# State Guide to Improving Prenatal Care

A healthy life begins with a healthy pregnancy. Improving Prenatal Care In Vermont



## State Guide to Improving Prenatal Care

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#### The following organizations developed and facilitated the Collaborative and this toolkit:

The Vermont Child Health Improvement Program (VCHIP) is a populationbased child health services research and quality improvement program of the University of Vermont College of Medicine. VCHIP's mission is to optimize the health of Vermont's children by initiating and supporting measurement-

based efforts to enhance private and public child health practice. VCHIP provides an established mechanism for Vermont's clinicians to continually improve the care they offer children and families throughout Vermont, and supports clinicians in their efforts by providing tested tools and techniques to improve care for specific populations.

The University of Vermont College of Medicine in alliance with Fletcher Allen Health Care, has as its mission to render the most compassionate and effective care possible, to train new generations of caring physicians in every area of medicine, and to advance medical knowledge through research. They serve – and learn from – the community.

#### The following organizations funded and assisted in the development of the Collaborative and this toolkit:

The March of Dimes is a national voluntary health agency whose mission is to improve the health of babies by preventing birth defects, premature birth and infant mortality. Founded in 1938, the March of Dimes funds programs of research, community services, education, and advocacy to save babies and in 2003 launched a campaign to address the increasing rate of premature birth.

The Collaborative was funded in part by a grant from the March of Dimes. Representatives from the March of Dimes Vermont Chapter were a lead partner in the development of the Collaborative. In addition, March of Dimes national and local representatives have assisted in the review of clinical content. All materials are for information purposes only and do not constitute medical advice. The opinions expressed are those of the author(s) and do not necessarily reflect the views of the March of Dimes.

The Vermont Department of Health's vision is to have the nation's premier system of public health, enabling Vermonters to lead healthy lives in healthy communities. The Department of Health is proud to continue a long tradition of public health service and

commitment to excellence in maternal and child health services in Vermont. As the State's lead agency for public health policy and advocacy, the Department developed a plan known as *Healthy Vermonters 2010* that includes six measurable maternal, infant and child health objectives related to improving pregnancy outcomes. The Collaborative is funded in part by the Vermont Department of Health. Representatives from the Vermont Department of Health have participated in clinical content development.

#### The Collaborative was developed in partnership with:

The National Initiative for Children's Healthcare Quality (NICHQ) is an education and research organization dedicated solely to improving the quality of health care provided to children. Founded in 1999, NICHQ's mission is to

eliminate the gap between what is and what can be in health care for all children. NICHQ raises awareness, helps clinicians and practices improve care, and undertakes research.

*Dartmouth Medical School* is dedicated to advancing health through the dissemination and discovery of knowledge. Their chief responsibility is to select students of exceptional character and accomplishment and prepare them to become superb and caring physicians, scientists and teachers. They are committed to:

- Education of health professionals in an environment of discovery
- Research that advances health
- Formulation of health policies in the interest of their citizens
- Service with their partners to maintain Dartmouth-Hitchcock Medical Center as a local, regional and national resource for health care of the highest quality



Marc







DEPARTMENT OF HEALTH

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## **Special Thanks**

Improving Prenatal Care in Vermont (IPCV) would like to acknowledge the support, experience and expertise of our Funders: The March of Dimes and the Vermont Department of Health. Their generous input and encouragement were indispensable. We also would like to thank the National Initiative for Children's Health Quality for their guidance, resources and expertise.

Thank you to our partners, The March of Dimes - National Office and Vermont Chapter, the Vermont Department of Health's Department of Prevention, Assistance, Transition and Health Access, the University of Vermont College of Medicine and Dartmouth Medical School.

This project would not have been a success without our participating prenatal care providers and their staff. As leaders and role models in the community, these practices continually demonstrated their ongoing commitment to learning, improving and delivering optimum prenatal care for their patients. It was no easy task for a busy practice to find the time and/or resources to fulfill the project responsibilities. The IPCV Team, Faculty and Funders are extremely proud and appreciative. We are privileged to have worked with these champions and leaders.



