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Agency of Human Services

To: Joint Legislative Commission on Health Care Reform
House Committee on Health Care
Senate Committee on Health and Welfare

cc: Doug Racine, Secretary, Agency of Human Services
Anya Rader Wallack, Special Assistant to the Governor
Annie Noonan, Commissioner, Department of Labor

From: Susan Besio, Commissioner, Department of Vermont Health Access
Harry Chen, MD, Commissioner, Vermont Department of Health

Date: May 2, 2011

Re: Primary Care Workforce Development Strategic Plan

As required in Section 31 of Act 128 of the 2010 legislative session, please find attached the Primary Care Workforce Development Strategic Plan. This report augments the *Interim Study of Vermont's Primary Care Workforce Development*, which was submitted to the legislature on November 15, 2010.

This Strategic Plan adds several new elements to our work – estimates of workforce needs into the future to enable success in health reform, strategic priorities, and proposed action steps. The overall goals of the Plan are to **attain and retain a sufficient primary care workforce to ensure timely, appropriate, and quality health care for all Vermonters and to achieve Vermont's health reform objectives**. The Plan establishes three general objectives in furtherance of these goals:

- Increase the number of primary care physicians and other practitioners (primary care advanced practice nurses and physician assistants) by 63 FTEs by 2015 (focused on adult care and geographic needs)
- Recruit, train, and retain sufficient (165-215) nurses over the next 3 years into advanced primary care and community health team (CHT) and other care coordination settings
- Recruit, train, and retain sufficient (200-250) CHT and other care coordination staff (other than nurses – see above) by October 2013 to meet statutory Blueprint for Health expansion requirements and other health reform timeframes

Recommendations and proposed action steps build on each of the objectives – see pp. 14-20 of the report.

Vermont has had workforce successes in the past decade and there is reason to be optimistic that the goals and objectives laid out in this Strategic Plan are achievable. However, we will need greater attention, focus, and resources devoted to workforce development to ensure the success of Vermont's health reform initiatives. The 2011 health reform bill currently moving through the legislature, H. 202, recognizes this need and includes several provisions that will continue and build on our work to date.

Primary Care Workforce Development Strategic Plan



A Report to the Joint Legislative Commission on Health Care
Reform, House Committee on Health Care, and Senate
Committee on Health and Welfare

By the Department of Vermont Health Access and
The Vermont Department of Health

corrected version June 13, 2011 *

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* This version of the report includes a correction on p. 8 regarding 2009 data on the number of full-time equivalent primary care dentists.

Primary Care Workforce Strategic Plan

Introduction/ Background

Health care depends on health professionals. As Vermont works toward universal health care, we will need to be sure we have a sufficient workforce to provide the necessary care. Health reform will also change how health care is provided, and we will need to educate, train, and encourage new and existing health professionals in new approaches.

Legislative Directive

Act 128 of 2010 directs the state to develop a “detailed and targeted five-year strategic plan with specific action steps for attaining sufficient capacity in the primary care workforce and delivery system to achieve Vermont’s health care reform principles and purposes.” The law further requires research and study of:

- “the current capacity and capacity issues of the primary care workforce and delivery system in Vermont, including the number of primary care professionals, issues with geographic access to services, and unmet primary health care needs of Vermonters.”
- “the resources needed to ensure that the primary care workforce and the delivery system are able to provide sufficient access to services should all or most Vermonters become insured, to provide sufficient access to services given demographic factors in the population and in the workforce, and to participate fully in health care reform initiatives, including participation in the Blueprint for Health and transition to electronic medical records.”
- “how state government, universities and colleges, and others may develop the resources in the primary care workforce and delivery system to achieve Vermont’s health care reform principles and purposes.”

Prior Reports and Conclusions

Three recent reports document the current status of and issues with Vermont’s primary care workforce. The state’s initial report to the legislature in response to the Act 128 directive ¹ was submitted in November 2010. It concluded:

Primary care is fast losing ground as the preferred field of practice. Lower payments and the fee-for-service payment mechanisms have reduced time spent with patients and made the practice of primary care both more difficult and less rewarding. An aging population with increasing health needs calls for investing in a new generation of primary caregivers through increased resources for training, new and higher incentives to practitioners, and

¹ *Primary Care Workforce Report and Five-Year Plan*, November 15, 2010; Department of Vermont Health Access, Vermont Department of Health, and the Act 128 Primary Care Workforce Committee.

support for caregivers who choose to enter primary care in underserved areas. The need is to educate, employ and retain primary care providers in all areas of the state.

The Vermont Area Health Education Centers (AHEC) Program's recent workforce report² includes the following challenges:

- There is a persistent and pervasive shortfall of internal medicine (IM) physicians in every region of Vermont. IM physicians serve adults in primary care.
- At first glance, the supply of family medicine (FM) physicians looks generally adequate statewide. However, FM physicians, who serve both adults and children, do not make up for the shortfall of IM physicians across Vermont. Eleven of Vermont's 14 counties do not have an adequate supply of FM/IM physicians combined. Supply of FM physicians also varies by region.
- The supply of advanced practice registered nurses and physician assistants in family medicine looks adequate statewide; however, it obscures the shortfall of PCPs in internal medicine and pediatrics. There is an overall shortfall of these practitioners to adequately serve Vermonters.
- The percent of IM and FM practitioners limiting or closing their practices to new patients further illustrates the stress on the adult primary care workforce to provide services to all Vermonters.
- The supply of pediatricians in the Champlain Valley and obstetricians-gynecologists in Chittenden County obscures the inadequate supply of these physicians in other regions of the state.

And Dr. William Hsiao's recently released final report³ recommends large investments (\$50 million annually) to attract and retain primary care professionals. Dr. Hsiao's team concludes:

Historically, neither primary care nor rural practice has attracted enough physicians, due to relatively low salary compared to specialty medicine, and to quality of life. Other disincentives to rural primary care practice include availability of employment for spouses/partners, length of time needed to obtain a license to practice in VT, and administrative burdens of practicing in VT [45]. In order to attract and retain adequate numbers of PCPs, Vermont must provide incentives to doctors to change or minimize the perceived disadvantages of rural primary care practice.

Moving Toward a Strategic Plan

All of the above-referenced reports include excellent information about the current status of Vermont's primary care workforce and identify problems and challenges; two of the reports include recommendations for future action. We will not replicate these information and analyses in this report, except in general or as may be necessary to explain recommendations or priorities.

² *The Vermont Primary Care Workforce – 2010 Snapshot*, January 2011; Vermont Area Health Education Centers Network.

