Health Workforce Council

2015 Annual Report

December 2015

Prepared on behalf of the Council by staff of the
Workforce Training and Education Coordinating Board
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I. Health Workforce Council Membership

The Health Workforce Council (Council) is comprised of leaders from a range of healthcare stakeholders, including: education and training institutions; healthcare organizations, migrant and community health services; labor and professional associations, and employer representatives. The Council is exploring adding other members to continue its focus on integrated healthcare delivery.

The Council is chaired by Dr. Suzanne Allen, Vice Dean of Academic, Rural and Regional Affairs at the University of Washington School of Medicine. A new vice-chair was welcomed at the December 2015 meeting: Kevin McCarthy, President of Renton Technical College. Dr. Michele Johnson, Chancellor of Pierce College, retired as Chair of the Council in May 2015 after almost 10 years of service. The Council deeply appreciates her service and commitment to health workforce issues over her many years leading this group. The Council is staffed by the Workforce Training and Education Coordinating Board (Workforce Board).

2015 Health Workforce Council Members

Council Member	Organization
Suzanne Allen, Chair	Vice Dean for Regional Affairs, University of Washington School of Medicine
Kevin McCarthy, Vice-Chair	President, Renton Technical College
Dan Ferguson	Allied Health Center of Excellence (Yakima Valley Community College)
Dana Duzan	Allied Health Professionals
Eileen McNamara	Group Health Cooperative
Marianna Goheen	Office of Superintendent of Public Instruction
Diane Sosne	Service Employees International Union (SEIU) 1199NW
Charissa Raynor	SEIU Healthcare NW Training Partnership
Marty Brown	State Board for Community and Technical Colleges
Mary Looker	Washington Association of Community and Migrant Health Centers
Deb Murphy	Washington Association of Housing and Services for the Aging
Sofia Aragon	Washington Center for Nursing
Lauri St. Ours	Washington Healthcare Association
Nancy Alleman	Washington Rural Health Association
Joe Roszak	Washington State Community Mental Health Council
Bracken Killpack	Washington State Dental Association
John Wiesman	Washington State Department of Health
Ian Corbridge	Washington State Hospital Association
Russell Maier	Washington State Medical Association
Heather Stephen-Selby	Washington State Nurses Association
Daryl Monear	Washington Student Achievement Council
Eleni Papadakis	Workforce Training and Education Coordinating Board

II. Summary of Health Workforce Council Efforts in 2015

The Health Workforce Council is charged with convening a diverse group of stakeholders to research factors impacting the shortage of healthcare professionals in Washington, and to recommend strategies to the Governor and Legislature that will reduce the shortage – either through policy or budget action – for education, training, and other workforce solutions.

The Council was very active in legislative work sessions in 2015 – testifying on legislation where applicable with Council recommendations, and presenting to a number of groups, including the Joint Task Force on Aging and Disability, the House Higher Education Committee, and the House Health Care and Wellness Committee. The 2015 Legislative Session advanced many long-time Council recommendations, including funding to increase residency opportunities, and the restoration of the Health Professional Loan Repayment and Scholarship program.

Successful Council recommendations include:

Increasing primary care residency opportunities in medically underserved communities.
The 2015 state budget provided over $16 million to increase residency opportunities for primary care practitioners in rural, underserved areas. Increasing residency opportunities has been a consistent recommendation of the Council. Research shows that residency location heavily influences a physician's choice of where to practice. Investments in primary care residency and other post-graduate clinical training opportunities, especially in rural and underserved regions, will likely encourage more new primary care providers to work in the Washington communities that need them the most.

House Bill (HB) 1485, sponsored by **Representative Larry Haler**, also addressed challenges in establishing residencies. The new law requires the Department of Health to gather additional data about the state's residency programs, including identifying the residencies in health professional shortage areas, to collect data on whether residents are from an in-state or out-of-state medical school, and analyze the geographic distribution of residency programs over time. The first report is due to the Legislature in November 2016, and will be updated every two years thereafter. The Council will keep a close eye on these reports to determine whether additional action could further address residency shortages. HB 1485 also re-establishes the Family Medicine Education Advisory Board, which will review and make recommendations on the selection of areas for future family medicine, among other duties. HB 1485 also requires the collection of demographic information for license renewal for physicians, osteopathic physicians, and physician assistants.

Future work on residencies could include the creation of workgroups to recommend solutions to additional residency issues. For example, a workgroup could explore additional opportunities for increasing the availability of postgraduate transition-to-practice programs for providers who are choosing to train further to gain additional expertise in rural practice – which has many unique challenges not found in urban areas – such as optional residencies for nurse practitioners, physician assistants, and dentists.

Restoring funding for the Health Professional Loan Repayment and Scholarship Program.
The Health Professional Loan Repayment and Scholarship Program encourages primary care health professionals to serve in critical shortage areas in Washington. The program provides financial assistance through conditional scholarships and loan repayment. Funding for this program was dramatically reduced for several years due to budget cuts. The Council has been a consistent advocate for restoration of this program. The 2015 state budget restored funding to this program to pre-recessionary levels. The Council is very appreciative of the efforts of **Senator David Frockt**, **Representative Paul Harris**, and **Representative Larry Haler**, who all sponsored policy bills that advanced this concept through public hearings, and provided the stage for extensive dialogue from stakeholders on the importance of this program in addressing rural health workforce shortages.