# **I**Introduction And Purpose

#### Healthcare Improvements: Changes that Impact Outcomes

Each of us goes to work daily wanting to do our best. In this rapidly changing world, however, our best may not be good enough without appropriate information, tools, and resources to help guide our work. Health care standards are constantly changing; therefore, achieving excellence in health care delivery is an ongoing mission. In our pursuit of excellence, we will encounter the need to improve and adjust our approach often as we learn and adapt to the ever evolving world of research and technology. This makes quality improvement a necessary and desirable endeavor. In Vermont, the Vermont Child Health Improvement Program (VCHIP), a partnership between the University of Vermont College of Medicine and the Vermont Department of Health, has focused on supporting health care providers as they work to impact health outcomes for the children, youth, and families we serve through quality improvement.

National and local quality improvement initiatives are based on sound evidence and/or best practice guideline consensus. A 2005 National Academy for State Health Policy survey<sup>1</sup> of Medicaid, maternal and child health, and children's mental health agencies suggests that states are increasingly interested in forming partnerships with physicians, provider organizations, and other entities to support provider education efforts aimed at improving the quality of children's health care. Although the survey reveals that many of the provider education formats adopted or supported by states are fairly traditional—materials, workshops, and grand rounds—states are also adopting newer formats, among them Learning Collaboratives. In 2003 VCHIP launched Improving Prenatal Care in Vermont (IPCV) to augment a State-wide commitment to improving the rate of prematurity and low birthweight. This initiative was made possible through the vital financial and policy support of the March of Dimes and Vermont Department of Health. Projects goals were aligned with the goals of *Healthy Vermonters 2010*. The collaborative process allowed our State and the providers on the frontline to evaluate the current system of care and improve the quality of prenatal care being delivered. This effort increased the connection between the health care system, state agencies, and local community resources.

The IPCV State Guide is designed to provide an outline of the need to improve prenatal care as well as the mission, goals, methodology, and leanings of the Improving Prenatal Care in Vermont (IPCV) project. As the creators of this guide, our hope is that interested organizations will be able to use the materials presented here (and in the "The Practice Toolkit for Improving Prenatal Care," described later), to assist them in their own State's efforts to improve birth outcomes.

#### The Need to Improve Prenatal Care

A healthy start to life begins with a healthy pregnancy and delivery. All obstetric providers aspire to provide the highest standard of prenatal care which results in the best possible outcome for each woman and her fetus. However, despite published consensus standards and evidence-based management strategies and interventions that are aimed at optimizing pregnancy outcome, wide variations in prenatal care exist. In addition, while we are able to obtain reams of data on inpatient care (cesarean section rates, surgical infection rates, etc.), most obstetric providers are not in a position to evaluate their prenatal care and are, therefore, not aware of the strengths and weaknesses of their system of care and practice patterns. Without ongoing evaluation, we are unable to assess how the care we provide impacts health outcomes.

In order to elucidate the puzzles of low birth weight and prematurity, we must first optimize our prenatal care within current consensus guidelines. While there are no known randomized clinical trials in existence that uncover the causalities for preterm labor and low birth weight, women who give birth early and/or who

The survey of the 50 states and the District of Columbia was conducted in 2005 as part the Assuring Better Child Health and Development (ABCD II) program, funded by The Commonwealth Fund and administered by the National Academy for State Health Policy. For additional information about the survey and its findings, visit http://www.cmwf.org/, *State Approaches to Promoting Young Children's Healthy Mental Development: A Survey of Medicaid, Maternal and Child Health, and Mental Health Agencies.* For additional information about ABCD II, visit the NASHP Web site at www.nashp.org.

give birth to low birth weight babies are less likely to have had early or adequate prenatal care as defined by existing guidelines for care . Providers must promote access to early and adequate prenatal care by ensuring the provision of care that is reflective of current "best practice" knowledge.

Adherence to current standards is important for the care of all pregnant women. Research has demonstrated that it is particularly important for low income and/or vulnerable woman, often insured by Medicaid,<sup>2</sup> as this population tends to demonstrate a higher risk of poor pregnancy outcome.<sup>3</sup> Though obstetric providers are responsible for providing high quality, evidence-based care according to the recognized standards and guidelines, current systems of care are not well designed to support the delivery of the highest quality care possible. The recent Institute of Medicine reports, To Err is Human and Crossing the Quality Chasm, argued that variations in the delivery of health care are inherent properties of the current system design and that improvement in health care can only result from a redesign of the existing systems.

