Health Care Workforce Annual Report

July 1, 2009 to June 30, 2010

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Overview

Legislative Mandate

Section 32.1-122.22 of the *Code* of Virginia requires that the State Health Commissioner submit an annual report to the Governor and to the General Assembly regarding the activities of the Virginia Department of Health (VDH) in recruiting and retaining health care providers for underserved populations and areas throughout the Commonwealth. The annual report is required to include information on:

1. The activities and accomplishments during the reporting period.
2. Planned activities for the coming year.
3. The number and type of providers who have been recruited by VDH to practice in medically underserved areas (MUAs) and health professional shortage areas (HPSAs).
4. The retention rate of providers practicing in these areas.
5. The utilization of the scholarship and loan repayment programs authorized in Article 6 (§32.1-122.5 et seq.), as well as other programs or activities authorized in the Appropriation Act for provider recruitment and retention.
6. Recommendations for new programs, activities and strategies for increasing the number of providers in underserved areas.

The State Health Commissioner delegated the responsibility of preparing the report to the Office of Minority Health and Health Equity (OMHHE), formerly the Office of Minority Health and Public Health Policy.

Commissioner's Healthcare Workforce Advisory Committee and Health Workforce Development Authority

The Office of Minority Health and Health Equity (OMHHE) served as staff to the Commissioner's Health Workforce Advisory Committee (HWAC). This committee advised the Commissioner on all aspects of the department's health workforce duties and responsibilities. The HWAC included, but was not limited to, representatives from the following organizations and groups:

1. Each of the Commonwealth's academic health centers;
2. The Statewide Area Health Education Center (AHEC) Program;
3. The Virginia Community Healthcare Association;
4. The Virginia Health Care Foundation;
5. The Virginia Association of Free Clinics;
6. The Virginia Association of Nurse Executives;
7. Health care providers;
8. Health professions residents and students; and
9. Other organizations as deemed appropriate by the Commissioner.

During the development of Virginia's State Rural Health Plan, the fragmentation/lack of coordination of the health care workforce pipeline was identified as a key barrier to Virginia's ability to more effectively recruit and retain health professionals in rural and other medically underserved areas. Coordination of the workforce pipeline is essential...this means having students adequately prepared and exposed to health professions, having programs and incentives available within the state for these students when they are ready for higher education, having clinical training experiences in rural settings when they are ready for those, and having advanced practice experiences in rural settings. Right now in Virginia, some of these programs exist in some areas, but it is spotty at best. Additionally, the Area Health Education Center (AHEC) Program in Virginia, whose purpose was to support the development of the health care workforce, lost its State funding last year largely due to its lack of strong leadership, unified vision/mission and integration into broader statewide health care workforce efforts.

As a result, the concept for establishing an Authority structure to provide oversight for healthcare workforce issues was first introduced as HB2142 during the 2009 General Assembly Session. Concerns were raised by stakeholders about the bill language, as there was some uncertainty regarding whether the language would truly enable the Authority to accomplish its intended purpose. The bill was tabled at that time. VDH was directed by the Virginia General Assembly to lead a study to establish a statewide system for health workforce pipeline development and to make recommendations regarding the infrastructure that would be needed to implement that system. The OMHHE provided the leadership to engage stakeholders from around the Commonwealth through a series of meetings and conference calls over the course of six months to obtain input on recommendations regarding *Code* language for the creation of the Authority. This input led to final draft of recommendations that were posted on a blog to obtain further public comment on the draft set of recommendations. Over 70 individuals representing over 50 agencies, organizations and associations provided input and reached consensus.

Ultimately, these efforts resulted in enabling legislation during the 2010 General Assembly that was unanimously passed by both House and Senate, and signed by Governor McDonnell, establishing the Virginia Health Workforce Development Authority (VHWDA).

The mission of the VHWDA is to *facilitate the development of a statewide health professions pipeline that identifies, educates, recruits, and retains a diverse, appropriately geographically distributed and culturally competent quality workforce for all Virginians*. The *Code* of Virginia identifies the following nine core functions needed for the VHWDA to accomplish its mission:

(i) providing the statewide infrastructure required for health workforce needs assessment and planning that maintains engagement by health professions training programs in decision making and program implementation;

(ii) serving as the advisory board and setting priorities for the Virginia Area Health Education Centers Program;
(iii) coordinating with and serving as a resource to relevant state, regional, and local entities including the Department of Health Professions Workforce Data Center, the Joint Legislative Audit and Review Commission, the Joint Commission on Health Care, the Southwest Virginia Health Authority, or any similar regional health authority that may be developed;
(iv) informing state and local policy development as it pertains to health care delivery, training, and education;
(v) identifying and promoting evidence-based strategies for health workforce pipeline development and interdisciplinary health care service models, particularly those affecting rural and other underserved areas;
(vi) supporting communities in their health workforce recruitment and retention efforts and developing partnerships and promoting models of participatory engagement with business and community-based and social organizations to foster integration of health care training and education;
(vii) advocating for programs that will result in reducing the debt load of newly trained health professionals;
(viii) identifying high priority target areas within each region of the Commonwealth and working toward health workforce development initiatives that improve health measurably in those areas; and
(ix) fostering or creating innovative health workforce development models that provide both health and economic benefits to the regions they serve.

This legislation took effect on July 1, 2010. The HWAC held its final meeting in May 2010. At this final meeting HWAC developed a set of recommendations for the Commissioner's consideration pertaining to by-laws, member appointments, and potential funding sources for implementation of the VHWDA. The *Code* of Virginia calls for the dissolution of the HWAC upon the appointment of the Board for the VHWDA.

Healthcare Workforce Recruitment and Retention

The OMHHE is involved in several efforts to recruit and retain health care providers.

