

HEALTHY START IMPACT REPORT

I. Overview of Racial and Ethnic Disparity Focused on by Project

Based on the community needs assessment in the application, the project focused on high-risk neighborhoods of African-American and Hispanic families, as well as two neighborhoods where very poor white women demonstrated high infant mortality rates and low birthweights. In all efforts to serve families who were found through comprehensive outreach efforts within the project area, any family eligible for services regardless of race or ethnicity was served. However, the intensive outreach and case management was prioritized by neighborhoods identified as high risk for African-American, Hispanic and White infant mortality as evidenced by vital statistics data. The singular risk for all these groups was extreme inner city poverty with all its attendant issues. A summary of the factors confirming the selection of the target population is described below.

A review of infant mortality rates for all race/ethnic groups over a three-year average from 1994 to 1996 showed Fresno County ranked 52 out of 58 California counties. The infant mortality rate for Fresno County was 8.6 per 1,000 population, compared to the state's 6.4. Fresno County, like the state and the nation, has a significantly higher infant mortality rate for African-Americans compared to all other race/ethnic groups.

The Babies First project area (29 census tracts in the Fresno-Clovis metropolitan area) had an overall infant mortality rate of 12.4 per 1,000 population during 1996-1998. Review of race/ethnicity in the proposed project area reflected once again the large disparities between certain race/ethnic groups. African-American mothers had an extremely high infant mortality rate of 19.2 compared to White mothers of 11.8, and Hispanic mothers of 11.0 per 1,000 population. Disparities by census tract are reflected in the project area map found in Appendix B.

Low birthweight is the leading cause of death during the neonatal period. It impacts an infant's rate of survival and their future development. Inadequate prenatal care is a contributing factor to low birth weight. Adequate prenatal care consists not only of entry during the first trimester, but also the quality of care that continues throughout the pregnancy. Smoking, alcohol, illicit drug use, and poor nutrition also contribute to low birthweight. In the Babies First project area, low birthweight in African-American babies was 13.9%; in Hispanics, 6.9%; and in Whites, 6.9%.

Women and children are more prone to suffer from hunger, inadequate housing, and insufficient medical care, and are more likely to be poor and receive public assistance. They are among the most vulnerable populations in our society today. The likelihood of poverty increases if one is of an ethnic minority. In the project area, Medi-Cal was the payor source for 73% of deliveries, and nearly one-half (47%) of children under 18 lived below the poverty level (1990 Census). The effects of poverty are well documented. Poverty impacts the overall health of families and limits their access to the health care system. The importance of prenatal care can not be overstated; unfortunately, many

women who are poor do not access health care services. Gaps of health status among various racial/ethnic groups are alarming. African-American women were less likely to receive adequate prenatal care compared to other racial/ethnic groups. Another population that is less likely to receive adequate health care services is the teen population. Fresno County has one of the highest birth rates for teen mothers in California and the nation. In 2001, the birth rate for teens, ages 15-19, was 68.7 per 1,000 in Fresno County, compared to 45.1 per 1,000 for the state. It has been shown that teen mothers are less likely to seek prenatal care; therefore, they are at risk for poor birth outcomes.

Ethnic minorities are not the only population affected by high infant mortality rates. A review of infant deaths in the Babies First project area showed the infant mortality rate for White women was 11.8 between 1996-1998, compared to 7.1 for White women countywide. This may be attributed to the high poverty rate among White women in the project area. White women in general fair better socially and economically than other racial/ethnic groups in the project area. However, when comparing White women in the project area to White women in all of Fresno County disparities did exist. Review of Medi-Cal deliveries revealed that more White women in the project area were below 200% of the federal poverty level than in Fresno County overall. White women in the project area were more likely to have less than a high school education and were less likely to have sought education beyond their high school diploma than White women in Fresno County overall. Review of prenatal care showed fewer White women in the project area initiated prenatal care in the first trimester compared to White women countywide. Additionally, White women in the proposed project area were less likely to receive the recommended number of prenatal care visits indicating inadequate continuity of care compared to White women in all of Fresno County.

II. Project Implementation

The Healthy Start project was seen as an augmentation and enhancement of the existing infrastructure established by Maternal, Child and Adolescent Health (MCAH) working under the guidelines of the state MCAH Title V Plan. Each of the intervention models was a strategy already implemented by the local MCAH program to address high-risk populations of pregnant women and their infants. Healthy Start formalized, strengthened, and focused efforts in an area identified as having the county's highest infant mortality rate. Healthy Start enabled resources to be targeted to this area in a comprehensive, community-based, integrated system designed to address risk factors related to poor birth outcomes.

Outreach and Client Recruitment

- A. Fresno County Automated Vital Statistics System (AVSS) data indicated that those engaged in promoting and providing access to prenatal care in Fresno County had successfully decreased the percentage of those getting into care after the first trimester from 27 percent in 1989 to 20 percent in 1994. However, planners realized that those women still most in need of prenatal care - the "hard-to-reach", victims of domestic violence, substance abusers, teens, or those whose cultural customs isolate them from the health care system - are best reached

through intensive outreach conducted by those who are familiar with the neighborhoods and/or populations targeted for outreach. Thus, outreach and client recruitment focused on intensive informing and case finding throughout the project area to assist women who do not access prenatal care during the first trimester and receive fewer than 10 prenatal visits.

The Department of Community Health collaborated with the Fresno County Economic Opportunities Commission (EOC), which has a network of health, education, employment and social services, as well as experience working with minorities in the project area, to develop a street/neighborhood strategy for the outreach and client recruitment model in the first Healthy Start grant (1997-2001). Because of EOC's successful history working with culturally diverse and underserved communities and their ability to conduct targeted recruitment, the employment of outreach workers who represented the communities and neighborhoods to be served was possible.

- B. The contract with EOC established an Outreach Unit with eight Community Health Outreach Workers (CHOWs), a Program Coordinator, and an Administrative Assistant. Four of the CHOWs were funded by Healthy Start and four with non-Healthy Start MCAH funding. These staff worked in collaboration with the MCAH Outreach Unit staff to case find and screen pregnant women in the Healthy Start target areas. Those pregnant women who were determined to be at low to moderate risk for unhealthy birth outcomes were followed by non-Healthy Start-funded Care Coordinators, and those determined to be at high risk were case managed by non-Healthy Start-funded and Healthy Start-funded Public Health Nurses (PHNs).

The eight CHOWs reflected the racial and cultural diversity of the Healthy Start area. Three CHOWs were African American; three CHOWs were Hispanic (bilingual Spanish/English) and two CHOWs were Southeast Asian (trilingual Lao/Hmong/Thai). One of the eight CHOWs was male. All of the CHOWs resided and/or have worked in the targeted Healthy Start neighborhoods. In BY 2002-03, the number of CHOWs was reduced to six, (leaving only one African American) due to a reduction in available funding. Through all four years, however, the CHOWs represented the racial/ethnic composition of the project area.

Babies First developed protocols and a screening tool for the CHOWs during the initial Healthy Start grant. MCAH Healthy Start staff and EOC Healthy Start staff met regularly to monitor the development and progress of the outreach model, and EOC provided monthly reports on outreach activities.

The typical flow of the client recruitment process began with the EOC Community Health Outreach Worker (CHOW). Their street outreach strategies included door-to-door canvassing, street or local canvassing (e.g., laundromats, corner markets, check-cashing locations, nail shops, churches, etc.), and participating in local neighborhood-specific activities, such as church or school events. CHOWs identified and conducted a voluntary screen of pregnant women and women with infants and preschool-aged children. Upon completion of the screening process, the "potential clients" received promotional items such as informational materials and/or incentive items and were linked with essential prenatal and well-child health services at point of contact. When immediate needs (e.g., no prenatal care,

pregnancy-related problems, child health needs, immunizations, no Medi-Cal) were determined, the CHOWs assisted the clients in obtaining appointments and assisted with transportation and translation. The “potential clients” were informed that a Healthy Start staff person would contact them about the home visitation program. The completed screens were sent to the Medical Risk Nurse of the MCAH Outreach Unit who reviewed the information, determined initial risk status, and referred the client to a Healthy Start or other non-Healthy Start-funded nurse case management unit or to a care coordinator. An Access-based Management Information System was developed to collect outreach and disposition data. The nurse or care coordinator providing follow-up continued to document services rendered in the client’s record.

The CHOWs provided low-risk tracking, defined as linking and follow-up for perinatal services of pregnant women (18 years and older) who have no reported high-risk conditions. In August 2004, two bilingual CHOWS (one Spanish and one Hmong) were collocated with MCAH Perinatal Outreach and Education (POE) staff to contact, monitor, and provide information and referral to Babies First waiting list clients and to newly arriving refugees from Southeast Asia. It was deemed necessary to arrange this activity because the Care Coordination Unit had five vacancies and three maternity leaves for several months.

Additionally, the CHOWs became active with local neighborhood associations and community-based organizations based in the project area in order to assist with the identification and utilization of local assets which are or can be used in the service of local families. The CHOWs participated in all neighborhood events sponsored by Babies First and its neighborhood partners. They also assisted with displays at health fairs and conferences.

Care coordination has been included in the MCAH Perinatal Outreach Unit. Non-Healthy Start-funded Care Coordinators (Health Education Assistants) follow pregnant women who are determined to be moderate risk and high-risk women (on waiting list for a PHN) for poor birth outcomes. Pregnant women determined to be at high risk for poor birth outcomes are case managed by Healthy Start-funded and non Healthy Start-funded PHNs.

- C. Prior to the original Healthy Start grant, the MCAH Perinatal Outreach Unit provided outreach and care coordination activities. Thus, a Nurse Practitioner (NP), a Health Education Specialist (HES) and three Care Coordinators (paraprofessionals) were in place for the Outreach model. The NP and the HES were both funded at .5 FTE by Healthy Start and at .5 FTE by non-Healthy Start funds. The three Care Coordinators were funded in full by non-Healthy Start funds. At the beginning of this project period there were nine Care Coordinators and four HES’s. All except the .5 FTE HES were hired with MCAH state funds.

Case Management

- A. MCAH’s Black Infant Health (BIH) case management program was implemented in 1991-92. It contributed to a decrease in the infant mortality rates from 35.4 in the 1991 -1993 period to 26.1 in 1995 in the project area (AVSS). In 1997, Fresno County implemented the Nurse-Family Partnership program (Dr. David Olds’ model) for first-time mothers. This

nurse case management model is well-documented and nationally known. The value of comprehensive, long-term care that high-risk pregnant women receive through one-on-one case management provided by public health nurses became evident through these two programs. Because of its effectiveness in reducing no or insufficient prenatal care, preterm delivery, and ultimately, infant mortality, this approach was selected for provision of the case management service model that was selected at the time of the initial Healthy Start grant.

- B. PHNs were utilized for high-risk (Comprehensive Case Management) or first-time mothers (Nurse-Family Partnership). For moderate risk clients, Health Education Assistants provided care coordination (see Outreach above). Case management focused on very high-risk pregnant women and/or their infants with multiple risk factors (medical, environmental, and psychosocial) who need intensive services and support provided by skilled medical professionals to access and maintain care/services to prevent morbidity and mortality. It focused on comprehensive case management using prenatal and infant public health nurse (nurse) home visiting. This model utilized the nurse as an intervention to decrease negative effects of stress and to improve birth outcomes through the change process. There are three phases in the change process: bonding, working, and changing. If these three phases are negotiated successfully, clients learn critical thinking and evaluative skills, good decision-making skills, and become effective in negotiating the health care environment.

Women with high-risk pregnancies benefit from individualized comprehensive assessment of both medical and psychosocial problems by a licensed skilled medical professional. The results of the assessment are then used by the nurse in developing a plan of care, in conjunction with the client, to address the problems. The protocol for serving high-risk pregnant women does not permit the non-licensed person to perform these functions. The following barriers to care can require nursing intervention:

- Child care
- Finances
- Improper care related to non-compliance of medical care and medical regimen.
- Educational level
- Homelessness or inadequate housing
- Domestic Violence/Family Violence
- Depression
- Mother's developmental delay or retardation

Case management received referrals from public and private health care providers, WIC, self-referrals, other County departments and schools. This was the beginning of a positive collaboration within the community. Once the referrals were received and assigned, individualization began. Each client was served according to need. Collaboration with prenatal care providers that speak the language and understand the cultural needs were utilized, along with WIC, food referrals, specialty referrals for high-risk medical, psychosocial factors, housing, drug rehab treatment programs, support groups and referrals for transportation and interpreters. All clients receiving case management services received individualized one-on-one health education in areas such as tobacco and HIV/AIDS

prevention. Once the client's individual needs were met, ongoing monitoring, support and education were given throughout the pregnancy, delivery and up to the infant's second birthday.

Health Aides and CHOWs provided transportation and translation services for the nurse case managers, as well as assistance with monitoring infants' weight and basic health education, including tobacco cessation and basic child safety. Although Health Aides continued to provide these services throughout the grant period, they were not funded by federal funds.

- C. Fresno County had developed, implemented, and refined over seven years a "best practice" comprehensive case management model in response to California's Title V Black Infant Health program, a statewide initiative targeting African-American infant mortality. The model, based on the research of Dr. David Olds and others, used public health nurse home visiting for very high-risk pregnant and parenting mothers. A care coordination component was developed in 1996. Protocols had already been developed for Case Management/Care Coordination.

Three Public Health Nurses (PHN) and .25 FTE Supervising Public Health Nurse were budgeted in Case Management. One of the PHNs was bilingual (Spanish speaking). Additionally, 20-24 nurses supported through non-Healthy Start MCAH funds staffed nurse case management and nurse home visiting units which served pregnant women from the Healthy Start area.

Health Education and Training

- A. Health education and training have been an integral function of the MCAH Division for over 12 years. They occur at all levels of the perinatal system, community at large, project area, clients and their families, stakeholders, medical and other service providers, and project area outreach CHOWs, case managers and care coordinators, and local policy makers. Health education was included in many of the project's objectives. During the first Healthy Start grant (1997-2001), breastfeeding education was implemented and education related to perinatal substance abuse was intensified; in the second grant (2001-05), public awareness about ATOD's effect on mothers and infants was included as one of the project's objectives, and education about perinatal depression began.
- B. All staff working with clients provided them with health education regarding the importance of obtaining and keeping prenatal care appointments to ensure a healthy outcome for themselves and their infant; provided ongoing education regarding the importance of obtaining immunizations for infants and other children; and educated mothers on the importance of well-child examinations and encouraged women who have infants with special health care needs.

In case management one-on-one health education and referral was provided in areas identified in the client's comprehensive health assessment and was an ongoing process with nurse case managers when working with clients. In the identification of behavioral risk in case management, the relationship building between the nurse case manager and the pregnant

and parenting client was important. Often the client would not share high-risk behaviors due to shame, guilt and fear. Once the nurse-client relationship was established with a safe and caring environment for the client, the client began to disclose. This was when the nurse case manager had to listen, support and provide teachable moments. Substance abuse/tobacco education, STD (includes syphilis) and HIV/AIDS, and interconceptional care were three major areas addressed in case management.

Tobacco Education and Training

The nurse case manager utilized tools in screening for primary and secondary tobacco use. Individualized one-on-one health education was provided on the dangers of tobacco use during pregnancy and the hazards of secondhand smoke exposure for the pregnant women and their families. The nurse continued monitoring, reassessing and supporting the client, using the Home Visit form, in methods of reducing tobacco use, with the primary goal of cessation; and, explored strategies to decrease second hand smoke exposure. The Home Visit form is a written collaborative agreement by which the nurse assisted the client in identifying the one or two small achievable activities in achieving tobacco cessation. This strategy was a way in which the client identified what she was willing to take responsibility for, and the nurse assisted in keeping the activities simple based on the individualized needs of the client. Once established, the client received a copy for her reference. Feedback was provided by both (PHN and client) during the next home visit.

All Case Management and Care Coordination clients were screened for tobacco use and secondhand smoke exposure through the 4Ps Plus screening tool. Those who screened positive for tobacco received education regarding the dangers of smoking and of secondhand smoke exposure particularly during pregnancy. Overall, 1,352 clients in case management and care coordination were screened for tobacco use; 484 showed evidence of smoking and were given risk reduction counseling. Of these, 283 women were given “A Pregnant Woman’s Guide to Quit Smoking,” published by Richard Windsor, Ph.D., of George Washington University. It seemed to be the only evidence-based self-help guide for pregnant smokers available. Along with the booklet, the Public Health Nurse instructed the client about the program outlined in the guide. She was given encouragement and praise for her success and encouragement to attempt quitting again if she failed. The PHN and client also explored strategies to decrease secondhand smoke exposure. The activities were reflected with each home visit through the Home Visit form. In CY 02, the Supervising Public Health Nurses in both Case Management programs collaboratively wrote protocols for Smoking-Cessation Education for clients.

Sexually Transmitted Disease Education

Again, in both MCAH case management programs, the nurse case managers assessed by using comprehensive health assessment tools and provided ongoing monitoring and reassessment of high-risk behaviors. Based on this assessment and the client’s individualized need, health education was provided and included prevention and early intervention services. In case management, health education as to the prevention of STD (including syphilis) and HIV transmission was an ongoing process and was provided with one-on-one education which included the modes of transmission, the signs and symptoms of the diseases, risks to

self and the fetus, methods of protection, and provided a supportive non-judgmental environment when discussing these issues.

When providing this education, the nurse case manager considered the client's level of education, development, culture, and language. Although this may be a difficult issue to discuss for most clients, this may be more difficult to discuss with Hispanic and Southeast Asian women who feel discussing such an issue is too embarrassing. If the client identified a need for medical follow up, the nurse case manager encouraged medical follow-up testing, facilitated a referral, and supported the client emotionally as well as assured access to care was provided and maintained. The majority of the time, the nurse case manager collaborated closely with the client and her medical provider. If risks were determined for the infant, the nurse case manager collaborated with the mother to assure appropriate medical follow up was provided. The nurses collaborated with "The Living Room," a community-based agency offering day care for persons with HIV/AIDS, when a client is positive for HIV/AIDS.

Each client in case management received basic education regarding the prevention of HIV/STD infection. Public Health Nurses encouraged clients at risk to use condoms in addition to other family planning methods. Public Health Nurses also distributed condoms and vaginal film to clients who were unable to purchase supplies. The PHN instructed the client in the correct use of condoms and vaginal film. In the event a client was HIV positive, had AIDS, syphilis or any other sexually transmitted disease, the PHN instructed the client in the areas of medication, prevention of exposure to sexually transmitted disease, and "safer sex" in general.

Nurses also screened and assessed for substance abuse utilizing the 4Ps Plus, referring for treatment when the client was ready to accept treatment. Two PHNs were assigned to two gender-specific residential drug treatment programs to case manage pregnant and parenting women and provide health education at those sites. They provided education and support for breastfeeding and screened for and educated clients about domestic violence and perinatal depression, offering referrals for services if the client consented.

In case management and care coordination, one-on-one health education and referral was provided in areas identified in the client's comprehensive health assessment and was an ongoing process for nurse case managers when working with clients, especially for the requested topics. Written and audio-visual materials were also incorporated into the teaching. In the identification of behavioral risk in case management, the relationship building between the nurse case manager and the pregnant and parenting client was important. Often the client would not share high-risk behaviors due to shame, guilt and fear. From time to time, staff provided group activities in the form of "Mommy and Me" and "Breastfeeding Mommies Support Group." These were conducted by Public Health Nurses, and clients were transported to the sessions if necessary. No class has been held since February 2005, due to a lack of participation by clients. Child Car Seat Safety was a "referred activity." The provider, "BabySafe," operated under a contract with the Department. Conducted in English and Spanish by a state certified provider, clients were provided transportation, and if they completed the course were given a car seat which met federal and state safety standards.

Examples of education topics for the women contacted through street outreach were: Danger Signs of Pregnancy, Preterm Labor, importance of early and continuous prenatal care, how to apply for Medi-Cal or Healthy Families, Comprehensive Perinatal Services Program (CPSP) provider network (described in Section II, “Collaboration and Coordination with State Title V and Other Agencies”), importance of well-child care and immunizations for all babies and children under 5 years of age, and resources in the community.

Examples of education topics for the women enrolled in Care Coordination: Danger Signs of Pregnancy, Preterm Labor, What to Expect at the Provider Office (visit schedule, CPSP services, routine laboratory testing), effect of smoking and secondhand smoke exposure on unborn and newborn, SIDS Back to Sleep, family planning, Shaken Baby Syndrome, parenting, normal growth and development, well-child care and immunizations.

Ongoing training of CHOWs has occurred throughout the four years of the grant. Attached in Appendix D is an outline of training that occurred in May/June 2001. In addition to MCAH staff (public health nurses, health educator, and care coordinators), ongoing CHOW training involved representatives from other community programs, including WIC, drug and alcohol treatment, child health, immunizations, managed care outreach, communicable diseases, and community-based organizations that serve specific target populations, such as the Hmong American Women's Association.

New employee orientation, Prenatal Care Outreach training, and a summary of trainings and in-services for Health Education Assistants are included in Appendix D. Both non-Healthy Start-funded MCAH care coordinators and EOC outreach workers have been trained to assist families with applications for the Healthy Families Program (SCHIP).

The initial training for all PHNs consisted of orientation through appointments with other county agencies. These agencies included, but were not limited to: California Children’s Services, Chest Clinic, Women, Infants and Children (WIC), Immunizations, Sexually Transmitted Diseases Clinic, Diabetic Care Center, Environmental Health, Child Protective Services, and Public Health Nursing. The Orientation Plan is found in Appendix D.

During orientation, the Healthy Start nurses accompanied eight different public health nurse case managers. The nurses were oriented on proper home visiting techniques, how to handle and differentiate between crisis management and stress management, and also proper resource and referral sources.

