Oklahoma Primary Care Health Care Workforce Gap Analysis

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Introduction
The study of health care workforce demand is complex. Most projection models focus on physician supply and demand. These models typically use some estimate of physician to population ratio as a method of predicting workforce demand. The estimates are adjusted for population age and other proxies for anticipated healthcare usage yet the best workforce demand estimates are often inconsistent or change rapidly. For example, the American Association of Medical Colleges (AAMC) recently published an update on physician workforce demand and revised its 2025 estimates of physician shortages downward by 48% or 62,350 physicians over estimates published just three years previously. Another limitation of national projections is that they tend to dilute geographic maldistribution of healthcare providers with persistent shortages in rural and underserved urban areas. Further, it is not well understood how the changing roles of Nurse Practitioners (NPs) and Physician Assistants (PAs) and new models of care including Accountable Care Organizations (ACOs) and Patient Centered Medical Homes (PCMHs) will influence physician supply and demand. These estimates should be interpreted cautiously and revised frequently as more information regarding model assumptions is known.

In spite of wide variation in supply/demand estimates, there is general consensus that physician demand will increasingly exceed supply over the next decade and severe shortages will persist in rural and underserved urban areas. The AAMC recently published a commissioned study on physician supply and demand that projects shortfalls in primary care will range between 12,500 and 31,100 by 2025 and demand for non-primary care physicians will exceed supply by 28,200 to 63,700 physicians. HRSA’s National Center for Workforce Analysis (National Center) produced a recent report that examined projected demand for primary care practitioners. The National Center defines primary care as four physician specialties; family medicine, general pediatrics, general internal medicine, and geriatrics (excluding hospitalists), as well as NPs and PAs who practice in primary care settings. The National Center proposes that effective integration of NPs and PAs into primary care delivery would reduce the physician shortage estimates for 2020 by nearly 70%, from 20,400 to 6,400, due to a projected oversupply of NPs and PAs. Additionally, newer models of workforce demand have been proposed that redefine physician shortages as a demand-capacity mismatch. Bodenheimer and Smith have recently proposed that healthcare systems can increase patient capacity without adding physicians by addressing inefficiencies in provider workflow. This wide variation in primary care demand estimates, ranging from several thousand to none, illustrate the complexity and uncertainty in supply/demand analysis under new models of healthcare delivery.

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Oklahoma’s health care workforce is a story of both shortage and maldistribution. The issue of workforce shortage is brought to the forefront every December when the United Health Foundation releases its annual *America’s Health Rankings* and dutifully reports that Oklahoma has one the lowest rates of primary care physician access in the country. However, the problems facing Oklahoma’s workforce are deeper and more complex than not enough primary care physicians. Compounding the general physician access limitations in Oklahoma is the fact that the physician workforce is older than the national average. Oklahoma ranks 9th nationally for proportion of physicians over 60. As of 2012, 29.7% of the state’s active physicians were age 60 or older. The state’s health care workforce is also constrained by geography. The vast rural stretches of the state suffer from acute shortages of both health care professionals and health care services (see Figures 2, 3, & 4). However, before the state can begin to formulate policy that tackles the twin problems of shortage and maldistribution, a holistic understanding of the state’s health care workforce is needed. Such an understanding is more than just counting the number and types of health care providers in a given location. It begins with assessing the types and quality of data that are available to construct an accurate description of the current workforce and those organizations that serve as the locus for health care delivery.

**Background & Data Acquisition**
The Oklahoma State Department of Health (OSDH) provided the OSU Center for Rural Health (OSU-CRH) with the health care provider data used to complete this gap analysis. OSDH obtained the data from a variety of sources. Many of these sources are the primary entities responsible for collecting the information. OSDH data analysts cleaned and processed the data prior to distribution to the OSU-CRH. This document represents an initial attempt at a meaningful healthcare workforce gap analysis, however, data limitations will impose restrictions on the types of analysis conducted. Analyses can be expanded or revised as additional data become available. OSU-CRH is prepared to support substantial revisions to the document as we are provided additional data elements, new datasets, or as analysis priorities change.

**Methodology**
One of the stated goals of the gap analysis is to “…identify and organize health care workforce gaps by: Provider Organization; Provider Types; [and] Geographic areas...” Given the sheer number of different provider organizations and provider types, some limitations must be imposed to keep the gap analysis meaningful. This is not to diminish the contributions of the other organizations or healthcare providers in the delivery of health care in Oklahoma. Future revisions or editions of this gap analysis should include these other entities that are required for a better understanding of the state’s health care workforce and/or transformation of the state’s health care delivery system. As for the geographic area component, this draft gap analysis will focus on counties. Other units of geography are considered when appropriate for the data. For provider types, this gap analysis will focus on those members of the workforce engaged in the delivery of primary health care services.

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Primary Care Provider Supply

Oklahoma faces an acute shortage of primary care physicians. This has been well documented by the United Health Foundation and is one of the issues driving health care policy changes in the state. The importance of a robust primary care workforce in terms of overall population health is well documented. The lack of primary care providers is limiting access to care which, in turn, is causing Oklahomans to die younger and at a faster rate than national averages. Currently, the Health Resources Services Administration (HRSA) designates all but 14 counties in the state as complete or partial primary care health professional shortage areas (HPSA) (Figure 1).