#### **Improving Prenatal Care in Vermont**

IPCV was a three year project designed to improve prenatal care throughout the state by identifying "best practice" prenatal guidelines and assisting busy obstetric providers in incorporating these guidelines into their office systems. The goal of the project was to contribute to efforts to lower the rates of preterm deliveries and low birthweight babies born in the state of Vermont. A secondary goal of the project was to provide recommendations for policy changes at the state level

Recognizing the importance of timely, evidence-based prenatal care and the possibility of applying quality improvement methodologies tested with other health care providers in Vermont to improve prenatal care, the Vermont Child Health Improvement Program (VCHIP) applied for funding from the March of Dimes and the Vermont Department of Health to develop and implement a program for improving prenatal care in Vermont (IPCV). VCHIP built upon Vermont's strong public-private collaboration at the state and local level, by bringing together the Vermont Department of Health, the Office of Vermont Health Access (Vermont's Medicaid Division), private obstetrical providers and the University of Vermont's Departments of Obstetrics and Gynecology, Pediatrics and Family Practice. Through IPCV, Vermont practices were also linked to the national resources of the March of Dimes and local insurance payers such as Blue Cross Blue Shield and MVP.

<sup>2</sup> CDC Pregnancy Nutrition Surveillance System, 2003

<sup>3</sup> Buescher PA, Method of Linking Medicaid Records to Birth Certificates May Affect Infant Outcome Statistics, AJPH April 1999, vol 89 No. 4

# Methods

#### **The Framework**

IPCV worked with participating prenatal care providers to develop and implement practice changes that enhanced prepregnancy and prenatal risk assessment, pregnancy care delivery, pregnancy case management and education services for women. We chose to tackle these issues through an innovative approach of working with providers to redesign their care systems so as to improve their adherence to the accepted standards of prenatal care, thereby providing optimum care. Three framework models were used as the structure for IPCV:

- Learning Model that makes obstetricians, nurse midwives, and family practice physicians part of a network of experts and fellow-learners.
- **Care Model** that outlines the elements of patientcentered prenatal care.
- Improvement Methodology that enables teams to rapidly test and implement changes to improve care.

The **Learning Model** used in the IPCV Collaborative is adapted from the Breakthrough Series<sup>4</sup>, a Collaborative Model developed by the Institute for Healthcare Improvement (IHI) in the mid-90s. The Breakthrough Series (BTS) was created to help health care organizations make "breakthrough" improvements in quality while reducing costs. A Breakthrough Series Collaborative is a short-term (6- to 15-month) learning system that brings together a large number of teams from health care provider practices and hospitals or clinics to seek

#### IPCV's Project Goals:

1.) Contribute to efforts to decrease the rate of preterm delivery and low birthweight in Vermont

2.) Develop a practice-level measurement tool (based on the prenatal care standards) for assessing practice performance in the delivery of prenatal services to women

3.) One hundred percent of participating practices will assess their level of adherence to the standards at baseline and perform monthly assessments based on their improvement strategy throughout the duration of the project

4.) Achieve a relative improvement of 20% in each practice in one or more of the following areas: diabetes, nutrition and appropriate weight gain, STI screening, smoking cessation, and genetic screening and counseling, and preterm labor education (expanded to include depression, substance abuse, intimate partner violence, periodontal disease, and influenza)

improvement in a focused topic area. It is a structure in which interested organizations can easily learn from each other and from recognized experts in topic areas where they want to make improvements. The driving vision behind the BTS is that sound science exists on the basis of which the costs and outcomes of current health care practices can be greatly improved, but much of this science lies fallow and unused in daily work. In other words, there is a gap between what we know and what we do.

A unique **Care Model** was developed for IPCV: The Three-Tiered Approach to Care. The Three-Tiered Approach defines quality 'best practice' prenatal care as having three essential steps: assessment and/or screening, intervention, and follow-up. Each tier occurs according to current standards in prenatal care and builds on the foundation of the prior tier.

