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PROJECT ABSTRACT

Name of State, Indian Tribe or Reservation: The Commonwealth of Massachusetts. *Project Title*: Massachusetts Pregnant and Parenting Teen Initiative. *Applicant Agency/Authorized State Representative*: Massachusetts Department of Public Health. *Address*: 250 Washington Street, Boston, MA 02108. *Contact Name*: Dahlia Bousaid, Office of Adolescent Health and Youth Development. *Contact Phone Numbers*: Voice: 617-624-6078. Fax: 617-624-6062 *E-Mail Address*: dahlia.bousaid@state.ma.us. Web Site Address: www.mass.gov/dph.

The Massachusetts Department of Public Health, in conjunction with a variety of public and non-profit partners, proposes the Massachusetts Pregnant and Parenting Teen Initiative, targeting pregnant and parenting teens (ages 14-20) in five cities: Chelsea, Holyoke, Lawrence, New Bedford and Springfield. These cities have the highest teen birth rates in the state – three to five and a half times the statewide average. This project will focus on teens in high schools and at community service centers. We expect to engage 400 pregnant and parenting teens per year, as well as their infants and children, in project activities over a three-year period.

The project will create an integrated service structure to formally link teams of qualified service providers in the five cities to address the broad needs of pregnant and parenting teens. These teams will operate out of schools and community-based organizations to provide teen mothers, young fathers and their children with wraparound services including age-appropriate medical care, health education, and social and emotional support services. Teams will be trained on a common service model across the five sites, though site-specific adaptations can be made to address local needs and resource availability. Each pregnant or parenting teen will be supported in developing an individualized graduation or GED plan. The project will engage both female and male teen parents. Key areas of focus will include infant care and nurturing skills, life skills training, workforce development and financial literacy education. The five local teams will be supported by MDPH staff and will participate in extensive training to create a community of practice model (COP) at the local and state level. A monitoring and assessment component will ensure that data are collected and analyzed to report on participant- and community-level findings in several key areas, helping to monitor the impact of the project, key areas for improvement and the potential for replication in other communities.

In addition to the schools and community-based agencies, key partners include: the Department of Elementary and Secondary Education (the state's education agency), the Department of Early Education and Care, the Department of Children and Families (the state's child welfare agency), the Department of Transitional Assistance, the Massachusetts Children's Trust Fund (which provides training, and program models that expand the capacity of communities to work with parents and children, and will provide specific support for the project's fatherhood component), the Comprehensive School Age Parenting Program and the Massachusetts Alliance on Teen Pregnancy (a statewide advocacy group which mobilizes communities to prevent teen pregnancy and to increase opportunities for teen parents). Partners will support training activities, provide technical assistance and help connect the project to a wide range of statewide and local resources.

A. DESCRIPTION OF PROBLEM AND NEED

"What helps me stay in school is my child and her future. If I don't finish it could be hard for both of us in the future and I don't want that for her." - New teen mother, from focus group[1]

Overview of teen pregnancy in Massachusetts: The proposed Massachusetts Pregnant and Parenting Teen Initiative targets pregnant and parenting teens (ages 14-20) in five cities with the highest teen birth rates in the state. Although the 2008 teen birth rate in Massachusetts (20.1 births per 1,000 females ages 15-19) was the lowest on record, large racial, ethnic and geographical disparities persist. In 2008, Hispanic teens had almost six times and Black teens almost three times the birth rate of White teens (66.7 for Hispanic teens, 32.3 for Black teens, and 11.7 for White teens).[2] Some communities – in particular the five cities targeted here – have teen birth rates rivaling those of states with the highest birth rates in the nation. In important ways, teens giving birth in Massachusetts are different from adults: (i) Marital status: 93.7% of teens giving birth were unmarried, compared to 30.2% of adult mothers. (ii) Smoking: Teen mothers were twice as likely to smoke during pregnancy (11.9% v. 6.5%). (iii) Prenatal care: Only 70.8% of teen mothers had adequate prenatal care, compared to 82.9% of adult mothers; teen mothers were twice as likely to have their prenatal care publicly funded as adult mothers. (iv) Low birthweight: While teen mothers were less likely to have preterm births than adult mothers, they were likelier to have a low birthweight infant: 9.3% for teen mothers v. 7.7% for adult mothers.