The Virginia Recruitment and Retention Collaborative Team is a voluntary group of state agencies and organization that focus on recruitment and retention in Virginia. Representatives come from each of the medical schools, Southwest Virginia Graduate Medical Education Consortium, Statewide Area Health Education Centers, Virginia Rural Health Association, Virginia Community Healthcare Association (VaCHA), VDH and the Virginia Health Care Foundation. This team is co-led by the VDH and the VaCHA (Virginia's Primary Care Association) and has as its mission, "to establish and enhance collaborative efforts in partnership with stakeholders to deliver improvements in recruitment processes and retention systems for

healthcare providers with an emphasis on medically underserved areas in Virginia." The team meets every other month via conference call and has mid-year and annual face-to-face meetings to discuss overall recruitment efforts.

This team is responsible for the development of the ChooseVirginia! campaign as a recruitment strategy to encourage health professional students, residents and all other practitioners to stay in Virginia to practice and serve Virginia's underserved populations.

In FY09, the Recruitment and Retention Collaborative Team co-sponsored its first Choose Virginia! student conference and recruitment fair for over 120 health profession students representing the state's medical, nursing and physician assistant professions. The one-day conference included a plenary session, hands-on clinical workshops and a recruitment fair. Anecdotally, recruiter and student comments were extremely positive. The Virginia Academy of Family Physicians shared that all of the Virginia family medicine residency programs felt that their time was extremely worthwhile, having had the opportunity to recruit medical students into their programs. Based on informal feedback, the collaborative team has decided to sponsor the event on annual basis.

Primary Practice Opportunities of Virginia (www.ppova.org) is a free, online recruitment website managed by the OMHHE. It highlights and promotes Virginia as a good place to live and work and markets the services, programs and opportunities offered by all members of the Virginia Recruitment and Retention Collaborative Team. The website includes a calendar of events, information about the various incentive programs, Virginia's residency programs and detailed information about the various communities in Virginia.

There were 35,695 visits to the PPOVA website during the past fiscal year. A feature of PPOVA is its email newsletter, PPOVA Updates, which had 171 individual subscribers, which consisted of professional students, residents, residency programs, practice sites and other interested organization representatives. Monthly articles included relevant and timely information about recruitment and incentive opportunities and services, program stories, as well as events and conferences.

National Rural Recruitment and Retention Network (3RNet)

is a not-for-profit network currently consisting of 54 organizational members which recruit health professionals to rural and underserved areas. Each member acts autonomously, and their individual recruitment efforts are supported by national promotional efforts and technical support of the 3RNet.

As a State Office of Rural Health grantee, the OMHHE is an organizational member of the 3RNet. As a member, Virginia has access to a national recruitment database that allows practice sites to post job vacancies, and for practitioners to seek job opportunities in Virginia, all free-of-charge. Virginia has a state profile available on the site which is featured at least twice a year on the 3RNet homepage. 3RNet advertises and markets for each of its state members in the national arena.

During FY10,

- 5,449 opportunities were posted by all 3RNet members;
- 1,253 professionals were placed across all positions by 3RNet members;
- 61 new opportunities (down from 74 positions FY09) were posted on 3RNet by Virginia practice sites.
- 530 new candidates (up from 421 candidates FY09) registered on 3RNet and indicated an interest in Virginia
- Virginia opportunities have been viewed 7,084 times during FY10 on the 3RNet.

Other member benefits to 3RNet include access to a number of services, in addition to having a page on its national website and access to the recruitment database. In 2009, 3RNet conducted a membership evaluation and the following were found:

- Respondents reported a rate of overall services provided by 3RNet on a scale of 1 to 10 (where 10 was the highest rating) at an 8.5;
- Members reported a number of resources to market their opportunities including agency and state Web Sites, exhibits/brochures, and visiting professional training and residency programs.

"Choose Virginia: A Great Place to Live and Work!" Healthcare Workforce Recruitment Video. To help enhance recruitment efforts, Virginia produced a healthcare workforce video to highlight Virginia and promote its incentive programs. Various incentive programs administered by OMHHE are featured. It also emphasizes and details the benefits of working in a medically underserved area in Virginia. The video is available on the OMHHE website (www.vdh.state.va.us/healthpolicy/primarycare/incentives/index.htm) and the Virginia Government YouTube Channel

(www.youtube.com/watch?v=-7ivKa0dS8A). During FY10, there were 7,036 hits to the video on the incentive programs webpage and 667 hits to the video via the YouTube Channel.

Healthcare Workforce Incentive Programs

OMHHE administers several incentive programs to attract primary health professionals to Virginia's underserved areas. These programs not only assist with paying down outstanding medical education debt but also afford individuals an opportunity to become part of a community and provide care to deserving populations.

Virginia's Loan Repayment Programs repay outstanding medical education debt in exchange for medical service in a medically underserved area. The purpose of the Loan Repayment Programs is to increase access to primary care services in Virginia's underserved areas. The Virginia Physician Loan Repayment Program is for primary care physicians and general psychiatrists only, while the Virginia State Loan Repayment Program is open to a broader spectrum of primary care practitioners to include primary care nurse practitioners, physician assistants, general dentists and dental hygienists.

> *"I wanted to thank you both for your tremendous assistance with my Virginia State Loan Repayment application. Imagine my relief and deep sense of gratitude when I received my award letter and check. I truly appreciate this assistance in paying down my medical student loans, which have represented a significant burden.*
>
> *Thank you again for your patience and professionalism in guiding me through this process. I look forward to living up to my service obligation by continuing to provide primary care services to Virginia's medically underserved population."*
>
> *- Susan Jervey Waller, M.D.*

While these programs have proven to be beneficial in increasing the number of providers providing care in underserved areas across the Commonwealth, state budget reductions during the past two years have made it challenging to sustain the impact of these programs. During FY09, funds that were originally appropriated for this program and not yet spent were taken to fill gaps in other areas of the State budget. Although the State did not eliminate the program, during FY10, there were no funds appropriated for the Virginia Physician Loan Repayment Program (VLRP) in the biennium budget.

