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Practice Patterns and Characteristics of Nurse Practitioners in Washington State

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by

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ABSTRACT

PURPOSE

Nurse practitioners (NPs) are an important component of the primary and specialty health care workforce. In Washington State, the potential impact of nurse practitioners in rural settings is of particular interest as a quarter of the state's population is rural, and rural areas are chronically beset with lack of access to health care. This investigation of the characteristics and practice patterns of nurse practitioners in urban and rural settings provides further understanding of NP contributions to rural health care.

METHODS

In 2003 we surveyed NPs in Washington State on topics such as demographics, educational background, certification, practice characteristics, prescribing practices, and practice barriers. We achieved a response rate of almost 75%.

RESULTS

NPs practicing in Washington have a mean age of 48.5 years and are largely white females. Over 73% of NPs completed a master's degree program for their initial NP preparation. In rural areas, NP certificates on family practice and women's health are more common than in urban areas. Regarding NP practice, over 75% of NPs are full-time. More rural NPs reported full-time practice than urban NPs. More NPs in small/isolated rural areas work in primary care (77%) and treat more state-assisted and indigent patients than NPs working in urban or large rural areas. NPs' annual income was between $50,000-$75,000 for 56.8% of full-time providers. Working relationships with physicians were reported to be similar across the geographic settings.

CONCLUSIONS

In Washington State, rural NPs practice somewhat differently than their urban counterparts: rural NPs are addressing more primary care needs and care to the underserved. Washington's NP workforce appears to have similar characteristics to the national NP workforce.

INTRODUCTION

Nurse practitioners (NPs) are an important segment of the health workforce, providing vital services to both primary care and specialty care populations. In Washington State, where about a quarter of the population lives in a rural location, the potential impact of NP services on access to care for persons living in small and isolated small places is of special interest. Prior studies suggest that in the United States NPs and physician assistants (PAs) provide 25% of generalist care in rural places (Larson et al., 2003), and that 23% of PAs and NPs practice in rural locations (Hooker & Berlin, 2002). Investigating the practice types, practice patterns and workload of rural NPs and comparing them to their urban counterparts provides information on the NP workforce's current and potential contribution in addressing the chronic lack of access to health care that rural populations experience (Chan et al., 2006).

Despite a workforce of over 3,200 licensed NPs in Washington State, little systematically collected information is available about them. In 2003, a statewide survey of Washington NPs was conducted to collect information in order to describe the workforce. This survey focused on topics such as educational background, demographic information, certification, practice characteristics, prescribing practices and practice barriers. At the time this survey was conducted, NPs who wanted to prescribe Schedule II-IV controlled substances were required to have a joint practice agreement with a physician. Just over half of Washington State NPs had obtained this prescribing authority.

METHODS

SURVEY DEVELOPMENT

Two survey questionnaires were developed by the Center for Health Workforce Studies (CHWS) staff and associates, one for those NPs with Schedule II-IV prescriptive authority and another for those

without Schedule II-IV prescriptive authority (see Appendix). The questionnaires asked both groups of NPs about their educational background, demographic information, income, current clinical practice and prescribing practices. Those NPs with Schedule II-IV prescriptive authority were also asked about their Schedule II-IV prescriptive practices and about barriers they experience in their practice regarding controlled substances. NPs without Schedule II-IV authority were asked about the process used to obtain prescriptions of Schedule II-IV drugs for their patients, their plans to obtain Schedule II-IV prescriptive authority, as well as the need for Schedule II-IV drugs in their practice. A copy of each questionnaire is provided in Appendix A.

SAMPLING FRAME

Questionnaires were mailed to all licensed NPs with addresses in the states of Washington, Oregon and Idaho. Responding NPs were classified as practicing in an urban or one of three rural location categories: large rural, small rural and isolated small rural. Because of small numbers in these latter two groups, they were combined in this study. This geographic classification was performed using the ZIP code of the NP's main practice location and the ZIP code version of the Rural-Urban Commuting Area (RUCA) codes (Version 1.11) (Morrill et al., 1999). The RUCA taxonomy assigns each ZIP code in the country to one of 30 codes. These codes were collapsed into four mutually exclusive rural categories—urban, large rural, small rural and isolated small rural. The classification of a place is based not only on its population and location, but also considers the ZIP code population's work-commuting patterns in relationship to surrounding cities and towns.

MAILINGS

Each NP received up to four mailings in an effort to obtain a high response rate. The first mailing in May 2003 included an introductory letter on University of Washington School of Nursing letterhead, a questionnaire, and a postage-paid, return envelope. Questionnaires that were returned because of incorrect addresses were re-sent with address corrections when they were available. Four weeks later, all nonrespondents were mailed a second mailing, on CHWS letterhead. A third mailing was sent on University of Washington School of Nursing letterhead. And the fourth and final mailing was mailed on School of Nursing letterhead to NPs who had not responded to the first three mailings four weeks later. The fourth mailing included a handwritten note from one of the collaborating NPs asking for study participation.

RESPONSES

Questionnaires were sent to all NPs with an active Washington State license NPs who had a mailing address in Washington, Oregon or Idaho. NPs with Oregon and Idaho mailing addresses were included to capture those NPs that worked in WA but lived in a neighboring state. A total of 1683 valid responses were returned. Some NPs did not meet inclusion criteria because of retirement, relocation outside of the state or because they were lost to follow-up. The final adjusted response rate to this survey was 74.4%.

CODING, DATA ENTRY, AND DATA CLEANING

The information from the returned questionnaires was coded and electronically entered for analysis. The data were checked for systematic errors during routine data analysis. Survey respondents were asked to select from a list of terms that described their clinical practice. These terms were divided into two groups, primary care and specialty care. Using these data in combination with the self-reported percentage of primary care in their clinical practice, each NP was designated as either a primary care NP or a specialist NP. Additionally, each NP was classified as either a full-time or part-time practitioner based on the total number of weekly hours worked. NPs working 30 or more total hours per week were considered full-time; those working less than 30 total weekly hours were classified as part-time.

Data analysis was performed with SPSS Statistical Software Version 10.0. One-way ANOVA and chi-square tests were performed to test for differences between the three practice location categories. Ninety-five percent confidence intervals were constructed for overall estimates.

RESULTS

DEMOGRAPHY

The mean age of all survey respondents was 48.5 years (see Table 1). The age distribution of Washington's NPs was similar across geographic designations. More than 75% of currently practicing NPs were between the ages of 40 and 60 and more than half were 50 years of age and older.

The NP workforce was largely female (91.7 %), but in both large rural and small/isolated small rural places there were significantly more male NPs practicing. In both large rural places and small/isolated small rural places 14.1% of NPs were male compared with only 7.4% of NPs practicing in urban locations.

There was little racial diversity in the Washington NP workforce where 95.1% of NPs were white, Asians represented only 2.5% of the NP population and NPs identifying themselves as Alaska Natives/American Indians made up 1.9% of the total NP workforce. In comparison, Washington State's population in 2004 was 85.3% white, 6.3% Asian and 1.6% Alaska Native/American Indian. In Washington's small and

isolated small rural places Alaska Native/American Indian NPs were 3.5% of the workforce. Less than 1.5% of NPs responding to the survey identified themselves as African American or as a Pacific Islander. Only 1.9% of NPs were Hispanic while Washington's population is 8.5% Hispanic. The average age at which NPs reported completing their NP education was 36.5 years.