³ *Act 128 Health System Reform Design - Achieving Affordable Universal Health Care in Vermont*, February 17, 2011, William Hsiao, PhD, FSA, Steven Kappel, MPA, Jonathan Gruber, PhD.

This report adds several new elements – estimates of workforce needs into the future to enable success in health reform, strategic priorities, and action steps.

Acknowledgements

This report was prepared by the Department of Vermont Health Access and the Vermont Department of Health. Research assistance was provided by the Vermont Area Health Education Center (AHEC), the Vermont Department of Labor, the Bi-State Primary Care Association, and others. Additional assistance was provided by the Act 128 Primary Care Workforce Development Committee,⁴ which met on March 16, 2011 to review the research and early recommendations of this report.

⁴ See Appendix 3 for committee membership.

Estimates of Vermont's Primary Care Workforce Needs

Scope and Definition

As directed by Act 128, the scope of this report is **primary care**. Issues may also exist with the education and recruitment of other health professions (e.g., specialty care, technicians, information technology), but they are not the subject of this report.

For purposes of this report, primary care is defined broadly and means:

health services provided by health care professionals specifically trained for and skilled in first-contact and continuing care for individuals with signs, symptoms, or health concerns, not limited by problem origin, organ system, or diagnosis, and includes prenatal care, dental, and mental health and substance abuse treatment.

<p>GOALS <i>Attain and retain a sufficient primary care workforce to ensure timely, appropriate, and quality health care for all Vermonters and to achieve Vermont's health reform objectives.</i></p>

Data and Analysis

The first objectives of this study were to define how many primary care health professionals will be needed by 2015 and how our traditional workforce may need to change to achieve health reform objectives.

Our general approach involved several steps:

- collect data on existing numbers of professionals, by type or category
- estimate numbers needed by 2015, assuming no other system changes (i.e., steady state)
- estimate numbers needed by 2015 to provide care for universal coverage
- estimate numbers needed by 2015 with other system changes, such as the Blueprint for Health

Table 1 summarizes the data we have collected and estimates we are able to make at this time. Good data exist for some primary care professions, including physicians, other practitioners (e.g., advanced practice nurses and physician assistants), and some other nursing professions. Gaps exist for others, including mental health professionals, medical assistants, dieticians, dentists, and some types of mid-level professionals not already listed here.

Table 1 - Primary Care Workforce Needs - 2015

Professional Group	Current in Primary Care (FTEs)	Needed over Current	+ for Universal Access 2015	+ for Other Reforms (Blueprint, etc.) 2015	TOTAL Add'l Need 2015
Physicians	± 500	+ 25	+ 38		+ 63
APRN & PA	± 160	+ 7	+ 13		+ 20
Nurses (RN and LPN)	± 585 (nurses)		+ 46	+ 120 -170	+ 165 -215
Other (incl. some CHT)				+ 125 -180	+ 125 -180
Mental Health, subs. abuse				+ 60 -100	+ 60 -100
Dentistry	218				
Public Health	5	+7			+7

Blanks in the table indicate a lack of data to make reasonable estimates.

Physicians

There is currently a shortage of approximately 25 primary care physicians statewide, though the numbers vary significantly by geographic region and by physician specialty (family medicine, internal medicine, pediatrics, OB-GYN). The Vermont Department of Health (VDH) and AHEC have conducted regular surveys of all primary care physicians (MDs and DOs) to determine the number of full-time equivalent (FTE) practitioners actively working in primary care settings. National benchmarks for numbers of practitioners per patient population and survey responses about whether practices are open to new patients provide ways to estimate the adequacy of physician workforce. See p. 6 of this report for the general conclusions from AHEC’s 2010 report.

There are currently 35 licensed naturopathic physicians (NDs) in Vermont. A survey is currently being developed by the Vermont Association of Naturopathic Physicians to collect data on the number of FTE NDs who are actively practicing in primary care. The legal scope of practice for NDs in Vermont includes primary care and NDs are pursuing inclusion in the Blueprint for Health and other health reforms. The specific roles NDs will play in primary care, however, are unclear at this point. For example, we don’t know how many NDs will successfully transition to advanced primary care practices (or medical homes) in the Blueprint model and be available to help provide care in a broad-based way.

Achieving universal coverage by 2015 will increase the need for primary care physicians from the expected shortfall of 25 to about 63 FTEs. As currently, the shortfalls will be felt more keenly in some parts of the state and in professions that serve adults. Of the estimated 38

additional FTEs needed to care for an estimated additional 47,000⁵ Vermonters, about 29 will be in internal medicine and family practice.⁶

The adequacy of physician supply varies by region of the state. Addison, Bennington, Caledonia, Chittenden, and Windham counties have a sufficient total supply of primary care physicians (as compared to national benchmarks), though most have shortages in adult primary care (internal medicine) and/or other specialties (family medicine, pediatrics, OB-GYN). The rest of the counties have shortages, with the largest being in Rutland, Franklin, and Windsor counties. Different strategies have evolved in different regions to address the problems in recruiting and retaining primary care physicians. Many hospitals now own primary care practices and pay salaries to their physicians. This relieves business-related pressures for physicians and often allows for more flexible work schedules. Other regions (e.g., St. Johnsbury, Springfield, Rutland, Franklin) have stressed or supported the development of federally-qualified health centers and rural health clinics. These settings provide similar benefits to physicians as hospital-owned practices, but also qualify for higher Medicare and/ or Medicaid reimbursement levels.

The Blueprint for Health and other delivery system reforms are already changing the practice of medicine in Vermont. Primary care practices are moving toward new medical home models that stress team-based care, population health management, and the use of electronic health record systems to support these changing practices. (See p.13 for more information on the Blueprint and its positive impacts on patients and providers.)

It is too early to tell what impact the Blueprint will have on the number of primary care physicians that will be needed to serve a given population of patients. The Blueprint and interconnected EHR systems will bring to bear new human and informational resources that should make the practice of medicine more effective and efficient. This may lead to situations where physicians are leading larger teams of professionals which can effectively manage the health of a larger population than physicians can do today. For now, however, we will assume no changes for the physician workforce needs related to the Blueprint and will continue to use national practitioner to population benchmarks.

Health Reform Goals

- Better Care*
- for all individuals
- Better Health*
- for populations
- Lower Costs*
- through improvements for all

Advanced Practice Nurses (APRNs), Physician Assistants (PA), and Certified Nurse Midwives (CNMs)

The data⁷ for current advanced practice registered nurses (including certified nurse midwives) and physician assistants in primary care show a small shortage overall (7 FTEs), though like physicians this varies widely by type of practice. There is a large shortage (37 FTEs) compared to national benchmarks for APRNs and PAs working in internal medicine, and an overabundance

⁵ 2009 Vermont Household Health Insurance Survey, VT Department of Banking, Insurance, Securities, and Health Care Administration, January 2010.