Consequently, the number of loan repayment awards has declined substantially (see Figure 1). To date, no loan repayment recipient is in default of fulfilling their service obligation. Also, a retention study conducted in 2007 by a consultant suggested that the Virginia Loan Repayment programs have been very successful in improving both the short-term and long-term supply of physicians in underserved areas. The study showed that the majority of physicians on the SLRP/VLRP who had completed their obligation (29 recipients out of 38 recipients), had remained in Virginia. Of the 29 physician loan repayment recipients who remained in Virginia, 14% were in the same underserved areas in which they served their obligations and another 62% were in another underserved area.

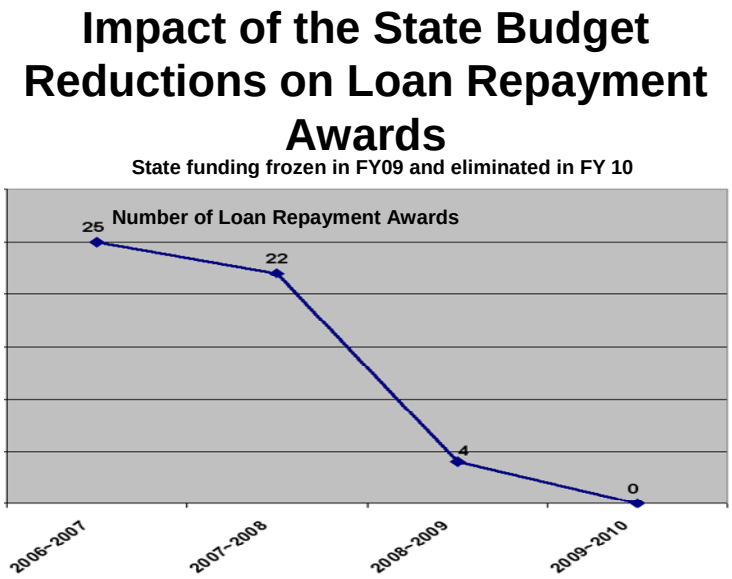


Figure 1. Impact of the State Budget Reductions on Loan Repayment Awards

Figure 1 demonstrates the number of new awards given each year.

In 2008, 57 active primary care physicians, nurse practitioners, physician assistants and general dentists were serving the Commonwealth through these two Loan Repayment Programs. This represented 84 years of medical service in Virginia's underserved areas. This number decreased during FY10 to seven (7) practitioners due to loss of State funding. Their practice locations can be seen in Figure 2.

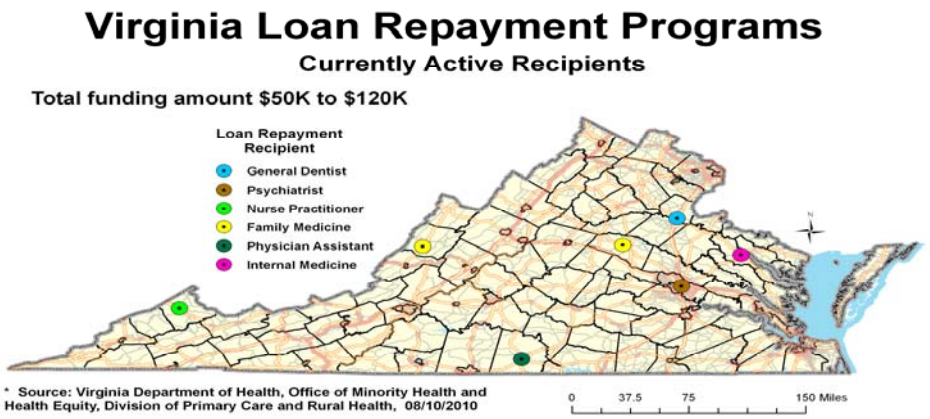


Figure 2. Current Active Recipients of Virginia Loan Repayment Programs

Dental Incentive Program. There is documented disparity in the number of dentists within specific areas of the state, as well as access to dental health services. To help address these issues, VDH began a state-funded scholarship program for Virginia Commonwealth University dental students in 1952. In 2001, the General Assembly passed legislation to establish a dentist loan repayment program (with no additional appropriation of funds). The 2005 General Assembly appropriated $325,000 for both programs and in FY06, the first loan repayment awards were made. State funding for both programs was eliminated as part of recent budget reductions. The last scholarship awards were made in FY08. In FY09 and FY10, the last loan repayment awards were made using some one-time federal funding.

Dentists who received a scholarship or loan repayment award were required to practice in a dental shortage area and accept low-income patients with government-sponsored insurance, primarily Medicaid. A shortage area is defined as any locality needing additional practitioners to meet the state average of one dentist to 2,472 citizens or any federal dental health professions shortage areas. Currently, there are 84 areas meeting one or both of these criteria, with 13 localities listed as needing 10 or more dentists.

At the time of this report, five dentists were practicing under a loan repayment obligation and nine dentists were practicing under a scholarship obligation. Twelve of these dentists are in private practice and two work in a public setting. They practice throughout the state in rural and urban areas, but predominately in southwest Virginia:

- Southwest region: Bland, Botetourt, Tazewell, Wise (2), Martinsville (2)
- Central region: Charlotte County, Richmond City
- Eastern region: Norfolk
- Northern region: Prince William (2)
- Northwest region: Staunton, Waynesboro

It is anticipated that by 2012, all dentists in the state-funded program will have completed their obligations.

The federal Oral Health Workforce Activities Grant that began in September 2009 includes a limited loan repayment program for dentists. According to the grant specifications, to be eligible, a dentist must work in a federally-qualified community health center or in a VDH clinic located in a shortage area. The grant provides for awards of $20,000 annually to four dentists for up to three years to assist with their payment of loans acquired to finance their dental education. To date, no awards have been made, as it appears that new dentists in community health centers are receiving National Health Service Corps awards, and there have been virtually no new hirers in VDH local health departments. VDH has requested to restructure the program to include dentists in private practice who are located in shortage areas and accept Medicaid, but to date, this change has not been approved.

