plan. These issues exacerbated the normal challenges associated with working with and empowering a local coalition.

E. Additional Elements

1. In St. Louis, managed care companies are the gatekeepers for Medicaid eligible women and children. The project attempted to contract with managed care companies to provide perinatal case management. First, the project staff held three meetings with Healthcare USA. However this company sends all referrals to the St.

Louis County Department of Health. The project staff then held two meetings with another managed care company, Care Partners. Unfortunately, Care Partners subsequently went out of business. No further options were available to the project.

2. Timing, mutual interest, and persistence all played a role in identifying and
developing resources to supplement Healthy Start funding. This is an area that requires a lot of time investment, without a guaranteed payoff. By consistently nurturing local relationships, however, the project eventually saw results in this area, while spreading the word about the mission and importance of the project in the community.

3. Given the time and difficulty in establishing a cohesive relationship between the March of Dimes and the Coalition, there may have been missed funding opportunities along the way. Now that the Coalition has a stronger infrastructure, it is well-positioned to take advantage of future private funding opportunities to complement its new Healthy Start funds.

III. Project Management and Governance

Structure

The Project utilized a somewhat complex management structure. The Healthy Start grant was awarded to the March of Dimes State Chapter in Missouri. The March of Dimes worked closely with the Maternal, Child, and Family Health (MCFH) Coalition on project development. The Executive Director of the MCFH Coalition divided her time between directing the Coalition and the Healthy Start Project for the first two and a half years of the grant. During the last year and a half of the grant the two positions were separated and a full time Healthy Start Project Director was in place. Implementation of direct services was contracted to community-based organizations.

B. Resources

Since the resources provided by the Healthy Start grant were primarily utilized to support direct client services, it proved essential to secure additional funding to improve the infrastructure of the Coalition and in order to prepare for assuming management of the project going forward. Further detail is provided in section E. below.

C. Changes

The Project experienced numerous staffing changes. In 2003, the project faced unanticipated challenges related to administration and management of this project, including the death of Mary Hayes, Executive Director of the Coalition. The project managed to move forward, establish an interim project director and then a new project director, to successfully implement the project.

At the end of 2003, Family Support Network, the primary subcontractor, reduced the number of its outreach workers from 4 to 3 staff. After analyzing the caseload and distribution, Family Support Network made this decision in order to maintain the efficiency and effectiveness of the project. With the remaining funds, Family Support Network was able to contract with an IT Coordinator to assist the staff in producing much-needed data reports in 2004.

D. Process

The grant utilized a checks and balances accounting system. The Project Assistant initiated all Purchase Orders. These were authorized by the Project Director and submitted to the Accounting Office. At the beginning of each month, a report from the previous month was generated and compared to the accounting financial documents. At that time, when all information was verified, a drawdown was made for the current charges by the Project Assistant.

Additional resources

The Coalition was aware that additional resources were needed in order to move the program forward. With the help of the March of Dimes, they applied to several funding sources. They secured funding from the Missouri Foundation for Health to hire their own Executive Director to free up the funds for the HS Project Director to become full time. The FIMR Coordinator was also funded through this grant.

A local managed care company donated $10,000 to provide client transportation to health education classes and baby necessities used as incentives. Another local foundation provided salary support to increase the FIMR coordinator to full-time, temporarily. A local Kiwanis club adopted the Healthy Start Project through Family Support Network. Throughout 2004 they donated diapers, baby clothes and other baby care items for participants of the program. Additional in-kind support was received from local organizations that provided free meeting space and from coalition members who provided educational workshops for participants and assistance with transportation. The March of Dimes also committed many hours of staff time to this project. In addition to Missouri chapter staff, March of Dimes staff from the national and regional offices stepped in to assist with project management, especially during staff transitions.

By collaborating with the Department of Health and Senior Services, Title V MCH, to implement FIMR, the project saved resources that would have been needed for training and data collection and evaluation. In addition, the DHSS provides $2,999 per year toward the St. Louis FIMR program. This provided support for brochures, supplies and meals for Case Review Team Meetings.

Cultural competency

The project staff providing direct care to Healthy Start clients reflected the racial composition of the Healthy Start catchment areas. Many also lived in the same communities where they provided services. In addition, a staff training session was conducted on cultural competency.

HEALTHY START IMPACT REPORT

IV. Project Accomplishments

Grantee: St. Louis Healthy Start (STHS)
Intervention: Outreach

Project Period Objective	Strategy and Activities	Accomplishments
O1: By 5/31/05 the percentage of low birth weight infants born to women who prenatally received HS Services will be no more than 12%. (Baseline: 14.7% of low birth weight infants born in project service area (zips 63113, 63120, 63136) in 2000. Source: MO Department of Health & Senior Services, MO Information for Community Assessment www.dhss.state.mo.us/MICA/nojava.html)	Strategy: Conduct aggressive outreach to identify women and assist with getting them access to prenatal care Activities (with Implementation Timeframes): 1a. Provide 4 workshops to women enrolled in HS on the dangers of alcohol, tobacco, and drug use during pregnancy (1 in 2002, 2 in 2003, 1 in 2004) 1b. Provide 6 prenatal classes to women enrolled in HS (1 in 2002, 3 in 2003, 2 in 2004) 2a. Complete risk assessments on women referred for case management services (66 in 2002, 75 in 2003, 70 in 2004) 2b: Provide interconceptional care and education to women of child-bearing age (37 in 2002, 70 in 2003, 68 in 2004) 3a. Screen women enrolled in HS services for depression (58 in 2002, 75 in 2003, 65 in 2004)	As of 4/30/05 16 of 137 women (11.7%) delivered low birth weight babies 3 workshops given (1 in 2002, 2 in 2003) 1 given in 2002, 3 given in 2003, 5 health topics covered in 2004 at Book Club Completed 70 in 2002, 80 in 2003, 65 in 2004, 3 in 2005 Provided 32 in 2002, 79 in 2003, 56 in 2004, 49 in 2005 Did not screen in 2002 because HS staff not trained; screened 80 in 2003, 73 in 2004, 7 in 2005

Project Period Objective	Strategy and Activities	Accomplishments
O2 By 5/31/05 the percent of very low birth weight infants born to women who prenatally received HS services will be no more than 2% (Baseline: 3.3% very low birth weight infants born in project service area in 2000. Source: MO Department of Health & Senior Services, MO Information for Community Assessment www.dhss.state.mo.us/MICA/nojava.html)	Strategy: Conduct aggressive outreach to identify women and assist with getting them access to prenatal care. Activities (with Implementation Timeframes): See Section O1	As of 4/15/2005, 3 of 137 women (2.2%) delivered very low birth weight babies

Project Period Objective	Strategy and Activities	Accomplishments
O3 By 5/31/05 the percentage of infants small for gestational age (*born less than 37 weeks*) born to women who receive HS services will be no more than 12%. (Baseline: 14.1% of infants who are born small for gestational age in project service area in 2000. Source: MO Department of Health & Senior Services, MO Information for Community Assessment www.dhss.state.mo.us/MICA/nojava.html)	Strategy: Increase community awareness of risk factors that contribute to infant mortality & low birth weight through health fairs and the distribution of literature. Activities (with Implementation Timeframes): 1a. Provide prenatal case management services to HS women (66 in 2002, 75 in 2003, 70 in 2004) 1b. Provide education to women on the importance of early & regular prenatal care (66 in 2002, 75 in 2003, 70 in 2004 2a. Screen women for depression (58 in 2002, 75 in 2003, 65 in 2004) 3a. Broker & refer women enrolled in HS services to WIC & food stamps (5 in 2002, 5 in 2003, 8 in 2004)	As of 4/30/05 5 infants small for gestational age (3.7%) were born to women who receive HS services. Provided prenatal case management to 70 in 2002, 102 in 2003, 65 in 2004, 10 in 2005 Provided 1 workshop in 2002, 1 workshop in 2003; educated 65 women in 2004 and 10 in 2005 No screenings in 2002; 80 screened in 2003 & 73 in 2004, 7 in 2005 Referred 5 in 2002, 13 in 2003, 7 (3 for WIC, 4 for food stamps) in 2004

Project Period Objective	Strategy and Activities	Accomplishments
O4: By 5/31/05 the percentage of preterm infants born to women who prenatally received HS services will be no more than 17% (Baseline: 19.4% of infants born preterm in project service area in 2000. Source: MO Department of Health & Senior Services, MO Information for Community Assessment www.dhss.state.mo.us/MICA/nojava.html))	Strategy: Conduct aggressive outreach services to educate women on the importance of early & regular prenatal care	As of 4/15/05 24 preterm infants (16.4%) were born to women who prenatally received HS services.
	Activities (with Implementation Timeframes): 1a. Women will be educated on the importance of early & regular prenatal care (66 in 2002, 75 in 2003, 70 in 2004)	Educated 66 in 2002, 80 in 2003, 65 in 2004, 10 in 2005
	1b. Women will be educated on the dangers of drug, alcohol, and smoking during pregnancy (66 in 2002, 75 in 2003, 70 in 2004)	Educated 66 in 2002, 80 in 2003, 47 in 2004, 10 in 2005
	1c. Women will receive information on nutrition (75 in 2003, 70 in 2004)	Provided information to 80 in 2003, 86 in 2004, 10 in 2005
	2a. Complete risk assessment on women referred for case management services (66 in 2002, 75 in 2003, 70 in 2004)	Completed 66 in 2002, 80 in 2003, 65 in 2004, 3 in 2005
	2b. Screen women for signs & symptoms of depression (100 in 2002, 75 in 2003, 65 in 2004)	No screenings in 2002, 80 in 2003, 73 in 2004, 7 in 2005
	3a. Provide interconceptional care & education to women of childbearing age (37 in 2002, 75 in 2003, 68 in 2004)	Provided care & education to 37 in 2002, 80 in 2003, 56 in 2004, 49 in 2005

Project Period Objective	Strategy and Activities	Accomplishments
O5 By 5/31/05 the percentage of participating postpartum women who receive interconceptional services will be no less than than 94% (Baseline: 89% of participating postpartum women received inter-conceptional care. Source: Healthy Start database – Client files – Education sign-in sheets)	Strategy: Provide interconceptional care & education to women who are enrolled in the project Activities (with Implementation Timeframes): 1a. Provide education to women on family planning & counseling (66 in 2002, 82 in 2003, 80 in 2004 1b. Provide education on the dangers of tobacco usage, drug & substance abuse during pregnancy to women (66 in 2002, 82 in 2003, 80 in 2004) 1c. Provide education on nutrition, lead, STD/HIV prevention to women (66 in 2002, 11 in 2003, 80 in 2004 2a. Increase community awareness about the risk factors associated with and that contribute to infant mortality and babies who are born with low birth weight through community events (1 in 2002, 1 in 2003, 2 in 2004)	As of 4/15/05 146 of 204 postpartum women (71.6%) received inter-conceptional services Provided education to 70 in 2002, 102 in 2003, 64 in 2004 Provided education to 70 in 2002, 102 in 2003, 41 in 2004, 10 in 2005 Provided education to 70 in 2002; in 2003 11 women attended 1 workshop, 102 women received education in the home; in 2004 86 women received nutrition education, 44 lead education, 67 STD/HIV education; in 2005 7 attended a meeting on breastfeeding and 7 attended a meeting on STDs 90 people attended 1 conference in 2002; participated in 17 health fairs in 2003 reaching 1,300 people; participated in 9 fairs in 2004 reaching 1,500 people; participated in 1 fair in 2005 reaching 100 people

