



## **Pregnancy Care Program to Improve Maternal and Infant Health Outcomes**

Report to:  
Joint Fiscal Committee

Agency of Human Services  
Douglas A. Racine, Secretary

September 26, 2011

## **Introduction/Background**

During the 2010-2011 legislative session, the Department of Vermont Health Access (DVHA) was asked for a preliminary analysis of the potential benefits that might be achieved through introducing a program for high risk pregnancies in the Medicaid population. At that time, DVHA completed a limited analysis of the cost of preterm neonatal intensive care unit (NICU) hospital stays among Vermont Medicaid beneficiaries during SFY 2009 and SFY 2010. The DVHA also engaged in preliminary discussions with its care management vendor, APS Healthcare (APS); APS provides care management services to pregnant women in its Wyoming and Hawaii Medicaid programs. APS and others have found that care management/care coordination programs for high risk pregnancies can provide benefits by reducing adverse birth outcomes, such as maternal complications, prolonged hospital stays for new mothers, premature births, low birth weight, NICU admissions, and infant mortality.

Preterm births are a leading cause of birth complications. The March of Dimes has reported that more than half a million babies are born preterm in the United States each year. According to the Institute of Medicine, preterm birth is a serious health problem that costs the United States more than \$26 billion annually in medical, educational and lost productivity costs. It is the leading cause of neonatal death, and babies who survive an early birth often face the risk of lifetime health challenges and developmental disabilities. High risk pregnancies may be related to many other risks, as well, including the risk of low birth weight, potential for maternal complications, timing and quality of prenatal care, and the presence of birth defects.

The most recent maternal and child health data (2009) reported for Vermont indicate 83% of pregnant women received early (first trimester) prenatal care. 9.2% of births were preterm (<37 weeks), 6.7% were low birth weight (<2500g), and Vermont's infant mortality rate (death prior to one year of age) was 6.1 deaths per 1000. While these rates are better than the national averages, many risk factors can be addressed to further improve maternal and infant health outcomes. Early prenatal care, achieving a healthy weight, moderate exercise, a healthy diet, reducing stress, and avoiding exposure to smoking, alcohol, illegal drugs and some medications all are positive steps women can take to reduce risks. These improvements are often supported through providing women with education and support, effective care coordination, and linkage with health and community resources.

DVHA's preliminary analysis suggested a potential annual cost savings opportunity of approximately \$400,000 from implementing a state-wide high risk pregnancy care management program. Similar programs have realized savings through enhanced outreach to providers and potentially eligible pregnant women, better education and prevention, improved service coordination, and addressing gaps in available services.

2011 Act 63 (H.441), § E.300(d), included the following charge to the Secretary of the Agency of Human Services (AHS):

*The secretary in consultation with the department of health access and the department of health shall report to the joint fiscal committee in September 2011 on the existing programs and scope of services including case management services available to pregnant women identified as high-risk. This shall include the resources available within state funded programs as well as other programs serving this population. The secretary shall include recommendations in the report for steps that may be taken to better coordinate services and reduce the potential for negative outcomes and higher costs related to these cases. The secretary is authorized to implement these recommendations provided they will result in more cost-effective service and are net budget neutral.*

To respond to this legislative mandate, the DVHA, in collaboration with the Vermont Department of Health (VDH), convened a workgroup of internal and external stakeholders, including the following:

- Agency of Human Services (AHS)
  - Secretary's Office - Integrated Family Services (IFS)
- DVHA
  - Division of Health Services and Managed Care
  - Vermont Chronic Care Initiative (VCCI)
- VDH
  - Maternal and Child Health (MCH)
  - Early Periodic Screening, Diagnosis and Treatment (EPSDT)
  - Vermont WIC Program
  - Alcohol and Drug Abuse Programs (ADAP)
- Department for Children and Families Child Development Division (DCF-CDD)
  - Children's Integrated Services (CIS)
- University of Vermont (UVM)
- March of Dimes

In addition, a BlueCross BlueShield of Vermont (BCBSVT) representative provided an overview of its maternal wellness program, *Better Beginnings*. BCBSVT reports an overall return on investment of 5.5:1 for this program that uses two RN case managers trained in obstetrics to provide telephonic outreach, education and support to beneficiaries. Finally, APS Healthcare, DVHA's care management vendor, analyzed Vermont Medicaid high risk pregnancy data and also provided information on other states' high risk pregnancy care management programs.