Description of target communities: The proposed project targets pregnant and parenting teens in the five Massachusetts cities with the highest teen birth rates – 3 to 5.5 times the teen

[1] Massachusetts Alliance on Teen Pregnancy. *Expecting Success: How Policymakers and Educators Can Help Teen Parents Stay in School*. March, 2010.
[2] Massachusetts Department of Public Health. *Massachusetts Births 2008*. March, 2010.

birth rate of the state as a whole. The overall Hispanic teen birth rate in Massachusetts is much higher than for residents as a whole, but in these cities the *Hispanic* teen birth rate is 45% - 150% higher than for Hispanics statewide. The following table summarizes teen birth rate data for the five target cities and for the state:

	Teen Birth Rate (15-19 yrs)[1, 2] (C. Is)	# Teen Births [1]	Hispanic Teen Birth Rate[1,2] (CIs)	Teen Birth Rate (10 – 14 yrs) [2, 3](CIs)	Number of Teens (10-19 yrs.)	Percent Hispanic Teens
Holyoke	115.33 (99.2, 131.45)	174	157.22 (134.1,180.1)	0.84 (0.22, 1.46)	6,529	66.5
Springfield	61.4 (55.4, 67.4)	373	109.8 (96.9, 122.8)	1.1 (0.69, 1.41)	25,210	40.0
Lawrence	80.94 (71.2, 90.7)	245	97.2 (85.1, 109.2)	1.1 (0.62, 0.97)	13,022	76.6
New Bedford	62.9 (54.2, 71.7)	186	119.5 (91.4, 147.6)	0.86 (0.41, 1.31)	12.806	18.9
Chelsea	97.0 (78.6, 115,3)	97	99.9 (89.5, 110.33)	2.7 (1.3, 4.0)	4,287	65.1
Massachusetts	20.1 (19.5, 20,6)	4,583	66.7 63.6, 69.8)	.24 (0.21, 0.27)	849,721	10.6

[1] 2008 MA Births; [2]Births per 1000; [3]2004-2008 MA Births

The target cities are former industrial or fishing towns with a long history of attracting immigrants. As a group, these communities currently have among the highest percentage of Latino residents of all cities in Massachusetts. Chelsea is a small city a few miles north of Boston. With over 35,000 residents and a land area of just 2.5 square miles, it has one of the highest population densities among all US cities. Latinos make up approximately half of the

city's population. Holyoke, located on the banks of the Connecticut River in Western Massachusetts, is a former paper mill center with a large Latino population. Over one third of residents are Puerto Rican, one of the highest percentages of Puerto Rican residents in any city outside of Puerto Rico. With over 72,000 residents, Lawrence is located in Northeastern Massachusetts on the banks of the Merrimack River, and attained fame in the 19th and 20th century as a great textile center. The city has long been a haven for immigrants, and today approximately two-third of the population is Latino. New Bedford is a former whaling port in southeastern Massachusetts, and with 93,000 people is the second largest city to be targeted by this project (after Springfield). Like the other cities to be targeted, it has a long immigrant tradition, but in New Bedford, Hispanics make up only 10% of the population. Other major groups include African Americans, Cape Verdeans and many whose families are from Portugal. Springfield in western Massachusetts has a population of 150,000, and is the largest city to be targeted by this project. It is the fourth largest city in New England, and famed as the home of the Springfield Armory, Smith & Wesson and the Basketball Hall of Fame. Approximately half the city's population is Black or Latino.

The five target cities are also characterized by disparities in income, school dropout rates, employment and STDs compared to the state as a whole. The following table summarizes key indicators for the five cities and for the state:

Indicators[1, 2, 3, 4]	**Holyoke**	**Lawrence**	**Springfield**	**Chelsea**	**New Bedford**	**MA**
# of Teens (10-19 yrs)	6,529	13,022	25,210	4,287	12,806	849,721
Percent Hispanic Teens	66.5	76.6	40.0	65.7	18.9	10.6
School Dropout Rate[1] (%)	9.8	10.2	9.6	9.4	8.4	2.9
Hispanic School Dropout Rate[1] (%)	11.5	10.3	11.6	10.2	9.7	7.5

Indicators[1, 2, 3, 4]	Holyoke	Lawrence	Springfield	Chelsea	New Bedford	MA
Per Capita Income ($)	15,913	13,360	15,232	14,628	15,602	25,952
% Children <18 living under poverty	41.9	32.1	43.6	27.9	29.5	12.0
% Speaks language other than English at home for persons (ages 5+)	42.8	64.6	31.6	58.4	37.8	18.7
% speaks language at home and does not speak English well or at all for persons (ages 5+)	23	26	21	31	26	22
% labor force unemployed, March 2010	12.1	17.4	13.5	9.9	13.3	9.3
Chlamydia rate (15-19 yrs) per 100,000[4]	3997.4	2789.4	4152	2563.7	1747.9	1079.6
Gonorrhea Rate (15-19 yrs) per 100,000[4]	419	146	675	NA	339.9	110

