

Health Workforce Council



2018 Annual Report



December 2018

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Workforce Training and Education Coordinating Board

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Health Workforce Council History & Role

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 ensure healthcare employers have a sufficient supply of skilled workers and professionals, and that quality healthcare services are accessible to all Washingtonians across the state, including in rural and medically-underserved areas.

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 healthcare delivery. The Council and its partners continue to focus attention on how to best invest in the state's healthcare workforce pipeline.

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).

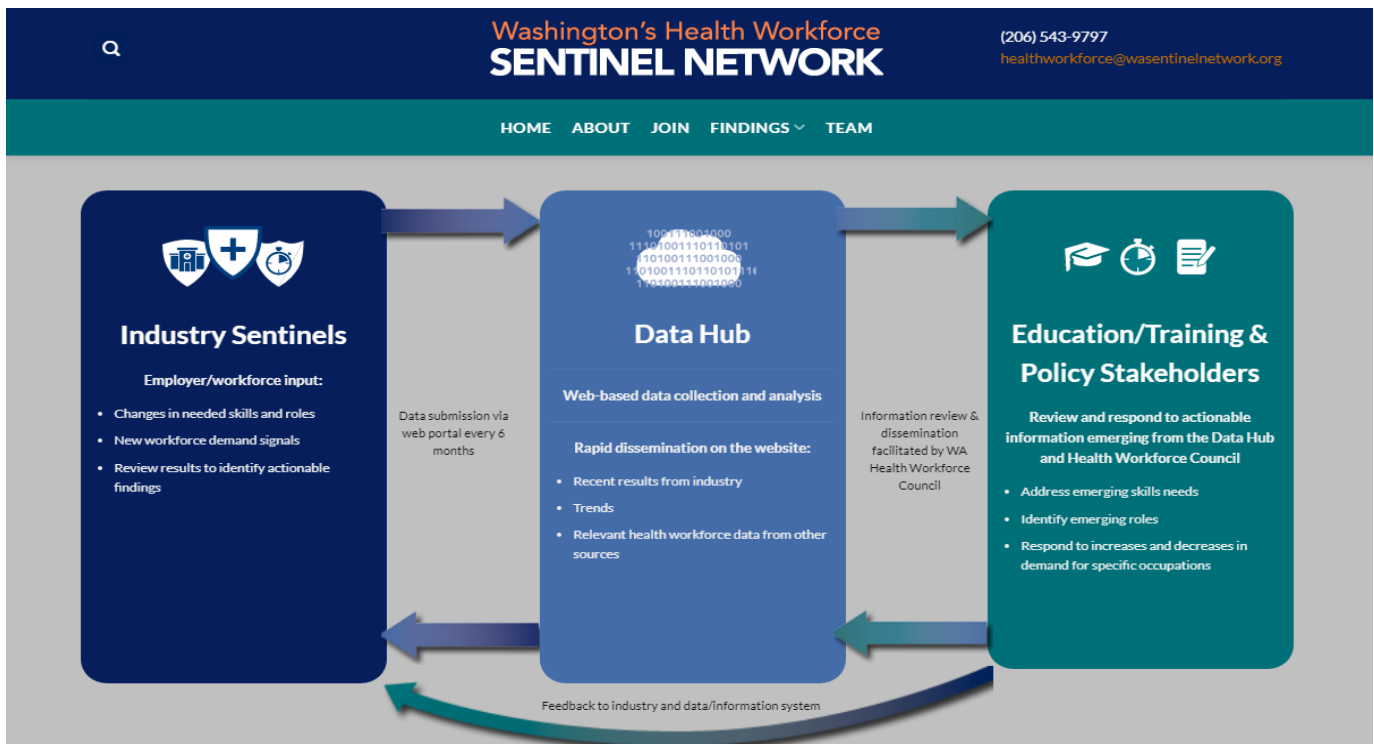
Member Name	Organization
Suzanne Allen, M.D., Chair	Vice Dean for Academic, Regional & Rural Affairs, University of Washington School of Medicine
Kevin McCarthy, Vice-Chair	President, Renton Technical College
Nova Gattman	Council Staff Coordinator
Carol Moser	Accountable Communities of Health, Rural Representative
Alicia Fehrenbacher	Accountable Communities of Health, Urban Representative
Dan Ferguson	Allied Health Center of Excellence
Marianna Goheen	Office of Superintendent of Public Instruction
Diane Sosne	SEIU Healthcare 1199NW
Amy Persell	SEIU 775 Benefits Group
Jan Yoshiwara	State Board for Community and Technical Colleges
Katherine Lechner	Washington Association for Community Health
Deb Murphy	Washington Association of Housing and Services for the Aging
Sofia Aragon	Washington Center for Nursing
Alexis Wilson	Washington Health Care Association
Joe Roszak	Washington Council for Behavioral Health
Cathy Dahlquist	Washington State Dental Association
John Wiesman	Washington State Department of Health
Ian Corbridge	Washington State Hospital Association
Russell Maier	Washington State Medical Association
Joelle Fathi	Washington State Nurses Association
Daryl Monear	Washington Student Achievement Council
Laura Zaichkin	Washington State Health Care Authority
Eleni Papadakis	Workforce Training and Education Coordinating Board

Council Project Spotlight: Health Workforce Sentinel Network

The Washington State Health Workforce Sentinel Network links the healthcare sector with policymakers, workforce planners and educators to identify and respond to changing demand for healthcare workers, with a focus on identifying newly emerging skills and roles required by employers. The Sentinel Network is an initiative of Washington’s Health Workforce Council, conducted collaboratively by Washington’s Workforce Board and the University of Washington’s Center for Health Workforce Studies. Funding to launch the Sentinel Network came from the Healthier Washington initiative, with bridge funding from Governor Inslee’s office until June 30, 2019.

Washington’s Health Workforce Sentinels are representatives of diverse healthcare facilities throughout the state who have volunteered to provide regular information about their evolving workforce needs. Sentinels provided information about the facility types they represent, counties from which their client and/or patient population is drawn, and recent health workforce concerns. Sentinels respond to questions about exceptionally long vacancies in positions for which they are attempting to hire, recent changes in turnover and workforce demand, skills and training needed for new and incumbent (existing) workers, and any new roles and occupations they have begun to employ.

Workforce demand findings since October, 2016 are available on the Washington Health Workforce Sentinel Network website and dashboard (<http://www.wasentinelnetwork.org>).



Recent Findings

Employer sentinels from many different healthcare settings and across the state have provided data to the Sentinel Network. The following tables show the occupations most frequently cited as experiencing demand changes in the past year by Accountable Community of Health (ACH) regions¹ of the state, as well as statewide by specific facility types. Frequently cited reasons for high turnover and retention problems include keeping competitive with salaries, the high level—or acuity—of care required by the patients at the facility, not enough career advancement opportunities, and difficulty recruiting in rural areas. More details for specific occupations and facility types can be found on the Sentinel Network web dashboard: <http://wasentinelnetwork.org/>.

Occupations with Exceptionally Long Vacancies reported by ACHs

Accountable Community of Health (ACH) <i>(Breakdown of counties on next page)</i>	Occupations cited most frequently as having exceptionally long vacancies ²	
	Most frequently cited	Next most frequently cited (including ties)
Better Health Together	Registered Nurse	Medical Assistant Nursing Assistant
Cascade Pacific Action Alliance	Registered Nurse	Medical Assistant Nursing Assistant Physician (Family Medicine, Psychiatrist, Emergency Medicine)
Greater Columbia	Registered Nurse	Licensed Practical Nurse Nursing Assistant Physician (Family Medicine)

¹ Accountable Communities of Health bring together leaders from multiple health sectors around the state to align resources, promote health equity, and create and collaborate on local health improvement plans. There are nine ACHs.

² Occupations cited are influenced by the number and types of facilities reporting. The Sentinel Network web dashboard provides more information about occupations specifically cited by different facility types.

Healthier Here	Registered Nurse	Nursing Assistant Medical Assistant Licensed Practical Nurse
North Central	Registered Nurse	Medical/Clinical Lab Technologist Mental Health Counselor Nurse Practitioner Physician (Family Medicine)
North Sound	Medical Assistant	Mental Health Counselor Physician (Family Medicine, Pediatrician, Psychiatrist)
Olympic	Physician (General Internal Medicine, Family Medicine)	Dental Assistant Medical Assistant Registered Nurse Nurse Practitioner
Pierce	Registered Nurse	Licensed Practical Nurse Medical Assistant Nursing Assistant
Southwest Washington	<i>Few responses with multiple occupations at comparable rank.</i>	

Breakdown of counties by ACH

- **Better Health Together** - Adams, Ferry, Lincoln, Pend Oreille, Spokane, and Stevens.
- **Cascade Pacific Action Alliance** - Cowlitz, Grays Harbor, Lewis, Mason, Pacific, Thurston, and Wahkiakum.
- **Greater Columbia** - Asotin, Benton, Columbia, Franklin, Garfield, Kittitas, Walla Walla, Whitman, and Yakima.
- **HealthierHere** – King.
- **North Central** - Chelan, Douglas, Grant, and Okanogan.
- **North Sound** - Snohomish, Skagit, Island, San Juan, and Whatcom.
- **Olympic** - Clallam, Jefferson and Kitsap.
- **Pierce ACH** – Pierce.
- **Southwest Washington** - Clark, Klickitat, and Skamania counties.

**Occupations with Retention/Turnover Difficulties by Facility Type,
as reported by Washington Sentinels in 2018**

Facility type*	Most frequently cited occupation(s)
Federally qualified health center (FQHC) or community clinic	Physician (Family medicine, OB/Gyn, Psychiatrist (adult and child))
Primary care clinic (not FQHC or community clinic)	Medical Assistant
Dental clinic	Dental Assistant
Behavioral-mental health clinic/outpatient mental health and substance abuse clinic	Mental Health Counselor Chemical Dependency Professional/Substance Use and Behavioral Disorder Counselor
Skilled nursing facility (SNF)	Nursing Assistant Registered Nurse
Nursing and personal care facility (not SNF)	Nursing Assistant Licensed Practical Nurse
Acute care hospital (25 beds or fewer)	Registered Nurse Physician (Family medicine)
Acute care hospital (more than 25 beds)	Registered nurse Physician (Family medicine, general internal medicine)

*Responses for more facility types and greater detail about occupations and reasons for retention/turnover difficulties can be viewed on the Sentinel Network web [dashboard](#).

