



2007 Alaska Health Workforce Vacancy Study Research Summary

Key Findings: Alaska is confronted by severe shortages of professional health workers, primarily in high-level primary care occupations that include **Family Physician, General Internist, Critical Care Nurse, Nurse Case Manager, Family Nurse Practitioner, Physician Assistant, Pharmacist,**

Dentist, Physical/Occupational/Speech Therapist, and Behavioral Health occupations. Shortages in **RNs and Allied Health** are much less acute. Most affected are rural areas and Tribal Health Organizations, though growth-driven high vacancy rates affect the Anchorage-Matsu region as well.

BACKGROUND

Alaska is confronted by a “perfect storm” of health professional shortages. The state has long suffered from a deficient “supply side” characterized by insufficient numbers of key health workers whose recruitment, retention and training have been impeded by Alaska’s remoteness, harsh climate, rural isolation, low population density and scarce training resources. Now exacerbating this already difficult situation is a burgeoning “demand side” for increased health services for a steadily growing and aging population. The health services industry is the fastest growing sector of Alaska’s economy, employing over 7% of the state workforce.

METHODOLOGIES

The key questions this study sought to answer were: What health occupations were at this time most critically affected by shortages? Exactly how many budgeted positions existed and how many of these currently remained unfilled? Where were these vacancies regionally and in what types of organizations? What did employers perceive to be the major underlying causes of their vacancies? How many new trainees/graduates could the job market actually absorb annually and how many organizations could absorb them?

Four hundred seventy-six (476) purposively sampled Alaska health service organizations of all types responded to the study survey (Figure 1). Survey data was used to generate estimates of positions and vacancies for the entire state of Alaska.

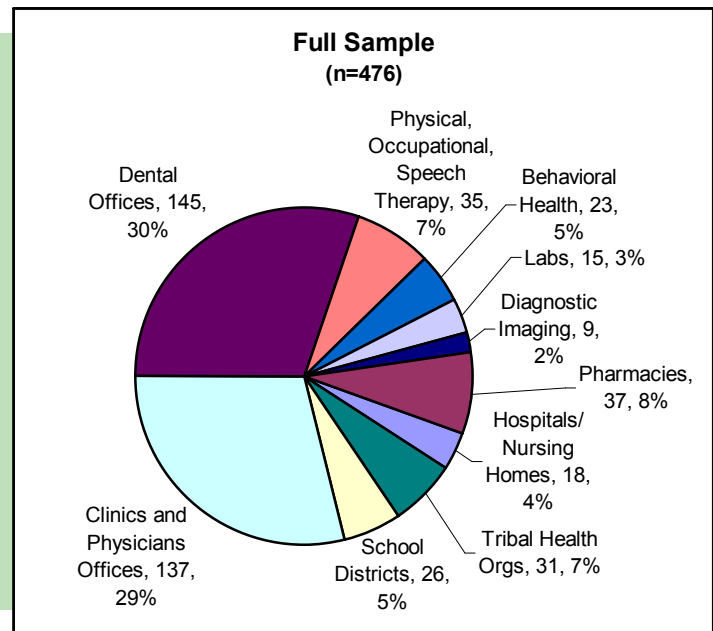


Figure 1

KEY FINDINGS

The findings confirm and quantify the trends cited in recent studies and accumulating anecdotal evidence: despite the recent progress in training and deploying health personnel, such as **Registered Nurses**, critical shortages persist (Tables 1,2).

The situation for key primary care occupations – **Family Physician, General Internist, Nurse Practitioner, and Physician Assistant** – was troubling, particularly in the rural areas, with numerous estimated vacancies and high estimated state vacancy rates between 15% and 20%.

Though vacancies for **Psychiatrists** were not numerous, they were particularly in demand (19.0% estimated vacancy rate) and difficult to recruit (mean vacancy length of 34.5 months).

The national **Pharmacist** shortage has hit Alaska hard and affects every region, with high estimated vacancy numbers (98), and an estimated vacancy rate of 23.7%.

Therapists of all kinds – **Physical, Occupational, Speech, and Speech-Language Pathologists** – were in short supply, with estimated vacancy rates ranging from 15.6% to 29.3%. No part of the state escaped the shortages; vacancy rates were most acute in rural areas, but numerically high in the Anchorage Mat-Su region.

High numbers of vacancies and high vacancy rates were reported for key specialized nursing occupations, particularly for **Nurse Case Manager, Family Nurse Practitioner, and Critical Care Nurse**. These appeared to be the current areas of most critical shortage in nursing.

The estimated **Registered Nurse** vacancy rate was moderate (8.0%), but this masked 10% rates in hospitals and tribal health organizations, and an estimated rural rate of 16.1%.