EDUCATION

A wide variety of educational programs were reported as the initial preparation for NP practice. Nearly three out of four NPs (73.3%) indicated that they had participated in a master's degree program for their initial NP preparation; of those NPs that were Master's educated, 6.3% reported completing a post-master's NP program. Another 18.7% of NPs identified a certificate program as their educational pathway to NP practice. These NPs on average were 5.5 years older than other NPs. Other training programs that were reported include Physician Assistant/MEDEX (0.8%), on-the-job training (3.3%), military training (1.1%), and other (3.2%). Those classified as "other" primarily included NPs who at the beginning of NP practice decades ago participated in various special NP education programs. Of Washington's currently practicing NPs, 88.5% reported having a master's degree or higher level of education. The average age at which NPs reported completing their NP education was 36.5 years.

Greater than 4 out of 5 (82.9 %) NPs reported having only one area of certification and 15.3% of NPs reported having two areas of certification (see Table 2). Fewer than 2% of NPs reported more than 2 certification areas and only 0.2% reported having no certifications from a credentialing board. Family practice was the most commonly reported area of certification (43.8%), followed by adult practice (16.5%), psych/mental health practice (15.7%), women's health (10.7%), and nurse midwifery (10.2%). Other certification areas included pediatrics (7.9%), gerontology (4.2%), acute care (2.0%), neonatal care (1.3%) and school/college health (0.5%). These areas of certification correlate with those offered by the Washington State Nursing Care Quality Assurance Commission.

Areas of NP certification were different for NPs practicing in rural areas than those working in urban locations. NPs in small/isolated small rural locations were much more likely to be family practice NPs (64.6%) than their large rural (50.7%) or urban (41.6%) counterparts. A larger percentage of the urban NPs were certified in psychiatric/mental health or adult care. A higher percentage of NPs practicing in large rural areas provided women's health care (17.6%) when compared with NPs practicing in urban

Table 1: Washington State Nurse Practitioner Demographics by Rural-Urban Status

	Urban (n = 1,442 [85.7%])	Large Rural (n = 142 [8.4%])	Small/Isolated Small Rural (n = 99 [5.9%])	Overall (n = 1,683 [100.0%])
Age				
Mean*	48.3	49.5	49.2	48.5
Age by category*				
% ≤ 30 years	3.0	0.7	2.0	2.8
% 31-40 years	14.8	12.1	13.1	14.4
% 41-50 years	38.8	43.3	36.4	39.0
% 51-60 years	38.1	39.0	38.4	38.2
% 61-70 years	4.8	4.3	10.1	5.1
% > 70 years	0.6	0.7	0.0	0.5
Sex‡				
% female	92.6	85.9	85.9	91.7
Race/ethnicity¶				
% white*	94.8	97.9	96.0	95.1
% black*	1.6	0.7	1.0	1.5
% Asian*	2.6	1.4	2.0	2.5
% Native American/Alaska Native*	1.7	3.5	2.0	1.9
% Pacific Islander*	0.6	0.7	1.0	0.7
% Hispanic*	1.8	2.1	3.0	1.9
Age at completion of initial nurse practitioner training (mean)	36.3	37.8	37.4	36.5

* Nonsignificant.
‡ $P \leq 0.01$.
¶ Column does not add to 100% due to NPs reporting multiple races.
The numbers of missing cases for each variable are age 20, sex 1, race 23, ethnicity 16, age at initial nurse practitioner training completion 75.

Table 2: Nurse Practitioner Specialty Certifications by Rural-Urban Status

	Urban (n = 1,439)	Large Rural (n = 142)	Small/Isolated Small Rural (n = 99)	Overall (n = 1,680)
% family practice§	41.6	50.7	64.6	43.8
% adult care†	17.5	10.6	10.1	16.5
% psychiatric/mental health†	16.5	12.0	8.1	15.7
% women's health†	9.9	17.6	12.1	10.7
% nurse midwifery*	10.2	11.3	9.1	10.2
% pediatrics‡	8.6	4.9	1.0	7.9
% gerontology*	4.2	2.8	5.1	4.2
% acute care*	2.2	2.1	0.0	2.0
% neonatal care*	1.5	0.7	0.0	1.3
% school*	0.6	0.0	0.0	0.5

* Nonsignificant.
† $P \leq 0.05$.
‡ $P \leq 0.01$.
§ $P \leq 0.001$.
There were three missing cases for area of certification.
Note: columns do not add to 100% due to NP holding multiple certifications.

(9.9%) or small/isolated small areas (12.1%). There were no statistical differences in midwifery practice, gerontology, acute care, neonatal care or school care by rural status.

PRACTICE

Washington NPs practice in a wide variety of types of facilities. Nearly a quarter (21.9%) of NPs reported practicing in two or more different types of facilities. The most common setting was a private office practice (40.3%) while 16.8% of NPs reported practicing in a hospital-based outpatient clinic and 16.1% indicated that they practiced in a community clinic. Hospital-based inpatient clinics, the fourth most common practice setting, accounted for 8.8% of responses. The other types of practice locations in descending order of frequency were long-term care facilities (5.5%), health maintenance organizations (5.4%), public health departments (4.5%), hospital emergency rooms (4.2%), hospital obstetrics (4.1%), school/college health clinics (3.8%), Veterans Administration (3.7%), Planned Parenthood (3.5%) and correctional facilities (3.0%). Tribal health centers, employee health clinics, hospital operating rooms, home care agencies, and the military each had less than 2% of NPs reporting working there. These percentages sum to greater than 100% because some respondents reported more than one practice site.

Overall, three-quarters (75.1%) of NPs were designated as full-time providers and 24.9% were classified as part-time providers. A larger proportion of rural NPs (81.1%) reported working full-time than urban NPs (74.1%). Table 3 describes the practice patterns of the state's full-time, clinically active NP workforce by rural-urban status.

On average, full-time practicing NP providers in urban, large rural and small/isolated small rural places have practiced a similar number of years (10.5), and work a similar number of total weekly hours (41.0), weekly clinical hours (33.4) and hours spent in direct patient care (32.0). The number of patients seen, however, and the type of care provided varied greatly by rural-urban status. NPs practicing in small/isolated small rural locations reported that 77.0% of their clinical practice was primary care while NPs working in large rural areas reported 65.4%. In urban areas, the percent of care classified as primary care was much lower, at 49.3%. Eighty-seven percent of providers in small/isolated small areas were designated as primary care practitioners based on their practice facility and practice description. Eighty-one percent of providers in large rural places and 66.5% of urban providers were also designated as primary care practitioners.

Small/isolated small rural NPs reported that a significantly larger proportion of their personal practice time was spent treating patients on state-assisted plans and/or indigent patients (62.5%) than their large rural (49.8%) or urban (45.4%) counterparts. Two-thirds of small/isolated small rural NPs (67.7%) and large rural providers (65.0%) reported seeing a new Medicare patient during the last month compared with 54.2% of urban NPs. There was no significant difference in the number of Medicare visits each of the groups reported. However, rural providers reported treating about ten more total patients per week than urban NPs.