⁶ AHEC 2010 Snapshot

⁷ AHEC 2010 Snapshot

(28 FTEs) in family practice. It's not clear how well matched or distributed the excesses are to the shortages and how much pressure could be relieved.

Assuming the same ratio of physicians to APRNs and PAs that exists now, universal coverage will increase the total need for APRNs and PAs by about 13 FTEs, ranging from 1-5 across the different types of practice. The Blueprint for Health reforms are not yet having much impact on the demand for APRNs or PAs. Most of the new positions being hired into Blueprint practices and community health teams are other types of health professionals (see below). The new team-based medical home model and the goal of reducing health care costs may encourage use of more APRNs and PAs, and to the full extent of their education and training.

Other Primary Care Professionals

Of the over 8,000 registered nurses (RNs) in Vermont, an estimated 400 FTEs actively work in a primary care setting. Similarly, there are more 2,000 licensed practical nurses (LPNs), of which about 185 FTEs actively work in primary care.⁸ There are not well-established national benchmarks for nursing in primary care, so we do not make estimates of the adequacy of the current workforce. Using a simple extrapolation from the numbers of currently active primary care nurses, we estimate that an additional 32 RN FTEs and 14 LPN FTEs will be needed to care for an additional 47,000 covered Vermonters.

The data are limited on other health care professionals, including medical assistants, health coaches or educators, dietitians, or community health workers. There are data on the total number of people who are licensed, certified, or registered, but not all professions require a license, certificate, or registration. In addition, we do not have robust survey or other data on most of these other professions that would enable workforce planning and development, such as estimates of how many FTEs work in primary care settings. Finally, there are few well-established benchmarks to estimate the adequacy of these professions in primary care.

Mental Health and Substance Abuse

Existing workforce data are weak related to mental health and substance abuse professions. To begin to address this issue, the Department of Vermont Health Access (DVHA) has recently entered into a contract with a team of experts.⁹ The scope of work for this initial small contract, which will be completed by fall 2011, is:

- Identify the universe of mental health (MH) and substance abuse (SA) professionals in the State;
- Use the Medicaid claims data base and other potential sources to identify the distribution of categories of claim generating practitioners by county, and identify whether location of services is public agency, private practice or primary or specialty medical care;

⁸ Primary care and FTE estimates made by AHEC based on responses to relicensure surveys.

⁹ Rodger Kessler, Ph.D., UVM; David Fassler, M.D.; Michael Hartman M.S.W.; Gary Widrick, Ph.D., M.S.W., UVM.

- Access information on national trends regarding training and workforce needed to integrate the health care system in rural areas;
- Estimate the increased volume of primary care based mental health services in both a referral based and panel based model of care and the increase in ongoing need for referral to the specialty system;
- Collect national estimates of ratios of MH professionals to patients in a practice panel where available;
- Estimate new patient access needs as the result of new case finding, accessing Blueprint, HRSA, the Department of Defense (DOD) and national projects to generate these estimates;
- Identify clinician RVU and volume productivity data for MH and SA providers;
- Identify present shortages of providers within different demographic areas of Vermont, the capacity and adequacy of present training programs for MH, SA and health behavior providers and project future trends based upon population rates, geographic distributions, provider availability and access issues;
- Identify and list major publications relevant to models and metrics of providing mental health, substance abuse and health behavior in medicine;
- Contact all relevant provider organizations in Vermont for their feedback on these issues;
- Summarize the results; generate a set of future recommendations and format a final project report.

Dentists

The number of primary care dentists has remained relatively steady over the past decade, with 218 FTEs (out of 292 individual primary care dentists) in 2009 as compared with 223 FTEs in 2001. The number of dentists accepting new patients has increased during this time, from 85% to 92% for all patients and from 37% to 65% for new Medicaid patients. The average age of dentists is growing (62% age 50 or older) and the number of dentists planning to retire, leave, or reduce hours has increased from 20% to 29% between 2001 and 2009, both indicating a looming workforce problem.¹⁰

The need for dental care could increase with universal coverage, but only significantly if dental coverage is part of the approved benefit packages. The U.S. Health Resources and Services Administration (HRSA) uses a benchmark of 3,000 patients to 1 dentist,¹¹ though estimating the number of additional dentists needed over time in Vermont would depend on the level of dental services included in the benefit packages.

The Blueprint for Health and Community Health Teams

Vermont's health reforms are investing in primary care. Through the Blueprint for Health, these investments are designed to result in better care for individuals, better health for populations, and lower per capita costs.¹²

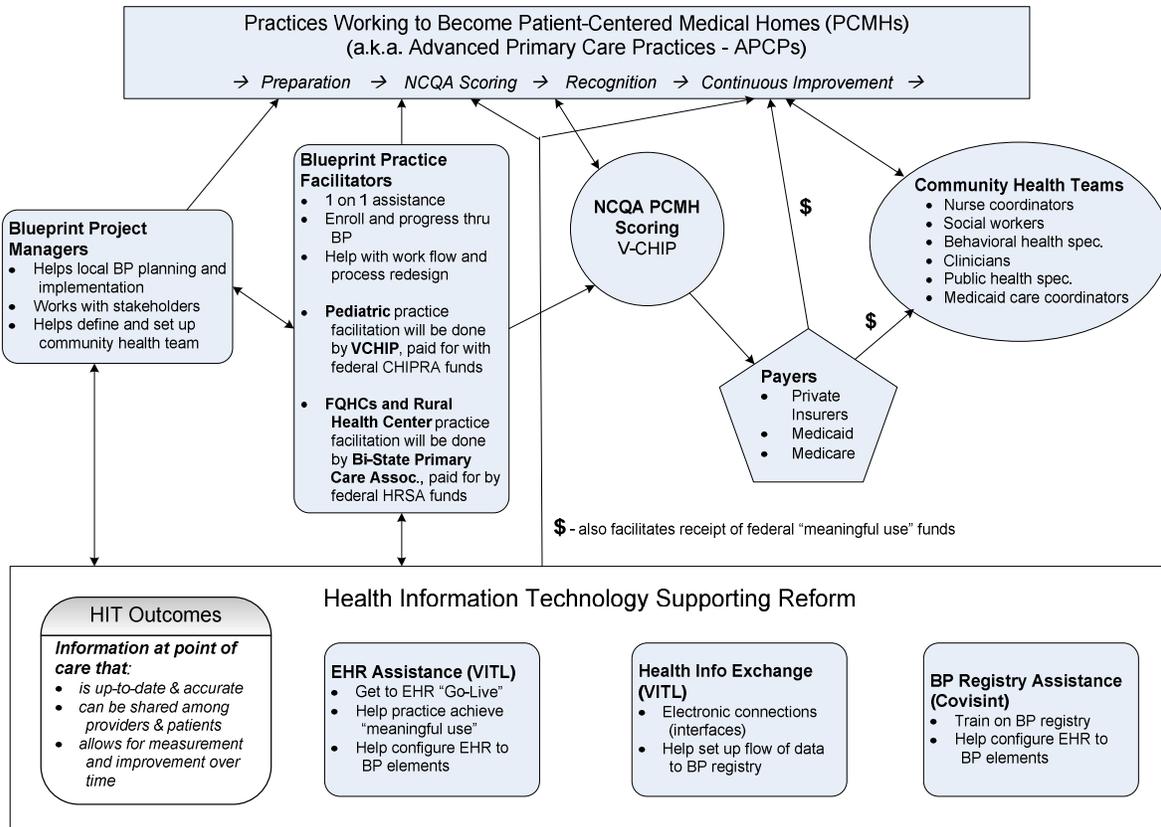
¹⁰ 2009 Dentist Survey Statistical Report, Vermont Department of Health, October 2010.