Through the Sentinel Network, healthcare employers described a variety of changes in needs for onboarding/orientation of new employees and training of the incumbent workforce. Onboarding and training needs varied by setting and occupation, but some examples are described below.

Examples of Recent Onboarding/Orientation and Training Changes Reported by Sentinels, by Setting and Occupation

- Medical assistant: New hire skills training/verification in behavioral-mental health clinic/outpatient mental health and substance abuse clinics.
More one-on-one training for longer periods of time in primary care clinics.
- Registered nurse: Automated the human resources onboarding process to hire more quickly in small acute care hospitals.
Quality measures and population health in large acute care hospitals.
- Chemical dependency professional: Integrated [substance use disorder and mental health treatment] as well as [understanding the culture of] primary care, and trauma-informed care and transgender care in behavioral-mental health clinic/outpatient mental health and substance abuse clinics.
- Mental health counselor: Medication assisted treatment training in FQHCs/community health clinics.
- Physicians: Buprenorphine training for primary care providers in FQHCs/community health clinics.
- Dental assistant: Ever-increasing regulations that require documented training in dental clinics.

Beginning in 2018, the Sentinel Network asked respondents to describe if their healthcare facility served primarily rural residents, a combination of rural and urban residents, or primarily urban residents. The table on the next page provides insights about how workforce demand varies across rural and urban-serving sites.

**Occupations with Exceptionally Long Vacancies in 2018,
by Level of Rural/Urban-Serving of Facility Type**

Facility Type*	Facility serves:		
	Mostly rural residents	A combination of urban and rural residents	Mostly urban residents
Federally qualified health center (FQHC) or community clinic providing care free or on sliding fee scale	Physician/Surgeon	Physician/Surgeon	Chemical Dependency Professional
Primary care medical clinic (not FQHC or community clinic)	Physician/Surgeon	Medical Assistant	Medical Assistant
Dental clinic	Dental Assistant	Dental Assistant	Dental Assistant
Behavioral-mental health clinic/outpatient mental health and substance abuse clinic	Behavioral Health Technician, Mental Health Counselor	Chemical Dependency Professional, Mental Health Counselor	N/A**
Skilled nursing facility	Nursing Assistant	Licensed Practical Nurse, Registered Nurse, Nursing Assistant	Registered Nurse
Nursing & personal care facility (not a Skilled Nursing or Intermediate Care Facility)	N/A**	Licensed Practical Nurse, Nursing Assistant	Nursing Assistant
Acute care hospital (25 beds or fewer)	Registered Nurse	Registered Nurse	Medical Assistant, Registered Nurse, Nursing Assistant
Acute care hospital (more than 25 beds)	Medical Assistant, Registered Nurse, Physician/Surgeon	Anesthesia Technician, Physician/Surgeon	Registered Nurse, Physician/Surgeon

*Responses for more facility types and more details about occupations and reasons for long vacancies can be viewed on the Sentinel Network web [dashboard](#).

**No responses provided to this question by facility type serving this population.

Use of Sentinel Network Findings

Information about the Sentinel Network and its findings have been used to inform health workforce planning in Washington, including assessments of the state's behavioral health workforce and medical assistant workforce, in discussions and presentations for other Washington workforce planning (such as to boards of Accountable Communities of Health), and nationally (at conferences on health workforce research and policy). Multiple states have expressed interest in using the Sentinel Network model in their states.

The Future of the Sentinel Network

Funding for the Sentinel Network, from Governor Inslee's office, ends in June, 2019. Health Workforce Council members are actively engaged in pursuing funding to sustain this unique and valued program, including sponsorship from industry organizations, local planning organizations, and licensing opportunities. The Workforce Board, on behalf of the Council, has requested state funding to continue the Sentinel Network beyond the 2019 session. This funding is included in Governor Inslee's proposed December, 2018 budget.

Health Workforce Council 2018 Recommendations

The Council has identified key priorities to address healthcare personnel shortages for consideration by the Governor, Legislature, and healthcare and education leaders. The Council takes a wide view in exploring options for addressing workforce issues in the healthcare sector. These recommendations focus on options to address quality of care through education and training, equitable geographic distribution of a trained healthcare workforce to allow for broad access to care, and encouraging innovative strategies to ensure a robust pipeline for health careers.

Some items will require additional work for stakeholders in 2019. Some require legislative changes. Others require funding from policymakers. The Council approved the following recommendations as high-priority focus areas to address health workforce challenges.

The recommendations to the Governor and Legislature are as follows:

1. Support ongoing information needs for state health workforce planning.
 - Health Workforce Council Staff Support
 - Sentinel Network – Workforce Demand Information
 - Provider Surveys – Workforce Supply Information
2. Strengthen the dental health workforce pipeline.
3. Evaluate the performance of the Washington State Health Professional Loan Repayment Program.
4. Recognize and compensate the training function of community-based settings.
5. Promote integrated care through the creation of a Washington Center for Interprofessional Practice and Education.
6. Establish a Care Worker initiative to develop multi-disciplinary career pathways for frontline workers.

Recommendation Detail

1. Support ongoing information needs for state health workforce planning.

The Workforce Board has requested funding from policymakers (\$240,000/annually) in the 2019 Legislative Session to support Council activities, including ongoing efforts such as the Health Workforce Sentinel Network, and proposes that staff could be engaged in new efforts, such as more focused data analysis, stakeholder convening, and policy development. The following items provide more details on how these funds could be utilized.

- **Health Workforce Council Staff Support**

The Council supports the Workforce Board's request for dedicated policy staff for the Council, who would support the work of the Health Workforce Council by facilitating collection and analysis of needed additional data on health workforce education/training, supply, and demand. Council staff could work with relevant education, employers, labor, research and policy experts to assemble health workforce planning resources covering the range of healthcare occupations and facility types involved in providing healthcare across the state, and engage in more stakeholder-focused efforts similar to the 2017 Behavioral Health Workforce Assessment.³

- **Sentinel Network – Workforce Demand Information**

The Council requests funding to continue the operation of the Health Workforce Sentinel Network. The Sentinel Network provides key information about trends in the occupations, skills and roles needed by healthcare facilities across the state. This workforce demand information is not available from other labor data sources. For more on the Sentinel Network, see page 7.

- **Provider Surveys – Workforce Supply Information**

The Council supports funding of ongoing reviews, analyses (as needed), and comparable reporting of workforce supply data and information derived from the current mandatory healthcare provider surveys (physicians, physician assistants (PAs), osteopathic physicians, osteopathic PAs, and nurses). Reporting of these data using comparable metrics across occupations and in a consolidated source will support regional assessments (e.g., access to primary care, behavioral health) as well as support other health workforce planning goals.

³ <http://wtb.wa.gov/behavioralhealthgroup.asp>

2. Strengthen the dental health workforce pipeline.

The Council recommends a multi-pronged strategy to address dental health workforce shortages, oral healthcare disparities, and enhancements to the education pipeline for oral health professionals. A recent study, Assessing the Impact of Washington State's Oral Health Workforce on Patient Access to Care,⁴ highlighted the challenge of recruiting oral health professionals, particularly in rural areas. More on this study in our data dive on page 36.

This strategy proposes the following:

- Provide immediate high-employer demand funding for dental assistant and hygiene programs to address a severe demand for these oral healthcare roles across the state.
- Provide incentives to institutions that offer dental assisting and hygienist programs outside of traditional school hours, including nights, weekends, and online.
- Develop a marketing campaign to inform high school students, teachers, and parents, especially in rural communities, about opportunities in dental assisting programs at area skill centers. With funding, Area Health Education Centers could play this role.
- Direct education agencies, providers, and industry groups to develop a dental assistant to dental hygienist pathway program between secondary and postsecondary education, and fund two to three sites to pilot this model once completed.
- Review whether there should be a recommendation on the potential value for offering preferential admissions to hygienist programs for individuals who have already been serving as a dental assistant.

3. Evaluate the performance of the Washington State Health Professional Loan Repayment Program.

The Council requests that policymakers fund the Washington Student Achievement Council (or their contracted designee) to do an assessment of the State Loan Repayment and Scholarship Program. The last assessment was done nearly 10 years ago. The assessment should review whether the program is meeting its goal of addressing recruitment and retention issues in Health Professional Shortage Areas.

⁴ Assessing the Impact of Washington State's Oral Health Workforce on Patient Access to Care, November 2017, Davis G. Patterson, PhD, C. Holly A. Andrilla, MS, Malaika R. Schwartz, MPH, Lisa Hager, MHA, Susan M. Skillman, MS.

The program received an infusion of state funds three years ago after serious program cuts during the mid-2000s recession. As this program is our state's primary tool for retention in rural areas, a thorough review of whether it is meeting those goals, as well as a look at ways to improve access, would provide important information to policymakers.

Additionally, the assessment should examine the penalty and fee structure and make recommendations on a fair, but not overly punitive, repayment model for those individuals who accept loan repayment or scholarship and do not complete their service.

4. Recognize and compensate the training function of community-based settings.

The Council requests that the state recognize and compensate the function that community-based settings play in training new behavioral health professionals and paraprofessionals in their first year of practice, often helping them to fulfill required supervision hours prior to full licensure. The Washington Association of Community and Migrant Health Centers (WACMHC) and the Washington Council of Behavioral Health (WCBH), in coordination with the Washington Association of Alcoholism and Addiction Programs (AAP) should, with funding provided for this purpose, convene a work group of community mental health agencies, federally qualified health centers, and similar organizations that are Medicaid funded for behavioral health services, to determine which incentives would be useful, and identify the level of funding needed if financial incentives were recommended.

The Council has long recognized that a major barrier to accessing behavioral health services is tied to low reimbursement rates. Stakeholders consistently identified low reimbursement rates for behavioral health services as the root cause for challenges to paying competitive salaries, and for recruiting, educating, training, and retaining a skilled behavioral healthcare workforce, especially in settings with large numbers of Medicaid-insured patients, such as Community Behavioral Health Centers. The top recommendation in the Council's Behavioral Health Workforce Assessment (2017) report was to "Adjust reimbursement rates to better support competitive recruitment and retention of a skilled behavioral health workforce." This still remains a top Council priority, and we encourage policymakers to take action on increasing reimbursement rates to begin addressing these issues.