Project Period Objective	Strategy and Activities	Accomplishments
O6 By 5/31/05 the number of recruited pregnant women that are receiving services will be no less than 95% (Baseline: 93% of recruited pregnant women are receiving services. Source: Healthy Start Report 2002)	Strategy: A marketing system will be developed that will include newspaper ads, door to door campaigns, presentations to local groups and organizations Activities (with Implementation Timeframes): 1a/b/c: Community awareness campaign will be developed (2002) and outreach workers will distribute flyers and present HS information to shelters and churches, local organizations grocery stores & other shops to recruit pregnant women (3000 flyers, 40 locations in 2002; 3000 flyers, 30 locations in 2003; 3500 flyers, 60 locations in 2004) 1d. HS will participate in health fairs (3 in 2003, 3 in 2004) 2. 3 HS neighborhood committees will be established in 2002 2a. A referral system will be established (2002 & 2003) & will be expanded with 5 local community organizations and clinics to identify new first trimester pregnant women	As of 4/15/05 218 pregnant women were recruited and received services 3000 flyers in 40 locations in 2002; 3000 flyers in 140 locations in 2003; 900 flyers in last 4 months of 2004 (quantity unknown for rest of 2004); 40 presentations in 2003 Participated in 3 fairs in 2003, 5 in 2004 3 committees were established 5 linkage agreements in 2002, 5 in 2003, 8 in 2004

Project Period Objective	Strategy and Activities	Accomplishments
O7 By 5/31/05 the percentage of women enrolled and receiving HS services screened for depression will be no less than 95% (Baseline: 90% of women enrolled and receiving HS services have been screened for depression. Source: Healthy Start Report 2002)	Strategy: Prenatal and Postpartum program participants will be screened for depression using the Edinburgh Screening Toolkit * The Edinburgh Screening Tool was not used until training in 2003 Activities (with Implementation Timeframes): 1a. Screen each participant twice by the Care Coordinator-once during the prenatal period and once during the postpartum period 2a. If a participant scores as being high risk for depression using the Edinburgh Screening Tool, the participant will be referred by the Care Coordinator for services for treatment 3a. Further follow-up will be made by calling the participant to make sure scheduled appointments were kept.	As of 4/15/05 143 of 218 women enrolled (65.6%) were screened for depression* 98 of the 142 participants screened (69%) were screened twice 5 were referred in 2002, 8 in 2003, 3 in 2004 Completed

Grantee: St. Louis Healthy Start (SLHS)
Intervention: Case Management

Project Period Objective	Strategy and Activities	Accomplishments
CM1 By 5/31/05 the percentage of 1 year olds who have received the full schedule of age appropriate immunizations will be no less than 93% (Baseline: 86% of participating 1 year olds have received immunizations. Source: Report from 2003 Healthy Start Records)	Strategy: Care coordinators will teach program consumers concerning the importance of immunizations and the appropriate schedule of immunizations using the immunization schedule that is provided in the postpartum educational folder Activities (including Implementation Timeframes) 1a. Develop capacity of the tracking system and HS staff to include the adequate collection of infant immunization records 2a. Provide education to women regarding immunization (66 in 2002, 82 in 2003, 80 in 2004) 3a. During each home visit, remind all consumers of the importance of immunizations, as well as collecting immunization records for which the client receives an incentive gift provided by the HS program 3a. (2004) Provide incentives to those parents who submit their records and keep timely doctors' appointments	see footnote[1] The system tracks immunizations. Provided education to 70 in 2002, 102 in 2003, 64 in 2004, 46 in 2005 Completed Completed

[1] Staff obtained complete immunization records for only 27% of the 101 children who were in the program for at least 1 year. This was due to several factors, including parental loss of records, failure to provide them when asked, and lack of systematic staff follow-up.

Project Period Objective	Strategy and Activities	Accomplishments
CM2 By 5/31/05 the percentage of pregnant HS participants who initiate prenatal care in the first trimester will be no less than 78% (Baseline: 73.9% received prenatal care during the first trimester in 2000. Source: MO Department of Health & Senior Services, MO Information for Community Assessment www.dhss.state.mo.us/MICA/nojava.html))	Strategy: Aggressive case finding of pregnant women in the first trimester Activities (with Implementation Timeframes): <u>2002</u> 1a. Develop HS training curriculum for outreach workers, care coordinators, and health care providers 2a. Build neighborhood & HS staff to implement a system of coordinated, integrated service to find pregnant women with the first trimester of pregnancy 2b. Establish Neighborhood Councils consisting of key stake holders in each zip code 2c. Establish a HS Advisory Council Board to serve as a catalyst for resources, referral & community input. 2d. Collaborate with partnering local health & social service providers & local city and county Health Departments to establish network and referral system to recruit women into HS	As of 4/15/05 the percentage of pregnant HS participants who initiate prenatal care in the first trimester was 67.9% (93 out of 137). Training materials developed Some coordination & integration of services but not fully implemented Established but less effective than planned Board established with 15 representatives; Board was replaced in 2004 with revised HS Advisory Council replacing the Neighborhood Councils & the Advisory Board Collaboration with social service providers completed; no collaboration with St. Louis City Health Dept. which is basically non-existent; some collaboration with St. Louis County Health Dept.

	3a. Survey local service providers to determine nature, scope and capacity of services available	Surveyed 10 providers; also ongoing
	<u>2003</u>	
	1a. Develop HS training curriculum for outreach workers, care coordinators, and health providers	Completed
	1b. Market the program to recruit women who are pregnant and in their first trimester of pregnancy	Completed
	1c. Make contact with local agencies that identify pregnant women	Completed
	2a. Formalize relationship w/partnering local health and social service providers and local city and county Health Depts. To establish a neighborhood network and referral system to recruit women into HS.	6 linkage agreements
	<u>2004</u>	
	1a. Public service announcements will be made by local radio stations 4 times	PSAs were developed in late 2003 & were sent to radio stations
	1b. Newspaper articles about HS will be published with request for first trimester pregnant women to call the program	3 articles in 2004, 0 in 2005
	2a. Marquee at the Northland Shopping Center (site of 1st HS office) will advertise program and recruit pregnant women	Marquee advertisement for 1 month in 2003 and in 2004
	2b. Flyers will be distributed to local organizations, stores, beauty shops, and laundromats with program information for potential enrollees	Completed

Grantee: St. Louis Healthy Start (SLHS)
Intervention: FIMR

Project Period Objective	Strategy & Activities	Accomplishments
R3: By 5/31/05 FIMR will review annually 75% of the expected fetal and infant deaths in the three project area zip codes. (Baseline: 36 fetal and infant deaths in 2001. Source: MO Department of Health & Senior Services MO Information for Community Assessment (www.dhss.state.mo.us/MICA/nojava.html)	Strategy: Infant Mortality Workgroup of the MCFH Coalition and FIMR Coordinator will collaborate with the MO Department of Health and Senior Services (DHSS) to secure legal authority, IRB approval, referral mechanism, and standardized training and data collection Infant Mortality Workgroup and FIMR Coordinator will secure support of key stakeholders. Activities (with Implementation Timeframes): 2002 Monthly meetings with DHSS to plan infrastructure Meetings with decision makers at each hospital (chief of neonatology, maternal/fetal medicine, directors of nursing). 2003 Hire FIMR Coordinator January 2003 Training for Staff April 2003 Execute contract with DHSS Receive referrals and begin abstractions Kick-off reception - October 2003 First CRT meeting and orientation – November 2003 2004 Case Review Team will review cases presented by Coordinator CRT meetings bi-monthly Ongoing abstraction and interviewing CRT present recommendations/findings from first year of reviews to Community Action Team (CAT) in October 2004 CAT meetings held quarterly	As of 4/30/05 73% (19/26) of cases were reviewed by the CRT and five recommendations were submitted to the Community Action Team. Completed Completed Completed Completed Completed Completed Completed Completed Completed Completed Completed Completed Completed

Grantee: St. Louis Healthy Start (SLHS)
Intervention: Consortium

Project Period Objective	Strategy & Activities	Accomplishments
CM4: By 5/31/05 the percent of consumer participation in the work of the consortium of program and policy directions for the healthy start initiative will increase by 25% (Baseline: 1 of 30 members of coalition in 2002 was a consumer. Source: St. Louis Maternal, Child and Family Health Coalition records)	Strategy: The consortium will work with the Healthy Start program and FIMR coordinator to identify consumers willing and able to participate in meetings and potentially serve on steering committee and board of directors. Activities (with Implementation Timeframes): 2002 HS project will form Neighborhood Councils in each zip code and a regional council made up of consumers, providers, political and community leaders from the three zip codes 2003 The consortium will identify a member of the steering committee to serve on the Neighborhood Council as a liaison and to work with the HS program and FIMR coordinator to identify consumers willing and able to participate in meetings and potentially serve on steering committee Host a "Report to the Community" to share project progress and solicit input from consumers. 2004 The consortium will plan 2 trainings for consumer and consortium members to increase confidence and interest in serving on the consortium by 12/31/04 Identify a consultant to provide series of trainings by June 2004 The consortium will develop incentives to facilitate participation of consumers (i.e. child care and transportation assistance) by 9/30/04 A member of the board of directors will serve on the Neighborhood Council and provide a regular report of consortium activities by 8/31/04	As of 4/30/05 the percent of consumer participation in the work of the consortium increased to 3 consumers Neighborhood Councils and regional council of providers were formed Member of steering committee served on HS Advisory Board Completed The consortium held one training in 2004 and one training in 2005 Completed 10/04 – FOCUS St. Louis Completed Completed

Grantee: St. Louis Healthy Start (SLHS)
Intervention: Outreach and Care Coordination

Project Period Objective	Strategy & Activities	Accomplishments
F1: By 5/31/05 50% of clients with facilitating services will report satisfaction (Baseline: 33% clients report client satisfaction of facilitating services. Source: Client's case notes)	Strategy: Through specific efforts, focus on improving level of client satisfaction Activities (with Implementation Timeframes): 1a. Focus groups will survey parents/pregnant women on adequacy of services and staff (2 in 2002, 2 in 2003, 1 in 2004) 1b. Yearly satisfaction surveys will be distributed to determine client level of satisfaction with program services. 1c. Phone surveys will be conducted and surveys will be mailed (1 each in 2003, 1 each in 2004) 1d. (2003) Clients will be polled about what kind of services that they would want to receive from the project. 1d. (2004) 1 report will be prepared capturing the information learned in the surveys. 1e. (2003) Clients will be requested to participate in HS Advisory and the MCFHC steering committee 2a. (2004) 8 clients will be recruited to participate in Healthy Start Advisory and the MCFHC steering committee	In 2004 65% of participants described services as excellent and 27% as good; in 2005 44% described services as excellent and 66% as good. 2 in 2003 1 in 2003, 1 in 2004, 1 in 2005 1 phone survey and 1 mailed survey in 2003, 1 mailed survey in 2004, 1 mailed survey in 2005 Completed Completed Completed 1 client was recruited and 5 clients were mentored

Project Period Objective	Strategy & Activities	Accomplishments
CMT 4: By 5/31/05 the percentage of completed referrals among prenatal clients seen by Health Provider will increase to 60% (Baseline: 30% of completed referrals among clients in 2002. Source: Healthy Start Database Client files)	Strategy: Develop the capacity of tracking system and Healthy Start staff to include adequate collection of screening, referral, and follow-up data on infants seen by a health care provider. Activities (with Implementation Timeframes): 1a. Develop tracking system (2002) 1a. Work closely with outside evaluators to develop data requirements (2003) 2a. 95% of clients will be screened by the Care Coordinators during intake for services needed (95% in 2002, 98% in 2004) 3a. Women will receive education on the importance of keeping appointments (66 in 2002, 82 in 2003, 98% in 2004)	As of 4/30/05 the percentage of completed referrals among prenatal clients seen by Health Provider was 100%. Completed Partially Completed; Work continued in 2004 when information specialist was hired to create additional databases to collect information 100% in 2002, 96% in 2004, 100% in 2005 70 women in 2002, 102 in 2003, 96% in 2004, 100% in 2005