¹¹ <http://bhpr.hrsa.gov/shortage>

¹² These "Triple Aims" are based on research by the Institute for Healthcare Improvement and further explained at <http://www.ihl.org/IHI/Programs/StrategicInitiatives/IHITripleAim.htm>.

Figure 1 shows many of the human and financial resources that are now being made available to primary care practices. These include direct payments and training for practices, but perhaps the most innovative investment is the development of community health teams (CHTs). The Blueprint for Health’s cutting edge payment reforms allow CHTs to provide services free of charge to the patients of primary care practices that have qualified for the Blueprint.

**Figure 1 - Vermont Health Reform
Helping Primary Care Practices**



All arrows connecting to the box at the top indicate resources provided at no charge to practices, supported by state and federal funds. Arrows with \$ indicate direct cash payments.

The multidisciplinary CHT works closely with primary care offices, hospitals, and existing health and social service organizations. The goal is to provide Vermonters with the support they need for well-coordinated preventive health services, and with coordinated linkages to available social and economic support services. The CHT is flexible in staffing, design, scheduling and site of operation. This results in cost-effective, core community resources that minimize barriers and provide the individualized support that patients need. The CHTs function as extenders of the practices they support, and their services are available to all patients (no eligibility requirements, prior authorizations, or co-pays).

Community Health Teams are paid for by Vermont’s private insurers and Medicaid, and soon Medicare will join the program as a payer. This support allows the services of a CHT to be offered free of charge to patients and practices. The payers provide a total of \$70,000 for every 4,000 Vermonters who are patients of Blueprint-qualified practices. This funding covers the

salaries of a core team. While this “core” CHT often works one-on-one with patients to meet a wide range of needs, a “functional” team may be much larger, including members of other local individuals and organizations who work in partnership with the CHT and primary care practices.

As shown in Table 2, CHTs are expected to add 300-400 new primary care jobs in communities across Vermont by the fall of 2013.¹³ These estimates are based on the experience to date in the Blueprint pilot communities (St. Johnsbury, Chittenden Co., and Central Vermont).

Table 2 - Blueprint Community Health Team Workforce

Position Type/ Role	Examples of Exper./ License	Existing FTEs with Reforms	Additional FTEs May be Needed (incl. existing)	Total Per 20,000	Total Statewide
CHT Director	RN + exper., Masters	1	0	1	31
Care Coordinator	RN	1	1	2	63
Social Worker, Behavioral Health	MSW	1	1-2	2-3	63-94
Coach, Educator, Community Health Worker	BA/BS/ Assoc., with training	1	1-2	2-3	63-94
Panel Management	Med. Asst., LPN	1	1-2	2-3	63-94
Admin. Asst.	Experience in medical office	1	0	1	31
Totals		6 *	4-7	10-13	314-408

** Funding of \$350,000 per 20,000 people currently comes from CHT payments by private insurers and public payers; other positions funded from other sources, including PPM payments.*

The exact numbers and types of professionals on the CHTs are determined locally based on the needs of a community, so it is difficult at this point to be precise. It is also true that we will learn more over time about the most effective staffing for CHTs. Nevertheless, we can make some general statements that will help in workforce planning and training:

- Nursing professions are playing an important role on CHTs, with perhaps as many as 100 new positions for RNs and another 100 which LPNs could fill. These nurses will need to be trained for advanced primary care practice settings, including team-based care models, care coordination, population health management, and electronic patient registries. These

¹³ Sec. 19 of Act 128 of 2010 states, “The commissioner of Vermont health access shall expand the Blueprint for Health as described in chapter 13 of Title 18 to at least two primary care practices in every hospital services area no later than July 1, 2011, and no later than October 1, 2013, to primary care practices statewide whose owners wish to participate.”

training emphases are different than the needs of other health care settings, such as hospitals and long-term care, and different than what is currently emphasized in nursing curricula.

- There will be a substantial role (100-200 FTEs) for CHT professions that require less clinical training than MDs, DOs, APRNs, PAs, or RNs. There are a variety of titles for these positions – health coach or educator, community health worker, nutritionist, trainer, panel manager, etc., and all work under the direction of a primary care physician (usually through referrals). They educate patients, help with patient self-management and behavior change, coordinate care with other CHT and community providers, and track results over time.
- All CHTs to date are hiring mental health/ substance abuse (MH/SA) professionals and we estimate that 65-95 FTEs will be needed statewide. Generally, these are Masters-level professionals with degrees and experience in mental health and/or social work. These professionals do MH/SA assessments and limited interventions, coordinate care and services, and make referrals for more acute specialty services. They work as part of a treatment team and integrate MH/SA services with primary care.
- We expect to see a realignment of the workforce over time to reflect our investments in primary care and cost savings in acute care. So, it is hard to estimate net job growth over time.