The Virginia Dental Hygiene Loan Repayment program was eliminated effective this year, due to budget reductions. Awards ranging from $517 to $7,000 were made to 15 hygienists since the inception of the program in FY08 through FY10. Eligible hygienists were employed in practices located in shortage areas that accepted government-sponsored insurance such as Medicaid. There are no loan repayment programs in Virginia for hygienists at this time.

J1 Visa Waiver Program (Conrad 30 Waiver Program). Virginia participates in the federal Conrad 30 Waiver Program (also known as the J-1 Visa Waiver Program) in an effort to improve access to health care for residents of underserved areas. The J-1 Visa Waiver Program allows International Medical Graduates (IMG) who completed medical training in the U.S. to practice in a federally designated health professional shortage area (HPSA) or a medically underserved area (MUA), rather than return to their home country as otherwise would be required. To be eligible, interested government agencies must request that the United States Department of Homeland Security, U.S. Citizenship and Immigration Services waive the foreign residency requirement in exchange for an agreement that the IMG will practice primary or specialty medicine for at least three-years in an eligible area.

All participating states have 30 slots to fill under this program, which includes 10 non-designated slots. Non-designated areas are for practice sites that are not located in HPSAs but may serve patients that come from HPSA areas. During FY10, Virginia filled 18 slots. However, when one looks at the federal fiscal year for the Conrad 30 Waiver Program (Oct. 1 to Sept. 30), Virginia filled 20 slots. Virginia does not currently track placements made through the 3RNet. However, the 2009 membership evaluation revealed that "for all matches (1,253), approximately 28% (354) of them were filled by professionals with J-1 Visas."

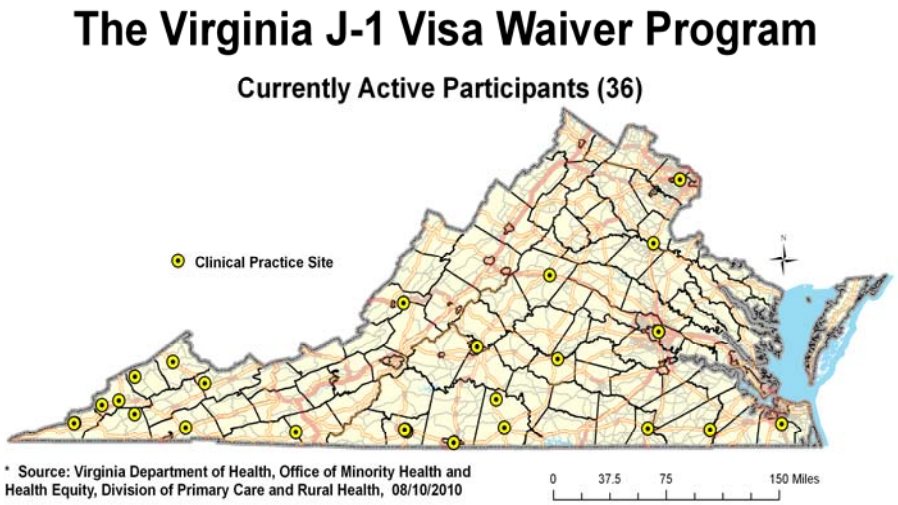


Figure 3. Current Active Recipients in the Virginia J-1 Visa Waiver Program

"I have always been abreast of the Conrad 30 waiver program. Once I found a good opportunity in Virginia, I searched the website and contacted you directly to find out more about the program. I remember having a quick response to my questions and that the website search engine took me directly to the correct page. I could never imagine that the process would have been so simple and expeditious. Thank you for the excellent job and I look forward to starting my new job soon."

-Daniel Fortes, M.D. (J-1 Physician)

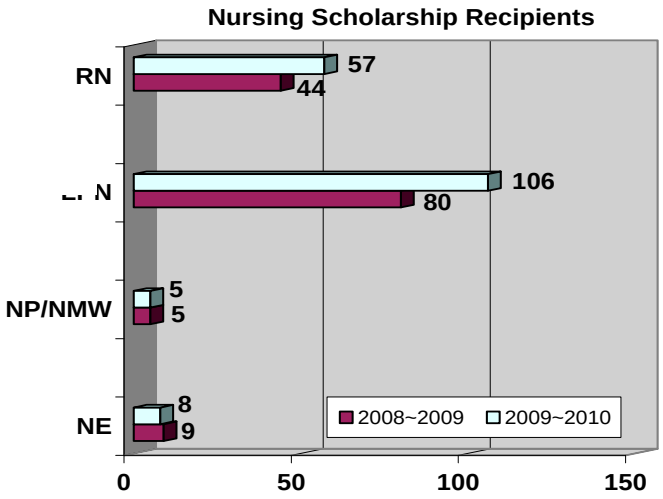
The National Interest Waiver (NIW) is a quicker and less restrictive pathway to permanent residency for immigrants with expertise in fields deemed to be of critical importance to the United States than the standard EB2 employment based green card route. The standard EB2 employment based green card is for immigrants who are members of the professions with advanced degrees (any degree above a baccalaureate degree or a baccalaureate degree and at least 5 years progressive experience in the professions) or who have exceptional ability in the sciences, arts, or business who will substantially benefit the United States. In order to obtain permanent residency through the EB2 category, the applicant must have an employer willing to sponsor him or her through labor certification or PERM.

Physicians who agree to work full time in a designated health professional shortage area or VA hospital and where a federal agency or state department of public health has determined that the physician's work is in the public interest for an aggregate of five years (not including time in J1 visa status) can obtain an NIW green card. The NIW applicant sponsors him or herself and is not required to have a job and is a good option for those who do not wish to wait several years for labor certification or those who do not wish to be tied to a specific employer during labor certification.

Like with the Conrad 30 program, the OMMHE provides letters of support for foreign physicians who agree to work in a designated HPSA area for a period of five (5) years. During FY10, 9 NIW applicants were approved by the Department of State to work in Virginia.