NPs in the three location types had similar practice patterns regarding weekend call. Overall, 41.0% reported taking weekend call. A similar percentage reported having hospital privileges (40.4%). However, the type of hospital privilege varied and a larger percentage of urban NPs (61.1%) were able to write an order that could be carried out prior to a

physician co-signing it than large rural NPs (40.5%) or small/isolated small NPs (54.2%). NPs practicing in rural locations had nursing home privileges at a higher rate, 21.7% and 22.1% respectively, for large rural and small/isolated small rural than NPs practicing in urban locations (12.6%).

INCOME

Of those NPs classified as full-time, 56.8% reported annual earnings between $50,000 and $75,000. Nearly 19% indicated they earned between $75,000 and $100,000 and 6.4% reported annual wages of more than $100,000. Additionally, 13.7% of NPs reported an annual salary between $25,000 and $50,000, 2.7% of NPs said they earned less than $25,000, and 0.6% said they did only volunteer NP work during the previous year.

Overall, 20.9% of NPs indicated that they had received a bonus in addition to their salary for their previous years work. Those NPs who reported receiving a bonus performed an average of 12.5 more weekly patient visits than their counterparts who did not receive a salary bonus. There was no difference in the percentage of NPs who received a bonus by rural-urban status.

NP/PHYSICIAN WORKING RELATIONSHIPS

NPs working in each of the three geographic designations reported similar work relationships with physicians. Overall, 14.4% of NPs reported that a physician was never present on site to discuss patient problems and 41.3% of NPs said a physician was nearly always (76%-100% of the time) available on site to discuss patient problems. Physicians were available for patient consultation by phone more of the time. Overall, 84.6% of NPs reported that a physician was "usually or nearly always " available for phone consultation and only 5.8% of NPs reported a physician was "never" available for a phone consultation regarding patient problems. Table 4 shows the distribution of physician availability both in person and by phone for NPs practicing in urban, large rural, small/isolated small rural locations separately and overall.

NPs were asked to describe the type of professional relationship they had with the physician(s) in their

Table 3: Full-Time Nurse Practitioner Practice Characteristics by Rural-Urban Status

	Urban (n = 1,050)	Large Rural (n = 117)	Small/Isolated Small Rural (n = 78)	Overall (n = 1,245)
% designated primary care providers§	66.5	81.0	87.0	69.2
% of practice that is primary care§	49.3	65.4	77.0	52.7
Years of clinical NP practice (mean)*	10.4	10.6	10.7	10.4
Total weekly hours (mean)*	41.1	39.9	41.1	41.0
Clinical weekly hours (mean)*	33.1	35.2	34.1	33.4
Direct patient care hours (mean)*	31.7	33.4	33.3	32.0
Total weekly visits (mean)§	51.2	62.9	61.2	53.0
% practice time serving state-assisted or indigent patients§	45.4	49.8	62.5	47.1
% saw a new Medicare patient in month†	54.2	65.0	67.7	56.3
Total weekly Medicare visits (mean)*	20.7	21.3	24.8	21.2
% take weekend call*	41.1	38.8	42.9	41.0
% have hospital privileges*	41.6	36.2	31.2	40.4
% admission/discharge privileges*	25.1	17.9	20.5	24.1
% have written orders carried out prior to an MD co-sign†	24.7	14.5	16.7	23.2
% ancillary privileges (make rounds, examine, teach, chart)*	19.3	13.7	16.7	18.6
% have nursing home privileges‡	12.6	21.7	22.1	14.0

* Nonsignificant.
† $P \leq 0.05$.
‡ $P \leq 0.01$.
§ $P \leq 0.001$.
The numbers of missing cases for each variable are % primary care 35, years of clinical NP practice 13, total weekly hours 0, clinical weekly hours 51, direct patient care hours 0, total weekly visits 86, % of practice that is primary care 103, % practice time serving state-assisted/indigent patients 265, % saw a new Medicare patient in month 301, total weekly Medicare visits 496, % take weekend call 38, % have hospital privileges 37, % admission/discharge privileges 21, % have orders carried out prior to an MD co-sign 21, % ancillary privileges 21, % with nursing home privileges 21.

Table 4: Nurse Practitioner/Physician Practice Relationships of Full-Time Clinically Active Nurse Practitioners by Rural Urban Status

	Urban (n = 1,050)	Large Rural (n = 117)	Small/Isolated Small Rural (n = 78)	Overall (n = 1,245)
% practice time a physician is present on site to discuss patient problems				
Never (0%)	13.3	18.2	23.0	14.4
Seldom (1%-25% of the time)	15.9	17.3	14.9	15.9
Sometimes (26%-50% of the time)	11.9	13.6	8.1	11.8
Usually (51%-75% of the time)	17.0	10.0	20.3	16.5
Nearly always (76%-100% of the time)	42.0	40.9	33.8	41.3
% practice time a physician is available by phone to discuss patient problems				
Never (0%)	6.3	4.6	1.3	5.8
Seldom (1%-25% of the time)	5.6	6.4	2.7	5.5
Sometimes (26%-50% of the time)	4.5	2.8	1.3	4.1
Usually (51%-75% of the time)	11.2	11.9	10.7	11.2
Nearly always (76%-100% of the time)	72.4	74.3	84.0	73.4
Type of physician/NP relationship¶				
No MD in practice	11.9	14.5	9.2	11.9
No MD on site§	6.1	14.5	11.8	7.2
Equal colleagues	46.2	40.0	47.4	45.7
MD is medical director	37.8	40.0	42.1	38.3
Hierarchical relationship	9.1	4.5	6.6	8.5

§ $P = 0.001$.
¶ Column does not add to 100% because answers were not required to be mutually exclusive.
The number of missing cases for each variable are physician present 84, physician available by phone 111, type of physician/NP relationship 72.

practice. Overall, 11.9% of NPs reported that there was no physician in their practice. More NPs in both large rural (14.5%) and small/isolated small rural (11.8%) locations reported that there was not a physician on site at their practice than NPs in urban places (6.1%). Similar numbers of NPs in each geographic classification described their professional relationship with the physician as one of equal colleagues without hierarchy (45.7%). For 38.3% of NPs, the physicians were described as acting as the clinic's medical director, to whom both the NP and other providers were accountable. In 8.5% of the cases, NPs described the physician relationship as a hierarchical/supervisory relationship where the physician's clinical decisions had to be accepted regarding the NP's patients.

STUDY LIMITATIONS

Several data limitations must be considered when evaluating the results of this study. First, the data come from only one state, Washington. Practice patterns and NP characteristics vary across states, especially since scope-of-practice regulations are made at the state level. Nevertheless, many of the findings from this study are very similar to national estimates made from the 2004 National Sample Survey of Registered Nurses (Steiger et al., 2006) and the American Academy of Nurse Practitioners National NP Sample Survey (Goolsby, 2005), suggesting Washington NPs may in fact be quite comparable to their counterparts elsewhere in the country. Another potential survey limitation is the lack of information about the survey's nonrespondents. Given the relatively high response rate of 74.4%, it is reasonable to have confidence in the estimates, but systematic differences between responders and nonresponders may exist.