[1] MA Department of Elementary and Secondary Education 2008-09

[2] 2000 US Census Massachusetts file with 2005 estimates for race/Hispanic ethnicity

[3] Percent unemployed from MA Department of Workforce Development

[4] 2007 MA Division of Sexually Transmitted Diseases Prevention

Existing programs that support pregnant and parenting teens: Healthy Families Massachusetts (HFM), launched in 1997, is an ambitious, statewide adaptation of the Healthy Families America home visiting model. It was designed to be available to all families in which the mother is a first-time parent under the age of 21. Services are initiated prenatally, at birth, or within the first year of the child's life, and may continue until the child's third birthday. Currently, HFM is being delivered by catchment area, with 17 agencies, and 27 programs operating as program sites. The Early Intervention Partnerships Program (EIPP) is a home visiting program for pregnant women and post partum mothers in communities with some of the

state's highest rates of infant mortality and morbidity. It serves as a high-risk maternal and newborn screening, assessment and service system that is a key component in reducing infant and maternal mortality and morbidity. Women with social and environmental risk factors, such as homelessness, substance abuse or violence in the family, first time teens on a waiting list for HFM and adolescents who experience a second (or third) birth are eligible. A variety of other programs, though not teen-specific, can support teen parents and their children in regard to substance abuse, gestational diabetes, HIV risk reduction, tobacco use and other health and social service concerns.

Teen parents and school:[3] The proposed project focuses on teen parents who are in high school, who are connected to community programs, and those who are disconnected from school and/or community programs. Approximately 10,000 Massachusetts public high school students dropped out during the 2007–2008 school year; for 2,600 of them, teen parenthood was the main reason. Without a high school education or equivalent, these young people are ill-equipped to meet even their own basic needs in this competitive economy, where the vast majority of jobs in Massachusetts that pay family-sustaining wages require education beyond the secondary level.

The recently released study on teen parents and school from the Massachusetts Alliance on Teen Pregnancy used surveys and focus groups to uncover some striking and hopeful information about these young parents. (i) Teen pregnancy ignites a commitment to school for previously disconnected youth. Teen parents surveyed said that their commitment to school increased after having a child, and 50% said that staying in school was *less challenging* once they were parents. (ii) Overall, school culture is supportive of teen parents. However, there is still work to be done. Some pregnant and parenting teens report being treated poorly or discriminated against by teachers and peers at school. (3) Family and community support is

[3] Information in this section from Massachusetts Alliance 2010, ibid.

critical to help teens stay in school. Teen parent providers identified family dysfunction and lack of family support as the most influential inhibiting factor for pregnant and parenting teens in completing their secondary education. Pregnant and parenting teens are more likely to stay in school when their families provide encouragement, set high expectations, and are available to help out. Encouragement from friends, partners, and other adults also helps pregnant and parenting teens stay in school. The proposed program builds on the strength, hope and resiliency of pregnant and parenting teens, and on potential support from family, school and community to develop and implement a comprehensive support model in five Massachusetts cities with teen birth rates much higher than the state and nation as a whole.

B. PROJECT GOALS AND OBJECTIVES

The goal of the Massachusetts Pregnant and Parenting Teen Initiative is to provide a comprehensive support model for pregnant and parenting teens (male and female) in five cities with disproportionately high teen birth rates so that: (1) They will graduate high school or earn a GED. (2) They will delay subsequent pregnancy for 24 months from date of entry into program. (3) Their infants and children will attain appropriate social and emotional developmental outcomes and receive supports to ensure they are on track for optimal development. It will focus on teens in high schools and at community service centers. Using a team approach in each community, the model is designed to build on expertise of MDPH partners who have developed culturally- and linguistically-appropriate interventions for working with pregnant and parenting teens in these high-risk communities. The model to be developed by the multidisciplinary support teams will use evidence-based practices to address key areas of need as identified by experts in the field. The model will promote a strengths-based approach which aims to reduce

risks and increase protective factors. The model includes: individualized and group educational support to help teen parents finish school, strength-based communication support and skill-building aimed at enhancing family systems, and age-appropriate medical care and health education focusing on such concerns as STIs and birth spacing.

To achieve its goal, the project has the following objectives:

Objective 1. Site selection: By Month 2, select at least 1 public high school and at least 1 community-program in each city (a minimum of 10 schools and programs) to develop and implement the comprehensive pregnant and parenting teen support model.

Objective 2. Multi-disciplinary teams: By Month 4, form multidisciplinary support teams in each of the 5 cities, based in the selected school and community programs, and comprised of a pediatric or family nurse practitioner, master's level social worker (MSW) or equivalent, school adjustment, guidance counselor or educational preparedness counselor, youth workers and a program coordinator.