Project Period Objective	Strategy & Activities	Accomplishments
CMT 5: By 5/31/05 the percentage of completed referrals among infants who will be seen by a health provider will increase to 95% (Baseline: 84% of completed referrals among infants in 2002. Source: Healthy Start Report 2002 Client files)	Strategy: Develop the capacity of the tracking system and Healthy start staff to include adequate collection of screening, referral, and follow-up data on infants seen by a health care provider. Activities (with Implementation Timeframes): 1a. Develop tracking system (2002) 1a. Case staffing will be held to discuss clients' cases (2003) 1b. Workshops on prenatal care and information on resources for pregnant women will be conducted (2 in 2003, 3 in 2004) 2a. Infants will be screened by the Care Coordinators during newborn intake home visit (80% in 2002, 90% in 2003, 95% in 2004) 3a. Women will receive education on the importance of keeping appointments (66 in 2002, 82 in 2003, 80 in 2004)	By 4/15/05 the percentage of completed referrals among infants who will be seen by a health provider was 100%. Completed Completed 3 in 2003, 5 in 2004 100% in 2002, 100% in 2003, 66% in 2004, 57% in 2005 70 women in 2002, 102 in 2003, 96% in 2004, 100% in 2005

Grantee: St. Louis Healthy Start (SLHS)
Intervention: Education and Training

Project Period Objective	Strategy & Activities	Accomplishments
ET1: By 5/31/05 the number of paraprofessionals trained each year in Domestic & Family Violence, smoking and substance abuse will be 100%. (Baseline: 6 of the 6 Healthy Start Workers trained in 2002. Source: Healthy Start Report 2002 Healthy Start Education Log Staff Pre and Post tests)	Strategy: A curriculum will be developed by the Health Education Contractors to cover key core services what will be utilized by the HS staff, health providers and others Activities (with Implementation Timeframes): <u>2002</u> 1a. The HS staff will be educated on core areas of case management, health, depression, HIV/STD and other areas 2a. HS staff will attend local conferences and workshops to update and reinforce their education in core areas. <u>2003</u> 1a. HS nurses and outreach workers will attend the Family Development Credentialing Program through the Family Support Council 2a. HS staff will receive training in smoking cessation and substance abuse <u>2004</u> 1a. All 6 HS staff will receive domestic violence training 1b. All 6 HS staff will receive smoking cessation training 1c. All 6 HS staff will receive substance abuse training	100% in 2002 and 2003; 33% in 2004; 66% in 2005 Partially Completed Completed 2 nurses & 2 outreach workers completed the program; 1 outreach worker was still in the program as of 4/30/05 Training completed in 2003 and in 2005 Completed in 2004 Completed in 2003 and in 2005 Completed in 2003 and 2005

Project Period Objective	Strategy & Activities	Accomplishments
Objective ET2: By 5/31/05 the prevalence of risk behavior that lead to poor perinatal outcomes will decrease after completion of training to the following: 17% for smoking 5% for substance 5% for STDs 2% for family violence (Baseline: 19% of clients smoked in 2002 14% of clients abused substance(s) in 2002 7% had STDs in 2002 4% of clients indicated family violence in 2002. Source: Healthy Start Report 2002)	Strategy: Education on the effects of risky behaviors will be discussed through workshops on smoking cessation; inadequate nutrition, domestic violence and substance abuse will be provided through workshops and during home visits. Activities (with Implementation Timeframes): 1a. Care Coordinators will screen all consumers for high-risk behaviors during initial intake during the second home visit. 2a. Education literature handouts will be distributed and discussed during health fairs (1,500 in 2002, 2500 in 2003, 1000 in 2004) 2b. Women will attend workshops on the dangers of risk behaviors (40 in 2002, 82 in 2003, 25 in 2004) 2c. (2004) 90% of enrolled women will receive information on the dangers of risky behaviors in their homes. 3a. Presentations will be given to local organizations and their network of providers on the dangers of using drugs, alcohol and smoking through workshops and community activities (1 in 2002, 2 in 2003, 2 in 2004)	As of 4/30/05 the prevalence was the following: smoking 8% Substance abuse 1.4% STDs 3.6% family violence 1.5% 70 screened in 2002, 102 in 2003, 44 in 2004, 3 in 2005 In 2002 1,500 distributed at 6 health fairs; in 2003 3,000 distributed at 7 health fairs; in 2004 1,000 distributed at 5 health fairs 3 in 2002, 42 in 2003, 11 in 2004, 7 in 2005 51.4% received information In 2002 1 presentation in collaboration w/ MCFH Coalition (Speaker: Ira Chasnoff); in 2003 2 presentations by MCFH Coalition at quarterly meetings; in 2004 3 presentations to local groups by HS staff

Project Period Objective	Strategy & Activities	Accomplishments
R1: By 5/31/05 the incidence of risk behaviors among pregnant and parenting women and adolescents after receiving specific HS funded risk reduction intervention will decrease to the following: 17% for smoking 5% for substance abuse 2% for family violence (Baseline: 19% of clients smoked in 2002 14% of clients abused substance(s) in 2002 4% of clients indicated family violence in 2002. Source: Healthy Start Data Report 2002; Healthy Start client case notes)	Strategy: Education on the effects of risky behaviors will be discussed through workshops on smoking cessation; inadequate nutrition, domestic violence and substance abuse will be provided through workshops and during home visits. Activities (with Implementation Timeframes): See Section ET2	As of 4/15/05 the incidence was the following: 8% smoking, 1.4% substance abuse, 1.5% family violence.

Grantee: St. Louis Healthy Start (SLHS)
Intervention: Consortium

Project Period Objective	Strategy & Activities	Accomplishments
C1:By 5/31/05 60% consortium members will increase their capacity (knowledge and skills) through provided training (Baseline: 50% of paid consortium member organizations and individuals receive training in 2002. Source: Consortium records)	Strategy: The consortium will include training as part of its regular meeting agenda. The consortium identifies a critical issue each year that serves as a theme for training during that year. 2002 The consortium will provide a training presentation at 3 of the 4 meetings each year. Activities (with Implementation Timeframes): 1a. Provide 3 training opportunities for 39 consortium members by 12/31/02 2003 1a. Provide 4 training opportunities for 30 participants by 12/31/03. 1b. The consortium identifies a critical issue each year that serves as a theme for training during that year. In 2003, the theme will be Domestic Violence. 2004 1a. Provide 3 training opportunities for 40 participants by 12/31/04. 2a. Work with an evaluator to develop draft survey tool by 12/31/04. 3a. Develop a membership recruitment plan to increase membership by 20%.	As of 4/30/05 training was provided at each regular quarterly meeting. Completed Completed Completed Completed Training provided to 39 participants. Consortium held focus groups. Completed – 26% increase.

V. Project Impact

A. **Systems of Care:** During the past four years, the Coalition was involved in the management of the Healthy Start project. This Coalition is made up of many health care professionals in the St Louis area.

1. Some of the approaches utilized to enhance collaboration included working directly with the Coalition and its network of community health care providers to provide education, and working with the Missouri Department of Health and Senior Services to retrieve data for FIMR.

2. Policies and procedures were developed and strengthened in order to keep the maternal child health community connected and informed. The Coalition formed a Board of Directors, became a 501c3 and attained not-for-profit status.

   Family Support Network developed a policy and procedure manual that can be utilized by any outreach organization. Specific information in the manual includes how to do a home visit, prenatal information tips and post-partum information to be shared with the clients.

3. Key relationships that have developed as a result of Healthy Start efforts include:

   a. Relationships among health service agencies, social service agencies, and community-based organizations -- There were linkage agreements in place between organizations that make referrals to the Healthy Start program and accept clients in need of more specialized care. These included hospitals, community clinics and faith-based organizations.

   b. Relationships that focus on involvement of consumers and community leaders -- There was a sustained effort to organize a consortium, the Healthy Start Advisory Council. This group met to strategize around increasing involvement of consumers in the high-risk population on the Advisory Council. The Council also mentored a group of consumers to encourage participation in the Council so their opinions and needs were being heard.

4. Comprehensiveness of services:

   a. In order for a woman to be eligible for the St. Louis Healthy Start program, she must be pregnant and live in the 63120, 63113, or 63136 zip code area. In order for a person to be counted as a client she must be assessed by a Healthy Start employee.

   b. Through education and referrals, the participants became more aware of how to access services in the community. They usually already knew the services that existed, but lacked the resources to connect with the services. The Healthy Start program helped bridge this gap.

c. The relationships that the outreach workers and nurses made with the participants allowed them to monitor their on-going health care. Referrals were made and documented. Nurses provided a critical service by regularly visiting to provide care in the home. This helped fill in the service gaps as the participants struggled with other immediate issues, such as housing, jobs, etc.

d. The project was unable to have a positive impact on the efficiency of agency records systems and sharing of data across providers to reduce the need for repetition. There were challenges related to the IT system in use throughout the 4-year grant period. When new guidelines were added by HRSA in the middle of the grant cycle, it was necessary to add additional database information. It was not possible to integrate the new information into the existing system, which made it difficult to extract reliable data from the system. Because of these data issues, the project was unable to focus on developing data sharing relationships with providers.

5. Impact on enhancing client participation in evaluation of service provision:

a. Much effort was put forth to engage the clients in the advisory council. There were attempts to include them in the Coalition and the Neighborhood Councils. Each time, consumers have expressed interest, but felt uncomfortable voicing their needs and concerns in these types of formats. Some other attempts were more successful. For example, client surveys were better received. These may be biased, however, because of a fear of having the service discontinued if negative comments were somehow tracked back to the client.

b. Consumer participation in the developing of assessment and intervention mechanisms and tools to serve perinatal women and/or infants was accomplished through one-on-one discussions with clients during the monthly book club meetings. During these meetings, clients were educated on key prenatal care health topics and asked if they were receiving these services or if they were in need of additional help. Many times during these meetings, a topic of interest would arise and become the topic of the next month's meeting.

B. <u>Impact to the Community</u>: The impact the project has had on developing and empowering the community includes:

1. The project promoted available resources and services in the community. The outreach workers made referrals to other services in the neighborhood. If someone needed to be referred outside of the service area, there were attempts made by the project to overcome barriers such as transportation issues. The clients received benefits, including information, referrals, health education and social support.

2. The consumer participation in this project was beneficial to the March of Dimes and its work at the State legislative level to bring more awareness to

the needs of this high-risk population. During some Book Club meetings, the topic of newborn screening was discussed and the need to have all babies screened for more tests at birth was well-received by these women. The clients also wanted to encourage more work to help them keep their Medicaid coverage.

3. The Coalition included a diverse group of health professionals with divergent opinions. In the last year, there were some challenges in defining the main goal of the Coalition. This pointed to a need to develop a Board of Directors to guide this group. The Coalition now has a Board and an Executive Director and are in the process of completing a strategic planning process to establish their future direction.

4. Many of the outreach workers were living in the community with the clients. They were given jobs and trained in the program for the past four years. Clients were encouraged to get their GED, finish their education and become employable.

C. Impact on the State:

The Healthy Start project worked closely with the Title V office and staff in St. Louis. They shared information to make both programs stronger. There was also collaboration between the St. Louis and other Healthy Start projects in the state.

D. Local Government Role:

The Healthy Start project and the Coalition kept the local Department of Health informed of the activities in the program. The Missouri Department of Health and Senior Services was able to provide perinatal statistics to help target services.

E. Lessons Learned:

This project experienced multiple challenges, including the deaths of the local project director and the Grants Management Director at HRSA. The lesson learned is the importance of appropriate staffing levels to adjust when unforeseen problems arise.