Other Health Reform Workforce Impacts

Medicaid Care Coordination – Since 2007, the Vermont Medicaid Chronic Care Initiative (VCCI) has provided statewide care coordination, case management, and health coaching services to Medicaid beneficiaries with chronic health conditions. Department of Vermont Health Access (DVHA) care coordinators, which include 8 RN case managers and 4 medical social workers, have provided face-to-face intensive case management to the highest cost, highest risk, medically and socio-economically complex beneficiaries, while contracted RN health coaches provide predominantly telephonic disease management health education and coaching to lower risk beneficiaries with less complex needs. Consistent with the Blueprint for Health, VCCI goals are to decrease inappropriate utilization of health care resources while increasing medically appropriate use, as well as improve beneficiary self-management, prevention and health maintenance. DVHA care coordinators are members of the Blueprint Community Health Teams (CHTs), support the primary care provider in achieving the clinical plan of care, facilitate effective communication and coordination among service providers, and work to remove barriers to beneficiary success through coordination with community support services.

In SFY 2011, DVHA began piloting an enhanced care coordination model in two counties (Franklin and Rutland); in each county two nurse case managers and one clinical social worker have been added to the existing statewide VCCI workforce. The six new care coordinators are co-located in primary care offices and medical facilities and provide services to any eligible beneficiary regardless of specific health condition or disease. They focus on reducing preventable emergency department visits, hospital admissions, lengths of stay, and readmissions through improved discharge planning, access to coordinated outpatient care and coordination with community resources. Once beneficiaries are stabilized and their more complex, acute needs have been addressed, they are transitioned to the Blueprint CHTs for ongoing support. If

the model proves to be cost-effective, DVHA plans to transition away from telephonic disease management over the next two years and expand the enhanced care coordination model statewide.

From a workforce standpoint, there are a current total of 18 state-employed care coordination staff (RNs and medical social workers) and 10 RNs employed by the private disease management contractor (APS Healthcare). Ultimately, the state expects to increase to an ongoing staffing level of 32 care coordinators. These positions are similar to some of those on the CHTs and will add to the demand for similar kinds of health professionals.

SASH – Support & Services at Home (SASH) is part of Vermont’s medical home health care and payment reform programs. Over the next 3 years, SASH will bring together nonprofit affordable housing, health care, and long-term care providers to provide care coordination, transitions planning, and self-management education services for lower-income elderly residents - improving outcomes and reducing expenditures. Through SASH, rural medical practices and community health teams (CHTs) will have a deeper reach and more profound connection with the poor elderly, disabled, and some other high-need populations throughout Vermont.

The SASH teams at 112 subsidized housing communities across Vermont will serve low income residents and Vermonters living in the community surrounding the subsidized housing. By embedding care management and coordination programming in the home, the barriers to self-management that are particularly acute among the poor elderly can be reduced by fostering person-centered approaches.

The SASH team is anchored by a housing-based care coordinator (SASH Coordinator) and a wellness nurse. The on-site SASH staff has daily contact with residents enabling targeted interventions. The wellness nurse provides in-person coaching on proper medication management, monitors vital signs, and provides intensive self-care counseling and education post-discharge from hospitals and nursing homes. Essentially, the housing-based SASH staff serve as extenders to primary care providers and the aging services network – all working together to keep seniors and others with service needs safe at home.

Over the next 3 years, the SASH program plans to hire an estimated 75 FTEs (combined total of SASH coordinators and wellness nurses). The professionals needed to fill these positions will have a similar set of skills, abilities, and experience requirements as those of the CHT and Medicaid care coordinator positions.

Blueprint Program and Project Workforce Impacts – The ramp-up of the Blueprint also requires program management and hands-on support for primary care practices (refer again to Figure 1). Each region (or hospital service area) now has a full or part-time “project manager” who coordinates the implementation of the Blueprint into a community and the development and functioning of the community health team. In addition, each area of the state will have access to a “practice facilitator.” These professionals (usually clinicians) work directly and closely with practices to help implement and manage the process of qualifying as patient-centered medical homes, to use information technology systems to improve patient care, to integrate patient self-management support and planned care visits, to educate and train about team-based care models, and to connect with community resources and specialty referrals.

In addition, state and federal funds support the Blueprint and health reform generally through contracts (and resulting staffing), including with the Vermont Child Health Improvement Program (VCHIP) at UVM to support Blueprint growth into pediatric practices, with the Vermont Information Technology Leaders (VITL) to support electronic health information exchange among practices, and with Covisint/ DocSite (a national company) to support the development and hands-on implementation of electronic patient registries that enable practices to proactively manage the health of entire patient populations.

Public Health – The Vermont Department of Health projects the need for one public health professional in each public health district office (12). The professional would participate on each Blueprint CHT, and would connect the team with public health resources. While primary care practices and CHTs are patient-focused, public health professionals will address general community health needs.

Objectives, Targeted Recommendations, and Action Items

GOALS

Attain and retain a sufficient primary care workforce to ensure timely, appropriate, and quality health care for all Vermonters and to achieve Vermont's health reform objectives.

Physicians and Other Practitioners

Objective: Increase the number of primary care physicians and other practitioners (primary care APRNs and PAs) by 63 FTEs by 2015 (focused on adult care and geographic needs).

Vermont has had many successful workforce initiatives and programs for primary care physicians and other practitioners, but significant barriers continue to exist, as shown in Table 3.

Table 3 - Factors Helping and Hurting Recruitment and Retention

Helping	Hurting
<ul style="list-style-type: none"> ▪ AHEC, UVM, Bi-State and other organizations and a track record of success ▪ Loan repayment, loan forgiveness, scholarships ▪ Health reform (e.g., Blueprint) investments in primary care ▪ Improved work environments & job satisfaction through Vermont reforms ▪ HIT investments 	<ul style="list-style-type: none"> ▪ Aging workforce ▪ National shortage of primary care physicians ▪ Cost of education and training ▪ Educational debt ▪ Lower pay/ reimbursements for primary care ▪ Low job satisfaction with current system (e.g., administrative burdens, difficult to practice as trained or desired) ▪ Work/ life balance concerns ▪ Geographic disparities ▪ Lack of spouse/ partner employment opportunities

High and Near-Term Priorities

There is a significant need for physicians and other practitioners in the next 5 years, yet the pipeline for training and education is considerably longer than that. So, Vermont should focus in the near term on recruiting existing practitioners from other states and on soon-to-be graduates from training and residency programs.

Recommendation 1 – Strengthen resources and services to support recruitment and Vermont placement of UVM College of Medicine trainees, FAHC medical residents, and Freeman Scholars.

Data show strong success in recruiting people with a Vermont connection. 41% of Vermont's primary care physicians were trained at either the University of Vermont (UVM) or Fletcher Allen Health Care (FAHC). There are currently 333 Freeman Scholars¹⁴ in the pipeline, of which about one third will be trained in primary care. AHEC currently lists 101 vacancies, including 41 in primary care.

Action Item – Secure replacement funding of \$50,000 for Physician Placement Specialist by July 2011.