Objective 3. Model development and local capacity-building: (a) By Month 6, fully develop the comprehensive support model and provide a minimum of 50 hours of training for members of the multi-disciplinary team and other school and community providers as appropriate to support effective implementation of program components. (b) Throughout the project period, provide a minimum of 25 hours of additional training per year to support continued fidelity in implementing the program model and address challenges and opportunities identified in the course of the implementation process.

Objective 4. Service delivery: Beginning in Month 5, in each of the five cities, provide assessment, case management, counseling, health education, infant and children services and

other core components (as described below in the Implementation Plan) to a total of 250 pregnant and parenting teens in Year 1 and 400 annually in Years 2-3.

Objective 5. Peer-led social marketing: Starting in Year 2 and working with the Massachusetts New Parent Initiative (MNPI), engage pregnant and parenting teens in the development of digital stories to illustrate the transition into new parenthood and give a voice to the challenges of adolescent parenthood; distribute the digital stories to teens through the MNPI as well as state and community partners.

Objective 6. Community Advisory Group: By Month 4, convene a Community Advisory Group composed of interagency and community stakeholders from state and non-profit agencies, as well as teens who have navigated the system of care while pregnant and parenting. This advisory group will work on the project's community education and awareness component as well as on system and policy issues, and will meet at least 6 times a year during the project period.

Please see the attached logic model for an overview of how resources, objectives and activities link to key programmatic outcomes for teen parents and their children.

C. IMPLEMENTATION PLAN

Program overview: The proposed Massachusetts Pregnant and Parenting Teen Initiative will help create and train multidisciplinary support teams in the communities of Chelsea, Holyoke, Lawrence, New Bedford, and Springfield to address the needs of pregnant and parenting teens. These teams will operate out of schools and community-based organizations to provide pregnant and parenting teens with wraparound services including age-appropriate medical care, health education, and social and emotional support services, as well as family

support designed to help address concerns in the teens' home environment. Teams will be trained on a common service model across the five sites, though site-specific adaptations can be made to address local needs and resource availability. Each pregnant or parenting teen will be supported in developing an individualized graduation or GED plan. Key areas of focus for this model will include infant care and nurturing skills, life skills training, workforce development and financial literacy education. The five local teams will be supported through extensive training, cross-community information sharing and connection to a variety of resources at the local and state level. A monitoring and assessment component will collect, analyze and report on client- and community-level data in several key areas, helping us determine the extent to which the project is working, how it is working and the potential for replication in other communities with large numbers of pregnant and parenting teens.

Activities by objective:

1. Site selection: Project sites will consist of at least one high school and at least one community-based program in each of the five cities.[4] In preparing this application we have determined that there is strong interest for participation from both schools and community-based agencies in each of the five cities. Four of the five cities have school-based health centers (SBHC) located within their local high schools. The SBHCs are expected to serve as a hub for delivery of medical services and to help link pregnant and parenting teens with local resources and referrals. In a community where there are no SBHC, the school health unit or community-based agency will serve to convene and organize the delivery of necessary services. In all five communities there will be a formal linkage between the school, a licensed medical provider and community-based support service agency. Please see the attached support letters which represent

[4] In Chelsea, for example, both Chelsea High School and the Phoenix Charter Academy, which both serve significant numbers of pregnant and parenting teens, have expressed strong interest in participating in this project.

a sampling of schools and community-based agencies in the target communities. These sites demonstrate leadership in providing services to pregnant and parenting teens, and have the capacity and interest to participate as strategic and synergistic partners. In New Bedford, the New Bedford Public Schools, Child and Family Services and Health Imperatives have submitted letters of interest to act as potential partners for this grant. In Lawrence, Family Service, Inc., the Lawrence Public Schools, and the Community Day Care of Lawrence have also expressed their interest and willingness to develop formal partnerships. The community-based sites will be selected by a competitive Request for Responses (RFR) process. The RFR will be issued in Month 1 and the selection will be made by the end of Month 2. Community-based sites will be selected on their track record in reaching pregnant and parenting teens, their history of working successfully with the local education systems in that community, their capacity to provide core project services and their willingness to function as part of a multi-disciplinary team.

2. Multi-disciplinary teams: The multi-disciplinary support team in each city is responsible for delivering core project services, integrating services across disciplines and between the school and community-based agency, and ensuring fidelity to the program model. The team will be comprised of a pediatric or family nurse practitioner, master's level social worker (MSW) or equivalent, school adjustment, guidance counselor or educational preparedness counselor, youth workers and a program coordinator at each site. Roles and additional resources are described below under Objective 4, Service Delivery.