DISCUSSION

Advocates for autonomous NP practice have long maintained that NPs help fill primary care access gaps for patients in rural locations. This study's findings indicate that a larger proportion of NPs practicing in rural places are primary care providers than are NPs who practice in urban locations. Additionally, a larger percentage of the services that these rural NPs provide constitute primary care. Unlike rural physicians, however, who work longer hours than their urban counterparts (Zhang & Thran, 1999, pg. 140), rural NP workload is similar to that of urban NPs. Rural NPs do not work more total hours or clinical hours weekly than urban NPs. They are not more likely than their urban counterparts to take weekend call. Rural NPs do provide about ten more patient visits each week than urban NPs. A larger percentage of their rural practice time is spent serving patients who are on state-assisted

insurance plans, such as Medicaid, or who are indigent. This practice pattern is consistent with that of rural physicians and dentists, who also see larger numbers of these patients than comparable urban providers (Andrilla et al., 2007, in press; Dobie et al., 2005).

Although this survey was conducted in one state, Washington, much of the data is consistent with a national survey of NPs performed by the American Academy of Nurse Practitioners. The average age of practicing NPs in Washington was 48.5 years, while the national average was 47.7 years. The overall age distribution of Washington's NPs is very similar to the national distribution. Washington has 2.8% of NPs 30 years or younger compared to 3.0% nationally. The percentage of NPs between 31 and 50 years in Washington (53.3%) is comparable to the national percentage in the same age range (56.2%) (Goolsby, 2005).

The educational pathways reported by Washington's NPs parallel what NPs report nationally. Slightly more Washington NPs report both Master's education (73.3% versus 69.7%) and certificate program training (18.7% versus 15.4%) than NPs nationally but the differences are not meaningful. A contributing factor to a higher number of master's educated NPs in Washington is that a graduate degree was required for NP licensure beginning in 1995. Nonetheless, 88.4% of NPs nationally and 88.5% of NPs in Washington report having a master's degree or higher level of education as their highest earned degree.

Washington's NP areas of certification mirror those of NPs nationally. The most common area of certification for both is family practice. In Washington, 43.8% of NPs are family practiced certified compared to 41.2% of NPs nationally. Adult NP is the second most common certification in both Washington State and nationally, with 16.5% and 19.3% of NPs holding Adult NP certifications, respectively. Washington has a much larger proportion of NPs with a Psychiatric/Mental Health certification (15.7%) than nationally, where only 2.8% of NPs are certified in this area.

The most frequently indicated practice setting by NPs both nationally (37.5%) and in Washington (40.3%) was a private office practice. Hospital outpatient clinics were reported as the second most common workplace cited by Washington NPs (16.8%) followed by community clinics (16.1%). Nationally, 12.6% of NPs reported that they worked in a hospital outpatient clinic and 4.7% indicated that they worked in a community health setting. The percentages of NPs working in public health, college health, emergency rooms, and Veteran's Administrations in Washington were similar to the national estimates.

Income levels of Washington's NPs were difficult to compare to national averages because the Washington questionnaire did not ask NPs to report their specific income. Instead, NPs were asked to select an income range that included their annual earnings (i.e., $50,000-$75,000). Nationally, the average full-time NP salary was $71,000 in 2003 and $73,000 in 2004 (NP Central, no date). Twenty-three percent of NPs nationally reported a salary between $60,000 -$65,000. This was the most commonly reported $5,000 salary interval in the national data. The income range choices on the Washington survey were much wider. The most commonly reported interval in the Washington survey ($50,000-$75,000) includes the most commonly reported national range. Additionally, 20% of both NPs nationally and Washington's NPs reported that they received salary bonuses.

The relationship between NPs and physicians is difficult to compare across states because of differences in scope-of-practice regulations. In Washington, 14.4% of NPs responded that a physician was never present on site to discuss patient problems. Nationally, 9.2% of NPs reported no on-site physician availability (Goolsby, 2005). A higher percentage of NPs nationally indicated a physician was "nearly always" available on site (59.6%) than did so in Washington (41.3%). These differences are consistent with the fact that Washington State has authorized fully autonomous NP practice since licensure was first legislated in 1973. Washington's NPs have more freedom to practice without a physician than do NPs in most states who are not fully autonomous.

This Washington State survey was conducted at a time when NPs were required to have a joint practice agreement with a physician in order to prescribe Schedule II-IV controlled substances. Nearly all (96.9%) NPs who responded to this survey reported having prescriptive authority for legend and Schedule V drugs. Kaplan et al. (2006) reported that although Washington State authorized full prescriptive authority for NPs, only 61.9% of practicing NPs reported having Schedule II-IV prescribing authority. The most common reasons cited by NPs without Schedule II-IV prescribing authority for not having it were: that it was not a high priority for them (43.6%) and they had no desire to write prescriptions for Schedule II-IV drugs (29.6%). For those NPs who had prescribing authority for Schedule II-IV drugs, the prescribing barrier most commonly reported to be a "significant" or "very significant" barrier in their practice prescribing Schedule II-IV drugs was concern about drug-seeking behavior by patients (15%).

Washington's NP workforce appears in many ways to be very similar to the national NP workforce. This study collected very specific data about practice patterns, workplace locations, facility types, educational pathways, certification areas and NP

demographics. Where these data could be compared to national estimates, few significant differences were found. National level estimates for urban and rural NPs were not available to compare to the rural and urban estimates for Washington State.

In Washington State, rural NPs practice somewhat differently than their urban counterparts. The survey results from this study show that about 14% of Washington's NPs practiced in rural Washington and from another study (Larson et al., 2003) that they provide about 12% of rural primary care. Rural NPs were more likely to provide primary care services than urban NPs. Rural NPs do fill a much needed generalist care role in providing care in rural Washington State. For instance, in rural Washington, NPs represent 32% of all female primary care providers, which allows rural residents a choice of provider gender. Whether the NP primary care role will nationally grow, remain the same, or shrink will depend on how a plethora of issues and trends play out during the next decade such as changes in educational requirements, national shortage of registered nurses, production of generalist physicians and physician assistants, and public and professional acceptance of NP independent practice, to name but a few. The challenge remains to maintain a health workforce system that provides its rural population with a well-trained cadre of providers who are located where they are needed and who provide high-quality care. A further study of rural practitioners throughout the country would be valuable to explore the extent to which these patterns describe rural NP practice elsewhere.