It is necessary for an agency that will be subcontracting their grant to other agencies to make sure that the community contractor is skilled in the implementation of such a grant. In our case, the contractor chosen had a strong track record in family support, but not in other areas such as building community partnerships and reporting. Documentation and accountability need to be addressed early.

The evaluation of the grant needs to be up and running at the beginning of the grant process. In addition, while the project used a very competent evaluator, it would have been beneficial to have someone from the local area to allow for improved communication.

HEALTHY START LOCAL EVALUATION REPORT

PROJECT NAME: St. Louis Healthy Start - #H49MC00146

TITLE OF REPORT: Final Evaluation Report

AUTHORS: March of Dimes
(The information in this report includes data analysis from Health Systems Research, Inc.)

Section I. INTRODUCTION

Local Evaluation Component

A. The evaluation component was contracted out to Health Systems Research, Inc. (HSR) of Washington, DC. This evaluator was chosen because they had much previous experience with Healthy Start projects. HSR identified 20 outcome measures for the project (see attached), which were used to design the project evaluation. Each outcome was linked to one of the MCHB Healthy Start performance measures.
B. HSR prepared reports throughout the project period, to inform the project on how well it was meeting its objectives and achieving the outcomes. Each report provided an analysis of the 20 outcome measures.
C. HSR stressed the use of an outcomes approach to the design, delivery and evaluation of activities with the project staff.

Key Questions/Hypotheses

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B. & C. The data sources were obtained from Family Support Network (FSN), the outreach and case management contractor. On a monthly basis, FSN completed data reports and submitted them to HSR for review. These reports measured data such as the following:

- Characteristics of program participants
- Risk factors
- Infants and children enrolled in a medical home
- Staff training on culturally appropriate skills
- Depression screening
- Participants with insurance, medical provider, WIC, housing, and other needs

- Health education provided to participants
- Dates of doctor's visits
- Referral information

Section III. FINDINGS/DISCUSSION

The following is a summary of findings on each of the 20 outcomes that were tracked.

1. Percent of at-risk or high-risk pregnant women from target communities enroll in Healthy Start and obtain early and adequate prenatal care.

Table 1 - Trimester of Entry into Prenatal Care, 2001-2005

Almost all of the participants were already enrolled in prenatal care at the time of entry into the program. It is difficult to assess trimester of entry into prenatal care since data on this indicator was missing for the majority of participants. The figures below show the trimester of entry into care for Healthy Start clients and a comparison with statistics for the project zip codes and the city as a whole.

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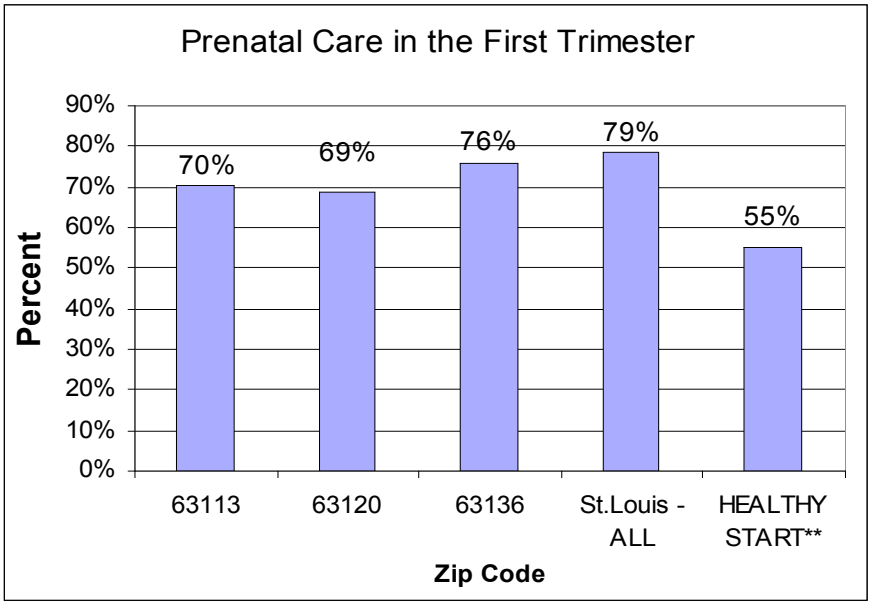
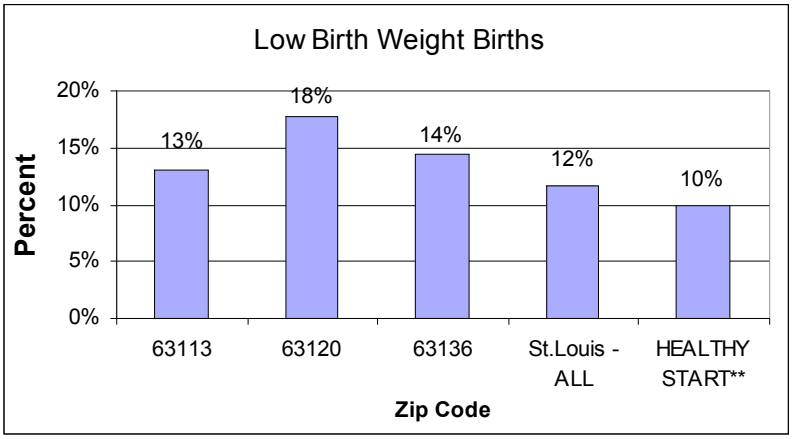
Chart 1 - Comparison of Prenatal Care Entry of Healthy Start Participants to others in Zip Code. (Birth Statistics Calendar Year 2000)



*Healthy Start Data is for 2001-2005, Zip Code Data is for CY2000

Of the 69 live births for which data is on birthweight available, 7 (10%) were low birth weight (1,500-2,499 grams), and 1 birth (1%) was very low birth weight (< 1,499 grams). Based on this data, the rate of low birth weight was lower among Healthy Start participants than other births in the Healthy Start catchment area and St. Louis as a whole.

Chart 2 - Comparison of Low Birth Weight Births of Healthy Start Participants



(from 2002-2005) to Others in the Zip Code in CY2000.

Table 2 - Birth Weight for Healthy Start Infants by Year

	Year				
	2002	**2003**	**2004**	**2005**	**Total**
Normal	7	34	20		61
LBW	0	2	5		7
VLBW	0	1	0		1
Missing	19	28	27	6	80
Total	26	65	52	6	149

Birth Weight defined as:
Normal: 2500 grams and above
Low: Less than 2500 grams and greater than or equal to 1500grams
Very Low: Less than 1500 grams

As shown in Table 3, sixteen percent of births were preterm or very preterm. This is a similar finding for premature births across all St. Louis. As with birthweight, Healthy Start participants' rate of premature births was lower than in the overall catchment area.

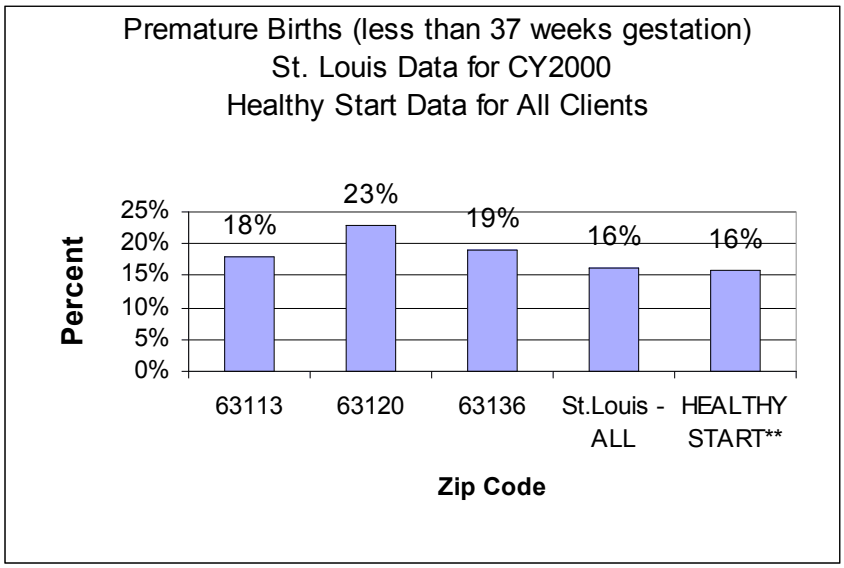
Table 3 - Term of Birth for infants of Healthy Start Participants

	Total	Percent
Full Term	118	84%
Preterm	19	14%
Very Preterm	3	2%
Total*	140	100%

*9 missing

Term of Birth Defined as: Full Term: >=37 weeks gestational age; Preterm: >=32 weeks gestational age; Very Preterm: <32 weeks gestational age

Chart 3 - Premature Births to Healthy Start Participants in Comparison with Catchment Area and all of St. Louis



2. Percent of at-risk pregnant women in target communities eligible for Healthy Start Case management enrolled in Healthy Start Case Management.

Table 4 - Healthy Start Client Enrollment by Zip Code of Residence, Insurance Status, Year of Enrollment and Number of live Births

Zip code	All Live Births*	Mother on Medicaid*	Clients Enrolled in Healthy Start 2002	Clients Enrolled in Healthy Start 2003	Clients Enrolled in Healthy Start 2004	Average Enrolled in Healthy Start (2002-2004)	Percent of 2000 Population
63113	239	172	8	7	4	6	4%
63120	231	175	15	14	17	15	9%
63136	972	624	29	36	32	32	5%
Total	1,442	971	52	57	53	54	6%

*Birth Statistics for the State of Missouri, Year 2000.

Based on the data above showing births to mothers on Medicaid for the three zip codes, the Healthy Start project enrolled an average of 6% of pregnant women on Medicaid in the catchment area each year.

3. Percent of women linked to Medicaid and a medical home within 60 days of enrollment

Most Healthy Start participants were already enrolled in Medicaid when they joined Healthy Start. Only four participants needed to be referred to and enrolled with a medical provider. Only one participant needed a referral to Medicaid over the entire project period.

4. Infants and children up to 24 months of women enrolled in Healthy Start have a medical home.

For the 101 infants with data on medical visits: 81 percent received a medical visit within 2 weeks of birth, with almost half within 1 week of birth. At 6 weeks of birth, 97% of the infants of mothers enrolled in Healthy Start received a medical visit.

Table 5 - Number of Weeks between Birth of Infant and 1st Medical Visit

Number of Weeks after Birth for 1st Visit	Number of Infants	Percent	Valid Percent	Cum Percent
Less than 1 Week	15	9%	15%	15%
1 Week	32	19%	32%	47%

2 Weeks	35	21%	35%	81%
3 Weeks	9	5%	9%	90%
4 Weeks	4	2%	4%	94%
5 Weeks	2	1%	2%	96%
6 Weeks	1	1%	1%	97%
8 Weeks	2	1%	2%	99%
15 Weeks	1	1%	1%	100%
Missing	67	40%		
Total	168	100%	100%	

5. Healthy Start staff develop culturally appropriate skills in assessing smoking behaviors, substance abuse/use, HIV/STD risk behavior, and family support.

As detailed in the table below, many staff training activities were held over the course of the project. Staff was also encouraged to attend off-site training.

