Health Workforce Council

2017 Annual Report

December 2017

Workforce Training and Education Coordinating Board

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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 has flexibility to add members from additional sectors or organizations as needed to enhance 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. The Vice-Chair is Dr. Kevin McCarthy, President of Renton Technical College. The Council is staffed by the Workforce Training and Education Coordinating Board (Workforce Board).

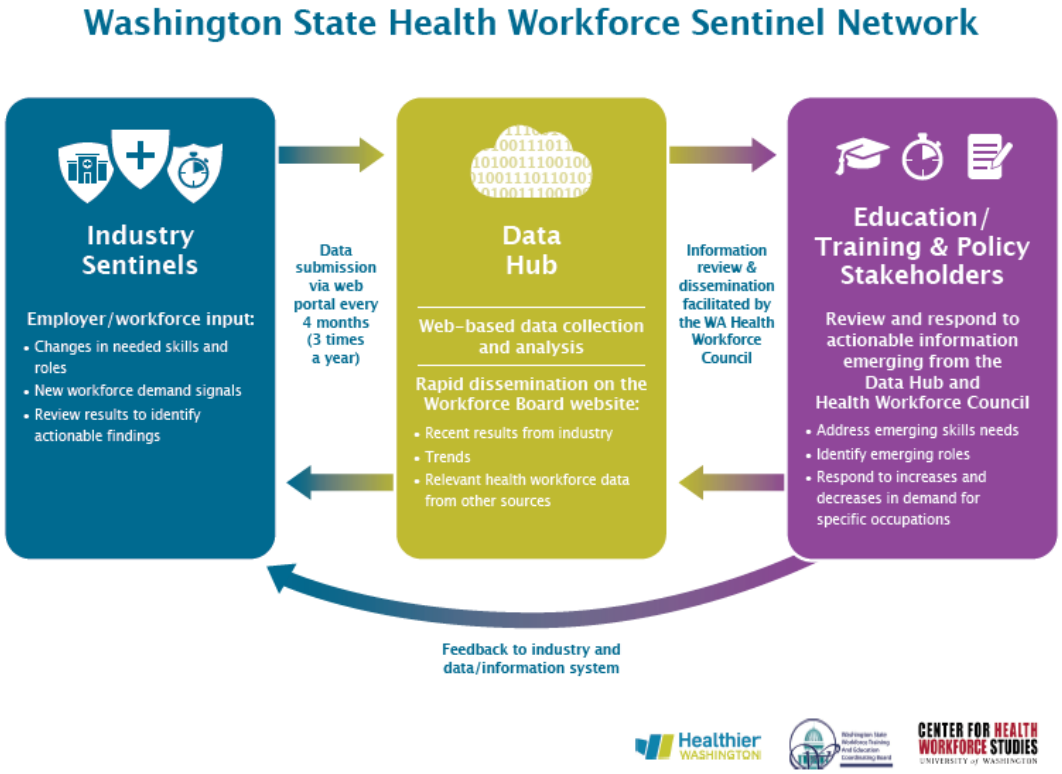
2017 Health Workforce Council Members

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 College)
Dana Duzan	Allied Health Professionals
Marianna Goheen	Office of Superintendent of Public Instruction
Diane Sosne	Service Employees International Union (SEIU) 1199NW
Amy Persell	SEIU Healthcare NW Training Partnership
Kendra Hodgson	State Board for Community and Technical Colleges
Abbie Chandler-Doran	Washington Association of Community and Migrant Health Centers
Deb Murphy	LeadingAge Washington
Sofia Aragon	Washington Center for Nursing
Joe Roszak	Washington Council for Behavioral Health
Alexis Wilson	Washington Health Care Association
Nancy Alleman	Washington Rural Health Association
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

Update on Council Projects

Health Workforce Demand—Signals from Washington's Health Workforce Sentinel Network

The Washington State Health Workforce Sentinel Network is an information network linking the state's healthcare industry with partners in education and training, policymakers, and workforce planners to identify and respond to emerging demand changes in the health workforce. Part of the state's Healthier Washington initiative, the Sentinel Network is a collaboration of the Workforce Board (and the Council) and the University of Washington Center for Health Workforce Studies, with federal funding from Washington's Health Care Authority.



In order to know more quickly—and with more certainty—where shortages and the unmet need for specific skills are affecting particular regions of the state, employer sentinels in the Network regularly report on changes in workforce demand at their organizations and contribute to the discovery of emerging trends. Sentinels provide information about the facility types they represent, Washington state counties from which their client and/or patient population is drawn, and health workforce concerns over the previous three to four months. They respond to questions about exceptionally long vacancies in their workforce, recent changes in workforce demand, skills, and training needed for new and incumbent workers, and any new roles and occupations they have begun to employ.

The Sentinel Network is designed to make findings easily available to educators, planners, and policymakers who can respond to signals of emerging workforce needs. Findings from four data submission points since October, 2016 are available on the Washington Health Workforce Sentinel Network website (http://www.wtb.wa.gov/HealthSentinel/).