While this work is ongoing, the Council is recommending the Legislature explore options to address retention and training needs at community-based settings, including community mental health

agencies, SUD treatment agencies, and federally-qualified health centers (FQHCs). Because Medicaid is the primary funder of community mental health services, Medicaid capitation rates are a primary determinant of community-based Medicaid providers' ability to recruit and retain a qualified workforce.

Stakeholders and key informants participating in the behavioral health workforce assessment emphasized that low reimbursement rates mean that community-based agencies cannot compete effectively with hospitals, including the state hospitals, health system, managed care organization (MCO), or government salaries. At times, due to the reimbursement issue, providers leave for more highly paid opportunities after only one year of employment at community-based sites, and often after completing their facility-sponsored supervision requirements. As a result, these sites serve as de facto training sites, a role which is not compensated and has a disproportionate impact on the ability of these sites to meet their primary mission: to provide behavioral healthcare services. Recognizing and compensating these sites for this function may help community-based settings better retain workers. Additionally, providing such compensation would, at least partially, address reductions in standard clinical productivity as a result of time spent supervising new workers, enabling better absorption of the costs of high turnover, and/or allowing for these settings to staff appropriately to support a training function.

5. Promote integrated care through the creation of a Washington Center for Interprofessional Practice and Education.

The Council requests that policymakers create the Washington Center for Interprofessional Practice and Education. The Center could be housed at the Center of Excellence for Allied Health at Yakima Valley College or other partner health workforce or academic institutions, and would be charged with collecting existing curriculum, standardizing and aligning existing team-based education efforts, developing policy recommendations, and working with employers, labor, and Accountable Communities of Health to ensure that the new and incumbent workforce has access to standardized training. Specific goals include:

- Organize and align existing interprofessional education and clinical training programs and efforts to create efficiencies.
- Facilitate sharing of interprofessional curriculum/activities across education institutions.
- Connect and partner with the healthcare industry and labor organizations to develop student-ready environments for clinical training (e.g., encourage clinical practice environments that are consistent with interprofessional education program curriculum/competencies).

- Coordinate industry and academic efforts to develop team-based clinical environments.
- Promote expansion of interprofessional education and training efforts across the state through ongoing recruitment of new programs.

6. Establish a care worker initiative to develop multi-disciplinary career pathways for frontline care workers.

The Council requests that the state charge the Workforce Board, with funding from the state budget to support project staff, to work with the Council on an initiative focused on convening stakeholders, researching career pathway recommendations for frontline care workers, reviewing available workforce data, and developing the policy framework for a care worker career lattice over an 18-24 month time period.

Underrepresented minorities, immigrants and refugees, and others from diverse population groups often work in entry- and middle-skilled positions across the healthcare sector. Yet viable pathways to better paying healthcare positions are limited, especially for those with barriers to traditional education and training programs. National and international efforts to stem the loss of care workers by using career pathway development and increased autonomy over the work have shown success. The development of career lattices, with wage and job progression across the full spectrum of the healthcare workforce, can support the retention and advancement of these workers, resulting in a more diverse healthcare workforce, and potentially improving patient outcomes as a “reflective workforce” develops from within communities being served.

Washington’s Nursing Care Quality Assurance Commission led efforts on a Long-Term Care Task Force in 2018, and noted in the conclusion that the Legislature may want to continue the panel to further their efforts and explore whether the recommendations are having the intended impact. The Council’s recommended initiative could use the Commission’s report as a launch point to expand the scope to the full frontline care workforce.

Healthcare Personnel Data

Since forming in 2002, the Council has brought attention to current and projected workforce 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. Demand is increasing for healthcare service 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 these data, a case study on nursing assistants is provided, as well as data dives on registered nurses, medical assistants, and oral health.

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 90 healthcare education and training programs for the time period spanning July 1, 2016 to June 30, 2017 (labeled 2017 for ease of reading). The table includes the five year average annual completion for each training program for perspective.

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.

Health Education Program Title	Average Completions 2013-2017	2017 Completions
Acupuncture and Oriental Medicine	71	73
Allied Health Diagnostic, Intervention, and Treatment Professions, Other	59	17
Anesthesiologist Assistant	21	13
Athletic Training/Trainer	33	32
Audiology/Audiologist and Speech-Language Pathology/Pathologist	94	49
Clinical Laboratory Science/Medical Technology/Technologist	29	39
Clinical Nurse Leader	18	19
Clinical/Medical Laboratory Assistant	62	51
Clinical/Medical Laboratory Technician	22	26
Communication Sciences and Disorders, General	85	104
Community Health Services/Liaison/Counseling	65	69
Dental Assisting/Assistant	1191	1056
Dental Hygiene/Hygienist	227	220
Dentistry	64	63
Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	82	67
Dietetics/Dietitian	16	19
Electrocardiograph Technology/Technician	33	16
Emergency Care Attendant (EMT Ambulance)	778	808
Emergency Medical Technology/Technician (EMT Paramedic)	269	372
Environmental Health	36	33
Family Practice Nurse/Nursing	43	39
Health Information/Medical Records Administration/Administrator	47	59
Health Information/Medical Records Technology/Technician	195	165
Health Professions and Related Clinical Sciences, Other	33	6
Health Services Administration	30	31
Health Services/Allied Health/Health Sciences, General	101	205
Health Unit Coordinator/Ward Clerk	60	40
Health and Medical Administrative Services, Other	34	
Health and Wellness, General	13	12
Health/Health Care Administration/Management	128	124
Health/Medical Preparatory Programs, Other	78	66
Hearing Instrument Specialist	24	25
Histologic Technician	15	15
Home Health Aide/Home Attendant*	668	1069

Hypnotherapy/Hypnotherapist	272	219
International Public Health/International Health	26	36
Licensed Practical/Vocational Nurse Training	804	493
Long Term Care Administration/Management	19	
Marriage and Family Therapy/Counseling	60	85
Massage Therapy/Therapeutic Massage	1147	966
Medical Administrative/Executive Assistant and Medical Secretary	468	268
Medical Insurance Coding Specialist/Coder	338	230
Medical Insurance Specialist/Medical Biller	108	91
Medical Office Assistant/Specialist	186	251
Medical Office Management/Administration	87	84
Medical Radiologic Technology/Science - Radiation Therapist	107	120
Medical Reception/Receptionist	155	83
Medical Transcription/Transcriptionist	76	69
Medical/Clinical Assistant	2491	2084
Medical/Health Management and Clinical Assistant/Specialist	81	60
Medicine**	219	235
Mental Health Counseling/Counselor	42	54
Mental and Social Health Services and Allied Professions, Other	329	250
Naturopathic Medicine/Naturopathy	103	140
Nursing Administration	26	28
Nursing Assistant/Aide and Patient Care Assistant/Aide	6326	6071
Nursing Practice	15	24
Occupational Therapist Assistant	104	98
Occupational Therapy/Therapist	90	92
Ophthalmic Technician/Technologist	17	23
Orthotist/Prosthetist	21	20
Osteopathic Medicine/Osteopathy	83	131
Pharmaceutics and Drug Design	15	12
Pharmacy	188	187
Pharmacy Technician/Assistant	479	276
Phlebotomy Technician/Phlebotomist	730	734
Physical Therapy Technician/Assistant	158	139
Physical Therapy/Therapist	116	116
Physician Assistant	117	141
Pre-Physical Therapy Studies	56	48
Psychiatric/Mental Health Services Technician	36	29
Public Health Education and Promotion	17	17
Public Health, General	241	331
Public Health, Other	13	9

Radiologic Technology/Science - Radiographer	110	102
Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other	16	
Registered Nursing/Registered Nurse	3519	3476
Renal/Dialysis Technologist/Technician	14	20
Respiratory Care Therapy/Therapist	26	27
Respiratory Therapy Technician/Assistant	63	56
Somatic Bodywork	16	18
Speech-Language Pathology/Pathologist	104	108
Sterile Processing Technology/Technician	25	48
Substance Abuse/Addiction Counseling	308	238
Surgical Technology/Technologist	141	139
Therapeutic Recreation/Recreational Therapy	15	27
Veterinary Medicine	108	124
Veterinary/Animal Health Technology/Technician and Veterinary Assistant	359	319
Vocational Rehabilitation Counseling/Counselor	25	25
Yoga Teacher Training/Yoga Therapy	230	165

Data Source: The Integrated Postsecondary Education Data System (IPEDS) 2017; Workforce Board Data Reporting System 2017 for private career school completions.

**Does not include program completions for Home Care Aides who complete Basic Training 70, the training program that students take before their certification exam from the Department of Health. The union that represents many Home Care Workers around the state, SEIU 775, estimates that this training program generated over 5200 completions in calendar year 2017.*