3. Model development and local capacity-building: Training will be provided by MDPH and program partners to the multi-disciplinary teams and other providers at each site as appropriate. Training will focus on five core components:

- Comprehensive Health Assessment for providers by the MDPH Early Intervention Partnerships Program (EIPP) Director
- *Happiest Baby on the Block* curriculum for providers by MDPH WIC program
- Wraparound support model by the Comprehensive School Age Parenting Program
- Early developmental milestones by the Massachusetts Department of Early Education and Care
- Training for the Community Advisory Group in community education and awareness by the Massachusetts Alliance on Teen Pregnancy.

Core training will be provided by Month 6. An additional 25 hours of training per year in Years 2 and 3 will focus on skill-building to support fidelity to program model, address challenges and opportunities identified during the implementation phase and provide additional support for key program elements. For example, the Massachusetts Children's Trust Fund is expected to provide training through its Fatherhood Initiative, which advances activities and training that support fathers, their families, and the professionals who work with them.

The Program Coordinator will convene monthly site-specific team meetings and quarterly community-of-practice meetings for all grantees to encourage information sharing among colleagues, identify best practices and address common challenges.

4. Service delivery: Core service components for pregnant and parenting teens will be: (i) Primary medical care including birth control and gynecological care. (ii) Health education about infant care and reproductive life planning. (iii) Parenting support groups for mothers and fathers. (iv) Individualized parenting support. (v) Case management services including support with school, jobs, housing, day care, transportation and basic needs. (vi) Counseling for such concerns as depression and mental health, substance use, intimate partner violence and healthy

relationships. (vii) Access to local resources and opportunities that set high expectations for the success of pregnant and parenting teens. Services for infants and children of these teen parents will include access to quality health and dental care that is consistent, coordinated and preventative; and routine screens for social, emotional and behavioral health concerns.

The multi-disciplinary team will deliver services as follows: The *nurse practitioner* will be based out of a school-based health center, community health center or hospital-based clinic, and will provide comprehensive health assessment (CHA) during the prenatal and postpartum period using tools developed by the MDPH EIPP. The CHA is a strength-based assessment tool that includes coping mechanisms and screening for physical and behavioral risk factors for both the mother and child. The *Master of Social Work clinician* or equivalent will provide support services using a wraparound case management model to address biopsychosocial needs. The clinician will lead parenting groups using the "Happiest Baby on the Block" curriculum which teaches soothing and basic infant care techniques to new parents. These staff will be trained by the MDPH WIC program staff who are certified for training-of-trainers in this curriculum. To supplement the curriculum, the clinician will work in collaboration with the Massachusetts New Parent Initiative to utilize emotion-based messaging tailored to adolescents on the importance of caring, sharing and bonding. Through this program, pregnant and parenting teens will develop digital stories to illustrate the transition into new parenthood giving a voice to the challenges of adolescent parenthood. The clinician will also provide strength-based communication support and skill-building aimed at enhancing family systems while respecting issues of cultural and linguistic sensitivity. Issues to be addressed include dyadic communication for both the teen parents and their families designed to help address concerns in the teens' family dynamic.

The *school adjustment counselor, guidance counselor or educational preparedness counselor* will develop and monitor individual education plan goals. They will work with individual pregnant and parenting students to develop innovative credit accumulation options and access to flexible scheduling. These staff will act as a liaison to represent the pregnant and parenting teens in student support team meetings to communicate high expectations for their success with principals and school and educational program staff. The *youth workers* (or in some instances the clinician) will provide gender-specific group sessions addressing the needs of young mothers and fathers. The youth workers will work with the young parents to identify community resources and opportunities directly linked to their identified priorities and work with the clinician to support the attainment of developmental milestones of the new parent role. They will help ensure that transportation or other logistical barriers identified by the teens are systematically addressed, work with the pregnant and parenting teens on issues pertaining to the transition period post-high school or GED program and focus on developing job readiness skills, higher education opportunities and fiscal responsibility. The youth workers will also help the teens develop a plan for continued post-program.

The program model will require that a *domestic violence advocate* be identified to provide modular instruction in healthy relationships and intimate partner violence prevention. The domestic violence advocate will be contracted through local domestic violence service providers and will work collaboratively with the pediatric or family nurse practitioners to review risk and protective factors including screening for birth control sabotage and physical coercion.