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Figure 1. Primary Care Health Professional Shortage Areas in Oklahoma, June 2015

Over 59% of the state’s population lives in a designated primary care HPSA. That is close to double the national rate of 32%. HRSA’s Bureau of Clinician Recruitment and Services estimates that Oklahoma needs an additional 102 practitioners to remove the primary care HPSA designations. Compounding the current primary care shortage are fears of the future demand for primary care services. A national study listed Oklahoma as one of the least prepared states, workforce wise, for the full implementation of the Affordable Care Act.

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For this gap analysis, we consider primary health care providers as follows:

1) Physicians (both allopathic [MD] and osteopathic [DO]) actively practicing in one of the traditional primary care specialties (family/general practice, non-specialized internal medicine, obstetrics & gynecology, and pediatrics);

2) Physician Assistants (PAs) actively practicing in one of the aforementioned primary care specialties; and

3) Advanced Practice Registered Nurses (NPs) in active practice with a practice role in acute or general adult care, pediatric care, midwifery, women’s health, or public health.

The PA source data did not contain data elements delineating specialty choice. The National Commission on the Certification of Physician Assistants (NCCPA) reports that 34.2% of PAs in Oklahoma are certified in a primary care specialty.\(^9\) To more accurately report the contribution of PAs in Oklahoma’s primary care workforce, we have adjusted the totals presented below to approximate the composition of the current PA workforce.

In sum, 5,399 primary health care providers practice in Oklahoma (Table 1). Physicians comprise the largest share of primary care providers at 67% followed by NPs (25%) and PAs (8%).

<table>
<thead>
<tr>
<th>Primary Care Provider</th>
<th>Number of Primary Care Providers</th>
<th>% of All Primary Care Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>3,618</td>
<td>67%</td>
</tr>
<tr>
<td>NPs</td>
<td>1,373</td>
<td>25%</td>
</tr>
<tr>
<td>PAs (estimated)</td>
<td>408</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>5,399</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 1. Primary Care Providers in Oklahoma, 2014

On a per capita basis, Oklahoma has 1 primary care provider for every 713 residents (or 14 primary care providers per 10,000 population). It is important to note that this assumes an even areal distribution of providers, the productivity of NPs and PAs are equivalent to that of a physician, and each provider is practicing at a 1.0 FTE rate. We know that these assumptions are flawed in that there are more severe provider shortages in rural and underserved urban areas of Oklahoma. The contribution of NPs and PAs is likely overestimated based on HRSAs standard that uses a .75 FTE weight for NPs and PAs in primary care supply/demand modeling\(^2\) and may overestimate physician supply as well. The inability of the data to support a reliable and valid baseline measure of primary care workforce capacity is a major limitation of the present analysis.

The OSDH workforce data contained some provider demographic data, but the information provided is not consistent across datasets. For example, the physician data contained gender and birthday for MDs, but these elements were absent from the DO data. The PA data contained gender, but no age information. Both gender and age data were absent from the NP data. Also, the data contained little to no information about the nature of the provider practice setting (e.g., employed in group practice; employed by a government agency; solo practitioner, etc.). It would not be prudent to construct detailed econometric models forecasting the future supply or productivity of primary care providers without complete and robust datasets. As a result of data limitations, the primary care workforce can only be presented as differences in the number of primary care providers at various levels of geographic detail.

Table 2 shows the distribution of primary care providers in OSDH Health Planning Regions. Notice the high concentration of providers in Oklahoma’s two large urban regions, Region 7 and Region 8. Interestingly, the lowest rate of providers is found in Region 6, the counties contiguous to Oklahoma County with the addition of McClain County. Most of the counties in Region 6 have relatively large populations compared to the rest of the state, however, the provider base in Region 6 is smaller than one might expect given the region’s population. See Table 8 in Appendix A for county level data.

<table>
<thead>
<tr>
<th>Region</th>
<th>Population</th>
<th>Primary Care Physicians</th>
<th>NPs</th>
<th>Est. PAs</th>
<th>Total Providers</th>
<th>Rate (per 10k Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 1 Northwest</td>
<td>246,827</td>
<td>165</td>
<td>69</td>
<td>17.8</td>
<td>251.8</td>
<td>10.2</td>
</tr>
<tr>
<td>Region 2 Northeast</td>
<td>480,919</td>
<td>290</td>
<td>128</td>
<td>25.3</td>
<td>443.3</td>
<td>9.2</td>
</tr>
<tr>
<td>Region 3 Southwest</td>
<td>428,168</td>
<td>301</td>
<td>111</td>
<td>31.7</td>
<td>443.7</td>
<td>10.4</td>
</tr>
<tr>
<td>Region 4 East Central</td>
<td>413,262</td>
<td>260</td>
<td>127</td>
<td>23.0</td>
<td>410</td>
<td>9.9</td>
</tr>
<tr>
<td>Region 5 Southeast</td>
<td>321,833</td>
<td>208</td>
<td>105</td>
<td>31.1</td>
<td>344.1</td>
<td>10.7</td>
</tr>
<tr>
<td>Region 6 Central</td>
<td>581,905</td>
<td>250</td>
<td>148</td>
<td>52.0</td>
<td>450</td>
<td>7.7</td>
</tr>
<tr>
<td>Region 7 Tulsa County</td>
<td>622,409</td>
<td>1000</td>
<td>267</td>
<td>79.7</td>
<td>1,346.7</td>
<td>21.6</td>
</tr>
<tr>
<td>Region 8 Oklahoma County</td>
<td>755,245</td>
<td>1144</td>
<td>418</td>
<td>147.4</td>
<td>1,709.4</td>
<td>22.6</td>
</tr>
</tbody>
</table>

See Figure 7 in Appendix B for a map of the regions.