This position has a 9-year track record of success, but the private Freeman Foundation funds that support it are ending. The outreach and connections provided by this position have helped place 113 physicians (all specialties) in Vermont since 2000, five times more than were successfully recruited during the 1990s. Recruitment efforts are targeted to specific professions and geographic regions of the state for which there are workforce needs. We have had success connecting and matching Freeman Scholars, UVM College of Medicine graduates, and FAHC residents to vacancies in Vermont. Most of these physicians complete their training (residency, fellowship programs) outside of Vermont and the physician placement specialist stays in contact to sustain, cultivate and nurture their connections to Vermont. This work impacts short-term and long-term workforce goals.

So far in FY11, AHEC/Freeman has successfully placed 7 primary care MDs and 1 hospitalist, and projects a total of 15 in primary care by the end of June 2011.

Possible Funding Mechanism:

- Pursue the use of Global Commitment Investment funding to support a total of \$50,000 (would require \$20,000 in state funds); matched by \$50,000 from AHEC and other UVM College of Medicine Office of Primary Care funds.

Action Item – Create and produce a “Vermont Brand” for recruitment of health care professionals to Vermont.

Vermont has a story to tell. We are leaders nationally in health reform and we should capitalize on our good work and good reputation to recruit the best professionals to Vermont. The Bi-State Primary Care Association through its Vermont Recruitment Center has recently adopted a new campaign with the message: *Practice Medicine in*

¹⁴ Freeman Scholars are UVM College of Medicine students or graduates who early in their training expressed a desire and intent to practice in Vermont. The Scholars received or are receiving scholarships toward medical school expenses. The scholarships are from the University of Vermont and funded through a gift to UVM from the Freeman Foundation. This innovative collaboration between UVM and the Freeman Foundation has provided \$20 million since 2001 to serve students and their education financing needs and also assist Vermont's future healthcare workforce needs. The Freeman funding to UVM ended June 30, 2010 and all funds will have been spent by summer 2011.

Vermont, Come for Who You Are, Stay for Who You Become and a list of “Top Ten Reasons to Practice Medicine in Vermont” (see Appendix 2).¹⁵

The Governor should charge a workgroup comprised of key staff from DVHA, VDH, and DOL, the state Marketing Officer, the Workforce Development Council, representatives from Bi-State Primary Care Association and AHEC, and human resource professionals from hospitals and other providers to develop and implement a Vermont-branded health care workforce campaign. Each entity contributes significant expertise to the work. Marketing alone will not assure that clinicians ultimately come to practice in the state. Bi-State Primary Care Association has the recruitment systems in place to translate the leads generated from the national marketing and outreach into health professionals that are recruited to communities throughout the state and where their services are needed most.¹⁶

Possible Funding Mechanism:

- The workgroup should identify sources for \$50,000 -100,000 to be augmented by existing marketing resources within the Administration, Bi-State and AHEC.

Recommendation 2 – Secure more funding ASAP for Vermont’s Educational Loan Repayment Program, with the goal of at least tripling the funding (from multiple sources) by 2014.

Medical educational debt continues to rise. The average medical school tuition in a public institution can be as high as \$39,500 per year¹⁷ (not including other expenses such as books, housing, meals, student fees, traveling, etc.) and the average medical student graduates with \$200,000 in loans, according to the American Academy of Family Physicians. This doesn't include any debt related to undergraduate study. For some students the total debt burden can reach nearly \$500,000.¹⁸

Vermont’s ability to change the basic costs of medical education is limited. As such, loan repayment remains one of the most important recruitment and retention tools that we have. Dr. Hsiao’s team recommends an annual budget of \$50 million for workforce development, recruitment and retention, including a significant role for loan repayment. However, they suggest these initiatives be funded through system savings which don’t begin to show up in their model until 2015.

The need is high (459 applications received), and the number and amounts of awards are low (235 grants made). The award details vary by discipline. For primary care, there were 173

¹⁵ *Opportunities to Improve Recruitment and Retention of a Primary Care Workforce for Vermont*, Recommendations from the Primary Care Workforce Committee convened by the Vermont Recruitment Center, a service of Bi-State Primary Care Association, January 2011.

¹⁶ Bi-State focuses on recruiting nationally, while AHEC focuses on recruiting physicians trained at either the University of Vermont (UVM) or Fletcher Allen Health Care (FAHC); efforts are coordinated and not duplicated.

¹⁷ <http://www.usnews.com/articles/education/best-graduate-schools/2008/03/26/hot-tips-for-medical-school-students.html>

¹⁸ <http://www.time.com/time/business/article/0,8599,2012443,00.html#ixzz1493eYkF3>

applications and 79 awards made in 2011 – the average state award was \$5,633 for a one-year service commitment. However, AHEC uses the state-funded program to work with practices, hospitals, and others to contribute “matching funds” to supplement the state award and pool resources into a more meaningful award. Factoring these matching funds, the average award increased to \$8,215 overall, and refining that to a subset of only those awards that also have a community match ($n=22$), the average award was \$16,022. Upon request from the legislature, AHEC recently outlined a rational and justifiable plan to annually spend \$10 million to address the demand, increase awards significantly, and expand the loan repayment program to other needed professions.

Action Item – seek and maximize outside funding sources including the National Health Service Corps and the Federal workforce development implementation grant opportunity.

National Health Service Corps (NHSC) funding was increased through ARRA and the PPACA such that Vermont’s FQHCs and safety net sites (about 18% of VT practices) are now eligible for federal loan repayment.¹⁹ Initial awards of up to \$60,000 for 2 years and subsequent awards up to a possible \$170,000 over 5 years are expected to be available.²⁰

Vermont currently has a small (\$130,000) federal workforce planning grant from the Health Resources and Services Administration (HRSA) Bureau of Health Professions that will help us prepare to compete for larger implementation grant funding expected to be awarded later in 2011. Details and potential grant amounts are yet to be released.

Action Item – develop strategies as may be necessary to augment state and federal funds to achieve the goals of at least doubling loan repayment funds in FY 13 (from \$870K to \$1.75 million) and at least tripling by FY 14 (to \$2.6 million), including the consideration of sustainable funding sources.

Vermont must find a way to significantly increase loan repayment funding over the next several years. If significant savings are to be achieved in 2015 and beyond, new ideas should be explored to borrow or otherwise front-load necessary funds from other sources.

For example, the NHSC loan repayments amounts may set a standard. If Vermont’s loan repayment amounts tracked those of the NHSC, we would need approximately \$1.9 million per year for the 63 additional primary care physicians called for in this report. Assuming the primary care physicians already in Vermont would also be eligible for these larger amounts (and that we may need to pay these higher amounts to retain the physicians), the needed amounts would rise substantially (e.g., 173 current applicants + 63 new ones times \$30,000/ yr \approx \$7 million/ yr).