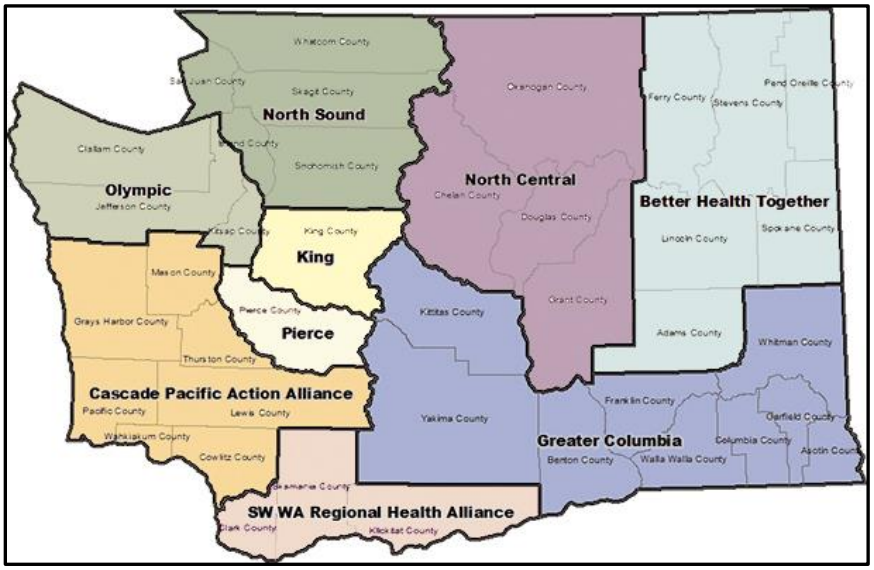
Key Findings To-Date:

Employer sentinels from many different health care settings and across the state have provided data to the Network. The table below illustrates the number of sentinels providing data to the Network at each of the four data collection points to-date, and for each of the nine Accountable Communities of Health (ACH) across Washington.

Number of Employer Sentinels by Accountable Community of Health Providing Workforce Demand Information to Washington's Health Workforce Sentinel Network

Accountable Community of Health (ACH)	Number of Sentinel Reports by ACH at Each Reporting Period			
	Jun/Jul 2016	Nov/Dec 2016	Apr/May 2017	Sept/Oct 2017
Better Health Together	38	25	24	21
North Central	28	20	13	10
Greater Columbia	23	34	16	27
North Sound	25	25	20	21
King	30	30	32	25
Pierce	20	18	27	18
Olympic	17	14	14	16
Cascade Pacific Action Alliance	26	23	23	25
Southwest Washington Regional Health Alliance	5	6	3	3
Total:	177	154	117	127

Washington's Accountable Communities of Health



Sentinels providing data to the Network included hospitals, free and federally-qualified community clinics, behavioral health clinics, long-term care facilities, primary and specialty care clinics, dental offices, and more.

The following table shows the occupations most frequently cited as experiencing demand changes in the past year by specific facility types, with examples of reasons provided by employer sentinels. The occupations are sorted from the most frequently cited at the top, followed by less frequently cited occupations. Highlights include:

- Nursing positions. Registered nurses, certified nursing assistants, licensed practical nurses and advanced registered nurse practitioners were reported most frequently as having long vacancies and increased demand.
    - Nurse demand was high across all regions of the state, and in hospital, primary care, behavioral/mental health, and long term care settings.
- Behavioral health occupations, such as chemical dependency professionals and mental health counselors, were also frequently reported as being in high demand.
    - Some of the reasons cited were increased service need in the population, Medicaid expansion, and integration of behavioral health and physical healthcare.
- Filling medical assistant vacancies was reported to be particularly difficult for employers at community health centers, as well as in some behavioral/mental health facilities, hospitals, and primary care clinics.

Washington Health Workforce Sentinel Network Demand Changes and Exceptionally Long Vacancies in the Past Year. Includes occupations most frequently reported by employer facility type, with examples of responses provided for data collection dates in 2016-17.

Key to Symbols: □ Acute care hospital; ◊ Behavioral/mental health/substance abuse clinic or hospital; ▽ Federally-qualified health clinic (FQHC) or community clinic; ⊗ Primary care clinic (not FQHC or community clinic); ♦ Skilled nursing facility (SNF); ● Long term care facility (not SNF); ♣ Other

Occupations most frequently cited as having recent demand changes	Number of Reports by Facility Type and Examples of Reasons for Demand Change	
	Exceptionally Long Vacancies*	**Increased Demand****
Nurse, registered	□ 27 ◊ 19 ▽19 ●22 ♦46 ♣20	□ 19 ◊ 14 ▽21 ●16 ♦31 ♣13
	Not enough RNs in area; difficulty recruiting in rural areas; cannot compete with hospital pay; Medicaid reimbursement rates too low; shortage/not enough qualified applicants.	*Surge in retirements; increased demand; adding positions/clinics; expanding services; new regulations require more RNs.*
Nursing assistant	□ 10 ◊ 1 ●29 ♦38 ♣1	□ 7 ◊ 1 ●26 ♦24
	Lack of qualified applicants; competition from facilities with higher pay; rural positions hard to fill.	*High turnover; surge in retirements; higher demand from clients and more referrals.*
Nurse, licensed practical	□ 5 ◊ 10 ▽2 ●21 ⊗4 ♦23 ♣13	□ 3 ◊ 6 ▽4 ●13 ⊗2 ♦16 ♣10
	Supply does not meet demand; retirements; more career options available.	*Medicaid expansion and behavioral health integration; more demand in long term care.*

