SHARP Occupations in Alaska

2014

Alaska Department of Labor
and Workforce Development,
Research and Analysis Section

In support of the Alaska Department of Health and Social Services' Division of Public Health's SHARP program, which provides "support-for-service" to health care practitioners, this report gives information on occupations especially relevant to that program's efforts to address Alaska's shortage and maldistribution of health care workers.

When assessing a shortage, it's helpful to first evaluate the existing supply — in this case, the supply of certain health care workers. That's the main objective of this report.

Taking the next step and determining how many of those workers Alaska should have, and how they should be distributed around the state, would require a more nuanced analysis and be less likely to produce objective, undisputed answers.

This initial step outlines the numbers and some details of the existing workforce, and sets the stage for more specific potential research to follow.

Nurses and social workers are largest occupations

A total of 13,118 people worked in SHARP-related health care occupations in 2012. (See Table 1.)

Nurses made up about 5,800 of that number. The next largest group was social workers with almost 1,600 in a combined group including "child, family, and school social workers" and "social workers, all other," which includes sexual assault social workers and criminal justice social workers.

Average ages highest with more required training

The average age for workers statewide and across all occupations is just over 40, and the average age for SHARP-related workers is 43. (See Table 2.)
Average ages are higher for occupations that require the most training and education, with average ages of 50 or older for oral surgeons, psychiatrists, and pediatricians. That suggests a significant number of those workers will retire in the next decade.

Notable occupations at the younger end of the table are social workers, counselors, physical therapists, and dentists. It's likely, however, that older dentists are more likely to open their own practices or form partnerships, making them owners rather than employees and not part of the data discussed here. (See "About the data" at end of this report for more information.)

Social workers most likely to be longer-term Alaskans

Alaska residents[1] have an average tenure of 7.3 years in the state across all occupations and 12.3 years for SHARP-related occupations. (See Table 3.) That number is skewed higher by the especially large number of nurses.

Social workers, counselors, and dental hygienists tend to have been in the state longer than average, while medical school occupations — such as surgeons, physicians, and psychiatrists — tend to have shorter average tenures as residents, likely due in part to Alaska's lack of a medical school.

Behavioral health workers especially likely to be residents

One common-sense way to assess whether the state has a shortage of workers in an occupation is to look at its percentage of nonresidents. Medical occupations tend to have higher percentages of nonresident workers. (See Table 4.)

Resident workers' wages were higher for every occupation than nonresident wages.

[1]Alaska residency has a number of definitions. For this report, a person is considered an Alaska resident if he or she is eligible for the Alaska Permanent Fund Dividend, which generally requires a person to have lived in the state for a full calendar year prior to the application year.

That likely means nonresidents aren't working year-round in Alaska as much as resident workers.

Nearly 5,000 openings by 2022

Occupational projections for SHARP-related occupations through 2022 show about 2,500 new jobs and an additional 2,300 openings resulting from retirements or other departures, such as career changes.

A higher percentage of openings are from growth than replacement for most medical occupations — health care social workers being one exception — than they are for behavioral health occupations. Because the average age of behavioral health workers is lower than medical workers and there would be fewer openings from retirement, that means a higher rate of people leave behavioral health occupations by changing careers.

The projections data should not be interpreted as a direct indicator of need or demand. Instead, they reflect existing trends in filled positions, capturing both supply and demand. Other data suggest the demand was greater than the supply in 2012, and that a certain number of positions went unfilled. The projections do not attempt to determine whether those vacancy numbers will grow or shrink by 2022.

Mapping the workers

SHARP-related workers are far from evenly distributed throughout the state. (See Map 1.) Sitka has the highest proportion relative to its population — three times higher than average — and the Wade Hampton and Aleutians West census areas have the lowest.

What the map doesn't show are the catchment areas of the workers' employers. Hospitals and health clinics in the Bethel Census Area, for example, would also serve residents of the Wade Hampton and Yukon-Koyukuk census areas. Anchorage, which is shown as having an overrepresentation of SHARP workers, likely has a number of providers whose catchment areas include the entire state, either because of specialized services or because they focus on Alaska Natives.

Topics for further research

This report answers some questions, but raises others. For example:

1. Why do the occupational counts differ so widely in some cases from the professional license counts? To research that question for other purposes, renewing license holders are being surveyed to determine how many of them are not actually practicing. (See "About the data" for more information.) Working with professional associations would be another potential research tool.