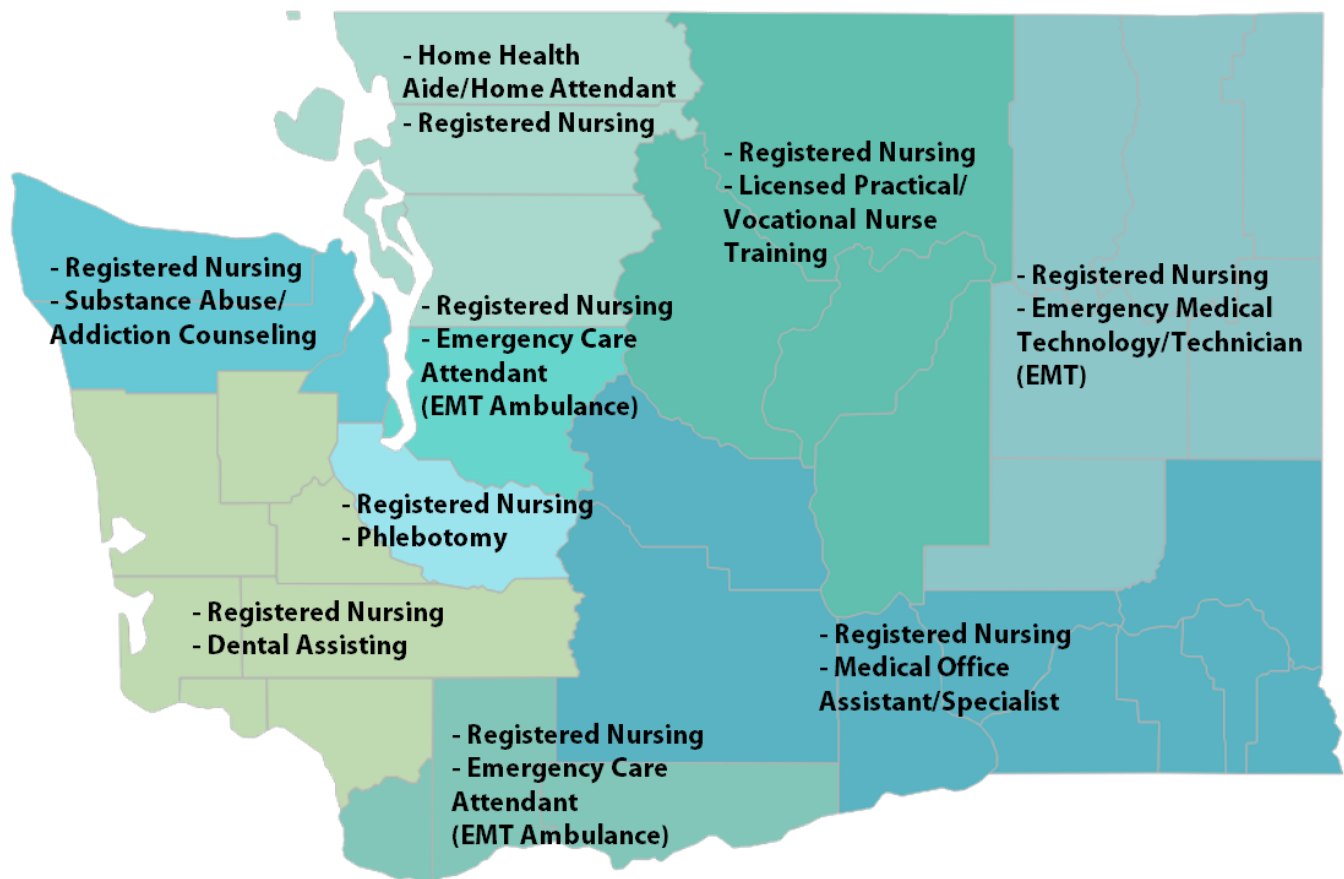
***Completion of medical school. These completers still must undergo three or more years of residency training before they can begin to practice.*

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: These data are 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.

Nursing assistant (NA) and medical assistant (MA) training programs were almost universally the top two training programs in each of the state's workforce area. The **following map omits those programs** to better highlight regional education specialties. Below you can see the next most common healthcare program completions for 2017 in each of the state's ACH regions.

2017 Unique Program Completions by ACH (Omits Nursing Assistant and Medical Assistant Completions)



Data Source: The Integrated Postsecondary Education Data System (IPEDS) 2017; Workforce Board Data Reporting System 2017 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 100 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 annual openings expected for this occupation for a five-year period in the future. This allows us to see where we may need to ramp up education programs or take a look at other workforce interventions, while we still have the time to make course corrections.

The case study in this section on nursing assistants illustrate that at times, there is more behind the data than simple numbers would suggest. The chart 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 can 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.

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 Sentinel Network (described on page 7), could provide the bridge to resolve many of these challenges—particularly for regional data on emerging changes in healthcare personnel needs. However, as described, funding for this program is ending in June of 2019, though Council members are seeking additional funding sources through a request for state funding, as well as pursuing sponsorship opportunities.

Health Workforce Employment Data

Occupation Name	Education Required	2017 Employment	Annual Net Increase	Projected Annual Openings
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	High school diploma or equivalent	201	5	37
Anesthesiologists	Doctoral or professional degree	574	8	24
Athletic Trainers	Bachelor's degree	362	8	28
Audiologists	Doctoral or professional degree	595	14	44
Cardiovascular Technologists and Technicians	Associate's degree	916	15	67
Child, Family, and School Social Workers	Bachelor's degree	7383	43	818
Chiropractors	Doctoral or professional degree	2049	68	130
Clergy	Bachelor's degree	4092	21	474
Clinical, Counseling, and School Psychologists	Doctoral or professional degree	3939	74	352
Community Health Workers	High school diploma or equivalent	1810	21	260
Community and Social Service Specialists, All Other	Master's degree	1701	19	244
Counselors, All Other	Master's degree	388	5	49
Dental Assistants	Postsecondary nondegree award	11527	210	1616
Dental Hygienists	Associate's degree	6632	130	571
Dental Laboratory Technicians	High school diploma or equivalent	928	12	123
Dentists, All Other Specialists	Doctoral or professional degree	293	4	12
Dentists, General	Doctoral or professional degree	3160	60	153
Diagnostic Medical Sonographers	Associate's degree	1573	37	130
Dietetic Technicians	Associate's degree	524	7	51
Dietitians and Nutritionists	Bachelor's degree	1682	26	138
Directors, Religious Activities and Education	Bachelor's degree	2175	9	277
Educational, Guidance, School, and Vocational Counselors	Master's degree	5768	111	764
Emergency Medical Technicians and Paramedics	Postsecondary nondegree award	3556	69	300
Epidemiologists	Master's degree	344	4	34
Exercise Physiologists	Bachelor's degree	180	5	17
Family and General Practitioners	Doctoral or professional degree	1350	19	57
Genetic Counselors	Master's degree	89	3	8
Health Diagnosing and Treating Practitioners, All Other	Master's degree	1581	30	119

Health Educators	Bachelor's degree	1573	12	211
Health Technologists and Technicians, All Other	High school diploma or equivalent	2952	49	250
Healthcare Practitioners and Technical Workers, All Other	Postsecondary nondegree award	1145	16	78
Healthcare Social Workers	Master's degree	3764	52	468
Healthcare Support Workers, All Other	High school diploma or equivalent	3055	43	451
Hearing Aid Specialists	High school diploma or equivalent	254	5	23
Home Health Aides	No formal educational credential	9343	158	1342
Industrial-Organizational Psychologists	Master's degree	0	0	0
Internists, General	Doctoral or professional degree	347	5	15
Licensed Practical and Licensed Vocational Nurses	Postsecondary nondegree award	7694	83	663
Magnetic Resonance Imaging Technologists	Associate's degree	843	13	61
Marriage and Family Therapists	Master's degree	294	2	35
Massage Therapists	Postsecondary nondegree award	9179	483	1732
Medical Appliance Technicians	High school diploma or equivalent	206	3	28
Medical Assistants	Postsecondary nondegree award	14201	343	2094
Medical Equipment Preparers	High school diploma or equivalent	1557	24	237
Medical Records and Health Information Technicians	Postsecondary nondegree award	4927	73	395
Medical Scientists, Except Epidemiologists	Doctoral or professional degree	5857	99	635
Medical Secretaries	High school diploma or equivalent	8236	152	1143
Medical Transcriptionists	Postsecondary nondegree award	1351	-13	132
Medical and Clinical Laboratory Technicians	Associate's degree	2793	41	229
Medical and Clinical Laboratory Technologists	Bachelor's degree	2966	46	245
Mental Health Counselors	Master's degree	4100	81	562
Mental Health and Substance Abuse Social Workers	Bachelor's degree	2534	38	319
Nuclear Medicine Technologists	Associate's degree	387	6	28
Nurse Anesthetists	Master's degree	708	11	48
Nurse Midwives	Master's degree	80	2	6
Nurse Practitioners	Master's degree	3214	89	274
Nursing Assistants	Postsecondary nondegree award	31572	422	4298
Obstetricians and Gynecologists	Doctoral or professional degree	382	6	17
Occupational Health and Safety Specialists	Bachelor's degree	2812	31	182

Occupational Health and Safety Technicians	High school diploma or equivalent	364	4	24
Occupational Therapists	Master's degree	3585	92	296
Occupational Therapy Aides	High school diploma or equivalent	217	4	34
Occupational Therapy Assistants	Associate's degree	490	10	78
Ophthalmic Laboratory Technicians	High school diploma or equivalent	496	7	67
Ophthalmic Medical Technicians	Postsecondary nondegree award	1822	42	205
Opticians, Dispensing	High school diploma or equivalent	1416	19	129
Optometrists	Doctoral or professional degree	947	26	59
Oral and Maxillofacial Surgeons	Doctoral or professional degree	51	1	2
Orderlies	High school diploma or equivalent	511	9	73
Orthodontists	Doctoral or professional degree	103	2	5
Orthotists and Prosthetists	Master's degree	227	3	18
Pediatricians, General	Doctoral or professional degree	573	9	25
Personal Care Aides	No formal educational credential	53503	1098	9912
Pharmacists	Doctoral or professional degree	6086	55	333
Pharmacy Aides	High school diploma or equivalent	1125	-6	140
Pharmacy Technicians	High school diploma or equivalent	7591	55	679
Phlebotomists	Postsecondary nondegree award	2909	67	406
Physical Therapist Aides	High school diploma or equivalent	926	27	157
Physical Therapist Assistants	Associate's degree	1395	37	231
Physical Therapists	Doctoral or professional degree	6030	143	425
Physician Assistants	Master's degree	2444	76	233
Physicians and Surgeons, All Other	Doctoral or professional degree	8322	125	362
Podiatrists	Doctoral or professional degree	160	3	12
Probation Officers and Correctional Treatment Specialists	Bachelor's degree	2334	11	211
Prosthodontists	Doctoral or professional degree	28	0	1
Psychiatric Aides	High school diploma or equivalent	95	2	14
Psychiatric Technicians	Postsecondary nondegree award	1004	41	140
Psychiatrists	Doctoral or professional degree	628	11	29
Psychologists, All Other	Master's degree	601	5	46
Radiation Therapists	Associate's degree	508	8	34
Radiologic Technologists	Associate's degree	4251	67	309
Recreational Therapists	Bachelor's degree	275	4	21
Registered Nurses*	Bachelor's degree	59765	1043	4444
Rehabilitation Counselors	Master's degree	5727	39	650
Religious Workers, All Other	Bachelor's degree	913	4	128
Respiratory Therapists	Associate's degree	2355	73	206
Respiratory Therapy Technicians	Associate's degree	60	-1	3
Social Scientists and Related	Bachelor's degree	956	14	108

Workers, All Other				
Social Workers, All Other	Bachelor's degree	778	3	83
Social and Human Service Assistants	High school diploma or equivalent	7449	82	1033
Sociologists	Master's degree	121	2	14
Speech-Language Pathologists	Master's degree	3875	85	302
Substance Abuse and Behavioral Disorder Counselors	Bachelor's degree	2287	36	299
Surgeons	Doctoral or professional degree	612	9	26
Surgical Technologists	Postsecondary nondegree award	2109	34	216
Therapists, All Other	Bachelor's degree	157	2	11

Data Source: The Integrated Postsecondary Education Data System (IPEDS) 2017; Workforce Board Student Data Reporting System 2017 for private career school completions; Bureau of Labor Statistics. Data for annual net increase and projected annual openings is for the time period spanning 2021-2026.