The Breakthrough Series Collaborative Learning Model uses the Model for Improvement as its **Improvement Methodology**. The Model for Improvement, developed by Associates in Process Improvement (http://www.apiweb.org/API\_home\_page.htm), is a simple yet powerful tool for accelerating improvement. This model has been used very successfully by hundreds of health care organizations in many countries to improve many different health care processes and outcomes.

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Langley G., Nolan K., Nolan T., Norman C., Provost L. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance. Jossey-Bass Publishers; San Francisco. 1996.

#### Timeline

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- Expert Meeting Preparation: February–July 2003
- Expert Meeting: August 2003
- Refine Change Package: August 2003–April 2004
- Recruitment: December 2003–April 2004
  - Collaborative: February 2004–May 2005 Learning Session #1: May 2004 Action Period #1: June–August 2004 Learning Session #2: September 2004 Action Period #2: October–December 2004 Learning Session #3: January 2005 Action Period #3: February–April 2005
- Evaluation: July-December 2005

Follow-up Interviews: July–August 2005 Prepare Manuscript & Toolkits: September–December 2005 Close-out Project: December 2005

#### The Changes

We built our project on a solid foundation of research, review of current literature and consultation with experienced and knowledgeable national and local experts in the field of prenatal care. The first step was to develop a project charter. The charter's purpose is to act as a map for practical changes that will result in improvement. Thus IPCV's charter stated the need for improvement by articulating the gap in what is, according to statistical information on prenatal care in Vermont, and what could be, as stated by the Collaborative goals. It also stated the Collaborative's mission, described the benefits of undertaking improvement work, presented potential outcome and process measures, and set expectations for Collaborative teams.

#### The Participants

Our criteria for acceptance into the Collaborative was that the applicant was a provider of prenatal care and communicated a commitment to improvement. We anticipated it might be more challenging for smaller practices to see real improvement because of small patient sample size but we felt it was important to give the opportunity to everyone. Thus, any prenatal care provider who applied within the State of Vermont was accepted. As a result of an intensive recruitment process, a total of ten practices teams from a variety of geographical and demographic areas across Vermont joined the Collaborative. It was coincidental and also advantageous to have received a commitment from at least one practice from each of the OB practice types: obstetricians, family practitioners and certified nurse midwives.



### **Measurement**

Measurement is the primary indicator of change used in a Collaborative. Participating teams use data resulting from measurement to track the implementation of changes in their office systems and whether patients receive a proven prenatal intervention as a result. Additionally, the measurement strategy provides a feedback mechanism and is used to monitor progress over time. This informs the improvement process at the practice and Collaborative level.

IPCV designed a specific measurement strategy that would allow participants to track the implementation of the Three-Tiered Approach (assess and/or screen, intervene and follow-up) for each prenatal care topic area. The measures were targeted to promote improvement where a gap in the current level of care and best practice recommendations existed, and where changes could reasonably be implemented. Data collection surveys and tools can be accessed at www. vchip.org or in the IPCV Practice Toolkit for Improving Prenatal Care.

Data resulting from practice data collection were used to create run charts that would illustrate improvement over time. The run charts presented are examples that reflect marked improvement in three areas: nutritional assessment, pre-gestational diabetes screening, and psychosocial/behavioral assessment in the first trimester.

#### What is a Change Package?

A change package is a set of materials and ideas that guide and enable Collaborative teams to implement breakthrough change in their setting. There are four main components:

1) a conceptual framework that describes features of the ideal system for prenatal care

2) a set of changes or strategies that have proven to be effective in achieving improvements (often called "change concepts")

3) the Model for Improvement (an approach for testing and refining changes)

4) a set of measures that enable teams to track progress to Collaborative aims



### **IPCV Run Charts Indicating Improvement**

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# **IV)** Topic Areas For Improvement

When deciding whether to undertake a prenatal care topic area on a state-wide level, it's important to consider the impact of the improvement not just on the patient, but also the provider and state-wide health care system. The following tables provide a brief outline of IPCV's most significant change, topic specific goals and measures as well as state-wide health care and systems impacts.