Table 6 - Summary Staff Training Topics and Participation

Training Topics	Number of Staff Participating
Cultural Competence	7
Smoking Cessation	9
Personal Safety	7
CPR	6
HIV/AIDS	6
Prematurity Summit	6
Domestic Violence	5
STD/AIDS	5
Breast Feeding	4
Conflict Resolution	4
First Aid	4
Healthy Families	4
Change Theory	3
DOH Trauma Training	3
Family Development	3
FIMR	3
Lead Training	3
Teen Pregnancy Prevention	3
Healthy Start Conference	2
SEMO Drug Abuse Prevention Conference	2
STD Awareness Prevention	2
Access 2000	1
Access II	1
Computer Software Training	1
Depression	1

Training Topics	Number of Staff Participating
Developmental Assets	1
EXCEL 1	1
Grief, Loss, Abandonment	1
Management of Multiple Gestation	1
Multicultural Health Care for Women	1
Nutrition	1
Post Partum	1
Prevention/Intervention Violence	1
Public Relations	1
Suicide Prevention	1

6. Percent of women enrolled in Healthy Start receive a basic health education package focused on topics important to prenatal, child and family health.

All participants received a basic health education package at intake and the initial home visit. In addition clients received specific counseling in the following areas as indicated in the chart below. Participant case management included providing health information related to prenatal, child and family health during home visits. The following table indicates specific education provided to participants during their home visits:

Table 7 - Number of Clients who received Education by Type of Education

Type of Education	Number of Clients
Drug/Alcohol	113
Nutrition	101
Family Planning	68
STD/HIV	72
Lead Poisoning	47
Immunizations	67

7. Percent of women enrolled in Healthy Start CM are screened and assessed for at risk behaviors.

All participants were screened and assessed for risk behaviors. Participant case management included discussion and education on issues such as drug/alcohol use, nutrition, family planning, STD/HIV, Lead, and immunizations. Participants were provided education and referral options during home visits.

8. Percent of women enrolled in Healthy Start are screened, risk assessed and referred as appropriate, for depression.

112 clients were reported as screened for depression at some point while enrolled in Healthy Start. Of those screened, 13 (12%) were referred for further depression assessment.

9. All Healthy Start staff are knowledgeable about smoking cessation education.

See Outcome 5. All staff received training in smoking cessation education.

10. Percent of women enrolled in Healthy Start Case Management and identified through screening and assessment as at-risk for unhealthy behaviors and ready for change, are successfully referred for intervention.

In 2004, 6 women reported smoking during their pregnancy and were referred for further assessment. Interconceptional participants were also screened and 4 were referred for further assessment/treatment. Of the approximately 33 children (birth to 21 months) screened, about one-half of their mothers were provided with risk reduction counseling and none were reported as referred for further assessment or treatment.

11. Percent of women enrolled in Healthy Start Case Management maintain a regular schedule of inter-conception care.

Records indicate that 46 participants received inter-conception care. Of these 46 participants, 42 had one visit, 3 had 2 visits, and 1 had 3 visits.

12. An outreach and case finding network is established in Healthy Start communities.

Staff attended meetings with many local agencies and organizations in the community. They also participated in many health fairs to publicize the project. The outreach workers found that their greatest recruitment success was via word-of-mouth. Since the outreach workers were from the local zip code areas, they were able to facilitate awareness of the project in the community. The table below lists the sources of referral to the Healthy Start program.

Table 8 - Recruitment and Referral Locations

Point of Referral for Healthy Start Clients	Total
Community	56
Flyer	5
Self	5
Phone call	4
Jennings High School	3
Barnes Jewish Hospital Teen Clinic	2
Meda P. Washington	2
Parents as Teachers	2
Walk in	2
Billboard at mall	1
Connect care	1
Current participant	1
Friend	1

Point of Referral for Healthy Start Clients	Total
Healthy Baby Forum	1
Mers- Goodwill	1
Neighbor	1
Previous Participant	1
School	1
Unknown	55
Total	145

13. A provider referral and follow-up system is established in Healthy Start communities.

The project established relationships with the following organizations:

- Barnes Jewish Hospital Mental Health
- Barnes Hospital Nursing Department
- Barnes Health Clinic
- Pine Lawn Teen Center
- St. Louis Department of Health
- Nurses for Newborns
- Tandy Recreational Center
- Matria
- West End Methadone Clinic

14. Two community-wide health education events are conducted each year.

The MCFH Coalition held quarterly educational events that were focused on various health topics. In 2003 the MCFH Coalition sponsored 4 one-hour training programs. The theme for the year was "The Affect of Violence on Families." Training topics were Family Violence, Screening for Domestic Violence, Domestic Violence in the Workplace and the St. Louis Crisis Intervention Team. Over 39 individuals representing over 29 organizations attended these training sessions. Fifty percent (50%) of the consortium membership participated in these trainings. In 2004, 39 participants received training on various health topics.

15. A Healthy Start tracking system is in place to assure ongoing care.

While a tracking system was developed and implemented, the project faced persistent challenges related to data entry and reporting due to viruses and infrastructure difficulties at FSN's Healthy Start site over the course of the project.

16. A FIMR program is established, implemented and used to formulate recommendations for community interventions.

Nineteen cases were reviewed during the contract period. Furthermore, five recommendations were selected by the CRT as priorities and were presented to the Community Action Team. The Case Review Team is made up of physicians as well as nurses, nutritionists, social workers, etc.

17. Four cross training events with Healthy Start staff and providers are conducted each year.

Healthy Start staff were encouraged to attend the quarterly coalition educational events. They also attended the March of Dimes' Prematurity Summit in 2004.

18. A mechanism for local reimbursement to Healthy Start for services provided is established and training conducted to operationalize this mechanism.

In July 2002, the project initiated discussions with Health Care USA and Care Partners targeted to the development of collaboration agreements regarding information sharing, client referrals and other activities of mutual interest. These discussions were seen as a prelude to discussions of a future contracting relationship between the health plans and Healthy Start. While follow-up meetings were held to explore a contracting agreement, in November 2002, Care Partners announced the closing of the St. Louis office.

19. Maintain Consortium organizational infrastructure.

The Coalition established a Healthy Start subcommittee to assist in the management of the project. The Coalition also applied for tax-exempt status in order to become self-sufficient for future grant opportunities.

20. Consumer input is assured through the Neighborhood Committee structure.

Six neighborhood council meetings were held with a total of 24 attendees. One of the attendees was identified as a Healthy Start client and 23 attendees represented a service organization. A decision was made in June 2003 to merge the 3 neighborhood councils into one.

Five meetings of the Healthy Start Advisory Council were held starting in May 2003 with a total of 29 participants. Three Healthy Start clients and 2 members of a neighborhood committee were members of the Board.

A Community Report event was held on October 27, 2003 to report on Healthy Start progress and to obtain feedback from the community. Flyers were distributed to announce the meeting that was held at a community center. Forty-five individuals

attended the meeting. Healthy Start successes were described and suggestions for future activities identified.

Section IV. RECOMMENDATIONS

The following is a summary of recommendations made by HSR in their evaluation report:

- Establish a structured staff training plan and develop an on-going assessment of training needs.
- Include pre and post-tests in staff training to determine effectiveness.
- Develop an outreach network that includes agencies who agree to participate in Healthy Start outreach and case finding.
- Conduct an assessment to identify the priority health education needs of the community and develop an inter-agency group that involves consumers to plan the events.
- Select a community contractor to implement the Project who is skilled in the development and conduct of health services delivery and community system-building.
- The evaluation and information technology staff need to collaborate closely.

Based upon the evaluation and March of Dimes' management of this project over the past four years, the March of Dimes has the following additional recommendations:

- Make sure objectives are realistic relative to the population to be served. In the short term, it may not be realistic to set a goal of achieving systematic changes in the local health care service system while providing services to very high-risk women at the same time.
- The local coalition needs to be invested in the project and have the infrastructure necessary to assist in the management of the project.
- When working with a coalition, it is important to nurture consensus, but the fiscal agent needs to have final authority regarding decision-making since the fiscal agent is legally responsible for implementation of the project.
- Recognize the potential limitations of working with a grass-roots community organization. In this project, they provided intense services to a select clientele, but were not prepared to recruit and manage a large caseload or to conform to the strict data requirements of HRSA.
- Require that the evaluator be from the local community. There was a disconnect between FSN and HSR which the March of Dimes attempted to bridge, but without great success. Throughout the project, FSN, housed in a building with poor infrastructure, battled IT problems, from multiple pervasive viruses to loss of electricity. These problems continually prevented FSN from providing the data that HSR needed to perform their evaluation.
- While HRSA hosted annual meetings, on-going guidance would be very beneficial to not only prevent problems in local projects, but to replicate best practices throughout the country.

- Establishing a standard database system, which could be replicated locally, so that information would be immediately available for HRSA's use would be helpful to HRSA and the grantee. Any revised data requirements could be uploaded into the system for use by local projects.

Section V. IMPACT BASED UPON THE RECOMMENDATIONS/RESULTS OF THE LOCAL EVALUATION

While the Healthy Start project had some positive results in serving high-risk women in the catchment area, it was unable to make significant headway in impacting change in the overall perinatal system in St. Louis. The project chose Family Support Network (FSN) as its outreach and case management subcontractor because of its experience in serving the targeted community. While direct service provision was FSN's specialty, they did not have experience in advocating for or facilitating improvement of the community's overall health service system. They established relationships with other community providers, but this served to facilitate individual referrals for participants, rather than the broader goal of system change. They also did not have experience in data management required for reporting to HRSA.

The participants who were reached through this project represented an extremely vulnerable, high-risk population with many needs. The intervention provided by the St. Louis Healthy Start project quickly focused on assisting the women in meeting these very basic needs. As we know from Maslow's Hierarchy of Needs, an individual's basic needs must first be met before higher level needs can be addressed. The women received items such as cribs and blankets, referrals to social service agencies, prenatal and interconception education, depression screening, and job training information. While these services filled a true gap in health care services in the community, we are not able to assess the long-term impact on health status. Instead of a proactive approach that may have resulted in more significant positive outcomes, the reality of the participants' needs for very basic services resulted in a reactive approach that provided more short-term intervention.

The March of Dimes recognized this shortcoming, and attempted to work with the Coalition to address these larger issues. Initially the Coalition took the lead in managing the project. However, the Coalition was not structured in a manner to effectively manage a grant of this size. As a result, the March of Dimes increased its involvement in working with the Coalition and co-managing the grant. That structure, however, including a project director who reported to both organizations, brought many basic management issues that arise when two different organizations attempt to manage one source of funding, including communication barriers, differences in staffing structure, varying training needs, and differences in organizational focus.

In addition to these challenges, it was necessary for the March of Dimes to spend much time managing the activities of FSN, including assisting in data collection, training, and staff management. Eventually, the March of Dimes performed an on-site performance review of FSN. This included a review of virtually all participant charts and meetings

with staff management, which culminated in a detailed report. Angela Hayes-Toliver of HRSA was copied on this report, as well as interim correspondence.

While more time was spent trouble-shooting management issues than was anticipated, the project was successful in providing services to many women in the targeted zip code. As reflected in the evaluation report, the percentages of both low birthweight and premature births with participants in this targeted population appeared to be lower than in the overall catchment area.

Over the course of the project, the Coalition also recognized its limitations and became motivated to further strengthen its own infrastructure to address the community's needs. The Coalition is now better prepared to direct future activities under the new Healthy Start grant. Now that their own infrastructure is established, they are ready to take on the broader community-wide health system issues.

Section VI. PUBLICATIONS

N/A

HEALTHY START LOCAL EVALUATION REPORT

PROJECT NAME: St. Louis Healthy Start - #H49MC00146

TITLE OF REPORT: Final Evaluation Report

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(The information in this report includes data analysis from Health Systems Research, Inc.)