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Appendix A: Questionnaires

A1 – For NPs with Prescriptive Authority

A2 – For NPs without Prescriptive Authority

APPENDIX A1 – For NPs with Prescriptive Authority

2003 Washington State ARNP Survey

WWAMI Center for Health Workforce Studies

University of Washington
Box 354982
Seattle, WA 98195-4982

2003 Washington State ARNP Survey

Section I — Background Information

1. Please describe your educational background. *Check all that apply.*

   ☐ Associate degree – Nursing
   ☐ Associate degree – Non-nursing
   ☐ Diploma
   ☐ Baccalaureate – Nursing
   ☐ Baccalaureate – Non-nursing
   ☐ Master's – Nursing
   ☐ Master's – Non-nursing
   ☐ Doctorate – Nursing
   ☐ Doctorate – Non-nursing

2. What type of educational program did you attend for your ***ARNP*** preparation? *Check all that apply.*

   ☐ Master's
   ☐ Post-master's
   ☐ Certificate
   ☐ Physician assistant/Medex
   ☐ On-the-job training
   ☐ Military
   ☐ Other *(please explain)*: _____

3. What year did you complete your initial NP education? _____

4. What is your gender? ☐ Female ☐ Male

5. What is your age? _____

6. Are you of Hispanic origin? ☐ Yes ☐ No

7. What is your race? *Check all that apply.*

   ☐ White ☐ African-American ☐ Asian ☐ Native Alaskan/American Indian ☐ Pacific Islander

8. Where do you live? ZIP code: _____ _____ _____ _____ _____

Section II — Current Clinical Practice

9. How many national nurse practitioner/advanced practice certifications from credentialing boards such as ANCC, NAPNAP, and ACNM do you have? _____

10. What are your areas of certification? *(Check all that apply.)*

    ☐ Family
    ☐ Adult
    ☐ Psych/mental health CS
    ☐ Psych/mental health NP
    ☐ Pediatric
    ☐ Women's health
    ☐ Acute care
    ☐ Gerontology
    ☐ Nurse anesthetist
    ☐ Nurse midwife
    ☐ School/college health
    ☐ Neonatal
    ☐ Other *(please specify)*: _____

11. How many total years have you ***practiced clinically*** as a nurse practitioner? _____

12. Are you currently employed/volunteering in an advanced practice role?

☐ Yes ➔ What is your role?
- ☐ Nurse practitioner
- ☐ Nurse midwife
- ☐ Nurse anesthetist
- ☐ Psych clinical nurse specialist
- ☐ Other *(please describe)*: _____

☐ No ➔ Why not? *(Check all that apply)*
- ☐ Employed in another nursing role:
  - ☐ RN staff nurse ☐ Consultant
  - ☐ Administrator ☐ Other *(please describe)*: _____
- ☐ Unable to find employment as an advanced practice nurse
- ☐ Working in a different profession *(please describe)*: _____
- ☐ Maternity/parenting leave
- ☐ Retired
- ☐ Choose not to work at this time for reasons other than above
- ☐ Other *(please describe)*: _____

13. During a typical practice ***week***, how many hours do you spend in the following activities? (***Do not*** include on-call hours.)

_____ Direct patient care
_____ Clinical practice administration
_____ Teaching
_____ Research
_____ Other professional activities *(please specify)*: _____
_____ TOTAL *(Add above items – this should represent your weekly average hours of work excluding on-call time)*

14. Please indicate your yearly ARNP-related income before taxes for 2002.

- ☐ Zero
- ☐ Less than $25,000
- ☐ $25,000-$49,999
- ☐ $50,000-$74,999
- ☐ $75,000-$99,999
- ☐ $100,000-$124,999
- ☐ $125,000 or more

15. Did you receive a bonus in addition to your salary for your work as a nurse practitioner in 2002?

☐ Yes ➔ How much or at what rate? _____
☐ No

ARE YOU CURRENTLY PRACTICING AS A NURSE PRACTITIONER?

☐ **NO ➔ STOP HERE AND RETURN THE QUESTIONNAIRE, AND THANK YOU FOR YOUR PARTICIPATION**

☐ **YES ➔ PLEASE CONTINUE**

16. Indicate the ZIP codes where you practice. If you practice in more than one site, list them in order from the one in which you practice most to the one in which you practice least.

(1) _____ _____ _____ _____ _____
(2) _____ _____ _____ _____ _____
(3) _____ _____ _____ _____ _____
(4) _____ _____ _____ _____ _____

17. In what type of facility do you practice? *Check all that apply.*

- ☐ Community clinic
- ☐ Health department
- ☐ Health maintenance organization
- ☐ Private office practice
- ☐ Hospital-based outpatient clinic (not an emergency room)
- ☐ Hospital emergency room
- ☐ Hospital-based inpatient unit
- ☐ Planned Parenthood
- ☐ School/college health service
- ☐ Long-term care facility
- ☐ Occupational/employee health clinic
- ☐ Veterans Administration facility
- ☐ Military clinic/hospital
- ☐ Home care agency
- ☐ Hospital operating room
- ☐ Hospital obstetrics
- ☐ Correctional facility
- ☐ Tribal health center
- ☐ Other *(please describe)*: _____

18. Check the term(s) below that best describe(s) your clinical practice. *Check all that apply.*

PRIMARY CARE	**SPECIALTY CARE**	
☐ Family	☐ Cardiology	☐ Oncology
☐ Adult	☐ Dermatology	☐ Orthopedics
☐ Geriatric	☐ Endocrine	☐ Pain management
☐ Pediatric	☐ Gastroenterology	☐ Psychiatry/mental health
☐ Women's health*	☐ Long-term care	☐ Rehabilitation
	☐ Neonatal	☐ Acute care
	☐ Neurology	☐ Urgent care/ER
*Primary care for women	☐ Ob-gyn/women's health	☐ Other *(please describe)*: _____

19. What percentage of your clinical practice is primary care? _____%

20. On average, how many hours per week do you do clinical work? _____

21. In a typical week, how many patient visits do you perform? _____

22. Do you have hospital privileges?

- ☐ Yes ➔ What type?
  - ☐ Admission/discharge
  - ☐ Write orders that can be carried out prior to physician co-sign
  - ☐ Write orders that need physician co-sign before implemented
  - ☐ Ancillary (can make rounds, examine, teach, chart)
  - ☐ Other *(explain)*: _____
- ☐ No

23. Do you have nursing home privileges? ☐ Yes ☐ No

24. Do you take evening or weekend call? ☐ Yes ☐ No

PLEASE ANSWER THE FOLLOWING QUESTIONS BASED ON YOUR MAIN PRACTICE SITE IF YOU HAVE MORE THAN ONE.

***NURSE MIDWIVES*: Please select the portion of your practice where you are most likely to use Schedule II-IV drugs.**

25. How often is a physician ***present*** on site to discuss patient problems as they occur?

- ☐ Never (0% of the time)
- ☐ Seldom (1%-25% of the time)
- ☐ Sometimes (26%-50% of the time)
- ☐ Usually (51%-75% of the time)
- ☐ Nearly always (76%-100% of the time)

26. How often, when the physician is ***not*** on site, is a physician available ***by phone*** to discuss individual patient problems as they occur?