A survey from the Cecil G. Sheps Center for Health Services Research in North Carolina in 2013 found that approximately 60 percent[1] of health professionals in Washington who benefited from the loan repayment program anticipated remaining in an underserved community for five years or more after their last service term. Loan repayment puts new workforce capacity in the field immediately, and scholarships help to grow the future healthcare workforce and support clinicians from disadvantaged backgrounds.

It's important to note that the Council does **not** recommend future changes to the program that would limit or mandate the health professions eligible for this program. The statute governing the program is already drafted to allow for maximum flexibility as needed by the state and local communities to respond to provider demand.

Ensuring stable funding for rural health workforce programs.
Early state budget proposals in 2015 included a potential cut in State Office of Rural Health dollars that currently fund the Area Health Education Centers (AHECs) in eastern and western Washington, as well as other partners across the state. The Council was pleased to see that the 2015 state budget made no cuts to these vital programs.

This work is critical to the state's effort to support the rural healthcare system. AHECs have had a number of notable results, including: coordinating hands-on training experiences for 50 medical students per year through clinics that serve rural and underserved populations; delivering continuing education programs to more than 5,500 individuals; and providing more than 180 rural disadvantaged youth with mentored experiential learning programs involving multiple day experiences. The AHECs also received funding in 2014 through the federal Veterans Administration to conduct professional development to address the behavioral health needs of rural active duty and returning veterans and their families. This work in Washington is the first of its kind in the nation.

[1] Pathman D, Fannell J, Konrad TR, Pierson S, Tobin M, Jonsson, M. Data from Clinicians in State Loan Repayment Programs in North Dakota and Washington State. Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill. August 2013.

Supporting access to, and the application of, telemedicine as a covered and reimbursable expense for healthcare services, and train current and future workers on the effective use of telemedicine.
The Council has for many years recommended the increased use of telemedicine as a reimbursable option for healthcare services, particularly for rural areas, where, at times, the nearest primary care provider (not to mention a specialist) is two or more hours away. Telemedicine has emerged as a cost-effective alternative to face-to-face consultations and examinations. The 2014 New Blue H Rural Health Report detailed the benefits of telemedicine for rural and underserved areas, including tele-home care services. The 2015 Legislature passed into law **Substitute Senate Bill (SSB) 5175**, which requires health insurance carriers to reimburse for telemedicine for the same services that would be reimbursable in person. The new law was sponsored by **Senator Randi Becker**, with Representative **Steve Bergquist** sponsoring the House companion legislation (HB 1403).

To effectively use telemedicine, healthcare workers will need to gain the necessary training and experience to make the most of this emerging technology. **Senator Becker** sponsored **Senate Bill 5986**, which would have created a Board of Telemedicine to oversee the changes expected from implementation of this technology across the healthcare system. While the bill didn't pass in the 2015 Legislative Session, the Council is very interested in this concept, as well as advocating for any comprehensive telemedicine/telehealth reform to include a component for education and training of the current and future workers who will use technology to care for patients.

Creating an Industry Sentinel Network that provides timely, relevant information on healthcare industry workforce needs.
Two years ago, the Council recommended the creation of a Health Workforce Industry Sentinel Network (Network) to the Legislature to address the need for accurate and timely data and information for health workforce planning. The Council was supported in this effort by the work of **Senator Karen Keiser**, who included funding for the Network in early versions of the Senate's operating budget in 2014. The Network was identified as a key component of a state plan to achieve the health system transformation envisioned in the Healthier Washington project. In the fall of 2015, the Workforce Board was awarded nearly $350,000 from the Healthier Washington Team and the Centers for Medicare and Medicaid Services (CMS) to begin implementation of the Network.

The Network, where healthcare providers and facilities provide "real time" updates on the supply of healthcare professionals and any gaps in healthcare coverage in a local area, will help alleviate the lag time that comes from traditional labor market data. This delay slows the development of education and training programs, even as the healthcare delivery environment undergoes rapid changes. The sentinel concept is modeled after a program at the Center for Disease Control, where sentinels in local areas provide real-time updates on emerging outbreaks with the goal of slowing the spread of infectious diseases.

Timely health workforce data is critical to ensure that the state's education and training resources are responsive to the on-the-ground workforce needs of healthcare employers. This "real-time" data and a statewide distribution system will provide alerts of emerging trends and communicate changes in health workforce demand before a problem with supply becomes a healthcare crisis. The Network, a select group of healthcare providers and facilities carefully selected to include a broad range of size,

employer type, and geographic distribution, will provide up-to-date information on the demand for healthcare workers within their organization and industry. Sentinels will be convened as needed to provide timely feedback around investments in education, training and talent development, and make targeted recommendations on industry needs. The Network also includes a response panel composed of key education, training and policy stakeholders to review, validate, and disseminate the data obtained from the Network at frequent and regular intervals throughout the year.

