

# Alaska Physician Workforce Study



Alaska Center for Rural Health

and



Institute for Circumpolar Health Studies

University of Alaska Anchorage  
3211 Providence Drive  
Anchorage, Alaska 99508

May 2000

## **PROJECT TEAM**

### **Alaska Center for Rural Health**

Denny DeGross, Director

### **Institute for Circumpolar Health Studies Evaluation Team**

Kate Heitkamp, BS  
Stacy Smith, MFA  
Jennifer Loudon, MPA  
Beth Landon, MBA, MHA

### **Alaska Medical Association**

Jim Jordan, Executive Director  
Kevin Tomera, M.D., Past President  
Rod Wilson, M.D.

### **Division of Occupational Licensing**

Leslie Abel, Executive Administrator, State Medical Board  
Nancy Ferguson, Licensing Examiner

This is a collaborative project of the Alaska Center for Rural Health,  
the Institute for Circumpolar Health Studies, the Alaska State Medical Association,  
and the Alaska Division of Occupational Licensing.

## EXECUTIVE SUMMARY

Alaska's health workforce, with the exception of nurses, community health aides and other paraprofessionals, received their professional education outside of Alaska. Consequently, the costs associated with recruiting and retaining adequate levels of health professionals in Alaska are, by all accounts of the institutions and agencies who employ them, extremely high.

Past attempts to describe the "condition" of Alaska's health work force were accomplished by performing surveys of hospitals and government agencies for their current and projected vacancies and hires. While those surveys were useful in providing a "snapshot" of the health workforce at a moment in time, resources have not been available to repeat those measures. Thus, no trends in vacancy or employment patterns were established that would have advised potential employers of health workers, or that would have predicted where educational institutions should have been planning greater or less efforts in the preparation of health care workers.

The present study takes a different approach. This is a study of the demographic characteristics and the professional behavior of a single profession, Alaska's physicians. What can be discovered about physicians that will be useful to the profession, to the agencies and institutions that employ them, and to the educational institutions that prepare them for their jobs?

### Methodology

This study is a collaboration between the Alaska Center for Rural Health, the Institute for Circumpolar Health Studies, the Alaska State Medical Association, and the Alaska Division of Occupational Licensing. The Division of Occupational licensing distributed 2,020 surveys along with license application materials sent to currently licensed physicians and to individuals who had requested licensure during the "off" year (Alaska re-licenses physicians every two years). Of those, 960 surveys were returned, for a rate of 44.7%. Approximately 1,220 physicians were licensed by Alaska to practice for the "licensed" years (1999 – 2000).

### Findings

The average **age** of the respondents was 49 years. Nearly 43% were over the age of 50. The mean age across "urban," "rural," and "remote" was consistent, at about 47. The mean age was slightly higher for "outside," which may reflect those who are semi-retired, performing locum tenens, or doing other "fill-in" work.

The **gender** breakdown for Alaska was close to the National breakdown, with 76% male physicians and 23% female physicians. Far fewer women (14%) are practicing in Alaska's non-Native rural, southeast island communities, or in the non-Native "rail-belt" communities on Alaska's small road system. This is significantly lower than the proportion of women to men statewide (23% female to 76% male). Women exceed the statewide rate in the "remote" areas, where Indian Health Service and Alaska Native tribal systems have been delivering the care for many years.

The **ethnic** breakdown shows that minorities make up less than 10% of the respondents. While Alaska Natives make up approximately 17% of Alaska's population, they only make up 1.4% of the physician respondents. This improved only marginally in the "remote" parts of Alaska where the primary employers of physicians are tribally operated systems.

The most frequently used means that respondents obtained **Continuing Medical Education (CME)** were: 1) Hospital programs; 2) self instruction; 3) national medical society; and, 4) university-based programs. Least used to satisfy continuing education requirements were: specialty journal, local medical society, and distance delivered courses. Not surprisingly, physicians living in “remote” areas, where travel options are limited, were the heavy users of distance delivered and local medical society courses. CME that required travel to another state was much more likely to be used by physicians living in urban areas

More than two-thirds of the respondents indicated that they could see at least a few **new patients**. Nearly half indicated they could see *many* new patients. When looking at patient care practice by location, a high percentage of respondents said they could take a *few* or *many* new patients (ranging from 69% for “rural,” 77% for “urban,” and 80% for “remote”).

Large majorities indicated they were seeing or would see **Medicaid and Medicare patients**, but the dramatic increase in Medicare audits since the time of the survey may have changed this considerably.

When asked how much time they **worked in a clinical practice**, most physicians (77.7%) said they worked 10 – 12 months per year, and nearly 14% indicated they worked 1 – 3 months of the year. Less than 10% said they worked the longer span of 4 – 9 months of the year. A high percentage of physicians from all locations (“urban”- 91%, “rural”- 89%, and “remote” - 82%) reported working 10 to 12 months of the year, with a slightly higher percentage of urban physicians working the longer months.

When asked the **number of hours worked**, the majority of physicians reported working more than 30 hours per week, the highest possible response for this question.

Nearly 80% of respondents reported spending between 75% and 100% of their time in **direct contact with patients**.

For the **location of their primary practice**, 65% of physicians reported working in an “urban” location; 7.8% worked in a “rural” location; and 17.3% worked in a “remote” location. A review of the distribution of employing entities provides a slightly different view, with nearly 70% of physicians reporting employment in private practice.

Less than one third of the respondents practicing in Alaska indicated **having secondary practice sites**. Of those, the physicians in “urban” practice sites nearly equaled all other locations. A much higher ratio of both “rural” (1 out of 2) and “remote” (1+ out of 2) physicians reported having a secondary practice, while only 1 out of 8 “urban” physicians reported having a secondary practice.

Of the physician respondents, 26% indicated that they provide **itinerant services** in Alaska, with a median value of 12 days.

Nearly 25% of the physicians reported **supervising PAs**, with a median value of 1 site.

48% of the respondents reported providing **specialty care**, and 52% indicated they provide primary care. More than 34% said they also have a “secondary” specialty, with 32% of those being primary care specialties.

Respondents were significantly more likely to have **residency** training in their primary specialty than in their secondary specialty.

The data suggest that a very high proportion of Alaska physicians have **ABMS certification** in their specialty. However, the data may be suspect because the survey failed to inquire about possible certification in the American Osteopathic Board (AOB), which is the only other certifying entity recognized by governments, licensing bodies, and the AMA.

More than half the respondents **worked in private health care**. However, it should be noted that physicians working in federal systems may or may not be licensed in Alaska. As expected, “urban” physicians reported a higher proportion of specialties than did “rural” or “remote” physicians.

Interestingly, the **ratio of primary care providers to specialty care** providers changes for physicians over age 50. Below age 50, a greater proportion in each age group worked in one of the primary care fields. After age 50, the balance shifted, showing a greater proportion in specialty fields.

## Table of Contents

EXECUTIVE SUMMARY .....	i
Table of Contents .....	iv
I. Introduction.....	1
A. Purpose of the Assessment .....	1
B. Current Information About Alaska's Health Workforce.....	1
1. Professional and Other Organizations.....	1
C. The Need For More Complete Health Workforce Information.....	2
D. Methodology .....	2
II. Survey Response Statistics .....	4
A. Demographics & Background.....	4
1. Age.....	4
a. Age of Respondents.....	4
b. Age by Region.....	4
2. Gender.....	5
a. Gender of Respondents .....	5
b. Gender by Region .....	5
3. Ethnicity .....	6
a. Ethnicity of Respondents.....	6
b. Ethnicity by Region.....	6
4. Continuing Medical Education (CME) Sources.....	7
B. Patient Care Information .....	8
1. Patient Care Practice .....	8
a. Patient Care Practice Status of Respondents.....	8
b. Patient Care Practice Status by Region.....	8
2. Medicaid and Medicare Patients .....	9
a. Medicaid and Medicare Patients Accepted by Physicians .....	9
b. Medicaid and Medicare Patients Accepted by Physicians by Region.....	9
3. Physician Work Time .....	10
a. Physician Work Time in Clinical Practice .....	10
b. Physician Work Time in Clinical Practice by Location .....	10
4. Regular Medicine-Related Work Hours .....	11
C. Medical Practice Information.....	12
1. Primary Practice Location .....	12
2. Distribution of Physicians in the Health Care System.....	13
3. Secondary Practice Locations.....	14
4. Itinerant Practice in Remote Alaska .....	14
5. Supervision of Physician Assistants.....	15
D. Practice Specialties and Settings.....	16
1. Primary Care and Specialty Care.....	16
2. Residency Training in Primary & Secondary Specialties .....	17
a. Primary & Secondary Specialties .....	17
b. American Board of Medical Specialties Certification.....	17
c. Primary Care versus Specialty Care by Location.....	18
d. Primary Care versus Specialty Care by Age.....	18

## **Appendices**

Appendix A: Physician Survey Instrument

Appendix B: Data Limitations

## **I. Introduction**

### **A. Purpose of the Assessment**

Alaska has chronically lacked resources with which to measure and describe the condition of its health workforce. As a consequence, there have been few opportunities to anticipate short or long-term shifts in the health careers job market with a degree of precision that could guide health career course offerings in educational institutions, or provider investment in long term recruitment and retention efforts.

In response, the Alaska Center for Rural Health (ACRH) elected to look at one segment of the health workforce: physicians. Working in collaboration with the Institute for Circumpolar Health Studies, the Alaska State Medical Association, and the Alaska Division of Occupational Licensing, ACRH has reviewed several variables of interest to planning agencies and employers of Alaska's workforce.

Some information about Alaska's health workforce has been gathered on a regular basis. Other knowledge of the workforce has been produced on a sporadic and non-recurring basis. However, it is fair to say that agencies in Alaska lack the resources necessary to perform longitudinal assessments of the health workforce in ways that would be of most use to many agencies who have that interest.