Occupations most frequently cited as having recent demand changes	Number of Reports by Facility Type and Examples of Reasons for Demand Change	
	Exceptionally Long Vacancies*	**Increased Demand****
Chemical dependency professional	□ 3 ◊ 53 ∇8 ♣3	□ 3 ◊ 42 ∇6 ♣3
	Low compensation; not enough applicants; licensing demands; difficult working conditions; those with dual licenses choose to work in mental health; rural recruitment difficult.	*More clients to serve; program expansion; increased demand due to Medicaid expansion.*
Mental health counselor	□ 5 ◊ 37 ∇16 ⊗1 ♦1 ♣1	□ 3 ◊ 28 ∇16 ●1 ⊗1 ♦2 ♣2
	Losing staff to higher paying entities with lower caseloads; rural limitations including difficulty accessing training; lack of qualified applicants.	*CMS final rule regulation changes; Medicaid expansion and integration; increase in clients and programs; greater client need.*
Nurse practitioner (multiple roles)	□ 4 ◊ 26 ∇15 ●1 ⊗2 ♦3 ♣3	□ 3 ◊ 16 ∇15 ●1 ⊗2 ♦2 ♣2
	Rural areas difficult; few ARNPs trained in chemical dependency; non-profit salary constraints; insufficient preceptors for clinical training.	*Medicaid expansion and integration (with behavioral health); retirements; high turnover; expansion of services/opening more sites.*
Nurse practitioner, psych-mental health	∇**4**	∇**2**
	Shortage of workforce; difficulty in recruitment for more rural areas.	*Increased demand due to Medicaid expansion.*
Social worker, clinical	□ 5 ◊ 25 ∇14 ⊗2 ♦4 ♣3	□ 3 ◊ 19 ∇16 ●1 ⊗1 ♣4
	Difficult to find qualified candidates; competing agencies; hard to find in rural areas; high workload and low compensation.	*Retirements; expanded services; expansion of primary care-based services.*
Medical assistant	□ 5 ◊ 5 ∇23 ⊗4 ♣4	□ 3 ◊ 8 ∇25 ⊗4 ♣6
	Limited training courses available in this geographic area; wages are lower than close competitor facility; leaving for higher pay elsewhere; low compensation/benefits in high rent community; appears to be no pool at all.	*Program growth; high turnover; increased demand due to Medicaid expansion; unable to hire LPNs.*
Physician/ Surgeon (multiple specialties)	□ 8 ◊ 5 ∇20 ⊗2 ♦2	□ 6 ◊ 5 ∇16 ⊗2
	Increased need for primary care; increased emergency department volumes; always challenging to find good clinicians in rural areas; competition from [non-safety net] settings.	*Retirements; opening a new clinic with 9 openings; adding 8 new positions—2 new clinics.*
Physician, psychiatrist (from "other")	◊ 12 ∇3 ♣1	◊ 8 ∇2 ♣1
	Shortage of psychiatrists in WA; can't compete with other agencies with higher pay/benefits; National shortage & very competitive; retirements/local competition/turnover.	*Increase in acuity needing psychotropic medications; increased access to care due to the ACA; program expansion.*
Dental assistant	∇19 ♣2	∇21 ♣4
	Significant turnover; school closure; retention problems due to low compensation/benefits; limited pipeline through local programs; no local educational institution.	*Program growth; new positions; clinic expansion.*

Occupations most frequently cited as having recent demand changes	Number of Reports by Facility Type and Examples of Reasons for Demand Change	
	Exceptionally Long Vacancies*	**Increased Demand****
Physical therapist	□11 ●1 ♦6 ♣2	□4 ♦3 ♣1
	Limited applicants; rural shortage of candidates.	*High demand for PTs industry wide.*
Psychologist, clinical	□1 ◊8 ∇7 ♦1 ♣1	◊6 ∇8 ♦1 ♣2
	Non-profit salary constraints; workforce shortage; rural region, pay, commute, poor area, partner/spouse has few employment prospects.	*Increased demand for integrated care utilizing psychologists; Medicaid expansion and integration [of behavioral and physical health].*
Marriage and Family Counselor	◊12 ∇4 ♣1	◊9 ∇5 ♣1
	Competing agencies; rural location with multi-lingual (Spanish-English) skills needed for clients; limited trained staff who want to do outpatient services with children and youth.	*New clinic; program expansion and need for dual licensed/credential [providers]; increased access to care due to the ACA; many schools now seeking our assistance placing counselors directly in schools.*
Peer counselor	◊13 ∇1	◊12
	Inadequate # of employable individuals; getting … state required training is difficult & expensive due to travel; Minimal workforce…that are solid in their recovery, demonstrate professionalism and have work experience; Nature of Peer Counselor role.	*Turnover; state WISe program requirements; not enough funding to support other positions.*

Data Source: Washington's Health Workforce Sentinel Network. http://www.wtb.wa.gov/healthsentinel/
**Long Vacancies = Sentinels report exceptionally long vacancies for open positions for an occupation in the 3 -4 months before the reporting period.*
***Increased Demand = Sentinels report an increase in the usual demand for an occupation in the 3 - 4 months before the reporting period.*

Employers described a variety of workforce training and skills development needs for their new and current workers. These varied across settings, but following are recent examples from those employing behavioral health occupations.

- The top training needs reported by employer sentinels from behavioral-mental health and substance use treatment facilities included Core Content Training (basic crisis counseling skills and services, data collection, and stress management techniques) for **chemical dependency professionals.**
- Across settings, more training was needed to introduce staff to integrated behavioral-physical healthcare models,to meet regulatory and administrative requirements such as Medicaid documentation **for chemical dependency professionals** and **mental health counselors**, and for effective use of electronic health records and health information technology across occupations.
- From a psychiatric/substance abuse hospital, the need for chemical dependency training for generalist **nurse practitioners** (as opposed to psychiatric/mental health nurse practitioners) was cited as a need in that field.

Findings for all questions asked of employer sentinels across occupations, facility types, and geographic areas of the state can be viewed on the Sentinel Network website at http://www.wtb.wa.gov/healthsentinel/.