- ☐ Never (0% of the time)
- ☐ Seldom (1%-25% of the time)
- ☐ Sometimes (26%-50% of the time)
- ☐ Usually (51%-75% of the time)
- ☐ Nearly always (76%-100% of the time)

27. What type of relationship do you have with the physician(s) in your practice*? Check all that apply.*

- ☐ No physician in my practice
- ☐ No physician on site
- ☐ Equal colleagues/no hierarchy
- ☐ S/he is the medical director who oversees all of our practice and I am accountable to the medical director, as are all other providers
- ☐ Hierarchical/supervisory in which I must accept his/her clinical decision about the patients I see
- ☐ Other *(please describe)*: _____

28. Please estimate the percentage of your personal practice time that serves patients on state-assisted plans or who are indigent (*such as Medicaid, CHIP, and Basic Health*):

_____% ☐ I don't know

29. During the last month, did you see a ***new*** Medicare patient? ☐ Yes ☐ No ☐ Don't know

30. During the past week, approximately how many office visits did you provide to Medicare patients?

_____% ☐ I don't see any Medicare patients ☐ Don't know

Of the above visits, approximately what percentage were billed under your own name and provider number? _____% ☐ Don't know

Approximately what percentage were billed under a physician's practice name and provider number? _____% ☐ Don't know

Section III — Prescribing Practices

31. Do you dispense drugs?

	YES	NO
Distribute samples of drugs	☐	☐
Distribute legend drugs prepackaged by a pharmacist	☐	☐
Count and package pills	☐	☐
Label medications	☐	☐
Other *(please describe)*: _____	☐	☐

32. Do you have prescriptive authority?

☐ Yes ☐ No ➔ Why Not? *(Check all that apply.)*
- ☐ In process of applying
- ☐ In process of meeting requirements
- ☐ An MD writes all my prescriptions
- ☐ An ARNP writes all my prescriptions
- ☐ No meds used in my practice, e.g., therapist/analyst
- ☐ Other *(please explain)*: _____

33. Do you currently have a personal DEA number?

☐ Yes ➔
- ☐ I pay the fee myself
- ☐ My facility/practice pays the fee

☐ No ➔ Why not? *(Check all that apply.)*
- ☐ In process of applying
- ☐ Have not yet applied but plan to do so
- ☐ Do not want to write for controlled drugs
- ☐ MD writes all my prescriptions for controlled drugs
- ☐ ARNP writes all my prescriptions for controlled drugs
- ☐ Use an institutional DEA number
- ☐ No controlled substances prescribed in my practice
- ☐ No meds prescribed in my practice, e.g., therapist/analyst
- ☐ Unwilling to pay the cost
- ☐ Other *(please explain)*: _____

34. How much of a need for prescriptive authority for Schedule II-IV drugs do you personally perceive in your clinical practice?

☐ None ☐ Very little ☐ Some ☐ Moderate amount ☐ A great deal

35. Do you have prescriptive authority for Schedule II-IV drugs?

☐ Yes ➔ For how many months have you had prescriptive authority? _____ months

☐ No ➔ Why not? *(Check all that apply.)*
- ☐ In process of applying
- ☐ In process of meeting requirements for prescriptive authority
- ☐ Do not want to prescribe controlled substances
- ☐ Unwilling to prescribe under a joint practice agreement because it is not fully autonomous
- ☐ An MD writes all my prescriptions for Schedule II-IV drugs
- ☐ An ARNP writes all my prescriptions for Schedule II-IV drugs
- ☐ Unable to find a physician with whom to develop a joint practice agreement
- ☐ My employer created barriers to the process of obtaining a joint practice agreement
- ☐ I have not taken the time to initiate the process
- ☐ It is not a high enough priority for me right now
- ☐ No meds used in my practice, e.g., therapist/analyst

IF YOU DO NOT HAVE SCHEDULE II-IV PRESCRIPTIVE AUTHORITY, PLEASE SKIP TO QUESTION 52.

Section IV

36. In a typical week, how many times do you prescribe a Schedule II-IV drug? _____ times per week

37. Since you obtained prescriptive authority for Schedule II-IV, are your patients receiving more Schedule II-IV medications? ☐ Yes ☐ No

38. In a typical week, how many times do you consult (call, seek in person, etc.) a provider/pharmacist for information to help ***you*** prescribe Schedule II-IV drugs? _____ times per week

39. In a typical week, how many times do you make a prescribing decision to use other than Schedule II-IV drugs because you feel a drug is outside your area of expertise? *If none, enter zero.*

_____ times per week

40. During the last month, how many times have you referred a patient who requires a ***specific*** Schedule II-IV drug to another provider because the medication is outside your expertise? *If none, enter zero.*

_____ times per month

41. ***Barriers to Prescribing:*** Rate the extent to which ***you*** experience the following as ***barriers*** to your current use of Schedule II-IV drugs in your practice? *Check one box per row. *Joint Practice Agreement.*

	NOT APPLICABLE	NOT A BARRIER	A SMALL BARRIER	A SIGNIFICANT BARRIER	A VERY SIGNIFICANT BARRIER
Prescribing certain Schedule II-IV drugs is outside my area of expertise	☐	☐	☐	☐	☐
I am concerned about dealing with drug-seeking behavior	☐	☐	☐	☐	☐
JPA* physician monitors the scheduled drugs I prescribe	☐	☐	☐	☐	☐
JPA* physician sometimes chooses a different drug than I prescribe	☐	☐	☐	☐	☐
JPA* physician sometimes reluctant to endorse my medication choices	☐	☐	☐	☐	☐
JPA* concerned about vicarious liability	☐	☐	☐	☐	☐
JPA* has protocols or standing orders for limited Schedule II-IV drugs	☐	☐	☐	☐	☐
Pharmacists unwilling to consult about Schedule II-IV drugs	☐	☐	☐	☐	☐
Pharmacists will not take a verbal order for Schedule III-IV drugs	☐	☐	☐	☐	☐
Other *(please explain)*: _____	☐	☐	☐	☐	☐

42. What were the most difficult aspects of obtaining your prescriptive authority? Please list in the order of difficulty, with the most difficult factor first.

_____

_____

_____

_____

_____

Please turn the page to continue ⇨

Joint Practice Agreement (JPA):

43. Did your facility/practice have organization-specific requirements that needed to be completed prior to applying for Schedule II-IV prescriptive authority?
    ☐ Yes ➔ What was the requirement? _____
    ☐ No

44. How difficult was the overall process of obtaining Schedule II-IV prescriptive authority?
    ☐ Not at all difficult ☐ Somewhat difficult ☐ Moderately difficult ☐ Extremely difficult

45. How difficult was it to find a physician with whom to develop a Joint Practice Agreement?
    ☐ Not at all difficult ☐ Somewhat difficult ☐ Moderately difficult ☐ Extremely difficult

46. How difficult was it to develop your Joint Practice Agreement?
    ☐ Not at all difficult ☐ Somewhat difficult ☐ Moderately difficult ☐ Extremely difficult

47. How difficult were the organizational requirements of your Joint Practice Agreement? ☐ Not applicable
    ☐ Not at all difficult ☐ Somewhat difficult ☐ Moderately difficult ☐ Extremely difficult

48. Did the physician(s) with whom you developed a Joint Practice Agreement require you to pay a fee?
    ☐ Yes ➔ How much? $_____
    ☐ No

49. Have you had to obtain a second Joint Practice Agreement because of problems with your first?
    ☐ Yes ➔ Please explain: _____
    ☐ No

50. Did your practice pay the $65 fee for the Department of Health application? ☐ Yes ☐ No

51. What were some of the problems/challenges you had with the implementation of the legislation allowing for the completion of ARNP prescriptive authority with a joint practice agreement with a physician? *Describe below.*

    _____
    _____
    _____
    _____
    _____

52. Any other comments you would like to make?

    _____
    _____
    _____
    _____
    _____

Thank you again so much for completing this survey!