While the estimated vacancy rate for **Dentist** was 10.3%, this masked a 15.3% estimated rural rate and a very high 42.0% rate for tribal health organizations, which had 39% of estimated **Dentist** vacancies.

Table 1. Occupational Groups

Occupational Groups	Study Sample (n=476)			State Estimate		
	Positions	Vacancies	Vacancy Rate	Positions	Vacancies	Vacancy Rate
All Occupations	18158	1866	10.3%	34738	3529	10.2%
Physicians	730	109	14.9%	1931	226	11.7%
Professional Nurses	4202	462	11.0%	7139	696	9.8%
Other Nursing Staff	1769	135	7.6%	1762	111	6.3%
Professions/ Therapists	1240	217	17.5%	2281	404	17.7%
Behavioral Health	2938	327	11.1%	7450	1033	13.9%
Allied Health	3209	291	9.1%	5523	434	7.9%
Public Health/ Nutrition	154	18	11.7%	189	ND	ND
Other Primary Care (PA & CHAP)	759	132	17.4%	1067	198	18.5%
Managers	1337	69	5.2%	2947	160	5.4%
Health Information/ Reimbursement	1816	106	5.8%	4451	253	5.7%

In the **Behavioral Health** occupational group, the most acute shortages – with both extremely high vacancy numbers and high vacancy rates – appeared to be among **Human Services Workers**. In addition, overall estimated **Behavioral Health** occupation vacancies were extremely numerous (1033), around 29% of all estimated vacancies – more than any other occupational group.

Among **Allied Health** occupations, high vacancy rates were affecting employers of **Physical Therapy Assistants** and **Respiratory Therapists**. **Sonographer** vacancies were difficult to fill, and **Surgical Technician** vacancies, though not numerous, were averaging 3 to 4 years in length.

One hundred (100) vacancies and a vacancy rate of 18.1% were reported for **Community Health Aide/Practitioners (CHA/Ps)**.

Among “front office” and “back office” occupations, **Coding Specialist** and **Certified Coder** had 11% estimated vacancy rates and very long mean vacancy lengths.

The managerial occupations for which high vacancy rates were reported were healthcare related: **Behavioral Health Supervisor, Clinical Department Manager, Health Information Manager, Medical Director, Nurse Manager, and Practice Manager**. Behavioral health organizations had the most estimated managerial vacancies.

Table 2. Key occupations

Key Occupations (high numbers of vacancies, high vacancy rates)	Study Sample (n=476)			State Estimate		
	Positions	Vacancies	Vacancy Rate	Positions	Vacancies	Vacancy Rate
Family Physician	252	48	18.3%	675	107	15.8%
General Internist	71	15	21.1%	200	40	20.0%
Psychiatrist	36	10	27.8%	93	18	19.0%
Registered Nurse	3109	299	9.6%	5489	439	8.0%
Critical Care Nurse	497	43	8.7%	629	60	9.5%
Nurse Case Manager	136	42	30.9%	209	49	23.4%
Family Nurse Practitioner	155	36	23.2%	364	71	19.5%
Physician Assistant	207	32	15.5%	515	98	19.0%
Pharmacist	302	73	24.2%	413	98	23.7%
Physical Therapist	271	29	10.7%	510	84	16.5%
Dentist	319	47	14.7%	692	71	10.3%
Human Services Worker	1568	170	10.8%	4800	697	14.5%
Behavioral Health Clinician	297	35	11.8%	555	71	12.8%
Case Manager/Care Coordinator	505	52	10.3%	1163	164	14.1%
Physical Therapy Assistant	35	11	31.4%	62	18	28.6%
Medical Assistant	367	38	10.4%	1092	102	9.3%
CHA/P	552	100	18.1%	552	100	18.1%
Certified Coder	85	6	7.1%	209	22	10.6%
Medical Director	49	6	12.2%	120	18	14.8%
Behavioral Health Supervisor	82	13	15.9%	176	22	12.5%

Looking at respondent types, tribal health organizations reported the highest overall vacancy rate (16.5%). These organizations reported 87 **CHA/P** vacancies; approximately half of all estimated vacancies for **Nurse Case Manager, Pharmacist, Chemical Dependency Counselor, Dentist, Medical Lab Tech, Medical Technologist, and Health Educator**; and all the estimated vacancies for **Coding Specialist**. But every respondent type was a locus for acute shortages in key occupations, such as clinics/offices of physicians for **PAs**, hospitals/nursing homes for **RNs**, pharmacies for **Pharmacists**, behavioral health organizations for **Human Services Workers**, and school districts for **Speech-Language Pathologists**.