Table 2. Primary Care Providers in Oklahoma by OSDH Health Planning Regions, 2014

Table 3 shows primary care providers by metropolitan statistical areas (MSA). MSAs are geographic areas defined by a core urban area with population of 50,000 or more, the county containing the urban core, and adjacent counties that have a high level of
commuting to the urban core for work. Again, the state’s two large metropolitan areas, Tulsa and Oklahoma City, have the largest aggregate number of providers and highest per capita rates. The Ft. Smith, Arkansas. MSA encompasses two counties in Oklahoma, Sequoyah and Le Flore. The large spatial dimensions of the MSA obscures some of the subtle variations in the distribution of primary care providers that was apparent in the OSDH Health Planning Regions.

<table>
<thead>
<tr>
<th>Metropolitan Statistical Area (MSA)</th>
<th>Population</th>
<th>Primary Care Physicians</th>
<th>NPs</th>
<th>Est. PAs</th>
<th>Total Providers</th>
<th>Rate (per 10k Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ft. Smith, Ark. MSA*</td>
<td>90,992</td>
<td>38</td>
<td>30</td>
<td>5.1</td>
<td>73.1</td>
<td>8.0</td>
</tr>
<tr>
<td>Lawton MSA</td>
<td>131,089</td>
<td>116</td>
<td>31</td>
<td>6.5</td>
<td>153.5</td>
<td>11.7</td>
</tr>
<tr>
<td>Oklahoma City MSA</td>
<td>1,319,677</td>
<td>1383</td>
<td>554</td>
<td>198.7</td>
<td>2135.7</td>
<td>16.2</td>
</tr>
<tr>
<td>Tulsa MSA</td>
<td>961,561</td>
<td>1147</td>
<td>325</td>
<td>92.7</td>
<td>1564.7</td>
<td>16.3</td>
</tr>
<tr>
<td>Non-MSA</td>
<td>1,347,249</td>
<td>934</td>
<td>433</td>
<td>105</td>
<td>1472</td>
<td>10.9</td>
</tr>
</tbody>
</table>

*Only two counties in Oklahoma, Sequoyah and Le Flore, are part of the Ft. Smith, Ark. MSA
See Figure 8 in Appendix B for a map of the MSAs

Table 3. Primary Care Providers in Oklahoma by Metropolitan Statistical Area, 2014

The OSU-CRH developed a county-based system to differentiate rural and urban areas in Oklahoma. The counties can be arranged into two distinct categories in order to report aggregate data for rural and urban regions of the state (Table 4). Again, such spatially large aggregations obscure variations the distribution of primary care providers.

<table>
<thead>
<tr>
<th>OSU Center for Rural Health Designated Area</th>
<th>Population</th>
<th>Primary Care Physicians</th>
<th>NPs</th>
<th>Est. PAs</th>
<th>Total Providers</th>
<th>Rate (per 10k Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>1,524,497</td>
<td>1,023</td>
<td>484</td>
<td>117</td>
<td>1,624</td>
<td>10.7</td>
</tr>
<tr>
<td>Urban</td>
<td>2,326,071</td>
<td>2,595</td>
<td>889</td>
<td>291</td>
<td>3,775</td>
<td>16.2</td>
</tr>
</tbody>
</table>

See Figure 9 in Appendix B for a map of the designated rural & urban areas.

Table 4. Primary Care Providers by OSU Center for Rural Health Designated Rural Areas, 2014

While regional portrayals do lend themselves to rapid analysis, they can miss the nuances that are associated with the actual distribution of spatial data. Figure 2, Figure 3, and Figure 4 show the spatial distribution of the practice locations of primary care physicians, NPs, and PAs, respectively (note, the PA map includes all PAs and was not adjusted using national primary care estimates for PAs as are the data presented earlier). The three maps clearly show concentrations of providers in Oklahoma County, Tulsa County, and other population centers.
Figure 2. Practice Locations of Active Primary Care Physicians in Oklahoma, 2014

Figure 3. Practice Location of Primary Care NPs in Oklahoma, 2014
By leveraging geographic information systems technology, more detailed analyses are possible. Rural Urban Commuting Areas (RUCA) are often used in health services research to classify urban and rural areas. RUCAs are based on Census tract-level commuting patterns that are the result of economic relationships between rural areas and urban areas (Figure 5). Because of their relative small geographic scale, and the inclusion of 33 different distinct categories, RUCAs provide a level of detail that is not apparent in larger scale geographies such as those presented in Table 2, Table 3, and Table 4.
To facilitate interpretation, the 33 different RUCA categories can be combined into logical categories. Table 5 shows the distribution of primary care providers in Oklahoma across four different categories based on Census tract of each primary care providers practice location. The per capita rates across all four categories mimics those presented above for rural and urban Oklahoma. The dearth of physicians in rural Oklahoma is particularly acute in the state's small rural towns and isolated rural towns.