## **High Risk Pregnancy Workgroup**

The workgroup engaged in the following activities:

- Researched definitions of *high risk pregnancy*.
- Conducted an environmental scan of existing programs and services currently available in Vermont for high risk pregnancies.
- Reviewed analyses indicating the number of high risk pregnancies in the Vermont Medicaid population, estimated costs, and potential savings opportunities.
- Obtained provider input on assessments and program needs.
- Reviewed evidence-based high risk pregnancy program models.

A smaller core group (DVHA, VDH, IFS) completed the following:

- Reviewed provider feedback.
- Identified opportunities for improved outreach, improved service coordination, and enhanced services.
- Developed general recommendations for addressing these improvement opportunities.

## **Workgroup Outcomes**

### Definition

While there is no universally accepted definition of “high risk pregnancy,” the workgroup decided a broad definition would be most useful because it identifies the largest number of high risk pregnant Medicaid beneficiaries and thereby provides the greatest opportunity for prevention through education and effective prenatal care. Consequently, the workgroup recommended that for this project Vermont adopt the following definition of high risk pregnancy, which is used by the Society for Maternal-Fetal Medicine:

*A high-risk pregnancy is one in which some condition puts the mother or the developing fetus, or both, at an increased risk for complications during or after pregnancy and birth.*

Using this definition, diagnostic codes associated with high risk pregnancy, and the Merck method of pregnancy risk stratification, DVHA’s care management vendor APS analyzed CY 2010 Medicaid claims data. 1,394 high-risk pregnancies were identified in the Medicaid population, representing a little over 40% of all pregnancies during this period. APS estimated approximately \$456,000 could be saved through addressing uncoordinated care in this population.

### Environmental Scan (see Attachment #1)

The workgroup’s environmental scan of programs and services in Vermont for pregnant women identified numerous and diverse programs, including state-led human services

programs, community-based programs, and programs supported through state chapters of private organizations (e.g., Vermont chapter of the March of Dimes). These programs all share the common goal of providing high quality health services to mothers, children, and families in Vermont.

A multidisciplinary range of health services is offered in Vermont, as appropriate, to pregnant women (and their families), including physical exams, dental and health screening, nutrition, social services, education, and referral services. The primary objectives of the majority of services are to provide health promotion, prevention, and early intervention to women in an effort to improve birth outcomes, including decreasing the incidence of premature births, infant mortality, low birth weight and other complications related to pregnancy and birth. In addition, many programs promote and assure comprehensive primary health care for children from birth to age 21. While smaller in number, several dedicated programs exist that target special populations, such as low-income pregnant women, pregnant teens, pregnant women addicted to substances such as tobacco or opiates, and pregnant women with mental health co-occurring disorders.

Among the multiple programs within the Agency of Human Services that provide health education and services to pregnant women, children, and families, three (3) were identified with the greatest focus on high risk pregnancies:

- Children's Integrated Services (CIS) within the Department for Children and Families, which is part of Integrated Family Services (IFS) in the Agency of Human Services (AHS) Secretary's Office;
- Maternal and Child Health (MCH) Services at the Vermont Department of Health [MCH Coordinators, WIC, and the Nurse Family Partnership (NFP) Home Visiting Program];
- The Vermont Chronic Care Initiative (VCCI) at the Department of Vermont Health Access.

(1). *Children's Integrated Services*. As part of IFS, CIS provides health promotion, prevention, and early intervention services to pregnant and post-partum women, infants and children birth to age six, and their families and child development providers. CIS provides services for women during pregnancy such as finding medical and dental care, providing information about health risks to both mother and infant, learning about a healthy diet for the mother and baby, and finding childbirth education classes. Postpartum services include maternal-child health nursing and breastfeeding support.