2. What are Alaska's peer states and how do they compare for the types of data presented here?

3. What are the best definitions to use for rural and urban? Because some of SHARP's emphasis is on providing better health care access to rural areas, the various definitions of rural and urban could be explored and explained. One example, from the U.S. Department of Health and Social Services, is attached as Map 2.

4. How much turnover are these occupations experiencing? SHARP managers recognize that to address a worker shortage in these occupations, recruitment and retention strategies could both be effective. A health care vacancy survey, in which the Research and Analysis Section was a partner, provided some information on turnover and retention. Additional information will be available in early 2015 through a data set Research and Analysis is creating that will compare turnover across industries and create turnover rates by occupation based on an analysis of historical data.

About the data

The Alaska Department of Labor and Workforce Development's Research and Analysis Section produces a variety of economic and demographic data including, most relevant to this project, occupational information for the roughly 420,000 people who work wage and salary jobs — also called payroll jobs — in the state and additional demographics of the 330,000 payroll workers who are Alaska residents. (See the footnote on page 2 for a definition of residency.)

Data for workers come primarily from quarterly reports nearly all Alaska employers are required to file under the state's unemployment insurance program. Additional information about Alaska residents — age, gender, duration of Alaska residence — is available through the state's Permanent Fund Dividend program, which distributes a share of oil-related investment earnings to eligible Alaskans each year.

These data sources — administrative records collected for other purposes — are both a strength and a weakness. They're a strength because the data are collected and published regularly, comparable across industries, and recognized as reliable and objective; they're a weakness due to the limited detail available and because they leave out some parts of the health care workforce.

This report does not include information on people working in the state as sole proprietors (the self-employed) or those who are both practitioners and business owners and thus not required to participate in the state's unemployment insurance program. Those numbers appear to be significant in some cases, judging by large discrepancies between the number of payroll workers and the number of people licensed.

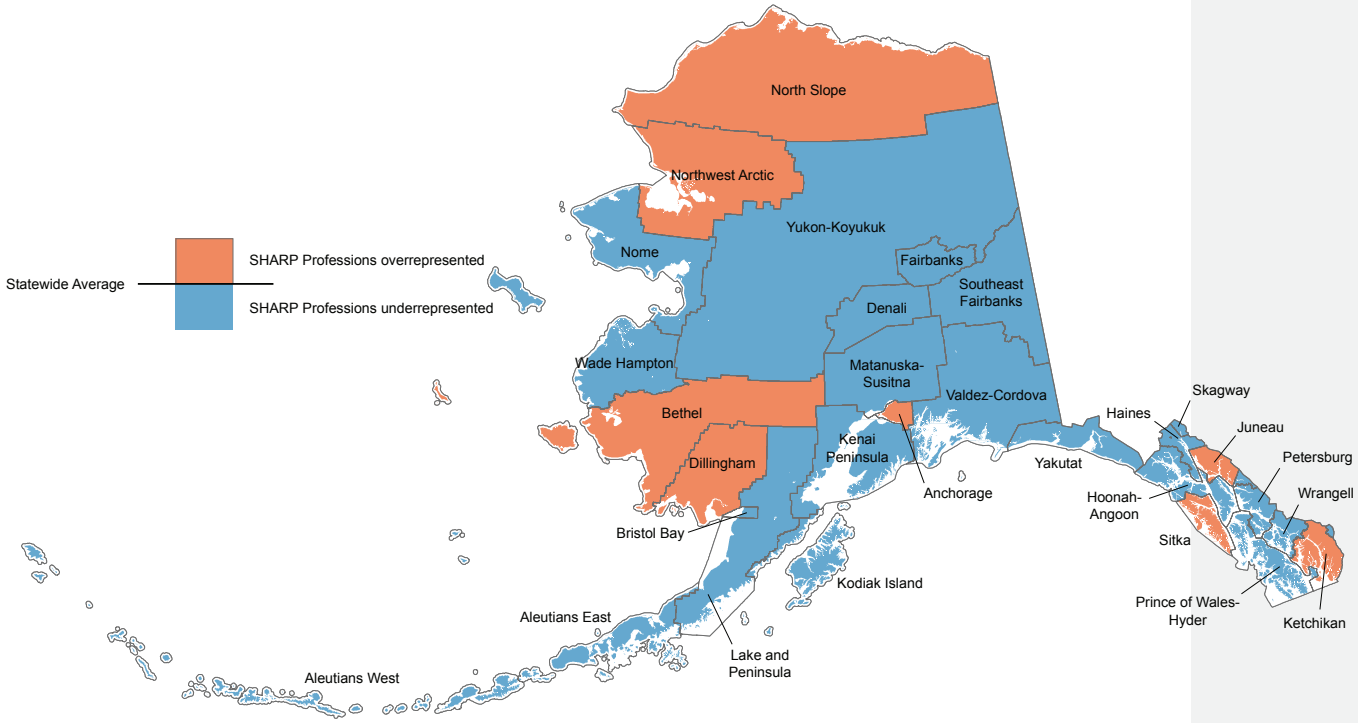
An example is dentists. About 250 dentists worked in payroll jobs in 2012, but 827 were licensed with the state to work as dentists that year. A person with a license doesn't necessarily practice, so that may explain some of the discrepancy, but not all of it.

