

***VERMONT*2007**

Blueprint for Health: Strategic Plan

Report to the Legislature on **Act 191**
January 2007



108 Cherry Street, PO Box 70
Burlington, VT 05402
healthvermont.gov



Table of Contents

Introduction	3
Part 1. Chronic Disease: The Problem and the Approach	4
Part 2. Blueprint Goals and Objectives	20
Part 3. Chronic Disease Information System (Model)	36
Part 4. AHS Implementation Plan and Coordination	44
Part 5. Organizational Structure	51
Appendices	
A. Glossary of Acronyms and Terms	56
B. Chronic Care Information System—Preliminary Model	59
C. Vermont Prevention Model	60
D. Organizational Options	64
E. Executive Committee Members	66
F. Department of Health Blueprint Staff	67
G. Blueprint Workgroup Members	68

VERMONT Blueprint for Health

Smart choices. Powerful tools.

Introduction

The Vermont Blueprint for Health, Chronic Care Initiative was launched in the fall of 2003 by Governor James Douglas. It was endorsed by the Vermont General Assembly in 2006 (Act 191) as “... a foundation which it intends to strengthen by broadening its scope and coordinating the initiative with other public and private chronic care coordination and management programs”.

The Blueprint is built on the premise that preventing disease and improving the quality of care for people with chronic illness are effective ways to reduce the overall demand for the highest cost treatment services; leading, in time to moderation in health care costs.

The Vermont Blueprint for Health articulates a clear vision: ***Vermont will have a statewide system of care that improves the lives of individuals with and at risk for chronic conditions.*** To achieve its vision, the Blueprint will:

- Utilize the Chronic Care Model as the framework for system change;
- Utilize a public-private partnership to facilitate and assure sustainability of the new system of care; and
- Facilitate alignment of Blueprint priorities and projects with other statewide health care reform initiatives

This Strategic Plan provides a road map for accomplishing this vision.

Part 1. Problem and Approach

The Impact of Chronic Conditions

Chronic conditions are the leading cause of illness, disability, and death in Vermont.¹ More than half of all Vermont adults have one or more chronic conditions with the number increasing with age. In a recent survey, 88 percent of Vermonters age 65 and older reported having one or more chronic conditions and 20 percent reported having four or more.² Common chronic conditions in adults include diabetes, hypertension (high blood pressure), cardiovascular disease, asthma, arthritis, cancer, respiratory diseases, depression and other mental health disorders, substance dependence and many others.

It is estimated that 15.5 percent of Vermont children (22,886) have a chronic condition.³ The most common chronic conditions in this age group are respiratory diseases, asthma, emotional-behavioral problems and congenital or genetic problems. Most lifelong health habits are learned in childhood setting the stage for development of chronic disease later in life. Among pre-teens and teens, the prevalence of overweight is increasing, and with it an increase in the prevalence of chronic conditions usually associated with aging such as heart disease and diabetes.

The proportion of the U.S. population with chronic conditions is projected to increase by more than one percent per year through 2030.⁴ The increase is driven by a combination of an aging population, increased prevalence of obesity, and lifestyle habits such as poor nutrition, physical inactivity, and tobacco use. Increased prevalence of obesity is of particular concern. Obesity is a risk factor for development of many chronic diseases and

¹ Chronic conditions are defined as chronic illnesses and impairments that are expected to last a year or more, limit what the individual is able to do, and/or require ongoing medical care.

² BRFSS, 2003.

³ National Survey of Children with Special Health Care Needs, DHHS. 2001.

⁴ *Chronic Conditions: Making the Case for Ongoing Care. September 2004 Update.*

complicates treatment of all chronic conditions; and, the rate of overweight and obesity⁵ is increasing among all population groups. In Vermont in 2005, 55.8 percent of adults over the age of 20 were overweight or obese compared to 46.9 percent in 1993, an increase of nearly 0.7 percent per year. Most troubling are increases in overweight among youth in grades 8 through 12 of about 0.5 percent per year, and among 2-5 year old children on WIC by about 0.4 percent per year.

The burden of chronic disease is not only personal but financial. Chronic conditions are the primary reason people receive health care. As a result, caring for Vermonters with chronic conditions is estimated to consume more than 80 percent of the \$2.8 billion spent in the state each year on health care.⁶ Nationally, care for people with chronic conditions represents 83 percent of health care spending, 81 percent of hospital admissions, 76 percent of all physician visits, and 91 percent of prescriptions written.⁷

The needs of Vermonters with chronic conditions will be the primary driver of the demand for health care and the resulting costs for the foreseeable future. As “baby boomers” age, the impact of chronic conditions will continue to grow. As it grows, the imperative to improve the quality of life for those who experience chronic conditions and to contain costs will become even more pressing.

The current health care system in Vermont and in the nation has evolved to provide care for people with short-term, acute, and episodic health needs. However, unlike acute or episodic care, prevention and management of chronic disease requires proactive, planned care; an ongoing, productive relationship between the individual and the provider team; and an environment supportive of this relationship. Because so much of chronic care involves self-care, the locus of control for people with chronic conditions must lie with the individual with support from the family, provider team, and community.

⁵ Overweight is defined as a BMI of 25 to 30 and obesity as a BMI greater than 30.

⁶ It is estimated that in excess of \$2.3 billion was spent on chronic conditions in Vermont in 2002, including approximately \$407 million in Medicaid spending. *Vermont Health Care Expenditure Analysis 2002*. Vermont Dept. of Banking, Insurance, Securities, and Health Care Administration.

⁷ Medical Expenditure Panel Survey, 2001, cited in *Chronic Conditions: Making the Case for Ongoing Care, September 2004 Update*.

Prevention and Care for Chronic Conditions

Prevention

Preserving good health and preventing disease is so obviously important that few would disagree that they should be the focus of any health care system; yet prevention is frequently neglected to address the more immediate

"Since both in importance and in time, health precedes disease, we ought to consider first how health may be preserved, and then how one may best cure disease."

Galen, circa 130-200 AD

demand for care. The goals of prevention are to improve the length and quality of life by forestalling illness, decreasing the incidence of disease and premature death, reducing suffering, and saving money. Prevention strategies are more likely to be effective if they are targeted to both the individual and the population as a whole; and, are designed to simultaneously reach multiple levels of influence on behavior as outlined in the Vermont Prevention Model (Appendix). The effectiveness of this multi-level approach has been demonstrated through the successes of the Vermont Tobacco Control Program and needs to be replicated to prevent chronic diseases and their complications.

Prevention of chronic conditions must begin early; the origins of chronic disease in adulthood are very often found in childhood. Increasing the investment in improving the health of children could substantially reduce the inheritance of chronic conditions in Vermont's adult population. Nowhere else, perhaps, is the axiom 'an ounce of prevention is worth a pound of cure' more applicable than in addressing more effectively the health outcomes and disease management of our children. As with adults, prevention strategies are most effective when delivered consistently through a multi-level approach that reaches children and their families, schools and other community sites and their health care provider and includes both individual and population based strategies.

Treatment (care)

At no time in the history of medicine has the growth in knowledge and technology been more profound. Medical science has advanced at a rapid pace to extend longevity,

improve health and functioning, and alleviate pain and suffering. Unfortunately, the health care system frequently falls short in its ability to translate knowledge into practice and apply these new technologies safely and appropriately.⁸ A recent study found that overall people receive about half of recommended care, and that there were striking similarities across diverse communities and among patients at all income levels and of different races.⁹ Reducing this gap between recommended care and what is delivered holds the promise of significantly improving health outcomes and moderating costs.

Predicting Improvement

Predictive models support the concept that significant improvements in clinical and functional status can be achieved by improving treatment services and/or preventing chronic conditions.^{10, 11} Using diabetes as an example and reduction in mortality as the outcome, this method has been used to demonstrate that better care can significantly reduce mortality rates in a relatively short time (2 to 5 years). Those gains are short-lived however due to longer life of people with chronic disease and the increasing rate of obesity which lead to increasing prevalence of diabetes and more people in need of care. Obesity prevention, targeted only to adults in this model, takes longer to demonstrate an effect on the mortality rate, but over time, leads to a significant decrease in mortality.¹² Prevention begun in childhood can be expected to have an even more profound impact.

The benefit of simultaneously working to prevent chronic disease and to improve the quality of care combines the short term advantage of improving care to effect a fairly rapid reduction in deaths, and the longer term benefit of prevention which maintains and

⁸ IOM. Crossing the Quality Chasm. National Academy Press. 2001.

⁹ Rand Health. Research Highlights: The First National Report Card on quality of Health Care in America. 2006. www.rand.org/health

¹⁰ AJPH article from March issue.

¹¹ Centers for Disease Control, Diabetes Modeling Program. 2005

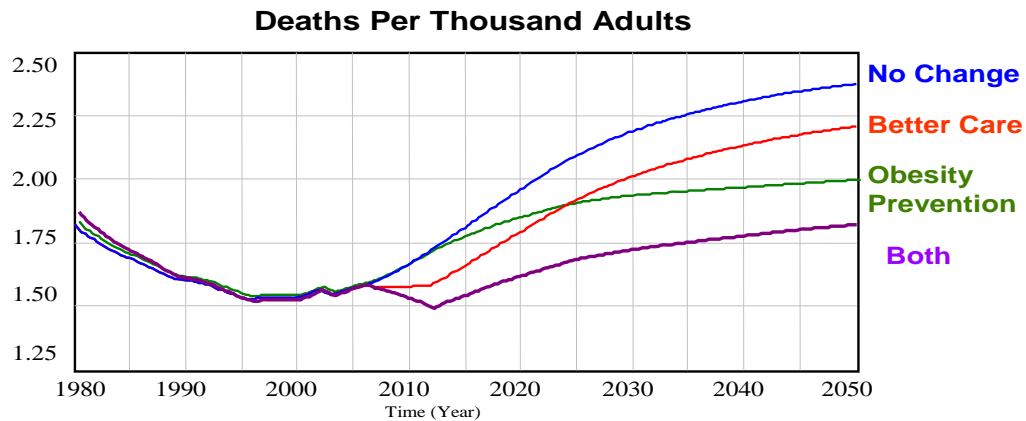
¹² Vermont Department of Health and Centers for Disease Control Diabetes Systems Modeling Project, 2005. (unpublished)

enhances the improvement in the death rate; though with a continued, but slower increase in mortality (figure).