Use of Sentinel Network Findings

Information from the Sentinel Network has already been used for workforce planning, including projecting recruitment needs, setting policy, informing education and training, writing grants, advocacy, and to discuss local and regional issues such as nursing demand concerns. One key long-term use of the Sentinel Network would be to provide the critical linkage between education and industry. For example, the Sentinel Network could provide the necessary data to help justify addition of an educational program, or adapt curriculum to address healthcare skills needed by new and incumbent workers.

Collecting, analyzing, and disseminating health workforce demand data to inform health workforce planning can be costly and time-consuming, often with significant delay between data collection and availability. As a response, Washington's Sentinel Network was designed to regularly detect and provide the necessary information to connect the network of industry, education and policy stakeholders and promote rapid responses to emerging health workforce demand changes.

The Sentinel Network has been used in discussions and presentations locally (such as ACH boards), statewide (to various healthcare groups and meetings), and nationally (at conferences on health workforce research and policy). At least one state is working with the University of Washington Center for Health Workforce Studies to adapt the Sentinel Network to that state's needs.

Respondents to a feedback survey reported sharing information with other people in their organizations (e.g., directors, CEOs, analysts, clinical and other staff), local college boards of directors, and other professionals outside the organization. (http://www.wtb.wa.gov/healthsentinel/SentinelNetworkEvaluationReport2017-10-5.pdf)

The Future of the Sentinel Network

Funding for the Sentinel Network, from Washington's Health Care Authority through its Healthier Washington initiative, ends in January, 2018. This is a critical time, as the state's Accountable Communities of Health are beginning their workforce planning, and the Sentinel Network is one of the few sources offering regional-specific data. The Council received a presentation in their November meeting about the Network that highlighted this concern. Members were very engaged and interested in pursuing additional funding opportunities to allow this program to continue in the future. At this time, there is no funding source identified to continue the program, but members are actively searching out opportunities.

Behavioral Health Workforce Assessment

The Council was actively involved in the development of an 18-month Behavioral Health Workforce Assessment, led by the Workforce Board, in collaboration with the University of Washington Center for Health Workforce Studies, and Agnes Balassa, a local facilitator.

In 2016 the Workforce Board was charged by Governor Inslee to engage in a detailed analysis of the behavioral health workforce, and to develop recommendations to policymakers on ways to address challenges of Washingtonians in accessing behavioral health services, particularly in light of the state's goal of integrating behavioral and physical health services by 2020. The project was funded through Governor Inslee's Workforce Innovation and Opportunity Act (WIOA) discretionary funds.

This work was split into two phases. In Phase I (July-December 2016), the project focused on engaging stakeholders to establish consensus on workforce-related major barriers to serving behavioral health needs, and developing early recommendations to the Governor and Legislature to address those barriers. Phase II focused strongly on collecting qualitative and quantitative data on behavioral health occupations, including supply, distribution, and their education and training requirements. Phase II also included a stakeholder process to develop final recommendations, including three stakeholder focus groups, a meeting of behavioral health CEOs and senior level leaders, and an opportunity for input from Council members.

The Council has been 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 health needs, and includes mental health and substance use disorders. Because physical health and behavioral health issues frequently go together, there is an increased focus on finding ways to treat both issues concurrently, especially in a primary care setting. True integration requires multiple team members to work together to create a shared treatment plan, to better serve the "whole person" and their individual health issues.

Approximately 250 people participated in this project from across the state, representing providers, hospitals, tribes, labor organizations, community health centers, educational institutions, and government agencies. For more information about the Behavioral Health Workforce Assessment, including the full report, please see: http://wtb.wa.gov/behavioralhealthgroup.asp.

The recommendations from the assessment are as follows:

1. Adjust reimbursement rates to better support competitive recruitment and retention of a skilled behavioral health workforce.

2. Promote team-based and integrated (behavioral and physical health) care.

- 2-a. Strongly encourage payers (Managed Care Organizations (MCOs)/health plans and Behavioral Health Organizations (BHOs)) to contract with and credential licensed community behavioral health agencies, as well as individual licensed clinicians. Work with payers to standardize the credentialing process.

- 2-b. Continue to support the use of/expansion of the Healthier Washington Practice Transformation HUB efforts to promote adoption and training of team-based, integrated behavioral health and primary care.

- 2-c. Expand the list of professions eligible to bill as mental health providers.

3. Increase access to clinical training and supervised practice for those entering behavioral health occupations.

- 3-a. Improve availability and quality of supervision for behavioral health associate-level providers.

- 3-b. Review the incentives for Licensed Mental Health Professionals (LMHPs) to become certified as Chemical Dependency Professionals (CDPs).

- 3-c. Recognize and compensate the function that community-based settings play in training new behavioral health professionals and paraprofessionals in their first year of practice.

- 3-d. Increase the ability of behavioral health clinical training sites to accept students/trainees by incentivizing and supporting clinical training sites.

4. Expand the workforce available to deliver medically-assisted behavioral health treatments.

- 4-a. Increase primary care providers' (physicians, ARNPs, PAs, pharmacists) confidence to use their full prescriptive authority for psychiatric medications.

- 4-b. Graduate more behavioral health professionals licensed as prescribers.

5. Improve workforce supply, distribution and diversity.

- 5-a. Provide financial support and other incentives to those pursuing careers in behavioral health.

- 5-b. Convene education programs with behavioral health care providers to identify mismatches between the skills of graduates/completers and expectations of employers.