**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 a few occupations for further analysis. This includes a case study that examines the data and asks key questions for policymakers, and three more in-depth occupational profiles.

Case Study: Nursing Assistants

Council data has shown a potentially concerning difference between a larger number of nursing assistant program completers than projected job openings. This is one example where just a look at the numbers does not tell the whole story. 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 what is happening when examining the number of trained nursing assistants when compared with the available jobs. The Sentinel Network clearly shows that nursing assistants are in demand in many settings. Council members are also hearing about challenges in hiring NA-Cs, particularly in long-term care and home health care facilities.

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 or to participate in clinical site training. This ensures students have basic care competencies, but could impact the supply numbers, as many program completers aren't actually employed as NA-Cs. The NA-C credential is commonly held by healthcare workers who also hold another credential. For example, a recent survey of Washington's medical assistants (medical assistants – certified, or MA-Cs) conducted by the University of Washington Center for Health Workforce Studies found that an estimated 24 percent of the 15,789 MA-Cs in the state were also licensed or credentialed in another healthcare occupation in Washington. Of those, a quarter (or an estimated 950 statewide) held a nursing assistant credential. Being credentialed in more

than one occupation can provide a broader scope of practice for the individual, which can be useful to employers.

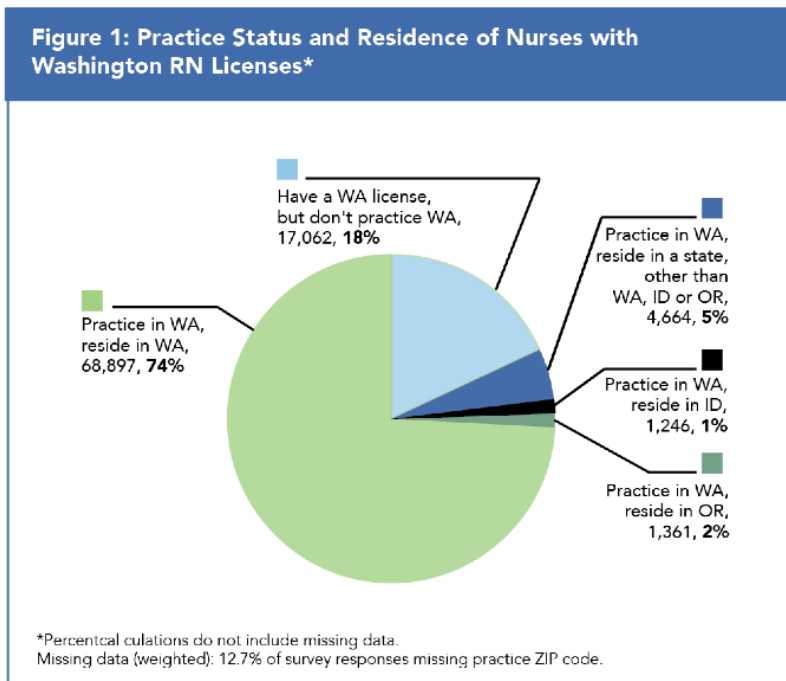
Further, how many of those who complete the program are passing the certification test, or even taking the test? Are transportation challenges limiting the accessibility of the testing site? Are potential NA-Cs taking jobs in other fields due to perceived low pay for oftentimes difficult work? Are NA-Cs 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. The Council has proposed a care workers initiative as part of their policy recommendations that might help address some of these retention issues. (For more details, see page 17.)

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.

Data Dive: Washington's Registered Nurse Workforce – 2018

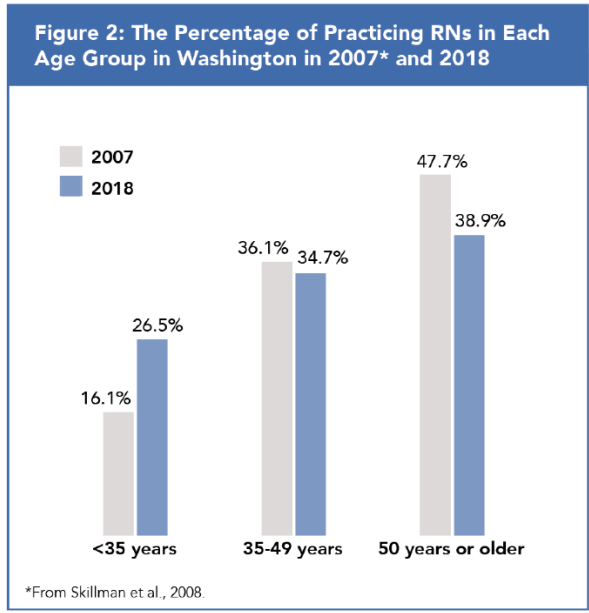
The Washington Center for Nursing engaged the University of Washington Center for Health Workforce Studies to survey⁵ Washington's registered nurses (RNs) in 2018 to provide up-to-date information about the state's RN supply. Questions addressed RNs' employment status, job characteristics, demographics, education, credentials, as well as satisfaction with their current nursing position, career plans, salary, and employment history.



Key findings include:

- Figure 1: Nearly 83 percent of the more than 93,000 RNs with Washington licenses in the survey sample were estimated to be employed as RNs, and an additional 7 percent were also licensed and practicing as advanced registered nurse practitioners (ARNPs).
- Figure 2: Since 2007, when the last survey of Washington's RNs was conducted, the number of RNs with state licenses has increased by about 20,000, and the average age of RNs has decreased by nearly two years. Despite the decreased average age, 29 percent of practicing RNs in Washington are currently age 55 or older, which means many are likely to be retiring from the workforce in the next decade.

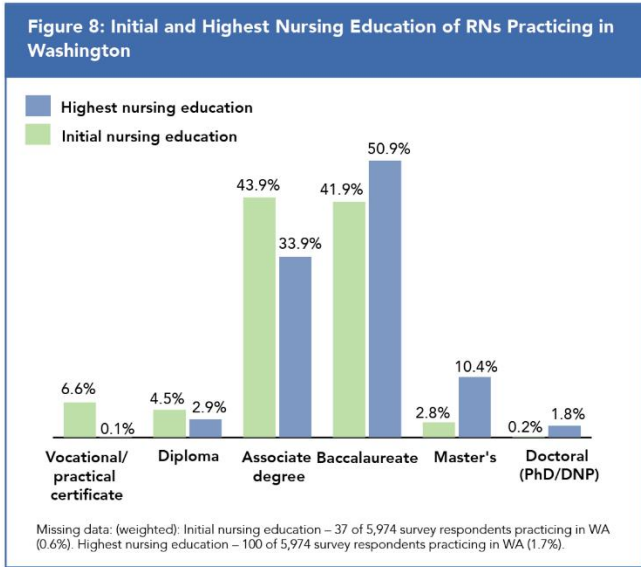
5 Skillman SM, Stubbs BA. Washington State's Registered Nurse Workforce: Results of a 2018 Survey. Center for Health Workforce Studies, University of Washington, Oct 2018.



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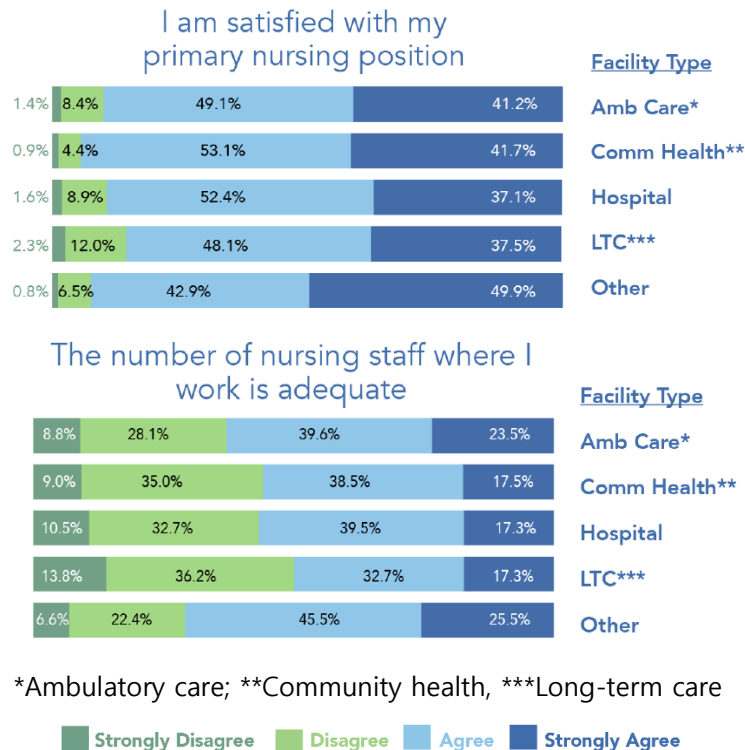
- The number and percentage of practicing RNs in Washington who are Hispanic/ Latino and/or from race groups other than White have also increased since 2007, although the distribution across ethnic and racial categories still does not match the distribution in Washington's overall population.
- Figure 8: Overall, more than 63 percent of surveyed nurses have baccalaureate or higher nursing degrees. Of these RNs, about half completed that degree program at an institution in Washington state. More than 75 percent of RNs under age 30 have a baccalaureate in nursing or higher.

⁶ Skillman SM, Andrilla CHA, Tieman L, Doescher MP. Demographic, education, and practice characteristics of registered nurses in Washington State: results of a 2007 survey. Final Report #120. Seattle, WA: WWAMI Center for Health Workforce Studies, University of Washington, Jun 2008.



- Washington’s RNs are quite satisfied with their jobs and roles, although more than half of the RNs in long-term care and a variety of other settings reported feeling overworked and concerned regarding the adequacy of nurse staffing at their workplace.