In addition to reducing mortality, this modeling system also allows examination of the impact on health care costs associated with improving care and prevention services for diabetes. Together, the two strategies can be expected to lower annual *per capita* health care costs for diabetes by as much as 12 percent (not adjusted for inflation) over the next 15 years as compared to making no changes. Unfortunately, the total health care costs associated with diabetes, expected to increase about 35 percent (not inflation adjusted) if no changes are made, will still increase by 24 to 30 percent even with the changes proposed.¹³

¹³ Vermont Department of Health and Centers for Disease Control Diabetes Systems Modeling Project, 2005. (unpublished)

Reducing diabetes deaths

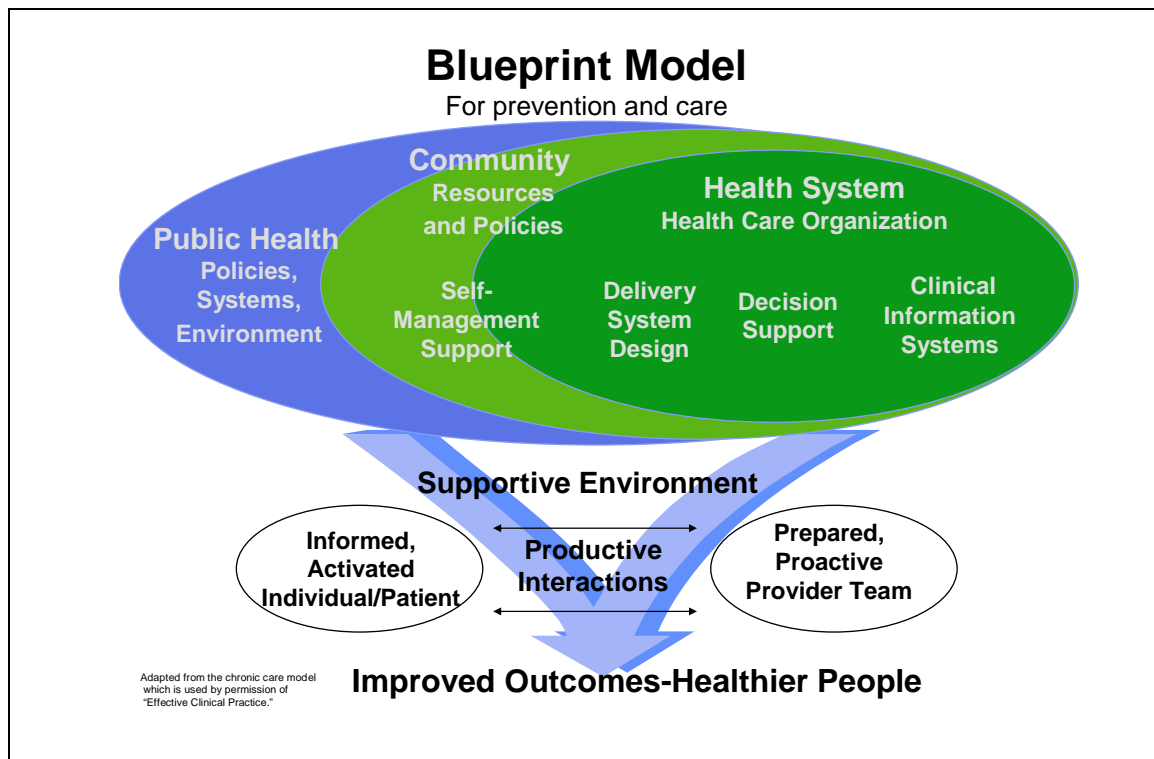


The Blueprint Care and Prevention Model

The Chronic Care Model (CCM) provides the basis for the Blueprint;¹⁴ it envisions an informed, activated patient who interacts with a prepared, proactive practice team; resulting in high quality productive interactions; which in turn lead to improved functional and clinical health outcomes. The health system/ health care organization and the community support this dyad. As a national model for collaborative care and quality improvement, the CCM is predicated upon multiple elements of the model functioning in combination.

¹⁴ ICIC is a national program of The Robert Wood Johnson Foundation with direction and technical assistance provided by the MacColl Institute for Healthcare Innovation, Group Health Cooperative of Seattle. www.improvingchroniccare.org

The CCM has most often been applied to practice improvement within a single health care organization. It has undergone some modification for implementation at the system-wide and statewide levels in Vermont. The illustration shows the Chronic Care Model¹⁵ with the additions of an ellipse to identify the role of public health, and “supportive environment” which represents the contribution of the model components to the patient-provider team.



Individual (consumer, patient) and family¹⁶

An informed, activated patient is one with clear understanding of their own health condition(s), the skills to self manage, and the ability to share responsibility with the provider for their plan of care. This shift to activation and shared responsibility cannot be done alone; it requires the help of the health care provider and the support of family, friends and the community. Families are often the most powerful influence on

¹⁵ The chronic care model is used with permission of “Effective Clinical Practice” .Original publication: Wagner, E.H. *Chronic Disease Management: What will it take to improve care for chronic illness?* Effective Clinical Practice 1998; 1:2-4.

¹⁶ The Chronic Care Model uses the term patient in describing the person in care; because people are generally patients only when interacting within the health system, the Blueprint generally uses more inclusive language

individuals, the health choices they make, and their ability to change. Family members often assume the primary individual decision-making role on behalf of their children and others unable to exercise this role for themselves.

Enhancing the ability of people to self manage requires an infrastructure that provides education regarding health and health conditions; resources, tools and incentives to develop skills in practical problem solving; and, support to develop self confidence in defining and carrying out the goals of the care plan. Most of all, it requires a working partnership with their provider and the practice team. Family members and friends, the community and society as a whole must be supportive of the individual to self-manage. It is the connections between each of these components that create the environment that lead to improvement in health related behaviors and ultimately clinical outcomes.

Various disease-specific education programs are in place; however, most do not address the self-empowerment and behavior change skills required for effective long term self-management. While both approaches (education and self-management) are critical, individuals, providers and health plans need to understand the differences and benefits of each in determining the best program for the individual's immediate and long term needs. Further, a variety of strategies are needed to accommodate different learning styles and support structures for people. Self-management programs are often not reimbursed by health plans, limiting access and unintentionally creating a disincentive to participation.

Community

Second only to family, the community may be the most important contributor to personal and population health. The Blueprint aims to make the community as a whole a healthier place to live, learn, work and play; to offer specific services that support self management and healthy behaviors; and, to link these back to the provider practices. This requires attention to community design (built environment), community awareness of its role in promoting health, and community norms that make healthy lifestyle choices the easiest choices to make.

The term “community” encompasses the physical and cultural settings that provide individuals with identity and support attitudes and beliefs, including those about health and health care. Community may also be described as “a group of people who share some or all of the following: geographic boundaries; a sense of membership; culture and language; common norms, interests or values; and common health risks or conditions”¹⁷. Communities are many things; examples include: municipalities, work places, schools, churches, social clubs and racial and ethnic groups. Communities play a key role in ensuring the infrastructure, facilities and services that support healthy behaviors, foster healthy living and protect individuals from harm. A *healthy* community includes those elements that enable all people to maintain a high quality of life and productivity and recognize prevention as an investment, not an expense. In order to facilitate the creation of healthier Vermont communities, communities themselves must be engaged in the process, through the mobilization of key individuals and organizations; outside resources cannot be utilized fully without meaningful community participation.

The sophistication of the health care system in the United States, and the emphasis on individual health have led resources to be focused on the high-technology and research ends of the health care spectrum; while the role of the community in achieving health gains has been underestimated. Resources are seldom dedicated to community level interventions, further limiting recognition of its vital role in the health of the community. Significant effort may therefore be needed to engage community members and organizations in this role and provide them with the tools and resources to fulfill it.

Provider Practice Team

Much of the work of changing how health care is delivered falls to the individual provider and practice team. It requires they keep apprised of evidence based standards of care for each of the numerous conditions, have decision support tools to enable use and the office systems to deliver the care. Providers must also guide and coach patients

¹⁷ Institute of Medicine. The Future of the Public's Health in the 21st Century. The National Academies Press, Washington, D.C. (2003)

regarding self management and link them to community services. A clinical information system is one essential tool that supports all of these requirements. In many settings, this burden can be reassigned to or shared with other parts of the organization; for Vermont practices it is incumbent upon the Blueprint to devise strategies to cover financial and administrative costs of adopting new approaches.

The provider practice team includes physicians, nurse practitioners, physician assistants, nurses, practice managers and other staff within the office setting as well as many referral resources such as medical specialists, registered dietitians, physical therapists and providers of complimentary and alternative medical services. Patients with chronic conditions may not always receive the care they need to reduce the complications of their underlying diseases; most often due to poor systems for recall and tracking. Providing the support necessary to achieve the goals of the Blueprint requires funding for information technology, training, practice redesign, and linkage of primary care with community and self management initiatives.

Because many primary practices already experience financial challenges, they may be averse to change, particularly if the change has an associated cost in time or resources. Reimbursement structures and rates that vary among payers and burdensome administrative procedures further complicate the providers' ability to apply uniform approaches to the treatment and management of the same condition. Because the number of people insured by a given insurance carrier in some practices may be too small to benefit from incentives provided by individual carriers, cooperation for establishing common clinical guidelines and evaluation metrics is critical to drive and sustain required changes. Further, the diversity of practice types throughout the state (academic vs. private, single vs. group, rural vs. 'urban') poses challenges in approach.

Health System/Health Care Organization

Defining a common approach to systems change is a complicated and necessary goal of the Blueprint for Health; for health care providers and people with chronic disease it is the nexus for change. The health care system encompasses the purchasers (usually

employers), payers (public and commercial insurers) and the health care organizations that employ providers and offer services to the public (e.g.: hospitals, physician organizations).

In the chronic care model, originally developed for a closed system health maintenance organization, the health system is responsible for the ensuring the availability of the information system, office practice design and decision support tools needed to ensure the productive interactions between patient and provider. In Vermont provider practices work with many different systems and health plans, and a core function of the Blueprint is to develop “systemness” from these multiple components. This requires modifications to the chronic care model and significant collaboration among traditional competitors to facilitate agreement on system policy, quality care, reimbursement, continuity, coordination and development of new services.

The existing health care “system” is not, in fact, a system; rather there is a collection of services and organizations that carry out multiple functions, though not in a systematic manner. The various stakeholders focus on different health indicators, have divergent priorities, and have different reimbursement structures. As a result, health care providers face significant challenges to Blueprint implementation. Individuals, especially those with chronic diseases, require coordination of services to maximize their overall health. Existing mechanisms for promoting and sustaining systems change are inadequate for the enormity of the task.

Not included in this plan, but essential functions that will support and sustain its implementation, are work to expand and stabilize the primary care workforce, the academic preparation of health care providers and systems administrators, and efforts to improve access to care.

Public Health

The role of public health is to assure the conditions for health of the population as a whole. The Chronic Care Model with its emphasis on clinical services to improve health

outcomes does not articulate a role for public health. Yet, personal health care is only one, and perhaps the least powerful of several types of determinants of health, among which are also included genetic, behavioral, social, and environmental factors.¹⁸

Population based strategies are essential to the success of the clinically focused strategies and include ensuring development and implementation of public policies, infrastructure and systems support, promotion of social and environmental changes, and coordination of public health programs (e.g.: immunization, breast cancer screening) with clinical services.

In Vermont, public health agencies are fully engaged in guiding the change process, developing new services and advocating for public support of the Blueprint. This role has been further articulated by the General Assembly in defining the Blueprint as a core component of public policy, to be implemented through the Department of Health with the support and assistance of other state public health agencies including the Agency of Human Services (AHS), Office of Vermont Health Access (OVHA), the Department of Banking, Insurance, Securities, and Health Care Administration (BISHCA), Department of Disability, Aging and Independent Living (DAIL), and others.

Chronic Care Information System (CCIS)

Information technology is a key component of the Chronic Care Model to ensure that health care providers have available patient data from the medical record (electronic or paper), coordinated with practice guidelines and other decision support tools, and adapted to office work flow. The system must produce individual and practice population reports with these data also available for monitoring Blueprint progress, reporting to the legislature and public, and evaluation.

There are multiple challenges to be faced in implementing the CCIS. Not all provider practices are computerized, nor are all staff computer literate. Practices with existing Electronic Medical Records must be assured of inter-operability and that no duplicate

¹⁸ IOM. *The Future of the Public's Health in the 21st Century*. National Academy Press. 2004.

data entry will be necessary. Many rural practices lack high-speed Internet access but dial-up Internet access is inadequate to satisfy the need for automatic data feeds into an electronic health record or registry. Non-technical issues include governance, confidentiality, security, and management of information for Vermonters who receive care out-of-state, or, for people who reside elsewhere, who receive care in Vermont.

Financing and Sustainability

The Vermont Blueprint aims to change the way services to prevent and care for chronic conditions are delivered. The significance of this aim cannot be underestimated. The impact will be significant, but the investment needed to accomplish the task is also significant. No other state has attempted change of this magnitude, so we must adapt models from other experiences to forecast Vermont investment needs. Success will be dependent on appropriate investment of time and resources by the state and by stakeholders throughout the system.

Investment needs

The need for additional revenue devoted to Blueprint implementation can be expected to rise as new communities and providers are added, and to decline as the innovation becomes the standard of care and health systems adopt new financing strategies. Prevention services will require increasing funds, and will become a larger proportion of the budget over time.

Investment in the information system was significant in 2007 with purchase of the statewide registry system. The cost associated with this application will drop significantly in 2008 and remain relatively level thereafter; the addition of providers (including pediatricians and specialists), patients and diseases may lead to modest increases, but will likely be off-set over time by economies of scale and the ability to “re-use” existing programming methods. Yet to be determined is the role of the Blueprint in addressing related information technology solutions such as electronic health records and expanded web-based consumer services.