The Council, along with the Workforce Board, partnered with the Healthier Washington project and the Health Care Authority as part of the implementation of the Network. Grant funding runs from 2015 to June of 2018. The Workforce Board is working with the University of Washington's Center for Health Workforce Studies to create and direct the Network, and the Council will be advising on implementation. Preliminary data and results on emerging health workforce trends will be available in the summer of 2016.

III. What's Ahead for the Health Workforce Council in 2016

In 2016, the Council will continue to promote its recommendations to reduce health workforce shortages, as highlighted in earlier reports. The Council engages in ongoing outreach and education before the Legislature and in workgroups, and provides biennial recommendations on strategies that address Washington's health workforce needs. Over the next year, the Council will dedicate a considerable amount of time to identifying, understanding, and providing these recommendations to policymakers in the 2016 annual report.

Additionally, the Council has identified the following topics as worthy of potential further exploration in 2016, and beyond:

Dedicated Staff Support for the Council: Funding Request for 2017

The Health Workforce Council was funded by federal grant dollars when it was created in 2001 (it was known then as the Healthcare Personnel Shortage Task Force). Since that grant funding is no longer available, for the past few years, the Workforce Board has supported the Council out of its base budget. But this support is limited due to competing priorities, increased workload, declining base budget revenue, and a lack of flexible funding.

In November, Council staff presented on health workforce data collection challenges to the House Health Care Committee. Along with these challenges are potential opportunities for the Council to provide additional support to policymakers through an expanded portfolio of health workforce data collection and analysis. The November presentation highlighted the lack of dedicated funding to support the current work of the Council and the additional work that could be done with more resources.

Recognizing the limited funding available for the supplemental budget, the Council did not submit a budget request for the 2016 session. Instead, the Council will dedicate time in 2016 to prepare a funding plan, including an overview of where the Council could expand its efforts. In particular, staff will provide a detailed look at the number and type of staff needed to accomplish the goals of an expanded role.

The Council expects to have a funding and work plan ready in the fall of 2016 for a budget request to the Legislature in 2017.

A well-staffed Council could:

- Provide needed policy analysis on key health workforce issues.
- Explore specific data concerns among healthcare providers.
- Look closely at legislative reports and workgroup recommendations and expand on them.
- Conduct other needed healthcare work as assigned (see case studies in Section IV of this report).

Behavioral Health Integration: Recommendations on Workforce Needs

The Council has been very interested in efforts to integrate physical and behavioral healthcare and expand interprofessional education. Behavioral health is an evolving area in the healthcare field and incorporates a wide range of issues, including mental health, behaviors that impact health, such as eating and exercising, as well as chemical dependency. Because physical health and behavioral health issues frequently go together, there is an increased focus on finding ways to treat both issues, especially in a primary care setting. True integration requires multiple providers to work together to create a shared treatment plan, to better serve the "whole person" and their particular health issues.

In 2016 the Council plans to gather information on efforts to provide workforce training and practice support to promote this kind of integrated care. This information will support a partnership with the Governor's office and the Healthier Washington Team on creating recommendations for the workforce needs of behavioral health integration that could be advanced in policies for the 2017 Legislative Session. The analysis and recommendations would address short- and long-term workforce issues to support full behavioral health integration by 2020.

IV. Healthcare Personnel Data

Since forming in 2003, the Health Workforce Council has brought attention to current and projected shortages in healthcare occupations. The Council's advocacy on shortages is showing results, most notably in expanded capacity in a wide range of healthcare programs at Washington's education and training institutions. Although progress has been made to close certain workforce gaps, continued shortages in key occupations are anticipated in the healthcare industry, such as dental hygienists, laboratory techs, and opticians.

As more people are covered by health insurance under the Affordable Care Act (ACA), demand is increasing for healthcare and healthcare workers, especially in rural areas of the state and low-income urban areas. U.S. Census data found that Washington's uninsured rate dropped to 9.2 percent in 2014. Washington's Health Benefit Exchange reported that the drop in the number of uninsured was the fifth largest in the nation. As recently as 2013, a Gallup survey pegged Washington's uninsured rate at 16.8 percent, so this drop is significant. The good news is that more Washingtonians have access to the healthcare system. The challenge is ensuring a sufficient supply of trained healthcare professionals to keep pace with demand.

The question remains: Will Washington have a sufficient healthcare workforce to serve the expanded number of insured people? Even prior to the passage of the ACA, the state and nation suffered from healthcare personnel shortages, especially in rural areas. Although the recession alleviated this shortage as more healthcare workers delayed retirement, elective treatments were postponed, and some financially pinched patients put off their healthcare entirely, shortages are forecast to reappear unless there are increases in the supply of certain types of professional and para-professional healthcare personnel.

Staff from the Workforce Board gathered and analyzed the supply and demand data featured in this report. The data in the following pages provides greater insight on projected healthcare personnel shortages in Washington. This year's report includes several case studies on key areas of demand data which require a deeper look into the numbers to truly understand what the data means, as well as potential follow-up questions for policymakers and stakeholders.

A. Healthcare Education/Training Program Completions

An increasing number of Washington students are enrolling in, and completing, healthcare programs to prepare for a variety of healthcare occupations. The state has successfully pushed to expand capacity in healthcare training programs, and in some cases provided financial incentives, such as the Health Professional Loan Repayment and Scholarship program.