- 5-c. Improve behavioral health literacy as a foundation for healthcare careers.

- 5-d. Increase the use of peer counselors and other community-based workers in behavioral health settings by continuing to expand training capacity and consistency across these occupations.

- 5-e. Expand access to the I-BEST teaching model, and encourage additional programs that include behavioral health occupations.

- 5-f. Reduce care worker turnover and improve diversity by creating career pathways and opportunities for certification of behavioral health and other paraprofessional roles.

Healthcare Personnel Data

Since forming in 2002, the Council has brought attention to current and projected shortages in healthcare occupations, and has proposed strategies to fill these gaps. Although progress has been made to close certain workforce gaps, continued shortages in key occupations are anticipated in the healthcare industry, including recruitment and retention of providers to practice in medically-underserved areas of the state. 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.

For this report, Workforce Board staff collected and analyzed the supply of completers of healthcare education programs, and reviewed data on employment information for key occupations. The data in the following pages provide greater insight on the state's projected health workforce needs. To help policymakers and others understand some of the contextual issues and conditions of this data, case studies on nursing assistants and medical assistants are provided. The report also provides potential follow-up questions for policymakers and stakeholders.

Healthcare Education/Training Program Completions

An increasing number of Washington residents 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 recent state reinvestment in the Health Professional Loan Repayment and Scholarship program.

Supply information includes all public and private degree-granting schools in Washington as well as 300+ private career schools offering short-term training and certificates. The following table shows completions for over 60 healthcare education and training programs for the time period spanning July 1, 2015 to June 30, 2016 (labeled 2016 for ease of reading). The table includes the five year average annual completion for each training program for perspective. The column containing the 2016 Program Completions is **color coded**, with numbers in **green** indicating an increase in completions from the average, **black** meaning the program stayed static, and numbers in **red** ink indicates a reduction in completions.

NOTE: **Completion numbers do not necessarily translate to workers filling positions.** Some programs require additional training, clinical work, licensing/certification requirements, or residency after completion, so program completers may not be able to immediately enter the workforce. In addition, there are practice areas that are experiencing more severe workforce gaps due to increasing demand for services, new regulations, challenges with recruitment and retention, and other factors. Frequently cited examples include long-term care and behavioral health.

Healthcare Education/Training Program Completions

Education Program Area	2012-2016 Completion Average	2016 Program Completers
Acupuncture and Oriental Medicine	71	71
Athletic Training/Trainer	32	22
Audiology/Audiologist	14	13
Audiology/Audiologist and Speech-Language Pathology/Pathologist	119	54
Cardiovascular Technology/Technologist	7	21
Chemical Dependency Professionals*	407	407
Clinical Laboratory Science/Medical Technology/Technologist	26	27
Clinical Nurse Leader	16	17
Clinical/Medical Laboratory Assistant	68	57
Clinical/Medical Laboratory Technician	18	32
Community Health Services/Liaison/Counseling	58	92
Dental Assisting/Assistant	1220	1087
Dental Hygiene/Hygienist	228	224
Dentistry	64	65
Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	86	88
Dietetics/Dietitian	26	34
Electrocardiograph Technology/Technician	34	68
Emergency Care Attendant (EMT Ambulance)	779	731
Emergency Medical Technology/Technician (EMT Paramedic)	237	363
Health Information/Medical Records Technology/Technician	202	213
Health Unit Coordinator/Ward Clerk	74	51
Hearing Instrument Specialist	23	25
Home Health Aide/Home Attendant**	559	1102
Hypnotherapy/Hypnotherapist	286	174
Licensed Practical/Vocational Nurse Training	914	653
Marriage and Family Therapists*	186	159
Massage Therapy/Therapeutic Massage	1231	1222
Medical Administrative/Executive Assistant and Medical Secretary	524	355
Medical Insurance Coding Specialist/Coder	401	306
Medical Insurance Specialist/Medical Biller	109	87
Medical Office Assistant/Specialist	162	196
Medical Office Management/Administration	90	91
Medical Radiologic Technology/Science—Radiation Therapist	107	93
Medical Reception/Receptionist	176	129

Education Program Area	2012-2016 Completion Average	2016 Program Completers
Medical Transcription/Transcriptionist	78	65
Medical/Clinical Assistant	2662	2163
Medicine***	214	203
Mental Health Counselors*	389	417
Naturopathic Medicine/Naturopathy	95	138
Nursing Assistant/Aide and Patient Care Assistant/Aide	6447	6652
Occupational Therapist Assistant	102	80
Occupational Therapy/Therapist	85	88
Ophthalmic Technician/Technologist	12	22
Orthotist/Prosthetist	20	19
Osteopathic Medicine/Osteopathy	70	70
Pharmacy	189	221
Pharmacy Technician/Assistant	560	431
Phlebotomy Technician/Phlebotomist	724	763
Physical Therapy Technician/Assistant	158	162
Physical Therapy/Therapist	113	115
Physician Assistant	104	145
Psychiatric/Mental Health Nurse/Nursing	11	12
Psychiatric/Mental Health Services Technician	37	43
Psychologist*	83	83
Public Health, General	200	290
Radiologic Technology/Science—Radiographer	114	112
Registered Nursing/Registered Nurse	3560	3454
Respiratory Therapy Technician/Assistant	65	58
Social Worker*	505	488
Speech-Language Pathology/Pathologist	99	104
Sterile Processing Technology/Technician	16	42
Surgical Technology/Technologist	141	153
Vocational Rehabilitation Counseling/Counselor	22	26