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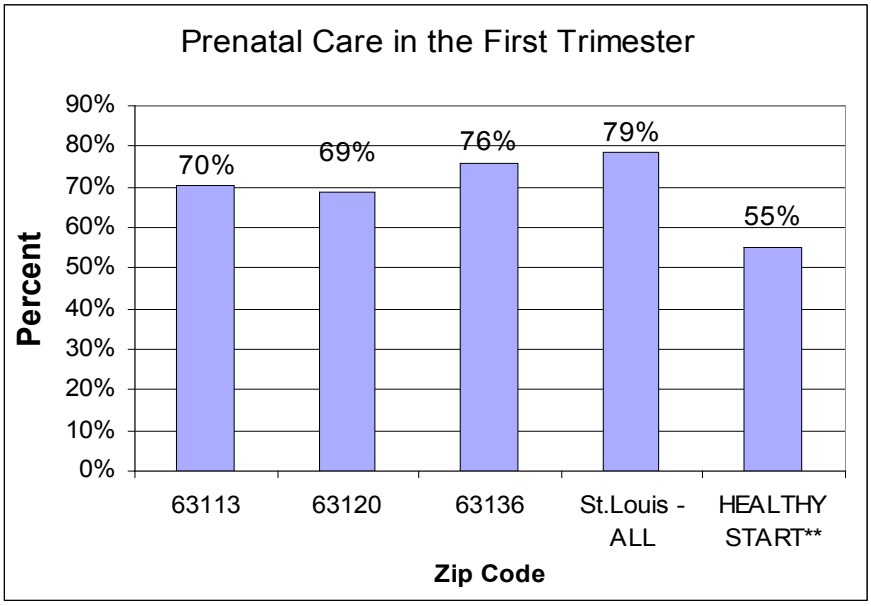

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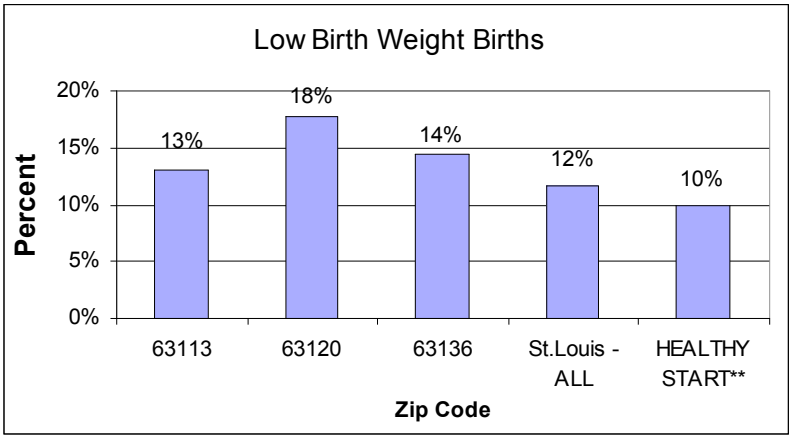
Of the 69 live births for which data is on birthweight available, 7 (10%) were low birth weight (1,500-2,499 grams), and 1 birth (1%) was very low birth weight (< 1,499 grams). Based on this data, the rate of low birth weight was lower among Healthy Start participants than other births in the Healthy Start catchment area and St. Louis as a whole.

Chart 2 - Comparison of Low Birth Weight Births of Healthy Start Participants



(from 2002-2005) to Others in the Zip Code in CY2000.

Table 2 - Birth Weight for Healthy Start Infants by Year

	Year				
	2002	**2003**	**2004**	**2005**	**Total**
Normal	7	34	20		61
LBW	0	2	5		7
VLBW	0	1	0		1
Missing	19	28	27	6	80
Total	26	65	52	6	149

Birth Weight defined as:
Normal: 2500 grams and above
Low: Less than 2500 grams and greater than or equal to 1500grams
Very Low: Less than 1500 grams

As shown in Table 3, sixteen percent of births were preterm or very preterm. This is a similar finding for premature births across all St. Louis. As with birthweight, Healthy Start participants' rate of premature births was lower than in the overall catchment area.

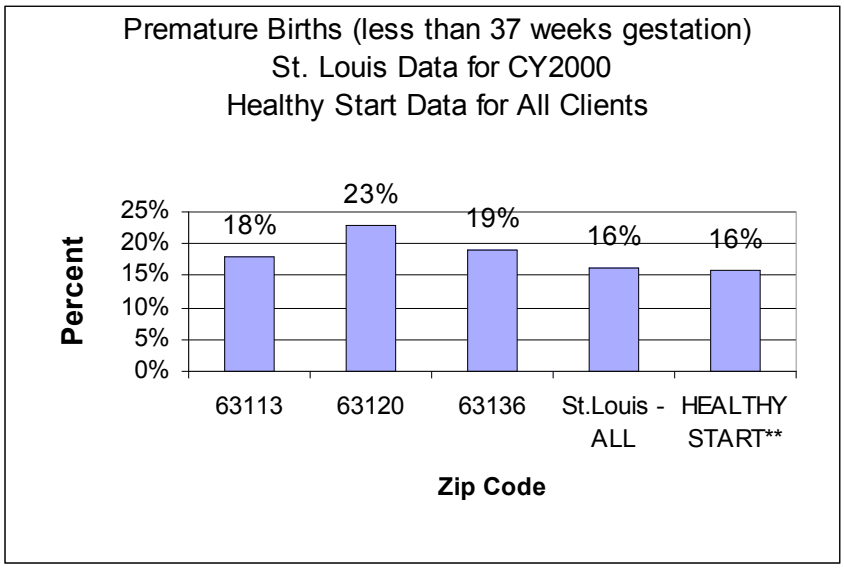
Table 3 - Term of Birth for infants of Healthy Start Participants

	Total	Percent
Full Term	118	84%
Preterm	19	14%
Very Preterm	3	2%
Total*	140	100%

*9 missing

Term of Birth Defined as: Full Term: >=37 weeks gestational age; Preterm: >=32 weeks gestational age; Very Preterm: <32 weeks gestational age

Chart 3 - Premature Births to Healthy Start Participants in Comparison with Catchment Area and all of St. Louis



11. Percent of at-risk pregnant women in target communities eligible for Healthy Start Case management enrolled in Healthy Start Case Management.

Table 4 - Healthy Start Client Enrollment by Zip Code of Residence, Insurance Status, Year of Enrollment and Number of live Births

Zip code	All Live Births*	Mother on Medicaid*	Clients Enrolled in Healthy Start 2002	Clients Enrolled in Healthy Start 2003	Clients Enrolled in Healthy Start 2004	Average Enrolled in Healthy Start (2002-2004)	Percent of 2000 Population
63113	239	172	8	7	4	6	4%
63120	231	175	15	14	17	15	9%
63136	972	624	29	36	32	32	5%
Total	1,442	971	52	57	53	54	6%

*Birth Statistics for the State of Missouri, Year 2000.

Based on the data above showing births to mothers on Medicaid for the three zip codes, the Healthy Start project enrolled an average of 6% of pregnant women on Medicaid in the catchment area each year.

12. Percent of women linked to Medicaid and a medical home within 60 days of enrollment

Most Healthy Start participants were already enrolled in Medicaid when they joined Healthy Start. Only four participants needed to be referred to and enrolled with a medical provider. Only one participant needed a referral to Medicaid over the entire project period.

13. Infants and children up to 24 months of women enrolled in Healthy Start have a medical home.

For the 101 infants with data on medical visits: 81 percent received a medical visit within 2 weeks of birth, with almost half within 1 week of birth. At 6 weeks of birth, 97% of the infants of mothers enrolled in Healthy Start received a medical visit.

Table 5 - Number of Weeks between Birth of Infant and 1st Medical Visit

Number of Weeks after Birth for 1st Visit	Number of Infants	Percent	Valid Percent	Cum Percent
Less than 1 Week	15	9%	15%	15%
1 Week	32	19%	32%	47%

2 Weeks	35	21%	35%	81%
3 Weeks	9	5%	9%	90%
4 Weeks	4	2%	4%	94%
5 Weeks	2	1%	2%	96%
6 Weeks	1	1%	1%	97%
8 Weeks	2	1%	2%	99%
15 Weeks	1	1%	1%	100%
Missing	67	40%		
Total	168	100%	100%	

14. Healthy Start staff develop culturally appropriate skills in assessing smoking behaviors, substance abuse/use, HIV/STD risk behavior, and family support.

As detailed in the table below, many staff training activities were held over the course of the project. Staff was also encouraged to attend off-site training.

Table 6 - Summary Staff Training Topics and Participation

Training Topics	Number of Staff Participating
Cultural Competence	7
Smoking Cessation	9
Personal Safety	7
CPR	6
HIV/AIDS	6
Prematurity Summit	6
Domestic Violence	5
STD/AIDS	5
Breast Feeding	4
Conflict Resolution	4
First Aid	4
Healthy Families	4
Change Theory	3
DOH Trauma Training	3
Family Development	3
FIMR	3
Lead Training	3
Teen Pregnancy Prevention	3
Healthy Start Conference	2
SEMO Drug Abuse Prevention Conference	2
STD Awareness Prevention	2
Access 2000	1
Access II	1
Computer Software Training	1
Depression	1

Training Topics	Number of Staff Participating
Developmental Assets	1
EXCEL 1	1
Grief, Loss, Abandonment	1
Management of Multiple Gestation	1
Multicultural Health Care for Women	1
Nutrition	1
Post Partum	1
Prevention/Intervention Violence	1
Public Relations	1
Suicide Prevention	1

15. Percent of women enrolled in Healthy Start receive a basic health education package focused on topics important to prenatal, child and family health.

All participants received a basic health education package at intake and the initial home visit. In addition clients received specific counseling in the following areas as indicated in the chart below. Participant case management included providing health information related to prenatal, child and family health during home visits. The following table indicates specific education provided to participants during their home visits:

Table 7 - Number of Clients who received Education by Type of Education

Type of Education	Number of Clients
Drug/Alcohol	113
Nutrition	101
Family Planning	68
STD/HIV	72
Lead Poisoning	47
Immunizations	67

16. Percent of women enrolled in Healthy Start CM are screened and assessed for at risk behaviors.

All participants were screened and assessed for risk behaviors. Participant case management included discussion and education on issues such as drug/alcohol use, nutrition, family planning, STD/HIV, Lead, and immunizations. Participants were provided education and referral options during home visits.

17. Percent of women enrolled in Healthy Start are screened, risk assessed and referred as appropriate, for depression.

112 clients were reported as screened for depression at some point while enrolled in Healthy Start. Of those screened, 13 (12%) were referred for further depression assessment.

18. All Healthy Start staff are knowledgeable about smoking cessation education.

See Outcome 5. All staff received training in smoking cessation education.

19. Percent of women enrolled in Healthy Start Case Management and identified through screening and assessment as at-risk for unhealthy behaviors and ready for change, are successfully referred for intervention.

In 2004, 6 women reported smoking during their pregnancy and were referred for further assessment. Interconceptional participants were also screened and 4 were referred for further assessment/treatment. Of the approximately 33 children (birth to 21 months) screened, about one-half of their mothers were provided with risk reduction counseling and none were reported as referred for further assessment or treatment.

13. Percent of women enrolled in Healthy Start Case Management maintain a regular schedule of inter-conception care.

Records indicate that 46 participants received inter-conception care. Of these 46 participants, 42 had one visit, 3 had 2 visits, and 1 had 3 visits.

14. An outreach and case finding network is established in Healthy Start communities.

Staff attended meetings with many local agencies and organizations in the community. They also participated in many health fairs to publicize the project. The outreach workers found that their greatest recruitment success was via word-of-mouth. Since the outreach workers were from the local zip code areas, they were able to facilitate awareness of the project in the community. The table below lists the sources of referral to the Healthy Start program.