A bigger group of dentists missing from the data in this report are those working as sole proprietors or as partners in a business where they're owners, not employees. Because those dentists wouldn't be covered by unemployment insurance, they would not be included in the reports employers file.

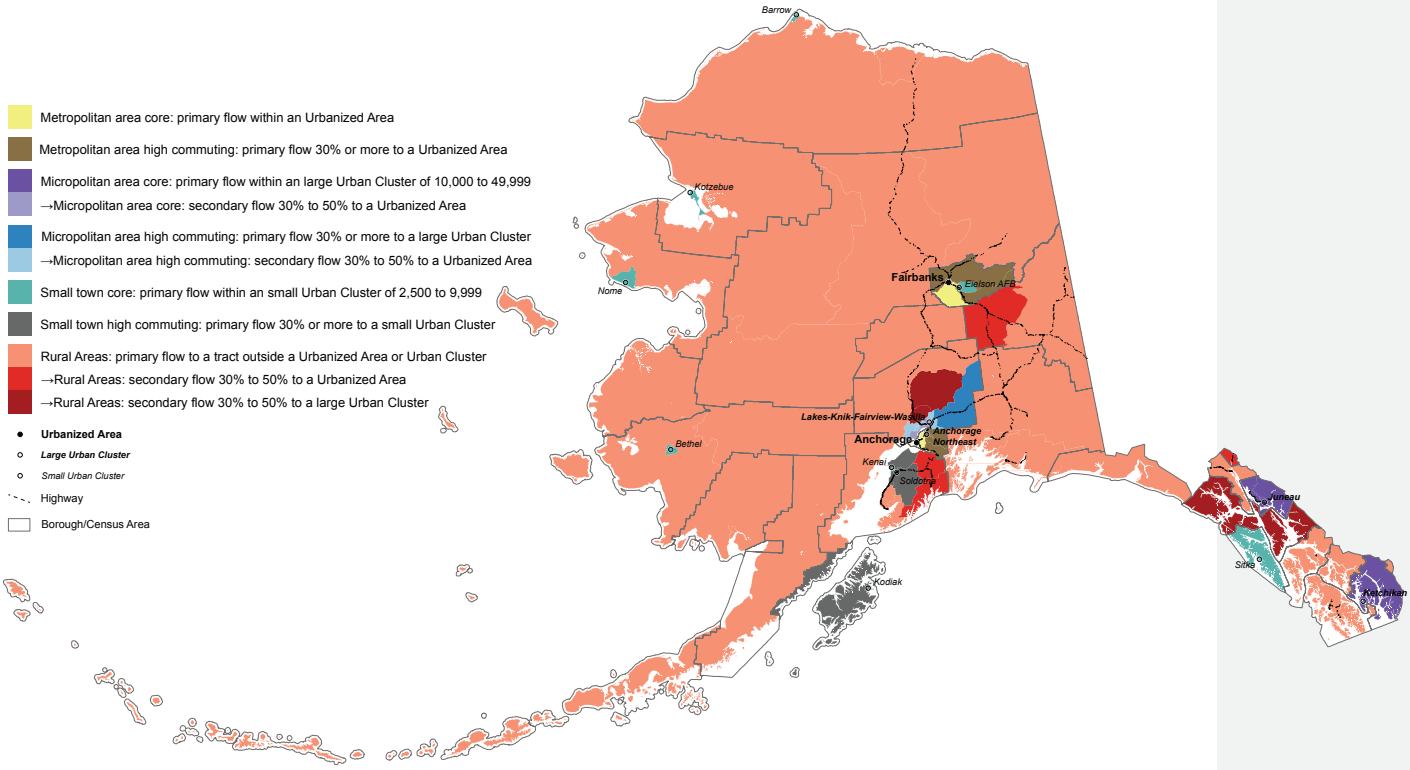
The U.S. Census Bureau produces a data set called "nonemployer statistics" that uses tax records to identify corporations without employees and individual proprietorships by industry. For dentist offices in 2012, there were 49 individual proprietorships and nine corporations. Even if each corporation had a handful of dentists practicing, those numbers still only explain a small part of the gap between 250 payroll dentists and 827 licensed dentists.