CIS has 12 regional coordinators, one in each AHS district. Typically, they are employed by a Parent Child Center or other child care support agencies. All referrals come to the CIS Coordinators, who review them with the CIS Intake and Referral Team. Standard intake and referral forms have been developed for use by local CIS Teams and service providers. The CIS Intake and Referral Teams meet weekly and include family support workers from Parent Child Centers and/or Home Health Agencies, mental health designated agencies, VDH Maternal and Child Health Coordinators, and

others as determined locally. They triage referrals and cases to determine the most beneficial services and also assign someone to make the initial contact with the woman or family to complete an assessment. CIS Coordinators also lead local CIS System Teams, which meet monthly and address systemic issues within the local system of care. Some communities have a third CIS team, the Consultation Team, which meets as needed to address special cases for which targeted assistance is needed (e.g., substance abuse, housing, etc.). Finally, the CIS Coordinators are the liaison and provide coordination with regional service providers and other community teams including another IFS entity, the Local Interagency Teams (LITs), Blueprint Community Health Teams (CHTs) including DVHA care coordinators, etc. Standard Intake and Referral Forms have been developed for use by local IFS/CIS Teams and service providers.

(2). Maternal and Child Health [including WIC, MCH coordinators and Nurse Family Partnership (NFP) Home Visiting program]. The Vermont WIC Program serves income-eligible pregnant women (family income below 185 percent of the federal poverty level or enrollment in Medicaid/Dr. Dynasaur or VHAP), women who are breastfeeding or who have a new baby, and infants and children up to age five who are nutritionally or medically at risk. Recipients are provided with nutritious foods, nutrition counseling, breastfeeding support, health education, and connections to other community resources.

The 12 MCH Coordinators are public health nurses based in each of the 12 VDH district offices. They are responsible for MCH population health assessment, assurance and policy development in their communities, work closely with the WIC program, and have developed strong relationships with local health care providers. In addition, they participate on the regional CIS Intake and Referral Teams, assist with referral coordination, and are liaisons with other VDH District Office staff, CIS Team members, medical providers, community partners including hospitals and families.

VDH recently received increased funding through the Maternal and Child Health Bureau and the Affordable Care Act to implement the Nurse Family Partnership (NFP) evidence-based home visiting model. VDH received \$557,000 for the first year of this program, which will be implemented using home health agency nurses. Funding for an additional four years has been made available through the Affordable Care Act. The NFP model closely complements Vermont's existing home and community-based services models. The NFP targets Medicaid-eligible women who will be first time mothers and whose pregnancies are under 28 weeks gestation. The NFP currently is being implemented in the following pilot communities: Rutland County, the Northeast Kingdom (Caledonia, Essex, and Orleans Counties), Bennington County, and Franklin County. With additional funding, as VDH moves forward with these pilot communities they are looking across the state to identify future sites for program implementation.

(3). Vermont Chronic Care Initiative (VCCI). The DVHA's VCCI provides statewide care coordination, case management, and health coaching services to Medicaid beneficiaries with at least one chronic health condition and/or high hospital

utilization. DVHA care coordinators include registered nurses and medical and licensed social workers who provide face-to-face intensive case management to the highest cost, highest risk, medically and socioeconomically complex beneficiaries. Care coordinators are members of the Blueprint Community Health Teams (CHTs), facilitate a medical home, and coordinate among medical and community service providers. Care coordinators are located in district offices throughout the state; currently in two pilot communities (Franklin and Rutland Counties), they are co-located in primary care offices and other medical facilities. Once beneficiaries' acute needs have been addressed, they are transitioned to the Blueprint CHTs for ongoing support. Until recently, DVHA care coordinators did not provide services to high risk pregnant women, infants, or children.

### **Opportunities**

All three of these programs within AHS departments provide valuable services to eligible consumers. Families and providers have expressed the need for better integration and coordination. The charge of Integrated Family Services (IFS) within the Agency of Human Services is to integrate the services provided to children and their families from prenatal to age 22. This effort includes creating common eligibility criteria, intake and assessment tools and procedures, as well as consistent data requirements and outcome measures. This approach brings many benefits to families through more effective services, improved access, and coordinated planning.

The workgroup identified several opportunities for improved service coordination and enhanced services where gaps currently exist.

- While the workgroup recognized the programs outlined above have recently established stronger relationships, specific triage protocols and transitions among service levels are not yet solidly established and coordination among them is inconsistent across communities.
- A consistent and effective process has not been firmly established for transitioning mothers after delivery to their ongoing medical home and for Blueprint Community Health Team support, if needed.
- Although the DVHA VCCI RN Care Coordinators recently began accepting high risk mothers, the current program even now does not include dedicated staff with the needed specialized expertise in maternal-fetal medicine and neonatology to work with this population.
- Providers may not be aware of available programs and resources in their communities and through Vermont Medicaid, or how to refer women with high risk pregnancies for these services.
- Women themselves may also be unaware of services and lack understanding of currently available Medicaid benefits, or they may find these benefits difficult to access in their communities. For example, transportation to medical appointments is a Medicaid benefit. However, some pregnant women and their providers may not be aware it is available, or there may be problems with access, customer service, timeliness, cancellations, etc., in particular locations.