### **B. Current Information About Alaska's Health Workforce**

Alaska Department of Labor: The ADL web page (<http://www.labor.state.ak.us/>) is a good place to start for general information about Alaska's health workforce. The Department projects that Alaska's occupations will be characterized by intense concentration in growth, with ten out of the more than 450 detailed occupations projected to account for 25% of total employment growth over the 1996-2006 period. Of those 10 fastest-growing occupations, five are associated with health services, and three with computer technology. ADL has been able to predict with reasonable accuracy large occupational trends based on information gleaned from random-sampled surveys of employers (including follow-up phone contact when required), and from information provided by professional organizations. However, no detailed analysis of specific health professions needs or characteristics are made from information gathered by ADL.

#### **1. Professional and Other Organizations**

Alaska State Medical Association: ASMA publishes an annual directory of the approximately 1250 physicians who are licensed to practice in Alaska and who are, for the most part, not employed by state or federal agencies. (The Division of Occupational Licensing indicates approximately 1700 – 1800 physicians licensed in Alaska). The listing is alphabetical, with specialty self-reported by physicians. ASMA employs a fulltime staff person to keep the directory current. ASMA staff has a high level of confidence that physician's addresses represent the location of the practice. Not described are: level of activity; out-of-state residency, with sporadic and/or periodic practice in Alaska; split or divided practice locations; and board certification for specialties. The directory contains a useful "Physician Distribution" grid at the back of the book, which shows physicians by community in four categories: Private Practice; Public Health; Military; and Municipal, State and Federal.

Alaska Dental Society: ADS publishes an annual directory of the approximately 350 Alaska dentists who are tripartite members of the American Dental Association, the Alaska Dental Society, and a local dental society. That number represents 76% of the dentists who are licensed to practice dentistry in Alaska.

Alaska Colleagues in Caring: ACIC is a statewide consortium of individuals, agencies, and organizations formed in 1996 in response to a Robert Wood Johnson Foundation initiative. ACIC is housed in the School of Nursing at the University of Alaska Anchorage. ACIC has completed four survey studies: 1) Alaska Registered Nurses, 2) Alaska Licensed Practical Nurses, 3) Federal Nurses in Alaska, and 4) Intention of Employers to Hire Nursing Personnel. The first three studies examined demographic features of the Alaska nurse population, including age, race, and gender. Also examined were: place of origin, the kinds of jobs actually performed, compensation, levels of education, and the kinds of nursing practices engaged in by Alaska nurses. The Employer Study tried to determine whether a nursing "shortage" exists in Alaska, what kinds of vacancy rates are being experienced by provider agencies, and what categories of nursing have been the most difficult to fill.

Alaska Center for Rural Health: ACRH completed limited studies of the health workforce needs for 37 health care occupations within selected Alaska agencies in 1988, and again in 1992. The 1992 study examined vacancy and hiring patterns in all hospitals, nursing facilities, and selected state and Anchorage municipal agencies. The study did not examine the private sector health workforce needs or professional organizations.

### **C. The Need For More Complete Health Workforce Information**

Examination of Alaska's health workforce has been sporadic and inconsistent. Limited, short term sampling has occurred, but no agency has been able to mount assessments employing repeated measures that would yield well marked trends. The economic volatility of Alaska's health system is such that neither over supply or scarcity in the workforce has ever been even marginally predictable.

A wide variety of institutions and organizations would benefit from better information about the evolving condition of Alaska's health workforce. School districts, universities, and Native corporations engaged in career guidance and academic counseling for students interested in health careers might craft better career trajectories for students. Employment and recruitment services (public as well as private) seeking jobs for clients might better anticipate both short and long term hiring needs. Most in need of improved understanding of health career hiring patterns are health institutions (hospitals, clinics, and public health agencies) who expend enormous resources to recruit and retain a health workforce that is characterized by extremely high turnover.

### **D. Methodology**

When assessing the "condition" of Alaska's health workforce, there are two possible approaches. One may look at the major institutional employers for the persistent patterns of vacancy and hire. The second may examine individual professions (one by one) in order to discern patterns that might affect their immediate and long term viability. For example, if, in exploring the demographic patterns of a profession, one discovers that an inordinate percentage of members are approaching retirement age, the system that relies upon that profession might wish to take heed. Of course, neither of these two approaches is sufficient to provide a complete picture of the health workforce "condition." A combination of both would be

more ideal. But, unlike many other states, no agency in Alaska to date has been able to secure the resources required to engage in such a two-pronged comprehensive system assessment. The Alaska Center for Rural Health, having executed two health facilities workforce assessments in the past (1988 and 1992 - see above), resolved, for purposes of demonstrating the difference, to assess a major health profession – hence, this study of Alaska’s physician population.

A mail out survey of New York State’s physician population provided the model for this assessment. In the New York study, a survey instrument was mailed out with license application materials that were sent by the state to all licensed physicians. The response rate and quality of responses were sufficient to justify a similar approach in Alaska. Four agencies—the Alaska Center for Rural Health (ACRH), the Institute for Circumpolar Health Studies (ICHS), the Alaska State Medical Association (ASMA), and the Alaska Division of Occupational Licensing—took part. ACRH and ICHS developed the survey instrument with assistance from a work committee of ASMA. The instrument was tested with 15 physicians in the Anchorage area, resulting in a modification of specific items on the survey before final printing and dissemination.

A total of 2,020 surveys were delivered to the Alaska Division of Occupational Licensing in the fall of 1998. They were enclosed with license materials sent out to all currently licensed physicians, as well as to those who had applied for licenses in "off" years. See Appendix A for the full survey instrument.

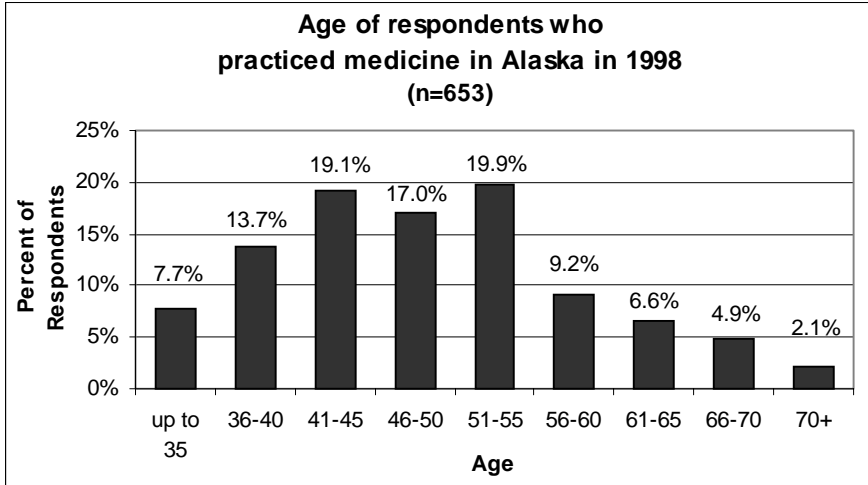
A total of 2,020 packets with surveys enclosed were sent out to physicians. Of the 960 surveys returned, 7 were discarded for containing no or nearly no data. The return rate was 44.7%. This is a good response for a mail survey. ICHS entered the data into Cardiff, an automated scanning software. Approximately 1,220 physicians were licensed by the state to practice for the next two years (1999 – 2000).

## II. Survey Response Statistics

### A. Demographics & Background

#### 1. Age

##### a. Age of Respondents



The average age of the survey respondents was approximately 49 years, with a standard deviation of 9.8. Nearly 43% of respondents were over the age of 50, which is a major concern for the Alaska State Medical Association and other agencies involved in the replacement of retirees.

Figure 1

##### b. Age by Region

Figure 2 shows no marked difference in the mean age of physicians across regions. With the exception of respondents in the “rural” region, the mean age of the physicians varies less than 5% per region. It is possible that the higher mean age of physicians “outside” Alaska is a reflection of those who are semi-retired, or performing locum tenens or other fill-in work.

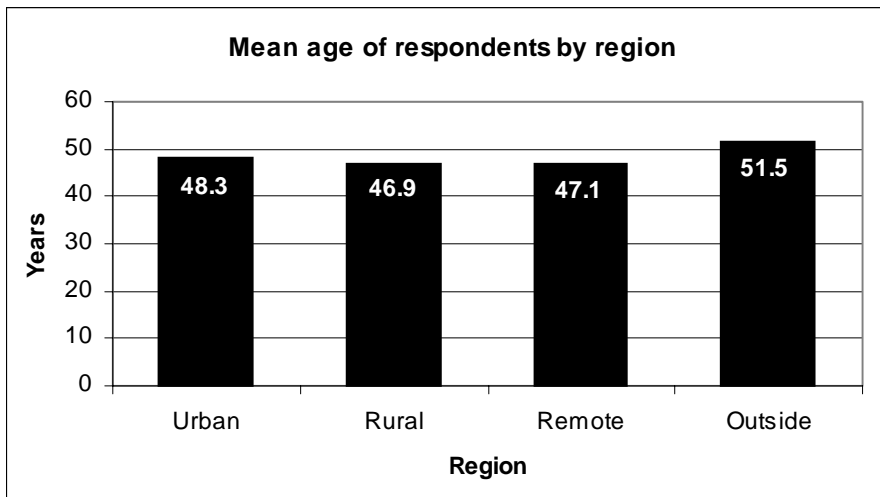
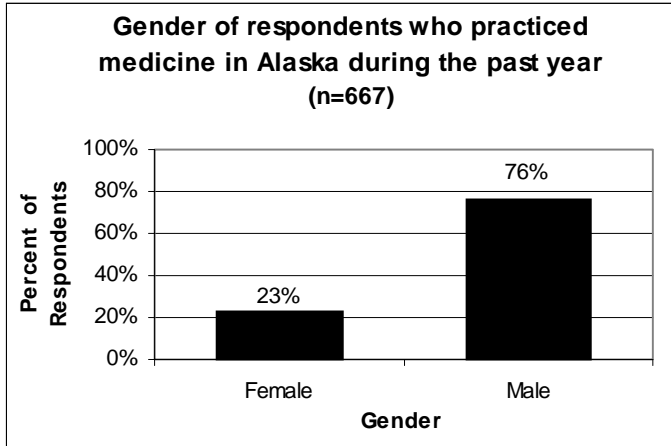


Figure 2

## 2. Gender

### a. Gender of Respondents



The gender breakdown of the respondents is 76% male and 23% female. Due to "rounding," these percentages do not total 100%. This number corresponds with figures from the Alaska State Medical Association, which shows 25.2% of Alaska's physicians are female. United States numbers for urban areas show 76% of the physician population are male and 24% are female, and in rural areas 85% are male and 15% are female (using the USDA Urban Influence Codes).