Pharmacists and physicians show similar patterns, with professional license holders far exceeding the sum of payroll workers in those occupations and additional practitioners identified in the nonemployer statistics.

MAP 1. Occupational Representation by Area



MAP 2. Rural-Urban Commuting Areas



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

TABLE 1. Profile of Select SHARP-Related Occupations

Total Workers by Occupation, Statewide 2012

Occupational Title	Total Workers[1]
Medical	
Registered Nurses	5,797
Physician Assistants	477
Physical Therapists	432
Family and General Practitioners	392
Pharmacists	384
Physicians and Surgeons, All Other	337
Health Care Social Workers	263
Nurse Practitioners	260
Internists, General	174
Psychiatrists	71
Pediatricians, General	68
Nurse Midwives	54
Obstetricians and Gynecologists	27
Behavioral Health	
Child, Family, and School Social Workers	967
Social Workers, All Other	624
Counselors, All Other	478
Mental Health and Substance Abuse Social Workers	474
Substance Abuse and Behavioral Disorder Counselors	357
Mental Health Counselors	342
Rehabilitation Counselors	273
Clinical, Counseling, and School Psychologists	137
Dental	
Dental Hygienists	465
Dentists, General	205
Dentists, All Other Specialists	48
Oral and Maxillofacial Surgeons	12

[1]Unduplicated count of total workers employed at any time during the year. Workers are assigned to the occupation in which they earned the most money.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

TABLE 2. Profile of Select SHARP-Related Occupations

Average Age of Resident Workers, Statewide 2012

Occupational Title	Average Age, Resident Workers
Total of All Occupations	**40.1**
Total of Select Medical Occupations	**43.0**
Medical	
Psychiatrists	52.2
Pediatricians, General	50.4
Physicians and Surgeons, All Other	47.7
Obstetricians and Gynecologists	47.0
Nurse Practitioners	45.0
Nurse Midwives	44.5
Registered Nurses	44.2
Physician Assistants	44.2
Family and General Practitioners	43.8
Pharmacists	43.0
Physical Therapists	41.7
Health Care Social Workers	41.6
Internists, General	40.2
Behavioral Health	
Substance Abuse and Behavioral Disorder Counselors	44.3
Clinical, Counseling, and School Psychologists	43.8
Mental Health Counselors	42.8
Social Workers, All Other	41.2
Rehabilitation Counselors	40.8
Mental Health and Substance Abuse Social Workers	40.5
Counselors, All Other	39.7
Child, Family, and School Social Workers	38.3
Dental	
Oral and Maxillofacial Surgeons	52.8
Dentists, General	42.9
Dental Hygienists	42.6
Dentists, All Other Specialists	42.3

[1]Unduplicated count of total workers employed at any time during the year. Workers are assigned to the occupation in which they earned the most money.

[2]Education level, work experience, and on-the-job training information determined by Bureau of Labor and Statistics

Note: Residency is calculated by matching workers reported by Alaska employers with the two most recent Permanent Fund Dividend files.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

TABLE 3. Profile of Select SHARP-Related Occupations

Average Years of Residency by Occupation, Statewide 2012

Occupational Title	Average Years as Alaska Resident[2]
Total All Occupations	**7.3**
Total Select Medical Occupations	**12.3**
Medical	
Health Care Social Workers	13.3
Registered Nurses	12.3
Nurse Practitioners	11.5
Nurse Midwives	11.4
Physician Assistants	10.1
Pharmacists	10.0
Pediatricians, General	9.5
Physical Therapists	9.2
Internists, General	9.2
Psychiatrists	8.9
Family and General Practitioners	8.8
Physicians and Surgeons, All Other	8.5
Obstetricians and Gynecologists	7.8
Behavioral Health	
Child, Family, and School Social Workers	14.9
Social Workers, All Other	14.6
Substance Abuse and Behavioral Disorder Counselors	14.6
Rehabilitation Counselors	14.1
Counselors, All Other	13.5
Mental Health Counselors	12.7
Mental Health and Substance Abuse Social Workers	12.4
Clinical, Counseling, and School Psychologists	10.0
Dental	
Dental Hygienists	16.8
Dentists, All Other Specialists	11.3
Dentists, General	10.1
Oral and Maxillofacial Surgeons	5.7