### The Impact of IPCV's Change Concepts on Improving Prenatal Care

Tier	Measures		Definitions		Collaborative Goal
Assess	Was patien tobacco use	t asked about 2?	<b>Tobacco</b> user includes tobacco use other than and very recent smoke	forms of inhaling rs	99%
Intervene	Of current was patient counseling	tobacco users, t given in-office ?	<b>Counseling:</b> evidence educating the patient o harmful effects of smo during pregnancy, or a assessment of a patient readiness to quit, or es a quit date or quit plan	of n the king n 's tablishing	99%
	Of current tobacco users, was patient referred to a cessation program?		<b>Referral:</b> can be a structured cessation program or a telephone quit line		99%
Follow-up	If patient is user, did pa weeks?	s/was a tobacco atient abstain at 28			50%
Most Significan Concept	nt Change	Impact		Outcomes	to Consider
Referrals fax fron Care (PNC) provi "Quit Line"	n Prenatal der to state	-Contact and suppor person -Offers standard of c assistance when una or through provider?	t offered by a real are smoking cessation vailable in community s office	-System ne in place wi providers -Resources ongoing su increase re	eds to be set th feedback to needed for pport and ferral load

### NUTRITION

Tier	Measures		Definitions		Collaborative Goal
Assess	Did patient nutritional	receive a assessment?	Assessment: Evidence assessing a patient's die habits, food allergies, fo vitamin use, frequency or appropriate weight ga pregnancy. BMI should calculated	of tary blic acid/ of eating ain during l also be	95%
	Was BMI c	alculated?			95%
Intervene	If patient is risk', did he office couns	'at nutritional e/she receive in- eling?	Nutritional risk: any p with a documented nutr concern, such as low m weight (BMI < 20), obe $\geq$ 30), poor weight gain by 28 weeks), or eviden eating disorder. Counse minimum, evidence of a the patient on appropria habits and a documente weight gain goal	atient itional aternal sity (BMI (< 15 lbs ce of an ling: at a educating te dietary d target	75%
	risk', was h nutritional	'at nutritional e/she referred for counseling?	Adequate weight gain: at 28 weeks (or start of trimester)	>15 lbs the 3rd	/5%
Follow-up	Did patient appropriate weeks?	achieve e weight gain at 28			90%
Most Significan Concept	nt Change	Impact		Outcomes	to Consider
BMI education Parameters for weight gain based on BMI		Assist in appropriate weight gains for over and under weight women (65% of population)		Assist in ed women on a weight befo after pregna	ucating all appropriate re, during, and ancy
		pregnancy and beyon	pregnancy and beyond		hieving 2010

Tier	Measures	Definitions	Collaborative Goal
Assess	Did patient receive a complete psychosocial assessment (substance abuse, intimate partner violence, depression) at the 1st prenatal visit?	Assessment: should occur at the 1st prenatal visit, once in the 2nd trimester and once in the 3rd regardless of risk	100%
	Did patient receive a complete psychosocial assessment (substance abuse, intimate partner violence, depression) once in the 2nd AND once in the 3rd trimesters?		100%
Intervene	If 'at-risk' for substance abuse, intimate partner violence, and/or depression, did patient received in-house counseling or a referral for treatment or counseling?	At-risk: a patient with a current or prior issue	99%
Follow-up	If 'at-risk' for substance abuse, intimate partner violence, and/ or depression AND referred for treatment or counseling, did patient actually receive treatment or counseling per referral?	Treatment/counseling: includes patients who have received or are currently undergoing treatment and/ or counseling for a prior issue	75%
Follow-up	During the past month, of the patients due for a 2 week postpartum follow-up phone call, how many received a call?		95%
	During the past month, of the patients due for a six weeks postpartum visit, how many presented for the appointment by 8 weeks?		95%
Most Signific Concept	ant Change Impact	Outcom	es to Consider

### PSYCHOSOCIAL/BEHAVIORAL (SUBSTANCE ABUSE, INTIMATE PARTNER VIOLENCE, DEPRESSION

Concept	Impact	Outcomes to Consider
Assess at least once in each trimester	The more often the question is asked the more likely the patient will trust to divulge or admit to a need or behavior	Improve outcomes for women and children at risk
Intervention/Referral	Appropriate referral or in office	State mental health resources not readily
Follow-up on intervention and/or referral	intervention improves outcomes for mother and baby	accessible or available for immediate or needed, real time referral and treatment
Contact with patient by 2	Follow up on successes, readiness, and	
weeks postpartum	status of patient to encourage progress and	
	assess ongoing risks	