The cost of promoting adoption of the Blueprint by provider practices can be expected to start low, rise as new practices are added, and gradually be reduced as their expertise grows and ended when new financing systems come into use. Cost projections will need to consider the likelihood that financially stable practices are most likely to participate early in the Blueprint with the more financially fragile, rural and/or high Medicaid and Medicare providers unwilling or unable to subsidize the implementation costs. Still to be addressed are the systems and costs necessary to address clinical preventive services for adults and children and chronic care management for children.

Consumer services, targeted to individuals, including workshops, materials, online services, community programs, and others represent a generally modest expense that require development and piloting. New strategies, to address additional risk factors, differing learning styles and interests needs will have to be introduced over time. The maintenance costs of these individually based services, if successful, may appropriately be assumed by employers and insurers.

Enhancement of community capacity to offer services, develop policies and infrastructure and champion healthier behaviors will require significant investment for the foreseeable future. Social marketing is an essential and well tested strategy for promoting healthier behaviors and social norms for health; and like expanded community capacity and other population based strategies can be expected to require significant investment for some time.

Cost Avoidance

The substantial investment that Vermont is making in the Blueprint can be expected to result in improved health outcomes and moderating costs. The “return on investment” will come, not from a reduction in total expenditures, but in spending less than would have been spent without the Blueprint interventions in place. The return from the Blueprint will come from costs avoided, not money saved.

The entities most likely to realize these lower costs are health insurance programs and the purchasers of health insurance. With better care management, including more appropriate and consistent use of pharmaceuticals, the pharmacy industry may conceivably realize additional revenue as a result of the Blueprint.

Funding

State general funds currently represent nearly the entire “cash” expenditure for Blueprint development. In fiscal year 2007, the total State appropriation is \$5.3 million of which \$3.8 million is the base appropriation and the remainder one time funding. Sixty percent of the funds are from the Global Commitment. Participating providers contribute significant in-kind and out-of-pocket support to implementation, including loss of billable hours. Community hospitals have also contributed greatly to the cost of implementation. Lesser amounts of in-kind service from participating organizations and limited pay-for-performance systems by insurers make up the remainder of current investments. Currently, federal grants to the VDH for chronic disease prevention and care contribute to the goals of the Blueprint, but do not direct costs. The state general fund appropriation is estimated to represent half, or less, of estimated current costs. A stable, sustainable funding structure with shared support from multiple sources, including participation by the Medicare program, must be described for the Blueprint.

Evaluation

Evaluation is the systematic assessment of an operation or program outcomes compared to a set of explicit or implicit standards, whose results are used to contribute to the improvement of the program. Evaluation should be dynamic, flexible, scalable, incremental and sustainable.

An initiative as comprehensive and complex as the Blueprint requires rigorous evaluation to determine if the innovations and implementation strategies can and should be replicated, amended or dropped; to assess whether identified improvements required for goal achievement are being achieved; and, if resource and staff allocation is adequate.

Data will be used to inform the Governor, Commissioner, the Executive Committee, legislature, community, providers and other stakeholders as well as potential funders about progress and/or barriers to achieving agreed upon goals and objectives outlined in the strategic plan. Objective data can also be shared with payers to encourage reimbursement policies which support Blueprint sustainability.

In light of the ambitious nature of this strategic plan and its reliance upon statewide and local partnerships, local engagement, and voluntary participation, progress on goals and objectives must be timely and informative. A common understanding must guide agreement on data sources, clinical and process measures (including baseline and goals to be achieved), as well as frequency and methods for data collection and reporting.

Part 2. Blueprint Goals and Objectives

Strategic Plan Implementation

The goals and objectives of this strategic plan are very ambitious, and no state has ever attempted anything like it before. The plan lays out a vision for where we would like the Vermont health system to be in five years and beyond. Accomplishment will require adoption by individual Vermonters, health care organizations and providers, businesses and community groups and communities throughout the state.

As this strategic plan is launched, ***there are several unknowns:***

- In all but a few instances, the strategies that will be employed have been tested in another setting, but most have been tested in isolation of one another and never put together into a comprehensive system. Will selected strategies work as intended?
- Can we identify or devise effective strategies to meet all of these goals and objectives?
- Can we deliver in the time frames suggested?
- Will we have the resources (money, people, ideas) needed when they are needed?
- What are the real costs of implementation? Of sustainability?

The barriers we face are significant. The systems of health care we have today evolved to serve mid-20th Century health problems, not those of the 21st Century. Systems of care that consume 15 percent of the gross state product of Vermont will not be easily changed. There are powerful interests in all sectors and the gains and/or losses from participation are largely unknown. Most significantly, consumer expectations for health services are largely incompatible with the systems changes needed.

Vermont can be successful. By implementing this strategic plan we will develop an improved system that will provide a model for others to follow in preventing chronic

disease and its complications, improving health and moderating costs. Success will be dependent on many interrelated factors:

- The Blueprint must be a learning organization, constantly piloting, evaluating and changing course based on experience.
- The members of the Blueprint partnership must accept the mutual obligation to achieve outcomes and share responsibility for results.
- The members of the Blueprint partnership must endorse and be guided by the values and principles addressed in this plan.
- There must be adequate and stable financing, drawing from all sources, public and private.
- Strong and effective leadership at the highest level of all participating organizations is essential.
- Act 191 establishes an executive committee to “advise the commissioner on creating and implementing a strategic plan for the development of the statewide system of chronic care and prevention...”

Values and Principles to Guide Blueprint Implementation¹⁹

- “Health is a state of **complete physical, mental and social well being**, and not merely the absence of disease.”²⁰
- There are **multiple determinants** of health; it is the product of the complex interactions of social, behavioral, economic, environmental and genetic influences.²¹
- Improving health status and the quality of health services is a **shared responsibility** of individuals, health care providers, public health officials, health care executives and many others who contribute to the well being of individuals and populations.
- **Active dialogue, collaborative participation and shared commitment** are essential to the success of the Blueprint.

¹⁹ Adapted from the Vermont State Health Plan, 2005. http://healthvermont.gov/pubs/health_plan05.aspx

²⁰ World Health Organization, 1948

²¹ Institute of Medicine. The Future of the Public’s Health in the 21st Century. National Academy Press. 2004.

- It is essential to understand and address problems of **social equity** to ensure access to services for the poor, disabled, poorly educated, unskilled, racial-ethnic minorities and other vulnerable groups.
- Services known to **prevent** occurrence of disease and/or limit progression of illness or disability in the population are a priority for both the public health and health care systems.
- A supportive **environment** is essential to facilitate the ability of individuals, providers and communities to create the conditions that make it possible to determine and act on informed choices and attain optimal health.
- **Accountability and transparency** to patients, the public and one another is an essential component of an integrated and collaborative health system.
- Health services must be **safe, effective, patient-centered, timely, efficient and equitable**²². To the extent possible, all interventions must be evidence-based or based on best or promising practices with an established empirical link between the activity and chronic disease prevention and management.
- Much of the work of the Blueprint is pioneering and requires **openness to learning and a willingness to change course** when indicated.
- The Blueprint will be **phased-in in a stepwise manner** so as not to overwhelm services or create additional barriers to participation.
- It is recognized that the quality and effectiveness of prevention, diagnosis and treatment for **children's health needs are critical to attaining the long term goals** of the Blueprint.

²² Institute of Medicine. *Crossing the Quality Chasm*. National Academy Press, Washington DC. 2001.

Long-term outcomes for the Blueprint (10-20 years)

The state response to the heavy burden of chronic disease is the Blueprint for Health. The goals for what the Blueprint needs to accomplish are ambitious and comprehensive, reflecting this burden. Changes in many of these indicators will be evident within a short time for the first conditions addressed; others may not be seen for several years. As more conditions are added and the Blueprint becomes more comprehensive, improvements are expected to become more noticeable and significant.

1. The prevalence of chronic conditions will be reduced.

It is critical to the long-term success of the Blueprint to prevent the occurrence of chronic conditions. Accomplishment of this goal will be measured by reduction in the proportion of the population that is overweight or obese and the proportion of people under the age of 45 reporting they have been told they have a chronic condition.

2. The health status and quality of life for Vermonters with chronic conditions will improve.

Treatment of chronic conditions, both self-care and provider care, should reflect the best in evidence based practice for all people at all times. Accomplishment of this goal will be measured by reductions in hospitalizations, fewer complications, better compliance with evidence based care, improvement in reports of poor physical and mental health and other indicators.

3. The cost of caring for Vermonters with chronic conditions will moderate.

The financial burden of chronic conditions is well documented and can be expected to moderate (slower rises in total costs) with better prevention and management. Accomplishment of this goal will be measured by monitoring the costs associated with specific components of care.

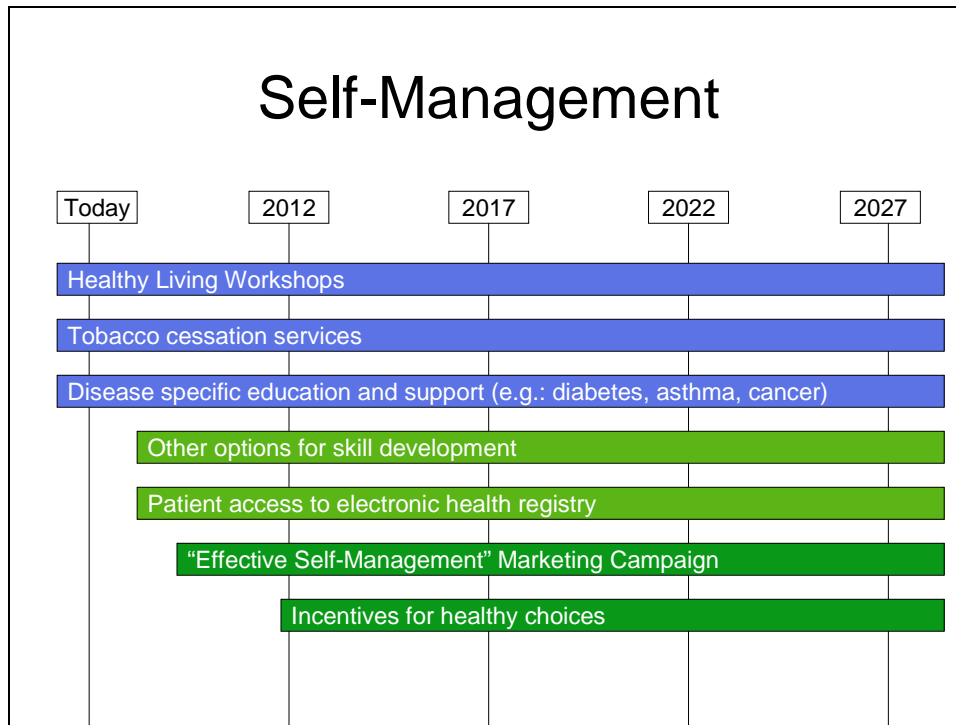
Goals and Objectives for the 5 year period January 2007 to January 2012

See Section 3 of this plan for the Chronic Care Information System goals and objectives.