Washington RNs’ Level of Agreement with Career and Job-Related Statements by Work Facility Type



Data Dive: Washington's Medical Assistant Workforce

Washington's Medical Assistants (MAs) were recently surveyed by the University of Washington Center for Health Workforce Studies, and the findings were reported in November in a peer-reviewed journal article.⁷ The demand for MAs in the U.S. is growing as they take on expanding roles in office and clinic-based healthcare systems. Recruiting and maintaining a qualified MA workforce can be difficult, as expressed by findings from Washington's Health Workforce Sentinel Network. Information about how MAs' backgrounds and education pathways, as well as their attitudes and perceptions about career pathway opportunities, is important to develop effective recruitment and retention strategies for MAs, as well as other frontline workers who provide essential services across healthcare settings.

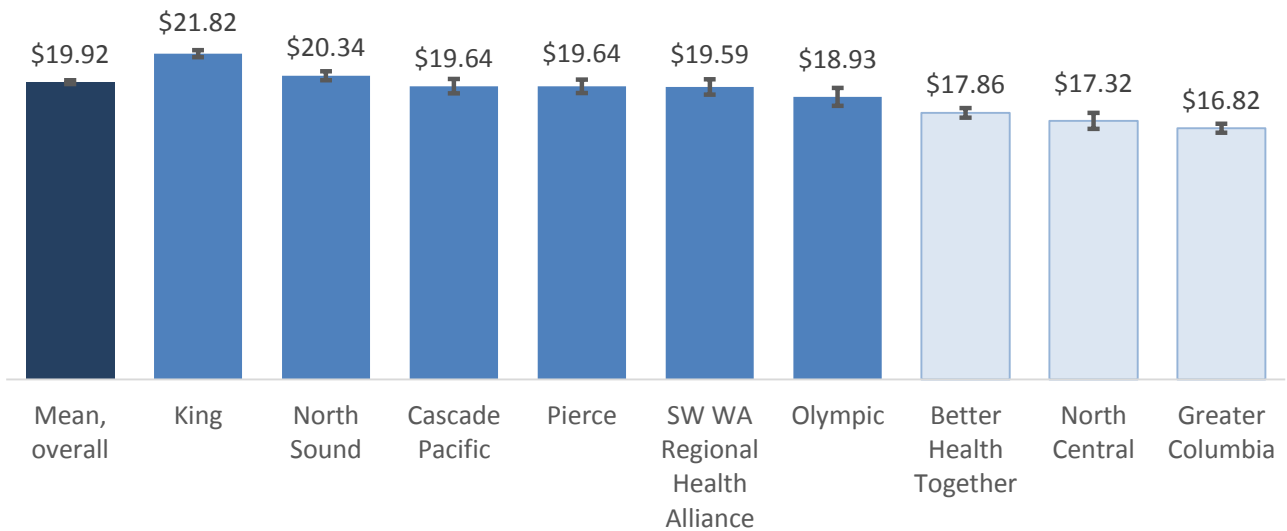
Key findings from this survey of Washington's MA-Certified (MA-C) workforce include:

- Demographic characteristics:
 - Washington's MA-Cs were, on average, 38 years old,
 - 93.0 percent female,
 - 15.3 percent Hispanic, and
 - 7.8 percent Asian, 5.4 percent Black/African American, 2.2 percent Native Hawaiian or other Pacific Islander, 1.6 percent Native American or Alaska Native, 6.2 percent more than one race.
- Education:
 - 54.6 percent of Washington's MA-Cs completed MA education through a public community college/technical school, 41.6 percent through a private/for-profit college or technical school, 2.0 percent through an apprenticeship program, 2.6 percent through military training or experience, and 4.2 percent through another educational route.
 - 84.5 percent completed MA education in Washington state.
 - For 52.9 percent, a certificate was their highest academic achievement in any field, and 42.9 percent held a baccalaureate degree or higher.

⁷ Skillman SM, Dahal A, Frogner BK, Andrilla CHA. Data and Trends - Frontline Workers' Career Pathways: A Detailed Look at Washington State's Medical Assistant Workforce. Medical Care Research and Review. 2018 (Nov). Online First.

- Primary work location:
 - 53.0 percent of Washington’s MA-Cs’ primary work location was in an office associated with a hospital or health system, 25.3 percent worked in a private office/clinic, 10.5 percent worked in a community health center, and 11.2 percent worked in a variety of other settings.
- Wages:
 - MA-Cs’ average hourly wage, statewide, was \$19.92. This varied across Accountable Communities of Health regions from \$16.93 to \$21.73. MA-Cs’ on the east side of the state had lower hourly wages than MA-Cs on the west side (see Figure below).

Mean Hourly Wage of MA-Cs Statewide, Overall and by Accountable Community of Health*



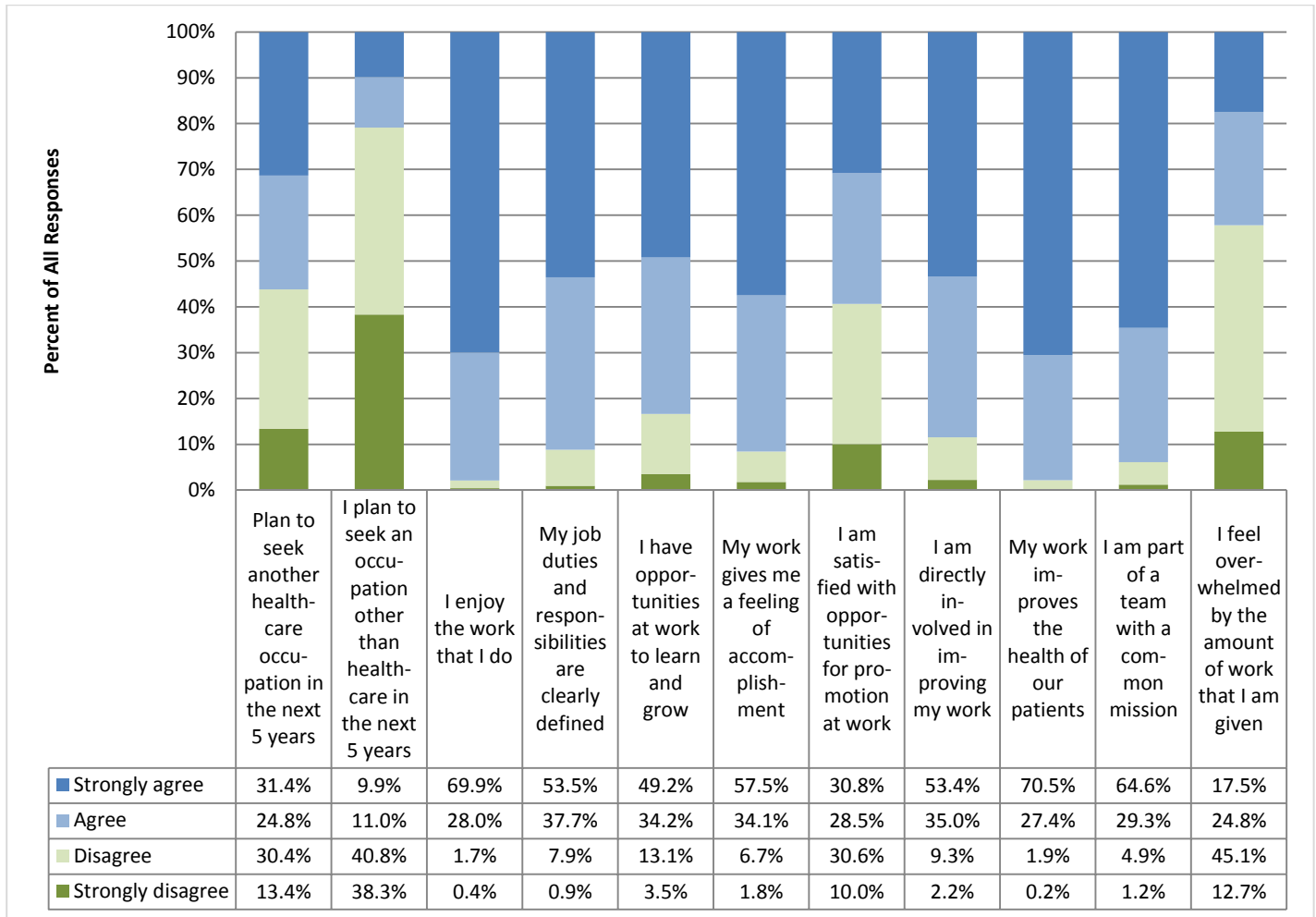
**2 standard deviations indicated by error bars.*

Regions in western Washington shown in medium blue, regions in eastern Washington shown in light blue.

- Career pathways and job satisfaction:

MA-Cs responded to a series of questions related to career and job satisfaction (see Figure on next page). While Washington’s MAs reported they were generally satisfied with their current positions, more than half indicated they planned to seek training or employment in another healthcare occupation within five years. MAs who were Hispanic, Black and Asian were more likely than White MAs to express interest in other careers.

Washington MA-Cs' Level of Agreement with Career and Job-Related Statements



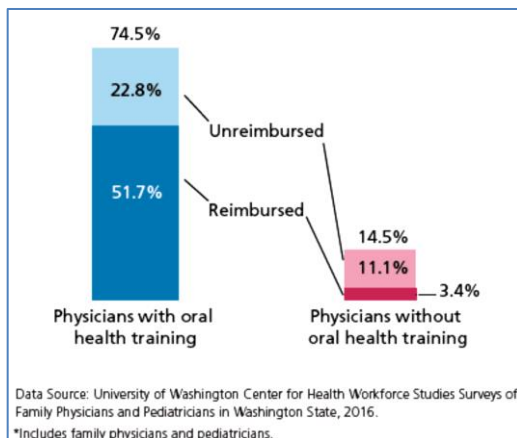
More details from this survey of Washington’s MA-Cs can be found in the published report⁸. The study concludes that because MA recruitment and turnover is expensive and disruptive for employers and patients, addressing issues related to MAs’ career advancement, workload management, and salary progression will likely strengthen MA career pathways and retain qualified workers. In turn, this will help to build a more stable and diverse MA workforce, rewarding both employers and MAs.

⁸Skillman SM, Dahal A, Frogner BK, Andrilla CHA. Data and Trends - Frontline Workers’ Career Pathways: A Detailed Look at Washington State’s Medical Assistant Workforce. Medical Care Research and Review. 2018 (Nov). Online First.