The nurses also had classroom training. This classroom training consisted of: documentation of visits; normal and abnormal antepartum, postpartum, well-woman and infant care; working with difficult or delayed clients; policies and procedures; training in the NCAST Feeding Scale and Teaching Scale; and individual training in problem areas. The nurses also attended a half-day training on the Healthy Families Program and have assisted clients with the application process.

Each nurse was assigned a staff advisor and an open door policy was established between the nurses and charge nurse/supervisor. The overall training was approximately three months or longer, according to individual needs. This training was repeated with each new Healthy Start PHN who was hired when a vacancy occurred. Healthy Start-funded 3.0 FTE PHNs during the grant period. Throughout the four years, 20-24 non-Healthy Start funded PHNs also case managed clients in the Healthy Start project area. Typically, a PHN carried a caseload of 25-30 clients at any one time.

Due to the high-risk nature of the consumers of nursing case management, frequent debriefing occurs between staff and management for problem solving-issues. Ongoing trainings for PHNs included, but were not limited to: Foundations of Public Health, interviewing skills, child abuse prevention, perinatal substance abuse, dual diagnosis, family/domestic violence, infant nutrition, childhood lead poisoning, smoking cessation, the SART process, Principles of Epidemiology, SIDS, lead poisoning, data collection, MCAH policies and procedures for case management, HIPAA training, leadership training, legal issues, computer skills, conflict resolution, and client boundary issues. Nurses also received training on resources available for interconceptional services; e.g., "Family Pact" services, high-risk infant programs, genetic services, lead screening assessment and treatment opportunities, medical treatment and therapy services available to disabled infants and children from the state California Children's Services program. In 2003, two special trainings were offered to PHNs: Certified Lactation Education Counselor training; and child abuse training by David Pelzer, author of *A Child Called It*. All nurses attended Babies First consortium meetings and cultural competency training. Beginning in 2002, PHNs received training about perinatal depression and received ongoing consultation and support from the MCAH Mental Health Team. In 2004, PHNs received training in Pre-Treatment intervention from Dr. Chasnoff and Richard McGourty, Ph.D. Nurses are also provided the opportunity to attend classes on subjects they deem appropriate.

Dr. Jacqueline Jackson, a private practice psychologist under contract with Babies First, provided ongoing cultural competency training to all MCAH (Babies First) staff and EOC Outreach staff. Her topics included working with culturally diverse clients and developing communication and interview skills. During the project period, she provided cultural competency training to 75 individuals, communication and team building training to 86 individuals, communication with clients on sensitive issues to 25 PHNs, strategies for assisting African Americans in accessing services to 40 PHNs and Mental Health Clinicians, managing change and transition to training to 42 individuals, and additional training in various topics.

The Consortium's role was to provide community-based education and sponsorship of education opportunities for partners, stakeholders and clinical professionals. Consortium members received education and training at task force meetings, at the annual June event, and at a special seminar on perinatal depression.

Comprehensive Perinatal Services Providers received ongoing education through one-on-one (office-based) meetings, provider trainings, and small provider-based topic specific meetings with consultants regarding substance abuse (ATOD), breastfeeding, and perinatal depression.

CPSP providers were trained in the use of the 4Ps Plus screening tool, and in the last year of the grant, 13 sites received training in a Pre-Treatment module. These and other health care providers have been invited to in-services and the Babies First Consortium Event each June.

The public received health education through the multilingual, multicultural Babies First media campaigns. These campaigns utilized TV and radio PSAs, print, bus signs, mall posters, billboards, and movie theater advertising to educate about the importance of and access to perinatal care, substance abuse, smoking, and breastfeeding. In the last month of the project grant, perinatal depression PSAs were added.

- C. Babies First had the advantage of its integrated service delivery with the MCAH Division and its relationship to the other County human services departments. MCAH had already developed a sophisticated educational component as part of its services to clients, which was outlined in written policy and procedures for outreach, case management, interconceptional and depression screening. Screening tools and protocols outlining the educational component of case management are included in Appendix C. MCAH also had in place a formal training program for staff and had coordinated CPSP provider training since the inception of the CPSP program.

Interconceptional Care

- A. Since the initial contact of the nurse case manager and the client occurs due to the pregnancy, interconceptional care and health education began with the initial contact. The two primary health education/promotion goals are to improve health during the perinatal period, post-delivery, and the well-woman period for the client and to improve health outcomes of the infant. One-on-one health education was individualized and sensitive to the client's social, cultural, religious, ethnic, and economic background and as appropriate to the client's level of knowledge and understanding.
- B. The case manager/care coordinator provided education and referral for interconceptional services. All project area clients were eligible for the State's Family PACT services (described in Part C below). The case manager educated the program participant regarding services and assisted the client in scheduling the appointment or providing transportation if needed.

On each visit, the nurse discussed the client's use of family planning. The client was educated on the advantages of spacing pregnancies to maintain her own health as well as the health of her unborn infant(s) to an optimum level. She was also given one-on-one education regarding methods of birth control, recommended ages for and frequency of Pap Smears, Breast Exams, and mammograms. The client was encouraged to attend her six week postpartum exam, and transportation could be offered to facilitate the client's attendance. The client was encouraged to obtain a primary care provider who could manage all health-related issues. The client received education regarding the need for medical follow-up, encouragement to attend medical appointments, transportation to appointments if needed. These services are written in the Home Visiting Policy and Procedures included in Appendix C.

During the antepartum period, the nurse case manager utilized a Comprehensive Assessment to assess the medical, social, environmental, and financial risk of the pregnant woman. As determined during the antepartum period, the nurse case manager continued the one-on-one individualized health education during the postpartum and well-woman periods. An example of education for the client is nutrition and medication education regarding the importance of increasing folic acid through diet and medication (as prescribed) and was provided during the perinatal and well-woman periods. Research shows that Hispanic women have a higher incidence of Neural Tube Defects (NTDs), making this strategy an important approach when working with the Hispanic perinatal population and providing education during the well-woman period. Other examples included the importance of regular breast self-examinations, STD/HIV prevention, family planning, annual pap smears and clinical breast examinations and mammograms as appropriate, and regular dental check ups. The nurse case manager provided support and encouragement for ongoing health care for the woman and infant (well-child check ups, immunizations, and special medical and developmental service linkages as appropriate) by referring and facilitating linkages to the appropriate services and continuing ongoing health education based on the client's need. Other activities of interconceptional care were also reflected by the nurse case manager's linkages to substance abuse services and the MCAH Mental Health Team for depression in the postpartum and well-woman period based on each client's need. A Collaborative Plan of Care (CPC) was developed by the nurse case manager and the client to determine the client's goals for self and her infant. With each home visit, the Home Visit Form was utilized to meet the smaller steps in achieving the CPC. Health education topics are included in the Postpartum and Well-woman sections of the CCM Protocols (attached in Appendix C).

The nurse case manager also assisted the client in self-efficacy by encouraging the client in completing her education, accessing work skills through training, identifying support services (i.e., child care and transportation) in achieving the client's goals. Resource availability and the knowledge of how to access these resources were important, and the nurse case manager tailored these resources to meet each client's individualized goals.

- C. MCAH developed the BIH Case Management/Care Coordination models (1993 – 2000) in an attempt to improve perinatal outcomes for African-American mothers and their infants. “Well-Woman Care” and “Infant Care,” as they are called in written protocols, are given equal importance with prenatal care. They are integrated into all direct services.

In 1996-97 the California Department of Health Services developed the Family PACT (Planning, Access, Care and Treatment), a comprehensive family planning services program designed to narrow the gap between insured and non-insured women and men in California. The Family PACT program is under joint administration of the Office of Family Planning and Medi-Cal. The program is designed to prevent unintended pregnancies and promote interconceptional health. Under this program, all women and men with incomes at or below 200 % of poverty with no other resource for family planning health care coverage, have access to comprehensive family planning services which include contraception, pregnancy testing, female and male sterilization, limited infertility services, reproductive health counseling and education related to contraception methods. In addition the program includes

screening for sexually transmitted infections and breast and cervical cancer. The goal of the Family PACT program is to expand access to family planning services through the provider community. Any Medi-Cal provider who elects to provide full scope of family planning services consistent with Family PACT standards can enroll and be reimbursed by Medi-Cal.

Since the implementation of the program, 60 providers in Fresno County have been enrolled to provide Family PACT services. Of these, 55 are Comprehensive Perinatal Services Program providers. This enables the CPSP providers to provide Family PACT, for interconceptional care before and after pregnancy regardless of alien status. While pregnant, they qualify for Medi-Cal. Before the implementation of the Family PACT program, there were only five contracted Office of Family Planning sites in Fresno County. With the additional sites in Fresno County, low-income women and men have vastly improved access to family planning services.

Depression Screening and Referral

- A. Babies First's approach to perinatal depression was based on an analysis of several local factors: the incidence of depression in adult women of child-bearing age in Fresno County, as well as the perceived incidence of depression and patterns of service utilization for women enrolled in nurse case management, systemic and client barriers to access of services and types and prevalence of screening for mental health issues by perinatal providers.

The Fresno County Department of Adult Mental Health Services provided diagnosis information for women of child-bearing age (WCBA=18-44) for the cumulative calendar years 1996 through 1999 and also for the year 2000. In 1996-1999 a total of 8,456 unduplicated women received assessment for an average of 176 per month. Of those, 3,900 women (46%) received an intake diagnosis in the depression spectrum. For calendar year 2000, a total of 3,213 unduplicated women were assessed for an average of 267 per month. Of these 1,883 women (57%) were diagnosed with some form of depressive disorder. This represented an overall increase of nearly 52% in women of child-bearing age presenting for assessment and an 11% increase in the diagnosis of depression.

Other diagnoses remained relatively stable over the period reviewed: 11% overall presented with anxiety disorders, approximately 7% with substance use disorders and about 7% with psychotic disorders.

Despite this data which indicated substantial utilization of assessment services at Adult Mental Health by women of childbearing age, there were no figures available regarding the number of women who were pregnant or postpartum. In fact, this was not formally tracked or routinely inquired of by the prevailing service system. An informal survey of mental health clinicians at Adult Mental Health in January 2001, showed only one woman known to be pregnant on existing caseloads.

Substance abuse admissions were also analyzed for the periods 1996 through 1999 and year 2000. For 1996-1999 an average of 800 women per year entered county-funded substance abuse services. Of those, 185 (6%) were pregnant. In 2000, 1,175 women entered treatment of which 124 (11%) were pregnant at time of admission. This represented a 45% increase in admissions for substance abuse. It could not be determined if the increase was the result of better data collection, greater program availability, or in fact represented a significant

increase in numbers of pregnant women seeking help for substance abuse. Whatever the case, it is well known that many women who abuse substances have co-occurring mental health disorders, particularly depression. While depression was not noted in admission data, anecdotal conversation with local substance abuse programs suggested a high incidence of perceived depression among their clientele.

Similar information was requested of public health nurses providing case management with perinatal clients. An informal poll regarding their caseloads at the time (February 2001) demonstrated a high incidence of perceived depression. Of 377 women being served by Comprehensive Case Management and Nurse-Family Partnership programs 106 (28%) were perceived by their public health nurses as suffering from depression in some form. Most of these clients also had significant psychosocial stressors such as poverty, unemployment, domestic violence, traumatic abuse histories, lack of positive social support, chaotic and unstable living situations, low educational level and the like; factors all known to exacerbate the experience of depression.

In spite of a rather high incidence of perceived depression in that population (106 of 377), only three women (less than 3%) were reportedly receiving mental health services at the time. Nurses cited numerous barriers contributing to the lack of service utilization; these barriers included issues related to childcare and transportation, concrete service needs that were excessive and primal in focus and an overburdened and unresponsive mental health system with multiple layers of assessment and long waiting periods for treatment which served to discourage both nurses and their clients alike. All of these barriers combined with the immobilizing and debilitating character of depression clearly made utilization of traditional mental health services both difficult and unattractive.

A review of screening prevalence and method demonstrated no clear strategy to effectively identify women who might require mental health services during the perinatal period. The comprehensive assessment completed by the Comprehensive Perinatal Services Program (CPSP) includes questions related to economic resources, housing, health practices, nutrition, coping skills and the like. While these questions probably have some predictive value with respect to depression, they are largely non-specific and do not appear to target the most relevant aspects of the depression experience. Additionally, the postnatal assessment done on the first postpartum visit included two or three general questions regarding adjustment of the family to the baby and one question about "baby blues," but it also was too non-specific to accurately identify depression. It was also given at only one time postpartum when research clearly demonstrates that postpartum depression may emerge four to five months and perhaps as late as one year after birth. There was concern as well about the skill and experience of the interviewer; in most cases the assessment questionnaire was administered by medical assistants with rudimentary training in the complexities of psychosocial issues. Because there was no standardization of assessment tools for CPSP providers, there was also concern that there would be some significant variance in areas of focus during perinatal visits.

Similar problems were encountered in review of the assessment tools utilized by public health nurses in the home visitation programs. Again there were a number of questions regarding environmental and psychosocial stressors that may very well infer the presence of

depression, yet without specificity. Additionally, the informal polling of the nurse home visitors revealed a great deal of variance between them with respect to the perception of depression. While the overall perceived incidence of depression was 28%, the range was 7-90% when individual nurse responses were reviewed. This was most likely reflective of individual nurse skill or comfort in identifying and addressing such issues with their clients.

The consequences of maternal depression and mental illness for both women and their children are well documented in the research literature. Recognizing the urgent necessity of improving the health status of mothers and children by diagnosing and treating maternal depression in the perinatal period compelled that a variety of strategies be investigated and implemented. The Babies First strategy was to cover a continuum of approaches from education to effective screening, followed by skilled assessment and referral for treatment, while building on already existing structures in nursing case management and care coordination. While the major strategies were designed with perinatal clients enrolled in nurse case management in the forefront, strategies to educate perinatal providers, bring screening into perinatal provider offices, and increase community awareness of this issue were also included.

- B. Five components for Babies First intervention with regard to perinatal depression were included in the initial plan. These were: 1) Provider Education; 2) Routine Screening; 3) Skilled Assessment; 4) Mental Health Services, and 5) Perinatal Depression Task Force.

1. Provider Education: Providers are defined as the nurse case managers and outreach staff of Babies First, CPSP doctors and staff, local psychiatrists, and LCSW and MFT clinicians in the public mental health system and/or in private practice. Training opportunities were also extended in the last two years of the project period to participants of the Central Valley March of Dimes Conference and for volunteer instructors of the Comenzando Bien prenatal curriculum sponsored by the national March of Dimes organization. Adolescent mothers enrolled in Fresno Unified Teen Parent program also received education about depression. Training for Babies First mental health staff was also included in provider education.

Katherine Wisner, MD, an internationally recognized expert in perinatal depression, was invited to provide community training for perinatal providers in CY 2003 and 2004. Babies First mental health staff provided ongoing education and support to public health nurses and care coordination staff. The program's clinical supervisor provided the March of Dimes and Fresno Unified School District trainings in CY 2004 and 2005.

2. Routine Screening: Screening for perinatal depression was implemented in 2003 for all clients enrolled in nurse home visitation utilizing the Edinburgh Postnatal Depression Scale (EPDS). Protocols were subsequently developed by the supervising public health nurses and clinical supervisor and staff trained in the use of the EPDS. PHNs screen clients at 32-36 weeks antepartum, 4-6 weeks postpartum, 6 months postpartum, 12 months postpartum and any other time a nurse feels it is appropriate. Screening protocols were not implemented in CPSP provider offices as originally hoped for due to staffing issues and general resistance to adding another screening protocol. This resistance was based on concerns that there was not

a reliable system of care to provide the necessary mental health treatment that women identified with depression would need.

The original plan called for the Perinatal Depression Task Force to review available screening instruments, choose the one best suited to the local population and develop screening protocols to be implemented in the nursing programs and CPSP provider offices. Because the task force proved difficult to establish over the project period, the screening strategy was altered as described above to insure that screening was implemented in the nursing programs if not communitywide.

3. Skilled Assessment: Clients of the nurse home visitation programs who screened positive on the EPDS were offered a mental health assessment by one of the clinicians on the mental health team. If a client declined an assessment referral, the public health nurse was encouraged to seek consultation and continue to monitor the client for symptoms of emerging or worsening depression and to once again offer referral for assessment and/or treatment. The goal was to see the client within a week of referral so that services would not be delayed. Unfortunately, this goal was difficult to meet when positions on the mental health team were vacated in mid 2003 and had to remain unfilled due to county budget cutbacks. Assessment by community providers was even more difficult to access in a timely manner. The mental health team was forced to triage positive screens by denying assessment to those clients already receiving some level of service in substance abuse programs or who had access to other services.

4. Mental Health Services: When assessment confirmed the presence of depression or another mental health issue, a client was assigned to a mental health clinician for home-based mental health services provided by the agency's mental health team. These services included both therapy and social work interventions designed to address the multiple impact of depression as well as psychosocial stressors which interfere with overall mental health functioning. A client might also be linked to an outside provider if she wished more conventional services or did not have additional concrete service needs that required a more integrated approach. For clients needing psychiatric medication, linkages were made to the county mental health system and/or primary care providers, while therapy continued to be provided by Babies First team members. The Mental Health Team also provided linkage to other needed services, such as housing and food. Mental Health Team policies and procedures are found in Appendix C.

5. Perinatal Depression Task Force: The Perinatal Depression Task Force was envisioned to include Babies First mental health and nursing staff, perinatal medical providers and pediatricians, representatives of community-based organizations that routinely interact with pregnant and parenting women and mental health providers in both the public and private sector.

The purpose of the Task Force was to develop a community wide strategic plan to establish a continuum of care that would include depression screening, assessment and referral, much as the SART process had been developed with regard to substance abuse for women in the perinatal period. The Task Force was to conduct a community SWOT analysis, review

formal screening tools, produce formal protocols to insure community wide access to mental health support for pregnant and parenting women and then monitor progress in those areas.

- C. One mental health clinician position and a medical social worker position were vacated in CY 2003 and another mental health clinician resigned in CY 2004. All three vacancies remained unfilled due to county budget cutbacks and hiring freezes. This specifically impacted the ability of the mental health team to meet demand for timely assessment and treatment services for those clients enrolled in nurse home visitation. The mental health team was reduced overall to two clinicians and a clinical supervisor, only partially funded through Healthy Start. All carried ongoing caseloads and participated in assessment and linkage of clients screening positive for depression as measured by the EPDS. Efforts to expand screening and assessment into CPSP provider offices were ultimately impacted by this staff shortage. Without the ability to provide timely assessment or a treatment resource, physician offices were reluctant to start routine screening for depression.

Local Health System Action Plan

- A. The MCAH program, under the leadership of the MCAH Director, is responsible for local implementation of California's Maternal and Child Health Title V Plan and updates the local MCAH plan to coincide with the federal Title V guidelines for states. The Local Health System Action Plan began with the local MCAH Plan which was developed from the local needs assessment which is aligned with the State Title V Plan's four goals, fourteen objectives and ten priorities. During the first grant period, the Babies First Consortium's Perinatal Systems Committee (PSC) identified two major gaps in the perinatal system: perinatal substance abuse and very low breastfeeding rates. During this second grant period, the PSC identified a third gap: poor access to appropriate assessment/services for high-risk infants. As part of the grant requirements perinatal depression became another focus of concern. Finally, infant mortality reduction with a focus on African-American families has always been a primary goal for Fresno.
- B. The planning was conducted as a part of the local and State Title V ongoing needs assessment and planning process. Data collection and analysis from staff and contractors was gathered. The Consortium served as the convener and facilitator of task forces to develop plans to tackle priority issues. Task forces were comprised of Title V staff, Babies First staff, consortium members, key stakeholders, providers, and community organizations which were organized to address a specific issue.

Consortium-based task forces were convened around perinatal substance abuse, breastfeeding, and access to care for high-risk infants and their families, and plans were developed to address them. All the activities in these plans have been implemented and the initial perinatal substance abuse and the initial breastfeeding goals have been met. In 2003 the Babies First Children's Planning Group partnered with First 5 Fresno (formerly the Fresno County Children and Families Commission funded by California Proposition 10, tobacco tax funds) in a one-year planning process for a children's model of care to ensure access to early intervention for high-risk children 0-5 years, specifically those born prenatally exposed to ATOD. The written plan was approved and funded by First 5 in July 2004. A

perinatal depression task force was attempted on several occasions, but not successful (see discussion under Perinatal Depression and Consortium Objective III).

- C. During the past eight years, the Healthy Start grant has provided the community with opportunities to engage local policy-makers in addressing issues by implementing the activities required to meet the goals and objectives identified in the State and local plan. Because these activities are consistent with the goals and objectives of Healthy Start, the state and local resources for MCAH core services have been maintained and in some areas increased. The recognition by the federal government of the need to improve infant mortality and morbidity validates the state and local efforts to improve the health of families in the project area.

When Healthy Start provided a three-day training (1998) by Ira J. Chasnoff, M.D., and Linda A. Randolph, M.D., the issue of perinatal substance abuse came to the forefront in Fresno, and the Perinatal Systems Committee decided to tackle the issue. With the assistance of Dr. Chasnoff, community providers and agencies mobilized to develop and implement a Screening, Assessment, Referral and Training (SART) model for pregnant and parenting women during the first grant period. Since then, additional providers have been trained in the use of the 4Ps Plus screening tool for perinatal substance abuse, and a SART database has been developed to measure outcomes.

A local resource was First 5, which provided a three-year grant for a Breastfeeding Education, Training and Support Project (2001-04) and a one-year planning grant to develop a Children's Model of Care (2002-03), after which First 5 funded the first stage of the project, the Assessment Center for Children at Exceptional Parents Unlimited (EPU) (2004-05).