[1]Unduplicated count of total workers employed at any time during the year. Workers are assigned to the occupation in which they earned the most money.

[2]Average time as a resident includes nonresidents with a value of 0.

Note: Residency is calculated by matching workers reported by Alaska employers with the two most recent Permanent Fund Dividend files.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

TABLE 4. Profile of Select SHARP-Related Occupations

Residency and Wages by Occupation, Statewide 2012

Occupational Title	Percent Resident Workers	Average Resident Wages	Average Nonresident Wages
Medical			
Internists, General	60%	$89,167	$66,836
Pediatricians, General	74%	$116,190	$36,446
Family and General Practitioners	76%	$115,802	$68,910
Physical Therapists	77%	$59,954	$30,506
Physicians and Surgeons, All Other	77%	$258,619	$150,642
Obstetricians and Gynecologists	78%	$166,533	$26,903
Physician Assistants	79%	$82,369	$59,759
Psychiatrists	82%	$143,029	$71,020
Pharmacists	82%	$93,209	$51,598
Nurse Practitioners	83%	$73,992	$37,816
Registered Nurses	83%	$59,859	$31,344
Nurse Midwives	83%	$47,922	$32,493
Clinical, Counseling, and School Psychologists	85%	$58,468	$32,114
Behavioral Health			
Counselors, All Other	86%	$30,561	$21,174
Mental Health and Substance Abuse Social Workers	88%	$39,708	$21,961
Health Care Social Workers	88%	$43,382	$34,387
Child, Family, and School Social Workers	91%	$35,291	$21,895
Social Workers, All Other	91%	$31,804	$15,894
Mental Health Counselors	92%	$39,595	$20,921
Substance Abuse and Behavioral Disorder Counselors	93%	$36,287	$17,788
Rehabilitation Counselors	94%	$34,170	$13,219
Dental			
Oral and Maxillofacial Surgeons	50%	$334,818	$82,242
Dentists, All Other Specialists	69%	$69,130	$30,071
Dentists, General	81%	$114,252	$64,671
Dental Hygienists	92%	$56,093	$20,534

[1]Unduplicated count of total workers employed at any time during the year. Workers are assigned to the occupation in which they earned the most money.

Notes: ND means not disclosable.

Residency is calculated by matching workers reported by Alaska employers with the two most recent Permanent Fund Dividend files.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

TABLE 5. Projections for Select SHARP Occupations

Total Workers by Occupation, Statewide 2012

Occupational Title	Projected Growth Openings	Projected Replacement Openings	Total Projected Openings
Medical			
Registered Nurses	994	873	1,867
Pharmacists	170	97	267
Family and General Practitioners	96	76	172
Physician Assistants	97	69	166
Physical Therapists	93	45	138
Health Care Social Workers	50	61	111
Physicians and Surgeons, All Other	59	46	105
Nurse Practitioners	50	37	87
Internists, General	20	20	40
Psychiatrists	14	12	26
Nurse Midwives	13	8	21
Pediatricians, General	11	8	19
Obstetricians and Gynecologists	7	5	12
Behavioral Health			
Mental Health and Substance Abuse Social Workers	129	175	304
Child, Family, and School Social Workers	95	157	252
Substance Abuse and Behavioral Disorder Counselors	83	138	221
Social Workers, All Other	78	109	187
Mental Health Counselors	74	101	175
Rehabilitation Counselors	67	68	135
Counselors, All Other	44	47	91
Clinical, Counseling, and School Psychologists	16	31	47
Dental			
Dental Hygienists	159	111	270
Dentists, General	35	37	72
Dentists, All Other Specialists	NA	NA	0
Oral and Maxillofacial Surgeons	NA	NA	0
TOTAL	2,454	2,331	4,785

[1]Unduplicated count of total workers employed at any time during the year. Workers are assigned to the occupation in which they earned the most money.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section