Higher vacancy rates were generally found in the rural respondents, particularly in the North/West and Southwest regions, which reported double digit vacancy rates for nearly all occupational groups, and overall vacancy rates of around 20% (Table 3, Figure

2). Occupations with much higher rural estimated vacancy rates included **RN** (6.9% urban, 16.1% rural), **Behavioral Health Clinician** (9.3% urban, 22.9% rural), **Dentist** (7.2% urban, 15.3% rural), **Physical Therapist** (13.5 urban, 31.6% rural), and **PA** (14.7% urban, 26.8% rural) (Table 4).

DISCUSSION

The “supply side” shortages apparently persist. “Inadequate Pool of Qualified Workers” was the top reason given for vacancies, cited by 54% of respondents, followed by “Transience/Moving Away” (28%), “Insufficient Compensation” (18%), and “Rural Isolation” (16%). Many tribal health organizations also reported “Insufficient/Expensive Housing” as a top reason for unfilled vacancies. The data also indicated a burgeoning “demand side,” where shortages were exacerbated by population growth and an increased need and demand for health services, particularly in the high-growth Anchorage Mat-Su region.

Table 3. Regional vacancy rates

Occupational Group	Regions (Study Sample – n =476)						
	North/ West (n=10)	Southwest (n=17)	Interior (n=72)	Anchorage Mat-Su (n=232)	Gulf Coast (n=69)	Southeast (n=70)	Statewide/ Multiregional (n=6)
Physicians	26.7%	21.2%	21.6%	12.6%	10.4%	6.8%	30.3%
Professional Nurses	26.0%	21.6%	5.9%	11.1%	8.0%	5.9%	12.1%
Other Nursing Staff	18.6%	18.8%	5.8%	6.2%	4.6%	2.3%	8.8%
Dentists/Pharmacists/Therapists	32.4%	32.4%	20.7%	15.9%	16.5%	16.3%	12.4%
Behavioral Health	19.0%	22.7%	13.1%	8.3%	7.1%	11.1%	11.6%
Allied Health	17.0%	24.6%	7.3%	6.5%	8.4%	7.7%	8.6%
Public Health/ Nutrition	30.0%	6.3%	0.0%	4.0%	18.9%	0.0%	10.5%
Other Primary Care (PA & CHA/P)	19.7%	18.6%	24.5%	9.0%	9.1%	4.0%	0.0%
Managers	13.8%	2.4%	3.5%	3.2%	6.4%	11.7%	4.0%
Health Information/ Reimbursement	15.9%	16.9%	2.0%	5.3%	6.6%	2.8%	7.2%
All Occupations	20.1%	20.3%	9.0%	8.6%	8.1%	7.7%	10.2%

Table 4. Urban vs. Rural vacancies and vacancy rates

Occupation	Urban		Rural	
	Estimated Vacancies	Estimated Vacancy Rate	Estimated Vacancies	Estimated Vacancy Rate
Family Physician	68	14.9%	38	17.6%
General Internist	27	18.8%	13	23.1%
RN	339	6.9%	94	16.1%
Family Nurse Practitioner	36	13.3%	34	36.4%
Pharmacist	68	22.7%	30	25.9%
Behavioral Health Clinician	36	9.3%	34	22.9%
Human Services Worker	158	8.5%	209	10.1%
Dentist	32	7.2%	38	15.3%
Dental Hygienist	14	3.6%	17	10.0%
Dental Assistant	27	4.4%	64	14.9%
Physical Therapist	59	13.5%	26	31.6%
PA	50	14.7%	47	26.8%
All Occupations	1998	8.1%	1162	13.3%

Many respondents provided commentary with their surveys and noted positions that are particularly difficult to fill:

- “We have been hiring travelers for Physical Therapy positions at \$67/hr – we can't find therapists to employ. We have been looking for 2 years.” (Urban Medical Clinic).
- “Without a state Physical Therapy program it is very difficult to get PT staff. Usually this area is staffed by PTs that leave competing PT clinics.” (Urban Physical Therapy Office)
- We really need a pharmacy school in Alaska. It took two years to fill our last pharmacist position.” (Urban Pharmacy)
- “Pharmacists are always the most difficult position to fill.” (Rural Pharmacy)

The availability of military spouses has apparently alleviated some of the workforce pressure, but has exacerbated the “transience” problem. Also affecting the shortages was the absence of local training resources (such as medical, dental, pharmacy, and therapy schools) to provide a local workforce pipeline. In the qualitative data, common refrains were, “we need a pharmacy school,” “we need a dental school,” “we need a physical therapy school.”

The acuity of workforce shortages was also reflected by the high percentage of estimated vacancies the responding employers would consider filling with new grads (Table 5). Respondents indicated that they had the capacity to hire sizeable graduating cohorts of Family Physicians, PAs, Occupational and Physical Therapists, Pharmacists, and Dentists. These may be the occupations likely to yield optimal responses to substantial investments in preparation and training programs and/or targeted recruitment and retention campaigns.