<table>
<thead>
<tr>
<th>RUCA Category</th>
<th>Population</th>
<th>Primary Care Physicians</th>
<th>NPs*</th>
<th>PAs (est.)</th>
<th>Total Providers</th>
<th>Rate (per 10k Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>2,732,378</td>
<td>2,881</td>
<td>1,030</td>
<td>324.6</td>
<td>4,235.6</td>
<td>15.5</td>
</tr>
<tr>
<td>Large Rural City/Town</td>
<td>561,214</td>
<td>487</td>
<td>193</td>
<td>48.6</td>
<td>728.6</td>
<td>13.0</td>
</tr>
<tr>
<td>Small Rural Town</td>
<td>264,028</td>
<td>164</td>
<td>95</td>
<td>18.5</td>
<td>277.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Isolated Small Rural Town</td>
<td>193,731</td>
<td>86</td>
<td>54</td>
<td>47.7</td>
<td>187.7</td>
<td>9.7</td>
</tr>
</tbody>
</table>

* Tract-level data was missing for one NP

Table 5. Primary Care Providers by Categorized RUCAs, 2014

As demonstrated by the previous descriptive and spatial analyses the primary care workforce supply is characterized by both shortage and maldistribution. The analyses are severely limited by the characteristics of the data available. The issue of workforce data insufficiency has been noted by other state-level organizations. For example, in May 2013 Oklahoma’s Primary Care Advisory Taskforce (PCAT) made several recommendations regarding primary care data including the following:
• The State should make primary care data more robust and complete
• The State should make primary care data available more rapidly
• The State should pursue the ability and capacity to maintain a State Healthcare Workforce database
• The State should develop and/or strengthen a statewide coalition around primary care data efforts

Oklahoma’s ability to craft policy solutions to its health status and healthcare access depend on reliable and valid baseline information. A significant investment in better workforce data collection and management will help ensure that policy makers have the information essential for meaningful decision making.

**Primary Care Provider Demand**

Modeling healthcare workforce demand is also complex. As previously stated, national primary care physician demand estimates over the next decade vary from several thousand to none. These estimates are driven by assumptions regarding the validity of provider baseline supply, the training pipeline, population demographics, health status indicators, and factors affecting access to care (e.g., insurance rates).

The Robert Graham Center recently published a study that provided state level estimates of primary care physician demand through 2030\(^\text{10}\). This study illustrates many of the issues and inconsistencies in supply/demand analyses. The report projects that Oklahoma will have a shortage of 451 primary care physicians by 2030 (see Figure 6). The report is based on a current primary care physician workforce of 2,191 physicians, a number obtained by using the American Medical Association (AMA) Masterfile. More recent AMA Masterfile data from 2013 reports 2,669 active primary care physicians proving patient care. The addition of nearly 500 primary care physicians to Oklahoma’s workforce is unlikely. Further, OSDH data presented previously appear to dramatically overestimate primary care physicians (N = 3,618) compared to the AMA Masterfile data used in national models. Generally accepted limitations of the AMA Masterfile (e.g., significant time lag between practice changes and updates in the Masterfile and non-response rate) are considered to overestimate the number of active physicians further exaggerating the discrepancy between Masterfile data and OSDH physician data.

\(^{10}\) Petterson, S. M., Cai, A., Moore, M., Basemore, A. State-level projections of primary care workforce, 2010-2030. September 2013, Robert Graham Center, Washington, D.C.
As previously stated, the National Center projects an oversupply of NPs and PAs by 2020. HRSA has produced national projections for NPs and PAs that show supply increases by 2020 of 30% and 58% respectively over 2010 workforce numbers. These increases in workforce supply are projected to produce a surplus of both NPs and PAs delivering primary care services (see Table 6).

<table>
<thead>
<tr>
<th>Primary Care Delivery</th>
<th>2020 Projected Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supply</td>
</tr>
<tr>
<td>Nurse Practitioners (NPs)</td>
<td>72,100</td>
</tr>
<tr>
<td>Physician Assistants (PAs)</td>
<td>43,900</td>
</tr>
</tbody>
</table>

Table 6. HRSA Workforce Projects for NPs & PAs in the US, 2010-2020

Although HRSA does not produce state-level estimates for PAs or NPs, HRSA’s National Center for Heath Workforce Analysis has produced projections for Oklahoma’s Nursing workforce indicating a substantial surplus by 2025 (see Table 7). These projections provide an indication that there will be sufficient surplus to encourage development of the NP workforce.

<table>
<thead>
<tr>
<th>Nursing Workforce</th>
<th>2025 Projected Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supply</td>
</tr>
<tr>
<td>Registered Nurse (RN)</td>
<td>55,000</td>
</tr>
<tr>
<td>Licensed Practical Nurse (LPN)</td>
<td>19,720</td>
</tr>
</tbody>
</table>

Table 7. Oklahoma Nursing Workforce Projections 2012-2025

Taking these various estimates in total, the demand for additional primary care providers in Oklahoma ranges from several hundred to none. Although the supply analysis presented previously shows clearly that there are severe deficits in primary care access especially in rural and underserved areas it is unclear what level of additional supply will meet the primary care demand during the next decade due to reliability and validity issues in the workforce data and broad variation in the assumptions related to changing models of healthcare delivery and workforce utilization.