1. By January 1, 2012, increase the proportion of Vermonters who engage in healthy behaviors.

Measures:

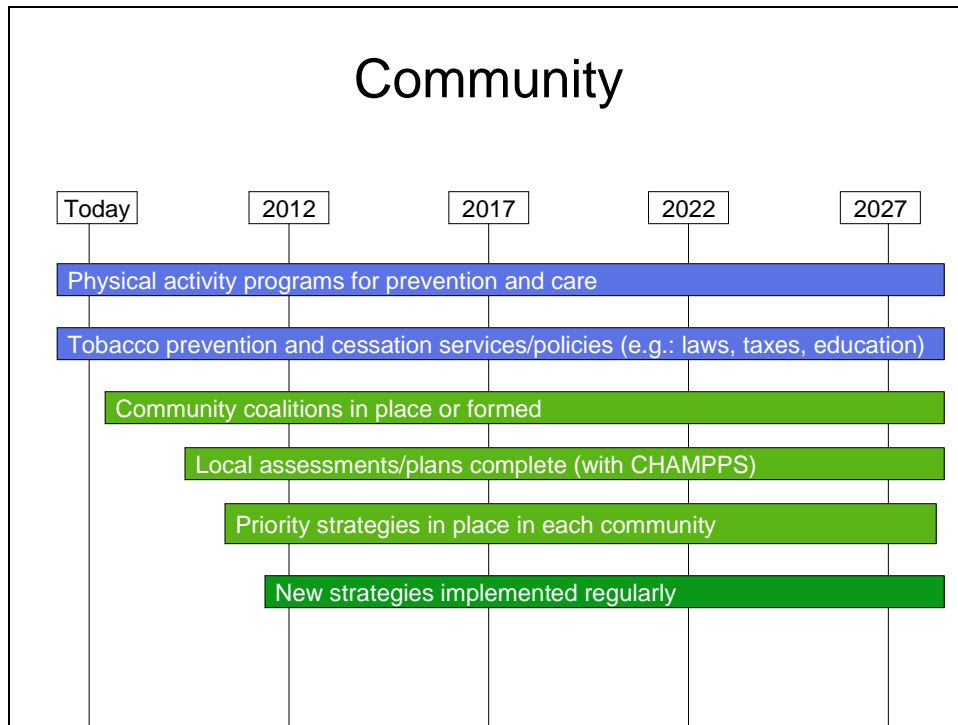
- *Increase to 45 percent the proportion of individuals with selected chronic conditions who exercise at least 30 minutes per day, 5 days per week (or 20 minutes of vigorous activity at least 3 time per week);*
- *75 percent of people with diabetes will have had HbA1c measured at least twice in the past year;*
- *75 percent of people with diabetes will have had LDL measured once in the past year;*
- *Additional measures will be added in the evaluation plan (e.g.: fruit and vegetable consumption, BMI, Smoking Cessation, alcohol intake).*



- 1.1. At one year follow-up, 85 percent of former participants (responding to a survey) in the Healthier Living Workshop (and alternative Blueprint programs) will report agreement with the statement: "I have been able to maintain the lifestyle changes I have made for my health condition".
 - 1.2. The Healthier Living Workshop will be conducted at least 50 times each year (statewide) with an average of 10 people completing each workshop.
 - 1.3. By December 2007, at least one alternative intervention to support improved self management skills will be piloted with full implementation by July 2008.
 - 1.4. By January 1, 2012, 10 percent of people with diabetes will use the Chronic Care Information System (CCIS) patient portal to review care plans and enter self care data in practices where it is available.
2. By January 1, 2012, sustainable, on-going interventions designed to prevent chronic disease and improve the health of those living with chronic conditions will be in place in various community settings (e.g.: towns, worksites, schools, churches, social groups) throughout Vermont".

Measures:

- *Each participating Blueprint community will implement interventions designed to address at least two risk factors (e.g.: physical activity, nutrition, alcohol, tobacco) for chronic disease.*
- *Each city and town with a population of 2,000 or more will have a physical activity program for adults.*
- *Outcomes will be compared to objectives for each intervention.*



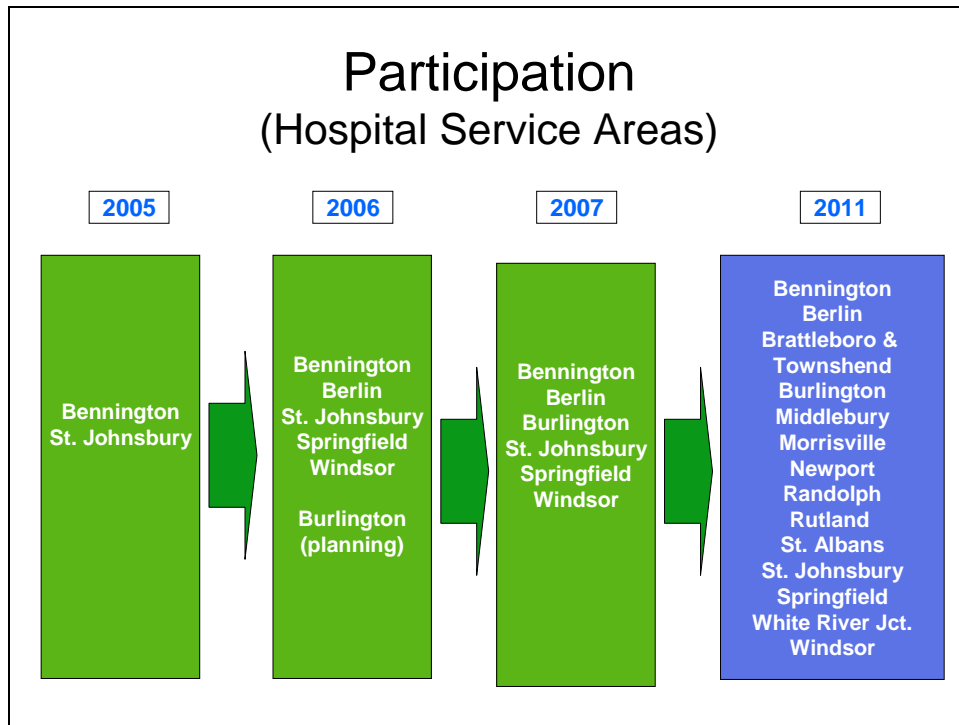
- 2.1. By 2008, every participating community will be represented by a coalition that is actively engaged in assessing and prioritizing needs with respect to chronic disease prevention and in developing and implementing action plans that include policy changes, environmental changes and programmatic activities.
- 2.2. Each participating community will implement their plans and meet locally-defined outcome measures for policy development, environmental change and/or program participation that will result in sustained behavioral change and coordination within the community (e.g., between towns and public schools).
- 2.3. By July 1, 2009, resources to support the costs of community infrastructure development to promote health will be identified and available.

3. By January 1, 2012, health care, self management and community services in each funded area will be mutually supportive.
 - 3.1. By July 2009, evidence based resources to support healthy behaviors and self management will be identified, referral criteria documented and available to health care providers and others.
 - 3.2. By July 2008, local advertising and use of Vermont 211²³ to support referral and participation in community program will be documented.
 - 3.3. By January 1, 2012, documented referrals between providers, self management and community programs will increase over baseline.
4. By January 1, 2012, 50 percent of employers with more than 25 employees will chose to offer incentives (directly or through their health plans) for employees to adopt a healthier lifestyle and/or participate in education and skills development programs [NOTE: this goal needs to be assessed with representatives of the business community to ensure that it is achievable and realistic].

Measure:

- *Health plans will report the number and proportion of employers offering specified incentives (e.g.: premium discounts, payment or reimbursement for classes; rewards for weight loss; time off for physical activity).*
 - 4.1. By July 1, 2007, a task force of business representatives will consider the costs and benefits of incentives that might be offered and recommend modifications to this goal to make it achievable and realistic.
 - 4.2. By July 1, 2008 a “tool kit” will be available for employers to assist them to offer incentive programs to their employees.
- 5. By January 1, 2012, 90 percent of primary health care practices caring for adults will chose to participate in the Blueprint as evidenced by a participation agreement and initiation of the CCIS and/or a clinical Microsystems assessment to meet Blueprint standards of care.

²³ Vermont 211 is a toll free information and referral source that includes listings for health related community services

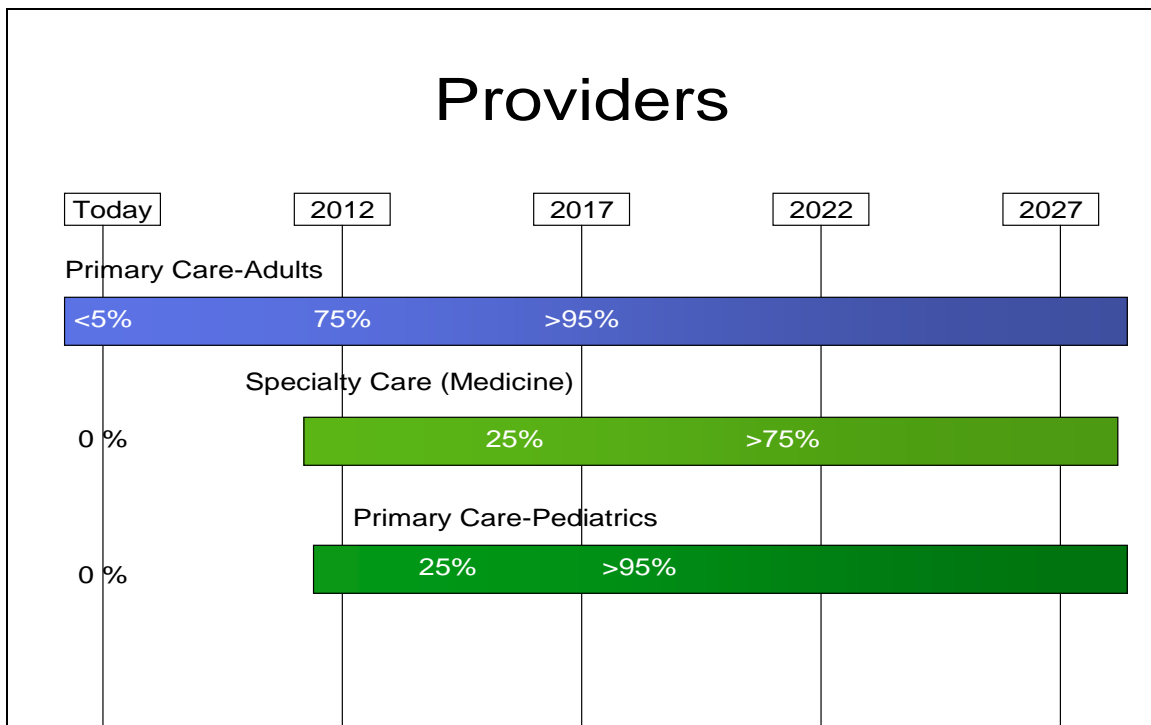


- 5.1. New practices will become eligible to participate through an application process for the entire hospital service area in which they are located.
- 5.2. By January 1, 2012, 75 percent of participating practices will demonstrate use of the CCIS with embedded Blueprint guidelines for proactive care management of diabetes as evidenced by at least 95 percent of patients with that diagnosis entered (Same as 15.3).
- 5.3. By January 1, 2012, 75 percent of practices participating in the Blueprint for 3 or more years will be using the CCIS for proactive care management for no fewer than four chronic conditions (Same as 15.4).
- 5.4. By January 1, 2012, 75 percent of participating practices will use self management support practices within the office setting.
6. By January 1, 2012, participating Blueprint practices will demonstrate adherence to best-practice guidelines for Blueprint-designated conditions (Same as 15.5).

Measures:

- 75 percent of people with diabetes will have had HbA1c measured at least twice in the past year.
- 75 percent of people with diabetes will have had LDL measured once in the past year.