Nursing Scholarships. Virginia Nursing Scholarships are provided to decrease expenses of nursing education. There are presently four scholarship opportunities available for nursing students accepted or enrolled in programs: Mary Marshall Nursing Scholarships for LPNs and RNs, Virginia Nurse Practitioner/Nurse Midwife Scholarships and the Virginia Nurse Educator Scholarships.

Figure 4. Nursing Scholarship Recipients



For further details and application information about any of the incentive programs, please visit: http://www.vdh.virginia.gov/healthpolicy/primarycare/incentives/.

Designating Shortage and Medically Underserved Areas and Populations

Health Professional Shortage Areas have been established for Primary Care, Dental Care and Mental Health Care. A general overview of some of the criteria for HPSA designations provided in Table 1.

Table 1: Requirements for Geographic and Population HPSA (Primary Care, Dental and Mental Health)

	Primary Care	Dental	Mental Health
Population: Provider Ratio Geographic (a shortage for the total population within a defined service area)	3,500:1	5,000:1	30,000:1 (Psychiatrist)
Population: Provider Ratio Sub-Population or High Needs (an underserved population in a geographic area such as low-income or migrant farm workers)	3,000:1	4,000:1	20,000:1
Travel Time	30 minutes	40 minutes	40 minutes

In addition to geographic and population HPSAs, there are also facility designations for entities such as Community Health Centers, Rural Health Clinics, federal and state correctional facilities and mental health facilities.

As the Primary Care Office for Virginia, OMHHE is federally mandated to oversee the designation process. To this end, the OMHHE maintains primary

care physician, general dentist and psychiatrist databases and monitors the demographics and health statistics of health care service areas to identify potential HPSA sites. All existing designations are reviewed on a three-year cycle to assure continuity and effectiveness of incentive programs. The OMHHE uses both small area analysis techniques and Geographic Information Systems (GIS) to optimize the HPSA designation process and to provide the highest degree of accuracy possible. Phone surveys of all providers within a service area (and within contiguous areas) are required for every HPSA designation and the OMHHE has incorporated these surveys into its ongoing responsibilities.

Because all HPSA designations must be reviewed on a regular basis, areas that may have earlier qualified as a HPSA may no longer qualify at a later date, usually because the designation has attracted practitioners to serve the area. These are "success stories" that, nevertheless, often present difficulties for both providers and communities because these areas also lose their eligibility for special programs, grants and enhanced provider reimbursements.

Primary Care HPSAs are designed to indicate shortages of primary medical care providers defined as family practice, general internal medicine, pediatrics, obstetrics and gynecology, and general practice. Geographic HPSAs, the most common primary care shortage designation, must meet the following criteria:

- Have a population to primary care provider ratio greater than 3,500:1 or greater than 3,000:1 if the population has high needs. A high needs area is determined by one of the following: high poverty rates (more than 20 percent below poverty), high birth rates (more than 100 births per 1,000 women) or high infant mortality rates (more than 20 infant deaths per 1,000 live births).
- Demonstrate that the primary medical care professionals in contiguous areas are overutilized, with a primary care provider ratio greater than 2000:1, or that these areas are currently designated as primary care HPSAs. If the contiguous areas are not overutilized or designated, it must be demonstrated that barriers to accessing the services of primary medical care professionals in these areas exist due to excessive distance (greater than 30 minutes travel time) or other factors.

Virginia currently has 102 primary care HPSA designations in 78 counties and cities throughout the Commonwealth (Figure 5). There are 47 geographic primary care designations and 3 population-based primary care designations. There are also 52 health care facilities with HPSA designations, of which 24 are community health centers, five are rural health clinics and 23 are correctional centers.

There are currently 297 primary care physicians practicing within designated HPSAs and it is estimated that it would require an additional 103 primary care physicians who agree to serve the medically needy in these institutions and areas to eliminate the primary care shortages that are currently being experienced within the Commonwealth's primary care HPSAs. This suggests that it would require a 35 percent increase in providers to eliminate all of the designations. It is noteworthy that even as the number of designations has increased over the past five years, the absolute number of new physicians required to eliminate all of Virginia's primary care HPSA has gone from a high of approximately 200 to the current 103.

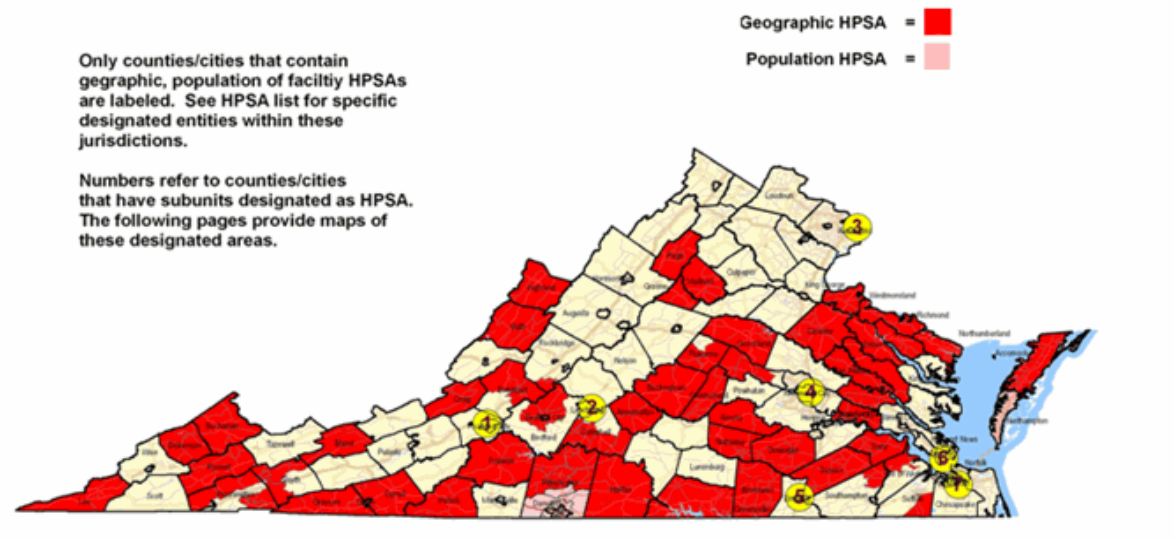


Figure 5. Virginia Primary Care Health Professional Shortage Areas (HPSAs)