Figure 3

### b. Gender by Region

Male physicians significantly outnumbered female physicians. Female physicians are under-represented in this state and do not correlate with the gender proportion of the populations being served. Further, medical schools are now graduating students in a more balanced male/female ratio. Fewer women are practicing in Alaska's rural non-Native Southeast island communities or in road-system rail-belt communities.

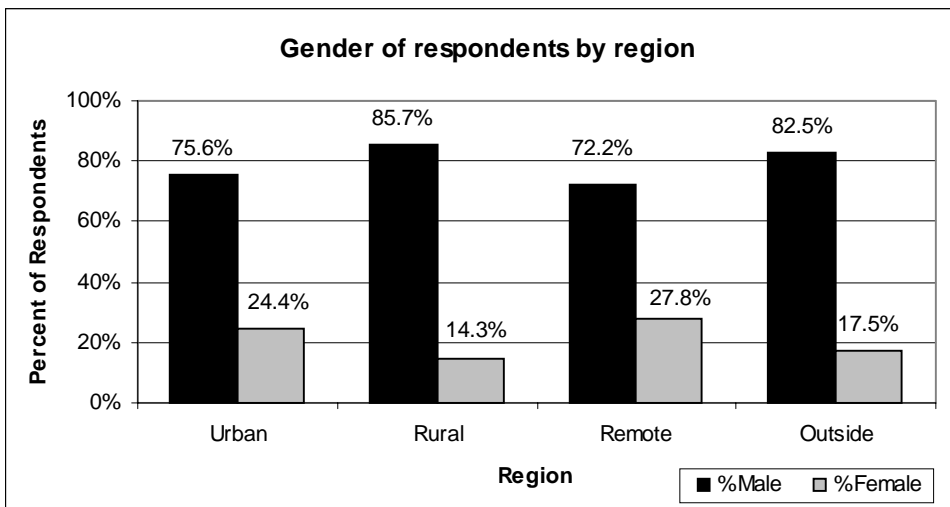


Figure 4

### 3. Ethnicity

#### a. Ethnicity of Respondents

The vast majority of survey respondents (90.7%) were Caucasian. Of the remaining respondents, 3.8% were Asian, 1.4% Native Alaskan/American, 1.2% African-American, 1.2% Hispanic, and 1.4% some other ethnicity.

Alaska's physician population does not appear to reflect the state's ethnic diversity, which is approximately 20% non-Caucasian. This has economic significance to Alaska's largest minority population, Alaska Natives, who make up 17% of the population, and who possess and deploy a substantial portion of the health resources of the state.

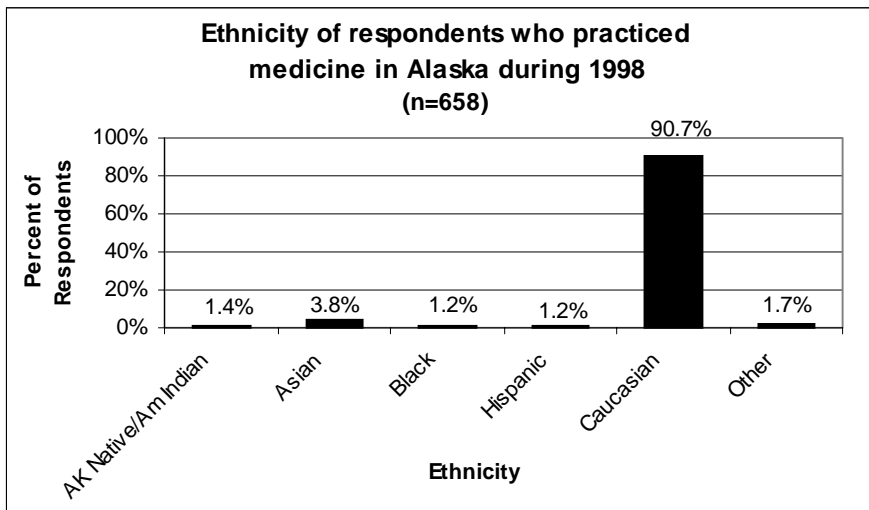


Figure 5

#### b. Ethnicity by Region

As described above, white/non-Hispanic physicians are over-represented in Alaska relative to the ethnic make-up of the state. Even broken down to the regional level, approximately 90% of the respondents are white/non-Hispanic (see Table 1).

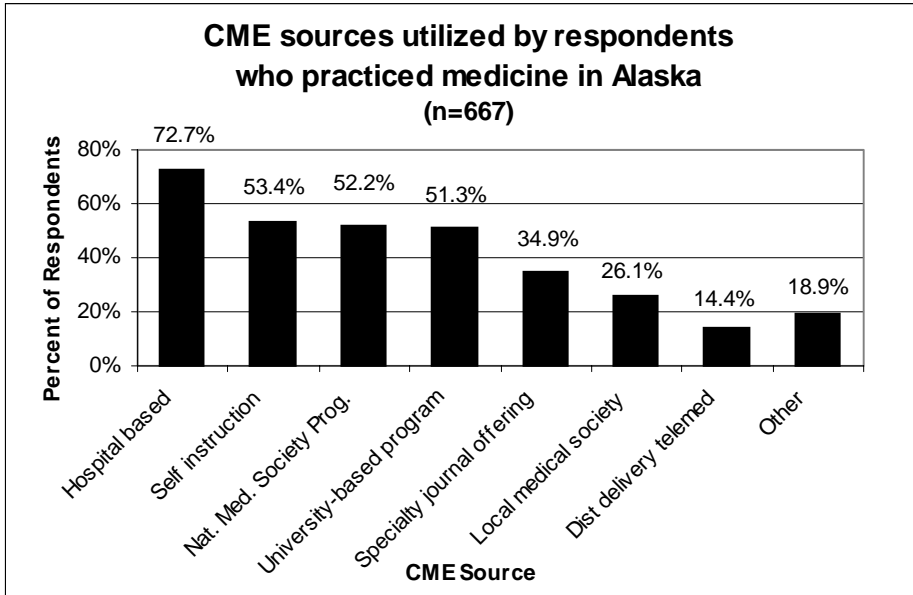
Table 1: Ethnicity of Respondents by Region (in percents)

Region	AK Native/ American Indian	Asian or Pacific Islander	Black/ African- American	Hispanic	White (Non- Hispanic)	Other
Urban	1.3	5.0	1.3	.8	90.0	1.8
Rural	0	2.1	0	4.3	91.5	2.1
Remote	3.7	1.8	.9	2.8	88.1	2.8
Outside	0	0	3.1	0	96.9	0

#### 4. Continuing Medical Education (CME) Sources

##### a. CME Sources of Respondents

Over 73% of all respondents used a hospital-based source for continuing medical education. Over half utilized self-instruction, national medical society programs, and university-based programs as CME sources. Specialty journal offerings, the local medical society, distance delivered education, and other sources for CME were used far less than the other four sources. This is unfortunate for rural and remote physicians, whose absence from their



workstation may be limited due to the lack of substitute coverage while they are out of town. The inclination is to see a “trip outside” as a vacation. Rural and remote area providers have long sought to have CME delivered closer to home, or on-site, giving them the freedom to enjoy a non-medical “trip outside” without guilt.

Figure 6

##### b. CME Sources by Region

Within any one type of CME, it is difficult to distinguish any trends. However, by comparing CME that requires extensive travel against CME that does not, a pattern emerges. Self-instruction and distance delivery can be done without travel. For these categories, physicians in “remote” regions represented the greatest proportion of users. CME offered by local medical societies require travel within the state, and physicians in “remote” regions were twice as likely to use this method than the other physicians. CME, which requires travel to another location, possibly to another state, is better represented by urban and outside physicians. These categories include national medical societies and university based programs. Percentages in Table 2 do not total 100% since respondents could check multiple CME types.

Table 2: Continuing Medical Education by Region

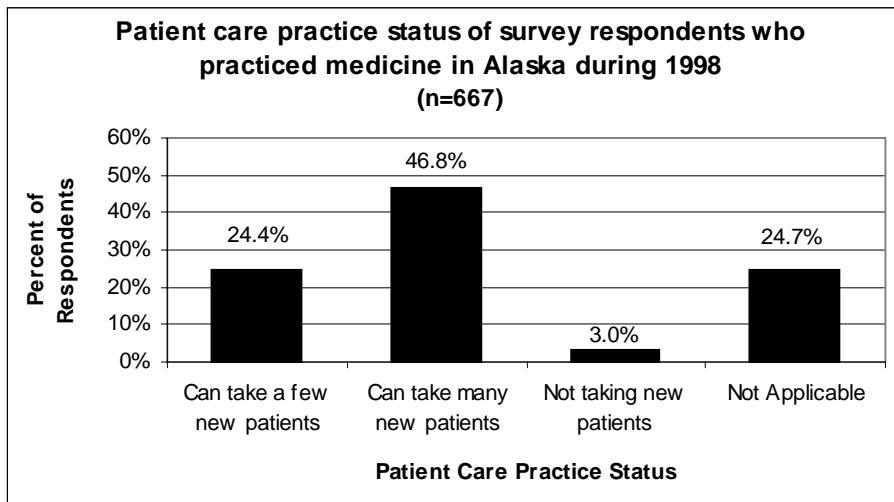
Region	Distance Delivery	Hospital Program	Local Medical Society	National Medical Society	Self-Instruct	Specialty Journal	Univ. Based Program	Other
Urban	14%	75%	29%	54%	53%	33%	51%	27%
Rural	16%	69%	29%	39%	65%	41%	51%	25%
Remote	23%	69%	62%	51%	56%	39%	47%	25%

## B. Patient Care Information

### 1. Patient Care Practice

#### a. Patient Care Practice Status of Respondents

The majority of physicians practicing in Alaska indicated that they could accept at least a few new patients. These physicians made up about two-thirds of the respondents. Very few (3%) indicated that they could not accept new patients at all. The remaining 25% responded that