**Conclusions**

A healthcare workforce gap analysis is typically a study that compares current staffing and distribution to a targeted standard. Studies of Oklahoma’s healthcare workforce are especially challenging because both the inputs (i.e., current workforce data) and the targeted objective are ill defined, compounding the complexity of workforce analysis. Estimates of supply and demand are based on assumptions associated with practice characteristics and trends, population and provider demographics, population health status, healthcare utilization, technology integration, and workforce transformation associated with value-based healthcare delivery models. These assumptions are often moving targets. For example, the recent SCOTUS ruling on the Affordable Care Act affected the 87,136 Oklahomans currently receiving insurance subsidies. Insurance coverage is an important predictor of primary care demand. ACOs and PCMHs rely on care teams rather than individual providers to provide services. Previous models that focus on provider to population ratios are not sufficient to understand the provider demands under these newer care delivery models. For example, Bodenheimer and Smith\(^3\) propose that more efficient use of health care workers and reallocation of care to non-physician clinicians would result in a 24% time savings to physicians, dramatically changing the demand estimates for primary care physicians.

In spite of a lack of precision with regard to demand predictions of healthcare providers, a severe primary care provider shortage persists in Oklahoma. Oklahoma ranks 43rd nationally in the number of active physicians providing primary care services and almost a third are age 60 or older. Oklahoma’s rural counties have more severe physician shortages and an older physician workforce compared to the state’s urban areas. A more robust analysis of Oklahoma’s healthcare workforce will require more comprehensive standardized data elements across professions. Fortunately, solutions for many of these data quality issues do exist. A notable improvement would be practitioner data that met the standards outlined in HRSA’s minimum data sets (MDS) for health care professionals (see Appendices C, D, & E). The MDS provide an unambiguous way to collect standardized data that can be collated together into robust analytical inputs. ACOs and PCMHs will play an increasing role in the delivery of primary care services to Oklahomans. More robust data will be required to fully understand how ACOs and PCMHs shift patient care responsibilities and work patterns.

**Limitations**

This draft gap analysis has a number of limitations. Most of these limitations stem from the source data available for the analysis. First, the lack of standard data elements among the
various datasets required us to make assumptions that may or may not reflect reality. For example, the primary care physician dataset and the APRN dataset contained data elements that described the specialty choice of the practitioners – the PA dataset did not contain such descriptors. This forced us to make certain assumptions about the contribution of PAs to primary care. The assumption used, 34.2% of PAs in Oklahoma are certified in a primary care specialty equates to 34.2% actually practicing in primary care, may or may not adequately reflect the practice patterns of PAs. Other data elements that are missing or incomplete across data sets and impose limitations on the analysis include gender, race/ethnicity, and age. Second, none of the datasets contained elements that described the practitioners’ nature of practice. For example, we know that health care professionals do not spend their entire working day in direct patient care, but no information was contained in the data to provide a measure of this information. The lack of information required us to assume a 1.0 FTE practice rate. We also know that some practitioners are employed by federal, state, or tribal agencies that regulate or limit the patient base yet without this information in the data we had to assume that each practitioner was able to provide medical care for anyone. Another important consideration is practitioners’ accepted payer source. We assumed that each practitioner accepted all manner of payment and even no payment.
### Appendix A

#### Table 8. Primary Care Providers in Oklahoma by County, 2014

<table>
<thead>
<tr>
<th>Region</th>
<th>Population</th>
<th>Primary Care Physicians</th>
<th>NPs</th>
<th>Est. PAs</th>
<th>Total Providers</th>
<th>Rate (per 10k Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adair</td>
<td>22,194</td>
<td>13</td>
<td>4</td>
<td>0.7</td>
<td>17.7</td>
<td>8.0</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>5,847</td>
<td>2</td>
<td>2</td>
<td>0.7</td>
<td>4.7</td>
<td>8.0</td>
</tr>
<tr>
<td>Atoka</td>
<td>13,898</td>
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Appendix B

Figure 7. OSDH Health Planning Regions, 2015

Figure 8. Metropolitan Statistical Areas in Oklahoma, 2013
Figure 9. OSU Center for Rural Health Designated Rural Areas in Oklahoma, 2014
Appendix C

FINAL MDS: Physicians
developed by the Federation for State Medical Boards (FSMB)

MDS: PHYSICIANS

Demographics

1. Birth date
   Month
   Day
   Year

2. Sex:
   ○ Male
   ○ Female

3. Race (1 or more categories may be selected)—Recommended as Optional:
   ○ White
   ○ Black or African American
   ○ American Indian or Alaska Native
   ○ Asian
   ○ Native Hawaiian/Other Pacific Islander
   ○ Other (specify)

   The workgroup acknowledges that this is a condensed list and state boards may choose to use
   more detailed response sets (e.g., HHS Data Standards for Race and US Census Bureau Race
   Categories)