5. Peer-led social marketing: The Massachusetts New Parent Initiative (MNPI), funded through the HRSA Maternal and Child Health Bureau, has created a set of emotion-based messages and digital stories aimed at enhancing communication between providers and new

parents. These materials are focused on supporting early parenting practices and the transition into parenthood. Project topics include: Stress of transition into parenthood; Self-care; Birth spacing; Soothing an infant; Bonding/Attachment. An important component of the MNPI is the creation of digital stories by parents, which are made available on the MDPH website (www.mass.gov/dph/newparent). In Years 2 and 3, MNPI staff will train program staff to work with teen parents in the five sites to help them develop their own digital stories on their experience as teen parents, and find ways to share these stories locally and across the state to build awareness about the challenges faced by these parents, and also the kinds of support which can help them finish school or get their GED and move forward in other aspects of their lives. Digital storytelling refers to the use of new digital tools to produce a short film that combines personal narration, photographic and other still images, a musical soundtrack and sometimes video. The philosophy behind this type of digital storytelling is one of using technology to enable those without a technical background to produce works that tell a story using moving images and sound. They are also a way to help people tell their own stories in a compelling and emotionally engaging form. These audiovisual stories produced by and for new parents capture new families' experiences with parenting in a format easily shared with other families and providers. The digital stories are then disseminated and used to educate both parents and providers.

6. Community Advisory Group: We will convene a Community Advisory Group composed of interagency and community stakeholders from state and non-profit agencies, as well as teens who have navigated the system of care while pregnant and parenting. The Advisory Group will focus on shifting social norms in regard to pregnant and parenting teens, through the project's community awareness and education component, and on promoting policy and systems

change at the state and local level to support the success of pregnant and parenting teens. It will meet at least six times during the project period.

Evidence-based strategies: Among the evidence-based or promising strategies to be used for this project are: (1) Comprehensive Health Assessment (CHA): A CHA is a health assessment in the broadest sense of the word which incorporates a core set of clinical guidelines that encompass the social, emotional and physical well-being of the pregnant woman, father and infant in the context of their family. The Nurse Practitioner or other licensed medical provider will conduct a CHA at intake and at six month intervals to assess changes in the CHA's 14 key areas. CHAs include at a minimum: (a) Clinical assessment with family health history, screening for current or potential factors that impact optimal health, and physical examination as indicated. (b) Breastfeeding and infant feeding status. (c) Nutritional status and physical activity. (d) Screening for alcohol, tobacco and other drug use, mental health including postpartum depression, intimate partner violence, and safe environments. (e) Parent-Infant Attachment. Based on the findings elicited from the Comprehensive Health Assessment, an individualized plan will be developed to incorporate health education, counseling, and brief interventions including appropriate referrals for specialized services as indicated. In addition, a qualified member of the medical care team will perform ongoing developmental screening utilizing the Ages & Stages Questionnaire, 3rd Edition for infants and toddlers under the age of one. Analysis of Massachusetts EIPP data confirms the utility of this tool in improving early identification of health concerns, especially as it relates to violence exposure.[5] (2) Happiest Baby on the Block: This widely used curriculum teaches parents calming techniques with the goal of fostering parental bonding and increasing participation by fathers in infant care. A 2010 evaluation by the

[5] Massachusetts Department of Public Health. Effective use of the PSAP screening tool within a community health program model. www.mchpartnership.com/presentations/82-carter.ppt.

University of Connecticut School of Social Work found that the Happiest Baby on the Block curriculum was "well received [by parents] and tended to increase knowledge about both baby soothing and crying."[6] (3) Emotion-based messaging: The digital stories to be developed and distributed in Years 2 and 3 will incorporate real-life adolescent parent experience to convey emotion-based messaging. Market research shows that people make behavior changes in response to emotional messages combined with a limited amount of logical or factual information. In fact, the vast majority of consumer decisions are based in emotion rather than logic or fact.[7] [8] Advertisers have demonstrated the power of drawing on emotions that resonate with a defined audience (emotional "pulse points") to generate a specific behavior.[9] [10]

Potential challenges and barriers to implementation: The most challenging aspect of the program plan is the development and implementation of a single program model in five sites with widely varying communities, resources and experiences. We believe, however, that several aspects of the proposed program structure will help overcome this barrier. First, the model builds on a set of well-developed core components and resources already being implemented across Massachusetts, including the Comprehensive Health Assessment (in EIPP), the Happiest Baby on the Block curriculum and emotion-based messaging. The project also builds on existing infrastructure, including school-based health centers in four of the cities and a number of strong community-based partners who have already expressed interest in participating. Fidelity to the

[6] Frisman L, Rodis E, Bucior M. Evaluation of the Shaken Baby Prevention Initiative. University of Connecticut School of Social Work. January 28, 2010. http://www.happiestbaby.com/wp-content/uploads/2010/05/ct-dcf-sbs-project-evaluation-jan-28-2010-1.pdf.
[7] Bagozzi, RP, Moore, DJ. Public service advertisements: emotions and empathy guide prosocial behavior. Journal of Marketing 1994; 58: 56.
[8] Friestad M, Wright, P. Persuasion knowledge: lay people's and researchers' beliefs about the psychology of advertising. Journal of Consumer Research, Inc. 1995; 22: 62-74.
[9] Feig, B. Marketing straight to the heart. New York: American Management Association, 1997.
[10] Friestad M, Wright, P. Persuasion knowledge: lay people's and researchers' beliefs about the psychology of advertising. Journal of Consumer Research, Inc. 1995; 22: 62-74.

program model will be strengthened by a formalized high-quality intensive training during the first six months, ongoing training throughout the project period, monthly site meetings and quarterly cross-site meetings to share best practices and challenges.

