Data Resources for Health Workforce Policy and Planning in Washington State

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Methods Part 1

Catalog of relevant health workforce data sources available for WA State analyses, as identified by:

- Previous use by DOH, UW CHWS
- Key informants from across the state – analysts and data users
- Interviews with experts on specific data sources

Box 1. Health Workforce Data Key Informants' Affiliated Organizations

- Washington Workforce Training & Education Coordinating Board
- Washington State Board for Community and Technical Colleges
- Washington State Employment Security Department
- Washington State Department of Health, Executive Office of Healthcare Innovation and Strategy, Health Workforce and Primary Care Systems Development
- Washington State Office of Financial Management Health Care Research Center
- Washington Health Care Association
- Washington State Board of Nursing
- Washington State Hospital Association
- Washington State Department of Health, Executive Office of Prevention, Safety and Health, Center for Access to Whole Person Care
- Washington State Department of Health, Office of Health Professions
- Washington State Department of Health Center for Drug Systems, Data, and Science
- Washington State Health Care Authority
- Washington Center for Nursing

Findings

- 30 currently available health workforce data sources catalogued:
  - 10 WA-based supply sources
  - 9 national supply sources
  - 4 WA-based demand
  - 7 national and other data sources

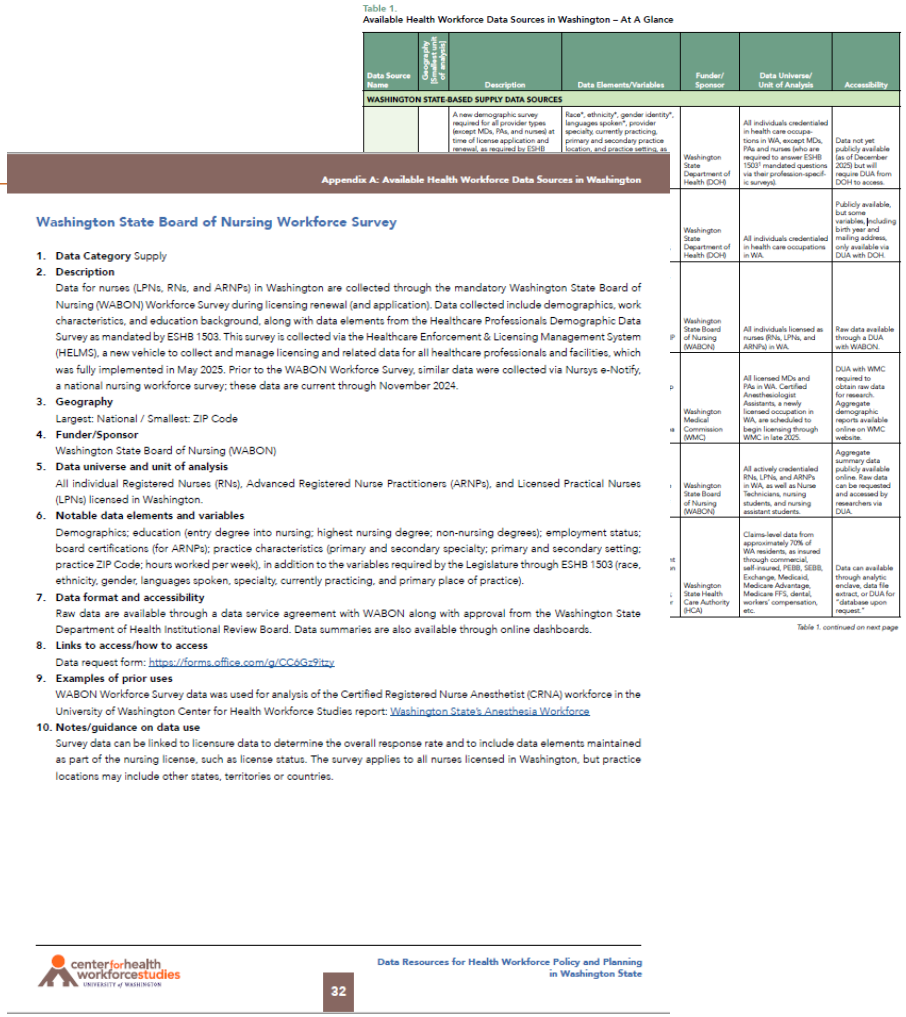

Table 1.
Available Health Workforce Data Sources in Washington – At A Glance

Data Source Name	Geography [Smallest unit of analysis]	Description	Data Elements/Variables	Funder/ Sponsor	Data Universe/ Unit of Analysis	Accessibility
WASHINGTON STATE-BASED SUPPLY DATA SOURCES						
		A new demographic survey required for all provider types (except MDs, PAs, and nurses) at time of license application and renewal, as required by ESHB	Race*, ethnicity*, gender identity*, languages spoken*; provider specialty, currently practicing, primary and secondary practice location, and practice setting, as	Washington State Department of Health (DOH)	All individuals credentialed in health care occupations in WA, except MDs, PAs and nurses (who are required to answer ESHB 1503* mandated questions via their profession-specific surveys).	Data not yet publicly available (as of December 2025) but will require DUA from DOH to access.
				Washington State Department of Health (DOH)	All individuals credentialed in health care occupations in WA.	Publicly available, but some variables, including birth year and mailing address, only available via DUA with DOH.
				Washington State Board of Nursing (WABON)	All individuals licensed as nurses (RNs, LPNs, and ARNPs) in WA.	Raw data available through a DUA with WABON.
				Washington Medical Commission (WMC)	All licensed MDs and PAs in WA. Certified Anesthesiologist Assistants, a newly licensed occupation in WA, are scheduled to begin licensing through WMC in late 2025.	DUA with WMC required to obtain raw data for research. Aggregate demographic reports available online on WMC website.