The following table shows completions for nearly three dozen healthcare education and training programs. Supply numbers include all public and private degree-granting schools in Washington as well as 300+ private career schools offering short-term training and certificates. The Workforce Board also does an extended analysis of the supply of trained healthcare professionals, offering a general overview on supply counts across multiple healthcare training programs, also broken out by gender,

race and ethnicity. The Health Workforce Completions report will be available in late January 2016 on the Workforce Board's website at http://www.wtb.wa.gov/HCTFIntro.asp.

In the past, the data has included the percentage increase over time (usually over a five-year period), but that tended to obscure other points, as a tiny increase in the number of students in an already small program would show a huge percentage increase, whereas a small percentage increase in completions to a program training over 1,000 providers would mask an impressive movement in expanding the number of trained healthcare providers. The data in this table is annualized by one, five and 10 years, so the reader can see the how training programs have grown over time.

NOTE: Some programs require additional training, clinical work, licensing/certification requirements, or residency post-completion, so program completers may not be able to immediately enter the workforce. Some education programs may also have chosen to reduce the size of programs based on local or state demand for certain occupations or other factors.

The table below shows both increases and decreases in program completions in select occupations from 2004-2014. Negative numbers indicate a decrease.

Instructional Program	2014	Annual % Change from		
		2013	2009	2004
Allied Health Professions				
Dietetics/Dietitian	46	-19%	9%	n/a
Emergency Care Attendant (EMT Ambulance)	759	1%	67%	37%
Emergency Medical Technology/Technician (EMT Paramedic)	115	-21%	-10%	-3%
Medical/Clinical Assistant	2,646	-8%	14%	6%
Occupational Therapist Assistant	108	-6%	55%	34%
Phlebotomy Technician/Phlebotomist	725	10%	-2%	4%
Physical Therapy Technician/Assistant	148	-14%	15%	14%
Physician Assistant	90	-10%	7%	5%
Surgical Technology/Technologist	131	-11%	2%	5%
Alternative Medicine				
Acupuncture and Oriental Medicine	76	3%	23%	8%
Massage Therapy/Therapeutic Massage	1,123	7%	6%	2%
Naturopathic Medicine/Naturopathy	85	10%	2%	-3%
Behavioral Health				
Mental and Social Health Services and Allied Professions, Other	382	23%	9%	12%
Mental Health Counseling/Counselor	47	52%	13%	
Psychiatric/Mental Health Services Technician	31	-30%	23%	1%
Substance Abuse/Addiction Counseling	314	-18%	20%	12%
Dentistry				
Dental Assisting/Assistant	1,311	9%	18%	6%
Dental Hygiene/Hygienist	232	3%	3%	3%
Dental Laboratory Technology/Technician	12	-29%	25%	-3%
Dentistry	65	-2%	4%	2%

Instructional Program	2014	Annual % Change from		
		2013	2009	2004
Medicine*				
Medicine	288	-2%	4%	2%
Osteopathic Medicine	70	-5%	n/a	n/a
Physician Assistant	90	-10%	7%	5%
Nursing				
Licensed Practical/Vocational Nurse Training	921	-19%	-3%	-1%
Nursing Assistant/Aide and Patient Care Assistant/Aide	6,371	6%	33%	21%
Registered Nursing – Associate's Degree	1,800	-11%	1%	6%
Registered Nursing – Bachelor's Degree	1,730	0%	3%	6%
Registered Nursing – Master's Degree and Above (includes Advanced Registered Nurse Practitioner)	413	-2%	6%	7%
Pharmacy				
Pharmacy	207	-17%	-3%	0%
Pharmacy Technician/Assistant	567	-7%	10%	1%
Public Health, Health and Medical Administrative				
Health Unit Coordinator/Ward Clerk	75	7%	-11%	-3%
Health/Health Care Administration/Management	138	0%	15%	14%
Medical Administrative/Executive Assistant and Medical Secretary	600	4%	13%	9%
Medical Insurance Coding Specialist/Coder	432	0%	8%	6%
Medical Office Assistant/Specialist	118	30%	3%	5%
Public Health, General	212	11%	27%	11%
Rehabilitation and Therapy				
Occupational Therapy/Therapist	94	8%	3%	6%
Physical Therapy/Therapist	117	-1%	4%	6%

Sources: The Integrated Postsecondary Education Data System (IPEDS) 2014; Workforce Board Data Reporting System 2014 for private career school completions.
**Completion of medical school. These completers still must undergo 3+ years of residency training before they can begin to practice. See more information in this report's case study on page 17.*