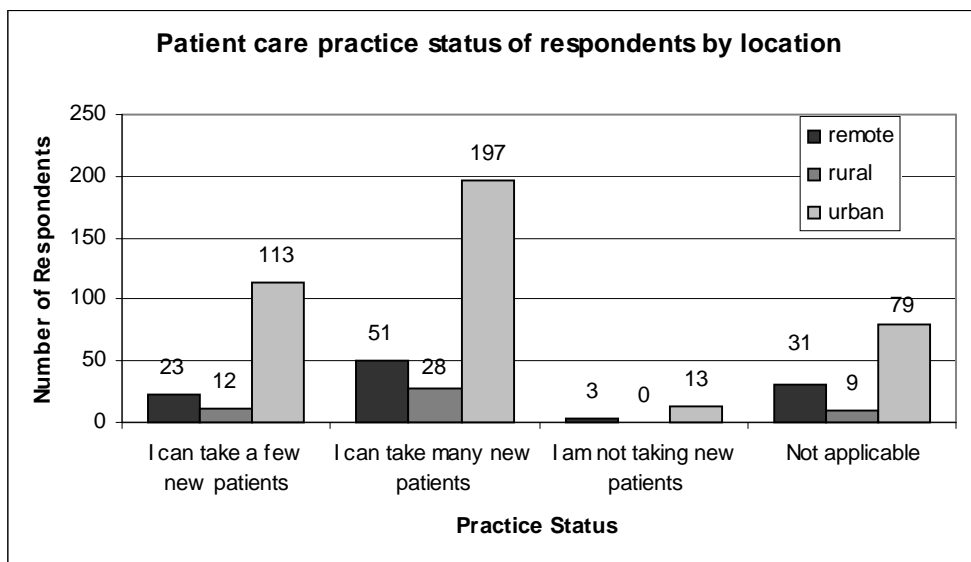


this question was not applicable to their practice. It may be that these physicians did not see patients anyway--such as physicians employed by state or federal agencies, or physicians whose jobs did not involve clinical work with patients (i.e. pathologist, epidemiologist).

Figure 7

#### b. Patient Care Practice Status by Region

65% of the physicians reported working primarily in urban locations. Of those respondents who could take a "few new patients," 76% (113) were "urban," and of those respondents who could



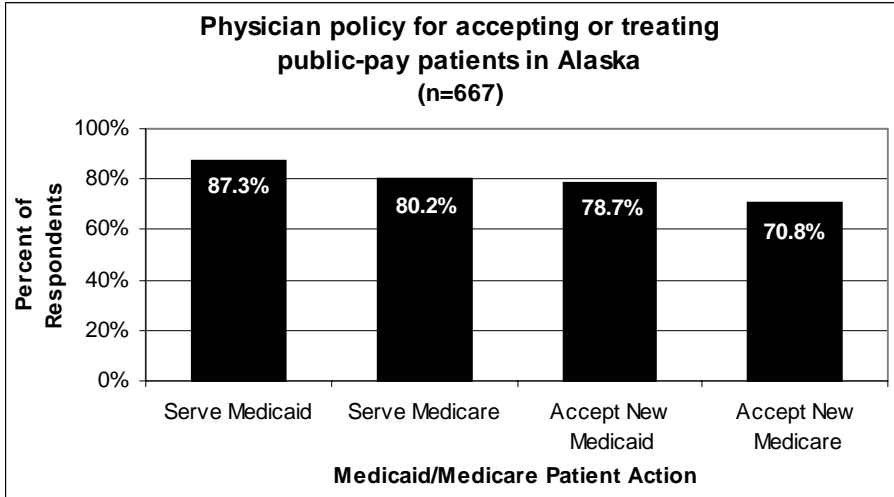
take "many new patients," 71% (197) were urban. This suggests that the urban respondents have a greater capacity for patients than the rural or remote respondents.

Figure 8

**2. Medicaid and Medicare Patients**

**a. Medicaid and Medicare Patients Accepted by Physicians**

A large majority of the physicians reported that they accept and serve both Medicaid and Medicare patients in their practices. The proportion of physicians who accept and serve Medicaid patients was slightly higher (7-8%) than those who accept and serve Medicare patients.



(Note: this information was collected prior to the Medicaid and Medicare Audits. It is possible that these findings are now invalid. Jim Jordan of the Alaska State Medical Association suspects that the figures in 2000 would not show so strongly that Medicaid and Medicare patients are being seen.

Figure 9

Caution: since this survey was completed, events have occurred which may have invalidated results concerning physicians providing services under Medicaid and Medicare, and their willingness to take new patients. In fiscal year 1998, Alaska initiated audits on approximately 70 physicians providing services to Medicaid patients. This, coupled with physician perceptions of a federal “witch-hunt” for fraudulent billing for Medicare patients, may have had a significant “chilling” effect – that is, it might be expected that these high percentages of participation in those services might not be repeated if this study were performed today.

**b. Medicaid and Medicare Patients Accepted by Physicians by Region**

Table 3: Physician Policy for Accepting or Treating Public-pay Patients by Region

Region	Accepts New Medicaid Patients	Accepts New Medicare Patients	Serves Medicaid Patients	Serves Medicare Patients
Urban	79%	69%	88%	81%
Rural	92%	86%	98%	92%
Remote	89%	86%	95%	92%
Outside	75%	65%	83%	69%

Table 3 demonstrates that urban respondents are the least likely to accept new Medicaid and Medicare patients, second only to physicians practicing outside of Alaska. Further, a greater percent of rural and remote respondents reported serving Medicaid and Medicare patients.

### 3. Physician Work Time

#### a. Physician Work Time in Clinical Practice

The average length of time that physicians practiced medicine in Alaska during 1998 was 10 months. Of the 667 physicians, 463 (73.4 %) worked the full twelve-month period. The average time worked outside the state during that same time period was 1.7 months. 8.9%, or 56 physicians, worked only one month in Alaska.

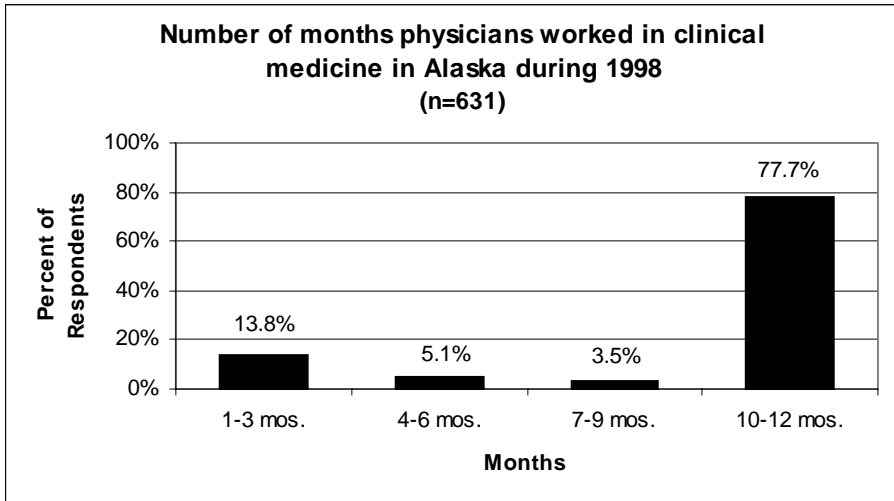


Figure 10

#### b. Physician Work Time in Clinical Practice by Location

Figure 11 shows that the majority of respondents worked 12 months of the year in Alaska. Months are aggregated into three-month increments because of their small size. In the 10-12 month category, the vast majority of respondents (80-85%) indicated 12 months.

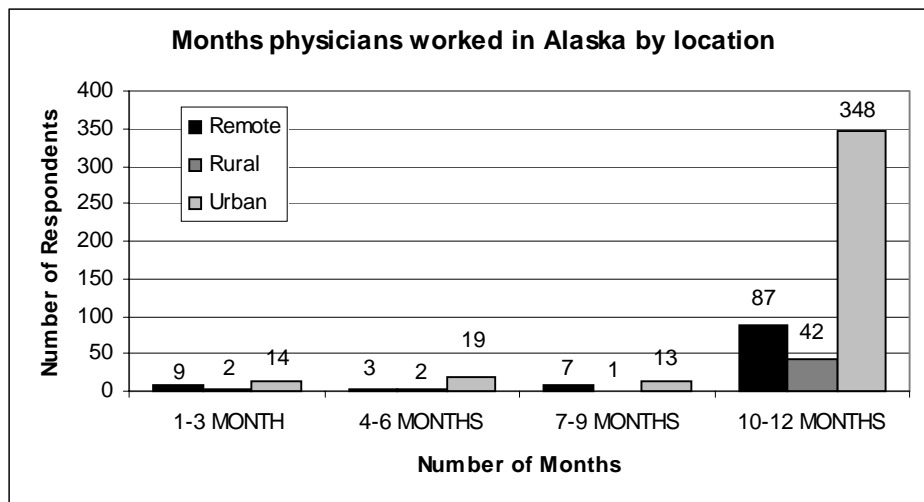


Figure 11

#### 4. Regular Medicine-Related Work Hours

The vast majority (82%) of the physicians who practiced in Alaska worked more than 30 hours per week, the highest possible response for this question.

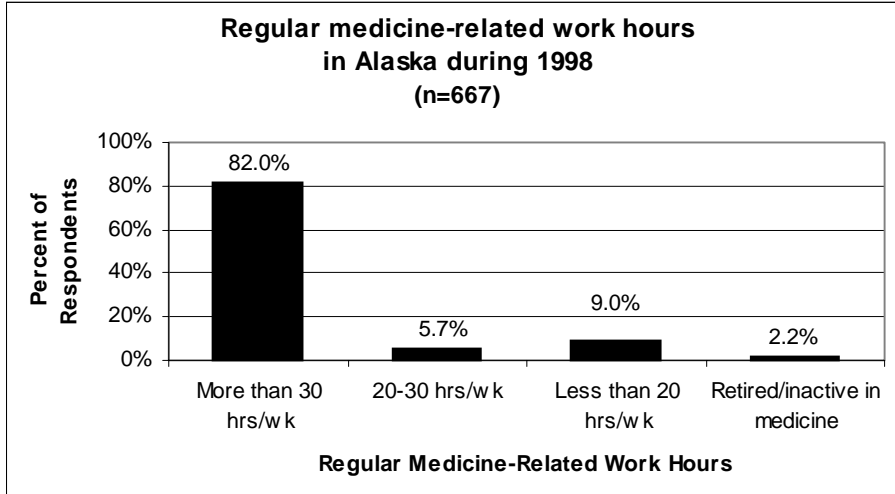


Figure 12

#### 5. Time Spent in Direct Contact with Patients

Over 85% of the surveyed physicians practicing medicine in Alaska spent at least 50% of their work time in direct contact with patients. The physicians who spent 75% or more of their time in direct contact with patients made up 79% of the survey respondents. It should be noted that some physicians do not have direct patient contact as part of their work, such as pathologists, epidemiologists, and administrators.