¹⁹ <http://nhsc.hrsa.gov/loanrepayment/>

²⁰ Clinicians that are eligible to receive NHSC Loan Repayment are: Primary Care Physician (MD or DO), Dentist (general, pediatric and geriatric), Nurse Practitioner (primary care), Certified Nurse-Midwife, physician Assistant (primary care), Dental Hygienist (general, pediatric and geriatric), Psychologist (health service), Licensed Clinical Social Worker, Psychiatric Nurse Specialist, Marriage and family Therapist, Licensed Professional Counselor

It is hard to know what level of loan repayment funding is optimal, though some research is underway that may provide some answers to this question.²¹ In the meantime, we know that the demand for funding far outstrips the supply, higher funding levels in FYs 07 – 09 had significant impacts, and Vermont’s health reforms add to the need.

As loan amounts can be increased, Vermont should also increase service requirements in similar ways as the NHSC in order to maximize our workforce investments.

Recommendation 3 – Support health care professionals practicing to the highest levels of training and experience.

The workforce changes needed to implement health reform and the need to lower system costs call for Vermont to support the idea that health care professionals should practice to the highest levels of their training and experience. This will require active work to educate employers and providers, address historical practices and concerns, and change statutes and rules.

Action Item – support a positive outcome for current negotiations between the Boards of Medical Practice and Nursing and resulting legislation to enable the independent practice of advanced practice nurse practitioners (APRNs) in ways that ensure public health and safety.

The Institute of Medicine’s recent report, *The Future of Nursing*,²² includes a recommendation that “nurses should practice to the full extent of their education and training,” while noting that “nurses can play a vital role in helping realize the objectives set forth in the 2010 Affordable Care Act.”

In Vermont currently, APRNs must practice according to a written collaborative agreement with a physician. A number of states do not require such collaborative agreements and Vermont has been considering this change for several years to help address the shortage of primary care providers. Leaders from the nursing and physician boards have been working hard this spring to craft an agreement that will ensure appropriate APRN education and training and allow for a transition to independent practice after an initial clinical training period with an experienced physician or APRN.

²¹ The Sheps Center for Health Services Research in North Carolina has a federal HRSA grant to conduct a national evaluation – funding trends and effectiveness of state, federal (including NHSC), and private loan repayment programs across the country. Vermont (AHEC) has signed on to participate (voluntary, no financial exchange for our time/work) in this project and is currently working with researchers at Sheps Center (including supplying de-identified data).

²² *The Future of Nursing, Leading Change, Advancing Health*, Institute of Medicine of the National Academies, October 2010.

On-Going and Longer-Term Priorities

- Support and maintain Medicaid and Medicare payment policies established by the federal ACA that pay higher rates for primary care
- Continue and expand upon Blueprint and community health team payment reforms
- Deconstruct Hsiao's \$50 million annual workforce recommendation and build multi-year budget
- Review licensing requirements and streamline where possible
- Address capacity issues in Vermont's health professions educational programs, including:
 - Optimize in-state clinical rotation experiences
 - Address clinical training site needs (preceptors/community faculty) including stipend or other funding as may be needed
 - Solve nurse or other faculty shortage issues
- Review and implement curricula innovations and revisions that respond to current and projected needs and ensure successful health reform and care delivery over time

Nurses (RNs and LPNs)

Objective: Recruit, train, and retain sufficient (165-215) nurses over the next 3 years into primary care, CHT, SASH, and Medicaid care coordination settings

The Institute of Medicine's *Future of Nursing* report includes several recommendations:

Nurses should be fully engaged with other health professionals and assume leadership roles in redesigning care in the United States, said the committee that wrote the report. To ensure its members are well-prepared, the profession should institute residency training for nurses, increase the percentage of nurses who attain a bachelor's degree to 80 percent by 2020, and double the number who pursue doctorates. And regulatory and institutional obstacles -- including limits on nurses' scope of practice -- should be removed so that the health system can reap the full benefit of nurses' training, skills, and knowledge in patient care.²³

Recommendation – support call from nursing leaders for a renewed Blue Ribbon Commission on Nursing to pursue the goals of the IOM Report and ensure the Commission also addresses Vermont's needs and health reform initiatives.

The Blue Ribbon Commission on Nursing should look broadly at nursing workforce issues and, in addition to those addressing the IOM report, make recommendations regarding:

- Supply and demand for nursing services in Vermont and changes that will be necessary to fully implement health reform
- Training and educational needs for nurses in advanced primary care practice settings, including team-based care models, care coordination, population health management, and electronic patient registries
- Adjustments that may be necessary in nursing curricula

²³ <http://iom.edu/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Press-Release.aspx>

- Debt levels and loan repayment amounts necessary to meet workforce requirements for the different nursing professions and for nurse faculty

Blueprint CHT and other Care Coordinators

Objective: Recruit, train, and retain sufficient (200-250) CHT and other care coordination staff (other than nurses – see above) by October 2013 to meet statutory Blueprint expansion requirements and other health reform timeframes.

The significant need for care coordination staff over the next several years will require action and innovation. There are few academic or organized training programs for this type of profession and none currently in Vermont. As a result, the Blueprint, Medicaid, and other initiatives are developing their own on-the-job training programs and modules. The aggressive expansion schedules and the potential for a lack of qualified applicants both call for the quick development and/ or expansion of appropriate training opportunities.

Recommendation – support CCV’s interest in including CHT-type professions (e.g., health coach, community health worker) in its application for the U.S. Department of Labor’s Trade Adjustment Assistance Community College and Career Training (C3TG) grants program.

The U.S. DOL intends to award at least \$2.5 million in each state to community colleges and other eligible institutions of higher education to deliver innovative, accelerated, credit-based education and career training programs that can be completed in two years or less, and prepare eligible workers for employment in high-wage, high-skill occupations.

Recommendation - address short-term training needs for care coordinators and others that work in integrated and team-based primary care settings.

The state should closely track the hiring processes for CHTs, SASH coordinators, and other care coordination staff; identify any problem areas; and coordinate the provision of any necessary training.