Consortium

- A. The Babies First Consortium was fully implemented during the initial grant period. The Black Infant Health Leadership Coalition, established in 1991-1992 in conjunction with the state's Black Infant Health Program, was the community consortium that became the foundation for the Babies First Consortium. The Consortium grew from 33 members in its first year to over 320 members during the initial grant period. Members represented a partnership of community-based organizations, neighborhood associations, faith-based groups, local businesses, policy makers, health care organizations, government entities and concerned citizens. The Consortium defined its vision as "a motivated, excited, informed, involved and healthy community of proud, united neighborhoods, which provide a safe, nurturing place for healthy families and healthy babies." Its mission was defined as "to provide committed, caring leadership to empower neighborhoods and communities and to build self-esteem through education, collaboration, and partnerships, resulting in access to health services, resources and information to promote healthy families and reduce infant mortality." By-laws were also developed and adopted.
- B. The activities of the Consortium were fully supported by MCAH Babies First staff, who had responsibility for coordinating meetings, agendas, presentations, minutes, and conferences

sponsored by the Consortium. The full Consortium met at an annual communitywide event held each June.

The Executive Committee was the governing body of the Consortium. It oversaw and provided guidance and direction for the Consortium activities with assistance from the MCAH Division. In addition, it coordinated and maintained communications between the standing and ad-hoc committees. There were originally 17 members, but by 2003 membership had decreased to 12. This committee typically met on a monthly basis.

Membership of the Executive Committee included the following: Co-chairs (one from project staff and one from the community); a Secretary (from project staff); the chairs/co-chairs of the standing and ad-hoc committees; the county's MCAH Director; Babies First Program Manager; representatives from Fresno Community Medical Centers, University Medical Center, and Saint Agnes Medical Center; E.O.C. Babies First Assistant Director; a member of the District Attorney's Office of Family Support; a representative from Panagraph; and two representatives from community-based organizations.

The Perinatal Systems Committee (PSC) was the working body of the Consortium. The PSC reviews the components of Fresno's perinatal system, identifies areas where it needs to be strengthened, makes recommendations for expanding, integrating or developing services, and establishes task forces focused on specific perinatal issues. In 2001, there were two Task Forces operating under this committee: Perinatal Substance Abuse and Breastfeeding. During the four years, a Children's Planning Group was added, and planning began for a Perinatal Depression Task Force.

A Public Relations Committee collaborated in the development and implementation of culturally and linguistically appropriate client education materials and public awareness campaigns. Members of the Public Relations Committee and Department of Community Health staff were involved in the following marketing activities: neighborhood block party events, mixed-media campaigns, development of promotional materials, community-based needs assessments, and Speakers' Bureau training. This committee met monthly until it was blended into the PSC in 2003. The committee members made recommendations to Panagraph, the marketing subcontractor, on art, design and language related to the development of consumer and stakeholder brochures that were in development. The Committee took an active role in identifying community partners in the new project census tracts.

The Consumer Involvement Ad-hoc Committee provided the Consortium with guidance and advice on recruiting interested women and their families who used Babies First services to participate in the Consortium through membership in the Babies First Club, a club established to provide support and empowerment to consumers with the goal of achieving active involvement in the Consortium. This committee typically met every other month, but was disbanded in 2002.

- C. The Consortium was well-established before this Healthy Start grant was received. Initial difficulties with getting consumers involved continued throughout the four-year period.

Additionally, as the individual Task Forces became more active, the need for meetings of the larger Consortium diminished. The most significant development, however, was the loss of commitment from the Executive Committee and its failure to develop a plan for sustainability (See Sustainability sections for detail).

Collaboration and Coordination with State Title V and Other Agencies

- A. The Fresno County Department of Community Health’s MCAH Division is Babies First’s primary link to the California Department of Health Services, MCAH Branch, which serves as the State Title V agency. The MCAH program, under the leadership of the MCAH Director (who is also the Babies First Project Director), is responsible for local implementation of California’s Maternal and Child Health Title V Plan. As the local CPSP administrator, MCAH has maintained a close working relationship with the majority of Medi-Cal providers in Fresno County for nearly 20 years. MCAH has also worked collaboratively with other human services departments and agencies for many years. Thus, collaboration and coordination were already well established before the first Healthy Start grant was received in 1997.
- B. Locally, Babies First, through the Perinatal Systems Committee, partnered with local providers in the expansion of the SART model which began implementation in 2000; the introduction in 2003 of a Pre-Treatment intervention for substance abusing women not ready to accept treatment; a breastfeeding initiative; and the planning process for the Children’s Model of Care to ensure access to appropriate early intervention services for children (0-5 years) at risk for medical, emotional, developmental or learning problems, which resulted in the establishment of the Assessment Center for Children at Exceptional Parents Unlimited (EPU) in 2004.

Perinatal outreach and care coordination services are provided primarily through the non-Healthy Start-funded MCAH POE Unit previously described in “Outreach and Client Recruitment.” Collaborating with MCAH in this effort are the Fresno County Department of Employment and Temporary Assistance (E&TA), which refers pregnant women/infants applying for services, and the Community Health Department’s Public Health Nursing Division’s Child Health and Disability Prevention Program (California’s local administration of EPSDT), the Gateway program to SCHIP, which provides intensive informing to eligible and potentially eligible women and their families and refers them to the outreach staff. These referrals, together with the toll-free hotline (promoted through local combined efforts of MCAH Babies First mixed-media marketing) and the MCAH POE unit staff, link women and/or their infants and young children with providers/plans and related services such as housing, Medi-Cal, food, WIC, etc. The Moms and Kids Hotline described in is key to the collaborative efforts in outreach.

The Comprehensive Perinatal Services Program (CPSP), California’s enhanced perinatal services for Medi-Cal, is administered through the state’s MCAH Branch. Certification, training of providers and quality assurance monitoring and oversight occurs through the local MCAH Program, which requires approved staffing and protocols tied to state regulations. At the time of the original application for Healthy Start funds, Fresno County had enrolled 47

CPSP providers; currently, 65 CPSP providers (40 in and around the project area), serve approximately 8,000 pregnant women annually within the county. Pregnant women identified through MCAH/Babies First outreach and served by case management and care coordination services are encouraged to enroll with CPSP providers. Both Medi-Cal managed care health plans require all their perinatal providers to offer CPSP services.

The MCAH Division's Perinatal Services Coordinator is a member of the local San Joaquin Sierra Regional Perinatal Program, a Title V funded program in California. The Perinatal Services Coordinator and other local MCAH staff participate in regional needs assessments and ongoing committees for the region's activities. In turn, the Regional Perinatal Coordinator is a member of the Babies First Consortium, serving on the Perinatal Systems Committee. The Regional Coordinator works primarily with the Babies First Breastfeeding Task Force Hospital Subcommittee.

The MCAH Division and Babies First continued to collaborate with the Black Infant Health Leadership Coalition (BIHLC), which was developed under the local Black Infant Health (BIH) project in 1992. MCAH participates in the statewide BIH program in an effort to improve the birth outcomes of African-American infants within the 16 health jurisdictions (counties and cities) where 97% of African-American live births and infant deaths occur in California. The BIHLC formed the nucleus of the existing Babies First Consortium and worked with MCAH and other community partners to build a broad community-based consortium reflecting the diverse cultural and ethnic population in the project area. The BIHLC has discussed strategies, which are best employed within those neighborhoods where "hard-to-reach" pregnant women most at-risk for preterm delivery; low birthweight and fetal and infant mortality reside. The BIHLC has implemented an annual community awareness forum focusing on family health issues. Activities of the BIHLC have included coordinating and sponsoring the community awareness forums with health fairs; educating the African-American community on the effects of drugs, alcohol, and tobacco on perinatal outcomes; and serving on Consortium's Perinatal Systems Committee and FIMR. Unfortunately, in the last three years, the BIHLC has become less active as an independent body; in part, perhaps, because of the strength of the Babies First Consortium.

California Children's Services (CCS): Children with special health care needs are linked to CCS, which is locally administered by the Department of Community Health, Children's Medical Services Division. This program is supported in part with Title V funds. The goal of CCS is to identify children who may need specialized medical care and encourage families with children with physical disabilities to obtain necessary medical services to maximize their children's potential. Babies First staff and subcontractors and medical providers caring for project clients regularly make referrals to this program.

The MCAH Director and staff facilitated the coordination of MCAH programs with other key programs serving women and children within the various County human services departments and throughout the community. These included mental health services, children's medical services, CHDP, EPSDT, high-risk infant follow-up, substance abuse and tobacco programs, child protective services, Medi-Cal eligibility services, WIC, family

planning, and teen pregnancy prevention projects. All these services are linked with the state programs as outlined in the State's Title V application and accessible to project area clients.

The most significant efforts are the Babies First collaboration within the County's human services departments: Department of Children and Family Services, Department of Behavioral Health (known as the Department of Adult Services for three years of the project), Department of Employment and Temporary Services, and between Babies First, these departments and the community. This is evidenced in the Babies First Consortium membership and its task forces described in the local health system and Consortium sections.

A strong collaborative relationship has existed for over 15 years between the MCAH Division and the Central California Division of the March of Dimes. MCAH staff have assisted in the planning of three March of Dimes conferences in February 2003, 2004, and 2005, aimed at prematurity and improving perinatal outcomes. At the 2005 conference, Kathy Hayden, Clinical Supervisor of the MCAH Mental Health Team, was a presenter at two breakout sessions. The current March of Dimes Program Services Manager is a Health Educator who was Babies First Program Manager in 2001-02.

Locally, MCAH was actively involved with other MCAH and family health programs impacting the perinatal system as well as other overall community activities to enhance the health and well being of children, youth and families. Some of these included domestic violence prevention (administering a competitive grant on behalf of two large local coalitions: The Domestic Violence Roundtable and the Interagency Council for Children, Youth and Families). This program has created a highly successful campaign, *Count to Ten*, which was designed to create an awareness in the community of the effect of domestic violence on children and families.

- C. As the local Title V Agency, Babies First benefited from longstanding collaboration and coordination with the State and with other local agencies providing services to the target population. The infrastructure and framework needed to achieve Healthy Start goals were already established. In addition, Babies First has achieved name recognition, visibility, and credibility in the community, which has enabled the program to find partners and support for addressing perinatal issues identified by the Perinatal Systems Committee.

Seamless and coordinated services exist with fiscal support from state and local revenues, especially in outreach and education with funding for media (air time) for radio and TV (three languages) provided by non-federal resources. In addition, the marketing firm contract initially funded by federal Healthy Start has been significantly offset in the past six years by local (non-federal) funds, continuing to develop and promote the Babies First campaign. MCAH has also provided local (non-federal) resources to cover the expenses for two of the six CHOWs in the agreement with EOC.

Sustainability

- A. Because outreach, case management, care coordination, and depression screening can be sustained by Federal Financial Participation (FFP) – Title XIX, the Title V Block grant, State

general funds, and County health realignment funds, sustainability efforts focused on maintaining the functions of the Consortium: public awareness, advocacy, and education. Included in this were educational seminars, neighborhood outreach events, media, Speakers' Bureau, the annual Consortium event held in June, and the meetings of the Consortium and its subcommittees and task forces. Therefore, the Consortium, through a competitive bid process, selected a consultant to facilitate strategic planning to sustain it for the long term.

- B. The Consortium's Executive Committee developed and released an RFP in December 2001 in an effort to contract with a consultant whose expertise is in developing non-profit, community-based organizations and to assist the Consortium in developing and implementing a plan for becoming self-sustaining by the end of the grant period. The consulting firm, Ellis/Edwards, was awarded the contract and work began early in 2002 for the committee to sustain itself at the end of the grant period. The original plan was for the Consortium to become a 501(c)3; however with the assistance of Ellis/Edwards, a variety of other venues were explored for the ultimate goal of sustainability. Peggy Edwards met with some members of the Executive Committee in April 2002 to discuss and brainstorm ideas, as well as to look at the barriers the Consortium faced with sustainability. Ms. Edwards attended several Executive Committee meetings and shared her plan with the members. In May 2002 Ms. Edwards organized an afternoon for Consortium members to attend a meeting to discuss sustainability as well as gather their ideas for the future of the consortium and barriers that may affect the outcome. A total of 48 members from the consortium were present for the meeting. In order to move forward with the strategic plan, a two day retreat was planned for October/November 2002; ultimately this was cancelled related to lack of positive responses for attendance. A conference call was held in November 2002, and it was decided that Ms. Edwards would travel to Fresno in December 2002 to discuss the strategic plan for sustainability and barriers to developing the plan. The meeting was re-scheduled to early January 2003 because of urgent training for nurses around the issue of smallpox vaccine/vaccination. By this time it was evident that the approach to sustainability had not been successful.

Consequently, Ms. Edwards met with members of the Executive Committee and project administration in January 2003, to discuss a plan for the future sustainability of the Consortium. After identification of the specific functions of the Consortium that should be sustained, it was agreed that a new approach was needed. She and her partner, Pam Ellis, developed a new model for sustainability centered around task forces to conduct the activities and advocacy functions of the Consortium. Ms. Edwards met with the Executive Committee in April 2003 to present seven options for Consortium sustainability. Only four community members attended, and it became evident that the Executive Committee did not have the commitment and will necessary to develop a sustainable model. Consequently, the Executive Committee was dissolved, and Babies First staff assumed the responsibility for strategic planning for sustainability.

- C. Healthy Start provided sustainability funds (\$25,000) in the final year of the original grant. These funds enabled the Consortium's Executive Committee to find a consultant to assist with developing a strategic and financial plan for sustainability.

By April 2003, however, it became evident that the Executive Committee did not have the commitment and will necessary to develop a sustainable model. Consequently, the Executive Committee was dissolved, and Babies First staff assumed the responsibility for strategic planning for sustainability.

D. Consortium: Additional Elements

1) Fresno Healthy Start's Consortium was developed through participation of key members of the local Black Infant Health Leadership Coalition (BIHLC). Established in 1992, the BIHLC was dedicated to addressing the high rates of African-American infant morbidity and mortality in the city of Fresno.

Incorporating consumers into the mainstream Consortium membership was a challenge which is still not fully met. In lieu of actual consumer participation during the first grant period, the Consortium was able to recruit residents who had *influence* within the targeted areas and/or had *neighborhood resources* to bring to the project. A number of approaches were utilized to enlist consumer participation, but none were successful for any length of time. These efforts were described in the Final Report and Project Impact Report submitted after the first Healthy Start grant.

2) The Consortium bylaws established in 1998-99 outlined the Consortium's structure, which included an Executive Committee and the following standing committees: 1) Perinatal Systems; 2) Public Relations; and 3) Sustainability/Resource Development. In order to increase consumer participation on the Consortium, an Ad-hoc Consumer Involvement Committee was also formed. In 1999, the Sustainability/Resource Development Committee was merged with the Perinatal Systems Committee. A Perinatal Substance Abuse Task Force was established in 1999, a Breastfeeding Task Force was added in January 2000, and a Child Study Group was initiated in February 2002. Several efforts were made to establish a Perinatal Depression Task Force. These efforts and barriers encountered are discussed in the Depression and Consortium Accomplishments sections.

The Executive Committee functioned as the governing body of the Consortium until it was dissolved in May 2003, due to lack of commitment to develop a sustainable model (See Sustainability). While it existed, the Executive Committee discussed project issues and potential partnerships and/or resources, and made recommendations for action to the full Consortium. Typical full Consortium meeting agendas included project updates, reports from the standing/ad-hoc committees, education in perinatal topics, and a brief presentation from a Consortium member to inform the membership about other related programs/services within the community. See attached Roster (Appendix B) for Consortium membership in place (Total = 327) during the majority of the project period. Approximately 45% of the members were active participants. Composition of the Consortium was as follows:

Gender		Race (estimates only)		Representation	
Male	28%	Caucasian	51%	State/Local Government	30%
Female	72%	Af-Am	8%	Provider	55%
		Hispanic	28%	Consumer	1%
		Asian	2%	Other	14%
		SE Asian	4%		
		Other	3%		
		Unknown	3%		

3) The Perinatal Systems Committee (PSC), with over 150 members, is the “working body of the Consortium.” It reviews the components of Fresno’s perinatal system, identifies areas where it needs to be strengthened and makes recommendations for expanding, integrating or developing services. The committee is charged with the development of resources and linkages to eliminate gaps in service and to ensure appropriate system linkages for long-term sustainability of the strategies implemented. The PSC coordinates Task Forces established around specific issues, such as perinatal substance abuse, breastfeeding, children’s model of care for high-risk infants, and perinatal depression. New Task Forces focusing on Perinatal Periods of Risk (PPOR) related to African Americans and Adolescent Health were introduced at the PSC meeting in March 2005, where members broke into small groups to discuss the issues.

4) The major strengths in the Fresno community which have served to enhance the Consortium and services to the target population were the pre-existing relationships among stakeholders; community organizations and government agencies with a history of working together; and existing neighborhood activities which have become an important resource for outreach. There is firm support from city and county governing bodies for improving the health of children and families.

The perinatal provider community has a strong presence in the work of the Consortium. This includes the hospitals, obstetricians, pediatricians and clinics. The Department of Community Health has a long-standing cordial relationship with these service providers through its MCAH and EPSDT programs. The cornerstone of care for the target population has been the state’s Medi-Cal Comprehensive Perinatal Services Providers, 65 of whom have provided perinatal services to all the women in the project area. They have participated in Consortium activities, including the Executive Committee and the Perinatal Systems Committee. CPSP providers have been key to the project helping women to access care within 3-4 days of referral. They are well represented on the Perinatal Systems Committee. They have been integrally involved in addressing perinatal substance abuse and in the Consortium’s efforts to address the problem. Each of the major hospitals has representatives on the Breastfeeding Task Force and has committed to increasing breastfeeding rates.

5) Visits to mentoring sites and one year’s experience during the initial project period convinced Healthy Start administration that community leaders are needed to advance the Consortium’s efforts. It was difficult to recruit community leadership from businesses and city/county governments, which could offer the political and economic resources necessary

for sustainability. Concerted efforts were made in the second project period to invite perinatal providers, business leaders, and government officials to join the Consortium. More community participation began to occur around the issues of breastfeeding, perinatal substance abuse, and a children's model of care.

Francine Deutsch, Ph.D., who had provided a three-part leadership skills training series to 24 members representing the Babies First Executive Committee, key Healthy Start project staff, and the National Training Institute Leadership group during the initial project period, continued to provide two to three day training sessions focused on team building, leadership development, conflict resolution and community planning.

Attendance of critical stakeholders and commitment to Babies First's goals was a barrier to the success of the Consortium. Beginning in 2001, attendance at Consortium meetings began to decrease. The Consortium's responsibility is to sustain its functions: public awareness, advocacy, and education. Included in this are educational seminars, neighborhood outreach events, media, Speakers' Bureau, the annual event, and the meetings of the consortium and its subcommittees and task forces. The regularly scheduled meetings of the Consortium Executive Committee and Public Relations Committee were repeatedly cancelled because of lack of participation by key stakeholders. When the committees did meet, plans were made, especially regarding sustainability; however, members did not follow through with any of their ideas and/or steps necessary to see them through. In addition, some members began to realize that there was no gain to their participation on their committees as their organization's agendas were not being met. Both committees were dissolved related to lack of ongoing participation.

In 2002, it became evident that the (good-will) approach was not enough to keep the community involved. A subcontractor facilitated the Consortium's strategic planning to restructure. It was discovered that the strength of the Consortium had been in task forces convened to meet community needs, such as perinatal substance abuse, breastfeeding, perinatal depression, and a Children's Planning Group for high risk infants. Each task force had clearly stated responsibilities and expectations. It was agreed that a new approach was needed, and a new model for the consortium was developed which centered around task forces (See "Sustainability" in Project Accomplishments Section).

6) Consumer involvement has been a challenge since the beginning. A number of strategies have been utilized over the years to facilitate participation by consumers on the Consortium. A Babies First Club was established in 1999 to give support to consumers transitioning out of case management with the goal of empowering them to become active in the Consortium. The goal was not achieved for a variety of reasons: among them, the majority of women/clients are enrolled in Welfare to Work programs; single mothers are parenting one or more children; and, most clients are still developing self-efficacy skills. The consumers that were involved in the Club found the time restraints and the commitment to the future difficult to manage with their lifestyles. The consumers found that school, as well as work/jobs took a larger portion of their time than they had anticipated. Along with school and work, the consumers found time commitments to their families highly demanding. The clients who are case managed are high risk for a variety of medical as well as psychosocial-

related problems; thus, mainstreaming them into a high level of community responsibility with joining the Consortium has been difficult to attain.

In the end, the consumers were unable to make the time and/or personal commitment required for participation in either the Club or the Consortium. The consumers eventually ceased coming to the Club, and the Club disbanded at the end of the first grant period.

7) Consumers are utilized primarily as focus group participants when educational materials, PSAs, and a variety of other media tools are being developed. The consumers are valued for their expertise in reaching at-risk clients through language, design, and content (message). Consumer involvement in this aspect of Babies First has been a significant, positive contribution to the Consortium efforts. Consumers are requested to sit on focus groups facilitated by Panagraph, the marketing subcontractor, for their expertise and knowledge. They are given incentives (usually gift certificates to various department stores) for their time. The Babies First multilingual mixed media campaign has been recognized for its excellence. Consumers who have been involved in the focus groups report they are pleased to offer input and would be willing to assist the Consortium in the future. There are consumers who attend the annual consortium meeting. In the past, they have provided testimonials to the membership on their personal experiences and have given interviews on-camera and in to newspaper articles on the importance of the Babies First program and what it has meant to them.