				Washington State Board of Nursing (WABON)	All actively credentialed RNs, LPNs, and ARNPs in WA, as well as Nurse Technicians, nursing students, and nursing assistant students.	Aggregate summary data publicly available online. Raw data can be requested and accessed by researchers via DUA.
				Washington State Health Care Authority (HCA)	Claims-level data from approximately 70% of WA residents, as insured through commercial, self-insured, PEBB, SEBB, Exchange, Medicaid, Medicare Advantage, Medicare FFS, dental, workers' compensation, etc.	Data can available through analytic enclave, data file extract, or DUA for "database upon request."

Table 1. continued on next page

Appendix A: Available Health Workforce Data Sources in Washington

Washington State Board of Nursing Workforce Survey

1. **Data Category** Supply
2. **Description**
   Data for nurses (LPNs, RNs, and ARNPs) in Washington are collected through the mandatory Washington State Board of Nursing (WABON) Workforce Survey during licensing renewal (and application). Data collected include demographics, work characteristics, and education background, along with data elements from the Healthcare Professionals Demographic Data Survey as mandated by ESHB 1503. This survey is collected via the Healthcare Enforcement & Licensing Management System (HELMS), a new vehicle to collect and manage licensing and related data for all healthcare professionals and facilities, which was fully implemented in May 2025. Prior to the WABON Workforce Survey, similar data were collected via Nursys e-Notify, a national nursing workforce survey; these data are current through November 2024.
3. **Geography**
   Largest: National / Smallest: ZIP Code
4. **Funder/Sponsor**
   Washington State Board of Nursing (WABON)
5. **Data universe and unit of analysis**
   All individual Registered Nurses (RNs), Advanced Registered Nurse Practitioners (ARNPs), and Licensed Practical Nurses (LPNs) licensed in Washington.
6. **Notable data elements and variables**
   Demographics; education (entry degree into nursing; highest nursing degree; non-nursing degrees); employment status; board certifications (for ARNPs); practice characteristics (primary and secondary specialty; primary and secondary setting; practice ZIP Code; hours worked per week), in addition to the variables required by the Legislature through ESHB 1503 (race, ethnicity, gender, languages spoken, specialty, currently practicing, and primary place of practice).
7. **Data format and accessibility**
   Raw data are available through a data service agreement with WABON along with approval from the Washington State Department of Health Institutional Review Board. Data summaries are also available through online dashboards.
8. **Links to access/how to access**
   Data request form: https://forms.office.com/g/CC6Gz9itzy
9. **Examples of prior uses**
   WABON Workforce Survey data was used for analysis of the Certified Registered Nurse Anesthetist (CRNA) workforce in the University of Washington Center for Health Workforce Studies report: Washington State's Anesthesia Workforce
10. **Notes/guidance on data use**
    Survey data can be linked to licensure data to determine the overall response rate and to include data elements maintained as part of the nursing license, such as license status. The survey applies to all nurses licensed in Washington, but practice locations may include other states, territories or countries.