APPENDIX A2 – For NPs without Prescriptive Authority

2003 Washington State ARNP Survey

WWAMI Center for Health Workforce Studies

University of Washington
Box 354982
Seattle, WA 98195-4982

2003 Washington State ARNP Survey

Section I — Background Information

1. Please describe your educational background. *Check all that apply.*

   ☐ Associate degree – Nursing
   ☐ Associate degree – Non-nursing
   ☐ Diploma
   ☐ Baccalaureate – Nursing
   ☐ Baccalaureate – Non-nursing
   ☐ Master's – Nursing
   ☐ Master's – Non-nursing
   ☐ Doctorate – Nursing
   ☐ Doctorate – Non-nursing

2. What type of educational program did you attend for your ***ARNP*** preparation? *Check all that apply.*

   ☐ Master's
   ☐ Post-master's
   ☐ Certificate
   ☐ Physician assistant/Medex
   ☐ On-the-job training
   ☐ Military
   ☐ Other *(please explain)*: _____

3. What year did you complete your initial NP education? _____

4. What is your gender? ☐ Female ☐ Male

5. What is your age? _____

6. Are you of Hispanic origin? ☐ Yes ☐ No

7. What is your race? *Check all that apply.*

   ☐ White ☐ African-American ☐ Asian ☐ Native Alaskan/American Indian ☐ Pacific Islander

8. Where do you live? ZIP code: _____ _____ _____ _____ _____

Section II — Current Clinical Practice

9. How many national nurse practitioner/advanced practice certifications from credentialing boards such as ANCC, NAPNAP, and ACNM do you have? _____

10. What are your areas of certification? *(Check all that apply.)*

    ☐ Family
    ☐ Adult
    ☐ Psych/mental health CS
    ☐ Psych/mental health NP
    ☐ Pediatric
    ☐ Women's health
    ☐ Acute care
    ☐ Gerontology
    ☐ Nurse anesthetist
    ☐ Nurse midwife
    ☐ School/college health
    ☐ Neonatal
    ☐ Other *(please specify)*: _____

11. How many total years have you ***practiced clinically*** as a nurse practitioner? _____

12. Are you currently employed/volunteering in an advanced practice role?

☐ Yes ➔ What is your role?
- ☐ Nurse practitioner
- ☐ Nurse midwife
- ☐ Nurse anesthetist
- ☐ Psych clinical nurse specialist
- ☐ Other *(please describe)*: _____

☐ No ➔ Why not? *(Check all that apply)*
- ☐ Employed in another nursing role:
  - ☐ RN staff nurse ☐ Consultant
  - ☐ Administrator ☐ Other *(please describe)*: _____
- ☐ Unable to find employment as an advanced practice nurse
- ☐ Working in a different profession *(please describe)*: _____
- ☐ Maternity/parenting leave
- ☐ Retired
- ☐ Choose not to work at this time for reasons other than above
- ☐ Other *(please describe)*: _____

13. During a typical practice ***week***, how many hours do you spend in the following activities? (***Do not*** include on-call hours.)

_____ Direct patient care
_____ Clinical practice administration
_____ Teaching
_____ Research
_____ Other professional activities *(please specify)*: _____
_____ TOTAL *(Add above items – this should represent your weekly average hours of work excluding on-call time)*

14. Please indicate your yearly ARNP-related income before taxes for 2002.

☐ Zero
☐ Less than $25,000
☐ $25,000-$49,999
☐ $50,000-$74,999
☐ $75,000-$99,999
☐ $100,000-$124,999
☐ $125,000 or more

15. Did you receive a bonus in addition to your salary for your work as a nurse practitioner in 2002?

☐ Yes ➔ How much or at what rate? _____
☐ No

ARE YOU CURRENTLY PRACTICING AS A NURSE PRACTITIONER?

☐ **NO ➔ STOP HERE AND RETURN THE QUESTIONNAIRE, AND THANK YOU FOR YOUR PARTICIPATION**

☐ **YES ➔ PLEASE CONTINUE**

16. Indicate the ZIP codes where you practice. If you practice in more than one site, list them in order from the one in which you practice most to the one in which you practice least.

(1) _____ _____ _____ _____ _____
(2) _____ _____ _____ _____ _____
(3) _____ _____ _____ _____ _____
(4) _____ _____ _____ _____ _____

17. In what type of facility do you practice? *Check all that apply.*

- ☐ Community clinic
- ☐ Health department
- ☐ Health maintenance organization
- ☐ Private office practice
- ☐ Hospital-based outpatient clinic (not an emergency room)
- ☐ Hospital emergency room
- ☐ Hospital-based inpatient unit
- ☐ Planned Parenthood
- ☐ School/college health service
- ☐ Long-term care facility
- ☐ Occupational/employee health clinic
- ☐ Veterans Administration facility
- ☐ Military clinic/hospital
- ☐ Home care agency
- ☐ Hospital operating room
- ☐ Hospital obstetrics
- ☐ Jail health center
- ☐ Tribal health center
- ☐ Other *(please describe)*: _____

18. Check the term(s) below that best describe(s) your clinical practice. *Check all that apply.*

PRIMARY CARE	**SPECIALTY CARE**	
☐ Family	☐ Cardiology	☐ Oncology
☐ Adult	☐ Dermatology	☐ Orthopedics
☐ Geriatric	☐ Endocrine	☐ Pain management
☐ Pediatric	☐ Gastroenterology	☐ Psychiatry/mental health
☐ Women's health*	☐ Long-term care	☐ Rehabilitation
	☐ Neonatal	☐ Acute care
	☐ Neurology	☐ Urgent care/ER
*Primary care for women	☐ Ob-gyn/women's health	

19. What percentage of your clinical practice is primary care? _____%

20. On average, how many hours per week do you do clinical work? _____

21. In a typical week, how many patient visits do you perform? _____

22. Do you have hospital privileges?

- ☐ Yes ➔ What type?
  - ☐ Admission/discharge
  - ☐ Write orders that can be carried out prior to physician co-sign
  - ☐ Write orders that need physician co-sign before implemented
  - ☐ Ancillary (can make rounds, examine, teach, chart)
  - ☐ Other *(explain)*: _____
- ☐ No

23. Do you have nursing home privileges? ☐ Yes ☐ No

24. Do you take evening or weekend call? ☐ Yes ☐ No

PLEASE ANSWER THE FOLLOWING QUESTIONS BASED ON YOUR MAIN PRACTICE SITE IF YOU HAVE MORE THAN ONE.