## **Recommendations**

### **Enhanced Service Coordination**

- Continue to strengthen relationships among DVHA Care Coordinators, CIS Coordinators, and Maternal and Child Health Coordinators (*see Attachment #2*).
  - Continue regular program management integration meetings (DVHA VCCI Director, CIS Director, VDH MCH Director and Office of Local Health Director).
  - Clarify roles and responsibilities of local staff (Care Coordinators, MCH Coordinators, CIS Coordinators) and establish criteria for case assignment.
  - Have all referrals come through the CIS Intake and Referral Teams for triage to appropriate services.
  - Use standard CIS Intake and Referral Forms. (More extensive targeted assessments will be conducted by the individual assigned by the CIS Intake and Referral Team to make initial contact with the pregnant woman.)
  - Ensure local DVHA Care Coordinators and MCH Coordinators participate in local CIS System Teams.
- Develop role of Blueprint Advanced Practice initiative with obstetrics practitioners.
- Draw upon capabilities of local Blueprint Community Health Teams, particularly during transition to ongoing postpartum medical care.

### **Enhanced Services**

- Hire two (2) regional DVHA Pregnancy Care Coordinators with expertise in maternal-fetal medicine to:
  - Facilitate collaboration among CIS, other IFS entities, MCH (including WIC), local DVHA Care Coordinators, home health agencies, medical providers and other community partners, etc.
  - Facilitate integration with Blueprint advanced practice medical homes and CHTs.
  - Develop enhanced Pregnancy Care Program model in partnership with stakeholders.
  - Implement Program, beginning in high prevalence areas.
  - Provide regional program oversight.
  - Serve as regional subject matter expert/resource to existing care coordinators; serve in consultative role to others, as needed.
  - Ensure consistent practices and procedures are implemented, as appropriate.
  - Ensure stakeholder participation and local customization, as appropriate.
  - Develop and implement Provider Outreach and Education Plan.
  - Manage limited high complexity, high risk caseload.

- Explore feasibility of offering incentives to providers for assessing and referring women with high risk pregnancies to CIS Intake Coordinators, and/or for collaborating with DVHA Care Coordinators on treatment plans.
- Explore feasibility of offering incentives to women for participating in appropriate services and/or adhering to behaviors known to reduce pregnancy and birth complications.

#### Enhanced Provider Outreach and Education

- Build upon MCH Coordinator relationships with OB/GYN providers and UVM VCHIP's OB Outreach Initiative to strengthen outreach and education to providers regarding:
  - Benefits and procedures for referring women with high risk pregnancies to the CIS Intake and Referral Team.
  - Existing resources and benefits available for Medicaid beneficiaries (e.g., transportation, breast pumps).
  - Other needs as identified by providers.

#### Financial Impact

- Costs:
  - Two Pregnancy Care Coordinators: \$80,000 each/year, or \$160,000 total/year.
  - Contracted expertise for program design, including incentives (TBD - one time cost, possibly covered by existing contracts).
  - Contracted resources to supplement Provider Outreach capacity (VCHIP, covered through current contracts).
  - Cost of beneficiary incentives/year (TBD).
  - Cost of provider incentives (TBD) for referring high risk pregnant women to CIS and to expand provider incentives to OBs for participating in DVHA Care Coordination (PCPs already receive incentives for participating in DVHA Care Coordination).
- Estimated savings through improved coordination of care: \$400,000/year.
- Program projected to break even in first 12 months and to achieve 2:1 ROI after that time.

## ATTACHMENT 1 PREGNANCY CARE INITIATIVES

### **Agency of Human Services (AHS)**

#### **Department for Children and Families (DCF)**

- *Children's Integrated Services (CIS)*  
CIS is in the Child Development Division of the Department for Children and Families (DCF) and is part of Integrated Family Services (IFS) within AHS. CIS provides health promotion, prevention, and early intervention services to pregnant and post-partum women, infants and children birth to age six, and their families and child development providers. CIS services include:
  - Maternal-child health nursing;
  - Finding child-birth education classes or breastfeeding and postpartum support;
  - Finding medical and dental care during pregnancy;
  - Obtaining information about health risks;
  - Learning about a healthy diet for the mother and baby;
  - Family support services;
  - Part C early intervention;
  - Early childhood and family mental health; and
  - Specialized child care supports.