Organizational structure: The project will be located in the Massachusetts Department of Public Health (MDPH) Office of Youth and Adolescent Development, the mission of which is to: implement strategies to enhance the overall health of youth, adolescents and young adults, ages 10 to 24, promote services and policies that are formed from a holistic youth development approach and create partnerships with state, federal, foundation, academic and statewide organizations across a broad range of adolescent health issues. The Office is directed by Dahlia Bousaid, who will serve as Program Director for the project. The Office is located within the MDPH Division of Primary Care and Health Access. Other key units that have been involved in developing the proposed project and will support its implementation are the Division of Perinatal, Early Childhood, and Special Health Care Needs, the School-Based Health Center Program, School Health Services, Family Planning, the Early Intervention Partnerships Program and the WIC program.

Massachusetts has long recognized the need for better coordinated delivery of critical health, development, early learning, child abuse and neglect prevention, and family support services. Key partners outside MDPH will include: the Department of Elementary and Secondary Education (the state's education agency), the Department of Early Education and Care, the Department of Children and Families (the state's child welfare agency), the Department of Transitional Assistance, the Massachusetts Children's Trust Fund (which provides training, and program models that expand the capacity of communities to work with parents and children, and will provide specific support for the project's fatherhood component), the Comprehensive School

Age Parenting Program and the Massachusetts Alliance on Teen Pregnancy (a statewide advocacy group which mobilizes communities to prevent teen pregnancy and to increase opportunities for teen parents). These key partners include esteemed leaders from multiple state and local agencies who have demonstrated a commitment to working with pregnant and parenting teens. Building upon successful, community-specific responses, these partners will form an Advisory Group to oversee the expansion of student support services to pregnant and parenting teens and their families in high risk communities.

Key staff and roles: The project will be managed, implemented and monitored by four key staff positions at MDPH:

- *Program Director (.25 FTE): Dahlia Bousaid*. Ms. Bousaid is Director of the Office of Adolescent Health and Youth Development at MDPH, where she provides technical assistance to MDPH staff and providers on youth development frameworks and oversees all functions of the office including staff, spending plans and contract management of the statewide Teen Pregnancy Prevention programs. Ms. Bousaid serves as State Adolescent Health Coordinator for Massachusetts. As Project Director, she will have overall responsibility for development, implementation, monitoring and reporting for the project, and will supervise the Program Coordinator, support coordination across the five sites and with existing MDPH programs.

- *Beth Buxton-Carter, LCSW, Program Director, Early Intervention Partnerships Program (EIPP) & the Massachusetts New Parent Initiative (MNPI), Bureau of Family Health and Nutrition (.25 FTE)*. Ms. Buxton-Carter will help connect and integrate project activities to EIPP, a home visiting program for pregnant women and post partum mothers in communities with some of the state's highest rates of infant mortality and morbidity as well as assisting in the training and production of digital stories.

- *Program Coordinator (1 FTE): to be hired*: The program coordinator will be based at MDPH and will function in a full time capacity to provide contract management and technical assistance to the multidisciplinary support teams. The program coordinator will be responsible for coordinating activities of the planning and implementation phases including the development of a training plan and schedule, and working with the Data Monitoring Coordinator to assess and report on project activities and results. The coordinator will convene monthly site-specific team meetings and quarterly community of practice meetings for all grantees with the ultimate goal of encouraging sharing among colleagues and identifying best practices, and will convene the Community Advisory Group. The position will report to Ms. Bousaid, the Program Director.

- *Data Monitoring and Assessment Coordinator (.5 FTE): to be hired / designated*: This position will design and direct the gathering, tabulating and interpreting of required program output and outcome data, and is responsible for communication and interpretation of overall program results.

In addition, *Renee Aird, Director, School-Based Health Center Program*, will provide in-kind support for the effective integration of project activities into the school-based health center model. Ms. Aird is responsible for activities related to contract monitoring for 37 School-Based Health Centers and their respective sponsoring agencies (hospitals and Community Health Centers). Ms. Aird has been a member of the Governor's Commission on School Drop-out and is an experienced obstetrical nurse with adolescent health expertise.