There were a few areas where our consumers were full participants. These included: focus groups for marketing and program materials; public relations and media coverage, such as articles related to Babies First in the *Fresno Bee* and in the *San Francisco Chronicle* (attached in Appendix F). Clients and their infants were encouraged by their nurses to attend the annual Consortium Event; however, only a few did. Babies First staff and the Consortium, well aware of this issue, continue to explore strategies for more inclusive participation in the Consortium's formal organization.

8) Suggestions made by consumers resulted in changes to the Babies First identity and logo, brochures, video, and PSAs. No product intended for consumers was finalized without a focus group, and revisions were made based upon their comments. Additionally, when invited to the annual Consortium lunch, consumers requested to be in the back of the room near an exit, so that they could leave with their babies if necessary. Although the Executive Committee thought the consumers should be a central focus at the front of the room, the consumers were grateful that their wishes were followed.

E. Sustainability: Additional Elements

1) The Medi-Cal (Medicaid) insurance programs in Fresno County are the state-administered managed care program. The two Medi-Cal managed care plans are Blue Cross of California and Health Net. These plans both have extensive provider networks, client education, translation, transportation, and referral linkages and memorandums of understanding with the County Department of Community Health (includes a section with the MCAH Division) and other health care providers. They were active in the Consortium.

2) California has provided Medi-Cal (the state's Medicaid program) prenatal care services to all pregnant women at 200 % of poverty or below including non-qualifying aliens (covered by state funds only) for pregnancy related and emergency services since 1989. Those women who are at 100 % of poverty who also meet the alien status qualify for full scope Medi-Cal. All women 200% of poverty or below are covered by Medi-Cal for delivery. In Fresno County approximately 10,000 infants are born with Medi-Cal as the payor source; 6,000 belong to Medi-Cal managed care plans and 4,000 are state only. An average of 85 percent of Babies First clients were Medi-Cal beneficiaries; in 2004, it was 94 percent. MCAH has never billed for services and has no experience with third party billing.

Infants delivered to Medi-Cal beneficiaries (up to 200% of poverty) are eligible for full scope Medi-Cal coverage and have continuous eligibility for one year. Following their first birthday these infants either remain on Medi-Cal with annual determinations of eligibility or are enrolled into California's SCHIP program, "Healthy Families." Children who are unqualified aliens are not eligible to enroll in Healthy Families or Medi-Cal. While all the project area infants have access, siblings born out of the country often have significant barriers to access for primary care if their parents are unqualified aliens.

3) The Fresno County MCAH Division maximizes its opportunity to utilize federal financial participation (FFP) – Title XIX under HRSA's Coordinated Medical Services program whenever possible. The State Department of Health Services, MCAH Branch provides each local health jurisdiction with a mix of funds including state general funds and Title V Block Grant, and the County contributes local health Realignment (state and local tax) funds. Fresno County MCAH receives limited Title V funding from the state; however, it is used to provide services in Perinatal Periods of Risk, formerly Fetal Infant Mortality Review, a toll-free hotline and injury prevention including family/domestic/child abuse prevention and planning.

The core services of outreach, case management (through nurse home visiting) and care coordination services will be continued using state and local funds to match with federal (CMS) Title XIX funds. Currently MCAH Perinatal Outreach and Education Unit (the care coordinators) are funded through local, state and Title XIX for the entire county, including the project area. This has been the case over the past 12 years and will continue beyond the term of this grant unless the federal government changes CMS regulations or the state and local government reduce their funds available for match. The MCAH Division's use of federal financial participation (FFP) to enhance the perinatal system serving Medicaid eligibles (women and children) is included in the state's Medicaid plan, and local health department MCAH programs are eligible to apply for these funds through their annual MCAH allocation process from the state MCAH Branch.

Two of the six CHOWs (under contract with EOC) have been funded by MCAH using local, state and federal Title XIX funds rather than by Healthy Start. This was made necessary because of increasing costs and fiscal constraints imposed by the federal grant limit. The local MCAH "Moms and Kids" Toll-Free Hotline was developed 12 years ago and continues

to be maintained with Title V funds. The Hotline is critical to Babies First outreach and will continue under the terms of the allocation agreement with the state MCAH Branch.

Fresno County receives approximately \$14 million a year in Prop. 10 (Tobacco tax funds) administered locally by the First 5 Commission, which by state legislation is targeted to pregnant women and children 0-5 years. In September 2001, MCAH received a three-year grant to implement a Breastfeeding Education, Training, and Support Project to improve breastfeeding rates in Fresno County. The proposal was developed with the support and assistance of the Consortium's Breastfeeding Task Force. The State has an agreement with the state to allow county MCAH programs to use Prop 10 funds as a match with CMS Title XIX for eligible functions. In July 2004 in partnership with other agencies, the Commission awarded funds to help implement a Children's Model of Care. MCAH has the ability to apply for additional Prop. 10 funds as appropriate project proposals are identified.

The sole unknown for sustainability relates to the functions of the Consortium and its task forces: public awareness, advocacy, and community education. These would not be completely eliminated, but they would be limited to resources available from MCAH.

4) As previously described in Consortium, the membership lost interest in "general" issues, and the Executive Committee lacked the commitment needed to achieve sustainability. With technical assistance and consultation from a consultant, it was determined a new model using "issue-specific" task forces (convened and coordinated by the Perinatal Systems Committee) would be the optimal working structure of the Consortium. Attendance at the Breastfeeding, Perinatal Substance Abuse, and Children's Model of Care meetings was excellent, and it is anticipated that new task forces would also elicit strong community interest.

III. Project Management and Governance

- A. From June 2001-December 2003, the Fresno County Department of Community Health was one of four departments in the Fresno County Human Services System. In January 2004, the Human Services System was reorganized; finance operations remained consolidated in a Human Services Administration, while the four Departments became separate entities. The Healthy Start project was administered by the Department of Community Health's Maternal, Child and Adolescent Health (MCAH) Division. The Healthy Start (Babies First) Project Director, the MCAH Division Manager, is also the local Maternal, Child, and Adolescent Health Director. A Babies First Program Manager was responsible for day-to-day supervision of the program and Consortium support. A Supervising Public Health Nurse (SPHN) supervised federally funded nurses, and another SPHN supervised the MCAH Outreach Unit. A Clinical Supervisor supervised Mental Health Clinicians. A Senior Staff Analyst provided budget and contract preparation and monitoring, as well as general administrative support and an Account Clerk provided direct fiscal support.
- B. In addition to the Staff Analyst and Account Clerk funded by Healthy Start, the System's professional accounting and budget staff were essential to budget development and management of revenues and expenditures. Although no longer funded by Healthy Start after the first year, the same Account Clerk continued direct fiscal support for the entire

project period. The state-funded MCAH Coordinator was highly involved in program management from the beginning, as the services of MCAH and Babies First are completely integrated.

- C. Babies First management and governance did not change in structure over the four years; however, there were a number of changes in management personnel. In March 2004, the Division Manager retired. The MCAH Coordinator served as Interim Division Manager until September, when she died unexpectedly. She was replaced as Interim Division Manager by the Babies First Program Manager, a Supervising Public Health Nurse; in October 2004, she became permanent Division Manager. During the four years, three individuals served as Program Managers. In 2003, the SPHN supervising the Outreach Unit retired and was replaced by another SPHN.
- D. Competitive bids or requests for proposals are required for all contracts for goods and services, which are proposed in Fresno County (assuring fair and appropriate distribution of funds), with certain exceptions. Because of EOC's many years' experience in working with women and their families in the Babies First project area, they were asked to participate in the development of the continuation application. Both Judith Gonzalez-Calvo, Ph.D., and Jacqueline Skillern-Jackson, Ph.D., were awarded sole source contracts based upon previous experience with Babies First and other MCAH programs. The competitive bid process was used to find a marketing firm to develop the Babies First public awareness mixed-media campaign, the consultant for leadership skills training provided to Babies First Consortium's Executive Committee and project managers, and the Consortium sustainability consultant. All subcontracts are monitored on a monthly basis by Babies First program administration and by the Department's Accounting division. Invoices are approved by the Babies First Staff Analyst and then processed through the Accounting Division for payment by the County Auditor's Office.
- E. Fresno County maximizes its opportunity to utilize Federal Financial Participation (FFP) – Title XIX under HCFA whenever possible. The state provides each local health jurisdiction with a mix of funds, including state general funds and the Title V Block Grant to the states, and the County contributes local health realignment funds. Through FY 2002-03, MCAH also received Proposition 99 (California's Tobacco tax initiative), which were used to provide Perinatal Outreach and Education. Locally, Fresno County has available approximately \$14 million a year in local Prop 10 (more Tobacco tax funds), which is targeted to fund services for children 0-5 years. The state developed an agreement with HCFA to allow county MCAH programs to use Prop 10 funds as a match with Title XIX for eligible functions. MCAH received a three-year grant of Prop 10 funds for its Breastfeeding Education, Training and Support Project (2001-2004) and a grant in 2003-04 to develop a plan for the Children's Model of Care. Fresno County MCAH receives very limited Title V funding; however it is used to provide services in FIMR, Toll-Free Hotline, and injury prevention including family/domestic/child abuse prevention and planning (which are not allowable categories of matching in Title XIX). The local MCAH Moms' and Kids' Hotline was developed 14 years ago and continues to be maintained with Title V funds. The Hotline, updated in 2002-03, has been critical to Babies First outreach.

Outreach and case management and care coordination services can be conducted using state, local and federal (HCFA) Title XIX funds as a match. All of the MCAH Perinatal Outreach and Education Unit staff were funded through local, state and Title XIX. This has been the case over the past 14 years. The use of federal financial participation under HCFA to enhance the perinatal system serving Medicaid eligibles (women and children) is included in the state's Medicaid plan, and local health department MCAH programs are eligible to apply for these funds through their annual MCAH Allocation process to the local health jurisdictions. Babies First services have been augmented from the time of implementation by use of staff funded by these additional resources. Clerical support for Babies First has also been funded by non-Healthy start resources.

Additionally, every agreement for services and technical assistance and consultation has included a mixture of Healthy Start and non-Healthy Start funds. Approximately half of the street outreach contract with EOC was covered by the MCAH Division using local, state, and federal Title XIX funds. Media campaigns also were supported by non-Healthy Start funds; in fact, some Babies First media campaigns were totally funded by other funds. In May 2005, the County Department of Employment and Temporary Assistance, recognizing the benefit of Babies First services to the population shared by both departments, gave \$200,000 to the MCAH Division to conduct a summer media campaign.

- F. Cultural competency is a priority in the project. Despite the lack of racial and cultural representation in the staff, MCAH has made concerted efforts to address and train staff on key issues. Project staff benefited from consultation/training with Dr. Jackson, who combines cultural competency and psychological expertise, as well as expertise in working with substance abusing African-American women, in training professionals to work with high-risk minority populations. Dr. Jackson also provided cultural competency training to MCAH paraprofessional, clerical, and administrative staff. In addition, the County provides cultural awareness and competency training through Staff Development.

EOC was chosen to be the Outreach subcontractor because of its network of health, education, employment and social services in the project area, as well as its experience working with minorities. The CHOWs reflected the racial and cultural diversity of the project area through all four years.

IV. Project Accomplishments

See Appendix A for Final Report/Implementation Plan with objectives, strategies, activities, and accomplishments.

Outreach and Client Recruitment

Project Period Objective I, to increase to at least 85% the number of women recruited by Babies First who initiate prenatal care in the first trimester of pregnancy, was not achieved. Rather, it declined to 60%. This may have been an unrealistic target in light of the challenges to reach women in their first trimester. Although the Outreach program finds pregnant women, the CHOWs do not limit offering Babies First services to women in their first trimester, nor do mixed media campaigns assure that calls to the hotline will be from

women early in their pregnancy. What Babies First does, however, is to link pregnant women to prenatal care and other needed services at all stages of their pregnancy. The activities in Objective I are focused on increasing communitywide awareness of the importance of early and continuous prenatal care through door-to-door canvassing, neighborhood activities, health fairs, mixed media campaigns, and the toll-free hotline. The data on the Implementation Plan (Appendix A) attests to the extensive reach of these activities.

The outreach program was successful in finding women who would be eligible for the services provided by Babies First and the comprehensive integration of services established by MCAH and linked with Babies First. The Agreement with EOC in the first year required that the eight CHOWs find 780 at-risk pregnant women requiring prenatal care in the project area; the target number was reduced to 600 when the number of CHOWs was reduced to six. In all, there were 1,307 referrals to services, 1,051 transports, and 204 interpreter services made by EOC outreach workers in the Babies First census tracts. Approximately 910 additional women were referred through physicians and other care providers to the Babies First program from 2001-2005.

In 2004, the CHOWs provided Low Risk Tracking to 65 pregnant women in the Babies First project area. The number was low because the majority of the referrals are high risk. Additionally, the CHOWs participated in all health fairs and neighborhood events.

Care Coordinators monitored 833 moderate to high-risk women (on the waiting list for a PHN). This proactive tracking was aimed at encouragement of early and continuous prenatal care and referral to other needed services. This service was provided by MCAH Health Education Assistants, who were culturally and linguistically competent to provide services to women with limited English speaking skills (four speak Spanish- and two speak Hmong). They also provided 558 transports. Babies First also distributed 11,860 bus tokens to clients (an average of 247 per year).

A Staff Nurse hired as part of the Breastfeeding, Education, Training and Support project assisted Care Coordinators by making home visits to clients who were having problems with breastfeeding. In addition, she made seven presentations about breastfeeding to African-American churches, day care, and beauty salons.

There is always a waiting list. When there are no openings in the nurse case management programs, the Care Coordinators will provide information and referral and make medical and WIC linkages. Waiting list clients receive monthly telephone calls to ensure medical compliance with appointments. When clients on the waiting list are in the third trimester, the Care Coordinators make telephone calls to ensure that the women are keeping their medical appointments, that they have a pediatrician, and send information about immunizations and well-child care.

From 2001-2005, 158 health fairs, neighborhood block parties and conferences attracted 66,509 community participants. At these events, 129,935 Babies First promotional items were distributed. The Moms and Kids Hotline received 23,072 calls during the same period.

As a result of site visit by Gail Davis, Healthy Start Project Officer, in June 2004, Babies First was asked to send a representative to the Healthy Start Promising Practices Meeting in September to participate in the Outreach/Case Management focus group. In addition, the project Evaluator was invited to participate in the Local Evaluation focus group. Further, Rebecca Carabez, R.N., Ph.D., Project Director and MCAH Division Manager, was invited to make a presentation on Babies First Perinatal Outreach Strategies to the Secretary's Advisory Committee on Infant Mortality in November 2004 (presentation attached in Appendix F).

Case Management

The primary objective of case management is to decrease low birthweight, which would inevitably decrease infant mortality within the Babies First target areas. Case management addresses these objectives by ensuring that all women enrolled in Healthy Start receive early prenatal care and, once the infant is born, ongoing postnatal and pediatric care. The Case Management objectives are found in the Implementation Plan (Appendix A). The following summarizes the success of the project period objectives:

Objective II, to increase to at least 95% the number of women enrolled in case management who receive a minimum of 10 prenatal care visits, was not achieved. Four reasons have been identified for this:

- Due to the acuity of psychosocial issues among case management clients, many enter care but do not follow through with prenatal care appointments.
- Many clients abuse substances and are therefore affected in their ability to perform day-to-day activities. Medical appointments, dental care, and other health-related activities are not a priority.
- Many clients enter case management late in their pregnancy.
- In 2004 and 2005, both case management programs had either vacant PHN positions or new staff who carry a lower caseload. New referrals were placed on a waiting list and entered case management late in the pregnancy.

Objective III, to increase to at least 50% the number of high-risk pregnant women who test positive as a result of screening by their PHN using the 4Ps Plus who are referred to treatment, was achieved. Although screening of case management clients is universal and the objective to make referrals was achieved, the more significant factor, women accepting the referral to treatment, was not as successful. In 2001, only 27.5% of clients agreed to a referral for treatment; in 2002, 18% accepted referral; in 2003, 45%; in 2004; 75%; and in the first five months of 2005, 26%.

Objective IV, to increase to at least 90% the number of infant clients enrolled in case management who are age appropriately immunized by 2 years or at discharge, was not achieved. Immunization rates at two years or at discharge varied from 66% to 87%. Since a significant number of clients enrolled in case management, especially in the high-risk

program, exit the program voluntarily or are lost to service prior to the infant's first birthday, it is not always possible to ensure that infants received all their immunizations.

Objective VI, to increase to at least 95% the number of infant clients enrolled in case management who receive their well-child examination by 2 months of age, was nearly achieved. PHNs made a concerted effort to assure that infants received a well-child examination by two months of age. Since 2002, they have succeeded with more than 90% of infants.

Objective VII, to increase to at least 100% the number of completed referral among infants clients with special health care needs, was achieved. In every year, all referrals among clients with special health care needs have been completed.

Objective VIII, to increase to at least 90% the number of postpartum women in case management who receive interconceptional services, was achieved. With the exception of CY 2004 (87.1%), more than 90% of postpartum women have received interconceptional services each year.

Objective IX, to screen 60% of clients enrolled in case management screened by the PHN for perinatal depression was surpassed. Screening began in CY 2003. Since then, 632 of 756 (84%) of clients have been screened by the PHN for perinatal depression.

Objective X, to increase to at least 85% of high-risk women who are identified with depression who are linked to the MCAH Mental Health Team for skilled assessment and intervention, was not achieved. Of the referrals made to the Mental Health Team, 79% (327 of 413 pregnant women) received an assessment and 78% of those assessed received mental health services. Considering that the Mental Health Team was not fully staffed after 2003 (reduced to only three Mental Health Clinicians and no Medical Social Worker), the Mental Health Team actually was highly productive and successful (See Perinatal Depression section in Accomplishments).

Retention is a key aspect of case management. Every attempt was made to achieve 90 percent retention until the infant was two years old as stated in each year's budget period objective. Once a case was referred and assigned to a nurse, retention began. The nurse case manager explained the purpose of the program and the benefit to the client. At this point the client accepted or rejected the program. If the program was accepted, home visits were scheduled weekly the first month and every two weeks to a month thereafter, depending upon the needs of the client. This scheduling continued until the birth of the infant. Once the infant was born, the nurse case manager saw the infant every week for the first month and every two weeks to a month thereafter, depending upon the needs of the family. Throughout this two-year period, incentives were given for continued progress, and extensive education and incentives were given for motivation after any digressions. Even with this process in place, however, clients withdrew from the program or moved away and did not communicate with their case manager.

An article in *The Fresno Bee* (February 6, 2002) reported on the success of Babies First in improving birth outcomes through its nurse home visiting programs. On October 5, 2004, Babies First's nurse home visiting programs were extensively covered in a five-part series, entitled "Too Young to Die," published in the *San Francisco Chronicle*. Part 3 of the series, "Fighting Back," focused on nurses working one-on-one with high-risk mothers in Fresno to reduce infant mortality. The author's research for this article included accompanying nurses on home visits on several occasions (both articles are attached in Appendix F).

Progress in achieving the common performance measures was mixed. The project was successful in getting medical homes for children 0-2 (98.9% in 2005 compared to 70.9% in 2001). Overall, among case management/care coordination clients, the project successfully increased the percentage of pregnant Healthy Start participants who initiate prenatal care in the first trimester from 41.3% to 73.5% in 2005. While Outreach was unable to make progress toward meeting Objective I, case management/care coordination achieved 80% in 2004. In retrospect, this may have been an unrealistic expectation, as women who have not had a prenatal visit are often found after the first trimester has ended. Low birthweight has been reduced from 9.8% to 5.4%, and very low birthweight is at 0%, although there were one VLBW in 2003 and 6 VLBW in 2004. Most promising, there has been no infant mortality among program participants.

During the first grant, separate data collection systems were utilized in the two case management programs. These were connected in a Healthy Start MIS established on a County network server in 1999 and enhanced in 2001-02 to collect the perinatal substance abuse information from the 4Ps Plus Screening and Field Assessment used by providers and PHNs. A new Case Management MIS incorporating the new data elements added by Healthy Start for this grant developed using Internet capabilities and implemented in January 2003. The MIS is described in the Evaluation section of this report. The MIS Data Collection Form is found in Appendix C.

Transportation has always presented a barrier for pregnant women and their families in the western and southwestern areas of Fresno and southeast Fresno, where there is little or no public transportation. This barrier was addressed by having the CHOWS and Health Aides (added to the program in 1998-99) provide transportation services.

One lesson learned by the project is that the Healthy Start target population is mobile. The reality is that in Fresno's Healthy Start project area, clients will move often due to personal reasons (e.g., lack of stable housing or seasonal employment), and environmental factors, (e.g., few or decreasing resources in the project area itself); when they move, the infant mortality rate shifts with them.

Health Education and Training

Objective V, to increase by 50% public awareness in the project area about ATOD and its effect on mothers and their infants, was achieved through mixed media campaigns, community block parties, health fairs and conferences.

Objective XI, to increase to at least 50% the number of CPSP providers who receive education and training in screening and referring for perinatal depression, was not achieved due to staff shortage and eventual elimination of the Mental Health Team (See Depression narrative for further explanation).

In 2003 and 2004, 226 individuals (including 16 PHNs) representing culturally diverse health and community service providers received Certified Lactation Education Counselor training; provided through a contract with the University of California, San Diego Extension. In addition, 21 community professionals completed train-the-trainer education.

Training of PHNs and CPSP provider staff in use of the 4Ps Plus continued throughout the project period. In 2004, 13 provider sites and MCAH PHNs received training from Ira J. Chasnoff, M.D., in a Pre-Treatment Module for substance abusing women not ready to accept treatment.

In conjunction with implementation of the Children's Model of Care, First 5 provided the Ages and Stages Questionnaire (ASQ) and the Ages and Stages Questionnaire Social and Emotional (ASQ-SE) training for the Department of Community Health and will train others in the community, including child care providers, preschools and others to screen children in the community for risk and refer the children identified as at-risk to the Assessment Center for Children located at EPU.