#### **DCF and Vermont Department of Health (VDH)**

- *Nurse Family Partnership (NFP)*  
In 2010, as part of the Affordable Care Act, Vermont received block grant funding through Title V (Maternal and Child Health) for Evidence-Based Home Visiting. VDH is the lead agency in close partnership with DCF- CIS to use existing infrastructure for this funding. Funding for this grant supports implementation of an evidence-based home visiting model in selected communities to support “at-risk” families. The NFP model was selected because it best meets grant criteria and most closely complements Vermont’s existing home and community based services models. The following four communities have been invited to participate: Rutland County, the Northeast Kingdom (Caledonia, Essex, and Orleans Counties), Bennington County, and Franklin County. The NFP enrolls Medicaid-eligible women who will be first time mothers and whose pregnancies are under 28 weeks’ gestation.

#### **Vermont Department of Health (VDH)**

- *Special Supplemental Nutrition Program for Women, Infants and Children (WIC)*  
The Vermont WIC Program serves income-eligible (family income below 185 percent of the federal poverty level or enrollment in Medicaid/Dr. Dynasaur or VHAP) pregnant women, women who are breastfeeding or who have a new baby, infants and children up to age five who are nutritionally or medically at risk.

Recipients are provided with nutritious foods, nutrition counseling, breastfeeding support, health education, and connections to other community resources.

- *Maternal Child Health (MCH) Coordinators*  
VDH District Office-based MCH Coordinators are responsible for MCH population health assessment, assurance and policy development in their communities. They provide direct service to high risk pregnant women through participation in the regional Children's Integrated Services (CIS) Teams, assisting with referral coordination and functioning as a liaison among VDH District Office staff, other CIS team members, and community partners including hospitals, medical providers, and families. They assure availability and delivery of key pregnancy and postpartum education and support opportunities for pregnant and postpartum women and their families on key health topics and behaviors. They also provide leadership for local MCH coalitions and advocate for the MCH public health agenda in early care, health, and education systems at the local and state levels.
- *Smoking Cessation*  
The Vermont Tobacco Control Program supports resources to assist pregnant women who wish to quit smoking. These resources, modeled on the five components of the Centers for Disease Control and Prevention (CDC) *Best Practices for Comprehensive Tobacco Control Programs*, include hospital-based group cessation coaches and the Quit Network (by phone, in person and online). The Vermont Quit Line provides a separate protocol for pregnant women, and the Vermont WIC Program is a primary source of screening and referral for the Quit Line. Pregnant women are eligible for eight sessions that occur around the quit day and for two additional sessions around the time of delivery to assist them in avoiding relapse. The Quit Line does not provide Nicotine Replacement Therapy (NRT) for pregnant or nursing women.

A recent federal grant application submitted by the Department of Vermont Health Access (DVHA) in partnership with VDH and the University of Vermont, *Incentivizing Smoking Cessation for Pregnant Women*, proposed targeted outreach to low income pregnant women, in coordination with VDH's "Bridging the Gap" plan to address tobacco-related disparities in Vermont. This plan targets lower socio-economic status adults, as well as clients of mental health and substance abuse services; these groups smoke at roughly double the average rate for all adults in Vermont.

### **VDH-Division of Alcohol and Drug Abuse Programs (ADAP)**

- *Federal Block Grant*  
ADAP oversees a federal block grant that requires all recipients of the federal block grant monies to prioritize populations for substance abuse service delivery. Two of the three priority populations are:
  - Pregnant IV injecting women
  - Pregnant women

The federal requirement is for these populations to receive services within 48 hours of contact with the provider.

- *Community Response Teams (CRT)/CIS Teams*  
Preferred Providers receiving grant funds through ADAP are required to participate in their local CIS teams, as requested. The primary function of the Provider is to expedite required services related to addiction for the identified family member. In some communities, a formal Community Response Team (CRT) exists that works in tandem with the local CIS Team to discuss on a monthly basis cases involving pregnant/postpartum women and their recovery or need for addiction services. Currently there are teams in Burlington (CHARM) and Rutland (BAMBI – see March of Dimes below).