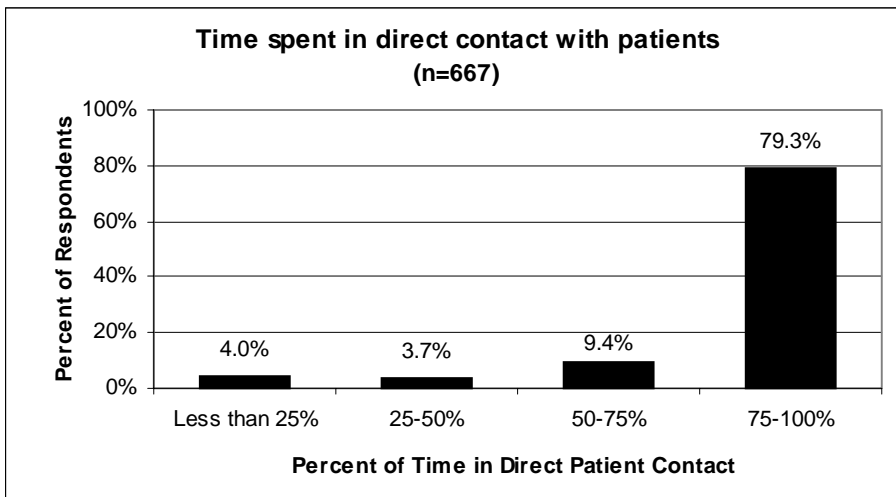


Figure 13

## C. Medical Practice Information

### 1. Primary Practice Location

It is difficult to look at practice locations without also addressing the geographic diversity of the populations being served. For the purposes of this survey, the state of Alaska is broken into three components: urban, rural, and remote. The communities listed beside the figure indicate how the geographies were selected. The population numbers came from the 1998 *Alaska Population Overview*. “Outside” refers to locations outside the state of Alaska.

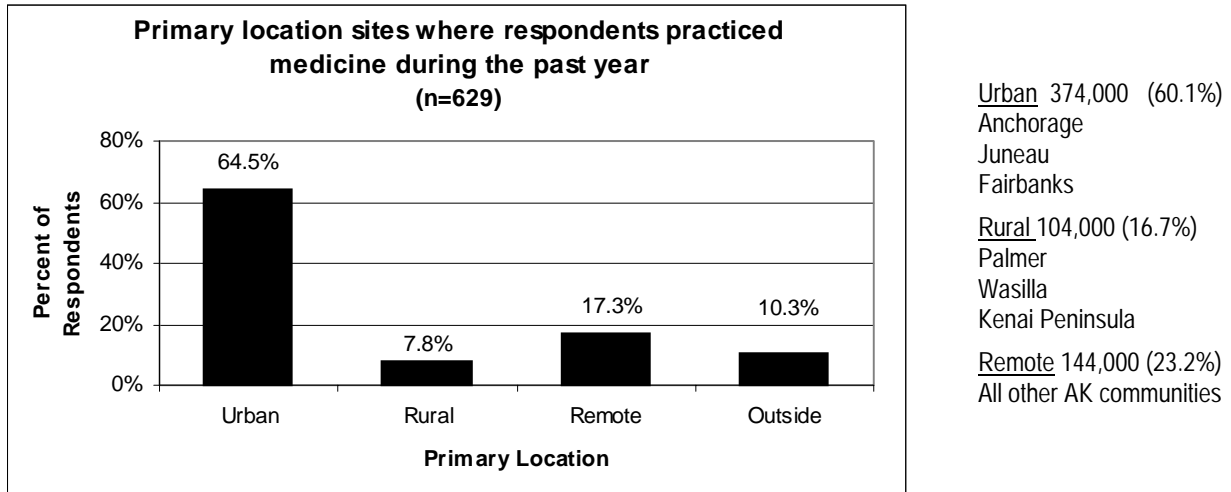


Figure 14

Physicians who treated patients in urban areas made up the largest portion of the survey respondents. Sixty-five percent of the physicians indicated urban areas as the location of their principal practice. This makes sense, since just over 60% of the state’s population resides in the designated urban areas, and many non-urban residents travel to the urban centers for specialty services.

Physicians with primary practices in rural areas (8%) were outnumbered by physicians with practice locations in either remote areas (17%) or outside the state (10%). The percent of physicians practicing in rural locations (8%) does not correlate with the population size, since 16.7% of the state’s population lives in these rural locations. This relates to the “duality” in the system – Native/IHS is one, and Island/rail-belt non-Native is the other (rural).

For the remote areas (everything outside urban or rural), 17% of the physician respondents reported working primarily in these areas, which corresponds with the overall population. 23.2% of the state’s population live in these areas, and many residents travel to the urban areas for specialty care, thereby reducing their demand for physician services.

## 2. Distribution of Physicians in the Health Care System

Figure 15 and 16 demonstrate that over half of the respondents worked in private health care, and affirms that private practice exists primarily in the urban areas. The next largest area in which physicians worked is in the IHS/tribal health care system.

**Caution** This number may be inaccurate due to licensure requirements. Physicians serving federal beneficiaries (IHS, VA, Coast Guard, Military) do not need a state license, and it is unknown how many of those who were licensed participated in the survey. Thus, respondents working in the tribal health care system or other federal systems may be under-represented in this assessment.

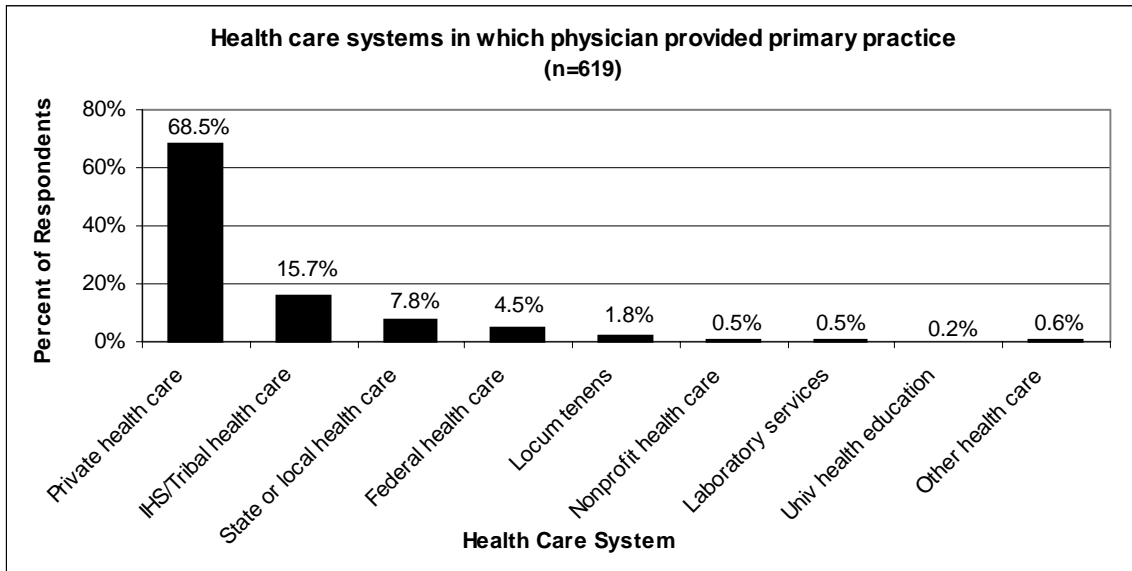


Figure 15

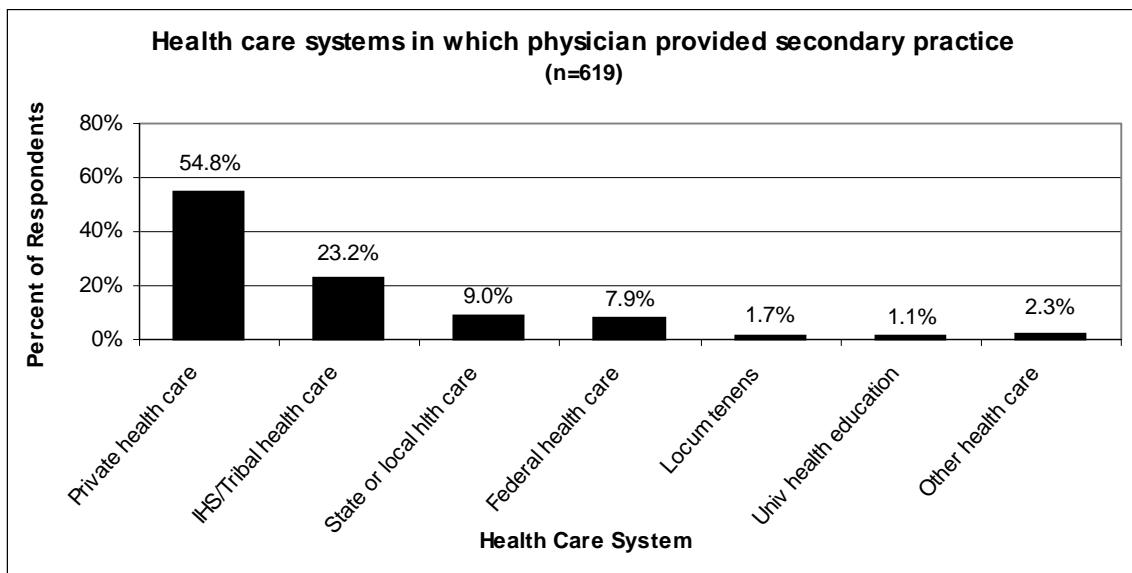


Figure 16

### 3. Secondary Practice Locations

Less than one third of the physicians surveyed in Alaska indicated having secondary practice sites. Again, urban practice sites outnumbered all other site types, and rural sites had the smallest proportion of practicing physicians in the survey. Sixteen percent of physicians reported a rural secondary practice location, and 24% of the physicians reported a remote secondary practice location. This correlates closely with 16.7% of the rural population and 23.2% of the remote population.