Babies First website development was initiated in 2003. A team of Maternal, Child and Adolescent Health staff met regularly with the marketing subcontractor's team. Development of the website took approximately 18 months, beginning with the website site map. The site map helped the team to determine the section headers and lay out the location and linkages between the sections. Development of the site map took a considerable amount of time and collaborative effort. However, once the site map was completed there was a clear foundation to proceed with the creative design, copy development, production and coding. When the website production was complete, the site was tested with project stakeholders, community members, including teens, and program staff. Informal focus groups were used as well as individual site review. The feedback from these reviews was used to further improve the site. The website includes the following options: About Babies First, Pregnancy Services, Healthy Lifestyles, Drug Abuse, Breastfeeding, Outreach, Depression, For Providers, and Contact Us. Its address is www.babiesfirstfresno.com

The website was launched prior to the annual Babies First Conference in June 2004. Since its launch, the site has been periodically revised. The fiscal year 2005-06 scope of work includes a website redesign. Program staff will work with the marketing subcontractor to revamp the website. The goal is to refresh the look and update the information available for a more user-friendly site. The website is being housed by the marketing subcontractor and has not yet been transferred to the Fresno County server due to website security complications. After the 2005-06 update is completed, staff will pursue this transition.

Interconceptional Care

In July 2001, a well-woman postpartum substance use assessment, known as the "Four Questions," was implemented in the case management programs. Clients are asked the four

questions at five different times during the postpartum phase. A trend analysis conducted by the Project Evaluator reflected that over time there were increases in the use of tobacco and decreases in the use of marijuana and alcohol among clients. Only two women stated use of cocaine, heroin, or methamphetamine at the second assessment, and there was no subsequent use of these substances.

Interconceptional care included the infant and/or toddlers in the home. Infant care and parenting skills were taught, and resources available for children were shared. Over the project period, 97% of infants born to Babies First clients received well-child visits within eight weeks of birth; 95% had a medical home, and 71% were appropriately immunized at two years old or at discharge.

Depression Screening and Referral

Provider Education: During the project period Babies First sponsored or participated in a number of formal educational events about perinatal depression that targeted not only providers of perinatal services, but also mental health staff and consumers.

In November 2002, the Babies First Consortium hosted Katherine Wisner, MD, Professor of OB/Gyn, Psychiatry and Pediatrics at the University of Pittsburgh for one-day training on Perinatal Mood Disorders. Dr. Wisner is an internationally recognized expert and researcher on perinatal mood disorders, treatment interventions and psychopharmacology for pregnant and lactating women. More than 260 people attended this conference which was specifically focused on the needs of medical and mental health professionals. The audience included a number of local physicians, many public health and perinatal nurses, dozens of mental health professionals and other infant-family professionals and paraprofessionals. Ten CPSP providers sent a total of 27 individuals, and three area hospitals also had staff in attendance. Continuing education units were offered. Evaluations submitted indicated overwhelmingly positive responses.

In February 2004, Babies First was asked to present on perinatal depression at the Third Annual Central Valley March of Dimes Conference held at Children's Hospital Central California. This conference was attended by nearly 300 persons invested in the prevention of infant mortality and morbidity. The Babies First Clinical Supervisor presented "Perinatal Depression: Impact, Identification and Intervention." Participants were particularly interested in data presented for the model of home-based mental health services which had been integrated within the nurse case management programs of Babies First. Additionally, this presentation was the most highly rated of the conference day and attendees commented on its high degree of relevance and practical application for their work.

In June 2004, Dr. Katherine Wisner returned to Fresno as one of three keynote speakers at the annual Babies First Consortium Conference, which was attended by 325 individuals. That evening Dr. Wisner presented to local obstetricians, pediatricians and psychiatrists on medication management for pregnant and lactating women with depression. That event was attended by 62 persons, including 40 physicians, 11 nurse practitioners, 1 physician assistant, 4 registered nurses and 6 mental health professionals.

In January and August 2004 and again in January 2005, the Babies First Clinical Supervisor was invited to participate in pre-service and enhancement training of volunteer instructors of the March of Dimes “Comenzando Bien” prenatal education curriculum. The focus of these trainings was on responding to psychosocial issues in pregnancy and enhancing therapeutic communication skills to assist women in their classes who might need linkage to professional services.

In 2004 and 2005 presentations on perinatal depression and other mental health issues were made to the teen parent class of Fresno Unified School District. The focus was on understanding the nature of depression around pregnancy and parenting, how to recognize symptoms that might benefit from intervention and how to access help if necessary.

In June 2002, the Clinical Supervisor and a Supervising Public Health Nurse attended the International Conference on Postpartum Support in Santa Barbara, CA. The clinical supervisor presented the model and preliminary data for Babies First pilot of an integrated mental health team within the perinatal nurse home visitation programs. Additionally, participants received information and training with respect to depression screening instruments for the perinatal population.

Mental Health Team clinicians attended a two day training on Perinatal and Postpartum Mood Disorders in March 2002 to enhance clinical skills and as a forerunner to training of perinatal service providers later that year. They also attended the National Zero to Three Conference in December 2001 at which perinatal depression had considerable focus. A number of local training opportunities were made available by the Infant-Mental Health Collaborative to enable the mental health clinicians to work more effectively with the infant-mother dyad when a necessary corollary to depression treatment. Clinicians also attended several local trainings on gender-specific substance abuse treatment and working with victims of domestic violence. All such trainings were relevant to providing effective mental health treatment for women with multiple psychosocial stressors in addition to depression.

In addition to these formal training events, ongoing education, consultation and support for public health nurses and care coordination monitors were an integral part of the overall education strategy. Individual consultation was available on an as needed basis as nurses identified concerns about specific clients. Monthly case conferences were held by each nurse home visitation program in which the mental health team participated. While nurses presented a variety of clients from their active caseloads, particular attention was given to those who had psychosocial issues, including depression. This allowed for educating about signs and symptoms of mental health disorders, discussion of strategies for more effective interaction and intervention and increasing the skills needed for identification and referral. At the West Fresno site where Healthy Start-funded nurses are located, a monthly in-service by mental health team staff on a specific mental health issue or diagnosis was included as part of the monthly case conference.

While formal training was noted to be helpful, the ongoing consultation, training and support of nursing personnel proved most effective for enhancing their skill development. In

discussing known clients, learning was moved from the theoretical to the practical. Specific strategies could be entertained within the context of a real situation which had both common and unique elements. Nurses frequently commented on the value of this type of learning for enhancing their therapeutic skills with clients. Anecdotally, it also appeared that over time nurses became more adept at identifying clients who were “ready” for mental health intervention, resulting in fewer failures to engage in treatment. Care coordination monitors also had access to this kind of consultation on an as needed basis and were provided on several occasions with in-service training on depression and other psychosocial issues and appropriate responses in the context of their particular role.

Education for both program participants and community members regarding perinatal depression is also a key component for building and sustaining an effective system of care for vulnerable women. For program participants, education on this issue occurs informally in the context of their relationship with their case managers. For women receiving prenatal care such education could occur at prenatal visits. When providers of any sort who interface with pregnant women are knowledgeable about signs and symptoms of depression, indicators for medication referral, treatment options and danger signs, pregnant women can only benefit. Direct care staff is enabled to better identify those women who are symptomatic for depression, dialogue with participants about their individual risk factors for depression during or after pregnancy and encourage women to self-disclose and seek or accept help. It is not enough just to educate providers or those who professionally interface with pregnant women. Strategies for wider community awareness and education ultimately benefit women and put pressure on local mental health providers to attend specifically to the needs of pregnant and parenting women and their children.

Routine Screening and Skilled Assessment: After a literature review and a small pilot of the Edinburgh Postnatal Depression Scale (EPDS) and the Postpartum Depression Screening Scale (PDSS), it was concluded that the EPDS would be more useful for screening Babies First clients. The EPDS was therefore chosen as the instrument to be incorporated into nursing protocols.

Policies and procedures were developed by the SPHNs and the clinical Supervisor to include the protocol for depression screening, documentation and data collection. Other policies and procedures to govern the general operation of a mental health team within the nurse home visitation programs were also jointly developed. Once the screening protocol was developed, training for nurse home visitors was scheduled and implementation of screening was set for April 2003.

The EPDS was completed by the client and then scored by the nurse whenever possible. Administering the screen verbally was permitted when issues of language or literacy precluded the client completing it herself. A Spanish language version of the EPDS was provided by Michael O’Hara at the University of Iowa and was adapted after consultation with several native Spanish speakers among staff and clients so that it more accurately reflected local idiom.

From April 2003 through May 2005 a total of 772 unique women were enrolled in nurse home visitation programs (This number is in part pro-rated for 2003 when the database did not separate clients by program). During that time 1302 EPDS screens representing 726 unique women were completed. Some 40% of the total screens were completed by women living in Healthy Start area. Seven women refused to complete the screen, one of them twice. Three women, when presented with the EPDS, readily admitted being depressed and requested counseling services. An additional six women did not complete the EPDS as they were already receiving mental health services. The table below shows the results of screening by Healthy Start and non-Healthy Start census tracts.

EPDS April 2003 – May 2005 By HS/Not HS				
	All Screens	% of Total Screens	Positive Screens	% of Positive Screens
Not HS	753	57.9%	159	60%
HS	529	40.6%	100	38%
Total	1282	98.5%	259	98%
Unknown CT	20	1.5%	6	2%
Total	1302	100%	265	100%

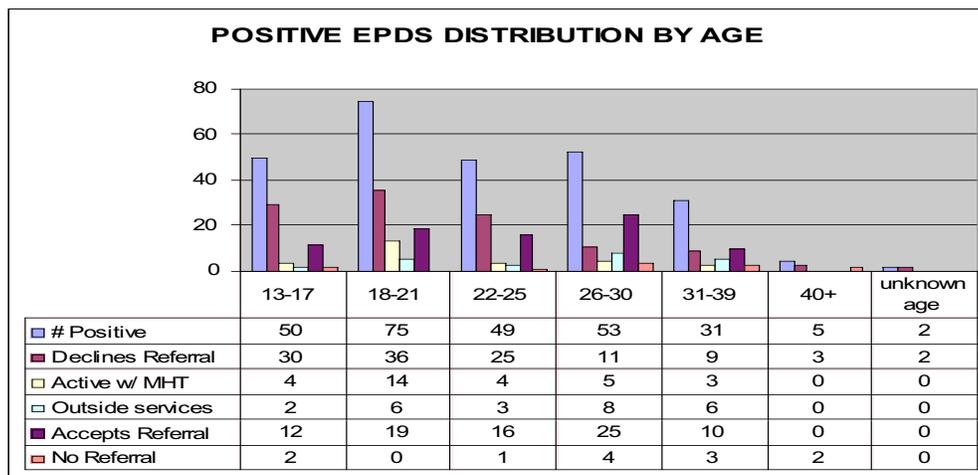
Of 1302 screens completed, 265 (20%) were positive for possible depression. This is consistent with national prevalence data for perinatal related depression reported by the National Institute of Mental Health. Also in keeping with research literature there was no significant difference in incidence of positive screens based on ethnicity or race. Clients of Comprehensive Case Management, generally known to be a higher risk population than that of Nurse-Family Partnership, represented 55% of all positive screens, but only 47% of the total screens completed.

When reviewing EPDS data with respect to interval of administration it is notable that antepartum women, statistically those at highest risk for the onset of perinatal depression, represented 40% of the positive screens and only 33% of the total screens. Twenty-three percent of the positive screens were for women between 0-8 weeks postpartum; they were 26% of the total. There was a notable drop-off of depression beyond 3 months postpartum; those women between 3-6 months represented 20% of the total screens, but only 14% of the positives, while women 7-12 months postpartum comprised 13% of the positives. This finding would be consistent with research that suggests that from antepartum to about three months postpartum is an especially high-risk time for the onset or exacerbation of depressive illness. This makes it even more critical that women be identified early and treated, thereby reducing the risk to their infants so clearly associated with maternal depression. The results also support continued screening for depression through the first year postpartum as called for in the nursing protocols.

Evaluating EPDS screens by age yields some notable results as well. Just over half of the total screens and just less than half of the positive screens were for women 21 and younger. One fifth of the total screens and 18% of the positive screens were from women 22-25. This

distribution is close to what was expected. When one looks, however at screens for women 26 and older, this distribution begins to shift. Women 26-30 represent only 14% of the total screens and yet 20% of the positive screens. Women 31-39 comprise 10% of the total screens and 12% of the positives. These older women completed 24% of the total screens, but almost one third of the positives. This may reflect a higher overall incidence of depression or more willingness to admit to the experience of depression. The older women were also more likely to be multiparous and perhaps have higher levels of overall stress as a result. These women were also more likely to utilize mental health services than their younger counterparts. For those women age 26-30 with positive screens, 72% accepted an assessment referral or were receiving services already from the mental health team or an outside agency. Only 21% of them declined an assessment referral, compared to 60% of the youngest group (13-17).

While not surprising that younger women were less inclined to seek mental health services for their depression, further analysis could prove fruitful for program redesign and development. Factors that may contribute to younger clients refusing services could include social stigma, variance in how case managers educate clients about depression and/or offer referral, substance use as a means of self-medication, and the effect of peer/social support on willingness to engage in healthier means of coping. The following table reflects data on the 265 positive EPDS screens found between April 2003 and May 2005.



Clients who screened positive were offered a referral for further assessment or treatment, usually with the MCAH Mental Health Team. Of all positive EPDS screens, 31% agreed to an assessment referral and an additional 21% were already receiving mental health services from the mental health team or outside provider.

It is important to note that use of the EPDS is only one tool for screening women who may benefit from mental health services. Clients were more likely to be referred for assessment and treatment based on skilled nursing interviews and the influence of their relationship with individual clients. During the project period, 304 unique individuals received face-to-face assessment by the MCAH Mental Health Team. Twenty-five women received services on more than one occasion. The project goal was that 85% of clients who screened positive

would receive a skilled mental health assessment. Clearly this goal was not met. At the same time, those with positive EPDS screens represented only 25% of the total of women who received assessment. Three times as many women were identified and served via other means. In the nursing programs it appeared that relationships with the client and nurse's individual knowledge and skill were the most influential factors affecting client's willingness to receive assessment. While the EPDS was somewhat useful, it could not substitute for the power of the nurse/client relationship.

There was also a great deal of variance between nurses in effectively getting their clients to an assessment. For example, all women with positive screens for one nurse accepted an assessment referral, while all women with positive screens for another nurse refused an assessment referral. There were also several women who reportedly agreed to assessment, yet were not subsequently referred for reasons that remain unclear. This highlights the need for ongoing training for nursing personnel in the administration of the screening instrument, but even more importantly, in the therapeutic communication skills necessary to educate women about depression and other mental health issues and motivate them to accept assessment and treatment.

Mental Health Services: Beginning in January 2001 and continuing through May 2005, Fresno County MCAH provided home-based mental health services to participants in nurse home visitation programs for pregnant and parenting women. A total of 457 referrals (Healthy Start referrals = 141 or 31%) were made by public health nurses or care coordinators, representing 417 unique individuals (includes four fathers of babies). All had very significant mental health and psychosocial issues that had potential impact on birth outcomes and overall health status for both the women and their children. Seventy-two percent (327) of these referrals resulted in assessment. One hundred persons (31%) who received assessment and/or treatment were residing in Healthy Start census tracts. Reasons varied for the 28% for whom no services were rendered (NSR): refusal by client, unable to locate, ineligible, unresponsive, linkage to other services or triage among them. Triage increased with mental health staff shortage and eventual discontinuation of this component in May 2005.

MENTAL HEALTH REFERRALS By HS/Not HS : January 2001 – May 2005						
	Assessed by MHT	NSR Referrals	Percent Assessed	Percent NSR	Total Referrals	% of Total Referrals
Not HS	227	89	72%	28%	316	69%
HS	100	41	71%	29%	141	31%
Total	327	130	72%	28%	457	100%

Seventy-eight percent (256) of those assessed continued with services beyond intake. Mental health services included individual, couples and family therapy, psychoeducation and support, and infant-mother dyad work, as well as social work interventions to address concrete service needs that frequently exacerbate and/or contribute to poor mental health status. The focus of the therapeutic work was to assist women to resolve issues that lead to depression and possibly interfere with healthy birth outcomes or overall functioning as

parents. Much emphasis was given in therapy to the primacy of role interactions or dysfunction, the establishing of healthier support systems, increased self-efficacy, depression management, and trauma resolution. Some women who preferred more traditional mental health intervention or who needed treatment for the dual diagnosis of depression and substance abuse were linked to other services by the mental health clinician or substance abuse specialist at the request of the public health nurse and with the permission of the participant. Of those receiving mental health services, 36% (116) also received assistance in meeting concrete service needs (housing, food, etc.); 28% (91) required clinician advocacy with service systems; 30% (97) received crisis intervention; and 20% were referred for psychotropic medication.

The majority of participants were Hispanic (204 or 62%), followed by African-American (20%), Caucasian (13%) and Asian (3%). They were mostly young; fifty percent (164) were younger than 21 years of age, 70% under age 25.

At least 50% of the women referred were first-time mothers. Forty-three percent were pregnant at referral and 56% postpartum. Twenty-two percent (72) of the postpartum women had infants less than 2 months of age and 56% (183) less than 6 months of age.

Seventy-nine percent (257) presented with depressive symptoms at intake. Almost 40% (127) were identified with anxiety symptoms, 32% (102) disclosed current or past substance abuse, 28% (91) were abused as children, and almost one quarter (75) admitted to child sexual abuse history. Sixty percent (195) had significant conflict with a partner and 38% (122) acknowledged current or past domestic violence. Almost 10% were diagnosed with major mental illness, such as schizophrenia or bipolar disorder. Not surprisingly, more than a third of all referrals had financial, housing, and employment issues, complicating their mental health status and requiring advocacy and assistance by the mental health clinician.

A key aspect of this model was the provision of assessment and treatment services in a timely manner. During the project period the median wait time from referral to assessment was 15 days. Twenty-nine percent of clients were seen within one week of referral and more than 50% within two weeks. Wait times became longer with staff shortages in the last two years of the project period.

Also important is that the “No-Show” rate (client not present for a scheduled appointment) for the mental health team was less than 10% over 4.5 years. In conventional community mental health settings where client and system barriers often impede treatment efforts, the “No-Show” rate is typically in excess of 50%. This suggests that women with very significant mental health issues and social impediments are more likely to utilize mental health services when they are designed to be consumer friendly, community based and easy to access.

Statistical analysis by the project’s evaluator, Dr. Judith Gonzales-Calvo, reports that “clients who completed the program or completely or partially attained their goals showed statistically significant improvement in functioning,” as measured by GAF (Global Assessment of Functioning in DSM-IV) scores at opening and closing. She also

demonstrated that “the groups that ultimately completed therapy functioned highest at the onset and those who did not complete scored the lowest.” She hypothesized that “because non-completers did not function as well at onset, this may have been associated with their lack of willingness to persevere.” She also suggested that those women who function lowest at onset “may require more work to remain in the program and affect change.” A model where clinicians actively engage clients, persist in efforts to keep them involved and assist with concrete service needs that are by necessity primal in focus may prove to be of more benefit than more traditional mental health services which are singularly focused on psychological improvement, especially for a population of high-risk, low income, and predominantly minority women.

The following case study is one example of the power of an integrated mental health service within pregnancy related nurse home visitation programs. Collaborative relationship, an immediate and flexible response, true honoring of the client’s preferences and values in determining a course of action for her treatment and engaging the client in a way that was both sensitive and relevant to her situation allowed this young woman remarkable growth. Further case studies can be found in Appendix F.

A nineteen-year-old Hispanic female resided with the father of her 10-month-old infant. She was undocumented, but in the process of applying for a green card. She had a past history of severe sexual abuse, abandonment by her father who was later murdered in Mexico, current physical and emotional abuse in her relationship with the father of her baby and a past history of methamphetamine abuse. She had ongoing serious depression and suicidal ideation for which she had been hospitalized once. At the time of referral to the mental health team she had been awaiting assignment at county mental health for almost three months. At a routine visit with her PHN, the client admitted to using methamphetamine again, feeling frightened and ashamed and wanting help. The PHN called the mental health team and requested immediate assistance. A clinician was mobilized to join the PHN at client’s home in less than one hour.

The client was evaluated for immediate danger and the client’s mother was involved in developing an overnight safety plan. The client was accompanied the next morning by the clinician to be assessed at a local outpatient substance abuse program. The client enrolled voluntarily the next day in the substance abuse program from which she graduated six months later. She continued to be seen for individual therapy one to two days per week by the mental health team clinician with a focus on abuse and relationship issues. At the time she closed to nursing she was pregnant with her second child and still living with the father of the baby in ongoing domestic abuse, but she was better able to set limits with him. More remarkably, she had obtained her GED and was enrolled in a nursing assistant program. She called her former PHN some 15 months later to say she was now living on her own with her children, supporting herself as a certified nursing assistant and currently enrolled in an LVN program with plans to go on to receive an RN degree. She reported feeling positive about her future, with no further relapse into drug abuse and good resolution of her depression.

Fresno County developed a very effective system of care for women who are enrolled in pregnancy related nurse home visitation programs. Depression screening is now a routine

practice with at least 96% of women screened at least once during pregnancy and/or postpartum. Skilled assessment was readily available by the program's mental health team, and many women received ongoing mental health treatment. Budget cutbacks resulted in the elimination of the Mental Health Team at the end May 2005.