4. Ethnicity
   Are you Hispanic, Latino/a, or of Spanish origin?
   (1 or more categories may be selected)—Recommended as Optional:
   ○ No
   ○ Yes, Mexican, Mexican American, Chican/o
   ○ Yes, Puerto Rican
   ○ Yes, Cuban
   ○ Yes, Another Hispanic, Latino/a, or of Spanish origin (specify) __________

5. Do you speak a language other than English at home? (optional)
   ○ Yes
   ○ No

6. What is this language? (If you answered Yes to #5)
   ○ Spanish
   ○ Other Language (identify) __________

Education & Training

6. Medical Education

A. What is your medical degree?
   ○ M.D.
   ○ D.O.
   ○ M.B.B.S.

B. What year did you complete your medical degree? □ □ □ □

C. Where did you complete your medical degree?
   ○ United States (specify state):
     Medical School Name: _______________
   ○ Foreign Country (specify):
     _______________

7. Residency Training/Graduate Medical Education

A. First Specialty Training
   • Location (State) _______________
   • Number of Years of Training __________
   • Year Completed _______________

September 1, 2013

19
B. Subspecialty Training
- Location (State) _______________________
- Number of Years of Training _____________
- Year Completed ________________________

C. Additional Training
- Location (State) _______________________
- Number of Years of Training _____________
- Year Completed ________________________

8. Training and Certification

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Practice Characteristics

9. What is your employment status?
- 〇 Actively working in a position that requires a medical license
- 〇 Actively working in a field other than medicine
- 〇 Not currently working
- 〇 Retired

10. Are you currently providing direct clinical or patient care on a regular basis?
- 〇 Yes
- 〇 No

11. If no, how many years has it been since you provided clinical or patient care?
- 〇 Less than 2 years
- 〇 2 to 5 years
- 〇 5 to 10 years
- 〇 More than 10 years

12. Which of the following best describes the area(s) of practice in which you spend most of your professional time:

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<tr>
<td>Geriatric Medicine</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Gynecology Only</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
</tbody>
</table>
13. Which of the following categories best describes your primary and secondary practice or work setting(s) where you work the most hours each week?

<table>
<thead>
<tr>
<th>Practice Setting</th>
<th>Principal</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office/Clinic—Solo Practice</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Office/Clinic—Partnership</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Office/Clinic—Single Specialty Group</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Office/Clinic—Multi Specialty Group</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Hospital—Inpatient</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Hospital—Outpatient</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Hospital—Emergency Department</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
FINAL MDS: Physicians developed by the Federation for State Medical Boards (FSMB)

Direct patient care hours per week at site: _____

Second Location Address

<table>
<thead>
<tr>
<th>Number</th>
<th>Street</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

City/Town State Zip Code: __________

Direct patient care hours per week at site: _____

Third Location Address

<table>
<thead>
<tr>
<th>Number</th>
<th>Street</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

City/Town State Zip Code: __________

Direct patient care hours per week at site: _____

September 1, 2013
Appendix D

FINAL MDS: Physician Assistants
developed by the PAHealth Foundation and the National Commission on Certification of Physician Assistants (NCCPA)

MDS: PHYSICIAN ASSISTANTS*

REQUIRED ITEMS

Demographics

1. Birth date □□ □□ □□□□□

2. Sex
   ○ Male       ○ Female

3. How would you classify your race?
   ○ American Indian or Alaska Native
   ○ Black or African American
   ○ White
   ○ Prefer not to answer

4. Are you Hispanic, Latino/a, or of Spanish origin?
   ○ No
   ○ Yes, Mexican, Mexican American, Chicano/a
   ○ Yes, Puerto Rican
   ○ Yes, Cuban
   ○ Yes, another Hispanic, Latino/a, or of Spanish origin
   ○ Prefer not to answer

Education & Training

5. Which of the following describes the degree or certificate you were awarded upon completion of your PA training?
   ○ Certificate/Diploma
   ○ Bachelor’s degree
   ○ Master’s degree
   ○ Associate degree
   ○ Military Training Certification
   ○ Other (specify)

6. What year did you complete your physician assistant education? □□□□□

7. Where did you complete your physician assistant education?
   Physician Assistant School/Program Name

8. Training and Certification

   Are you Certified by National Commission on Certification of Physicians Assistants (NCCPA)?
   ○ Yes       ○ No

   Have you completed Physician Assistant Post-Graduate Training?
   ○ Yes       ○ No

   Have you completed Specialty Certification?
   ○ Yes       ○ No

September 1, 2013

DRAFT
Practice Characteristics

9. What is your employment status? (mark all that apply)
   - Actively working in a position that requires a physician assistant license
   - Actively working in a field other than physician assistant
   - Not currently working
   - Retired

10. Please indicate which of the following best describes the area of practice of your supervising physician(s) in your principal and secondary clinical position(s). (Check all that apply)