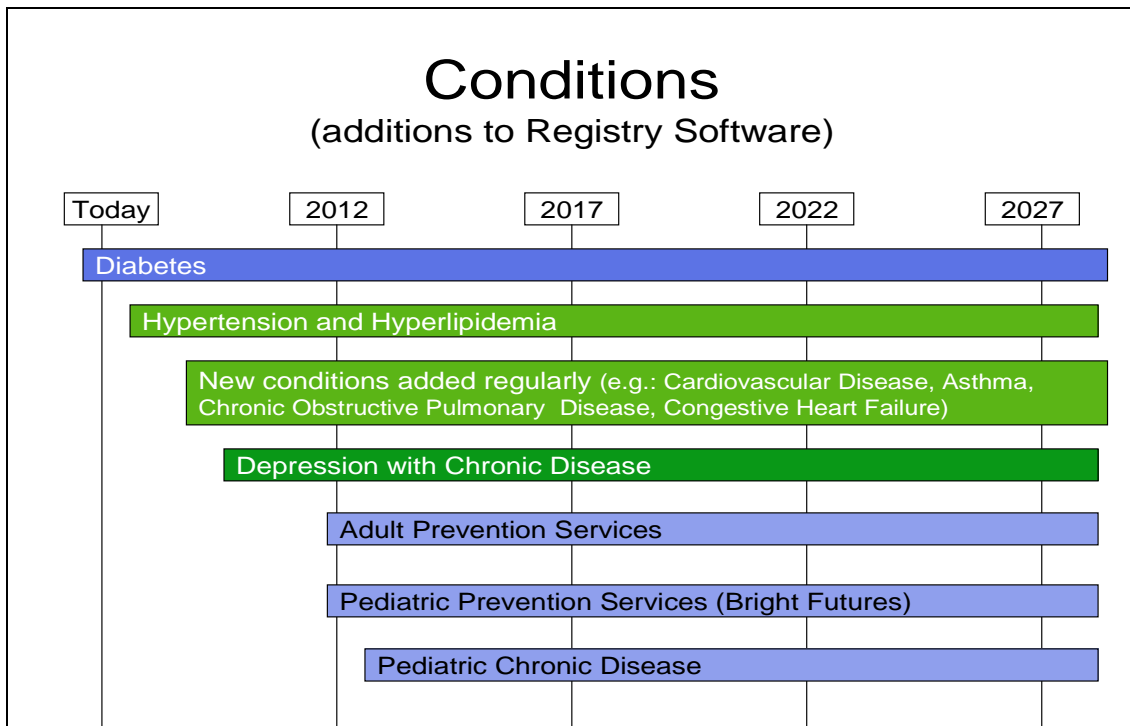
- 60 percent of people with diabetes will have HbA1c values of less than 7.
 - 40 percent of people with diabetes will have LDL values of less than 100 and 80% will have values of less than 130.
- 6.1. Within 12 months of enrollment, participating practices will complete a Microsystems assessment to identify how care can be improved, and demonstrate measurable improvement in at least two office processes where change is indicated.
 - 6.2. Based on the assessment, all participating practices will demonstrate measurable improvement in additional process improvements in areas where change is indicated, in each of the following years.
 - 6.3. Within 12 months of the CCIS being available to their practice, participating practices will be using the CCIS for their diabetic patients with at least 95 percent entered into the registry.
 - 6.4. By January, 2012, best practice guidelines and CCIS decision support for prevention of disease (as recommended by the US Clinical Preventive Services Task Force) will be available for implementation by Blueprint participating providers.



7. By January 1, 2012, 25 percent of Vermont primary health care practices caring for children, and 10 percent of physicians in selected specialties will chose to participate and initiate use of the CCIS and/or conduct a clinical Microsystems assessment within the coming year.
 - 7.1. By July 1, 2010, a plan for integrating pediatric preventive services and child health care providers will be in place.
 - 7.2. By July 1, 2010, the specialty physicians to participate in the Blueprint will be selected and a plan for integration into the Blueprint will be in place.
8. By January 1, 2012, a uniform set of clinical quality and performance measures for conditions to be addressed by the Blueprint will have been identified through a collaborative process and be in place for use by payers, physicians and other health care providers. Uniform measure sets help to focus provider and payer quality improvement efforts, inform consumers, and serve as the basis for aligning payment methods with evidence-based care. Transparency and accountability will be a hallmark of the measurement system.
 - 8.1. By July 1, 2007, clinical quality and performance measures will be adopted for each of the chronic conditions included in the Medicaid Care Management Program. These conditions include, but are not limited to: asthma, COPD, CHF, diabetes, and CAD.
 - 8.2. At least one set of clinical quality and performance measures will be added each year thereafter until measures for 70 percent of the top 15 priority conditions identified by the 2000 Medical Expenditure Panel Survey (MEPS) and outlined in the Institute of Medicine's 2001 book "Crossing the Quality Chasm".
 - 8.3. All clinical quality and performance measures will be reviewed annually for consistency with those used by the Medicare program and updated, if appropriate.
9. By January 1, 2012, effective systems for managing chronic care will be in place for use by payers, physicians, and other health care providers. Collaborative effort will be essential to bring about greater commonality, consistency, and coordination in these systems across payers.
 - 9.1. By July 1, 2007, risk stratification strategies will be used by all payers to identify individuals with or at risk for chronic disease(s) and to assist in

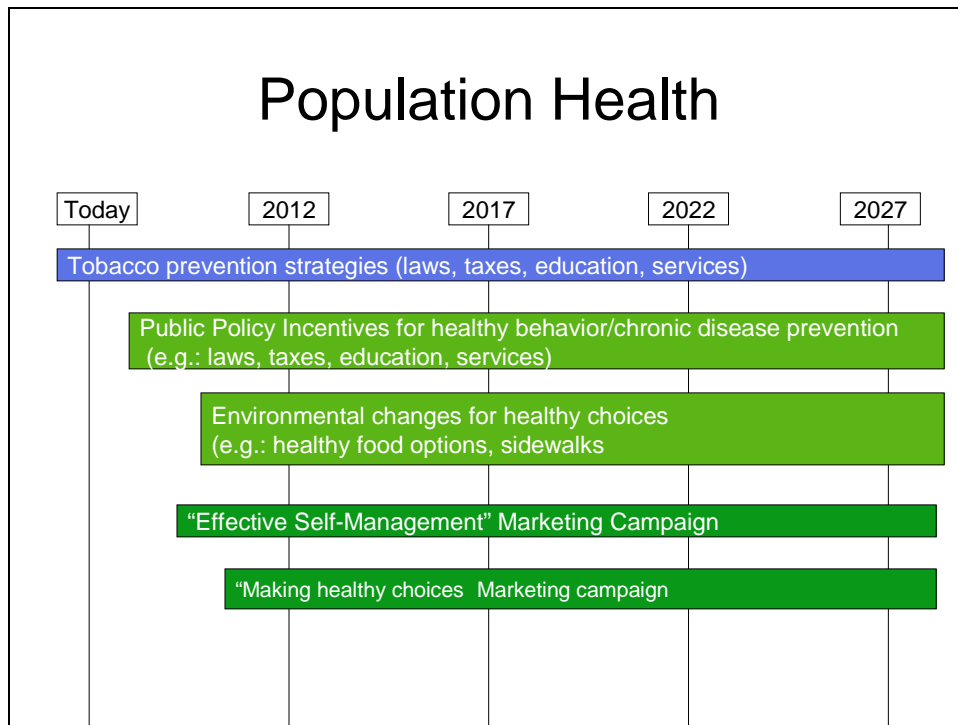
- the determination of the severity and the appropriate type and level of care management services needed to manage those chronic conditions.
- 9.2. Beginning January 1, 2008, each year and thereafter, state health financing programs with care management initiatives – i.e., OVHA, the State Employees Health Benefits Program, and Catamount Health plans - will report on the results of their efforts for managing chronic care and achieving improved outcomes for their beneficiaries.
 - 9.3. By January 1, 2008, a facilitated stakeholder process (including participating payers, physicians and other health care providers, employers, and consumers) will be completed to develop guidelines for promoting, to the extent possible, greater commonality, consistency, and coordination across payers in care management programs and systems.
 - 9.4. By January 1, 2010, each participating payer organization, in collaboration with participating physicians and other health care providers, will have completed an examination of existing care management programs and developed a plan proposing changes to its care management system(s) that will increase alignment with the Blueprint guidelines, to the extent necessary.
 - 9.5. Beginning January 1, 2009, each year and thereafter, each participating payer organization, in collaboration with participating physicians and other health care providers, will report on the results of its efforts to align its care management system(s) with the Blueprint guidelines.
 - 9.6. Models for managing chronic care will be evaluated for return on investment (ROI).
10. By January 1, 2012, sustainable financing models to support and sustain physicians and other health care providers of effective chronic care will be supported by purchasers and initiated by payers participating in the Blueprint.
- 10.1. By July 1, 2008, a comprehensive analysis will be completed by a facilitated stakeholder process (including participating payers, physicians and other health care providers, employers, and consumers) to recommend sustainable payment mechanisms and related changes needed to support the essential elements of high quality chronic care, such as care coordination, effective use of health care information by physicians and other health care providers and patients, and patient self-management education and skill development. The analysis shall be informed by mechanisms used in the Medicare program. The comprehensive analysis shall consider the following:

- 10.2. Sustainable payment methods for physicians and other health care providers that enable compliance with evidence-based care delivery and care management and that support achievement of Blueprint goals for health care improvement;
- 10.3. “Pay for Performance” and other payment mechanisms that provide rewards and incentives for high performance.
- 10.4. By October 1, 2008, the Commissioner will make recommendations for sustainable payment mechanisms and related changes to the legislature and other stakeholders.
- 10.5. By January 1, 2009, and each year thereafter, state health care financing programs (i.e., OVHA, the State Employees Health Benefits Program, Catamount Health Plans) will participate in a coordinated effort to determine satisfaction levels of physician and other health care provider participating in the Blueprint care management initiatives
- 10.6. By January 1, 2009, OVHA will develop proposals to tie Medicaid reimbursement for physicians and other health care providers to Blueprint standards.



11. By January 1, 2012, stable, long term sources of financing to support continued development, implementation, and sustainability of the Blueprint will be in place.
 - 11.1. By July 2009, a financial analysis that includes estimates of costs for Blueprint development and sustainability over time; contributors to the burden of chronic disease (e.g.: high fat foods, physical inactivity, substance abuse); financial returns that can be expected by the various sectors of the industry (e.g.: purchasers, plans, institutions, pharmaceutical and device companies) will be completed.
 - 11.2. By January 2010, alternatives and recommendations for financing Blueprint infrastructure, community, individual and population-based strategies will be made to the legislature and other stakeholders.

12. By January 1, 2010, the State of Vermont will have no fewer than three population-based policy and/or environmental approaches to improving health and preventing chronic disease in place.



- 12.1. By January 1, 2008, a work plan for promoting healthier behaviors and developing a culture where making healthy behaviors is the norm using environmental and population focused strategies will be in place; the plan will link with existing plans for tobacco control, obesity prevention and others.

- 12.2. By January 1, 2009 alternative public policy incentives that support healthy behaviors and discourage unhealthy behaviors will be presented to the legislature for consideration.
 - 12.3. By January 1, 2012, at least two media campaigns supporting/promoting healthy behavior choices and what it means to be an effective self-manager will be completed or in process.
13. By January 1, 2012, evaluation reports will document progress in meeting Blueprint objectives and guide changes to this plan.
- 13.1. By July 2007, an approved plan for monitoring and evaluating progress of each component of the Blueprint toward meeting goals and objectives will be in place.
 - 13.2. By July 2007, methods for calculating costs avoided will be verified, methodology documented and requirements for reporting will be disseminated.
 - 13.3. By January 1, 2008 all baseline measures and data sources will be identified and reported.
 - 13.4. By January 1, 2010, reports called for in the evaluation plan will be available on the web to stakeholders and the public and include analysis of performance measurement, Blueprint components that need to be changed or dropped, identification of areas where accountability and overall financial and quality performance may be improved over time.
14. The organizational structure and operation of the Blueprint will support the multiple levels of implementation required to accomplish the goals of this Blueprint Strategic Plan.
- 14.1. By March 1, 2007 guidance documents and charters will be in place for the executive committee and workgroup groups.
 - 14.2. By October, 2007, specific forums, programs and other methods for communication and knowledge transfer will be developed and implemented as a strategy for statewide engagement and participation
 - 14.3. By October 1, 2007, a formal, ongoing (developmental or formative) evaluation plan for Blueprint organizational structure, partnership and operations will be in place.

- 14.4. By January 1, 2008, a formal evaluation of the Executive Committee, work groups and partnership structures and functions will be completed including any needed recommendations for change.
- 14.5. By January 1, 2008, an assessment of staffing patterns and organizational structure for implementation of the Blueprint will be completed including any needed recommendations made for change.

Part 3. Chronic Disease Information System (Model)

The Blueprint's mission is to improve the health of Vermonters with or at risk for chronic conditions. The Blueprint articulates a vision and a plan for an improved health care delivery processes through collaboration of health systems, providers, communities, and individuals. An important collaborator in Blueprint's plan is the Vermont Information Technology Leaders, Inc. (VITL) VITL is organized as Vermont's Regional Health Information Organization. (RHIO) The collaborative effort between the Blueprint and the RHIO provides for an expanded public health infrastructure to support implementation of care and prevention services.