Tier	Measures	Definitions	Collaborative Goal
Assess	Of patients at risk for pre- gestational diabetes, did he/she receive a Glucose Tolerance Test at 16 weeks?	At-risk: BMI> 30 or previous macrosomic infant	90%
	Did patient receive a Glucose Tolerance Test at 28 weeks?	Assessment: use a 3 hour Glucose Tolerance Test	95%
Intervene	Of patients who screened positive at 16 or 28 weeks, did he/she receive appropriate intervention?	Intervention: dietary or insulin	99%
Follow-up	Of patients who screened positive at 16 or 28 weeks, did he/she have normal glucose levels at 34 weeks?	Normal glucose level: < 95 mcg. fasting or < 120 mcg. for 2 hour GTT	99%

Concept	Impuci	Outcomes to constact
Screen at risk patients by	Improve outcomes by earlier detection of	Early pregnancy
16 wks	existing condition	identification of patients with diabetes will
Group consensus on cut off parameters for 1 and 3 hr GTT	Community practice standards	significantly improve perinatal outcome and long term care of patient and infant

## INFECTIOUS DISEASE

Tier	Measures		Definitions		Collaborative Goal
SEXUALLY TRANSMITTED INFECTIONS					
Assess Was patient screened for GC and Chlamydia?				95%	
Follow-upWas patient retested if positive and/or re-screened if at risk due to social factors by 34 weeks?				95%	
		INFL	JENZA		
Intervene	Did patient vaccination	received Flu ?	<b>Flu Season:</b> October th April	nrough	75%
	PERIODONTAL DISEASE				
Assess Did patient receive an evaluation of oral cavity for Periodontal Disease?				90%	
Intervene If evidence of Periodontal Disease was found, was this patient referred for dental care?		Referral: should be made evidence of disease is p in the mouth, the exam unsure, or the patient h dental care in the last y	de when present iner is as not had ear	90%	
Most Significat	nt Change	Impact		Outcomes	to Consider
Concept		Impuci		Guicomes	to consider
Screen for evidence of Periodontal Disease Re-screen patients at risk for STIs in the third trimester		Evidence links poor periodontal health to preterm delivery Re-screening at risk patients will identify those with re-infection whom require treatment		State does 1 dental prov Medicaid p	not have sufficient ider for the opulation
				Maternal an increases m potential m remain unio	nd fetal infection norbidity and ortality if STIs dentified

### GENETIC SCREENING

Tier	Measures		Definitions		Collaborative Goal
Assess	Was patien cystic fibro	t screened for sis (CF), if eligible?	<b>Eligible patient:</b> Cau Ashkenazi Jew	icasian or	95%
Assess	Assess Was patient screened for genetic risk using questionnaire (as defined)?		<b>Complete genetic screening</b> <b>questionnaire:</b> must be a 3-generational assessment containing all the elements in the "Genetic History Questionnaire for Prenatal Patients." (see below)		95%
	Was a gene performed?	tic screening test ?	Screening test: a Qu marker and/or Ultrase	ad or Triple creen	
Most Significar Concept	nt Change	Impact		Outcomes	to Consider
All patients offer date noninvasive screening CF testing offered Caucasian and As Jews Thorough Family questionnaire	ed up-to- genetic d to all shkenazi	Identification of at ri request prenatal diag genetic abnormalitie Early identification of Identification and ap of patients with posi allows thoughtful de and after pregnancy	isk patients who may gnosis of significant es of at risk pregnancies propriate counseling tive genetic histories ecisions both during	Improved i lethal gene Current scr allow all pa genetic scr just those is by tradition Early ident treatment of specific gen may impro- outcome	dentification of tic abnormalities reening tools attents access to eening rather than dentified at risk hal methods ification and of neonates with hetic disorders we long term
				Identificati risks (e.g., BRCA posi optimal co screening t	on of genetic breast cancer and tivity) allows unseling and/or o be performed