It should be noted that the provider numbers associated with the Primary Care HPSA designation process do not necessarily equate with the current provider supply needs of the Commonwealth. These data reflect, among other factors, the state of the provider supply from the date of the application for the HPSA designation, which can be three or more years old; they do not reflect areas that may be marginally eligible for designation but do not conform to the strict thresholds of the designation process; and they do not reflect areas that have not been designated but are presently under review. In addition, because designations can be configured from sub-jurisdictional units such as census tracts (as long as they meet certain rational service area criteria) the configuration may be overlooked until extensive small area analysis is performed.

Finally, the statewide primary care health provider data (from the Board of Medicine) often significantly over estimates the supply of primary care physicians in an area. There are quite a few physicians who are licensed, but are not practicing, practicing only part time or who have moved, are retired or are even deceased that still show up in the Board of Medicine database.

Therefore, many areas can also be thought to be sufficiently supplied with providers until extensive phone surveys are completed.

Dental HPSAs are designed to indicate shortages of general dental care and take into account the number of full time equivalent (FTE) of dentists, which are, in turn, weighted by the age of the individual dentist and the number (FTE) of dental hygienists and assistants associated with each dentist. Geographic dental HPSAs, the most frequent shortage designation, must meet the following criteria:

- Have a population to general dental provider weighted ratio greater than 5,000:1 or greater than 4,000:1 with high needs. A high needs area is determined by high poverty rates (more than 20 percent below poverty) or by low fluoridation rates (more than 50 percent of the population has no fluoridated water).
- Demonstrate that the dental care professionals in contiguous areas are overutilized with a population to dentist ratio greater that 3,000:1 or these areas must be currently designated as dental HPSAs. If the contiguous areas are not over-utilized or designated, it must be demonstrated that barriers to accessing the services of dental professionals in these areas exist due to excessive distance (greater than 40 minutes travel time) or other factors.

Virginia has 76 separate dental HPSA designations in 60 jurisdictions (Figure 6). The designations include 34 geographic designations in 40 jurisdictions and six low-income designations in seven jurisdictions as well as 36 facility designations. Of the 36 facility designations, 24 are community health centers and 12 are correctional facilities.

There are currently 157 dentists practicing within the designated HPSAs and it is estimated that it would require an additional 123 dentists who agree to serve the medically needy in these institutions and areas to eliminate the dental shortages that are currently being experienced within the Commonwealth's dental HPSAs. This suggests that it would require a 78 percent increase in providers to eliminate all of the dental HPSA designations.

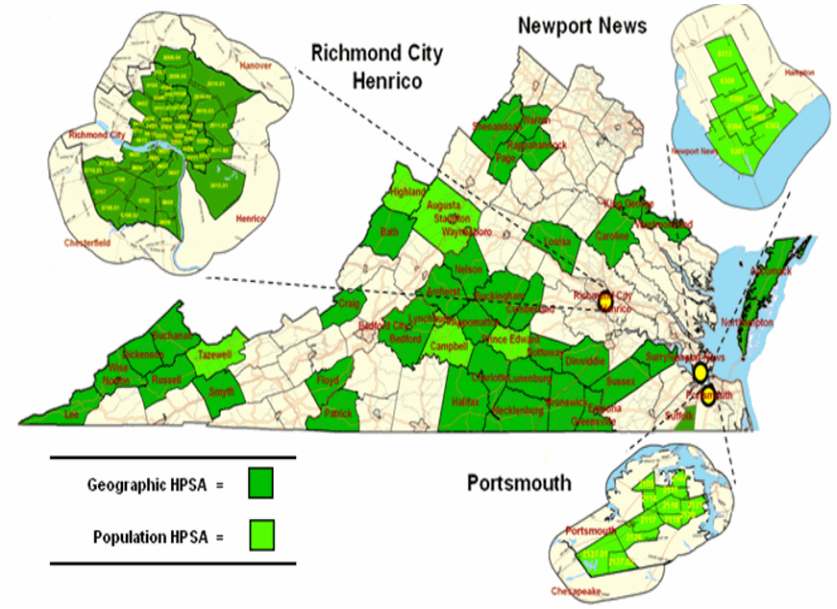


Figure 6. Virginia Dental Health Professional Shortage Areas

It should be noted that the provider numbers associated with the Dental HPSA designation process do not necessarily equate with the current provider supply needs of the Commonwealth. These data reflect, among other factors, the state of the provider supply from the date of the application for the HPSA designation, which can be three or more years old; they do not reflect areas that may be marginally eligible for designation but do not conform to the strict thresholds of the designation process; and they do not reflect areas that have not been designated but are presently under review.

In addition, because designations can be configured from sub-jurisdictional units such as census tracts (as long as they meet certain rational service area criteria) the configuration may be overlooked until extensive small area analysis is performed.

A major goal of the OMHHE over the past year was to develop a "dentist practice-site-specific database" that would facilitate the timely designation and significant expansion of dental Health Professional Shortage Areas (HPSAs). To accomplish this end, all of the available Virginia dental provider databases were surveyed and evaluated as potential sources of accurate information. The databases used, in order of assessed accuracy and importance, are as follows:

- Medicaid Enrolled Providers Practice Site Locations (Annual data for 2008).
- CMS, Unique Physician Identification Number (UPIN) database
- Virginia Department of Health, Division of Dental Health Dental Survey
- Virginia Department of Health, Dental X-Ray Registration Database
- Virginia Employment Commission, Dental Business Licenses

- InfoUSA Dental Provider Data
- Virginia Board of Dentistry, Dental Licensure Data
- Virginia Community Healthcare Association Dentist Data
- Free Clinic Dental Clinic Sites

By triangulating these databases, the OMHHE was able to develop a dentist file with the following critical information for each dental practice-site: (1) Dentist Name and License Number (2) Geocodable Addresses of all Dental Practice Sites; (3) Dental Specialty of Practitioner; (4) Practitioner Total FTE at each Practice Site, (5) Percentage Medicaid and Sliding Fee Scale services at each Practice-Site; and Age of Practitioner.