Appendices

Appendix 1 – Detailed Workforce Needs Table

Primary Care Workforce Capacity – Current and “Needed for Health Reform”							
Practitioner:	Total Licensed or Estimated (Current)	Total Active in Primary Care (Current Head Count) in PC Community Practices	Total Active in Primary Care in Community Practices (Current FTEs)	CURRENT Needed to Reach Benchmarks (FTEs) **	ADDITIONAL SUPPLY for Universal Access # (FTEs)	Change (±) for Blueprint (APCP & CHT) (FTEs)	Totals Needed by 2015 (FTEs)
Physician: ¹		550	475	25	38		63
Internal Medicine (Primary) *		131.9	121.1	53.6	13.2	0	67
Family Practice *		238.0	200.5	1.6	15.3		17
Pediatrics *		107.8	91.1	-24.6	5.0		-20
OB-GYN *		72.4	62.8	-5.6	4.3		-1
Naturopath (ND)	35	35	N/A	N/A	N/A		0
Other Practitioners: (APRN, CNM, PA-C)		249	160	7	13		20
Internal Medicine (Primary) *		31.3	21.2	37.1	4.4	0	41
Family Practice *		133.8	95.3	-28.0	5.1		-23
Pediatrics *		30.7	17.4	4.8	1.7		7
OB-GYN *		53.2	26.0	-6.9	1.4		-5
Other PC Professions							
Nurse - RN *	8367-Active, 5680 employed	10% or 566	399		32	120-170 ²	165-215
Nurse - LPN *	2150 Active, 1520 employed	15% or 228	184		14		
Community Health Team Beyond Nurses (Medical Asst., Community Health Wkr, Health Coach, etc.)						125-180	125-180
Mental & Beh. Health, Subs. Abuse							
Psychiatrist (MD)						60-100	60-100
Nurse - Psych Specialist			12 - 26 ³		2		
Clinical Social Worker	370						
Professional Counselor							
Psychologist							
Public Health Specialist			5			7	7
Dentistry							
Dentist	366	296	218				
Hygienist							
Dental Assistant							
Notes:							
	Blank cells mean sufficient data not available						
	* AHEC Primary Care 2010 Report						
	** AHEC PC Report 2010 using GMENAC benchmarks						
	# AHEC PC Report 2010 using GMENAC benchmarks assuming 32,000 as new Vermonters to the population						
	¹ ND numbers not included in totals						
	² Includes nurses for CHTs, Medicaid care coordination, and SASH teams						
	³ Mental Health APRNs reported a mean 44 hours per week; 26 FTE assumes 90% working full time and 12 FTE uses 41% full time as RNs report						

Appendix 2 – Top Ten Reasons to Practice Medicine in Vermont

Practice Medicine in Vermont

“Come for Who We Are, Stay for Who You Become”

TOP TEN REASONS TO PRACTICE MEDICINE IN VERMONT

10. Vermont is one of the healthiest states in the union
9. Lower malpractice rates than many other states
8. Our hospitals and health centers are as healthy as our citizens
7. We may be rural, but the availability of technology is second to none
6. Great relationships between hospital administrators & physicians
5. Strong collegial relations between generalists and specialists
4. Cultural opportunities abound
3. One of the greatest educational systems in the United States
2. “Work Hard, Play Hard”– every season
1. With the Blueprint for Health and the goal of universal health care access, Vermont is at the forefront on National Health Care Reform

From Opportunities to Improve Recruitment and Retention of a Primary Care Workforce for Vermont, Recommendations from the Primary Care Workforce Committee convened by the Vermont Recruitment Center, a service of Bi-State Primary Care Association, January 2011

Appendix 3 – Act 128 Health Care Workforce Provisions

Sec. 31. INTERIM STUDY OF VERMONT’S PRIMARY CARE WORKFORCE DEVELOPMENT

(a) Creation of committee. There is created a primary care workforce development committee to determine the additional capacity needed in the primary care delivery system if Vermont achieves the health care reform principles and purposes established in Secs. 1 and 2 of No. 191 of the Acts of the 2005 Adj. Sess. (2006) and to create a strategic plan for ensuring that the necessary workforce capacity is achieved in the primary care delivery system. The primary care workforce includes physicians, advanced practice nurses, and other health care professionals providing primary care as defined in 8 V.S.A. § 4080f.

(b) Membership. The primary care workforce development committee shall be composed of 18 members as follows:

- (1) the commissioner of Vermont health access;
- (2) the deputy commissioner of the division of health care administration or designee;
- (3) the director of the Blueprint for Health;
- (4) the commissioner of health or designee;
- (5) a representative of the University of Vermont College of Medicine’s Area Health Education Centers (AHEC) program;
- (6) a representative of the University of Vermont College of Medicine’s Office of Primary Care, a representative of the University of Vermont College of Nursing and Health Sciences, a representative of nursing programs at the Vermont State Colleges, and a representative from Norwich University’s nursing programs;
- (7) a representative of the Vermont Association of Naturopathic Physicians;
- (8) a representative of Bi-State Primary Care Association;
- (9) a representative of Vermont Nurse Practitioners Association;
- (10) a representative of Physician Assistant Academy of Vermont;
- (11) a representative of the Vermont Medical Society;
- (12) a representative of the Vermont health care workforce development partners;
- (13) a mental health or substance abuse treatment professional currently in practice, to be appointed by the commissioner of Vermont health access;
- (14) a representative of the Vermont assembly of home health agencies; and
- (15) the commissioner of labor or designee.

(c) Powers and duties.

(1) The committee established in subsection (a) of this section shall study the primary care workforce development system in Vermont, including the following issues:

(A) the current capacity and capacity issues of the primary care workforce and delivery system in Vermont, including the number of primary care professionals, issues with geographic access to services, and unmet primary health care needs of Vermonters.

(B) the resources needed to ensure that the primary care workforce and the delivery system are able to provide sufficient access to services should all or most

Vermonters become insured, to provide sufficient access to services given demographic factors in the population and in the workforce, and to participate fully in health care reform initiatives, including participation in the Blueprint for Health and transition to electronic medical records; and
(C) how state government, universities and colleges, and others may develop the resources in the primary care workforce and delivery system to achieve Vermont's health care reform principles and purposes.

(2) The committee shall create a detailed and targeted five-year strategic plan with specific action steps for attaining sufficient capacity in the primary care workforce and delivery system to achieve Vermont's health care reform principles and purposes. By November 15, 2010, the department of Vermont health access in collaboration with AHEC and the department of health shall report to the joint legislative commission on health care reform, the house committee on health care, and the senate committee on health and welfare its findings, the strategic plan, and any recommendations for legislative action.

(3) For purposes of its study of these issues, the committee shall have administrative support from the department of Vermont health access. The commissioner of Vermont health access shall call the first meeting of the committee and shall jointly operate with the representative from AHEC to co-chair of the committee.

(d) Term of committee. The committee shall cease to exist on January 31, 2011.