<table>
<thead>
<tr>
<th>Principal Practice</th>
<th>Secondary Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Medicine</td>
<td></td>
</tr>
<tr>
<td>Anesthesiology</td>
<td></td>
</tr>
<tr>
<td>Critical Care Medicine</td>
<td></td>
</tr>
<tr>
<td>Dermatology</td>
<td></td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td></td>
</tr>
<tr>
<td>Family Medicine/General Practice</td>
<td></td>
</tr>
<tr>
<td>General Pediatrics</td>
<td></td>
</tr>
<tr>
<td>Gynecology Only</td>
<td></td>
</tr>
<tr>
<td>Hospital Medicine (Hospitalist)</td>
<td></td>
</tr>
<tr>
<td>Internal Medicine – General Practice</td>
<td></td>
</tr>
<tr>
<td>Internal Medicine – Subspecialties</td>
<td></td>
</tr>
<tr>
<td>Allergy and Immunology</td>
<td></td>
</tr>
<tr>
<td>Cardiology</td>
<td></td>
</tr>
<tr>
<td>Endocrinology</td>
<td></td>
</tr>
<tr>
<td>Gastroenterology</td>
<td></td>
</tr>
<tr>
<td>Geriatrics</td>
<td></td>
</tr>
<tr>
<td>Hematology</td>
<td></td>
</tr>
<tr>
<td>Infectious Disease</td>
<td></td>
</tr>
<tr>
<td>Nephrology</td>
<td></td>
</tr>
<tr>
<td>Oncology</td>
<td></td>
</tr>
<tr>
<td>Pulmonology</td>
<td></td>
</tr>
<tr>
<td>Rheumatology</td>
<td></td>
</tr>
<tr>
<td>Sports Medicine</td>
<td></td>
</tr>
<tr>
<td>Neurology</td>
<td></td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td></td>
</tr>
<tr>
<td>Occupational Medicine</td>
<td></td>
</tr>
<tr>
<td>Ophthalmology</td>
<td></td>
</tr>
<tr>
<td>Otolaryngology</td>
<td></td>
</tr>
<tr>
<td>Pathology</td>
<td></td>
</tr>
<tr>
<td>Pediatric Subspecialties</td>
<td></td>
</tr>
<tr>
<td>Physical Medicine/Rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Preventive Medicine/Public Health</td>
<td></td>
</tr>
<tr>
<td>Psychiatry</td>
<td></td>
</tr>
<tr>
<td>Radiation Oncology</td>
<td></td>
</tr>
<tr>
<td>Radiology</td>
<td></td>
</tr>
<tr>
<td>Surgery - General</td>
<td></td>
</tr>
</tbody>
</table>

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FINAL MDS: Physician Assistants
developed by the NCPA Health Foundation and the National Commission on Certification of Physician Assistants (NCCPA)

Surgery - Subspecialties
- Cardiothoracic
- Colon and rectal
- Gynecology and obstetrics
- Gynecologic oncology
- Neurologic
- Ophthalmic
- Oral and maxillofacial
- Orthopedic
- Otolaryngology
- Pediatric
- Plastic and maxillofacial
- Urology
- Vascular
- Other

11. Which of the following best describes the type of practice setting in which your principal and secondary clinical PA position(s) are located?

<table>
<thead>
<tr>
<th>Office-based private practice</th>
<th>Principal</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solo practice</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Single specialty physician group</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Multi-specialty physician group</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Hospital (non-VA, non-government)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Inpatient department</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Outpatient department</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Emergency department</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Ambulatory surgical center</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Behavioral/mental health facility</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Community Health Center (Federally Qualified Health Center)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Federal Government facility/hospital/unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bureau of Prisons (BOP)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Indian Health Service (IHS)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Public Health Service (PHS)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>United States Military</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Veterans Administration (VA)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Rural health clinic</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Home health care agency</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Extended care facility (non-hospital/nursing home)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Hospice</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Occupational health setting</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Public or community health clinic (non-federally qualified)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Rehabilitation facility</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>School-based or college-based health center or school clinic</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Free clinic</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other setting (specify): ___________________________</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

12. Please enter the zip code and the number of hours you work in a typical week at your principal and secondary clinical position(s).
12. Direct Patient Care: Practice Locations
Please enter the location of the sites of your principal and secondary clinical positions:

**Principal Practice Site**

<table>
<thead>
<tr>
<th>Number</th>
<th>Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>City/Town</td>
<td>State</td>
</tr>
</tbody>
</table>

**Secondary Practice Site** (if applicable)

<table>
<thead>
<tr>
<th>Number</th>
<th>Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>City/Town</td>
<td>State</td>
</tr>
</tbody>
</table>

13. During the regular hours of a typical work week, what number of hours
do you spend on the following activities at your principal and secondary clinical
position(s)? (Totals should add to hours worked as provided for question 12.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Principal</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct, face-to-face patient care (inpatient)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct, face-to-face patient care (outpatient)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect (collateral) patient care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g., phone calls, reviewing labs,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>charting)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration (e.g., of own</td>
<td></td>
<td></td>
</tr>
<tr>
<td>practice, hospital committees)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching/precepting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing education (e.g.,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>courses, journal reading, video</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
and audiotapes  
Research  
Activities related to quality improvement or patient safety  
Volunteerism  
Other activities (please specify:  

14. Do you have a National Provider Identification (NPI) number?  

○ No  ○ Yes If yes, NPI number: ______________

15. Are you planning to leave your principal clinical PA position in the next 12 months?  

○ Yes  ○ No
14. Do you have a National Provider Identification (NPI) number?