### **Department of Vermont Health Access (DVHA)**

- *Vermont Chronic Care Initiative (VCCI)*  
DVHA registered nurses and social workers provide care coordination and case management services to high risk beneficiaries, including pregnant women. The program uses a holistic approach that addresses physical, behavioral, and socioeconomic conditions that present barriers to health improvement. DVHA care coordinators are fully integrated core members of existing *Blueprint for Health* Community Health Teams. In several areas, they are co-located in provider practices and medical facilities.

### **VDH and University of Vermont –Vermont Child Health Improvement Program (UVM/VCHIP)**

- *Improving Care for Opioid-Exposed Newborns (ICON)*  
The goal of the ICON Project is to improve health outcomes of Medicaid-eligible, opiate-exposed infants, by improving availability, access, efficiency, and coordination of care and services for Medicaid-eligible opiate-dependent pregnant and parenting women and their infants. Through collaboration between VDH's Division of Alcohol and Drug Abuse Programs (ADAP) and Office of Local Health, staff provide targeted educational trainings aimed at increasing awareness and adherence to best-practice guidelines, care management and coordination, coordination of services for opioid-dependent pregnant women during the prenatal, intrapartum, and initial postpartum period, as well as the management of opioid-exposed newborns.
- *Vermont Regional Perinatal Health Project (VRPHP)*  
The goal of the VRPHP is to improve efficiency and effectiveness in the management of Medicaid-eligible newborns by assisting Vermont participating hospitals and their community partners to identify and implement practices that measurably improve the delivery of health care services and health outcomes for this population. Specific attention is given to Medicaid-eligible opiate-dependent pregnant and parenting women and their infants. Activities include hospital-based educational outreach, quality improvement activities, research and dissemination of evidence-based guidelines and current best practice recommendations to skilled medical professionals related to the delivery of perinatal care. Trainings

include perinatal conferences that incorporate reviews of hospital-specific and population level data, and key quality care indicators benchmarked against national trends and outcomes. A registry is maintained of Vermont Medicaid-eligible opioid-dependent pregnant women and Medicaid-eligible opioid-exposed infants.

- *Obstetrical (OB) Outreach*

The goal of the OB Outreach project is to strengthen and expand a network of obstetric providers and nurses at Medicaid participating Vermont and New Hampshire birth hospitals and to improve the quality of care provided to Medicaid-eligible women and infants. Activities include the following: collecting data regarding maternal and fetal risk factors, interventions and outcomes through a web-based registry called OBNET; establishing prenatal care standards and recommendations; identifying potential recommendations for changes in state Medicaid policy for obstetrical care of women; examining the impact of obesity and abnormal gestational weight gain on maternal and child health; and increasing skilled medical professionals' knowledge regarding the impact of obesity in pregnancy and related interventions. Specific attention is given to the needs of opiate-exposed pregnant and post-partum women and their infants.

Project personnel also participate in periodic transport conferences for obstetric care providers at Vermont Medicaid participating hospitals to review their obstetric care practices and outcomes, and to discuss patient focused pregnancy complications and new obstetric management algorithms. Staff also provides 24-hour telephonic consultative service for referring Medicaid participating providers regarding management of pregnancy complications including management of opiate dependent women.

### **Community Partners Partially Funded by AHS**

- *Lund Family Center*

The Lund Family Center's mission is to help children thrive by serving families with children, pregnant or parenting teens and young adults, and adoptive families. It is a private, non-profit organization that has become a comprehensive treatment facility for pregnant or parenting young women with substance abuse and/or mental health issues and their children. Clinical services include screening and assessment, outpatient treatment, group counseling, case management, family therapy, and aftercare services. Lund also offers a 24-bed residential treatment program with 24-hour counseling staff, on-site nursing staff, and access to comprehensive treatment services for pregnant and parenting young women with a substance abuse and/or mental health diagnosis.

- *Washington County Mental Health (WCMH)*

WCMH offers Early Childhood Mental Health services that include a case manager who works primarily with mothers experiencing co-occurring mental health/substance abuse challenges and their at-risk children. Services may begin pre-partum. Attached to the service is *Sierra House*, a home that offers

temporary housing to these mothers. Referrals come primarily from the local Case Review Team, members of which also serve as the *Sierra House* Advisory Board.