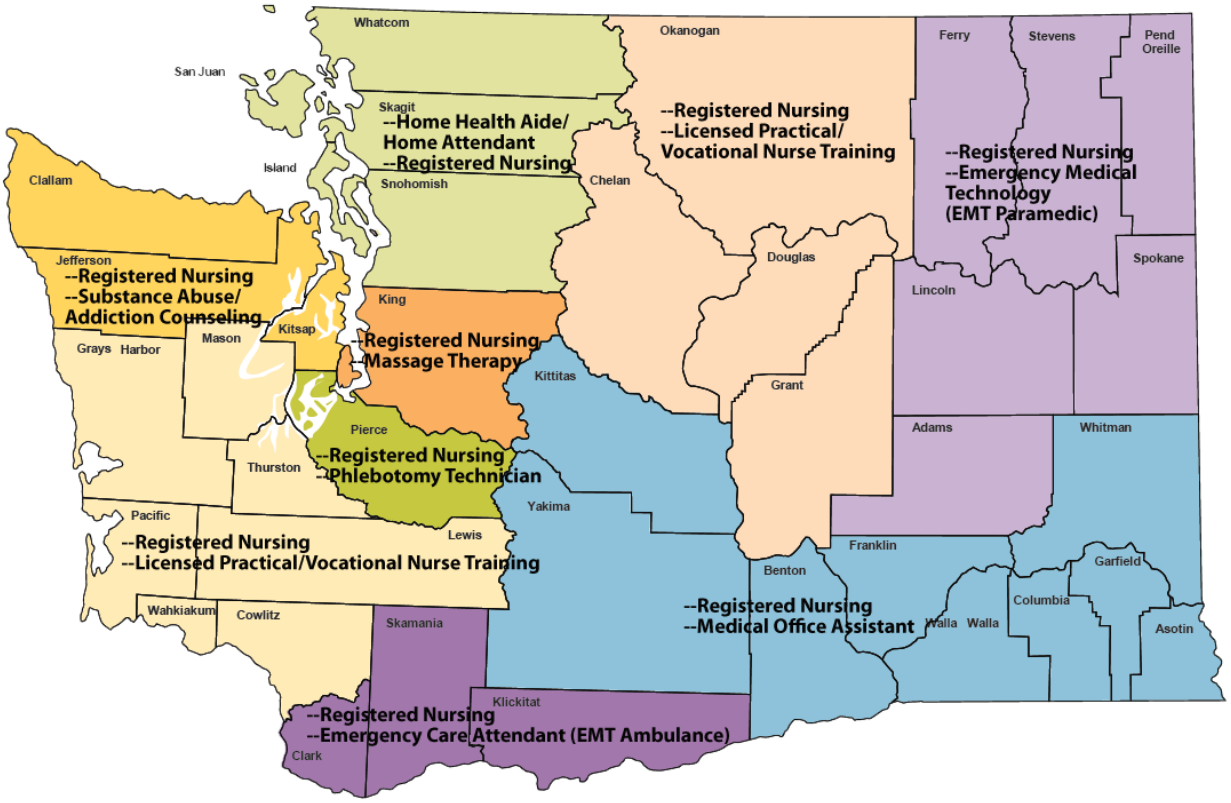
Data Source: The Integrated Postsecondary Education Data System (IPEDS) 2016; Workforce Board Data Reporting System 2016 for private career school completions.
** Source: University of Washington, Center for Health Workforce Studies–Behavioral Health Workforce Assessment, IPEDS.*
***Does not include program completions for Home Care Aides who complete a training program outside of an education institution after high school. The union that represents many Home Care Workers around the state, SEIU 775, estimates that their training program generated over 4900 completions over the 2015-2016 time period.*
****Completion of medical school. These completers still must undergo three plus years of residency training before they can begin to practice.*

Health Program Completions by Workforce Development Area

To provide some regional data for policymakers, the Workforce Board has sorted healthcare program completers into Accountable Communities of Health (ACH) regions based on the location of their education and training institution. A caveat: This data is where a student went to school, not their home address, and some completers may choose to work outside of the geographic area in which they were trained.

Since the nursing assistant (NA) and medical assistant (MA) training programs were almost universally the top two training programs in each of the state's workforce areas, the **following map omits those programs** to better highlight regional education specialties. Below you can see the most common healthcare program completions for 2016 in each of the state's ACH regions.

2016 Completions by Accountable Communities of Health Region
(Omits Nursing Assistant and Medical Assistant Completions)



Data Source: The Integrated Postsecondary Education Data System (IPEDS) 2016; Workforce Board Data Reporting System 2016 for private career school completions.

Healthcare Employment Data

On behalf of the Council, the Workforce Board analyzes employment data and projected openings for selected healthcare occupations. The data includes an analysis of approximately 80 healthcare occupations, including the reported average educational program requirement (as reported by the federal Bureau of Labor Statistics), current employment numbers for that occupation, the projected

annual net increase in open positions for that occupation, and finally, given career changes and retirements, a projection of the actual annual openings expected for this occupation.

The case studies in this section on medical assistants and nursing assistants illustrate that at times, there is more behind the data than simple numbers would suggest. The data does not currently include information on individuals no longer practicing but retain their license, or providers who serve Washington residents and practice through an endorsement of their license, but reside in another state. Most significant is the challenge and expense of obtaining regionally-specific data. There may be a distribution issue in some communities, where the number of educated healthcare professionals is higher than the number of available job openings, while other areas of the state struggle to fill open positions.

Health workforce data is 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 arriving at a firm answer to this question could be even more challenging.