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Data Source Name	Geography [Smallest unit of analysis]	Description	Data Elements/Variables	Funder/ Sponsor	Data Universe/ Unit of Analysis	Accessibility

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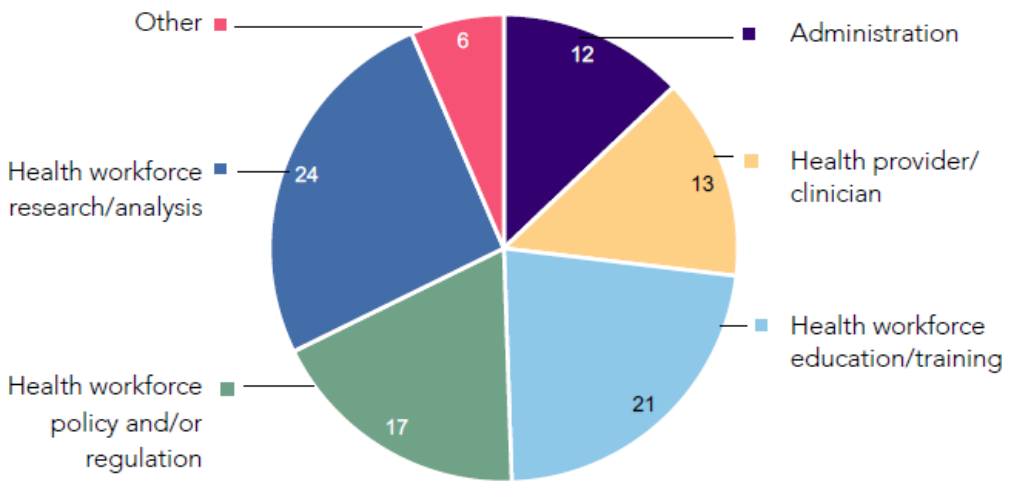
Methods Part 2

Identification of Key Workforce Question Priorities

Figure 1. Health Workforce Policy and Planning Roles of Survey Respondents (n=46)

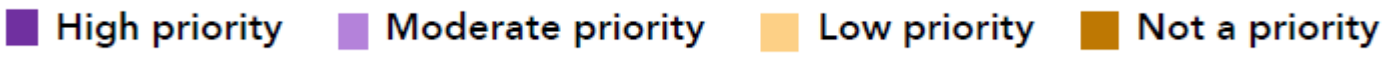


Note: respondents could select "all that apply" in response to the question, "In what way(s) are you involved in health workforce policy and planning?"

- Public survey of individuals involved in health care workforce policy, planning, education, research
- Asked to rate priority of common workforce related questions from 0 – not a priority to 3 – high priority: 10 supply, 5 demand, 3 population need questions

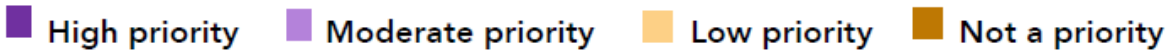
Prioritization of Supply Questions

Question	Mean Rating	Distribution of priority ratings of health workforce supply questions by survey respondents (n=46)
How many of [occupation X] have active Washington licenses (or are otherwise credentialed to practice in Washington?	2.5	67.4% 19.6% 10.9% 2.2%
How many/what percentage of actively licensed [occupation(s)] are practicing in Washington?	2.5	59.6% 29.8% 8.5% 2.1%
What are the practice settings (e.g., hospital, ambulatory care, long term care) where [occupation(s)] with active WA licenses are currently practicing?	2.4	53.2% 31.9% 14.9% 2.1%
What are the demographic characteristics of [occupation(s)] (e.g., age, sex, gender, race/ ethnicity, language spoken)?	2.4	61.7% 21.3% 17.0% 2.1%