***NURSE MIDWIVES*: Please select the portion of your practice where you are most likely to use Schedule II-IV drugs.**

25. How often is a physician ***present*** on site to discuss patient problems as they occur?

- ☐ Never (0% of the time)
- ☐ Seldom (1%-25% of the time)
- ☐ Sometimes (26%-50% of the time)
- ☐ Usually (51%-75% of the time)
- ☐ Nearly always (76%-100% of the time)

26. How often, when the physician is ***not*** on site, is a physician available ***by phone*** to discuss individual patient problems as they occur?

- ☐ Never (0% of the time)
- ☐ Seldom (1%-25% of the time)
- ☐ Sometimes (26%-50% of the time)
- ☐ Usually (51%-75% of the time)
- ☐ Nearly always (76%-100% of the time)

27. What type of relationship do you have with the physician(s) in your practice*? Check all that apply.*

- ☐ No physician in my practice
- ☐ No physician on site
- ☐ Equal colleagues/no hierarchy
- ☐ S/he is the medical director who oversees all of our practice and I am accountable to the medical director, as are all other providers
- ☐ Hierarchical/supervisory in which I must accept his/her clinical decision about the patients I see
- ☐ Other *(please describe)*: _____

28. Please estimate the percentage of your personal practice time that serves patients on state-assisted plans or who are indigent (*such as Medicaid, CHIP, and Basic Health*): _____%

29. During the last month, did you see a ***new*** Medicare patient? ☐ Yes ☐ No ☐ Don't know

30. During the past week, approximately how many office visits did you provide to Medicare patients?

_____% ☐ I don't see any Medicare patients ☐ Don't know

Of the above visits, approximately what percentage were billed under your own name and provider number? _____% ☐ Don't know

Approximately what percentage were billed under a physician's practice name and provider number? _____% ☐ Don't know

Section III — Prescribing Practices

31. Do you dispense drugs?

	YES	NO
Distribute samples of drugs	☐	☐
Distribute legend drugs prepackaged by a pharmacist	☐	☐
Count and package pills	☐	☐
Label medications	☐	☐
Other *(please describe)*: _____	☐	☐

32. Do you have prescriptive authority?

☐ Yes ☐ No ➔ Why Not?

- ☐ In process of applying
- ☐ In process of meeting requirements
- ☐ An MD writes all my prescriptions
- ☐ An ARNP writes all my prescriptions
- ☐ No meds used in my practice, e.g., therapist/analyst
- ☐ Other *(please explain)*: _____

33. Do you currently have a personal DEA number?

☐ Yes ➔ ☐ I pay the fee myself
☐ My facility/practice pays the fee

☐ No ➔ Why not? *(Check all that apply.)*
☐ In process of applying
☐ Have not yet applied but plan to do so
☐ Do not want to write for controlled drugs
☐ MD writes all my prescriptions for controlled drugs
☐ ARNP writes all my prescriptions for controlled drugs
☐ Use an institutional DEA number
☐ No controlled substances prescribed in my practice
☐ No meds prescribed in my practice, e.g., therapist/analyst
☐ Unwilling to pay the cost
☐ Other *(please explain)*: _____

34. How much of a need for prescriptive authority for Schedule II-IV drugs do you personally perceive in your clinical practice?

☐ None ☐ Very little ☐ Some ☐ Moderate amount ☐ A great deal

35. Do you have prescriptive authority for Schedule II-IV drugs?

☐ Yes ➔ For how many months have you had this prescriptive authority? _____ months

☐ No ➔ Why not? *(Check all that apply.)*
☐ In process of applying
☐ In process of meeting requirements for prescriptive authority
☐ Do not want to prescribe controlled substances
☐ Unwilling to prescribe under a joint practice agreement because it is not fully autonomous
☐ An MD writes all my prescriptions for Schedule II-IV drugs
☐ An ARNP writes all my prescriptions for Schedule II-IV drugs
☐ Unable to find a physician with whom to develop a joint practice agreement
☐ My employer created barriers to the process of obtaining a joint practice agreement
☐ I have not taken the time to initiate the process
☐ It is not a high enough priority for me right now
☐ No meds used in my practice, e.g., therapist/analyst

IF YOU HAVE SCHEDULE II-IV PRESCRIPTIVE AUTHORITY, PLEASE SKIP TO QUESTION 44.

Section IV

FOR PEOPLE WITHOUT SCHEDULE II-IV AUTHORITY AND WHO ASK SOMEONE ELSE TO PRESCRIBE SCHEDULE II-IV DRUGS FOR THEIR PATIENTS.

36. In a typical week, how many times do you refer your patients to see another provider to prescribe a medication because you do not have Schedule II-IV prescriptive authority?

_____ times per week

37. In a typical week, how many times do you consult (call, seek in person, etc.) a provider/pharmacist for information to help you prescribe schedule II-IV drugs?

_____ times per week

38. In a typical week, how many times do you make a prescribing decision to use a medication other than a Schedule II-IV drug when you really preferred a controlled substance?

_____ times per week

39. In a typical week, how many times do you make a prescribing decision to use other than Schedule II-IV drugs because you feel a drug is outside your area of expertise?

_____ times per week

40. ***Barriers to Prescribing:*** Which of the following do you experience? *Check all that apply.*

- ☐ Lack of expertise to prescribe Schedule II-IV drugs
- ☐ No provider on site to write Schedule II-IV prescriptions for my patients
- ☐ No physician in the community with whom I can develop a Joint Practice Agreement
- ☐ No provider to whom I can refer my patients for Schedule II-IV drugs without losing them as clients
- ☐ Provider who prescribes Schedule II-IV drugs sometimes reluctant to endorse the ones I request
- ☐ Provider who prescribes Schedule II-IV drugs sometimes chooses different drugs than I request
- ☐ Provider who prescribes Schedule II-IV drugs concerned about vicarious liability
- ☐ Employer prohibits the use of standing orders or protocols for prescribing Schedule II-IV drugs
- ☐ Protocols or standing orders restricted to specific Schedule II-IV drugs
- ☐ Pharmacist unwilling to take a telephone order for Schedule II-IV drugs
- ☐ Pharmacist unwilling to consult about Schedule II-IV drugs
- ☐ Other: _____

41. Overall, what are the most important reason(s) you have not applied for Schedule II-IV prescriptive authority? Please list your reasons in order of importance, with your most important reason first.

_____

_____

_____

_____

_____

42. If you have not yet applied for Schedule II-IV prescriptive authority but contemplate doing so in the future, how difficult do you anticipate it will be to find a physician with whom to develop a joint practice agreement? *Check one.*

- ☐ Not applicable
- ☐ Not at all difficult ☐ Somewhat difficult ☐ Moderately difficult ☐ Extremely difficult

43. Please help us understand why you do not use Schedule II-IV drugs in your practice. *Check all that apply.*

- ☐ I don't use ***any*** prescription medications in my practice.
- ☐ I have developed a practice that does not include use of Schedule II-IV drugs.
- ☐ I am not willing to prescribe Schedule II-IV drugs until I have fully autonomous prescriptive authority.
- ☐ My practice setting does not allow for use of Schedule II-IV drugs.
  Please explain: _____
- ☐ I am concerned about my skills in dealing with drug-seeking behavior.
- ☐ Other: _____

44. Any other comments you would like to make?

_____

_____

_____

_____

_____

Thank you again so much for completing this survey!