Preliminary analysis of the consolidated dental data suggests that the number of dentists who self-report on surveys that they take Medicaid and/or offer a Sliding Fee Scale and/or offer charity care to their patients is significantly exaggerated. For example, in reviewing actual Medicaid claims data, it was discovered that over half of the dentists enrolled in the state's Medicaid dental program did not see any Medicaid patients or receive any Medicaid reimbursement in 2008.

Mental Health HPSAs are designed to indicate shortages of mental health care providers which are defined as psychiatrists and other core mental health providers (e.g., clinical psychologists, psychiatric nurses, marriage/family counselors and clinical social workers).

For geographic mental HPSA the following criteria must in general be met:

- Have a population to psychiatrist ratio greater than 30,000:1, or 9,000:1 for core mental health care providers, including psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists who meet specific federal guidelines, or a combination of 6,000:1 for core mental health providers and 20,000:1 for psychiatrists.
- For a geographic designation with unusually high needs (generally with 20 percent or more of the population in the service area with incomes below Federal Poverty Level), the ratio must be at least 20,000:1 for psychiatrists, 6,000:1 for core mental health providers including psychiatrists, or a combination of 4,500:1 for core mental health providers and 15,000:1 for psychiatrists.

For a low income population (generally the percentage of individuals below 200 percent Federal Poverty Level) mental HPSA the following criteria must be met

- Have a low income population ratio greater than 20,000:1 for psychiatrists, 6,000:1 for core mental health providers including

psychiatrists, or a combination of 4,500:1 for core mental health providers and 15,000:1 for psychiatrists.

Virginia has 64 separate Mental Health HPSA designations, including geographic, low-income and facility in 84 jurisdictions (Figure 7). Of this number, there are 24 community health centers and 25 correctional centers designated as facilities and 14 whole or partial mental health catchment areas of Virginia's Community Service Boards (CSB). The CSB designations represent 71 jurisdictions. Fifty-nine counties and 10 cities are designated in their entirety as geographic mental health HPSAs, along with one partial city, Chesapeake City. Richmond City has a homeless population mental health designation to meet the challenges of this specific population.

There are currently 53 psychiatrists practicing within a designated Mental HPSA and it is estimated that it would require an additional 17 psychiatrists who agree to serve the medically needy in these institutions and areas to eliminate the mental health shortages that are currently being experienced within the Commonwealth's mental HPSA. This suggests that it would require a 32 percent increase in psychiatrists to eliminate all mental health shortages designations in the currently designated areas.

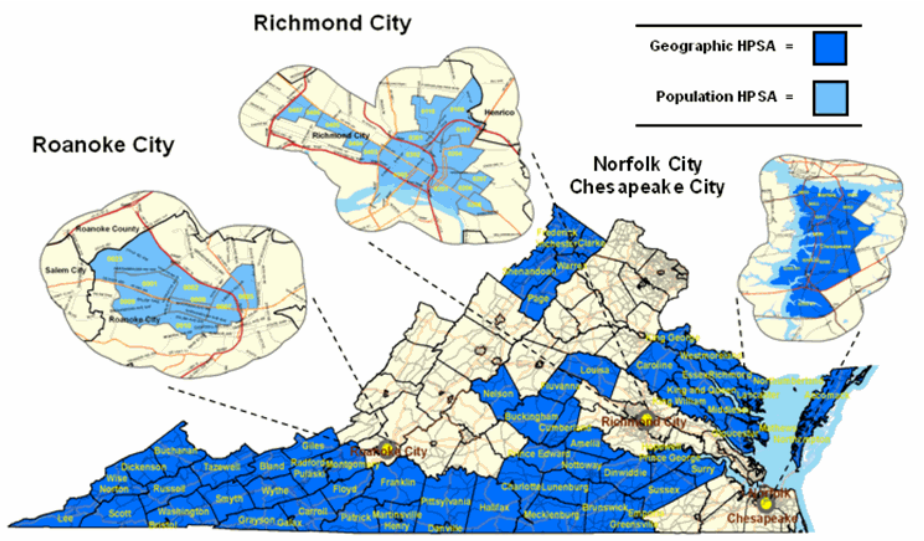


Figure 7. Virginia Mental Health Professional Shortage Areas

It should be noted that the provider numbers associated with the Mental HPSA designation process do not necessarily equate with the current provider supply needs of the Commonwealth. These data reflect, among other factors, the state of the provider supply from the date of the application for the HPSA designation, which can be three or more years old; they do not reflect areas that may be marginally eligible for designation but do not conform to the strict thresholds of the designation process; and they do not reflect areas that have not been designated but are presently under review. In addition, because designations can be configured from sub-jurisdictional units such as

census tracts (as long as they meet certain rational service area criteria) the configuration may be overlooked until extensive small area analysis is performed.

As with the primary care physician data from the Board of Medicine, the statewide mental health provider data often significantly over estimates the supply of psychiatrists in an area. There are quite a few psychiatrists who are licensed, but are not practicing, practicing only part time or who have moved, are retired or are even deceased that still show up in the Board of Medicine database. Therefore, many areas can also be thought to be sufficiently supplied with providers until extensive phone surveys are completed.

Designation of Medically Underserved Areas and Populations (MUA/MUP)

The MUA/MUP designation process was initially established to assist HRSA in allocating community health center (CHC) grant funds to areas of greatest need. For MUA/MUP designations, a composite index of four indicators is compiled and compared with national averages to compute an Index of Medical Underservice (IMU) score.