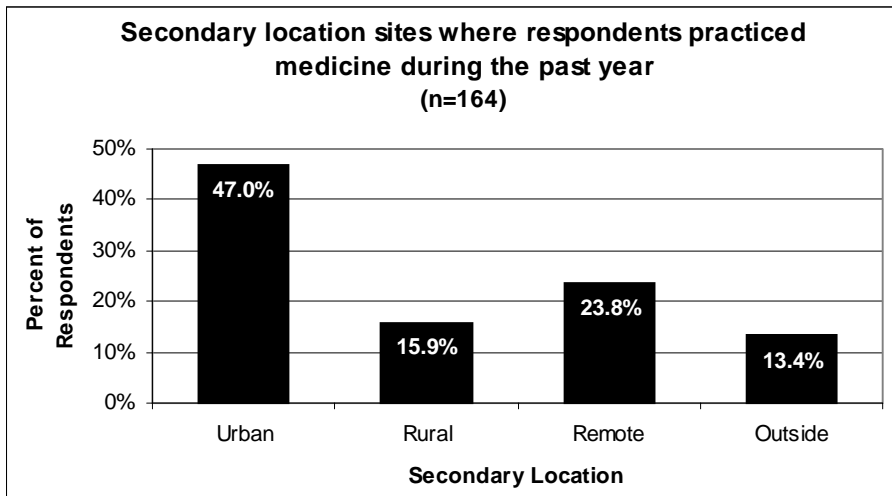
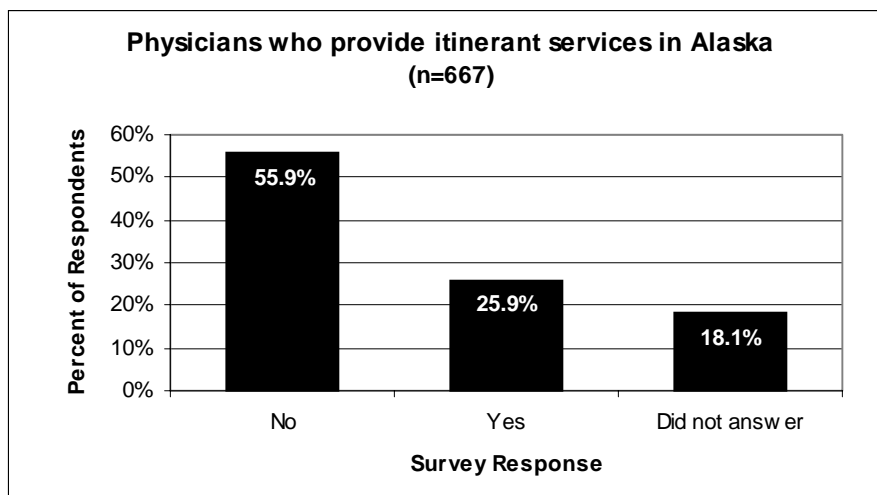


Figure 17

### 4. Itinerant Practice in Remote Alaska

Of the survey respondents, 26% indicated that they provide itinerant services in Alaska, with a median value of 12 days. A median is the most central or middle value. In this response, it was more appropriate to take the median than the average (22 days) because of the high standard deviation of 28.3 days. The minimum itinerant time period was zero days and the maximum time was 240 days.



The high amount of itinerant services could be accounted for by 1) IHS/Tribal docs, 2) private docs assisting their peers, or 3) private physicians in urban areas who do not have a “complete” practice and are looking for more work.

Figure 18

**Caution:** 18% of the survey respondents did not indicate whether they provided itinerant services, or how much they provided. This may be due to the structure of the question, which inquired of *urban* respondents only. In fact, the majority of physicians who did not respond to this question resided in “remote” areas. This suggests that they knew they qualified as “rural” or “remote” and felt it was inappropriate to respond to the question.

## 5. Supervision of Physician Assistants

Nearly a quarter (23%) of the physicians provide supervision of physician’s assistants, with a median value of one site. A median is the most central or middle value. In this response, it was more appropriate to take the median than the average (1.8) because of the high standard deviation of 2.3. The minimum number of sites was 1 and the maximum number of sites indicated by any physician was 20. “Sites” can be remote clinics (Craig, Yakutat, Galena, McGrath, etc.) – or they can be Roy Howard, the dermatology specialist PA who works in Dr. Senter’s office here in Anchorage, or the fair number of PAs who work for the Department of Corrections under some Doctor’s license, or the PAs who work on the Alyeska pipeline.

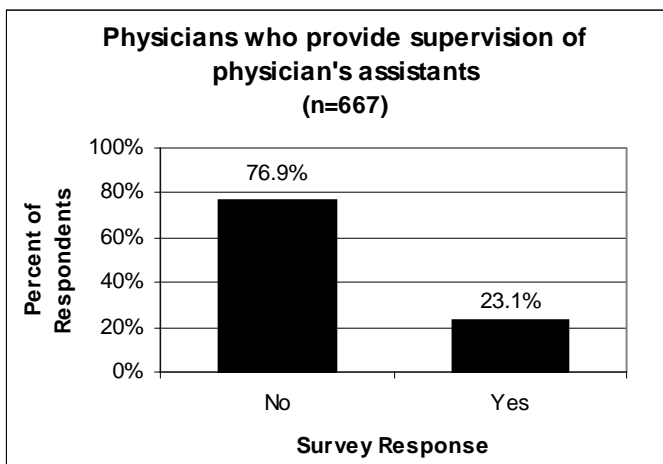


Figure 19

## D. Practice Specialties and Settings

### 1. Primary Care and Specialty Care

The type of care provided by the physicians was closely split, with 48% offering specialty care and 52% offering primary care options. For the purposes of this study, primary care is one of the six fields listed to the right of the graph below.

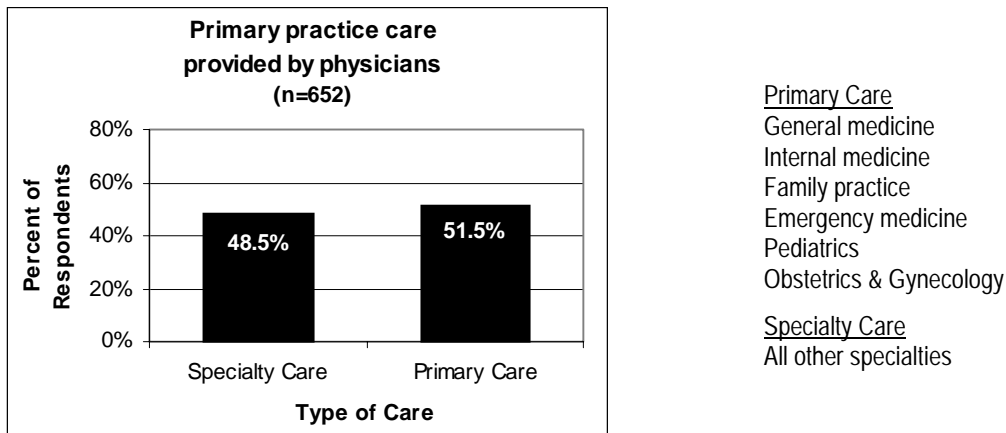


Figure 20

Over 34% of the physicians also indicated having secondary specialties, but the type of care associated with these specialties was less evenly split. In this case, 62% of the physicians indicated specialty care, while only 38% indicated primary care specialties.

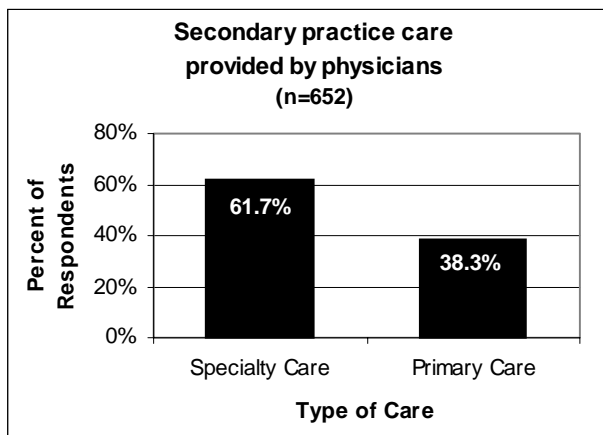


Figure 21

## 2. Residency Training in Primary & Secondary Specialties

### a. Primary & Secondary Specialties

As the graphs below demonstrate, respondents are significantly more likely to have residency training in their primary specialty than in their secondary specialty.

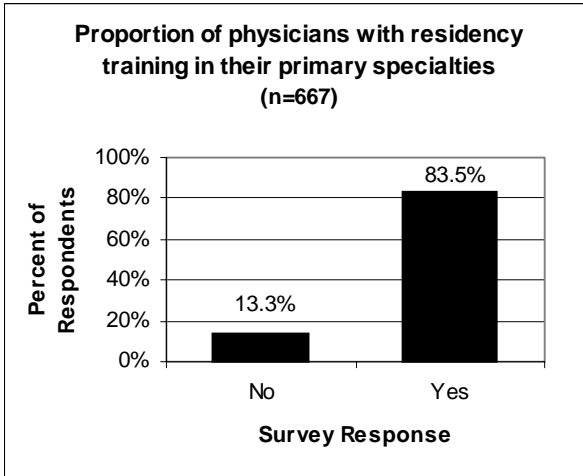


Figure 22

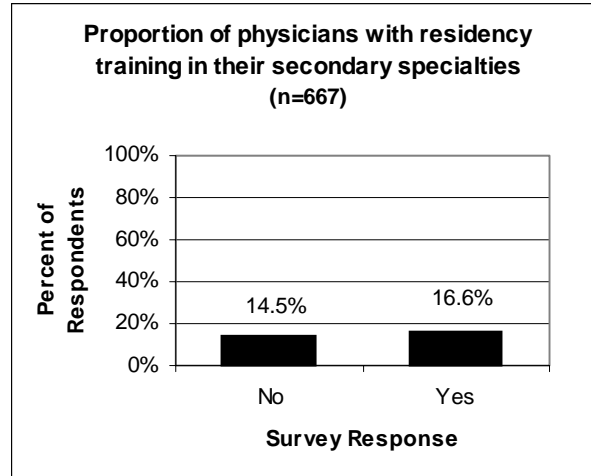


Figure 23

### b. American Board of Medical Specialties Certification

These data suggest a very high percentage of respondents are ABMS certified, much higher than the nation as a whole. However, these results should be viewed with caution for two reasons. First, this is “self reported,” without any clarification on the integrity of the “board” that provided the license. Also, the survey neglected the American Osteopathic Board (AOB), which is the only other certifying entity recognized by governments, licensing bodies, and the AMA.