- *School Health*

Comprehensive health education is a part of Vermont's Coordinated School Health Program, based on a CDC model designed to coordinate health and education. The Comprehensive Health Education curriculum includes activities that help young people develop the skills they need to avoid sexual behaviors that result in HIV infection, other STDs and unintended pregnancy, as well as tobacco use, dietary patterns that contribute to disease, sedentary lifestyle, alcohol and other drug use, and behaviors that result in unintentional and intentional injuries.

- *Parent Child Centers*

Vermont has 15 Parent Child Centers that provide home visiting as part of a variety of supports and services for families, and also connect family members to additional information and assistance. Services include supports for pregnant and parenting teens through the Learning Together program, which is grant funded through 2013. Case managers help link teen parents and parents-to-be with a variety of resources including health care.

### **Private Foundations/Commercial Payers**

- *March of Dimes*

- *Prematurity Campaign*

- A national initiative that has invested millions of dollars in research, professional education, advocacy and community programs to reduce high risk pregnancies and premature birth.

- *Teen Pregnancies*

- March of Dimes works with several Parent Child Centers to reduce risks associated with teen pregnancies and also prevent a second teen pregnancy.

- *Smoking Cessation*

- March of Dimes has collaborated with MCH coordinators, UVM, and the WIC program to develop initiatives for targeting smoking cessation efforts within the WIC program.

- *Opiate Use*

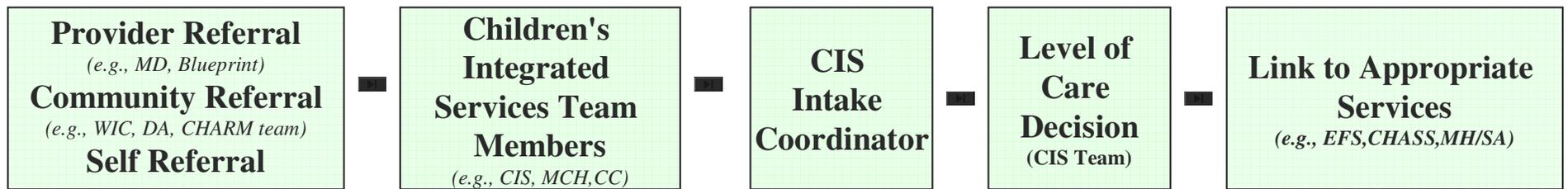
- March of Dimes provided funding to VCHIP to develop and publish *Vermont Guidelines for Opiate Exposed Newborns*, including a video demonstration of newborn screening techniques. March of Dimes also provided funding to Rutland Regional Medical Center for launching *Babies and Mothers Beginning In-synch (BAMBI)*, a comprehensive referral program to help with early identification and care.

- *Blue Cross Blue Shield of Vermont (BCBSVT)*  
BCBSVT offers the *Better Beginnings* program to pregnant members. The telephonic program includes dedicated RN case managers, structured member education, and enhanced member benefits, and strives to create an interactive partnership among the member, obstetrician, and case manager.
- *Fletcher Allen Health Care (FAHC) Maternal Fetal Medicine Services (MFMS)*  
MFMS at FAHC provides specialized care for all types of complications of pregnancy, including women who have serious illnesses. These illnesses may be either in association with, or as the result of pregnancy. The principal aim of the service is the early detection and treatment of complications of pregnancy in order to minimize any adverse maternal and fetal consequences of these complications. MFMS also care for pregnancies where there is a suspected or established fetal abnormality, providing diagnostic, therapeutic and counseling services. Women are referred by their primary care provider.
- *UVM Genetic Counseling*  
Genetic counseling services are provided through the Vermont Regional Genetics Center, a division of UVM's Department of Pediatrics. The Center, with financial support from the newborn screening program at VDH, provides genetics evaluations and genetic counseling at several sites within Vermont and works closely with health care providers and families to accomplish an integrated system of family-centered care for genetic conditions.

# Attachment #2 Medicaid High Risk Pregnancy Initiative Integration of CIS, MCH, and DVHA CC

## Referral Source

## Outcome



**Q: What is the Criteria for Program Acceptance?**

**A: High Risk Pregnancy as defined by the Referring Providers**

**Q: How is Contact Initiated?**

**A: Through the Local CIS Team Members**

**Q: Who Performs Service Level Needs Assessment?**

**A: CIS Team Members (e.g., CIS, MCH, DVHA care coordinators)**