Data Dive: Washington's Oral Health Workforce and Impact on Patient Access to Care

A study⁹ released in late 2017 described the supply and distribution of Washington's dentists and dental hygienists, and factors that affect the extent to which dentists and physicians (pediatricians and family physicians) provide oral health services. Forty percent of dentists responding to the 2016 survey reported accepting Medicaid for payment, and according to the Washington State Health Care Authority, 28 percent of dentists enrolled in Medicaid in 2015 were accepting new Medicaid patients. Increased payment rates, access to specialists for referral, and reduced paperwork were the most common changes that dentists reported would encourage them to care for patients on Medicaid. Dentists reported providing an average of \$49,729 of free or discounted care in 2015. About 68% of pediatricians and 42 percent of family physicians in Washington reported receiving training to provide oral health services to children. More than half of pediatricians and family physicians without training to provide oral health services to children would like to receive training and provide services.

Physicians trained in oral health services for children provided these services more often and reported fewer barriers to service provision than physicians without this training. About three quarters of physicians trained in oral health preventive care reported that they had provided pediatric oral health preventive services in the past year, and most (52 percent) reported being reimbursed. In sharp



contrast, only 15 percent of physicians who had not received oral health training reported providing the service in the past year, and most of them had not been reimbursed.

Figure: Physician* reimbursement for oral health preventive services for children by oral health training status, 2016.

Key informants interviewed for this study cited a variety of issues affecting access to oral health care, including difficulty recruiting and retaining oral health providers to care for rural and underserved populations, including patients covered by Medicaid for which reimbursement rates are a disincentive to providers.

⁹ This study, by the University of Washington Center for Health Workforce Studies and funded by the Arcora Foundation, can be accessed at http://depts.washington.edu/fammed/chws/wp-content/uploads/sites/5/2017/11/Washington_State_Oral_Health_Workforce_FR_Nov_2017_Patterson.pdf.

Health Workforce Best Practices

This section was drafted to provide policymakers with examples of best practices across the state in addressing health workforce shortages. This may include statewide programs that could be expanded to serve more individuals, or local programs that might be applicable to other regions of the state.

Chemical Dependency Professional (CDP) Certification for Advanced Professionals

Spokane Falls Community College (SFCC) and Whatcom Community College (WCC)

SCC & WCC offer a 15-credit, online fast-track CDP training. This education enables advanced professionals to earn the educational requirements for the Washington State Chemical Dependency Professional Certification (see WAC 246-811). In addition to coursework, students will be required to complete supervised experience hours as required by the state to receive full Chemical Dependency Professional status and pass the credentialing exam.

SFCC and WCC were awarded the Hospital Employee Education and Training (HEET) 11 allocation to continue to provide the fast track online Chemical Dependency Professional (CDP) training. The HEET grant is in partnership with SFCC and WCC to meet the demand in Washington State for mental health professionals to receive their CDP training and to update curriculum to address recent changes in the industry such as "Ricky's Law" for the Involuntary Treatment Act. This training provides the educational component for professionals to become dually licensed in their field, and provide client-centered integrated behavioral health treatment. SFCC is currently recruiting for their Winter/Spring cohort. SFCC and WCC have had a total of 96 CDP graduates for both HEET 9 & 10.

In addition, SFCC graduated 26 fast track Chemical Dependency Professional (CDP) certificate students June 2018 as part of the Washington State Department of Social and Health Services, Division of Behavioral Health and Recovery (DBHR), Washington State Youth Treatment Improvement grant. This was the final cohort for the 2016-2018 DBHR contract with a total of 75 graduates for the past three years. SFCC Addiction Studies has also recently received a new contract from DBHR for Designated Crisis Responders (DCRs) and currently has 46 students in the DBHR CDP program.

Environmental Services Safety Program – A Labor/Management Partnership

SEIU Healthcare 1199NW, SEIU Healthcare 1199NW Multi-Employer Training and Education Fund, and Swedish Medical Center

SEIU Healthcare 1199NW, SEIU Healthcare 1199NW Multi-Employer Training and Education Fund (Training Fund) and Swedish Medical Center partnered to support Environmental Service (EVS)

Technician at Swedish Medical Center to gain alignment in best practice and achieve wage progressions through a comprehensive, healthcare-specific, certification program called Certified Environmental Service Technician (CHEST). CHEST is a professional development opportunity for incumbent EVS technicians sponsored by the Association for the Healthcare Environment. The CHEST training addresses many areas of responsibility for EVS workers including: Infection Prevention, Waste Stream Handling, Linen Handling, Safety, Cleaning and Disinfection, and Communications. Upon becoming certified at Swedish Medical Center, EVS workers received a \$.75 per hour increase in pay as well as becoming eligible to apply for the flex positions where they could earn an additional \$.75 per hour more.

This unique partnership is the first in the nation to be co-taught by labor and management CHEST trainers who are jointly identified and receive training. The goals of the program include increasing patient and caregiver satisfaction, improving throughput, and fostering interdisciplinary teamwork and partnership between Nursing and EVS to ensure a safe and clean facility. The partnership also set a goal to train the entire EVS workforce across Swedish to become certified. During 2018, 45 members completed the training with a passing rate of 80 percent.

Instructional support is provided through Literacy Source, a non-profit organization in Seattle serving adult learners with basic skills instruction. Literacy Source provides teaching strategies to CHEST trainers and test taking strategies for members. They also offer targeted support for members who do not initially pass the test in order to refresh their skills and help them to successfully become certified. Other Training Fund employers are considering replicating this model to help establish EVS standards and promote worker advancement.

The Healthcare Apprenticeship Consortium

SEIU Healthcare 1199NW, UFCW Local 21, OPEIU Local 8, Kaiser Permanente, MultiCare Health System, Swedish Medical Center, Swedish Edmonds, UW Medicine, and SEIU Healthcare 1199NW Multi-Employer Training and Education Fund

A new partnership is getting underway to deliver healthcare apprenticeships in Washington State. The Healthcare Apprenticeship Consortium/SEIU Healthcare 1199NW Multi-Employer Training Fund Program ("Healthcare Apprenticeship Program") is a one of a kind multi-union, multi-employer partnership created to provide access to all healthcare employers within Washington State who seek the benefits of skilled apprenticeship training for their workforce. The Healthcare Apprenticeship Program represents collaboration by the SEIU Healthcare 1199NW Multi-Employer Training and Education Fund ("Training Fund") – a Taft-Hartley trust managed by a joint board of employer and union trustee representatives –

SEIU Healthcare 1199NW, UFCW Local 21, OPEIU Local 8, and healthcare employers including Kaiser Permanente of Washington, MultiCare Health System, Swedish Medical Center, Swedish Edmonds, and UW Medicine.

These partners have worked in conjunction with the Healthcare Apprenticeship Consortium/SEIU Healthcare 1199NW Multi-Employer Training and Education Fund Joint Apprenticeship Training Committee (“JATC”) to develop standards for the Healthcare Apprenticeship Program. The Healthcare Apprenticeship Program will be available not only to current Training Fund participating employers, but also all other healthcare employers in the State, including employers whose healthcare employees are represented by a union other than SEIU Healthcare 1199NW, OPEIU, UFCW, and employers whose healthcare employees are not unionized.

The Healthcare Apprenticeship Program and its participating entities are anticipating eventual growth to address multiple skill categories across the healthcare sector. This kind of collaboration will pave the way for aligning workforce development and career-connected learning across healthcare systems and have a significant impact on the current and future direction of Washington’s healthcare workforce system.

The first apprenticeship occupation, set to launch in 2019 and in collaboration with the Seattle College District, will be Medical Assisting with the intent of increasing occupations based on industry needs.

Health Workforce for the Future (HWF)

Workforce Development Council of Seattle-King County

The Workforce Development Council of Seattle King County (WDC) was awarded funding under the 2nd round of the national Health Professions Opportunity Grant (HPOG2) initiative in 2015 to implement the King County Health Workforce for the Future (HWF) project. HWF targets individuals who are unemployed or remain under/unstably employed despite the improving economy; incumbent workers in need of support for career progression; and youth. Program goals aim to meet the skilled needs of healthcare employers in the King County area, build the infrastructure necessary to ensure a robust pipeline for the future healthcare workforce in King County, and support progress toward economic self-sufficiency for low-income residents. The HWF project builds on lessons learned and best practices from the extensive experience of the WDC and its partners in the healthcare sector, including work under the WDC’s HPOG1 project, Health Careers for All (HCA). HWF will serve at least 625 participants over five years, approximately 1/3 of whom will be TANF recipients at enrollment. HWF supports

participants to prepare for and engage in training for a wide range of healthcare occupations, including nursing, medical office, diagnostic/therapeutic roles, and more, and emphasizes career pathway progression. At the end of the third year of the five-year project, in September 2018, HWF had enrolled 530 individuals, 400 of whom had started healthcare occupational training. Of those, 230 had completed training and 170 had secured healthcare employment by the end of Year 3, at an average wage of \$18.30/hour.

HEET 11: Diversifying the Workforce & Enhancing Career Pathways in Behavioral Health

Whatcom Community College, Kitsap Mental Health

The HEET 11 (Hospital Employee Education and Training) project sponsored by Whatcom Community College (and in partnership with other industry and education institutions) will address workforce shortages, remedy skills gaps, and increase diversity in language and culture in the behavioral health (BH) workforce and acute care environments serving clients with BH needs. In response to emerging trends, the project will prepare healthcare staff for the integration of BH and physical healthcare. The project creates BH pathways for staff employed in acute care, primary care, behavioral health, substance use disorder organizations, and future students.

With the development of necessary curriculum and creation of integrated basic education and skills training BH pathways, the project will provide opportunities for creation of relevant BH certificates, and allow enhancement and diversification of the BH workforce with additional education and career opportunities. The project will address these identified training needs:

- Enhance knowledge of team-based care and the utilization on a bi-directional team
- Enhance knowledge of SBIRT
- Address communication differences between physical healthcare and behavioral health
- Provide training for communication skills and tools necessary for de-escalation and motivational interviewing
- Create a modularized behavioral health basics course that can be included in various programs
- Provide education about behavioral health navigation

Kitsap Mental Health (KMH) is participating in this project by working with the Whatcom Community College project lead to identify functional workflow and challenges Medical Assistants encounter while working in a behavioral health environment. In addition, KMH is hosting Whatcom Community College faculty as a shadowing site so that they can gain a better understanding of the team-based approach

utilized here and learn about the role of the medical assistant in these teams. A KMHS staff member is assisting with the behavioral health curriculum development for the Medical Assistant courses as well.