D. WORK PLAN AND MONITORING

Workplan:

Component	Time Frame	Responsible Staff / Partner
Administration: Hire Program Coordinator Hire / Designate Data & Monitoring Coordinator	 By Month 3 By Month 3	Program Director
1. Site selection: Issue RFR for community-based agencies Designate community-based agencies Designate one high school in each city	 By Month 1 By Month 2 By Month 2	Program Director
2. Multi-disciplinary teams: form team in each city	By Month 4	Program Coordinator
3. Model-development and capacity-building: Initial training Ongoing training Site meetings Cross-community information sharing	 By Month 6 Months 7-36 Monthly from Month 4 Quarterly meetings from Month 4	Program Coordinator, with MDPH and outside training partners
4. Service delivery: multi-disciplinary team delivers services at school and community-based locations in the 5 cities	Ongoing Months 5-36	Program Director, Program Coordinator
5. Social marketing: teens develop digital stories, which are disseminated to spread awareness of teen parenting concerns	Ongoing from year 2	Program Coordinator, with MNPI Director
6. Community Advisory Group:	Convenes by Month 4, meets through the project period	Program Coordinator
Monitoring: Data Monitoring and Assessment Coordinator collects and reports on key program outputs and outcomes	From Month 5, with reports at least every quarter	Data Monitoring and Assessment Coordinator

Monitoring: The Program Coordinator will meet monthly with each site to review progress in recruiting participants, implementing various components of the model, collecting and reporting participant-level data on a regular basis and to identify concerns, opportunities and strategies for addressing them. The Program Coordinator will also convene a cross-site meeting of all grantees each quarter for information-sharing and group assessment of progress and concerns. The Data Monitoring and Assessment Coordinator will oversee data collection and analysis, and work with an outside Evaluator to better understand the implications and relevance of this data to intended project outcomes. The Coordinator will report at least quarterly. Key data to be collected and reported include: all elements of the EIPP CHA tool for the prenatal and post partum periods, data collected using the Stages and Ages Questionnaire 3rd Edition at three month intervals. The number of reproductive life plans will be tracked and the number of subsequent pregnancies also will be tracked when possible. Risk factors and/or problems identified will be tracked with accompanying referral information and follow-up plans. The attainment of educational goals including high school graduation or GED will be tracked by the identified school or education staff person. Parameters to be reported will be identified depending on goals developed in the individual graduation plan and/or school-based individualized education plan (IEP).

As described above, the criteria for making sub-awards to community agencies in each site will include: (1) their track record in reaching pregnant and parenting teens, (2) their capacity to provide core project services and (3) their willingness to function as part of a multi-disciplinary team.

We will ensure the medical accuracy and completeness of materials used in grant supported efforts, whether conducted by the State or by sub-awardees, by monitoring data

collection on all aspects of care. This will include clinical chart audits to be completed by designated MDPH and MD staff in the respective agencies.

E. STAKEHOLDER PARTICIPATION

The MDPH will function as the convener and coordinator of partners in the identified communities to assist them in developing a community-specific strategic plan to address the needs of pregnant and parenting teens. Prior to this application, the MDPH has conducted field research to gather information on perceived priorities of pregnant and parenting teens. Current research will be broadened to include additional service providers, schools, teens and their families. The MDPH will work with community stakeholders and other state agencies to ensure that a comprehensive system-wide response is developed and the genuine participation of community members is included in the development of this plan.

The proposed model will allow for flexibility to address community-specific needs. While there is a requirement for all service providers to be trained in evidence-based core components (Comprehensive Health Assessment, Happiest Baby on the Block, Emotion-based messaging), there will be an expectation that sites will customize their service delivery plans based on their local needs and experience. The MDPH will also ensure that proposed service delivery plans incorporate culturally- and linguistically-appropriate adaptations and that multidisciplinary teams make informed decisions and modifications to their plans based on site-specific data. These plans will be shared quarterly at the cross-site community of practice meetings, where there will be an opportunity to discuss strategic responses to data trends.

An active advisory group will meet six times per year. The advisory group will consist of staff from multiple state and local agencies with expertise and a demonstrated commitment to working with pregnant and parenting teens. This group will work to design clear guidelines and

protocols for addressing the overall health of the Commonwealth's expectant and parenting teens; develop sustainable partnerships with key stakeholders to enhance and expand the work of the grantees; and promote policy and systems change at the state and local level to support the success of pregnant and parenting teens. The advisory group will also be responsible for working with the grantees in designing and implementing the community awareness campaign which will include the teens' digital stories and other mixed media messaging.