Table 8 - Recruitment and Referral Locations

Point of Referral for Healthy Start Clients	Total
Community	56
Flyer	5
Self	5
Phone call	4
Jennings High School	3
Barnes Jewish Hospital Teen Clinic	2
Meda P. Washington	2
Parents as Teachers	2
Walk in	2
Billboard at mall	1
Connect care	1
Current participant	1
Friend	1

Point of Referral for Healthy Start Clients	Total
Healthy Baby Forum	1
Mers- Goodwill	1
Neighbor	1
Previous Participant	1
School	1
Unknown	55
Total	145

17. A provider referral and follow-up system is established in Healthy Start communities.

The project established relationships with the following organizations:

- Barnes Jewish Hospital Mental Health
- Barnes Hospital Nursing Department
- Barnes Health Clinic
- Pine Lawn Teen Center
- St. Louis Department of Health
- Nurses for Newborns
- Tandy Recreational Center
- Matria
- West End Methadone Clinic

18. Two community-wide health education events are conducted each year.

The MCFH Coalition held quarterly educational events that were focused on various health topics. In 2003 the MCFH Coalition sponsored 4 one-hour training programs. The theme for the year was "The Affect of Violence on Families." Training topics were Family Violence, Screening for Domestic Violence, Domestic Violence in the Workplace and the St. Louis Crisis Intervention Team. Over 39 individuals representing over 29 organizations attended these training sessions. Fifty percent (50%) of the consortium membership participated in these trainings. In 2004, 39 participants received training on various health topics.

19. A Healthy Start tracking system is in place to assure ongoing care.

While a tracking system was developed and implemented, the project faced persistent challenges related to data entry and reporting due to viruses and infrastructure difficulties at FSN's Healthy Start site over the course of the project.

20. A FIMR program is established, implemented and used to formulate recommendations for community interventions.

Nineteen cases were reviewed during the contract period. Furthermore, five recommendations were selected by the CRT as priorities and were presented to the Community Action Team. The Case Review Team is made up of physicians as well as nurses, nutritionists, social workers, etc.

17. Four cross training events with Healthy Start staff and providers are conducted each year.

Healthy Start staff were encouraged to attend the quarterly coalition educational events. They also attended the March of Dimes' Prematurity Summit in 2004.

19. A mechanism for local reimbursement to Healthy Start for services provided is established and training conducted to operationalize this mechanism.

In July 2002, the project initiated discussions with Health Care USA and Care Partners targeted to the development of collaboration agreements regarding information sharing, client referrals and other activities of mutual interest. These discussions were seen as a prelude to discussions of a future contracting relationship between the health plans and Healthy Start. While follow-up meetings were held to explore a contracting agreement, in November 2002, Care Partners announced the closing of the St. Louis office.

19. Maintain Consortium organizational infrastructure.

The Coalition established a Healthy Start subcommittee to assist in the management of the project. The Coalition also applied for tax-exempt status in order to become self-sufficient for future grant opportunities.

21. Consumer input is assured through the Neighborhood Committee structure.

Six neighborhood council meetings were held with a total of 24 attendees. One of the attendees was identified as a Healthy Start client and 23 attendees represented a service organization. A decision was made in June 2003 to merge the 3 neighborhood councils into one.

Five meetings of the Healthy Start Advisory Council were held starting in May 2003 with a total of 29 participants. Three Healthy Start clients and 2 members of a neighborhood committee were members of the Board.

A Community Report event was held on October 27, 2003 to report on Healthy Start progress and to obtain feedback from the community. Flyers were distributed to announce the meeting that was held at a community center. Forty-five individuals

attended the meeting. Healthy Start successes were described and suggestions for future activities identified.

Section IV. RECOMMENDATIONS

The following is a summary of recommendations made by HSR in their evaluation report:

- Establish a structured staff training plan and develop an on-going assessment of training needs.
- Include pre and post-tests in staff training to determine effectiveness.
- Develop an outreach network that includes agencies who agree to participate in Healthy Start outreach and case finding.
- Conduct an assessment to identify the priority health education needs of the community and develop an inter-agency group that involves consumers to plan the events.
- Select a community contractor to implement the Project who is skilled in the development and conduct of health services delivery and community system-building.
- The evaluation and information technology staff need to collaborate closely.

Based upon the evaluation and March of Dimes' management of this project over the past four years, the March of Dimes has the following additional recommendations:

- Make sure objectives are realistic relative to the population to be served. In the short term, it may not be realistic to set a goal of achieving systematic changes in the local health care service system while providing services to very high-risk women at the same time.
- The local coalition needs to be invested in the project and have the infrastructure necessary to assist in the management of the project.
- When working with a coalition, it is important to nurture consensus, but the fiscal agent needs to have final authority regarding decision-making since the fiscal agent is legally responsible for implementation of the project.
- Recognize the potential limitations of working with a grass-roots community organization. In this project, they provided intense services to a select clientele, but were not prepared to recruit and manage a large caseload or to conform to the strict data requirements of HRSA.
- Require that the evaluator be from the local community. There was a disconnect between FSN and HSR which the March of Dimes attempted to bridge, but without great success. Throughout the project, FSN, housed in a building with poor infrastructure, battled IT problems, from multiple pervasive viruses to loss of electricity. These problems continually prevented FSN from providing the data that HSR needed to perform their evaluation.
- While HRSA hosted annual meetings, on-going guidance would be very beneficial to not only prevent problems in local projects, but to replicate best practices throughout the country.

- Establishing a standard database system, which could be replicated locally, so that information would be immediately available for HRSA's use would be helpful to HRSA and the grantee. Any revised data requirements could be uploaded into the system for use by local projects.

Section V. IMPACT BASED UPON THE RECOMMENDATIONS/RESULTS OF THE LOCAL EVALUATION

While the Healthy Start project had some positive results in serving high-risk women in the catchment area, it was unable to make significant headway in impacting change in the overall perinatal system in St. Louis. The project chose Family Support Network (FSN) as its outreach and case management subcontractor because of its experience in serving the targeted community. While direct service provision was FSN's specialty, they did not have experience in advocating for or facilitating improvement of the community's overall health service system. They established relationships with other community providers, but this served to facilitate individual referrals for participants, rather than the broader goal of system change. They also did not have experience in data management required for reporting to HRSA.

The participants who were reached through this project represented an extremely vulnerable, high-risk population with many needs. The intervention provided by the St. Louis Healthy Start project quickly focused on assisting the women in meeting these very basic needs. As we know from Maslow's Hierarchy of Needs, an individual's basic needs must first be met before higher level needs can be addressed. The women received items such as cribs and blankets, referrals to social service agencies, prenatal and interconception education, depression screening, and job training information. While these services filled a true gap in health care services in the community, we are not able to assess the long-term impact on health status. Instead of a proactive approach that may have resulted in more significant positive outcomes, the reality of the participants' needs for very basic services resulted in a reactive approach that provided more short-term intervention.

The March of Dimes recognized this shortcoming, and attempted to work with the Coalition to address these larger issues. Initially the Coalition took the lead in managing the project. However, the Coalition was not structured in a manner to effectively manage a grant of this size. As a result, the March of Dimes increased its involvement in working with the Coalition and co-managing the grant. That structure, however, including a project director who reported to both organizations, brought many basic management issues that arise when two different organizations attempt to manage one source of funding, including communication barriers, differences in staffing structure, varying training needs, and differences in organizational focus.

In addition to these challenges, it was necessary for the March of Dimes to spend much time managing the activities of FSN, including assisting in data collection, training, and staff management. Eventually, the March of Dimes performed an on-site performance review of FSN. This included a review of virtually all participant charts and meetings

with staff management, which culminated in a detailed report. Angela Hayes-Toliver of HRSA was copied on this report, as well as interim correspondence.

While more time was spent trouble-shooting management issues than was anticipated, the project was successful in providing services to many women in the targeted zip code. As reflected in the evaluation report, the percentages of both low birthweight and premature births with participants in this targeted population appeared to be lower than in the overall catchment area.

Over the course of the project, the Coalition also recognized its limitations and became motivated to further strengthen its own infrastructure to address the community's needs. The Coalition is now better prepared to direct future activities under the new Healthy Start grant. Now that their own infrastructure is established, they are ready to take on the broader community-wide health system issues.

Section VI. PUBLICATIONS

N/A

St. Louis Healthy Start Evaluation Design		
Outcome	**Indicator and Data Elements**	**Data Source**
1. **__% of at risk or high risk pregnant women in target communities obtain early and adequate prenatal care.**	# of women meeting risk criteria in/using PNC. Data: - EDD - Date of program enrollment - Date and # of visits - Gestational age of infant	Client record Birth Cert.
MCHB: PM #36 - % of program participants with 1st trimester PN visit		
2. __% of at risk pregnant women in target communities eligible for Healthy Start case management (CM) are enrolled in HS CM.	# of women meeting risk criteria that enroll in CM. Data: - Date of CM enrollment - Date of CM activities - Services needed - Services provided	Client record
MCHB: PM # 35 - % of communities with comprehensive systems of women's health.		
3. __% of women enrolled in Healthy Start CM are linked to Medicaid (MA) and a medical home within 60 days of enrollment.	# of women enrolled in CM and linked to MA. Data: - Date of referral - Date of enrollment - Name of provider - # of medical home visits	Client Record
MCHB: PM # 20 - % of women who have an ongoing source of primary/preventive care MCHB: # 35 - % of communities with comprehensive systems of women's health.		
4. Infants and children up to 24 months of women enrolled in Healthy Start have a medical home.	# of infants and children enrolled in medical home. Data: - Date of enrollment - Name of medical home - Dates of visits - EPSDT compliance	Client Record

MCHB: PM # 17 - % of children with a medical home.		
5. Healthy Start staff develop culturally appropriate skills in assessing smoking behaviors, substance abuse/use, HIV/STD risk behavior, eating disorders, family support, and housing adequacy.	Completion of training, pre-and posttest with acceptable level of posttest results. Regular continuing education and posttest updates.	Staff Education Log
MCHB: PM # 10 – Degree to which programs have incorporated culturally competence elements into….and training.		
6.__% of women enrolled in Healthy Start CM receive a basic health education package focused on topics important to prenatal, child, and family health.	# of women enrolled in CM who receive package. Data: - Topic and information provided - Dates provided - Client feedback	Client Record
MCHB: PM # 35 - % of communities with comprehensive systems of women's health.		
7. __% of women enrolled in Healthy Start CM are screened and assessed for at risk behaviors.	# of women enrolled in CM screened and assessed for at risk behavior. Data: - Date of screening/assessment by topic	Client record
MCHB: PM # 22 – Facilitate provider screening for risk factors		
8. __% of women enrolled in Healthy Start are screened, risk assessed and referred as appropriate, for depression.	# of women enrolled in CM screened/assessed for depression. Data: - Date of screening/assessment - Date and place of referral - Date referral completed	Client record
MCHB: PM # 22 – Facilitate provider screening for risk factors		

9. All Healthy Start staff are knowledgeable about smoking cessation education.	Completion of training and testing. Data: - Dates of training - Pre-and posttest results	Staff education log
MCHB: PM # 10 – Degree to which programs have incorporated culturally competence elements into….and training.		
10. __% of women enrolled in Healthy Start CM and identified through screening and assessment as at risk for unhealthy behaviors are ready for change, are successfully referred for intervention.	# of women identified as ready; and # of referrals made and # of referrals completed. Data: - Id of unhealthy behavior and for each: date of referral, date referral completed.	Client record
MCHB: PM # 21 – Number of women needing a referral who complete referral.		
11. __% of women enrolled in Healthy Start CM maintain a regular schedule of inter-conception care.	# of women enrolled in CM maintaining ACOG schedule of visits. Data: - # of women - Dates of visits	Client record
MCHB: PM # 20 - % of women who have an ongoing source of primary/preventive care MCHB: PM # 35 - % of communities with comprehensive systems of women's health.		
12. An outreach and casefinding network is established in Healthy Start communities.	# of agencies in network; protocol for referrals used; description and # of casefinding activities by agency; # of referrals by agency Data: - Referral source by woman - reason for referral by woman	Outreach contact form Client record
MCHB: PM # 35 - % of communities with comprehensive systems of women's health.		
13. A provider referral and follow-up system is established in Healthy Start communities.	Data: - # and type of providers in HS Network - # of referrals made by HS to each provider	Referral forms