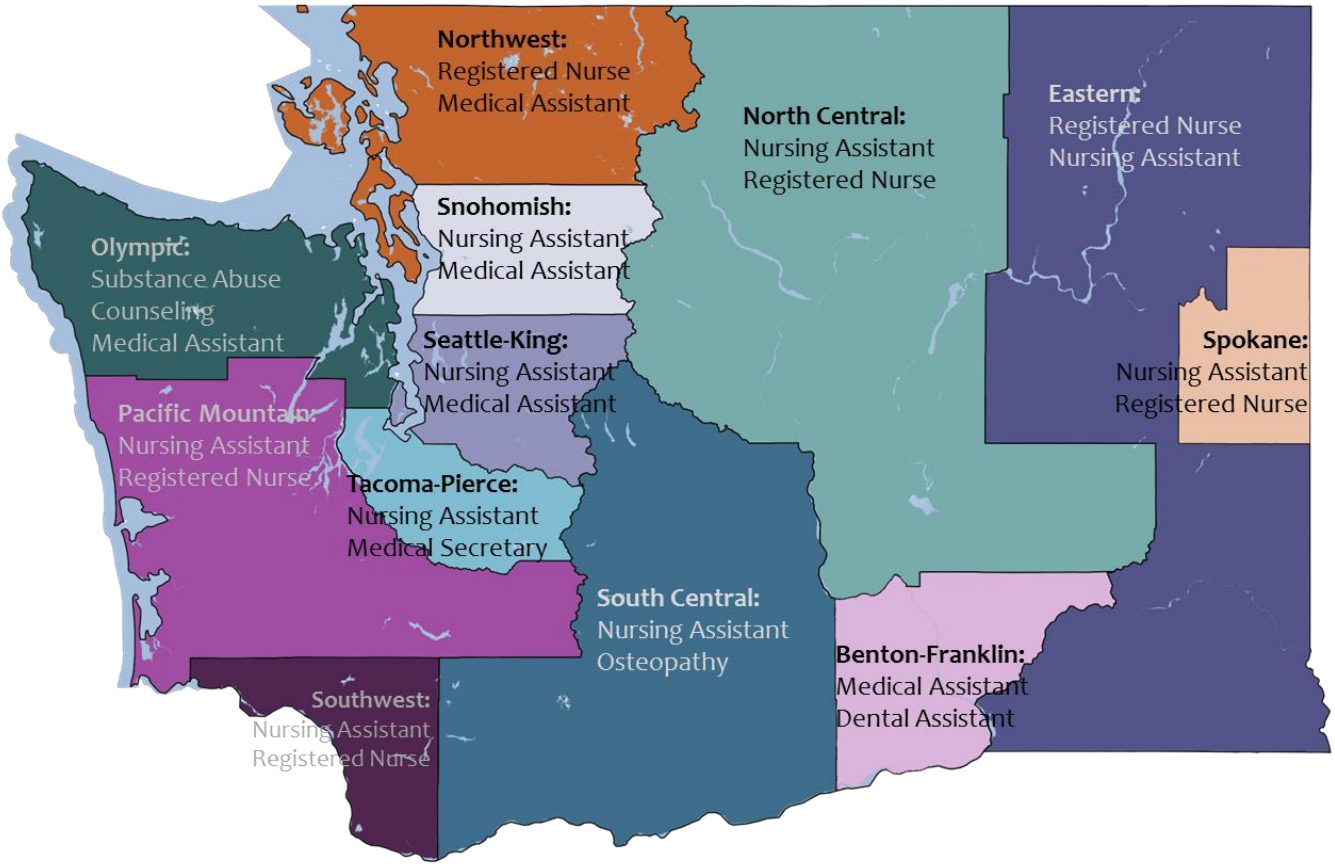
B. Health Program Completions by Workforce Development Area

The following map shows the most common healthcare program completions for 2014 in each of the state's Workforce Development Areas.

Workforce Development Areas can be a single county (such as the highly populated King, Pierce, or Snohomish counties), or made up of multiple counties that share similar labor markets. Workforce Development Areas are overseen by local Workforce Development Councils (WDCs). The state's 12 WDCs provide on-the-ground workforce development planning and promote coordination between education, training, and employment efforts in their communities.

Completers are sorted into Workforce Development Areas based on the location of their education and training institution, not their home address, so many may choose to work outside the area in which they trained. As the map below shows, certain healthcare training programs are popular across workforce regions, particularly nursing and medical assistant training programs. However, there are also distinct regional differences.

Top Program Completions by Workforce Development Area



C. Healthcare Personnel Shortages and the Health Workforce Council's Role

On behalf of the Council, the Workforce Board analyzes the supply and demand for selected healthcare occupations. The analysis compares the projected job openings to supply from new entrants completing healthcare education programs in Washington and estimates a gap over time – in this case, a look at the projected need for providers over the next five years. This analysis helps anticipate the gap between supply and demand, should the annual supply of trained healthcare professionals stay the same.

A chart of projected gaps by occupation is provided on page 18, but the data in this chart should be used with caution. The case studies in this section on entry-level workers and career pathways, behavioral health workforce data, nursing completions, and physician shortages illustrate that at times there is more behind the data. A gap analysis cannot provide the complete picture. The chart does not

currently include information on individuals who retire or no longer practice, or providers who relocate to Washington and begin practicing through an endorsement of their license from another state. Most significant is the lack of data by geography or community. There may be an oversupply in some communities, but large shortages in others.

As noted in the Next Steps section, the Health Workforce Council in 2016 will be looking at funding plans to expand its role, or change its structure to better serve as a clearinghouse for health workforce data and issues. The Council's focus on improving access to health workforce data could allow for increased focus on health workforce data and challenges, along with solutions.