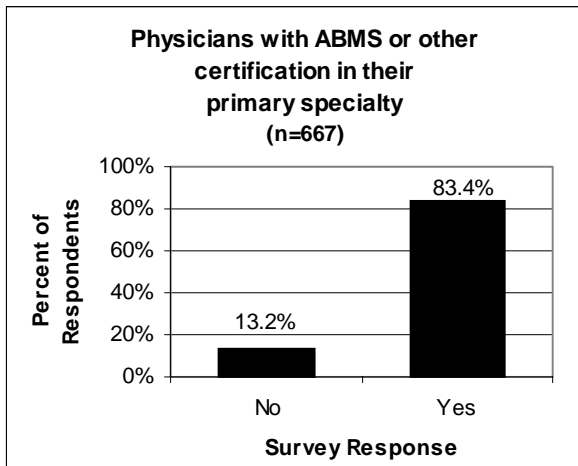


Figure 24

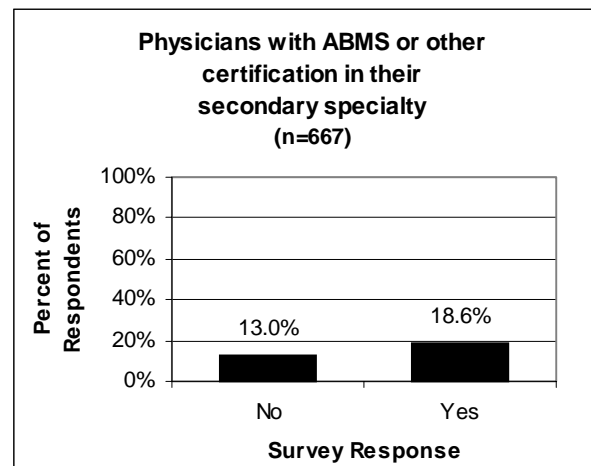


Figure 25

**c. Primary Care versus Specialty Care by Location**

Figure 26 shows the proportion of primary versus specialty care providers in different regions. As expected, more specialty care physicians (71%) worked in urban areas--the only region with more specialty care physicians. The remote region had a greater percentage of primary care physicians than specialty care physicians; this is reasonable because patients often travel to urban areas for specialty care. Interestingly, the rural respondents were balanced between primary and specialty care physicians. This may be partially due to "family practice" being counted as a specialty.

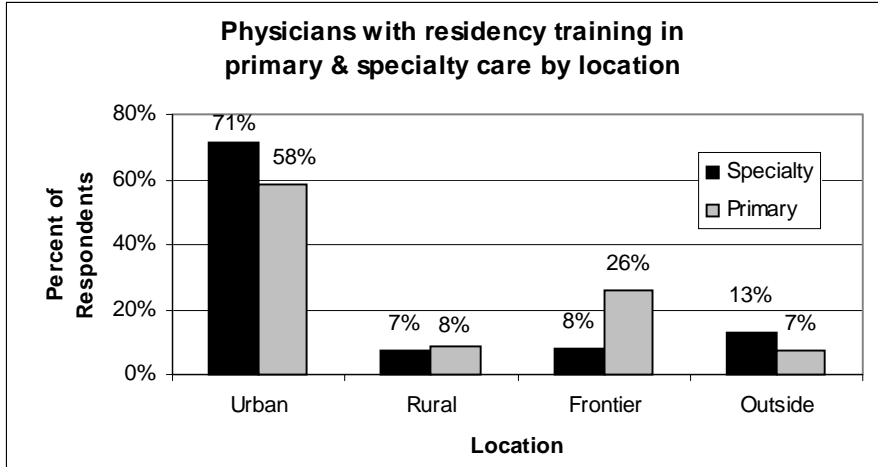


Figure 26

**d. Primary Care versus Specialty Care by Age**

Interestingly, the ratio of respondents in primary versus specialty care changed for physicians over 50 years of age. A greater proportion of respondents in the under 50 years age groups provided primary care, while a greater proportion of respondents in the over 50 years age groups provided specialty care. Overall, there were more respondents in the younger age groups. This phenomenon may be the result of factors such as: Alaska attracts younger physicians and more primary care physicians, or perhaps the national trend to promote more physicians in primary care is occurring in Alaska as well. If the latter is true, the now near-even split between primary and specialty care (52% versus 48%) may shift increasingly towards primary care providers in the future.

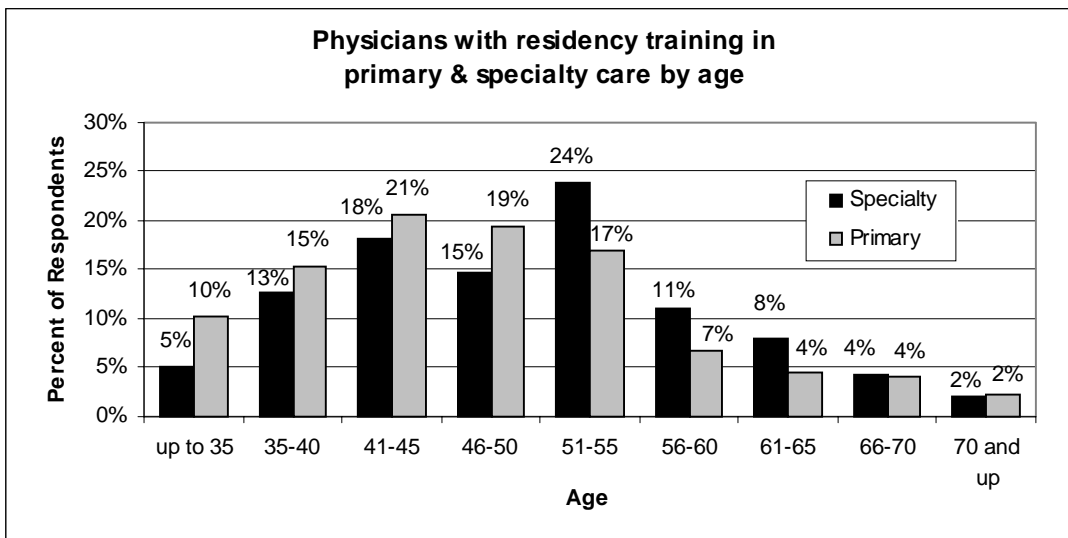


Figure 27

## **Appendix A**

### **Physician Survey Instrument**

**PRACTICE SPECIALTIES & SETTINGS**

14. MARK ONE PRIMARY AND IF APPLICABLE, ONE SECONDARY

PRIMARY	SECONDARY	SPECIALTY
<input type="checkbox"/>	<input type="checkbox"/>	ALLERGY AND IMMUNOLOGY
<input type="checkbox"/>	<input type="checkbox"/>	CARDIOVASCULAR DISEASE
<input type="checkbox"/>	<input type="checkbox"/>	CRITICAL CARE
<input type="checkbox"/>	<input type="checkbox"/>	DERMATOLOGY
<input type="checkbox"/>	<input type="checkbox"/>	ENDOCRINOLOGY AND METABOLISM
<input type="checkbox"/>	<input type="checkbox"/>	GASTROENTEROLOGY
<input type="checkbox"/>	<input type="checkbox"/>	GENERAL MEDICINE
<input type="checkbox"/>	<input type="checkbox"/>	GERIATRICS
<input type="checkbox"/>	<input type="checkbox"/>	INFECTIOUS DISEASE
<input type="checkbox"/>	<input type="checkbox"/>	MEDICAL ONCOLOGY
<input type="checkbox"/>	<input type="checkbox"/>	NEPHROLOGY (RENAL)
<input type="checkbox"/>	<input type="checkbox"/>	GENERAL SURGERY
<input type="checkbox"/>	<input type="checkbox"/>	NEUROLOGICAL SURGERY
<input type="checkbox"/>	<input type="checkbox"/>	OBSTETRICS AND GYNECOLOGY
<input type="checkbox"/>	<input type="checkbox"/>	ORTHOPEDIC SURGERY
<input type="checkbox"/>	<input type="checkbox"/>	PLASTIC SURGERY
<input type="checkbox"/>	<input type="checkbox"/>	THORACIC SURGERY
<input type="checkbox"/>	<input type="checkbox"/>	UROLOGY
<input type="checkbox"/>	<input type="checkbox"/>	OTHER SURGICAL SUB-SPECIALTY
<input type="checkbox"/>	<input type="checkbox"/>	ANESTHESIOLOGY
<input type="checkbox"/>	<input type="checkbox"/>	EMERGENCY MEDICINE
<input type="checkbox"/>	<input type="checkbox"/>	FAMILY PRACTICE
<input type="checkbox"/>	<input type="checkbox"/>	NEUROLOGY
<input type="checkbox"/>	<input type="checkbox"/>	OCCUPATIONAL MEDICINE
<input type="checkbox"/>	<input type="checkbox"/>	PATHOLOGY
<input type="checkbox"/>	<input type="checkbox"/>	PEDIATRICS
<input type="checkbox"/>	<input type="checkbox"/>	PHYSICAL MEDICINE & REHABILITATION
<input type="checkbox"/>	<input type="checkbox"/>	PREVENTIVE MEDICINE
<input type="checkbox"/>	<input type="checkbox"/>	PSYCHIATRY - ADULT
<input type="checkbox"/>	<input type="checkbox"/>	PSYCHIATRY - CHILD & ADOLESCENT
<input type="checkbox"/>	<input type="checkbox"/>	PULMONOLOGY
<input type="checkbox"/>	<input type="checkbox"/>	RADIOLOGY (DIAGNOSTIC)
<input type="checkbox"/>	<input type="checkbox"/>	RADIOLOGY (THERAPEUTIC)
<input type="checkbox"/>	<input type="checkbox"/>	RESEARCH/ADMINISTRATION
<input type="checkbox"/>	<input type="checkbox"/>	SPORTS MEDICINE
<input type="checkbox"/>	<input type="checkbox"/>	OTHER

(specify) \_\_\_\_\_

15. WHAT BEST DESCRIBES THE PATIENT CARE PRACTICES IN QUESTION 11? MARK ONE BOX FOR THE PRINCIPAL PRACTICE AND IF APPLICABLE, ONE FOR THE SECONDARY.