Local Health System Action Plan

The State's Title V Plan and the State's list of priority needs form the basis of the local health system action plan. In general, the local plan aims to identify perinatal issues and to improve the perinatal system. During the first project period, the Consortium identified two major gaps in the perinatal system: perinatal substance abuse and breastfeeding. In this second project, perinatal depression and early intervention for high-risk children were identified. Consortium task forces comprised of community stakeholders, providers, partners, and individuals were utilized to tackle each need.

Babies First played an important role as the convener and educator of community stakeholders about Fresno's infant mortality rate and provided data on the causes of the high rates in this community. The community was educated that infant mortality results from a number of risk factors. Once the data were provided, groups could be mobilized to provide leadership with the development of a vision and strategic plan to address the health risk. The planning process was most successful when it was focused on "specific need." Consortium stakeholders, partners, and assigned MCAH staff came together for a "defined purpose and time" to develop and implement activities which would lead to achieving the goals agreed upon. (Please refer to "Consortium Accomplishments" and "Systems Impact" for activities and accomplishments.)

A lesson learned is that if the effort is based on one person's efforts and participation, the project becomes vulnerable if there are not others in the leadership team that can carry on the process. In order to sustain a process, the convener must find community members to train for leadership roles. Otherwise, when the convener (in this case, Babies First) withdraws resources the project loses momentum. MCAH/Babies First was the leader in the community. Although the program tried to build leadership capacity in the BIHLC and in the Consortium, it was evident that without MCAH/Healthy Start resources the effort would not be sustained.

Consortium

The Implementation Plans for the three Consortium objectives are found in Appendix A. Objective I, to make the Consortium a self-sustaining 501(c)(3) organization was not achieved. As described in "Sustainability," the Executive Committee lacked the will to continue and a new organizational structure was developed in 2003-04.

Objective II, to increase and maintain leadership capacity of the Consortium through leadership training, was also not achieved in the manner that had been planned. Although a consultant was secured, Executive Committee members stopped attending the training even before it was dissolved in 2003. Instead, Babies First and MCAH Supervisors benefited from

leadership and advocacy training, along with team building, communication skills, and strategic planning.

Objective III, to organize a Perinatal Depression Task Force was also not achieved. The barriers and difficulties encountered in attempts to accomplish this have been extensively discussed in the “Perinatal Depression” sections of this report.

The primary functions of the Consortium were public awareness, advocacy, and education. In addition to perinatal issues addressed/presented at full Consortium, Perinatal Systems Committee, and task force meetings, continuing education conferences for physicians, nurses, social workers, other professionals, and MCAH staff have been sponsored or co-sponsored by Babies First each year. Nearly 2,700 community members, social service professionals, and health care providers attended formal training sponsored by the Consortium during the project period. Topics included reducing health disparities, perinatal substance abuse, children’s system of care, breastfeeding and perinatal depression. From 2001-05, Dr. Deutsch provided leadership training on empowerment and advocacy, communication challenges and effectiveness, organization and time management, managing change and strategic planning; in all, 37 individuals received training from Dr. Deutsch.

Public awareness was raised through nine mixed media campaigns, which included TV and radio PSAs, a video, billboards, bus and movie theater advertising, and through printed stakeholder brochures developed specifically for the provider community. Section VIII, “Products,” addresses the publications/products developed and the languages available. These items augmented products developed during the first grant related to access to perinatal services, Babies First nursing and health education programs, breastfeeding, and perinatal substance abuse, including tobacco. Every “product” has the Moms’ and Kids’ toll-free hotline telephone number prominently displayed, and Moms’ and Kids’ hotline cards are distributed everywhere in the community.

“Babies First” is a “brand name” for perinatal health in Fresno. In 2003, an Addy (award given by the Advertising Council of Central California) was awarded to Panagraph, the public awareness subcontractor, for the Public Service Video, “Babies First – People Who Care.”

Local Assemblywoman, Sarah Reyes, attended a Consortium meeting in October 2001 and spoke briefly about her commitment to the goals of Babies First. Project staff presented an overview of the new project area, and emphasis was placed on the goals of eliminating racial disparities, reducing infant mortality and addressing perinatal depression. Updates were given on the media campaign, the receipt of the First 5 grant to fund the Breastfeeding Education Training and Support Project, the implementation of the SART process, and the future goal of initiation of a SART for infants and children who have been drug-exposed.

Annual Consortium Events

June 2002: Ira J. Chasnoff, M.D., was the featured speaker, with 468 Consortium and community members in attendance. Dr. Chasnoff updated Consortium members on the progress of the Perinatal Substance Abuse Task Force and the local National Training

Institute Leadership Committee. Eight (8) Babies First clients and their infants were in attendance, accompanied by their case managers. The new updated Babies First video, "People Who Care," that had been developed and produced by Babies First public awareness subcontractor, Panagraph, with the assistance of project staff, was aired at the event. Individual community members were recognized for their contributions to Babies First during the year. Connie Woodman, Project Director, presented "Babies First Highlights, 1998-2002." This presentation, an article in *The Fresno Bee*, and two editorials related to this event are attached in Appendix F.

June 2003: Beverly Coleman-Miller, M.D., was the featured speaker, with 352 consortium and community members in attendance. Her topic was, "Eliminating Health Disparities – What It Means." Three Babies First clients and their infants were in attendance, accompanied by their case managers. Shirley Shelton, Coordinator of California's Statewide Black Infant Health Program, honored Fresno and the Black Infant Health Leadership Committee for its accomplishments in improving birth outcomes for African Americans. Individual community members were recognized for their contributions to Babies First during the year.

June 2004: A day-long Seminar, "Promoting a Healthy Start for Children and Families," was held, with 330 consortium and community members in attendance. Dr. Chasnoff presented "The Nature of Nurture: An Update on Fresno County Collaboration," which introduced the Screening, decision-Making, Assessment, Referral and Treatment (SMART) Model of Care to identify and treat high-risk infants and children. Dr. Katherine Wisner's presentation was "Addressing Perinatal Depression," and Audrey J. Naylor, M.D., M.P.H., Dr. P.H., tackled "The Politics of Breastfeeding". Breakout sessions were held by each of the presenters in the morning and the afternoon. Lynn Johnson, SPHN, Interim Maternal, Child, and Adolescent Health Director, presented Babies First Program Highlights. Connie Woodman, former MCAH Director and Project Director, who had recently retired, was honored by Babies First.

June 2005: Planning for the June Seminar occurred during the final project year. The event's topic was "Effective Strategies and Collaboration to Improve Adolescent Health." Over 235 individuals attended to hear Clair D. Brindis, Dr. P.H., and celebrate Babies First. The event was covered by four television stations (one Spanish) and two local newspapers (*The Fresno Bee* and *Vida en el Valle*). Dr. Brindis was interviewed by two of the television stations and *The Fresno Bee* newspaper. The newspaper articles are included in Appendix F and the TV coverage is included on the enclosed CD. Additionally, a local panel of individuals from six community agencies that work with youth increased awareness about local resources. The receipt of a new four-year Healthy Start grant was announced.

The Babies First Consortium's standing committee, the Perinatal Systems Committee (PSC), was convened to assist in the identification and development of strategies to address service gaps within the perinatal system which contribute to poor outcomes in Fresno County. This has been a public and private effort.

At a PSC Committee meeting in November 2001, Dr. John Scholfield, a pediatrician and a member of the Consortium, apprised the members of the importance of implementing a SART (Screening, Assessment, Referral, and Treatment) for infants and children. Studies prove that children exposed to substance abuse in utero have a higher risk for neurological and psychological problems after birth. Substance-exposed children are also more likely to develop behavioral problems and SART aims to identify and provide intervention to those children at risk. It was also reported that tobacco continues to be the worst substance used during pregnancy. The Consortium promoted the use of the “Pregnant Women’s Guide to Quitting Smoking,” which had been presented at the annual meeting in June 2001, by Richard Windsor, Ph.D.

The accomplishments of the various task forces are described below:

Perinatal Substance Abuse

The most notable accomplishment of the Consortium’s Perinatal System Committee (PSC) was the organized strategy to address perinatal substance abuse and the implementation of the Screening, Assessment, Referral and Treatment (SART) model of Ira Chasnoff, M.D. In the early 90’s, state and local perinatal substance use prevalence studies were conducted. Fresno County consistently had an 11 % use of drugs by mothers tested at delivery. During the first Healthy Start project period, the PSC conducted a community assessment of the resources within the perinatal substance abuse system, determined the level of perinatal addiction in the project area (10-15 percent of infants tox-positive at delivery), and found the community lacked a comprehensive approach to perinatal substance abuse intervention.

The Committee’s objective was to create an integrated system of care in which obstetrical providers screen pregnant women for possible substance abuse, provide field assessments if indicated, and assist with a referral to treatment. This group was successful in creating awareness and participation by physicians to screen and refer women to case management and other perinatal care services that address substance abuse. Prior to this organized strategy, many obstetrical providers did not screen and refer women for substance abuse. Those providers who did screen using toxicology tests and tried to refer the tox-positive women to treatment, found the few women’s treatment beds in the county were always full with women court-ordered to receive treatment, and the treatment centers lacked the capacity to accept any other referrals. They became discouraged and stopped their attempts to refer.

The 4Ps Plus screening tool has been incorporated in the health history provided during the obstetrical visit or during the nurse’s home visit and includes family history, partner history, and the client’s own history prior to knowledge of pregnancy which includes alcohol use (perceived as less intrusive as compared to illicit drugs) and tobacco use. This screening tool also helps assess domestic violence in relationship to the partner’s use/abuse. When incorporated with the health history, the subject of substance use becomes less invasive, allows for discussion, and screens for risk. When a woman screens positive on the *4Ps Plus*, it is immediately followed by a field assessment to identify and confirm substance use, after which a referral to treatment is made if the

woman agrees to treatment. This screening is conducted at least once each trimester and once postpartum.

The 4 Ps Plus screening and field assessment tool has also improved over the four years. In the beginning the tool had one page with the screening questions and then was followed up with a multiple page assessment of use tool with no section to note the interventions or referral(s) made. After several revisions, the tool became one page and incorporated the 4 Ps Plus screen, the field assessment, and the intervention and referral information. Changes in the tool have expanded the data that is collected and tracked, giving more complete information on the Screening, Assessment, Referral and Treatment (SART) process. These data have been used to identify areas that require additional work by the SART leadership such as the low rate 3-4 % accepting referral to substance abuse treatment.

In addition, a second substance abuse screening tool (with four questions) was developed for mothers case managed by MCAH PHNs during the postpartum period until the baby's second birthday.

Data collected and analyzed in 2002 reflected a high rate of client refusal of referral to treatment. Focus groups were held with the CPSP provider staff around what the client reasons for refusal were. Reasons given were the perception that treatment is for women who abuse a substance different than her drug of abuse, excuses such as a friend abused the same drug and her children are okay, or that she only abused marijuana and did not feel she needed intensive treatment service, or she continued to express fears around entering treatment.

This led to the development of the pre-treatment intervention provided in the OB office modeled after Kaiser Permanente Northern California's Early Start program, which has demonstrated in women receiving Early Start services, a reduction in the numbers of NICU admissions, number of ventilator days and overall cost to Kaiser. The pre-treatment manual, "I am Concerned: A Brief Intervention for the Primary Private Care Setting," was developed by Dr. Chasnoff and field-tested in seven CPSP OB provider sites. OMNI Women's Health providers agreed to gather data on CPSP women who were positive on the 4 Ps Plus before their staff were provided with the pre-treatment intervention training and use of the manual and also gather data on the women who received the pre-treatment intervention. The women who received the pre-treatment intervention did not become fearful, leave prenatal care, or change to a provider who was not screening for substance abuse by being shown graphic pictures of the impact of the specific drugs, i.e.; fetal alcohol syndrome babies or cocaine-exposed babies. They related that they did not realize the potential harm the drugs cause their babies; in some cases women reduced their drug use and others agreed to a referral to treatment.

In addition to the pre-treatment manual, a video of a jittery drug-exposed newborn was made available, as well as an 8 minute testimonial video, "You Can," featuring three pregnant or postpartum women in treatment talking about their substance abuse history

and treatment experience. The video was developed by Babies First's marketing subcontractor, Panagraph.

The referral process was established so the patient can be directly referred to the perinatal treatment programs or to MCAH for assistance in getting the pregnant substance abusing women into one of three perinatal substance abuse treatment programs. The Spirit of Woman and M'ella programs can send their staff to the OB office to meet with the patient and assist in the referral to treatment.

Children's Model of Care

During the planning and implementation of the SART, it became evident that a similar process and system needed to be established for infants and children prenatally exposed to substances. Supported by the pediatric community with developmental pediatricians and child advocates in the foster care system, it was determined that there was a fragmented (at best) process in the identification and intervention for children 0-5 years with at-risk histories. Once the SART model was implemented, the Perinatal Substance Abuse Committee transformed itself into a Child Study Group to address this issue.

A group of 16 community professionals attended a retreat in February 2002 to begin planning for a children's SART process in Fresno. Healthy Start provided funds for lodging at the retreat. In June, prior to the annual Babies First event, Dr. Chasnoff provided training for local judges on the issues; 72 judges and attorneys and key staff members from the Juvenile Drug Dependency Court attended the training and gave their support for the development of a Child Study Center.

In November 2002, a concept paper was submitted to First 5 Fresno requesting approval to submit a proposal in partnership with First 5 for a planning grant for a Child Study Center. This was approved, and a one-year planning grant proposal was funded by First 5 in February 2003. The final plan, "Putting the Pieces Together: Ensuring Access to Early Intervention for High-Risk Children Birth Through Five in Fresno County," was completed in April 2004 and is found in Appendix F.

Over 400 individuals from the community participated in the planning process. Parents of affected children were included in the interviews and planning process (conducted in English and Spanish), two town meetings were held with over 100 participants at each, and 60 plus interviews were conducted with experts and community partners and individuals to learn what the issues were. This effort was the most ambitious of all the "addressing the gaps" process for the Consortium.

The Model of Care is a public-private partnership drawing upon the experience of all who will be involved – from parents of high-risk children to the leaders of Fresno's institutions and agencies. The SMART Model is an integrated system of health and behavioral health care that will ensure access to appropriate early intervention services for children (0-5) years in Fresno County. The model is anchored by five core functions: Screening, Decision-Making, Assessment, Referral, and Treatment. The Smart Model will identify children ages 0-5 years who are at risk for medical, emotional,

developmental or learning problems and will move them into a system of care before they experience failure in school or enter the juvenile justice system.

In July 2004, Exceptional Parents Unlimited (EPU), the lead agency for the Model of Care's Children's Center, and Maternal, Child and Adolescent Health were awarded First 5 grants to open the Children's Center. This Children's Center, which opened in February 2005, receives referrals from the other community partners who screen children using the Ages and Stages Questionnaires to identify children at risk. A Model of Care Partners Oversight Committee, comprised of participating partner agencies, was established to provide direction, oversight, monitoring and to continue the effort to implement the model for all high-risk children in Fresno County. The MCAH Perinatal Services Coordinator initially served as Coordinator of the Oversight Committee, which met eight times during BY 2004-05. Since April 2005, she has served as a consultant to the committee and program staff.

Breastfeeding

Concerned about Fresno County's low breastfeeding rates (32% reported on 1999 hospital discharge data), the Babies First Perinatal Systems Committee's Breastfeeding Task Force was formally begun in January 2000. The task force has grown to nearly 100 interested members, representing the two Medi-Cal Managed Care plans, the six delivery hospitals, the children's hospital, WIC, private medical providers, the UCSF/Fresno School of Medicine-Pediatric and Obstetric Programs, MCAH nursing staff and the school district, as well as the CHDP nutritionist, the Perinatal Services coordinator, and the Regional Perinatal Services Program Coordinator. This task force meets monthly. It coordinated the effort to develop radio and television PSAs, billboards, consumer brochures, movie ads, and posters (in English and Spanish) and a stakeholder brochure. Radio PSAs in Hmong were also developed. A Hmong brochure and poster have also been developed, but not yet printed.

In June 2001, Babies First, in conjunction with the MCAH Division, submitted a proposal to the Fresno County Children and Families Commission (First 5) for the Babies First Breastfeeding Education, Training and Support Project to increase the capacity of perinatal providers to encourage and support mothers who choose to breastfeed their infants. The proposal was funded (\$500,000 over three years) in September 2001; these funds used Title XIX for matching.

The objectives of the project were to: create public awareness of the benefits of breastfeeding, increase the capacity of the perinatal system to support breastfeeding, increase the number of certified lactation counselors/educators in Fresno County; and to develop strategic plans with individual hospitals to increase exclusive breastfeeding rates at discharge.

Accomplishments of the project included:

- Breastfeeding mixed media campaigns each year;
- Participation in Babies First health fairs and neighborhood events;

- Celebration of World Breastfeeding Month each August; which included a proclamation from the County Board of Supervisors and a variety of community activities, as well as newspaper, radio and TV coverage;
- Development and distribution of a Breastfeeding Resource Directory, which was also uploaded to the Babies First website;
- Inclusion of breastfeeding educational materials , resources, and local resource information in the State First 5 Parent Kit distributed to all new mothers;
- Development of a Babies First Speakers' Bureau presentation and training for volunteers;
- Certified Lactation Education Counselor training to 226 individuals representing culturally diverse health and community service providers and train-the-trainer education to 21 community professionals (three were bilingual English/Spanish and one was bilingual English/Vietnamese) through a contract with University of California, San Diego Extension;
- Identification and distribution of ethnically, culturally and linguistically appropriate breastfeeding educational materials and resources to health care provider offices;
- Establishment of a Hospital Subcommittee to meet with local delivery hospitals to review barriers to breastfeeding and to assist with improving exclusive breastfeeding rates.

All objectives of the project were completely met and even surpassed, with the exception of the fourth. The original objective included finding a consultant to provide technical assistance and consultation to develop a strategic plan with each hospital aimed toward the adoption of the *Model Hospital Policy Recommendations* for breastfeeding. Although a consultant was identified, several meetings with hospital MCH coordinators made it evident that there were many barriers to accomplishing this objective. The Hospital Subcommittee continues to meet with the delivery hospitals to make progress toward improving exclusive breastfeeding rates. In 2005, Community Medical Centers convened an internal Breastfeeding Task Force to assess and develop strategies to improve breastfeeding rates at its facilities. Meetings were held in March and May.

As part of World Breastfeeding Awareness Month, Babies First partnered with Kaiser Permanente and the Tzu Chi Buddhist Free Clinic in the "Neighbors in Health" community event held in August 2003 and 2004. In addition to multiple clinical service booths provided by numerous agencies, a breastfeeding education booth staffed by English, Spanish and Hmong speaking volunteers conducted learning games. The newly designed Breastfeeding floor display (8'x10') was utilized. Over 2,000 participants attended the event. Babies First continues to participate in the Annual Neighbors in Health event. Only the Breastfeeding display is used, but materials are distributed about all Babies First services.

On March 8, 2002, the Babies First Breastfeeding Task Force sponsored a full day breastfeeding seminar featuring Dr. Paula Meier of the Rush-Presbyterian St. Luke's Medical Center, Chicago, Illinois. She presented on the topic of "Supporting Breastfeeding in the NICU" to 170 medical providers and support staff at Children's

Hospital Central California. In attendance were the five members of the neonatology group, who cover infants in all the NICUs in the County of Fresno. Prior to this seminar, the four NICUs in the community did not actively promote feeding neonates breast milk or support breastfeeding by mothers with infants in the NICU. Subsequently, breastfeeding rates within the NICUs have risen significantly, demonstrated by Children's Hospital having to purchase two large freezers to store all the breast milk that the mothers pump for their neonates in the NICU.

In June 2004, in conjunction with her presentation at the Consortium's annual event, Dr. Audrey Naylor from Wellstart International held a Breastfeeding Forum with three delivery hospitals. Dr. Naylor's keynote address and two breakout sessions at the event were entitled, "The Politics of Breastfeeding" and "Baby Friendly Hospital: A Work in Progress." These sessions included information on the development of evidence-based hospital policies and procedures for breastfeeding mothers and newborns. There was discussion about the "Ten Steps" and Model Hospital Policy Recommendations. Approximately 50-70 participants attended each breakout session.

Perinatal Depression

Establishing this task force proved more difficult than anticipated. The Perinatal Depression Task Force was envisioned to develop a strategic plan for outreach, education and community advocacy with respect to depression, similar to the plan implemented for perinatal substance abuse in years previous.

Many of the key community and agency members identified as critical to creating a strategic plan were already engaged in other pressing social concerns in the community and could not commit to regular participation. Other priorities gained greater focus for many key community players, and attention to perinatal depression was sidelined.

There also appeared to be reluctance in the perinatal provider community to begin formal screening for depression in part due to overburdened practice requirements and also because of concern that there were not community treatment resources easily accessible to assess women screening positive. Without specific attention given to strengthening a treatment system, these providers will not likely agree to implement wide spread depression screening in their practices.

Additionally, Fresno County Department of Behavioral Health Services declined to participate in a task force and specifically stated they did not have anything to offer Babies First with respect to altering systems or improving access for the perinatal population. Without this key player at the table, others lacked confidence that a Perinatal Depression Task Force could be an effective agent in developing a continuum of care for pregnant women with depression and other mental health issues.

A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis was conducted in October 2002; approximately 40 community members were present to discuss what they considered to be the strengths, weaknesses, opportunities and threats to developing specific screening and treatment services for the perinatal population. These members

consisted of Marriage and Family Therapists, Licensed Clinical Social Workers, Public Health Nurses, Medical Social Workers, and representatives from the community at large, along with project staff and other perinatal providers. This was to be the precursor to development of the task force. Good information resulted from the SWOT meeting, but a task force did not develop from it. It was decided that the Task Force would have a planning retreat in December 2002 to take an in-depth look at the results of the SWOT analysis and move forward with a strategic plan around the issue of perinatal depression. The retreat was cancelled when it was recognized there were too many conflicts with task force members' schedules and the holidays. The planning retreat was then re-scheduled for February 2003; it was again determined toward the end of December 2002, there were not enough positive responses for the three day planning session to move forward, and the retreat scheduled for February was cancelled.