Copies of the full study can be downloaded from the ACRH website at:

<http://nursing.uaa.alaska.edu/acrh/>

Table 5. New Grad Vacancies

Occupation	Study Sample (n=476)	Statewide Estimate
Human Services Worker – HS diploma	68	266
Registered Nurse	93	226
Human Services Worker – AA degree	47	195
Case Manager/Care Coordinator	37	120
Family Physician	25	89
CHA/P	88	88
Pharmacist	46	84
Medical Assistant	21	84
Physician Assistant	23	80
Occupational Therapist	21	75
Dental Assistant	26	75
Dentist	27	67
Physical Therapist	23	62
Speech-Language Pathologist	28	53
Behavioral Health Clinician	19	53

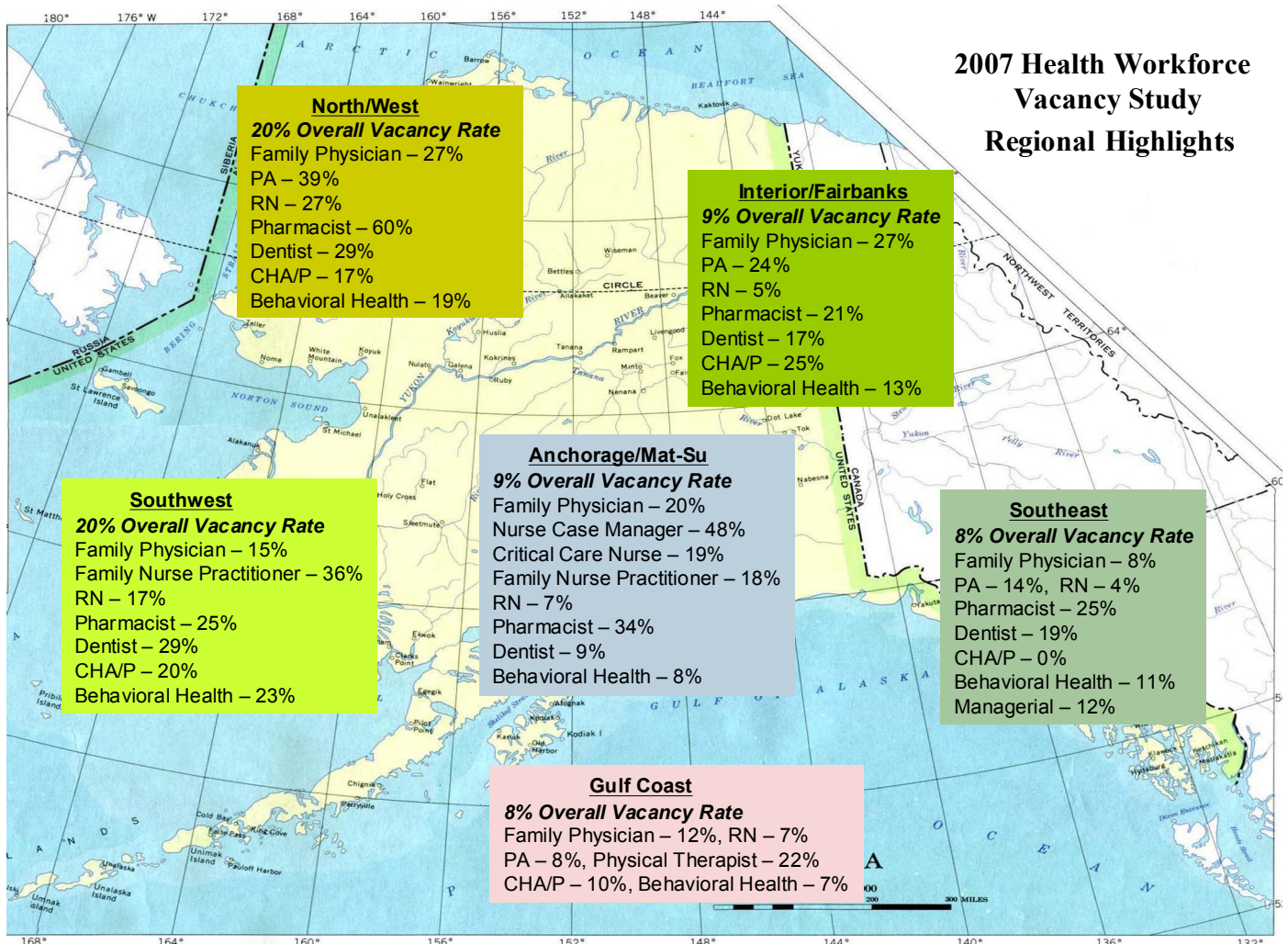


Figure 2. Regional Highlights