Prioritization of Demand Questions

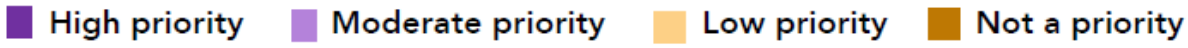
Question	Mean Rating	Distribution of priority ratings of health workforce demand questions, by survey respondents (n=46)
What are vacancy rates for [occupation(s)] in [setting]?	2.6	68.2% / 22.7% / 9.1%
How many [occupation] are employed in [setting]?	2.2	43.5% / 37.0% / 17.4% / 2.2%
What special skills/qualifications are being sought/required by employers in specific settings?	2.1	36.4% / 36.4% / 25.0% / 2.3%
To what extent do health care organizations staff with permanent/ regular employees vs. contract (short term) employees? Which occupations/ how many positions are employed as remote/telework positions?	2.0	37.0% / 39.1% / 13.0% / 10.9%
Which occupations/how many FTEs have recently been laid off/furloughed/ reduced in [setting type]?	2.0	39.1% / 30.4% / 26.1% / 4.3%



Mean rating calculated from responses: 3=high priority, 2=moderate priority, 1=low priority, 0=not a priority.

Prioritization of Population Need Questions

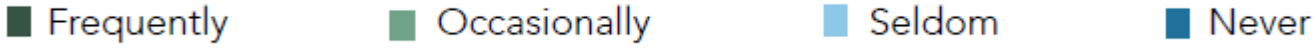
Question	Mean Rating	Distribution of priority ratings of health workforce population need questions, by survey respondents (n=46)
What percentage of the population has health insurance? What percent of the insured population has Medicaid coverage? Medicare? Do available providers accept patients' insurance?	2.6	66.0% / 25.5% / 8.5%
What are the demographic characteristics of the population of interest, and are there providers available who are appropriate for their care where it's needed?	2.5	54.3% / 39.1% / 4.3% / 2.2%
What are the average transportation times of the population to services and does transportation hinder access to care?	2.3	45.5% / 43.2% / 11.4%



Mean rating calculated from responses: 3–high priority, 2–moderate priority, 1–low priority, 0–not a priority.

Accessibility of Health Workforce Data Questions

Question	Distribution of frequency ratings of accessibility of health workforce data questions, by survey respondents (n=46)
About how often do you access online data resources about Washington's health workforce (e.g., Health Professions License Data, WA Board of Nursing workforce dashboard, Employment Security Department "Occupations in Demand")?	41.3% / 43.5% / 8.7% / 6.5%
When you want to access data about Washington's health workforce, how often are you able to find the information you're seeking?	26.1% / 50.0% / 23.9%
If guidance about how to use/access health workforce data from various sources were available, how often would you be likely to use it?	58.7% / 19.6% / 19.6% / 2.2%
If an integrated data system were available that provided online access to health workforce supply and demand data for Washington, how often would you be likely to use it?	76.1% / 15.2% / 6.5% / 2.2%



Take-Aways

- **Limits to currently available workforce data:**
  - Some weaknesses for use in planning if data collected for administrative purposes, which may limit their completeness and accessibility.
  - Gaps include incomplete data from surveys using population samples and low survey response rates, as well as datasets that lack key variables relevant to workforce analyses.
- **Data accessibility:**
  - Varies depending on requester - accessing source data can involve fees and/or data use agreements.
  - Some data made available through publicly accessibly dashboards (e.g., WABON, WOHW).
  - When available, resources that integrate multiple types of workforce data and facilitate access for users can facilitate timely health workforce analyses. Operationalizing the integration of health workforce data, however, can be very complex.

Take-Aways

- **Dissemination and communication:**
  - Many Washington researchers and policymakers access and analyze a wide variety of sources of workforce data, and sharing of their research findings to better inform statewide workforce planning is limited.
  - Increasing ways to share research findings among potential users could help maximize resource use and benefit workforce planning in Washington.

Discussion

What actions are reasonable to:

- Improve access to the workforce data that are currently available in Washington?
- Facilitate use of HELMS (and ESHB 1503) data?
- Fill data gaps that would inform high priority workforce questions?
- Encourage communication among users accessing and analyzing the wide variety of sources of workforce data?

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Full Report:

https://familymedicine.uw.edu/chws/publications/data-resources-for-health-workforce-policy-and-planning-in-washington-state/

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