As the program goes forward, the Blueprint implementation will require close monitoring of progress and on-going evaluation at the provider, practice and community levels as well as statewide. These healthcare services and evaluative processes all need to be supported by information systems.

According to the *Improving Chronic Illness Care* (ICIC) group, "Effective chronic illness care is virtually impossible without information systems that assure ready access to key data on individual patients as well as populations of patients. A comprehensive clinical information system can enhance the care of individual patients by providing timely reminders about needed services and summarized data to track and plan care. At the practice population level, they identify groups of patients needing additional care as well as facilitate performance monitoring and quality improvement efforts."²⁴

²⁴ ICIC <http://www.improvingchroniccare.org/change/model/components.html>

Overview of the CCIS

The Chronic Care Information System (CCIS) for the Blueprint combines a database system provided by GE Healthcare with Orion Health's Web based care management and decision support system. This approach allows the Blueprint to take advantage of the technical expertise of two healthcare industry leaders.

Database system

The behind the scene hosting services are provided by GE Healthcare, and managed by VITL as part of the RHIO. GE's system, which is HIPAA certified, stores patient demographic information and clinical data in separate databases. This increases the level of privacy because patient medical data cannot be seen without going through a secure technique to tie the two databases together

Care management/decision support system

Orion Health's system provides the clinician with management, decision support, and secure Web based access to their patient's information with user friendly screens. The system has been continually enhanced and used by physicians around the globe for over seven years. Because the system is web based it will be able to keep up with future changes in clinical guidelines and information technology.

One of the most important features for the Blueprint is the ability of the Orion system to incorporate Vermont's clinical guidelines and protocols for care of chronic conditions. These guidelines and protocols provide reminders, trend analysis of diagnostics data, and the ability to easily sort and analyze data based on those protocols. This aids the clinicians in treating people with chronic conditions. These are advanced practice management capabilities, which are not currently available in Vermont.

Another important feature of the Orion system is its ability to produce reports. These reports help clinicians and other healthcare providers to evaluate patients' progress.

Information Management

As part of the collaborative effort the RHIO will establish and manage electronic interfaces with a number of data sources as they become available (e.g., Electronic Medical Records (EMRs), Practice Management Systems (PMS), Labs, Payers, Pharmacies, and Hospitals). The CCIS will access and present this information to the clinicians in a consolidated format. For this effort to be cost effective, a common set of message standards needs to be adopted by all electronic providers of information.

The RHIO is tasked with connecting to, protecting and managing the various data sources that are germane to the CCIS and the Blueprint mission.

Benefits of the CCIS design

This system offers many advantages to physicians, patients, and the people of Vermont. For clinicians, this system will simplify information analysis and risk stratification. Patient data within the system will be scrutinized to alert clinicians to measures that need attention such as lab values and to examinations or tests that need to be performed.

The system is capable of capturing patient clinical information, recommendations, and referrals to provide automated individualized care plans to the patients. Through the use of its analysis tools, the CCIS system can assist the clinician in coordination of the individual care plans as well as providing a “snapshot” of the patient’s overall progress and roadblocks to successful mitigation of the chronic illness.

The CCIS Web interface offers special advantages for paper based practices, currently over 80 percent of all practices in Vermont. Patient demographic, lab and other medical data can be captured electronically from other sources by the CCIS and presented to the clinicians. Information that is acquired electronically from laboratories, payers’, and hospital records will minimize the manual data entry that would be required to bring a paper based systems on to the CCIS. The Web based system enables data entry of clinical information where electronic access to information is unavailable.

The CCIS is designed to work seamlessly with existing electronic medical records (EMR) systems. This eliminates the need for duplicate data entry and allows access from within the EMR if desired.

A Patient Portal is a tool of the CCIS that gives individuals the ability to monitor their own care plan and their progress. This is an essential element for self-management of chronic conditions. For example, patients may be able to use the Portal to enter information concerning the progress of their care plan; can receive alerts about lab values and receive appointment reminders. An important option gives them the ability to query the system to see who has viewed their electronic health information.

The State of Vermont will benefit from the tools CCIS provides to clinicians and patients to mitigate the insidious downward trends these illnesses have. This focus has been shown to reduce the cost of chronic care and will enable Vermonters to live healthier and more productive lives.

Barriers to Implementation

The above overview of the CCIS has summarized the IT functionality that will be developed by the partnership between the Blueprint and VITL. This technology has the potential to significantly improve chronic illness care in Vermont. Achieving that potential requires addressing two major barriers which have frustrated previous efforts to implement other types of health information technology.

The first barrier is getting data into the system. The powerful tools built into the CCIS are only as good as the data that is supplied to them. This is a challenge because less than a quarter of the physician practices in the state currently have Electronic Medical Records and because other systems (e.g., physician practice management systems, hospital information systems, payer claims data, pharmacy data) have all been developed independently of one another. That means the data required for the CCIS will have to be

supplied by a combination of (1) manual data entry and (2) piecing together electronic data that is currently stored in disparate sources such as physician practice management systems, hospital information systems, payer claims data, etc.

One of the clear lessons from other efforts to implement regional chronic illness registries, and from the Blueprint's own experience with interim solutions such as the Vermont Health Record, is that requiring a high level of manual data entry by physician practices is not a sustainable solution. The Blueprint will have to create a sustainable means of getting data into the CCIS during an era when most physician practices are still paper based. Given the local differences in sources of data and IT infrastructures, the solutions will probably have to be customized for each community.

The second barrier is the challenge of acceptance of new information technology by health care providers. They must embrace it and use it if the CCIS is to achieve its potential to improve health care management. It will only be used if providers perceive it as a benefit and want to use it. Therefore, the CCIS must be easy to use in a way that fits into the clinical workflows. Experience has shown that successfully introducing new information technology requires flexibility and strong logistical and training support to use it effectively; and it requires patience, particularly when working with smaller practices that are most prevalent in Vermont. Once they are using the CCIS, provider practices will need on-going user support that is timely and helpful to maintain their participation. If these organizational barriers can be overcome, the CCIS should be compelling enough for providers to use it voluntarily; however, if they are not overcome, the CCIS will not be used effectively.

The initial focus of the Blueprint IT staff has been on the technical issues involved in creating the CCIS. This has been a daunting task but it is probably not the greatest risk to this effort. Even the best information technology will fail if it cannot be integrated successfully into the organizations that use it. Therefore, work plans developed to implement this strategic plan for the CCIS must explicitly address these two critical

barriers: bridging the gaps in data sources and use, particularly for paper base practices, and strategies to promote and secure acceptance of the CCIS by health care providers.

The CCIS as a component of comprehensive health information in Vermont

The CCIS is not the only large scale health IT initiative in Vermont. VITL, owner of the RHIO, will design and manage an integrated set of online health information resources called the Vermont Health Information Exchange (VHIE).

The CCIS will fit into the larger context of the Vermont comprehensive health information system and must address both the Blueprint and the work of VITL. The vision for the VHIE is that it will provide (1) a platform for health information sharing, and (2) information services and applications that use the platform. The VHIE will include:

- A comprehensive infrastructure for healthcare data storage, retrieval, processing, and sharing.
- Information services that gather, process, and distribute patient data that originates from multiple sources. For example, VITL's Medication pilot project.
- Other information services to be determined in the future. Possible examples might include statewide databases of lab test results, diagnoses, allergies, etc.

The Blueprint has been a major driver of VITL's efforts to develop the VHIE. It will also be the first system to be implemented on the VHIE platform. However, over the next five years the CCIS will become one of many services within a much larger and more complex health information exchange in Vermont. The functionality and effectiveness of the CCIS will be affected by the design and quality of the VHIE. Therefore, the Blueprint CCIS must continue to participate in VITL's growth and its development of the VHIE to ensure that needs of the CCIS and those of future customers remain aligned and address the health information needs of the State of Vermont.

Planning assumptions

The development and implementation of a CCIS that will support the vision for the Blueprint, be integrated within a larger health information system and meet the day-to-day needs of providers and patients requires a vision of the possibilities and an understanding of the barriers. The following planning assumptions have guided the development of CCIS goals and objectives and will continue to guide implementation and modification of this strategic plan over the next five years.

- Information will be protected as mandated by state and federal standards;
- Clinicians will use information systems to help manage care in their practices;
- Chronic disease care will be guided by evidence based clinical guidelines; and, decision support tools will support use of clinical guidelines at the point of care;
- The data provided by clinical systems will be stored in central data repositories; be available as a HIPAA “safe harbor” defined limited data set; and will be available for aggregation, analysis and reporting;
- There will be full participation by insurers, laboratories, hospitals, providers and other holders enabling access to the data needed to ensure success of the CCIS;
- Access to the data repository will be via web services;
- Clinicians must be able to access patient data from any provider location;
- There may be increased reporting requirements to review the progress of the Blueprints success that the CCIS systems will have to support;
- A statewide health information infrastructure will be available;
- Elimination of multiple statewide patient registries and data repositories may be possible;
- A risk stratification system will be needed as a component of the CCIS;
- Improved data standards will lead to increased interoperability of clinical data and clinical documents;

CCIS Goals and Objectives for the 5 year period January 2007 to January 2012

15. By July 2007, standards to ensure that the CCIS will work harmoniously with provider EMR systems and clinician workflow will be in place.
16. By July, 2007, a communications plan will be in place to inform individuals and providers regarding the CCIS, its benefits and limitations. The plan will specifically identify methods to describe data protection strategies that ensure privacy, and will address techniques for dealing with concerns.
17. By January 1, 2012, the CCIS will have evolved into a comprehensive and integrated set of tools for improving chronic disease care in Vermont; and its effectiveness and usability will make it attractive or compelling for clinicians.
18. Throughout the period ending January 1, 2012, Blueprint IT services will be guided by a continuously updated Scope of Work document agreed to by all stakeholders.
19. Throughout the period, the Blueprint IT program will manage current projects effectively and anticipate and envision future projects that can help the Blueprint succeed.

Part 4. State Agency of Human Services Implementation and Coordination

Act 191 requires an AHS implementation plan by January 1. The following tables outline the current programs in AHS departments as well as other agencies of state government. The Agency of Human Services has both program services and systems change initiatives across its member departments that will integrate with and enhance the outcomes of the Blueprint planning and implementation. Those identified as priorities in the first two years of this plan are housed in DAIL, OVHA and VDH and the AHS Central Office and are outlined below. As the Agency gains more experience with and success in implementation, it will focus on alignment of additional programs and initiatives, including the integration of children's programs, within the Blueprint framework. Additionally, alignment of social services targeted at prevention and well being will also be addressed. All of the Agency's departments are committed to coordination and integration of their services with the Blueprint framework. All are represented on one or more Blueprint workgroups and several have representatives on the Executive committee.

The Department of Health and OVHA staff have met regularly over the past several months to collaborate on developing common objectives and coordinating and integrating services. Beginning in January 2007, AHS leadership teams and cross departmental teams from all Departments and Offices within the Agency of Human Services will ensure that the Blueprint framework and its implementation becomes a regularly occurring discussion.

2007 - AHS Chronic Care Initiatives Alignment with Long Term Blueprint Outcomes

AHS currently has many programs targeted to the prevention and/or treatment of chronic conditions and that address one or more of the long term Blueprint goals. In 2007 the following programs will be implemented in coordination with the Blueprint framework.