Home Care Aide Peer Mentor Program

SEIU 775 Benefits Group

The Home Care Aide Peer Mentor Program was launched in 2016 to assist new caregivers in completing the requirements necessary to gain their Washington State Home Care Aide Certification. Peer mentors connect with caregivers early on in their journey to offer individualized, guided support through applications, training, and exam preparation. Peer mentors are certified Home Care Aides themselves, and have received additional training in order to provide effective coaching and tutoring support to other caregivers. Their goal is to clarify expectations, reduce unnecessary anxiety, and build confidence as caregivers learn to apply new skills on-the-job.

The program has recently expanded to provide peer mentorship to Advanced Home Care apprentices who are taking an additional 70 hours of training in order to build upon their skillset. From July 1, 2017 to June 30, 2018, 1,366 mentees were served. Those receiving services report high satisfaction with the overall experience with an aggregate score of 4.94/5 with five being extremely satisfied. Almost 100 percent report having access to a peer mentor has a positive impact to their role as a caregiver. Peer mentors offer support Monday-Friday between 9am-6pm over the phone, by email, and through video conferencing. Mentors also facilitate weekly group skills sessions and exam preparation webinars. Currently, services are available in English, Cantonese, Mandarin, Spanish, and Russian. Additional information about the program can be found at: <https://www.myseiubenefits.org/peermentors/>.

Innovations in Creating Access To Careers in Healthcare, I-CATCH

Office of Family Assistance, Administration for Children & Families, HHS

Edmonds Community College

I-CATCH is a five year (September 2015 to September 2020) Health Professions Opportunity Grant (HPOG) administered by Edmonds Community College in partnership with Everett Community College, Skagit Valley College, Whatcom Community College, Workforce Snohomish, Refugee & Immigrant Services NW and TRAC to provide opportunity for well-paying career jobs in healthcare for TANF participants or other low income (<200 percent federal poverty level) adults in Snohomish, Skagit, Island and Whatcom Counties; to fill job shortages in the local healthcare industry; and to study what support and interventions work best to train individuals for an opportunity out of poverty. The program

has the active support of over 50 community organizations including DSHS offices, service agencies, community service and healthcare employers. The five-year goal is to enroll 1250 qualified individuals to meet regional healthcare employment shortages in direct patient care, pharmacy and laboratory, social and human services and medical office and information.

I-CATCH uses a strengths-based, growth mindset, and student-centered approach to assist participants to address barriers of poverty that would otherwise keep them from being successful in starting a career pathway. The grant provides participants wraparound support services that include tuition assistance, fees and course supplies, transportation assistance; structured assessment and onboard processes with a holistic view of their family needs; builds trust with participants through intention advising; teaches crisis management with limited emergency funds; provides a loaned laptop and internet access that can be earned when completing their healthcare program; and healthcare employment coaching and other work-ready soft skills.

I-CATCH has recently completed year three of the grant, and enrolled 753 students with 440 currently engaged in healthcare programs. There have been 235 students who have completed their program, and 107 are now employed in a healthcare position with an average starting wage of \$15.63/hr. Over 100 of I-CATCH students have entered into a second or higher level training program. As one recent Medical Assisting graduate put it, "I followed through with the courses in the program, sometimes thinking I wouldn't make it. The assurance, technical support and financial support removed obstacles in my path throughout the entire experience. The skill of the I-CATCH program at finding and removing obstacles with students was impressive. The work is sometimes hard, but getting to the work after worrying about it was harder. I did it. I am now a college graduate." This graduate received his Washington State Medical Assistant Certified License, was hired by The Everett Clinic, and is earning over \$39,500 yearly.

Innovations in Delivery of Healthcare Pre-requisite Coursework

Workforce Development Council of Seattle-King County

Most advanced healthcare training programs require completion of college-level coursework before students can even apply. Because this coursework is not a program, but rather a collection of math, science, and other college classes, many students—and particularly low-income/working students—face challenges at this critical stage on the healthcare career pathway. The WDC of Seattle-King County's Health Workforce for the Future (HWF) pre-requisite cohort at South Seattle College is designed to streamline this process with more efficient course sequencing, a predictable schedule, contextualized

curriculum, and targeted advising and support. The cohort design builds from lessons learned in the WDC's 1st round HPOG project, Health Careers for All (HCA), and leverages resources and learnings from other initiatives, including state-funded Hospital Employee Education and Training (HEET) grant projects.

A similar cohort funded under HCA enrolled 31 entry-level healthcare employees in pre-requisite coursework for nursing at North Seattle College. Though working, 87 percent of these students completed all pre-requisite courses as scheduled in six quarters, through a mix of online and campus-based instruction. More than two-thirds (68 percent) of these students successfully completed both the pre-requisite coursework and nursing training, earning their associates degree in nursing, and became licensed and employed as RNs within the span of four years. The HWF pre-requisite cohort builds from successes in HCA, borrowing some key features of the HCA cohort – including standardized scheduling, pre-requisite coursework contextualized with healthcare content, campus-based “navigation” support, batch registration quarter-to-quarter, and targeted advising.

The HWF cohort aims to apply lessons learned from the nursing pre-requisite phase to advanced healthcare training pre-requisites more broadly, and sequences courses in such a way that the most common requirements are clustered early in the sequence. The cohort also provides an opportunity for the workforce system and college partners to work jointly toward developing strategies to sustain elements of the approach that may increase the efficiency of moving students, including those who must work while in school, through the prerequisite phase and into training for in-demand advanced healthcare occupations in the future.

Northwest Health Career Path

Area Health Education Centers, the UWSOM Center for Service Learning Program and the Center for Health Equity Diversity and Inclusion, UW Informatics School, UWSOM Students, the Allied Health Center of Excellence, and Seattle Data For Good

Northwest Health Career Path is a collaborative project to create a network of programs that have the common goal of increasing the equity and access to health science education and healthcare careers in the WWAMI region, starting with Washington. This is accomplished via an interactive website designed to provide a coordinated “pathway” of program experiences. Students, volunteers, mentors, and advisors alike can use the site to find programs that fit their needs in terms of academic or career goals, region, time of year, level, and type of activity to match their needs. In the short-term the project provides a database of resources. The long-term vision is to use the data to analyze the distribution of

these services, impact, gaps, and equity. The survey instrument used to collect data on programs also identifies opportunities for scholarship, transportation services, and how programs serve students of diverse and/or disadvantaged backgrounds.

Response to Escalated Situations Training (REST) Pilot – a Labor Management Partnership

SEIU Healthcare 1199NW, SEIU Healthcare 1199NW Multi-Employer Training and Education Fund, UW-Valley Medical Center, and Highline Community College

SEIU Healthcare 1199NW, SEIU Healthcare 1199NW Multi-Employer Training and Education Fund, UW-Valley Medical Center, and Highline Community College have partnered to offer specific training to frontline staff in order to develop foundational skills for effectively responding to escalating situations with patients, visitors and staff, often related to their behavioral health. The program is known as Response to Escalated Situations Training, or REST. This pilot project was delivered with the intent of gaining additional knowledge from participants about their experience in order to improve the delivery for future trainings specific to the unique needs of members and employer sites.

Collaboratively, the partnership offered an eight-hour training at Valley Medical Center in November, 2018, that enabled workers to engage in activities and reflection on mental health and addiction, escalated situations, cultural styles, and tools for de-escalation. Participants included workers from Environmental Services, Food Management, and Nutrition Services.

The REST curriculum was developed as a response to frontline staff feeling ill-equipped to handle a significant rise in patients demonstrating challenging behaviors related to their mental health conditions or to drug addiction. The skills imparted during the trainings and used at the workplace led to improved safety for both staff and patients. The training program has improved relationships and helped to build teamwork, with staff using common language and practices, working together to address agitated, aggressive, and/or violent patients. This curriculum had been used by the Massachusetts 1199 SEIU Training and Upgrading Fund using a “train-the-trainer” model and ensuring members informed the curriculum based on their experiences. The training at Valley Medical Center was co-facilitated by a Valley Medical Center manager and Training Fund Board member, as well as an instructor with Highline College who has a background teaching behavioral health classes and instructing English language learners. This program was supported further through Hospital Employee Education and Training (HEET) Funding.

Tools for Calm

SEIU 775 Benefits Group, UMass Medical School, UCLA Mindful Awareness Research Center

In the home care workforce, there is a high incidence of behavioral health conditions like anxiety, depression and insomnia. This not only impacts well-being, but also has a compounding impact on caregivers' physical health and their ability to provide care to their clients and families. To address these challenges, the Benefits Group piloted *Tools for Calm*, a six-week, six-hour mindfulness course that provides practical skills home care workers can easily integrate into their lives and work. To date 275 workers have participated from all over Washington. The course consistently receives strong reviews (9.2/10 average rating) and program research shows significant improvements in key behavioral health conditions. Even three months after the course ended, caregivers continued to see positive results, reporting on average 40 percent lower anxiety, 24 percent lower stress, and 32 percent better sleep. This course has a dual benefit as it provides workers with critical skills for self-care, yet they are immediately able to apply these same skills to their work with home care clients as well.

Skills that Shine Mentorship Program

Washington State Opportunity Scholarship

In 2011 the Washington State Opportunity Scholarship (WSOS) was created to connect the state's leading industries with rising Washington talent by reducing barriers to education and training, and facilitating entry into high-demand careers for Washington students. WSOS has coupled their financial support with a year-to-year student support system to ensure Scholars are successful from day one of college to the launch of their professional career.

A cornerstone of WSOS's career services is the Opportunity Scholarship Skills that Shine (StS) mentorship program which features the participation of hundreds of volunteer professionals from across the state, a custom matching platform, and an online curriculum to expedite connections between the mentorship pair. Working with volunteer mentors, third-year Scholars enhance their repertoire of skills and resources as they apply for internships, jobs and post-baccalaureate studies. This year 100% of the most recently accepted Scholars, and dozens of other Scholars from previous enrollments are actively participating in StS. The StS curriculum is available at https://washington-state-opportunity-scholarship.teachable.com/p/skills_that_shine_2018.