Health workforce data can be complex and come from many sources. Often, key data are spread across multiple agencies and organizations. Individual data elements may be held by a number of sources, such as state agencies and professional associations, or contained within licensing surveys. What might seem like a simple question about a specific occupation in a geographic area could involve any number of agencies and organizations, and triangulating the answer to this question could be even more challenging.

Data on various health occupations is often more accessible at the state level, but this data is often far from complete. Meanwhile, obtaining local-level details can be costly and challenging. Further, accessing health workforce data in a vacuum does not always provide the level of detail necessary to make sound decisions on where to invest in training programs and other areas of the health workforce pipeline. Data must be analyzed and evaluated to make sense of the information and put it to good use. The Health Workforce Industry Sentinel Network (described on page 6), may be able to help with some of these challenges – particularly for real-time, emerging data.

For the coming year, the Council has selected a few key areas for further analysis in the form of case studies (below). These are areas where the data alone did not provide a clear picture of what was happening on the ground for these occupations. The analysis helps explain the data, and also asks policymakers questions to consider in their review of this information. .

Case Study: Behavioral Health Workforce Data

Behavioral health provides a ready example of data challenges facing policymakers. This evolving healthcare area, which incorporates a wide range of behaviors that impact health, such as eating and exercising, as well as chemical dependency and mental health issues, has received a lot of attention in recent years. For example, the state's Health Care Authority and Healthier Washington project team are working to integrate the financing and delivery of physical health services, mental health services, and chemical dependency services in the Medicaid program through managed healthcare by 2020.

However, it can be challenging to nail down specific data points within behavioral health. Many healthcare providers, such as nurses and physician assistants, may deliver behavioral healthcare – occasionally or as their primary role – but it can be difficult to discreetly evaluate this from the rest of their work. Additionally, information on shortages can be difficult to obtain at the regional level. State data on the number of graduates in behavioral health doesn't provide enough information to know whether educational institutions are training enough providers to meet behavioral healthcare demand

in specific areas of the state, how these providers are putting their skills to use, and whether the training they're receiving has prepared them for integrated behavioral healthcare delivery. To get a really good picture of what's happening in the behavioral health workforce, and what occupations are needed for this work, there needs to be a comprehensive analysis of the data available along with the needs of the workforce so the state can effectively deploy limited resources. The Council will be focusing on this issue in 2016 (see Section III on page 8 for more details).

Case Study: Using Career Pathways to Address Gaps Between Completions and Projected Openings for Entry-Level Program Completers

Even in occupations where more people are being trained than there are projected openings available for them to fill, doesn't always mean there is a surplus of trained healthcare workers in those occupations. There are many factors to consider. The numbers in this analysis (with the exception of registered nurses) do not include licensed or certified individuals by education program. Students may complete a training program, but until they finish their required clinical, licensing, and residency requirements, their ability to work in the field they trained for may be limited to a short-term provisional certificate. Or they may not be able to work at all until all requirements are completed. There is also substantial "churn" among entry-level healthcare positions, which makes extended projections a bit more challenging. Some healthcare students also may prefer to get an entry–level credential and then continue training for a higher level degree or certification without ever working in that particular role. Additionally, because healthcare is changing so quickly, there may be other roles for trained healthcare workers that will emerge later.

For those areas where we are showing a significant number of providers being trained versus potential projected openings, what policy changes might be necessary to support a stronger career pipeline for entry-level workers? In examining the demand chart below, there appears to be a surplus of healthcare professionals in certain short-term, entry-level training programs. In areas where it appears there is an oversupply of trained providers versus projected openings, there is often demand higher up the career ladder. Ambulance attendants and EMTs/paramedics, or dental assistants and dental hygienists, are just two examples of this phenomenon. How might the state support these entry-level healthcare workers to keep them in the healthcare industry while also offering opportunities to build on their education and skills, so they can move up the career ladder?

Lower-wage, entry-level workers are playing a larger role in the healthcare system as healthcare costs rise. To keep costs down, more responsibilities are being shifted to lower-level healthcare professionals (while still remaining in the scope of their licenses). At the same time, entry-level, low-wage healthcare positions typically experience high turnover. This impacts the continuity of care for patients and clients. Providing frontline healthcare workers with the chance to advance their careers and skills promises to cut down on costly turnover and boost employee retention. This could be done by encouraging employers to provide flexible scheduling that allows employees the chance to gain additional education and training; increasing coordination among education and training programs to expand knowledge of other professions' education, skills and competencies across a range of disciplines; ensuring adequate career counseling to those interested in health careers; incentivizing promotional practices for entry-level healthcare workers; and exploring public/private co-investment strategies to develop the health workforce pipeline. As healthcare payment reform models are being

designed, the Council also supports finding new ways to incent providers and facilities that support career development and access to training for healthcare workers.

Case Study: Nursing Completions

For this particular item, the Council looked at the number of newly registered nurses by examination, instead of completers of educational programs, which provides a more accurate picture of work-ready, available supply. The Council has long had a focus on increasing the number of nursing completions. The Council ran an advocacy effort to increase nursing completions between 2004 and 2011. This work advocated for high demand programs of study funding specifically geared toward health professions, and allowed for a quick turnaround on increasing nurse training program positions and hiring the faculty necessary to train additional students. This effort had great success, as demonstrated by a 37 percent increase in the number of completions for nursing over the time period of the initiative.