### PRETERM LABOR

Tier	Measures	Definitions	Collaborative Goal
Intervene	Were signs discussed a and 22 wee	and symptoms nd given between 18 ks?	95%
Most Significa Concept	nt Change	Impact	Outcomes to Consider
Screen for risk o delivery in early and patient educa regarding signs a symptoms of Pre	f preterm pregnancy ation and term Labor	Early screening will allow prenatal care to be organized commensurate with the patient's risk (e.g., more frequent prenatal visits)	Decrease in preterm delivery rate

(trans Screen for risk to allow length transfer of care as necessary

by 20 wks

New treatment (progesterone) or screening (transvaginal ultrasound for cervical length) options are becoming available



# **V**) The Practice Toolkit For Improving Prenatal Care

Despite the compelling nature of the work, many Vermont practices were unable to participate in IPCV. Thus, IPCV recruited only a small portion of the total prenatal care providers in the state. To give providers who did not participate in the Collaborative an opportunity to use the ideas developed by IPCV to improve his/her care, IPCV created a "Practice Toolkit for Improving Prenatal Care."

At the conclusion of the Collaborative, tools and materials that had been collected and updated throughout the Collaborative were gathered into the Practice Toolkit and distributed to every prenatal care practice in the State of Vermont. The Practice Toolkit describes the project and provides a compelling explanation of why and how providers play an essential role in the improvement of pregnancy outcomes. Each topic area provides topic-specific checklists that follow the Three-Tiered Approach and can be used as a guide to implement changes that will lead to optimum prenatal care.

Should you choose to use some of the ideas contained in the Toolkit, it will be important to research their relevance to the up-to-date understanding of adequate prenatal care both nationally and in your State. Here are our recommendations for implementing the Practice Toolkit:

- 1.) The application of these ideas should be done in collaboration with prenatal care providers, such as in a Breakthrough Series Collaborative. This will provide a forum for open discussion regarding community standards, thereby soliciting provider feedback on how to incorporate evidence-based improvements into local office systems in the least disruptive way.
- 2.) It's essential to compare the content of the Toolkit with updated prenatal care standards. Identify new knowledge and changes in "best practice" recommendations since the printing of the Toolkit by researching current literature and consulting with experts in the field.
- 3.) Assist providers to examine their office system to find "gaps" in care as compared to current standards of 'best practice' for assessment, intervention and follow-up.
- 4.) Select, develop and/or adapt a screening tool
- 5.) Identify established, county-specific referral options
- 6.) Begin universal screening

The Practice Toolkit can be used as a guide to implement current changes in best practice and will ensure that processes are set up to better assess, intervene and follow-up on issues surrounding the continued delivery of optimum prenatal care. Through its use, you have an opportunity to continually improve care for pregnant women and their families in your State.

#### Resources

These are resources and agencies/ organizations used by IPCV to obtain the tools and best practice guidelines that are included in the Practice Toolkit. This list is not exhaustive, but rather is meant to direct you to sources of information that might help you to put together tools, guidelines and best practice recommendations for your prenatal care Collaborative. We attempted to provide you with general resources that are less likely to change in the near future, though you may find that you'll need to investigate to find updated website addresses.

#### National

- March of Dimes Web site: marchofdimes.com (English) or nacersano.org (Spanish)
- Funded educational resource centers (Area Health Educations Center [AHEC])
- American College of Obstetrics and Gynecology (ACOG) at http:// www.acog.org, and other professional organizations, such as the American Academy of Family Physicians (AAFP) or American Medical Association (AMA) at http://www.ama.org
- National Guidelines Clearinghouse: http://www.guideline.gov/
- Web search

#### State/local

- Health Plans
- County Resources
- Health Department for:
  - Patient directed materials
  - Content experts for Learning Sessions
  - District offices for content experts who would be willing to visit an individual practice
  - Patient directed materials



# **VI**)Going Beyond One Improvement Project

Although quality improvement can be championed by a single individual within an organization, a Learning Collaborative that will partner the State and private sector providers on the scale of IPCV is more easily developed when a program of organizations is in existence capable of providing infrastructure, funds, and expertise. The Vermont Child Health Improvement Program (VCHIP) is one example of such a network.