PRINCIPAL	SECONDARY	PRACTICE TYPE
<input type="checkbox"/>	<input type="checkbox"/>	PRIVATE SOLO PRACTICE
<input type="checkbox"/>	<input type="checkbox"/>	PRIVATE GROUP PRACTICE
<input type="checkbox"/>	<input type="checkbox"/>	COMMUNITY HEALTH CENTER
<input type="checkbox"/>	<input type="checkbox"/>	URGENT CARE
<input type="checkbox"/>	<input type="checkbox"/>	PRIVATE HOSPITAL - INPATIENT
<input type="checkbox"/>	<input type="checkbox"/>	PRIVATE HOSPITAL - AMBULATORY CARE
<input type="checkbox"/>	<input type="checkbox"/>	PRIVATE HOSPITAL - EMERGENCY CARE
<input type="checkbox"/>	<input type="checkbox"/>	NURSING HOME
<input type="checkbox"/>	<input type="checkbox"/>	HOME HEALTH
<input type="checkbox"/>	<input type="checkbox"/>	HOSPICE
<input type="checkbox"/>	<input type="checkbox"/>	STATE OR LOCAL HEALTH DEPT.
<input type="checkbox"/>	<input type="checkbox"/>	MILITARY INPATIENT
<input type="checkbox"/>	<input type="checkbox"/>	MILITARY AMBULATORY CARE
<input type="checkbox"/>	<input type="checkbox"/>	MILITARY EMERGENCY ROOM
<input type="checkbox"/>	<input type="checkbox"/>	VA OUTPATIENT
<input type="checkbox"/>	<input type="checkbox"/>	IHS INPATIENT
<input type="checkbox"/>	<input type="checkbox"/>	IHS AMBULATORY CARE
<input type="checkbox"/>	<input type="checkbox"/>	IHS EMERGENCY ROOM
<input type="checkbox"/>	<input type="checkbox"/>	TRIBALLY OPERATED HOSPITAL
<input type="checkbox"/>	<input type="checkbox"/>	OTHER SETTING
<input type="checkbox"/>	<input type="checkbox"/>	OTHER

(specify) \_\_\_\_\_

16. DID YOU COMPLETE TRAINING IN A RESIDENCY PROGRAM IN YOUR:

A. PRIMARY SPECIALTY?      B. SECONDARY SPECIALTY?  
 Y      N      Y      N

17. DO YOU HAVE AN AMERICAN BOARD OF MEDICAL SPECIALTIES CERTIFICATION OR SOME OTHER CERTIFICATES OF SPECIAL QUALIFICATIONS?

A. PRIMARY      B. SECONDARY  
 Y      N      Y      N

(specify) \_\_\_\_\_

(specify) \_\_\_\_\_

(specify) \_\_\_\_\_

**ALASKA WORKFORCE DATA PROJECT**

Voluntary Physician Survey Form



The Alaska Health Workforce Data Project is an activity of the Alaska Center for Rural Health, in cooperation with:

- Alaska Department of Commerce and Economic Development, Division of Occupational Licensing
- Alaska Department of Health and Social Services, Division of Public Health
- Alaska State Medical Association
- Institute for Circumpolar Health Studies, UAA

Please return your completed survey and medical relicensing materials to:

The Medical Board  
 c/o Nancy Ferguson  
 Division of Occupational Licensing  
 P.O. Box 110806  
 Juneau, AK 99811-0806



**PLEASE USE A BLACK OR BLUE PEN TO FILL OUT THIS FORM**

For optimum accuracy, please print carefully and avoid contact with the edges of the box. The following will serve as an example:

1 2 3 4 5 6 7 8 9 0

Mark choice boxes like this

NOT like this:

**BACKGROUND INFORMATION**

**PATIENT CARE INFORMATION**

**PRACTICE LOCATION INFORMATION**

1. PLACE OF RESIDENCE (ZIP CODE)  -   
 BIRTHDATE (mm/dd/yy)  /  /

3. GENDER  FEMALE  MALE

4. RACIAL/ETHNIC ORIGIN (CHECK AS MANY AS APPLY)  
 ALASKAN NATIVE/AMERICAN INDIAN  
 ASIAN OR PACIFIC ISLANDER  
 BLACK/AFRICAN AMERICAN  
 HISPANIC  
 WHITE (NON-HISPANIC)  
 OTHER

5. HAVE YOU ATTENDED CME CLASSES OFFERED BY ANY OF THE FOLLOWING SOURCES DURING THE PAST YEAR? (CHECK AS MANY AS APPLY)  
 HOSPITAL PROGRAM  
 UNIVERSITY-BASED PROGRAM  
 NATIONAL MEDICAL SOCIETY PROGRAM  
 LOCAL MEDICAL SOCIETY  
 SELF INSTRUCTION  
 DISTANCE DELIVERY TELEMEDICINE  
 SPECIALTY JOURNAL OFFERING  
 OTHER

6. WHAT BEST DESCRIBES YOUR PATIENT CARE PRACTICE STATUS OR ACTIVITIES: (CHECK ONLY ONE)  
 I AM NOT TAKING NEW PATIENTS  
 I CAN TAKE A FEW NEW PATIENTS  
 I CAN TAKE MANY NEW PATIENTS  
 NOT APPLICABLE

7. PLEASE DESCRIBE WHETHER YOUR PRACTICE CURRENTLY: (CHECK AS MANY AS APPLY)  
 SERVES MEDICAID PATIENTS  
 ACCEPTS NEW MEDICAID PATIENTS?  
 SERVES MEDICARE PATIENTS?  
 ACCEPTS NEW MEDICARE PATIENTS?

8. DURING THE PAST YEAR HOW MANY MONTHS DID YOU:  
 a.) WORK IN CLINICAL MEDICINE OUTSIDE THE STATE OF ALASKA?   
 b.) WORK IN CLINICAL MEDICINE INSIDE THE STATE OF ALASKA?

9. PLEASE DESCRIBE YOUR REGULAR MEDICINE-RELATED WORK HOURS WITHIN THE STATE OF ALASKA.  
 MORE THAN 30 HOURS PER WEEK  
 20-30 HOURS PER WEEK  
 LESS THAN 20 HOURS PER WEEK  
 RETIRED OR INACTIVE IN MEDICINE

10. APPROXIMATELY WHAT PERCENT OF YOUR PROFESSIONAL TIME IS SPENT IN DIRECT PATIENT CONTACT (INCLUDING RECORD DOCUMENTATION & PATIENT VISITS, BUT EXCLUDING ADMINISTRATION, TEACHING, AND RESEARCH)  
 LESS THAN 25%  
 25-50%  
 50-75%  
 75-100%

11. WHAT IS THE LOCATION OF SITES WHERE YOU SPEND THE MOST TIME PROVIDING DIRECT PATIENT CARE (INCLUDING BOTH OFFICE AND HOSPITAL)? PRINT THE ZIP CODE OF YOUR PRACTICE LOCATION(S) (INCLUDING OUT OF STATE) BELOW. ALSO, INDICATE THE AVERAGE HOURS PER WEEK THAT YOU SPEND AT EACH PRACTICE LOCATION.

PRINCIPAL LOCATION  
 Zip Code  -   
 AVERAGE NUMBER OF HOURS PER WEEK @ PRINCIPAL LOCATION   
 SECONDARY LOCATION  
 Zip Code  -   
 AVERAGE NUMBER OF HOURS PER WEEK @ SECONDARY LOCATION

12a. IF YOUR PRINCIPAL OR SECONDARY PRACTICE LOCATIONS ARE NOT LOCATED IN RURAL PARTS OF ALASKA, DO YOU EVER ITINERATE OUT TO REMOTE PARTS OF ALASKA?  
 YES  NO

12b. IF 12a IS YES, APPROXIMATELY HOW MANY DAYS PER YEAR DO YOU PRACTICE IN REMOTE AREAS OF ALASKA?

13. IF APPLICABLE, THE NUMBER OF SITES IN ALASKA WHERE YOU PROVIDE PA SUPERVISION.



19557

PLEASE CONTINUE BACK SIDE

## **Appendix B**

### **Data Limitations**

#### **Question #9**

Respondents who marked the “retired or inactive in medicine” box often went on to complete the survey, although the survey advised against proceeding. It is unclear if people answered the remaining questions from their perspective or former employment or a new career. To avoid any misinterpretation of the data, all subsequent responses were deleted from this sub-population’s surveys.

#### **Question #12a**

The language in this question created unnecessary subjectivity. In the manner written, only “rural” respondents would answer, but it is not clear who is or is not “rural.” Further, it would have been better phrased to include any respondent who provided itinerant services, independent of their community of origin. Fully 18% of the respondents left this question blank. The majority of these were from clearly urban areas. Nevertheless, the data should be viewed with appropriate caution.

#### **Question #12b**

Because of problems in 12a, these data are questionable.

#### **Question #14**

Data here are fine. However, based on hand-written insertions, two additional categories should have been included: internal medicine and ophthalmology.

#### **Question #17**

The primary and secondary data seem representative of the respondent population. However, written comments under “specify” are problematic and should not be included in the analysis.