Because there is so much overlap in persons involved in various aspects of perinatal services, attempting to address too many issues at once seems unproductive. Perinatal providers have very busy practices and therefore have limited time to devote to strategic community planning about issues as interconnected yet diverse as breastfeeding, mental health, substance abuse, family violence, prenatal care, and physical health issues. The key players for one are also the key players for the others. Multiple initiatives in the same time period necessarily require interested parties to prioritize their interest.

Involving persons, including Babies First staff, who have specific interest in perinatal mental health issues with other community initiatives working to improve overall mental health services and access (i.e. Mental Health Advisory Board, Fresno Metro Ministries, California Prop 63 Task Forces, First 5), may be more effective in promoting attention to these issues than a separate task force.

Collaboration and Coordination with State Title V and Other Agencies

Collaboration and coordination with State Title V occurred in developing a local needs assessment in 2004; in administration of the State's Medi-Cal Comprehensive Perinatal Services Program; the Toll-Free Hotline; Fetal-Infant Mortality Review; Perinatal Outreach and Care Coordination; Black Infant Health; nurse home visiting services for first-time mothers through the Nurse-Family Partnership and high-risk multiparous mothers using a comprehensive case management model.

The Babies First Consortium successfully collaborated with hundreds of other maternal and child health advocates across the state between August and October 2001, to restore the MCAH state general funds and their HCFA match (\$14 million) to the State MCAH Branch when they were eliminated by the Governor when he signed the State budget. California governors have blue-line authority over legislatively approved budgets prior to signing. The local effort toward policymakers was spearheaded by the consortium. Of all the funds eliminated by the Governor in the State Health and Welfare Agency, these were the only funds restored thanks to the legislature which unanimously voted to reinstate the funds, thereby sending a message to the Governor that they had enough votes for a veto override if he did not agree to restore the funds.

Having identified perinatal substance abuse as a barrier to reducing infant mortality and morbidity, the four California Healthy Start sites (Alameda, Fresno, Los Angeles, and San Bernardino) received approval to use Healthy Start Partnership funds received in 2000-01 to join with the California Conference of Local Directors of Maternal, Child and Adolescent Health (CCLDMCAH) to fund a statewide study of current services, practices, protocols and needs associated with perinatal substance abuse. In 2001-02, 30 counties, representing 80% of the births in the state, were surveyed by a consultant secured to conduct a statewide needs assessment regarding perinatal substance abuse. A report, "Working in Partnership: Needs and Opportunities for Improving Perinatal Substance Abuse Services in California," was published in July 2002. (A copy of this report is attached in Appendix F.) In December, a conference was held in Sacramento to share the findings of the report and initiate local collaborations. Counties sent local leadership teams, and well over 600 participants worked to identify ways to return to their counties to tackle this problem.

In Fresno, this effort translated into collaboration between the local National Training Leadership Institute (a subcommittee of the PSC comprised of local individual policy makers representing public and private agencies), Human Services System Administration, County Behavioral Health, Department of Employment and Temporary Assistance to develop a Perinatal Residential Treatment RFP in 2001. In 2002, M'ella House opened with 25 perinatal residential treatment beds, joining Spirit of Woman (residential) and the County-operated Perinatal Addiction Treatment and Health Services (PATHS) gender-specific outpatient treatment program focusing on the mother-baby dyad, which opened in 2001.

Collaboration with local CPSP providers resulted in the expansion of the SART model which had been implemented during the initial project period; a pilot project in 2003 for a Pre-Treatment model for substance abusing women not ready to accept treatment; the Breastfeeding Education, Training and Support Project; and the planning process for the Children's Model of Care to ensure access to appropriate early intervention services for children (0-5 years) at risk for medical, emotional, developmental or learning problems, which resulted in the implementation of the Child Study Center in 2004. In November 2004 and April 2005, a 13 OB provider sites were trained in the use of the pre-treatment model that had been piloted by 6 providers in the previous year, increasing the total trained to 19 sites.

Sustainability

At the termination of this grant, the core services of outreach, case management (through nurse home visiting) and care coordination services will be continued using state and local funds to match with federal (CMS) Title XIX funds. Currently MCAH Perinatal Outreach and Education Unit (the care coordinators) are funded through local, state and Title XIX for the entire county, including the project area. This has been the case over the past 12 years. The MCAH Division's use of federal financial participation (FFP) to enhance the perinatal system serving Medicaid eligibles (women and children) is included in the state's Medicaid plan, and local health department MCAH programs are eligible to apply for these funds through their annual MCAH allocation process from the state MCAH Branch.

Two of the six CHOWs (under contract with EOC) are currently funded by MCAH using local, state and federal Title XIX funds rather than by Healthy Start. The four Healthy-Start funded CHOWs could be funded in the same way. This was made necessary because of increasing costs and fiscal constraints imposed by the federal grant limit. The local MCAH “Moms and Kids” Toll-Free Hotline was developed 12 years ago and continues to be maintained with Title V funds. The Hotline is critical to Babies First outreach and will continue under the terms of the allocation agreement with the state MCAH Branch.

Additionally, MCAH has formal MOUs with the two Medicaid managed health care plans in the county (Blue Cross and Health Net). Clients also have access to SCHIP. Both of these programs are described previously in Project Implementation, Part E, Sustainability.

Progress toward achieving sustainability for the Consortium took several twists and turns (See Project Implementation, Sustainability, Part B). In January 2004, Ms. Edwards, the consultant, facilitated a one-day strategic planning session for seven MCAH/Babies First supervisors. After discussion of successes and strengths of the Consortium and of lessons learned, future objectives were identified and a new model was developed. Aware that the Consortium’s strength has been found in task forces convened to meet community needs, such as perinatal substance abuse, breastfeeding, and, most recently, a child study group, the future model consists of task forces convened to tackle specific issues identified by MCAH and the Perinatal Systems Committee (a coordinating body). Each task force will have clearly stated responsibilities and expectations and a time-limited commitment. Each task force will report on progress at the end of the year and make recommendations for next steps. New priorities will be established each year. The annual Consortium event will continue to bring all members together at least one time each year.

V Project Impact

A. Systems of Care:

1. The Consortium, through its Perinatal Systems Committee, was very successful in developing an infrastructure for system integration and brought providers from many areas of health and human services together to improve the care delivery system. The project’s impact was focused in four areas:

- Public awareness and outreach to link mothers and infants to the perinatal system
- Perinatal Substance Abuse, including Screening, Assessment, Referral and Treatment for pregnant and parenting substance abusing women
- Breastfeeding
- Identification and early intervention services for high-risk infants and young children.

Public Awareness and Outreach

Babies First public awareness efforts were paramount in building an infrastructure among perinatal providers who assist in the effort to reduce infant mortality and morbidity.

Perinatal providers receive referrals of women in need of prenatal care from Babies First, and, in turn, the providers refer high-risk pregnant women to the program for case management, substance abuse, and other needed services. Public awareness was raised through the mixed media campaign, which included TV and radio PSAs, a video, billboards, bus and movie theater advertising, and through printed stakeholder brochures developed specifically for the provider community. Every “product” has the Moms’ and Kids’ toll-free hotline telephone number prominently displayed, and Moms’ and Kids’ hotline cards are distributed everywhere in the community. For additional information about the public awareness (marketing) campaign and the Moms’ and Kids’ hotline, refer to Section B, “Impact to the Community,” which follows this section.

The provider community has collaborated with Babies First by participating in the Consortium and taking an active involvement in the perinatal substance abuse, the identification of and early intervention services for high-risk infants and young children, and breastfeeding efforts, all of which are described below.

Perinatal Substance Abuse

The first public-private leadership team was convened in 1998 to focus on perinatal substance abuse. At the conclusion of the first Healthy Start grant, a Screening, Assessment, Referral and Treatment (SART) model had been implemented in Fresno. Dr. Chasnoff’s copyrighted 4Ps Plus screening tool for perinatal substance abuse had been adapted for Fresno County. MCAH Public Health Nurses and 20 CPSP providers had been trained in its use of and were finding women in need of assessment, referral and treatment. During the project period, the number of provider sites screening pregnant women utilizing the 4 Ps Plus and providing the 4 Ps Plus form with no patient identifiers to MCAH increased from 20 to 37. In the beginning the screen was not routinely completed on all CPSP clients by every CPHW in the office. Trainings have been provided to reinforce the importance of all women being screened, with the exception of those women who self-disclose their use. Women who are positive are asked the field assessment questions, and an intervention is provided for those women who are positive on the assessment.

Currently, 37 OB providers who routinely screen and assess for substance abuse refer their patients to one of three gender-specific treatment programs, two of which were developed out of a public and private partnership under the Consortium. From July 1, 2002 through May 31, 2005, CPSP providers and MCAH PHNs conducted 21,290 screens, with 3,542 (16 percent) positive. Eight percent (1709) resulted in positive assessments, and 23 percent (394) of those with positive assessments accepted a referral to treatment. Efforts continue to expand the number of providers and to improve post assessment interventions once the woman is identified as using substances. Convincing pregnant substance abusing women to enter treatment presents a challenge, and keeping them in treatment is the greatest challenge.

The original NTI Team identified the lack of gender-specific perinatal substance abuse treatment capacity to treat the women who were being identified even without universal screening. In this grant period the team worked with the Fresno County Human Services System’s DCFS, ET&A and MCAH to collaborate on the specific requirements the County

wanted incorporated in perinatal substance abuse treatment contracts. The separate departments pooled their funding resources and produced a gender-specific perinatal substance abuse RFP. This has changed the way perinatal substance abuse treatment capacity is funded and provided.

In 2001 the County opened the Perinatal Addiction Treatment and Health Services (PATHS) the outpatient gender specific substance abuse treatment program. The program can accommodate up to 240 women and has a licensed child care facility on site. The children accompany their mother to the program and are incorporated into the treatment program. The Clinical Director of the PATHS program is a member of the Leadership Team.

During this grant period, the Spirit of Woman residential treatment program increased its treatment capacity from 16 to 50 residential beds. A portion of the funding to expand this facility came from the contract that was awarded under the perinatal RFP which the Leadership Team and its consultants wrote for the County. It is privately owned and operated. It is currently operating on the grounds of a residential facility that formerly housed the chronically mentally ill. The grounds are comprised of 35 apartment units that can accommodate two women with their children. The facility also has treatment rooms and a trailer that is set up to be the therapeutic child care program. Women in the Spirit of Woman program are provided with mental health services provided under special funding that the director, Audrey Riley, has secured. Audrey Riley is a member of the current Leadership Team.

The third program which was opened during this grant period is the M'ella program operated by the West Care Corporation. The program was awarded a County contract under the new perinatal RFP. M'ella is part of a large complex that was formerly a skilled nursing facility. A portion of that facility is devoted to the perinatal program. The rooms are shared by two women and their children. There are designed treatment rooms and child care facilities that include an attached play ground. The Clinical Supervisor, Lynn Pimentel, is a current member of the Leadership Team.

The NTI Leadership Group, established in 1999 continues to meet regularly to conduct strategic planning and policy development to integrate the service delivery system for substance abusing pregnant and parenting women and their children. Membership has changed over the years; some of the original key stakeholders in establishing SART for pregnant and parenting women have moved or retired and current membership is comprised of leaders and stakeholders who have a vested interest in perinatal SART.

Members of the new Leadership Team established in January 2005 are: Gail Newel M.D., private OB/GYN; Elizabeth Woods M.D., perinatologist and faculty member of the UCSF Fresno Department of OB, Medical Education Program; Lynn Pimentel, Director of the WestCare/ M'ella perinatal substance abuse treatment program, Audrey Riley Director of Spirit of Woman treatment provider Al Grasso, Clinical Supervisor for the PATHS program; Gloria Fitzgerald, MCH Director for Community Medical Centers; Katherine Walker of the Department of Children and Family Services; Kay Cone-Olson of Employment and Temporary Assistance; Edward Moreno, Interim Director of Community Health-Health

Officer; Dennis Koch, Deputy Director of AOD; Rebecca Carabez, Ph.D., Division Manager for MCAH; and Laurie Misaki PSC. Members of this new team will be having a Leadership Institute in November 2005.

This team is committed to continuing implementation of the SART process to establish a comprehensive perinatal substance abuse community intervention. Universal substance abuse screening of all pregnant women in Fresno County has been a primary goal. The perinatal system has changed through Babies First efforts; CPSP providers in 37 sites, who see over half of the pregnant women in this county, now routinely screen all their pregnant and postpartum women. The 4 Ps Plus screening is done in the context of the patient's relationship with her OB provider and their staff, not in a laboratory through a urine tox screen. The approach of taking a medical history, linking it to the screening, followed by educating the pregnant woman on the risks of substance abuse to her unborn child and to her did not drive women out of prenatal care.

MCAH has partnered with the CPSP OB providers to complete the screen and field assessment if the screen is positive, as well as complete the referrals section. Providers submit the NCR copy without the patient identifier to MCAH monthly. This raw data has been inputted to create an MCAH local perinatal substance abuse database. In place of very old prevalence data collected through tox screens only for a six week window of time as women entered the hospital to deliver, MCAH has data on the number of screens completed each month, the numbers of positive assessments, and the type of referrals or interventions made. This data now provides a mechanism to evaluate, monitor and improve the SART intervention process.

In an analysis of the 4 Ps Plus data, the whole SART process was reviewed. Data revealed that 30-40% of the women, who disclosed in the field assessment that they were using substances while pregnant, declined a referral to substance abuse treatment and no action was taken for another 40% of women because, for the type of the problem identified, the CPSP staff did not have another treatment option that was acceptable to the client. With that information, the pre-treatment option was created. The pre-treatment intervention is modeled on the psycho-educational approach utilized in the Early Start program developed by Kaiser Permanente Northern California.

In addition to the Kaiser Permanente Early Start program in Fresno, 37 CPSP sites (that is, half of the perinatal provider network) screen, assess and, in 19 sites, provide pre-treatment intervention in the OB office. Within the relationship formed between the provider and the patient, the substance abusing pregnant woman is provided specific information on her drug/drugs of abuse, using the Pre-treatment book which contains a list of the effects on the infant, child and mother for each drug, including tobacco and alcohol, a video and photos of substance-exposed newborn infants. Pre-treatment is described in greater detail in the Consortium Accomplishments section.

The outcome of the implementation of the SART process is that a comprehensive system to screen (S), assess (A), and refer (R) using the 4 Ps Plus screening and data collection tool has been incorporated into routine prenatal care in 37 OB sites. This perinatal substance abuse

intervention system also includes an additional 25 perinatal residential treatment beds and 240 perinatal outpatient treatment slots for women to receive perinatal substance abuse treatment (T).

Breastfeeding

The most notable accomplishment for the Breastfeeding Task Force was setting a goal of increasing the exclusive breastfeeding rates for the County of Fresno and reversing a downward trend. Results of surveys of providers and hospitals in 1999 and 2000 indicated the lack of education and training of the perinatal providers and pediatric providers to educate and support pregnant and postpartum women in breastfeeding, lack of public awareness as to the health risks of not breastfeeding, and the lack of hospital policies that support breastfeeding.

The exclusive breastfeeding rate for Fresno was 32% in 1999 with only 6-7% of WIC mothers breastfeeding. The task force developed a strategic plan that worked on making changes in the perinatal system of care on the public awareness, perinatal and pediatric provider education and training, hospital practices. The plan was formalized in writing a grant for funding.

First 5 Fresno funded a Babies First Breastfeeding project to provide for a public awareness campaign, medical provider education, 40 hour lactation training for 200 people, and work with hospitals to implement the Model Hospital Policies. These four strategies were implemented during this grant period. With the mixed media campaigns to increase public awareness, three medical provider education seminars, 200 lactation educators and counselors trained, and policy and/or practice changes being effected by hospitals there has been a slight improvement in the data.

As part of the project, over 45 CPSP provider staff attended the 40-hour lactation training from 32 CPSP sites. In addition, Babies First has provided breastfeeding materials to the CPSP providers to give to their clients to educate them about making an informed infant feeding choice. The training, materials, and other resources for providers has increased the capacity of OB providers to educate and support mothers in breastfeeding. The latest State Department of Health Services breastfeeding data indicates that in 2002 Fresno County had increased its overall exclusive breastfeeding rate to 34.9%.

Children's Model of Care

The original NTI Leadership team educated a number of other community partners about the impact of perinatal substance abuse on infants and children. From that effort, a number of new partners who work with children collaborated in a communitywide effort to identify these high-risk children and link them to early intervention services. Two Children's Leadership community teams worked to complete a grant application to First 5 Fresno for a one-year planning process, followed by implementation of the Model of Care for High-Risk Children in Fresno County. The plan was to reduce fragmentation and duplication and change the way services are provided to high-risk children. The children's stakeholders;

Department of Children and Family Services (DCFS), Department of Community Health (DCH), Central Valley Regional Center (CVRC), Fresno Unified School District (FUSD), Exceptional Parents Unlimited (EPU) and Department of Employment and Temporary Assistance (E&TA) have signed a formal agreement to support the Assessment Center for Children through funding and/or staff being collocated to operate the Center. The agreement states that the stakeholders will work towards the best interest of the child regardless of funding source and honor each other's assessment.

In December 2004 the Model of Care Partner Oversight Committee was formed. The six partners (found in preceding paragraph) and First 5 provide oversight and evaluation for the model.

Screening and decision-making in the community began in May 2005. First 5 provided the Ages and Stages Questionnaire (ASQ) and the Ages and Stages Questionnaire Social and Emotional (ASQ-SE) training for the Department of Community Health and will train others in the community, including child care providers, preschools and others to screen children in the community for risk and refer the children identified as at-risk to the Assessment Center for Children located at EPU.

It has taken time for EPU to put together the collocated team comprised of staff from CVRC, E&TA, DCFS, FUSD and EPU. Seven EPU staff are funded by MCAH's First 5 grant matched with Title XIX funds. These staff members facilitate access to assessment and treatment services. The professional staff completes the comprehensive assessment that includes a developmental, mental health, learning disability and physical assessment and treatment plan.

With the implementation of the Model of Care, an integrated system of care is in place for screening; decision making is occurring in the community; and referrals are going to the Assessment Center, which completes a comprehensive assessment and care plan completed with linkages to community treatment resources.

2. Training and procedures for using the 4Ps Plus screening tool have been established and are being followed by Babies First PHNs and 37 CPSP providers. As the MCAH case managers or service providers in the community identify a pregnant women who is using alcohol or illicit drugs, a referral is made to the MCAH Outreach and Health Education Supervising PHN. The PHN supervisor has resources readily available for the perinatal medical providers and the community.

In an effort to integrate a substance abuse system within the county, the Human Services System funded 20 Substance Abuse Specialists (SAS) throughout the system. One of the three designated to the Department of Community Health was assigned to MCAH. This SAS acted as a resource and team member to the MCAH outreach, care coordination, case management, and perinatal service providers. The SAS was originally located at the PATHS facility, the County's gender-specific outpatient treatment program, and assisted in linking women who screened positive on the 4Ps Plus to treatment.

In June 2004, the Substance Abuse Specialist position was transferred to the MCAH Perinatal Outreach and Education Unit. Referrals from CPSP offices which showed a positive screen and assessment for substance use were contacted by the SAS. When contact was made, the SAS attempted to schedule a home visit with the client and offered a referral for an outpatient or residential treatment program. If the client consented, the SAS advocated for the woman's barriers to enter the program such as child care, transportation, or payor source for the services. The referral was then assigned to either the PHN home visitation program or care coordination for follow-up. SAS activities included maintaining current knowledge of system and community-wide resources including survival skills; substance abuse treatment, medical and addiction services to include the criteria and process to access these services; special health services; aftercare services; family services; educational and vocational services; and, methodologies and strategies in working with pregnant and parenting women.

In 2005, an additional process was piloted. Seven OB sites and another office with two private OBs began to call the SAS directly while the client was in the office in order to link women who were identified as using substances while pregnant to perinatal substance abuse treatment. The previous process of faxing in a referral and then having the SAS contact the patient on her own outside the OB provider office often took too long or the patient changed her mind about treatment. During the three-month trial, the SAS was able to link a higher percentage of women to treatment by going to the provider offices.

At the end of BY 2004-05, due to budget constraints, the SAS was transferred to the Department of Behavioral Health to work in the PATHS facility; consequently, Babies First began to develop a new means to provide linkage to substance abuse services during the new grant period.

3. Relationships built by the project with providers and community agencies are reflected in the list entitled "Babies First Community Partners," which is included in Appendix B. Additional relationships involving consumers and community leaders are found in Section B, "Impact to the Community."

The MCAH Division is responsible for the local administration of CPSP (Medi-Cal's Comprehensive Perinatal Services Program), which has been described in Section II, "Collaboration and Coordination with State Title V and Other Agencies". The CPSP program has been actively involved in the perinatal screening process (SART) recommended by the Babies First Consortium's Perinatal Systems Committee for case management nurses and local perinatal providers to identify pregnant women at risk for ATOD. CPSP has a reimbursement mechanism under California's Medi-Cal plan to cover the psychosocial assessment, which now includes the 4Ps Plus screening and field assessment, by the provider.

The MCAH Division Perinatal Services Coordinator is a member of the local San Joaquin Sierra Regional Perinatal Program, a Title V funded program in California. As a member of the executive committee, the MCAH Division's Perinatal Services Coordinator and other local MCAH staff participate in regional needs assessments and ongoing committees for the region's activities. Likewise, the Regional Perinatal Coordinator is a member of the Babies

First Perinatal Systems Committee. The Regional Coordinator has attended the Breastfeeding Task Force Hospital Subcommittee and is involved in improving the breastfeeding training for hospital nurses.