State-level data on health occupations is generally available and accessible. Even so, this data is often far from complete. Meanwhile, obtaining local-level information can be challenging and costly. Accessing health workforce data without an analysis of additional factors impacting the data 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. The Health Workforce Industry Sentinel Network (described on page 4), could provide the bridge to resolve many of these challenges—particularly for regional data on emerging changes in healthcare personnel needs. However, as described on page 9, funding for this program is ending in January of 2018, though Council members are seeking additional funding sources.

Health Workforce Employment Data

Occupation Title	Average Educational Requirement	Current Employment	Annual net Increase in Employment	Projected Annual Openings
Ambulance Drivers and Attendants	HS diploma or equivalent	**287**	**3**	**8**
Anesthesiologists	Doctoral or professional degree	**468**	**11**	**24**
Athletic Trainers	Bachelor's degree	**326**	**10**	**15**
Audiologists	Doctoral or professional degree	**528**	**16**	**28**
Cardiovascular Technologists and Technicians	Associate's degree	**997**	**35**	**51**
Child, Family, and School Social Workers	Bachelor's degree	**8,495**	**116**	**320**
Chiropractors	Doctoral or professional degree	**1,818**	**66**	**100**
Clinical, Counseling, and School Psychologists	Doctoral or professional degree	**4,311**	**89**	**176**
Community Health Workers	HS diploma or equivalent	**1,405**	**24**	**50**
Counselors, All Other	Master's degree	**433**	**9**	**18**

Occupation Title	Average Educational Requirement	Current Employment	Annual net Increase in Employment	Projected Annual Openings
Dental Assistants	Postsecondary certificate	**11,191**	**251**	**531**
Dental Hygienists	Associate's degree	**6,174**	**143**	**231**
Dental Laboratory Technicians	HS diploma or equivalent	**1,297**	**28**	**64**
Dentists, General	Doctoral or professional degree	**3,024**	**71**	**124**
Diagnostic Medical Sonographers	Associate's degree	**1,399**	**47**	**70**
Dietetic Technicians	Associate's degree	**548**	**12**	**16**
Dietitians and Nutritionists	Bachelor's degree	**1,319**	**28**	**36**
Educational, Guidance, School, and Vocational Counselors	Master's degree	**5,556**	**104**	**215**
Emergency Medical Technicians and Paramedics	Postsecondary certificate	**3,629**	**39**	**94**
Epidemiologists	Master's degree	**300**	**4**	**13**
Exercise Physiologists	Bachelor's degree	**320**	**13**	**14**
Family and General Practitioners	Doctoral or professional degree	**2,002**	**27**	**79**
Genetic Counselors	Master's degree	**60**	**2**	**3**
Hearing Aid Specialists	HS diploma or equivalent	**485**	**13**	**17**
Home Health & Personal Care Aides	Training varies by employer	**50,841**	**900**	**1,367**
Internists, General	Doctoral or professional degree	**428**	**6**	**17**
Licensed Practical and Licensed Vocational Nurses	Postsecondary certificate	**7,511**	**84**	**297**
Magnetic Resonance Imaging Technologists	Associate's degree	**894**	**21**	**36**
Marriage and Family Therapists	Master's degree	**655**	**9**	**22**
Massage Therapists	Postsecondary certificate	**10,017**	**340**	**399**
Medical and Clinical Laboratory Technicians	Associate's degree	**3,350**	**72**	**156**
Medical and Clinical Laboratory Technologists	Bachelor's degree	**3,332**	**75**	**159**
Medical Appliance Technicians	HS diploma or equivalent	**147**	**4**	**8**
Medical Assistants	Postsecondary certificate	**13,481**	**332**	**603**
Medical Equipment Preparers	HS diploma or equivalent	**1,832**	**41**	**78**
Medical Records and Health Information Technicians	Postsecondary certificate	**4,686**	**102**	**196**
Medical Transcriptionists	Postsecondary certificate	**1,944**	**16**	**55**
Mental Health and Substance Abuse Social Workers	Bachelor's degree	**2,823**	**48**	**115**
Mental Health Counselors	Master's degree	**4,951**	**87**	**187**
Nuclear Medicine Technologists	Associate's degree	**367**	**7**	**13**
Nurse Anesthetists	Master's degree	**634**	**15**	**29**
Nurse Midwives	Master's degree	**59**	**2**	**3**
Nurse Practitioners	Master's degree	**2,847**	**93**	**159**