	BLUEPRINT GOALS		
	PREVENTION OF CHRONIC DISEASE	IMPROVE HEALTH OUTCOMES	COST MODERATION
OVHA			
CARE COORDINATION PROGRAM¹ Intensive Care Management targeted at top 1-2% of Medicaid beneficiaries that are complex and require ongoing support. Includes: Self Management Skill Assessment & Education; Emergency Room Utilization; Discharge Planning; Provider Verification, Access, Referrals & Education; Pharmacy Analysis & Outreach	X	X	X
CHRONIC CARE MANAGEMENT PROGRAM The Chronic Care Management Program is comprised of a specialized set of services for Medicaid beneficiaries with chronic conditions that are less complex and require less intensive care management than those enrolled in the Care Coordination Program. Includes: HRA; Health Promotion Mailings; Telephonic & Face-to-Face Nurse Support; Provider Outreach & Education		X	X
BUPRENORPHINE PROJECT OVHA is seeking to encourage primary care physicians to provide buprenorphine treatment by prepaying an enhanced capitated rate with an additional bonus based on participation rate, predicated upon providers following a “Best Practices” protocol as established by the Division of Alcohol and Drug Abuse Programs (ADAP) - VDH and subject to review via Medicaid claims data and office-based chart review. Participating practices allow OVHA and ADAP to assist them in establishing microsystems, protocols and educational opportunities for the staff as well as helping the providers achieve more readily “Best Practices” status.		X	X
PREMIUM ASSISTANCE PROGRAM FOR ESI PLANS At minimum, an approved employer-sponsored insurance plan must include coverage of chronic conditions in a manner consistent with the Blueprint, the OVHA Chronic Care Management Program and Catamount Health. People eligible for VHAP/ESI will get the VHAP wrap to ensure that all chronic care treatment is covered; for expanded ESI there is a chronic care cost-sharing wrap,		X	X

	BLUEPRINT GOALS		
	PREVENTION OF CHRONIC DISEASE	IMPROVE HEALTH OUTCOMES	COST MODERATION
FIELD SERVICES			
SERVICE COORDINATION Intensive service coordination with high risk individuals or families who need support from multiple departments or organizations and require an identified lead case manager and functioning support team. Includes: Coordinate physical, behavioral and social support providers; Ensure coordinated service packages, access to and utilization of care; Establish lead case manager .	X	X	
DAIL			
HEALTH AND LTC INTEGRATION PROJECT 3 year planning project funded by CMS. Goal is to develop a service delivery system that uses capitated payments from both Medicare and Medicaid dollars to provide coordinated acute, primary and LTC services to dual eligible elders and adults with physical disabilities. Uses a multi-disciplinary team and participant-centered model. Medicaid dollars would be used flexibly. Flexibility with Medicare dollars when CMS grants that approval.	X	X	X
PACE (PROGRAM FOR ALL-INCLUSIVE CARE FOR THE ELDERLY) Uses capitated payments from both Medicare and Medicaid. Uses a multi-disciplinary team and participant-centered approach. Based in an adult day center. Chittenden Co. site opening in January, Rutland site, a year later. An Option under the Choices for Care 1115 Demonstration Waiver. The definition and design of the PACE information system is not yet complete.	X	X	X
OLDER AMERICANS ACT Funds from the federal Administration on Aging. A portion of the funding must be devoted to health promotion and disease prevention. In FFY 2007, \$105,929 will go to the 5 Area Agencies on Aging for this purpose.	X	X	X
HEALTH			
CHRONIC DISEASE PROGRAMS —Disease prevention and control programs funded primarily by the U.S. Department of Health and Human Services (DHHS). These programs offer a variety of services including planning, infrastructure development, prevention, treatment and evaluation. Interventions are targeted to some or all of the Blueprint focus areas. Examples include: arthritis, asthma, cancer, diabetes.	X	X	X

	BLUEPRINT GOALS		
	PREVENTION OF CHRONIC DISEASE	IMPROVE HEALTH OUTCOMES	COST MODERATION
TOBACCO/ALCOHOL PREVENTION —Substance use prevention and cessation services funded by DHHS, tobacco settlement funds and others sources. These programs offer a variety of services including planning, infrastructure development, prevention, treatment and evaluation. Interventions are targeted to some or all of the Blueprint focus areas with significant resources devoted to changing environmental and social norms of behavior.	X	X	X
FIT AND HEALTHY VERMONTERS —Obesity prevention services funded by DHHS and state funds focusing primarily on changing environmental and social norms relative to nutrition and physical activity.	X	X	X
COORDINATED HEALTHY ACTIVITY, MOTIVATION AND PREVENTION PROGRAM (CHAMPPS) —Federal and state funds for development of community based prevention services focusing primarily on behaviors related to tobacco and alcohol use, nutrition and physical activity	X	X	X
MATERNAL AND CHILD HEALTH —Disease prevention and service system development programs funded by the Maternal and Child Health Bureau, Department of Agriculture and state funds. These programs offer a variety of services including planning, infrastructure development, prevention, treatment and evaluation.. Includes: WIC, EPSDT, school health, Children with Special Health Needs and others	X	X	X
MENTAL HEALTH —Prevention and treatment services funded by the Substance Abuse and Mental Health Services Administration, Medicaid and general funds. Programs offer treatment services to adults and children through community agencies and the state hospital, work closely with MCH, schools and primary care to develop prevention and early intervention services.	X	X	X
ORAL HEALTH — State and Federally funded planning & promote activities to prevent oral health disorders and improve access to dental services	X	X	X

In addition to the initiatives outlined above, the Blueprint planning and the systems change framework will need to be integrated into several Agency wide activities and programs. These include:

- Global Commitment to Health Care Waiver Quality Assurance and Improvement Plan
- Global Commitment to Health Waiver Evaluation
- Primary Prevention Plan

- AHS Field Services Division
- AHS Workforce Development & Four Key Practices (Holistic, Customer service, Strengths-Based and Results oriented.
- AHS Information Technology Development including but not limited to OVHA’s Decision Support System (DSS), Medicaid Management Information System (MMIS), Global Clinical Record (GCR), SAS, DSSProfiler

The Vermont chronic care initiatives mentioned above focus on change within the five Blueprint target areas: self management, provider practice, community, health system and/or public health; and several contribute to the development of the Chronic Care Information System. An overview is provided on the following chart.

Programs	Blueprint Prevention and Care Model Model Component					
	SELF MANAGE- MENT	PROVIDER PRACTICE	COMMUN- ITY	HEALTH SYSTEM	PUBLIC HEALTH	INFORMA- TION SYSTEM
OVHA						
CARE COORDINATION PROGRAM	X	X	X	X		X
CHRONIC CARE MANAGEMENT PROGRAM	X	X		X	X	X
BUPRENORPHINE PROJECT	X	X	X	X		
TECHNOLOGY						X
PREMIUM ASSISTANCE PROGRAM FOR ESI PLANS	X	X		X		X
FIELD SERVICES						
SERVICE COORDINATION	X	X	X		X	
DAIL						
HEALTH AND LTC INTEGRATION	X	X	X	X		X
PACE	X	X	X	X	X	X
OLDER AMERICANS ACT			X		X	

	Blueprint Prevention and Care Model Model Component					
Programs	SELF MANAGE- MENT	PROVIDER PRACTICE	COMMUN- ITY	HEALTH SYSTEM	PUBLIC HEALTH	INFORMA- TION SYSTEM
HEALTH						
CHRONIC DISEASE PROGRAMS	X	X	X	X	X	
TOBACCO/ALCOHOL PREVENTION	X	X	X		X	
NUTRITION AND PHYSICAL ACTIVITY	X	X	X		X	
CHAMPPS			X		X	
MATERNAL AND CHILD HEALTH	X	X	X	X	X	
MENTAL HEALTH	X	X	X		X	
ORAL HEALTH	X	X			X	

2007 - Other State Agency Alignment with Blueprint Outcomes & Components

	BLUEPRINT GOALS		
	PREVENTION OF CHRONIC DISEASE	IMPROVE HEALTH OUTCOMES	COST MODERATION
STATE EMPLOYEE HEALTH PLAN The new contract for CY2007 – 2010 included required alignment between the vendor’s disease management program and the Blueprint.	X	X	X
BISHCA			
CATAMOUNT HEALTH PLAN All Catamount Health insurance plans must: <ul style="list-style-type: none"> ▪ include coverage for preventive care and chronic care. ▪ waive deductibles and other cost-sharing payments for chronic care if the individual is actively participating in a chronic care management program. ▪ waive deductibles and other cost-sharing payments for preventive care, provided such services are obtained in network. However, if preventive care services are not available in network, the carrier shall waive deductibles and other cost-sharing payments for preventive care services obtained outside of network. ▪ provide access to chronic care management programs consistent with the Blueprint and OVHA chronic care management program. ▪ share data about their chronic care management programs, to the extent allowable by federal and state law, in order to support health care reform initiatives. 	X	X	X

Programs	Blueprint Prevention and Care Model Model Component					
	SELF-MANAGEMENT	PROVIDER PRACTICE	COMMUNITY	HEALTH SYSTEM	PUBLIC HEALTH	INFORMATION SYSTEM
ADMINISTRATION						
STATE EMPLOYEE HEALTH PLAN	X	X	X	X		
BISHCA						
CATAMOUNT HEALTH PLAN	X	X	X	X		X

Part 5. Blueprint Organizational Structure

Adopted by Executive Committee June 1, 2006

Reaffirmed by Executive Committee July 26, 2006

Act 191, Health Care Affordability for Vermonters, requires the executive committee of the Blueprint to “consider and include recommendations in the revised strategic plan for an implementation structure and timeline.” The report shall include at a minimum: an assessment of the options for an organizational structure; and, recommendation as to which structure is most likely to achieve statewide goals, maintain an effective partnership between public and private entities and broaden participation of stakeholders.

Blueprint Expectations contained in Act 191

Act 191 states, “The general assembly endorses the “blueprint for health” chronic condition prevention and chronic care management initiative as a foundation which it intends to strengthen by broadening its scope and coordinating the initiative with other public and private care coordination and management programs”. (H.861 Sec.4 (a))

The general assembly through Act 191 broadens and strengthens this vision in several ways:

- It codifies the Blueprint as a core component of health care reform in Vermont.
- It recognizes the importance of prevention and improved treatment for chronic conditions as an “effective first step” essential to reducing health care costs over time.
- It places a strong emphasis on prevention of chronic conditions.
- It mandates an aggressive timetable for full implementation and participation.
- It names the Blueprint as the standard for development of other health reform initiatives.

- It endorses the Blueprint as an “integrated approach to patient self-management, community development, health care system and professional practice change, and information technology initiatives.”
- It establishes an executive committee to “advise the commissioner on creating and implementing a strategic plan for the development of the statewide system of chronic care and prevention...”

Further, Act 191 specifies that the Secretary of the Agency of Administration is responsible for the coordination of health care system reform among executive branch agencies, departments, and offices.

Organizational Options

Vermont uses at least six different models for managing and implementing programs. These range from an agency of state government (OVHA); through boards (Liquor) or commissions (on Women); to public non-profits (State Colleges), to private non-profit organizations (VPQHC). The type of structure designated by the legislature determines governance, staff employment, funding mechanisms, how contracts are made and the amount and nature of public participation. A summary of these options is included in Appendix D.

Recommended Organizational Structure for FY 2007 and Beyond

Consistent with Act 191, the Blueprint for Health is structured as a program within the Department of Health with an appointed Executive Committee serving in an advisory capacity. The Commissioner of Health in collaboration with the Executive Committee shall consider the merits of other potential organizational structures; and include in the revised strategic plan a recommendation as to which is most likely to achieve the statewide goals of the Blueprint for Health and to maintain an effective partnership between the public and private sectors.

Characteristics of the current organizational structure for the Blueprint for Health are that responsibility for implementation is assigned to the Department of Health which hires and supervises staff, adheres to state policies and procedures, and is accountable to the legislature, the Secretaries of Human Services and Administration, and the Governor. Public input into policies and strategies for project development and implementation is ensured through the Executive Committee and participation by other stakeholders as required by the legislation.

This structure has already been successful in framing the Blueprint and developing the current strategic plan, has led to an effective partnership between public and private entities over the past two and a half years and is poised to broaden participation of stakeholders beyond the current 100 participating organizations.

Organizational Structure Description

Executive Committee

A two day “retreat” was held with members of the Committee and key VDH staff in May. This provided the opportunity to review successes and challenges of the current structure; to agree to the recommended process and structure that will guide the Executive Committee and the Department over the next year; and, to develop new operating principles for the Committee.

The Executive Committee adopted the purpose statement from Act 191 and added to it a commitment to advocacy. The purpose statement now reads:

The Executive Committee advises the VDH Commissioner on creating and implementing the strategic plan for the development of the statewide system of chronic care and prevention, and advocates for integration of Blueprint work within the Committee members’ own organizations and with their constituents and partners.