The gap analysis on page 18 shows that based off of 2014 completion numbers, there are potentially more completions than job openings. Members of the Council are aware that many providers are having a real problem finding licensed nurses. So why would there be a gap in job openings projected for registered nurses? In examining the data further, there was a 10.6 percent increase in the number of new RN licenses in 2014. And projected demand dropped slightly – by approximately one percent between the 2014 and 2013 analyses. This data also does not tally how many nurses do not renew their licenses due to retirement or other reasons. This information still does not fully account for the information in the gap analysis; more research is needed to fully understand the factors impacting these numbers.

An area where further analysis could be of interest would be in the employment opportunities for nurses by education level. The Institute of Medicine's report, *The Future of Nursing: Leading Change, Advancing Health* called for 80 percent of nurses to have a bachelor's degree by 2020. Some facilities may prefer hiring bachelor's degree nurses to achieve Magnet status, in which a facility achieves a higher level status by having a high level of nurses with bachelor's degrees or above. Based on this goal, are nurses with associate's degrees having any difficulties securing employment? Data from facilities on their hiring preferences is not easily available. Are facilities hiring nurses with less than a bachelor's degree? Additionally, are recently licensed nurses with an associate's degree still pursuing further education? Or might they be leaving the nursing field all together?

Nursing stakeholders have spent the last three years engaged in a process to make the transition for associate's degree nurses (ADNs) seeking a transfer to a bachelor's program as seamless as possible. This group has completed a nursing Direct Transfer Agreement (DTA), which allows nurses with an associate's degree a direct transfer into a bachelor's program, which could further enhance their employment prospects. Twenty-three (85%) of the 27 community college nursing programs in Washington have expressed interest in adopting the DTA at their institutions. Six early adopting schools have completed the implementation process and have begun admitting their first cohorts of DTA students. A seventh school will be ready for their first admissions in January 2016, and another 16 schools have begun the necessary curriculum revision process as part of a second wave of implementation over the next two years. Successful implementation of the Associate in Nursing DTA will assure that nursing graduates from community colleges offering this three-year pathway will have

all credits accepted for transfer to a Washington State RN-to-BSN program, meet all general university education requirements, and will be able to complete their BSN with one additional year of study.

In addition, registered nurse completions and demand information also includes Advanced Registered Nurse Practitioners (ARNPs). ARNPs do not function in registered nurse roles. With advanced education and certification, the ability to prescribe medications, and independent practice authority from physicians, many ARNPs are primary care providers, and cannot easily be classified in demand data.

For these reasons, and others not yet identified, it cannot be concluded that the supply of registered nurses is sufficient.

Case Study: Physician Supply

Education, training and market forces, and the timelines that affect the production of physicians, are different from most other occupations in this analysis. Physicians are not job-ready at the completion of medical school. The supply data in this analysis is for medical school completions, not completion of residency requirements. Physician residency is a much stronger predictor of where a physician will choose to practice. Physicians have three to 10 years of additional training before they can begin to practice independently. An individual who graduated in 2014 wouldn't begin working until at least 2017, and those who choose to specialize could still be training as long as 2024.

Accurately predicting the projected demand for physicians, analyzing the data available, and making recommendations to address shortages; this is an area that could be its own report. This topic has been studied extensively over the years. The physician shortage is one example of where health workforce data analysis and projections is extremely challenging. The Legislature funded a study of primary care physicians in the 2015 budget, which may provide a clearer analysis of the demand for this specialty area when complete.

Reducing the shortage of primary care providers, particularly in rural areas, is a tremendous need in Washington and nationally. The market for physicians is national. While some areas of the state, particularly the Seattle area, are well-known as an attractive location for physicians to live and practice medicine, the state is falling behind on primary care providers practicing in rural and underserved communities. Many states with large rural populations provide extensive residency and practice incentives to recruit physicians to targeted communities. The Legislature made great investments in physician residencies in the last session, but there is more work to be done to ensure that Washington can recruit and retain a sufficient number of primary care providers to meet critical workforce shortages. Utilizing advanced practice registered nurses and physician assistants to meet the demand for primary care providers is another strategy to address shortages.