	- # of referrals by reason - # of referrals completed by provider - # of f/up activities by HS staff	Client record
MCHB: PM # 21 – Number of women needing a referral who complete referral. PM # 35 - % of communities with comprehensive systems of women's health.		
14. **Two community-wide health education events are conducted each year.**	Description of events: objectives, participants, evidence of outcomes achieved.	Flyers Newspaper accounts
MCHB: PM # 10 – Degree to which programs have incorporated culturally competence elements into….education and training.		
15. A web-based Healthy Start tracking system is in place to assure ongoing care.	Description of system and evidence of what system does.	Tracking, data reports
MCHB: PM # 35 - % of communities with comprehensive systems of women's health.		
16. A FIMIR program is established, implemented, and used to formulate recommendations for community interventions.	Data: - # and type of participants - # of times group met - # of cases reviewed - Id of issues identified and outcomes achieved	FIMR meeting minutes
MCHB: PM # 14 – Degree to which morbidity/mortality review processes are used.		
17. **Four cross training events with Healthy Start staff and providers are conducted each year.**	Description of event: purpose, objectives, participants, evidence of outcomes achieved.	Participant evaluations
MCHB: PM # 10 – Degree to which programs have incorporated culturally		

competence elements into….education and training		
18. A mechanism for local reimbursement to Healthy Start for services provided is established and training conducted to operationalize this mechanism.	Description of mechanism and evidence that it is in place. Dates of training, outcomes, and participants.	MOA with participating agencies. Training agenda and participant list.
MCHB: PM # 5: % of projects that are sustained in the community after the federal grant period ends.		
19. Maintain Consortium organizational infrastructure.	Description of committee structure and roles and evidence of a strategic plan.	Meeting minutes. Workplans
MCHB: PM # 5: % of projects that are sustained in the community after the federal grant period ends. PM # 35 - % of communities with comprehensive systems of women's health.		
20. Consumer input is assured through the Neighborhood Committee structure.	Description of linkage between Consortium and Neighborhood Committees and utilization of consumer input.	Minutes of both groups
MCHB: PM # 7: Degree to which programs ensures family participation in program and policy activities.		

The following table displays the overall program information (in accordance with Healthy Start Program Guidance) to be collected and analyzed by the Project.

Overall Program Information		
1. Number and description of women enrolled in the program (referred to Healthy Start and enrolled in CM)	Data needed: - age - education level - residence zipcode - income	Client intake forms Client record

	- race/ethnicity - pregnancy history: - live births - preterm births - low wgt births - insurance status	
2. Pregnancy outcomes of women enrolled in CM.	Data needed: - birth weight: -term -preterm -1501 – 2500 gms -under 1500 gms - gestational age	Birth Certificate Link to client record

VII. Fetal and Infant Mortality Review (FIMR)

As mentioned earlier, the St. Louis Healthy Start project included a FIMR program as the basis for the Local Health System Action Plan. The FIMR program was not in place prior to the initiation of the Healthy Start project. The FIMR program became operational in November 2003. Delays in the implementation and other challenges were described in section 2. The St. Louis FIMR program is focused on fetal and infant deaths only. However the program coordinates with the Missouri Child Fatality Review program and the Missouri Pregnancy Associated Mortality Review program.

The St. Louis FIMR is based closely on the national model and includes medical abstraction as well as maternal interviews in the home. Two teams are used, one for case review and one for community action. The program is funded partially through Healthy Start and partially through a private local foundation. The Missouri Foundation for Health has awarded the MCFH Coalition a 3-year grant to fund a portion of the FIMR Coordinator as well as an expansion of the program to review more deaths.

Upon completion of a full year of reviews, the Case Review Team submitted five recommendations to the Community Action Team in April 2005. See attached report for details.

Closing Report
Health Start Grant
FIMR Program
Prepared by: Rochelle Dean
FIMR Coordinator

Submitted to:
Kendra Copanas
Maternal Child & Family Health Coaliton

Pat Plumley
March of Dimes

(1) Collaboration with DHSS *(Collaborate with DHSS to maintain legal authority for case referrals and data collection)*

- The collaborative partnership with the Department of Health and Senior Services, resulted in the following:
    - Development of a referral process to ensure access to fetal and infant death certificates
    - Development of standardized training, data collection and evaluation procedures for the FIMR program
    - Sustainability for the legal and ethical authority to conduct FIMR
    - Successfully transferred responsibility for St. Louis FIMR from March of Dimes to the MCFH Coalition. Obtained a revised letter of authorization to abstract.

(2) Abstractions *(Complete abstraction on 21 cases from the three targeted zip codes)*

- 36 abstractions completed

Maternal Interviews

- 10 Maternal interviews completed
- 26 No shows; cold calls; declines; and cancellations of maternal interviews.

Barriers to conducting maternal interviews

- National Fetal Infant Mortality Review Program (NFIMR) office in Washington, DC indicates that generally, 10% of moms are lost to follow-up, and 55% of home interviews are conducted. NFIMR does not maintain a database of FIMR stats from respective FIMR programs.

- In cases where the mom has abused drugs (cocaine or marijuana) during the pregnancy, securing a maternal interview is difficult due to nomadic lifestyle and sporadic living arrangements. Drug use is reflected in 10% of cases.

- In cases where the mom has had a present or prior history with MDSS (Missouri Division of Social Services, Division of Family Services), securing a maternal

interview is difficult, as she often does not trust " the system" (i.e., DFS, courts). History may reflect involvement with the state welfare system, child abuse or foster care divisions and the juvenile courts for abuse, neglect, monthly home monitoring, or removal of children. Due to the mom's fears and distrust, she associates the FIMR program with "the system," even with the explanation that FIMR is a voluntary and confidential program. Former history with MDSS is reflected in 30% of cases, but "fear" of the system may be a factor without prior history.

- Homelessness is also a contributor and barrier to securing maternal interviews. Several factors may contribute to a mom being classified as homeless. Factors are as follows:
    - Multiple addresses listed in hospital record, reflecting mom's living arrangements with relatives or associates.
    - Drug addiction
    - Abusive relationship
    - Lack of financial assets
    - Lack of support systems

- It's not unusual that a percentage of moms decline to participate in the maternal interview for the following reasons:
    - Bereaved over loss and find it unbearable to talk about deceased infant or fetal loss.
    - Agreed to be interviewed, then has a change of heart voiced to FIMR coordinator via phone or in person
    - Mom scheduled interview, but was no show when FIMR coordinator visited home
    - Rescheduled but not available on scheduled date, and no follow-up phone call with FIMR coordinator
    - Simply not interested in participating in FIMR program

- Cold calls are home visits conducted by FIMR coordinator based on following:
    - Moms are unreachable by phone and/or via correspondence.
    - Mom had scheduled visit but was no show upon FIMR coordinator
    - No shows
    - In some instances, not unusual for FIMR coordinator to conduct two cold calls
    - Cold calls are usually 99% unsuccessful

- A full report of barriers and strategies to address the challenges was submitted in April 2005.

(3) Cases presented for review *(Present 21 cases for case review)*

- 19 cases presented for review. May CRT meeting was postponed until June 15 due to the unavailability of physicians. 3 cases will be reviewed at the June meeting and an additional 11 cases are ready for presentation.

Case Review Team (CRT) Activities ***(Coordinate six meetings per year with CRT. Organize and present data/recommendations from CRT to Community Action Team (CAT).***

- Reviewed 19 cases and 11 are pending review.
- Five (5) Recommendations/issues identified by the CRT to date are as follows:
    - **Prenatal** -There is a lack of continuity of care during the prenatal period among the various urgent and primary care providers. Health referrals addressing issues such as smoking and drug use, should be provided to pregnant women during pregnancy.

    - **Postpartum** –Lack of consistent and accurate health care information and education (i.e. Back to Sleep)

    - **Placental Pathology** – Documentation needs to be reflected in medical records to indicate whether pathology is being ordered, and if so what the results were.

    - **Autopsy** – Families should be made aware of the option of having an autopsy performed in addition to the findings if the family consents to an autopsy. Documentation of the offer, request and findings should be reflected in the medical chart.

    - **Education** – Community awareness of resources will provide a sense of assurance that pregnant women and/or moms will utilize the resources (i.e. Smoking Cessation programs).

(4) Community Action Team ***(Coordinate the CAT and conduct 3-4 meetings per year as determined by the St. Louis Maternal Child & Family Health Coalition. Assure the CAT includes wide community representation and provide staff support for the CAT strategic intervention plans.***

- The CAT is a key player in the development and implementation of the action plans.
- CAT is comprised of 72 professionals and community members with the expertise in the area of maternal, child and family health, including administrators, physicians, nurses, social workers, paramedics, and dietitians from state and local health departments, local hospitals inclusive of children's hospitals, health clinics, managed care organizations, universities, and professional associations, and administrators and direct practitioners specializing in the areas of mental health and substance abuse, domestic violence, child welfare, family planning, child care, transportation, housing, employment training, father support, correctional services, faith community representatives, and members of other health, minority rights, and child welfare coalitions. Members were selected by the Infant Mortality Workgroup to assure wide representation.
- Meetings were held in September 2004, January 2005 and April 2005.

(5) Develop a local health systems action plan document

The St. Louis Fetal Infant Mortality Review program (FIMR) is the process the Maternal, Child & Family Health Coalition uses to identify the focus of the LHSAP. When a fetal or infant death occurs, the FIMR staff abstract data from vital records and medical records and collect information from other sources. Consent is obtained when required. The staff also conduct a home interview with the mother and/or other family members, with their consent, to record and better understand their experiences of services available to them. After records are collected, case information is de-identified, summarized, and presented to a Case Review Team.

The Case Review Team (CRT) reviews the individual cases, identifies health system and community factors that may have contributed to the death, and makes recommendations for community change. The Community Action Team (CAT) translates recommendations into action and participates in implementing interventions designed to address the identified problems. The development of the St. Louis FIMR program is a result of multiple collaborative partnerships from committed diverse organizations and individuals. The St Louis FIMR program was spearheaded by the Infant Mortality Workgroup (IMWG), a committee of the Maternal Child and Family Health Coalition (MCFHC). The IMWG recruited and secured the support of key neonatal and maternal fetal medicine providers, which ignited the interest and commitment of hospitals and additional provider agencies. IMWG members include representatives from local organizations who are especially committed to reducing fetal and infant mortality in St. Louis and are knowledgeable regarding infant health and the causes of infant death.

The Infant Mortality Workgroup (IMWG), the Case Review Team (CRT) and the Community Action Team (CAT) are comprised of professionals and community members with expertise in the area of maternal, child and family health, including administrators, physicians, nurses, social workers, paramedics, and dietitians from state and local health departments, local, health clinics, managed care organizations, universities, and professional associations, and administrators and direct practitioners specializing in the areas of mental health and substance abuse, domestic violence, child welfare, family planning, child care, transportation, housing, employment training, father support, correctional services, faith community representatives, and members of other health, minority rights, and child welfare coalitions.

The five recommendations of the CRT form the foundation of the Local Health System Action Plan for 2005 – 2006. The CAT is currently examining each in more detail. They will form subcommittees to develop action plans for each recommendation by the end of 2005. In addition to the five recommendations from the CRT, the CAT identified access issues through a community needs assessment. A subcommittee was formed and is examining transportation and cultural competence issues related to access. The issues will be further refined and an action plan developed by the fall of 2005.