Responsibilities of the Blueprint Executive Committee include:

- Advise on, review, and make recommendations to the Commissioner regarding strategic plan approval.
- Assist in identification, development and deployment of a funding strategy for sustainability.
- Advise on programmatic and spending priorities for the partnership.
- Assist in creating and implementing a communication strategy for the Blueprint.
- Advocate for and integrate Blueprint work within home organizations, as well as with constituents and external partners.

Department of Health

The Blueprint initiative is administered by the Department of Health with staff reporting to the Commissioner through the Chief for the Blueprint and Chronic Disease. Staff working full time on the Blueprint includes: the Blueprint Implementation Director, Program Managers for self-management, community, provider practice and health systems, health informatics and information technology. Additional staff working part time on the Blueprint includes information systems developers, the public health planning chief, information systems director, staff in each district offices, chronic disease program staff, statisticians, epidemiologists, communications specialists, and members of the legal administrative and business operations teams.

The Chief for the Blueprint and Chronic Disease is responsible for Blueprint strategy development, implementation, integration with other chronic disease programs, maximizing and allocating resources and communication with the Commissioner and Administration.

The Blueprint Implementation Director is the primary liaison between the Health Department and the Executive Committee, oversees all communications regarding the Blueprint, is directly responsible for pilot and new community implementation; and works with all workgroup leaders and VDH program managers to ensure collaboration and coordinated implementation.

The core full time staff are responsible for implementation of the Blueprint strategic plan in their respective areas of expertise, working closely with the Implementation Director, contractors, implementation community teams, Department staff and others. Workgroups for each of the five functional areas, represented by key stakeholders advise and support the staff.

Executive Committee—Department of Health Interface

The Executive Committee meets monthly to review progress, assess and clarify problems, suggest solutions and advise the Commissioner of Health as to the preferred course of action on a variety of issues. A second, telephone meeting, may be held if there are pressing issues.

Meeting agendas are set by the Implementation Director and Executive Committee Co-chair (a non-government committee member) with input from the Commissioner, Director Blueprint and Chronic Disease, staff managers, and Executive Committee Members. Monthly “Implementation Director Reports” are sent to Executive Committee members outlining progress and concerns. Items from these reports may also be included as discussion topics at the meetings.

A guidance document outlines the roles and responsibilities of the Executive Committee and serves as a resource for staff to identify issues that need to be brought to the Committee. Several members of the Executive Committee also participate on work groups giving them more direct access to the staff and to the issues of Blueprint implementation.

Appendices

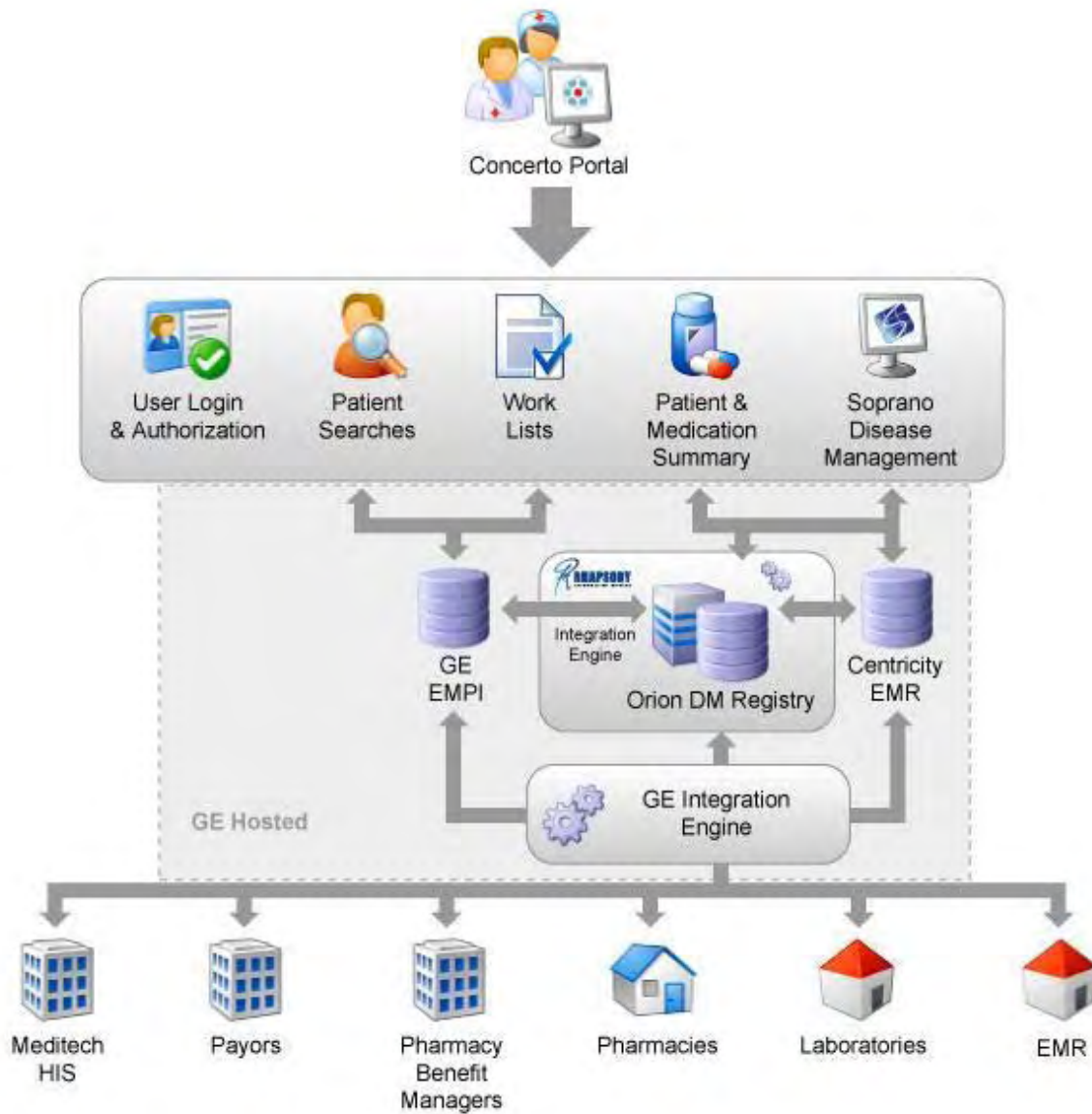
Appendix A--Glossary of Acronyms and Terms

Term	Description/Definition
AHEC	Area Health Education Centers
BISHCA	Vermont Department of Banking, Insurance, Securities and Health Care Administration
Blueprint for Health	The state's plan for chronic care infrastructure, prevention of chronic conditions, and chronic care management program, and includes an integrated approach to patient self management, community development, health care system and professional practice change, and information technology initiatives
BRFSS	Behavioral Risk Factor Surveillance Survey
Care coordination	A component of Chronic Care Management that includes intensive intervention and support for people with advanced disease, multiple complications. May also be referred to as case management
Case management	See care coordination
CCIS	Chronic Care Information System
CCM	Chronic Care Model
CDC	Centers for Disease Control
CHAMPPS	Coordinated Healthy Activity, Motivation and Prevention Program
Chronic Care	Health services provided by a health care professional for an established clinical condition that is expected to last a year or more and that requires ongoing clinical management attempting to restore the individual to highest function, minimize the negative effects of the condition, and prevent complications related to chronic conditions
Chronic care information system	The electronic database developed under the blueprint for health that shall include information on all cases of a particular disease or health condition in a defined population of individuals
Chronic Care Management	A system of coordinated health care interventions and communications for individuals with chronic conditions, including significant patient self-care efforts, systemic supports for the physician and patient relationship, and a plan of care emphasizing prevention of complications utilizing evidence-based practice guidelines, patient empowerment strategies, and evaluation of clinical, humanistic, and economic outcomes on an ongoing basis with the goal of improving overall health.
Chronic Care Model	A national model for collaborative care and quality improvement that illustrates the components necessary to improve care for people with chronic conditions within a health care setting
Chronic condition	Chronic illnesses and impairments that are expected to last a year or more, limit what the individual is able to do, and/or require ongoing medical care
CMS	Centers for Medicare and Medicaid Services

Term	Description/Definition
Community	The term “community” encompasses the physical and cultural settings that provide individuals with identity and that support attitudes and beliefs about health and health care
DAIL	Department of Disability, Aging and Independent Living
Decision support	Readily accessible evidence-based guidelines and information to guide care options and decision making including the training, computer systems and other supports to facilitate use
Disease management	A component of Chronic Care Management that focuses on individuals identified as needing specific education and support services
Disease registry	The component of the CCIS that identifies patients and populations of patients by selected attributes and guides day-to-day support for decision making and quality monitoring
EHR	Electronic Health Record
EMR	Electronic Medical Record
Health care providers	The physicians, nurse practitioners, physician assistants, nurses, counselors, and other health and public health professionals who work with individuals to guide, support and assist them to be healthy, and who deliver treatment and care when needed
Health Care Sector	The organizations and facilities that make the policies, establish outcome measures, implement procedures and provide the incentives that control what health services are available and how health care is delivered by providers and received by individuals
Health risk assessment	Screening by a health care professional for the purpose of assessing an individual’s health, including tests or physical examinations and a survey or other tool used to gather information about an individual’s health, medical history, and health risk factors during a health screening
Healthier Living Workshop	The name used in Vermont for the Stanford University Chronic Disease Self management Program
HEDIS	Health Plan Employer Data and Information Set
HSA	Hospital Service Area. Regions representing local health care markets, as defined by the Vermont Dept. of Health. Some HSAs have more than one hospital
IHI	Institute for Health Improvement
Logic model	A planning tool that provides a visual representation of plans for a project and serves as a guide to appropriate evaluation
OVHA	Office of Vermont Health Access (Medicaid)
Partnership	Collaboration between parties having specified rights and responsibilities to achieve a common goal
PDSA	Plan-Do-Study-Act
Prevention—primary	Action to prevent disease or disability from happening
Prevention—secondary	Action with asymptomatic individuals to prevent development of symptoms of disease or disability from developing
Prevention—tertiary	Action taken for people with established disease to restore to highest possible function, minimize the negative effects or prevent disease-related complications

Term	Description/Definition
Provider practice	Delivery of health services by physicians and other health care providers that is proactive, planned and provided within a continuous relationship
RHIO	Regional Health Information Organization
Self management	The actions taken by individuals to decide among health care options and to implement strategies to minimize their personal health risks and enhance the likelihood of improved health outcomes
Self management support	The physical, social and systems environmental factors that facilitate self management and adoption of new behaviors
VCHIP	Vermont Child Health Improvement Program
VDH	Vermont Department of Health
VHIE	Vermont Health Information Exchange
VITL	Vermont Information Technology Leaders
VPQHC	Vermont Program for Quality in Health Care

Appendix B—Chronic Care Information System—Preliminary Model



Appendix F--Vermont Department of Health Staff working with the Blueprint²⁵

Name	Role
Sharon Moffatt, RN, MSN	Acting Commissioner
Art Limacher, MBA	Information and Technology Director
Donald Swartz, MD	VDH Medical Director
Eileen Girling, RN, MPH *	Blueprint Implementation Director
Ellen Thompson, MS	Public Health Planning Chief
Eugene Bifano *	Blueprint IT Manager
Jennifer Crowley *	Blueprint Program Technician
Jennifer Hicks	Research and Statistics Unit Chief
Jerry Sable, MD, MHA *	Public Health Physician, Health Informatics
Jessica Porter, RN, JD **	Chief, Blueprint and Chronic Disease
Kelly Dougherty, MPH *	Community Programs Administrator
Kim Jones **	Information Systems Developer
Lisa Dulsky Watkins, MD *	Public Health Physician, Provider Practice and Health System
Liza Lewis **	Administrative Assistant
Mary Woodruff, RD, MPH *	Self Management Programs Administrator
Peter Marsh **	Information Systems Developer
Vacant	Information Systems Developer

²⁵ VDH Staff paid exclusively under the Blueprint are designated by one *; staff partially paid by the Blueprint are denoted by two **; other staff listed here are paid by other funding sources