Collaborating with MCAH in perinatal outreach and education are the Fresno County Department of Employment and Temporary Assistance (E&TA), which refers pregnant women/infants applying for services, and the Community Health Department's Public Health Nursing unit, which provides intensive informing to eligible and potentially eligible women and their families and refers them to the outreach staff. These referrals, together with the toll-free hotline (promoted through local combined efforts of MCAH Babies First mixed-media marketing) and the MCAH POE unit staff, link women and/or their infants with providers/plans and related services such as housing, Medi-Cal, food, WIC, etc.

Babies First has a formal MOU with the two Medi-Cal managed care plans responsible for the health care needs of all welfare-linked Medi-Cal beneficiaries in the county. The MCAH/Healthy Start Outreach Coordinator has developed a working relationship with the two commercial plans in the referral/case-management/coordination aspect. Referrals for transportation and other critical services for clients within the project area are referred directly. With the implementation of screening of all pregnant women for alcohol, tobacco, and other drugs (ATOD) by their perinatal provider, it is anticipated the plans will need to become more involved to support and reimburse for this screening.

Locally, MCAH is actively involved with other MCAH and family health programs impacting the perinatal system as well as other overall community activities to enhance the health and well being of children, youth and families. Some of these include domestic violence prevention (administering a competitive grant on behalf of two large local coalitions - The Domestic Violence Roundtable and the Interagency Council for Children, Youth and Families). This program has created a highly successful campaign, *Count to Ten*, which is designed to create an awareness in the community of the effect of domestic violence on children and families.

The Babies First Project Director and staff facilitate the coordination of MCAH programs with other key programs serving women and children within the Human Services System and throughout the community. These include mental health services, children's medical services, CHDP, EPSDT, high-risk infant follow-up, substance abuse and tobacco programs, child protective services, Medi-Cal eligibility services, WIC, family planning, and teen pregnancy prevention projects.

4. a. California has provided Medi-Cal services to all pregnant women at 200% of poverty or below - including non-qualifying aliens (covered by state funds only) - for pregnancy-related and emergency services since 1989. Those at 100% poverty level who meet the alien status qualify for full-scope services. In addition, Medi-Cal has adopted two federal Medicaid options. First, for Medi-Cal eligibles, "presumptive eligibility" which provides perinatal services for pregnant women for up to four consecutive months while their Medi-Cal is being determined and reimburses the perinatal provider even if the woman is deemed ineligible or fails to follow through with the application process. Second, "continuous

eligibility” which allows for coverage to continue throughout the pregnancy and postpartum irrespective of any other circumstances. These two options allow for early and continuous prenatal care for all women eligibles and beneficiaries.

The infants of Medi-Cal beneficiaries up to 200% of poverty level are all eligible for full-scope Medi-Cal coverage and have continuous eligibility for one year following birth. Following their first birthday, these infants either remain on Medi-Cal with annual determinations of eligibility or are enrolled in California’s SCHIP program. SCHIP is known as “Healthy Families’ California. It covers children over the age of one who are under 200 percent of poverty who do not qualify for Medi-Cal. This program is administered by the “private” for-profit health plans and not subject to the EPSDT or other federal Medicaid standards. Babies First/MCAH staff in the perinatal outreach, care coordination, and case management and project partners are knowledgeable about linking infants over one year and other children with this program and were trained to assist clients in completing applications. The state’s Child Health and Disability Program, administered by the Community Health Department under “Nursing Outreach Services” Division, provides the “Gateway” program to SCHIP. The Moms and Kids Hotline links callers directly to this program.

b. Prior to Babies First, barriers to access and service utilization and community awareness of services included: a lack of comprehensive case management; fragmentation, often caused by categorical funding; limited access to services due to lack of transportation, child care or translation services; lack of gender-specific perinatal substance abuse services; no system to meet needs of high-risk children; limited capacity to educate about and support breastfeeding; and lack of screening for perinatal depression. Babies First has been successful in mobilizing the community to eliminate some of these barriers. Additionally, public awareness activities have made the community aware of services available. All of these topics have been discussed elsewhere in this narrative.

c. MCAH/Babies First care coordination, provided in conjunction with perinatal providers, has been previously described in Section II, Project Implementation, under Case Management.

The Babies First Perinatal Systems Committee’s Perinatal Substance Abuse Leadership team assessed services for pregnant substance abusing women and their children. It was evident that there was a lack of services and care coordination for drug-exposed infants and children. Despite state legislation, drug-exposed infants are not routinely identified and linked to services. The Department of Children and Families Services and the Juvenile Dependency court team members had assessed their agencies and concluded their system was overwhelmed with children that had not been identified as drug exposed, had not received a comprehensive assessment and early intervention services. Public health nurses within MCAH and CHDP identified that when they had infants in their case loads that needed developmental or mental health assessments to access services, it was very difficult even as nurses to get the children assessed and that families faced even more barriers. School districts indicated that more and more children entering school are struggling, creating a growing number of special education students beginning in kindergarten as well as high numbers of children K-3rd grade being expelled from school for behavioral issues.

This assessment led to the creation of a Children’s Planning Group that partnered with First 5 to develop a plan to provide a comprehensive approach to identify, assess and link children to early intervention services. That plan became the Screening, decision-Making, Assessment, Referral and Treatment (SMART) Model of Care. The model includes the Assessment Center for Children. The center is staffed with assessment and intervention staff, as well as with Children’s Services Coordinators who facilitate access to assessment and treatment services. In addition, the Model of Care Partner Oversight Committee was created to coordinate the screening and decision making functions in the community, the assessment and treatment planning functions, and linkage to recommended treatment or intervention services within the Model of Care.

d. Upon enrollment, Babies First clients in case management and care coordination sign permission slips which include release of information to share information with perinatal providers and other members of the health care team. Referrals from physicians to the program include similar permission slips for sharing information.

5. a. Babies First has developed and provided culturally appropriate health education materials to perinatal providers in Fresno County. These include subjects such as the importance of prenatal care, breastfeeding, tobacco use, substance abuse, and perinatal depression. All materials are published in English and Spanish; some are also available in Hmong. All products reviewed for cultural and linguistic appropriateness in focus groups comprised of consumers.

b. With the exception of the *4Ps Plus*, which is a research- and evidence-based tool for screening for substance abuse by providers, and the *Edinburgh*, the perinatal depression screening tool, all other assessment and intervention tools are based on California’s Department of Health Services-approved CPSP tools, which have been implemented statewide among providers. Locally, MCAH utilizes the model developed by Dr. David Olds for nurse-family partnership and the Black Infant Health model, which Fresno County helped to develop for care coordination and case management. This model has been documented to be highly effective in reducing African-American infant mortality.

B. Impact to the Community:

1. The project’s marketing/public awareness campaign has succeeded in making “Babies First” a household name and a resource for the community. When individuals or agencies have a need for information or assistance with maternal, child and adolescent health topics or planning for an event, they seek out Babies First. During the first project period, materials related to the importance of prenatal care, Babies First nursing and care coordination programs, breastfeeding, and perinatal substance abuse were developed in English, Spanish, and Hmong (where applicable). During the past four years, additional materials were developed about Black Infant Health, the SART process, breastfeeding and perinatal depression. The slogan, “People Who Care, “People Who Help, People You Can Trust,” and the Moms and Kids Toll-Free Hotline number are included on all printed materials and advertising products.

Successful partnering with neighborhood associations, the community-at-large, and other organizations have resulted in various activities, such as block parties, health fairs, ethnic and/or family celebration events, from which emerged new awareness and utilization of Babies First services. Community partners provided great support in the coordination of the events by involving volunteers from specific neighborhoods. One or more Babies First displays at each event highlighted program services and health/social services information. Incentive items (such as pens, pencils, key chains, magnets) were given away to attract attendees to the booths and to promote the Babies First program. These events clearly showed the emerging community-based partnerships, which can be sustained by the community partners in future years, and will lead to greater recognition and support of the respective communities and greater consumer involvement. There were 158 events held from July 2001 through May 2005.

A toll-free Moms' and Kids' Hotline, (a Title V project) available in English, Spanish, and Hmong, is in operation 24 hours a day and provides referrals to perinatal/pediatric providers, help with getting Medi-Cal, WIC, immunizations, family planning, breastfeeding support, substance abuse treatment, and 24-hour domestic violence emergency services. Wallet size cards available in three languages are distributed throughout the community. The Babies First mixed-media marketing campaign displays and promotes this number in its marketing efforts. During each media campaign, calls to the hotline increase significantly. The response to the most recent Babies First media campaign offers a good example: from January through April 2005 (when there was no media), an average of 300 calls was received per month; when a campaign began in May, that number rose to 641 and in June, 681.

The Babies First website has provided educational information to the community and to providers and assists the community in accessing services. The website is described in Section IV, Project Accomplishments, under Health Education and Training.

These activities have translated into recruitment of women into the Babies First Program and facilitated the work of the CHOWs who carried out street outreach. The women most appropriate for case management were found and successfully recruited. Additionally, the visibility of Babies First in the community enhanced the trust of potential families who would qualify for its services.

2. In 2003, voters in California were asked to approve Proposition 54, which would have prohibited the collection of data related to race, ethnicity, color or national origin. Public health officials agreed that this would make it difficult to conduct research or apply for grants which aim to reduce ethnic and racial health disparities. After the *The Fresno Bee* published an article (September 2, 2003) which included interviews with a Babies First client who indicated no opposition to her race being known and with Connie Woodman, Babies First Project Director, Babies First was contacted by reporters from ABC News with Peter Jennings who wanted to prepare a feature about Proposition 54 and the possible ramifications nationwide. Both the client and the Babies First Senior Staff Analyst were interviewed for this feature. The client received a significant amount of air time, and the Babies First

Analyst explained how how Babies First would be affected if unable to collect these data when applying for federal grant funds. The article is attached in Appendix F.

3. Babies First has not experienced significant divergent opinions in its communitywide efforts. When a problem is clearly identified and a vision exists, the community can be mobilized to work in collaboration and partnership. During the SART process, Dr. Chasnoff and Dr. McGourty conducted an NTI Leadership Institute focused on community team building to address perinatal substance abuse. From this initial NTI Leadership Team a second Leadership Team that focused on reducing the impact of perinatal substance abuse on children was birthed. This was the Children's Planning Group, also facilitated by Drs. Chasnoff and McGourty. During the development of the Children's Model of Care, however, there was a difference in vision which delayed completion of the plan until resolved by the coordinating team.
4. As a result of the implementation of the Children's Model of Care, 11 new positions have been created at EPU and funded by First 5. In addition, 9 positions have been funded by MCAH and First 5 for children's service coordination and linkage to the model of care. In addition, as a consequence of the Breastfeeding, Education, Training and Support project's success at increasing the number of women who are initiating breastfeeding, a Center for Breastfeeding Medicine has been established at CMC-Fresno. Providers refer lactating women when they experience medical complications, such as mastitis, insufficient milk supply, or infant sucking problems. CHOW experience has fostered career advancement opportunities that require enhanced skills for care coordination and/or health education positions which periodically become available through Fresno County as well as through local providers' offices. Additionally, one client became a Health Education Assistant (Care Coordinator) in the Department of Community Health and now has a BA in psychology. A second client became a Health Aide in the Comprehensive Case Management program during the first project period.

C. Impact on the State

Fresno's MCAH Division has an excellent working relationship with the California Department of Health Services, Maternal, Child and Adolescent Health Branch, which serves as the state Title V agency. It is the Babies First project and Consortium's primary link to the state. Healthy Start funds have allowed for including state and local Title V staff to attend the national Healthy Start meetings in the past. The national focus on integrated services and collaborative efforts was helpful in conveying the national effort in developing a comprehensive seamless system of care at the local level. While MCAH has advocated for this approach, efficiently blending resources at the service delivery level with a streamlined system for the clients, it has not always been supported by some of the categorical program consultants at the state and local level. The state and federal partnership effort has promoted this approach.

Statewide Perinatal Substance Abuse Needs Assessment

During the second year of the initial grant, the four California Healthy Start sites agreed that treatment for perinatal substance abuse was an issue of the highest priority. All four programs were challenged in their effort to reduce infant mortality and morbidity because of substance abuse by pregnant and parenting women. Using Healthy Start Partnership funds awarded in 2000-01, the sites joined with the California Conference of Local Directors of Maternal, Child and Adolescent Health (CCLDMCAH) to fund a statewide study of current services, practices, protocols and needs associated with perinatal substance abuse. A no-cost extension was received to conduct this study, which was completed in June 2002.

The study examined issues related to perinatal substance abuse and how it is being addressed in California by maternal, child, and adolescent programs; mental health and alcohol and drug jurisdictions; and child welfare, detention, court systems, and health care providers. The survey covered the continuum of care, including identification during pregnancy and screening, treatment services, recovery and support services, local and state collaboration, and cooperation among involved organizations. MCAH Directors also gave their perspectives on needs and service gaps. Approximately 50 MCAH and other experts from various state and local disciplines convened in Sacramento and reached consensus on opportunities to improve services for pregnant and parenting substance-abusing women, and made recommendations for action and next steps. The results are expected to assist with recommendations for program and policy improvements to increase the availability of gender-specific treatment for pregnant and parenting substance abusing women. The full report, *Working in Partnership: Needs and Opportunities for Improving Perinatal Substance Abuse Services in California*, and the Executive Summary are included with this document in Appendix F.

This report was the framework for a statewide meeting planned for December 11, 2002, sponsored by the State MCAH Directors. The objective was to discuss as a state the findings and recommendations and begin to look at building partnerships to address the findings of the report.

In 2003, the Perinatal Services Coordinator and the MCAH Coordinator presented Fresno's experience in mobilizing a community effort to intervene in perinatal substance abuse to MCAH Action. After that presentation other communities began to ask who they need to mobilize and how to put plan together and how to implement the plan. They began to convene community teams, knowing the members need to be from the highest level of decision makers among the stakeholders in the community. Many of these communities have also contracted with Dr. Ira Chasnoff for consultation and use of the 4 Ps Plus. Fresno's MCAH Director and PSC are often consulted by other communities when they are putting together their plans or during the implementation of their plans. The success of the perinatal SART model using the 4Ps Plus in Fresno and other communities has been cited in discussions with MCAH Directors statewide. The MCAH Directors are exploring how the state could adopt SART using the 4Ps Plus as the model for the entire state.

The Babies First Breastfeeding Task Force has been identified by the state Department of Health Services WIC branch and the California Breastfeeding Coalition, a statewide organization, as an effective coalition making system changes in Fresno. At the Department of Health Services-sponsored Perinatal Service Coordinator's statewide annual meeting held in November 2004, information on the Babies First Breastfeeding resources and materials were shared with over 50 other counties and the state MCAH staff. The state staff and other counties learned how Fresno had provided lactation training and incorporated breastfeeding into CPSP. In addition, counties inquired about copy right and if they could duplicate the Babies First breastfeeding materials. Other coalitions have looked to Fresno's Babies First Breastfeeding Task Force as a model for their communities.

D. Local Government Role

The Fresno County Human Services System provided services to the community through its Departments of Adult Services, Children and Family Services, Community Health and Employment and Temporary Assistance. From its formation as part of the Department of Public Health over 50 years ago, the Department of Community Health has provided treatment and preventive health care services through a comprehensive, collaborative, public and environmental health system utilizing the core public health functions of community assessment, policy development, and assurance. The Director reported directly to the Fresno County Board of Supervisors.

In 2004, the Human Services System divided into four separate departments: Behavioral Health (formerly Adult Services), Children and Family Services, Community Health and Employment and Temporary Assistance. All are committed to serving the residents of Fresno County, in particular the underserved, through a wide range of community education, case management, and clinically based programs offered throughout the community. These departments have a proven track record in building community-based coalitions in order to tackle community health issues. Additionally, the Department of Community Health has had extensive experience in the development, implementation, and evaluation of prevention activities and programs.

The Department of Community Health and the MCAH Division have endeavored to accomplish a seamless system of care for clients and have significantly improved integration of services for pregnant and parenting women within the four departments and between the departments and the community. Fresno County adopted the SART process and committed to integrate a process where a pregnant client identified with substance abuse issues gets a "warm hand off" in accessing services. When completed, this integration will mean that SART functions independently and allows movement across the system. No matter where the pregnant woman enters the system, once the client has been identified at risk and in need of services, this coordination will occur throughout the departments. The new Leadership Team is focused on achieving this integration.

After the establishment of the PATHS program, the coalition identified the need to increase the perinatal substance abuse residential treatment capacity. As a result, the County HSS

Administration, the Departments of Children and Families, Employment and Temporary Assistance, and Community Health/ Maternal Child and Adolescent Health Division, with consultation with the National Training Institute, developed a Perinatal Residential Treatment RFQ. With the development of the new RFQ, which included new requirements for gender-specific treatment, therapeutic child care and linkages to health care services, the County changed what was required by Fresno County in its perinatal substance abuse services contracts.

As described previously, Babies First has spearheaded communitywide efforts to develop an integrated, comprehensive system to address perinatal substance abuse, a children's model of care, and to increase breastfeeding rates. These efforts have been aided by having established relationships with other county departments and agencies.

C. Lessons Learned

As previously indicated on numerous occasions, the most significant lesson learned by Fresno Babies First is that recruitment of consumers to participate in the Consortium has been difficult. Although residents of the project area who have influence and/or resources in their neighborhood have joined, users of Babies First services will not. Nurse case managers ask their clients to attend Consortium meetings, but they decline. They have, however, participated in focus groups and neighborhood events. The women served by Babies First are very poor and disenfranchised; sometimes undocumented; approximately one-third do not speak English; approximately one-third have not completed high school; they lack self-esteem; and have documented psychosocial problems. In addition, Cal-Works (TANF in California) requires its clients to return to work 90 days after birth and to leave the welfare system with two years of enrollment. Additionally, there are no increases in monthly grants during subsequent pregnancies. California women feel the need to get trained and find employment.

Another lesson learned is the power of advertising for creating public awareness of a government-sponsored health program. The Babies First media campaign – utilizing TV, radio, billboards, buses, mall signs, and movie theatres – has created name recognition throughout the community and has resulted in significant increases in calls to the toll-free Moms' and Kids' Hotline by individuals seeking services during each campaign

Babies First learned that in order to effect system change requires a great deal more than finding a evidence-based screening tool (such as the 4 Ps Plus) or strategy (implementation of a baby-friendly hospital model). It requires utilizing a communitywide, comprehensive approach that is comprised of convening, under the auspices of the Babies First Consortium's Perinatal Systems Committee, issue-driven subcommittees, along with public awareness of the problem (mixed media campaign), training and educational materials for providers and clients, and development of increased capacity or improved access to services. With this approach, the Consortium was very effective in mobilizing more community resources and effecting system changes for perinatal substance abuse and breastfeeding.

Fresno County's mental health system has little capacity to provide a mental health assessment or intervention for perinatal depression or other perinatal mental health issues. Mental health resources are directed to the chronically mental ill, and pregnant and postpartum women are rarely served in the mental health system. The existing system has been in place for more than 30 years, and the needs of pregnant and postpartum women are not a priority. In addition, few mental health professionals, including psychiatrists, are comfortable or well informed about providing medications or treatment to pregnant women. When funding for mental health services is not on parity with health services funding, there are even more barriers to services. Any improvement will require additional funding resources, and a network of treatment providers that is comfortable and well informed about interventions with pregnant and postpartum women will need to be created in order to reduce the barriers to mental health treatment for pregnant and postpartum women.

VI. Local Evaluation

The Local Evaluation, submitted by the Project Evaluator, Judith Gonzalez-Calvo, Ph.D., is found in Appendix G.

VII. Fetal and Infant Mortality Review (FIMR)

MCAH maintains a FIMR program (a Title V-funded activity) to assist in identifying issues/gaps in the perinatal system which may be contributing to preventable fetal-infant morbidity and mortality. Prior to receiving the initial Healthy Start grant, FIMR focused on reviewing all African-American infant deaths in the county in an attempt to assist in lowering their high infant mortality rate. This focus, together with the strategies implemented in BIH Outreach and Case Management, resulted in a decrease in the IMR by 50% over 4 years (1992-1996), from 40.3 to 20.9. Beginning in July 1998, the FIMR Technical Advisory Committee (TAC) began reviewing all cases occurring in the current Healthy Start/Babies First project area. Some of the frequent issues noted during the case reviews included: 1) smoking; 2) drug and/or alcohol use; 3) SIDS; 4) unrecognized decrease in fetal movement; and 5) congenital anomalies. FIMR recommendations included encouraging providers to make smoking cessation, drug and alcohol treatment, and genetic testing referrals for women requiring these services and promoting the Back to Sleep Campaign. The Babies First Consortium was represented on FIMR. The Perinatal Systems Committee's focus on perinatal substance abuse was initiated in part as the result of FIMR data. The MCAH Division maintains a FIMR Coordinator who collaborates with the statewide FIMR project and who participates in the Perinatal Systems Committee.

The State has begun piloting "Perinatal Periods of Risk" (PPOR) in eight counties that have high African-American infant mortality rates. This pilot will replace the current FIMR program. Fresno is one of the counties. Over the next four years, the Consortium will convene and facilitate a PPOR task force in conjunction with this new FIMR process. Focusing on analysis of fetal and infant mortality within the project area, it is anticipated more information can be learned around preventing morbidity and mortality.

VIII. Products

A list of products developed with Healthy Start funds (wholly or in part) is found in Appendix E. Products include printed materials, posters, TV and radio PSAs, print ads, billboards, mall signs, bus signs, movie slides. Each item is also produced on the CD included with this report.

IX. Project Data

Healthy Start data tables begin on the following page.