Occupation Title	Average Educational Requirement	Current Employment	Annual net Increase in Employment	Projected Annual Openings
Nursing Assistants	Postsecondary certificate	**29,641**	**471**	**1,115**
Obstetricians and Gynecologists	Doctoral or professional degree	**894**	**20**	**43**
Occupational Therapists	Master's degree	**3,129**	**87**	**133**
Occupational Therapy Aides	HS diploma or equivalent	**96**	**3**	**6**
Occupational Therapy Assistants	Associate's degree	**393**	**10**	**21**
Ophthalmic Laboratory Technicians	HS diploma or equivalent	**367**	**7**	**17**
Ophthalmic Medical Technicians	Postsecondary certificate	**1,498**	**41**	**54**
Opticians, Dispensing	HS diploma or equivalent	**1,448**	**40**	**76**
Optometrists	Doctoral or professional degree	**1,038**	**32**	**68**
Oral and Maxillofacial Surgeons	Doctoral or professional degree	**46**	**1**	**2**
Orthodontists	Doctoral or professional degree	**60**	**1**	**2**
Pediatricians, General	Doctoral or professional degree	**244**	**3**	**10**
Pharmacists	Doctoral or professional degree	**6,116**	**94**	**228**
Pharmacy Aides	HS diploma or equivalent	**1,374**	**8**	**35**
Pharmacy Technicians	Postsecondary certificate	**8,066**	**135**	**203**
Phlebotomists	Postsecondary certificate	**2,345**	**57**	**105**
Physical Therapist Aides	HS diploma or equivalent	**929**	**30**	**56**
Physical Therapist Assistants	Associate's degree	**1,253**	**37**	**73**
Physical Therapists	Doctoral or professional degree	**4,980**	**143**	**267**
Physician Assistants	Master's degree	**2,515**	**78**	**132**
Physicians and Surgeons, All Other	Doctoral or professional degree	**7,946**	**173**	**383**
Podiatrists	Doctoral or professional degree	**101**	**1**	**3**
Psychiatric Aides	HS diploma or equivalent	**224**	**7**	**12**
Psychiatric Technicians	Postsecondary certificate	**674**	**18**	**23**
Psychiatrists	Doctoral or professional degree	**347**	**7**	**16**
Psychologists, All Other	Master's degree	**605**	**6**	**18**
Radiation Therapists	Associate's degree	**500**	**13**	**24**
Radiologic Technologists	Associate's degree	**4,247**	**96**	**164**
Registered Nurses*	Postsecondary certificate	**57,683**	**1,432**	**2,746**
Rehabilitation Counselors	Master's degree	**6,286**	**99**	**227**
Respiratory Therapists	Associate's degree	**2,190**	**60**	**106**
Respiratory Therapy Technicians	Associate's degree	**87**	**-**	**1**
Social Workers, All Other	Bachelor's degree	**871**	**7**	**28**
Sociologists	Master's degree	**102**	**2**	**3**
Speech-Language Pathologists	Master's degree	**3,561**	**90**	**174**

Occupation Title	Average Educational Requirement	Current Employment	Annual net Increase in Employment	Projected Annual Openings
Substance Abuse and Behavioral Disorder Counselors	Bachelor's degree	**3,894**	**74**	**154**
Surgeons	Doctoral or professional degree	**792**	**18**	**39**
Surgical Technologists	Postsecondary certificate	**2,160**	**57**	**75**

Sources: The Integrated Postsecondary Education Data System (IPEDS) 2016; Workforce Board Student Data Reporting System 2015 for private career school completions; Bureau of Labor Statistics. Data for annual net increase and projected annual openings is for the time period spanning 2015-2020.

*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, Limitations and Potential Discrepancies

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.

The Council has selected twokey 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: Medical Assistant Data Discrepancies

For several years the Council's data has shown a greater number of medical assistants (MA) being trained than job vacancies. However, Council members are also hearing from facilities about great challenges in hiring medical assistants due to a lack of applicants. The Sentinel Network data collection also found that seven out of nine ACH regions are home to facilities reporting exceptionally long vacancies for medical assistant job openings. These two situations highlight where health workforce educational outputs and projected job openings may not be telling the entire story.

What could explain this discrepancy between the data for supply and the reported demand from facilities? One potential contributor to the data's reported "surplus" could be issues with becoming credentialed as a Medical Assistant-Certified (MA-C). How many complete the education program but not the test required for certification? Is there any duplication impacting the number to account for those who are Medical Assistant-Registered but who received their MA-C credential later in the year? The distribution of newly trained MAs is also an issue; while some urban areas may have more trained workers than openings, other, rural areas may struggle to recruit staff. More research is

necessary to accurately identify potential answers to the difference between the number of certified medical assistants and the projected demand.

Case Study: Nursing Assistant Oversupply?

Similar to medical assistants, Council data has also shown a potentially concerning difference between the number of Certified Nursing Assistants (CNA) and the projected job openings. While the training for this position is relatively short, it still requires an investment of tuition and fees, as well the time required to complete the training, so it's important to understand whether there truly is an oversupply of trained CNAs when compared with the available jobs. Despite the data showing a surplus of potential workers, Council members are hearing about challenges in hiring CNAs, particularly in long term care and home health care facilities.

Again, similar to the situation with MAs, there are no easy answers; just more factors to consider. Some nursing programs encourage their students to have the nursing assistant credential to begin the program. This ensures students have basic care competencies, but could impact the supply numbers, as many program completers aren't actually employed as CNAs. How many of those who complete the program are passing the certification test, or even taking the test? Are transportation challenges limiting the accessibility of the testing site? Does Washington's rising minimum wage impact retention in these positions? Are potential CNAs taking jobs in other fields due to perceived low pay for oftentimes difficult work? Are CNAs distributed equitably across the state, or do less populated areas report a higher shortage? The data also does not account for the needs of an aging population; as life expectancies increase, more people will need care from these frontline workers.

Finally, since many nursing assistants are hired before their training, and receive a Nursing Assistant-Registered (NA-R) credential while they pursue their Nursing Assistant-Certified (NA-C) credential, there is likely some duplication in the supply of workers due to double-counting the NA-C and NA-R credentials for those who received both in the latest data available.

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 are 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 roles include providing updates to policymakers on health workforce supply and demand, tracking progress on implementation of new programs, and bringing together key stakeholders to develop and advocate for sustainable solutions. The Council identifies policy and funding priorities to bring to the Governor, Legislature, and other policymakers and stakeholders. Washington grapples with a shortage of healthcare workers, in the midst of an increasingly diverse and aging population needing more services and rapid changes in health care delivery. The Council and its partners continue to focus attention on how to best invest in the state's healthcare workforce pipeline.