VCHIP's mission is to optimize the health of Vermont's children by initiating and supporting measurementbased efforts to enhance private and public child health practice. Sustaining VCHIP's mission are four key values that permeate our work:

- Maintaining a community focus
- Seeking and supporting innovations
- Ensuring responsiveness
- Encouraging collaboration throughout Vermont

VCHIP is a public-private partnership that works in collaboration with public health to support clinicians in their efforts to improve children's health care by providing the tested tools and techniques of *quality improvement*. This is accomplished through:

- Measurement-based assessments of current care delivery for specific populations
- One-on-one and group support with VCHIP's quality improvement staff to identify specific achievable improvements in current office systems of care
- Active collaboration with others seeking to make improvements (other clinicians, state government, and private insurers)

The following graph portrays VCHIP's development and the sequence of maternal and pediatric health issues addressed over time:



VCHIP has engaged providers throughout Vermont in assessing their care and applying quality improvement methodology, and improving the care delivered in their practice. As of 2004 practices in the state participating in one or more VCHIP project are:

- 85% of Pediatric Practices
- 27% of Obstetric Practices
- 23% of Family Practices
- 39% of Certified Nurse Midwife Practices
- 100% of Hospitals providing obstetrical delivery services

VCHIP has created a resource for states interested in setting up programs similar to VCHIP, called the *Improvement Partnership Guide*. An Improvement Partnership (IP) is a durable regional collaboration of public and private partners that uses measurement-based efforts and a systems approach to improve the quality of children's health care. The *Improvement Partnership Guide* will be available in 2006. To obtain a copy, call VCHIP at (802) 847-4220.

The complex and time-consuming task of moving quality improvement forward requires an organizational "hub." IPs are uniquely positioned to advance quality improvement efforts within a designated state or region because they provide an institutional home, staff, and other resources that are dedicated solely to facilitating quality improvement processes in clinical settings. When an IP is established, large-scale QI projects to identify and improve gaps in care can be implemented on a continuous basis.

Health care is delivered locally and organized predominantly on a state or regional basis. A state or regional Improvement Partnership is effective because it creates linkages among the multiple levels of the child health care system by bringing together those who can effect the desired changes. This coordination supports quality improvement in the clinical settings where care takes place and promotes policy changes at the regulatory or state levels to sustain these improvements in care. It has been said that "all improvement is local." Experiences with IPs suggest that, while this is true, it is also true that local improvements benefit enormously from coordination and support on a state or regional basis.

The Department of Health and VCHIP have forged a strong and effective partnership for improving public health. In the past five years, VCHIP has demonstrated its ability to get results by collaborating with frontline health care professionals to improve the health and health care of Vermont's women, children, and youth. I am proud of this unique partnership and I look forward to continuing our alliance. (Paul Jarris, MD, MBA, Commissioner, Vermont Department of Health)

### Conclusion

We are very proud of the fact that this Breakthrough Series Collaborative was the first of its kind to tackle the global concern of preterm delivery and babies born with low birth weight. The experts taught us there are many pieces to this puzzle – there is no simple solution or direction that is proven to dramatically impact these pregnancy outcomes. At the time of this report, the rate of premature deliveries in the State of Vermont is 9.5/100 live births. Considerable work still needs to be done if we are to impact this rate.

With advice, support and guidance from national and local experts, the Vermont Department of Health, the March of Dimes, participating practices, and all our collaborators, IPCV brought a new methodology to ongoing efforts to improve the present prenatal care system. We are proud to say that this project assisted in the effort to establish statewide standards in prenatal care where only guidelines previously existed, and therefore constitutes one more step towards improving outcomes for women and their families in Vermont. Opportunities to improve will continue to appear as States organizations and providers partner to set the best possible systems in place. With thoughtful and ongoing collaboration and continued focus on better outcomes, State healthcare systems can provide the highest quality care possible for women and their families.

Thank you.

The State of Vermont has been thrilled to work with VCHIP and I believe other states would leap at the chance to participate in the same way. The ... fast turn around process put in place in Vermont has had more measurable impact on quality improvement in practice than years of long term planning, complex frameworks for improvement, and cumbersome training programs......We are seeing changes and we know that they are a proxy for improved health and well-being in our state. I have spoken with a number of other state agency directors who are very interested in partnering in this process. (former Deputy Director, Agency for Human Services)





(802) 847-4220 http://www.vchip.org