The indicators are:

1. Poverty level.
2. Percent of the service area's population age 65 and over.
3. Infant mortality rate (IMR) for the service area.
4. Current number of full-time-equivalent (FTE) primary care physicians providing patient care in the service area.

Virginia has MUA/MUP designations in 104 jurisdictions (22 cities and 82 counties). Many of the designation dates for MUA/MUP go back to 1978. Because these designations have enabled certain localities to maintain their applicability for many federal programs, including the Community Health Center Program and the J-1 Visa Waiver Program among others, it has been difficult to de-designate areas. In fact, even when the designations have been updated, HRSA has been reluctant to eliminate the earlier designations. Maintaining these designations has been perceived as support for existing programs in areas of continuing vulnerability. Unfortunately within rapidly developing areas of the Commonwealth, this has often lead to significantly inappropriate designations.

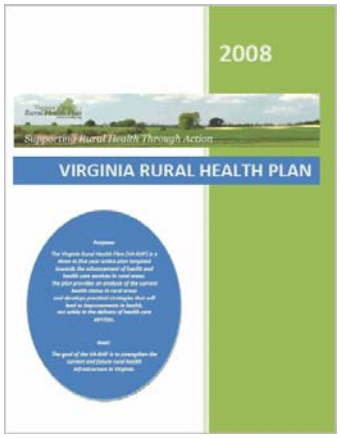
The MUA/MUP designation process is currently being used in Virginia to target sub-jurisdictional areas (e.g., census tracts, minor civil divisions) for designation. Previously, these areas have often been overlooked because sub-jurisdictional data was not available.

Designation of Census Tracts with over 20 Percent below Federal Poverty Level (FPL)

It is often noted that communities that request shortage or underservice designations are not always the neediest communities. Of the four components of the IMU score, poverty levels provide a convenient sentinel measure indicating areas potentially qualifying for designation.

By identifying and targeting high poverty census areas for designation, the OMHHE was able to proactively review for HPSA and MUA/MUP designation all of Virginia's 206 CTs (2000 Census) with over 20 percent of their population below FPL. Within two years, the OMHPHP increased the number of targeted CTs either designated or pending designation from 105 in 2006 to 179 in 2008, a 70 percent increase.

The OMHHE has once again begun reviewing for HPSA and MUA/MUP designation all of Virginia's 206 Census Tracts (2000 Census) with over 20 percent of their population below FPL.



Virginia's State Rural Health Plan

Finalized in December 2008, the Virginia State Rural Health Plan (VA-SRHP) is a 3-5 year strategic plan designed to strengthen the healthcare infrastructure in rural areas. The plan, which is led by the Virginia State Office of Rural Health and the Virginia Rural Health Association, is a collaborative effort of over 50 prominent partners who are dedicated to rural Virginia. Implementation of the recommendations from the VA-SHRP comes from the active engagement of stakeholders who either partake in the "Adopt A Rural Health Plan Recommendation" campaign and/or serve on the four VA-SRHP Councils:

Access Council. Examining rural health care access issues related to primary care, specialty care, emergency medical services, and mental and dental health care to make recommendations for improving health care access.

Quality Council. Examining rural health care quality issues to make recommendations for quality improvement efforts and activities.

Data and Rural Definitions Council. Examining available rural health data and identifying data gaps to make recommendations for future data collection efforts and activities.

Workforce Council. Examining available resources and issues to make recommendations for improving the healthcare workforce in rural Virginia. This is the only group in Virginia to specifically address rural workforce issues, and it is increasingly important this council communicates with the other groups in the state. Mechanisms to communicate across these groups were implemented, including sharing of meeting minutes and appointing representatives to serve on all three committees. The Council is also working to increase collaborations between academic health centers, community colleges and high schools.

During FY10, this Council was extremely active with the following:

1. Participation in the development of the Virginia Health Workforce Development Authority legislation.
2. Completion of a Workforce Survey that focused on recruitment and retention issues in Virginia and inquired about clinical education opportunities in rural areas.
3. Completion of a survey of best practices which identified educational models for primary care, behavioral health and dental health professionals.
4. Hosting of the 2010 Rural Workforce Summit, which focused on exemplary models for training health workers across the continuum of education.
5. Establishing the first Rural Workforce Awards. These awards recognize the efforts of individuals and organizations in their efforts to improve and expand the health workforce in the rural areas of Virginia. During the Workforce Summit, there were five awards given to individuals and organizations that have significantly contributed to rural communities through initiatives designed to address Virginia's healthcare workforce shortage.

Going forward, the Council intends to collect information about educational approaches for integration of behavioral health into primary care, survey academic institutions about their rural focus in education, and collect data about the barriers and opportunities of dual certification programs.

For updates on progress of any Council of the State Rural Health Plan, please visit http://www.va-srhp.org/index.htm.

Future Activities

- Planning for the second annual *ChooseVirginia!* conference took place during FY10 and is scheduled for October 8th & 9th, 2010 in Richmond, Virginia. This conference is sponsored by the VDH, VaAHEC and the Virginia

Academy of Family Physicians.

During FY10, a decision was made to transition the PPOVA website to *ChooseVirginia!* to support the campaign of encouraging pre-health students to pursue the health profession schools in Virginia, to recruit professional students to consider Virginia's programs for their training, and for Virginia residents to consider Virginia as their place of practice. *ChooseVirginia!* will provide all the functionalities of PPOVA and its electronic newsletter, but will also feature a host of other resources to include student outreach (K-16) information, Area Health Education Center (AHEC) programs with links to each AHEC region, links to Virginia's health profession programs, pre-health student summer program opportunities, and a new statewide student registry to assist with pre-health student recruitment and tracking in Virginia. The *ChooseVirginia!* website is expected to be operational in September 2010.

- With the consolidated dental data mentioned previously in this report, the OMHHE will be looking more closely at low-income dental HPSA development throughout the Commonwealth in the upcoming months.