Projected Gaps Between Education Completions and Jobs Available

Occupational title	Average annual total openings 2018-2023	2014 program completers	Gap between openings & completions
Ambulance Drivers and Attendants (does not include emergency medical techs)	41	759	-718
Cardiovascular Technologists and Techs	42	13	29
Dental Assistants	454	1,311	-857
Dental Hygienists	341	232	109
Dental Laboratory Technicians	53	12	41
Dentists, General	175	73	102
Diagnostic Medical Sonographers (includes ultrasound techs)	87	77	10
Dietetic Technicians	22	46	-24
Dietitians and Nutritionists	69	46	23
EMTs and Paramedics	168	115	53
Health Diagnosing and Treating Practitioners, All Other (alternative medicine)	176	459	-283
Hearing Aid Specialists	9	23	-14
Licensed Practical and Licensed Vocational Nurses	382	921	-539
Massage Therapists (massage, Asian & somatic bodywork)	699	1,123	-424
Medical and Clinical Laboratory Techs (blood bank, hematology, histologic, & lab science techs)	172	103	69
Medical Appliance Technicians	9	25	-16
Medical Assistants (includes reception, coding specialists, clinical assistants, and anesthesiologist assistant)	616	2,646	-2,030
Medical Records and Health Information Techs (health info & insurance coding specialist)	246	623	-377
Medical Secretaries (office assistant, insurance specialist, & admin)	465	858	-393
Medical Transcriptionists	71	77	-6
Mental Health Counselors	130	47	86
Nuclear Medicine Technologists	19	5	14
Nursing Assistants	1,129	6,371	-5,242
Occupational Health and Safety Techs (radiation protection, environmental health, & industrial hygiene)	20	64	-44
Occupational Therapists	122	94	28
Occupational Therapy Assistants	27	108	-81
Ophthalmic Medical Techs (orthoptist & technician)	40	16	24
Opticians, Dispensing	89	13	76
Pharmacists (Also includes pharmacy administration, pharmaceutics and drug design, and pharmaceutical chemistry)	252	207	45

Occupational title	Average annual total openings 2018-2023	2014 program completers	Gap between openings & completions
Pharmacy Technicians	213	567	-354
Phlebotomists	83	725	-642
Physical Therapist Assistants/Aides	128	148	-20
Physician Assistant	93	90	3
Physicians (see case study on page 17)	403	288	115
Psychiatric Aides/Technicians	38	31	7
Radiation Therapists	16	115	-99
Radiologic Technologists (CT, MRI, & X-ray techs – doesn't include ultrasound techs)	164	115	49
Registered Nurses (all education levels, including nurse practitioners, research, clinical and administrative – see case study on page 16)*	2,365	2619*	-254
Respiratory Therapists	71	33	38
Respiratory Therapy Technicians	7	68	-61
Substance Abuse and Behavioral Disorder Counselors	135	314	-179
Surgical Technologists (pathologist assistant, surgical tech, & sterile processing tech.)	68	131	-63

Sources: The Integrated Postsecondary Education Data System (IPEDS) 2014; Workforce Board Data Reporting System 2014 for private career school completions.

***Includes nurses newly licensed in 2014 by examination. U.S. Department of Labor data provides aggregate data on demand for registered nurses. Nursing demand numbers are not broken down by degree attainment. The registered nurses category for this table includes nurses of all education levels as well as nurse practitioners.

Data Details and Limitations: Accurately predicting future changes in the demand for healthcare workers as a result of national healthcare reform is challenging. It will be important to carefully monitor changes in the healthcare system for labor market effects not predicted in the official projection. In general, this methodology tends to be conservative in predicting changes to recent trends. Demand estimates are from occupational projections for Washington developed by the state's Employment Security Department under a contract from the U.S. Department of Labor. This national methodology relies heavily on recent trends and national averages. Therefore, it may underestimate emerging overall changes or effects specific to Washington.

V. Health Workforce Council History

In 2001, amid growing concerns about personnel shortages in Washington's healthcare industry, the state's Workforce Board convened a workgroup of healthcare stakeholders. Soon after, in 2002, the Workforce Board created the Healthcare Personnel Shortage Task Force (Task Force) at the request of then-Governor Gary Locke. The Task Force developed a statewide strategic plan to address severe personnel shortages in the healthcare industry, and in January 2003, the Task Force released a strategic plan to tackle the growing gap between the number of trained healthcare professionals and the needs of Washington residents. The report was presented to the Governor and Legislature, and was titled *Healthcare Personnel Shortages: Crisis or Opportunity?*.

In 2003, the Legislature passed Engrossed Substitute House Bill 1852, directing the Workforce Board to continue convening stakeholders to establish and maintain a state strategic plan to address healthcare workforce shortages. The plan was intended to be a blueprint that helped ensure a sufficient supply of trained personnel providing quality, affordable healthcare to the residents of the state. The bill also required an annual report to the Governor and Legislature on this work, including recommendations on how best to address healthcare personnel shortages.

In 2014, Task Force members voted to change their name to the Health Workforce Council to better reflect a new focus on the overall health of a person – looking at overall health instead of just healthcare delivery.

The state workforce system's overarching goals for healthcare is to provide hospitals, clinics, and other healthcare employers with a sufficient supply of skilled workers and professionals across a wide range of occupations, and to ensure that quality healthcare services are accessible to all Washingtonians across the state, including in rural and medically underserved areas. To accomplish this, the workforce system focuses on preparing workers for healthcare jobs that are in-demand, and encouraging job retention among healthcare workers by offering opportunities to advance their careers through additional education and training.

The Council's main role is to develop a strategic plan that addresses health workforce shortages, track progress on implementation of new programs, and bring together key stakeholders to advocate for and develop sustainable solutions. The Council identifies policy and funding priorities to bring to the Governor, Legislature, and other policymakers and stakeholders. As Washington grapples with a shortage of healthcare workers, along with a growing aging population needing more services, the Council and its partners continue to focus attention on how to best invest in the state's healthcare workforce pipeline.