- No
- Yes

If yes, NPI number: ____________________________

15. Are you planning to leave your principal clinical PA position in the next 12 months?

- Yes
- No
RECOMMENDED, BUT OPTIONAL ITEMS

A. Which of the following best describes your current employment arrangement at your principal practice location?
   ○ Self employed
   ○ Salaried employment
   ○ Hourly employment
   ○ Locum tenens
   ○ Other (specify): ________________________

B. Number of Physicians at each practice location:
   
   Principal □ □ □  Secondary □ □ □

C. Do you personally communicate with patients in a language other than English?
   ○ Yes  ○ No

   If yes – What language(s)? ________________________

*Note: This MDS reflects the incorporation of MDS-based questions approved by and used in the NCCPA Professional Profile.
Appendix E

Nursing Supply Minimum Data Set

1. Jurisdiction

2. License Number

3. First Name __________________________

4. Last Name __________________________

5. What is your gender?
   a. Male
   b. Female

6. What is your race/ethnicity? (Mark all that apply)
   a. American Indian or Alaska Native
   b. Asian
   c. Black/African American
   d. Native Hawaiian or Other Pacific Islander
   e. White/Caucasian
   f. Hispanic/Latino

7. What is your date of birth?
   Month: [ ] [ ] Day: [ ] [ ] Year: 19[ ]

8. What type of nursing degree/credential qualified you for your first U.S. nursing license?
   a. Vocational/Practical certificate-nursing
   b. Diploma-nursing
   c. Associate degree-nursing
   d. Baccalaureate degree-nursing
   e. Master's degree-nursing
   f. Doctoral degree-nursing

9. What is the name of the school (education program) you graduated from that qualified you for your first U.S. RN license?

10. In what city and state was this education program located?

   City __________________________    State __________________________

11. What is your highest level of education?

   September 1, 2013
   NCSBN Supply MDS
a. Vocational/Practical certificate-nursing
b. Diploma-nursing
c. Associate degree-nursing
d. Associate degree-other field
e. Baccalaureate degree-nursing
f. Baccalaureate degree-other field
g. Master’s degree-nursing
h. Master’s degree-other field
i. Doctoral degree-nursing
j. Doctoral degree-other field

12. What type of license do you currently hold?
   a. RN
   b. LPN
   c. Advanced Practice RN license (include all advanced license statuses in your state)

13. What is the status of the license currently held?
   a. Active
   b. Inactive

14. Are you currently licensed/certified as a...
   a. Nurse Practitioner
   b. Clinical Nurse Specialist
   c. Certified Registered Nurse Anesthetist
   d. Certified Nurse Midwife
   e. Not licensed/certified as any of the above

15. What is your employment status? (Mark all that apply)
   a. Actively employed in nursing
      i. Yes
         1. Full-time
         2. Part-time
         3. Per diem
      ii. No
   b. Actively employed in a field other than nursing
      i. Yes
         1. Full-time
         2. Part-time
         3. Per diem
      ii. No
   c. Working in nursing only as a volunteer
   d. Unemployed
      i. Seeking work as a nurse
      ii. Not seeking work as a nurse
   e. Retired

16. If unemployed, please indicate the reasons.
MDS: Nursing developed by the National Forum of State Nursing Workforce Centers and the National Council of State Boards of Nursing (NCBSN)

a. Taking care of home and family
b. Disabled
c. Inadequate Salary
d. School
e. Difficulty in finding a nursing position
f. Other

17. In how many positions are you currently employed as a nurse?
   a. 1
   b. 2
   c. 3 or more

18. How many hours do you work during a typical week in all your nursing positions?
   
19. Please indicate the state and zip codes of your primary and secondary employer and total hours worked at each position.

   Primary Practice Site

   Secondary Practice Site

   Total Hours Worked this Site

   Total Hours Worked this Site

20. Please identify the type of setting that most closely corresponds to your primary nursing practice position.
   a. Hospital
   b. Nursing Home/Extended Care/Assisted Living Facility
   c. Home Health
   d. Correctional Facility
   e. Academic Setting
   f. Public Health
   g. Community Health
   h. School Health Service
   i. Occupational Health
   j. Ambulatory Care Setting
   k. Insurance Claims/Benefits
   l. Policy/Planning/Regulatory/Licensing Agency
   m. Other

21. Please identify the position title that most closely corresponds to your primary nursing
practice position.
   a. Consultant/Nurse Researcher
   b. Nurse Executive
   c. Nurse Manager
   d. Nurse Faculty
   e. Advanced Practice Nurse
   f. Staff Nurse
   g. Other-Health Related
   h. Other-Not Health Related

22. Please identify the employment specialty that most closely corresponds to your primary nursing practice position.
   a. Acute Care/Critical Care
   b. Adult Health/Family Health
   c. Anesthesia
   d. Community
   e. Geriatric/Gerontology
   f. Home Health
   g. Maternal-Child Health
   h. Medical Surgical
   i. Occupational health
   j. Oncology
   k. Palliative Care
   l. Pediatrics/Neonatal
   m. Public Health
   n. Psychiatric/Mental Health/Substance Abuse
   o. Rehabilitation
   p. School Health
   q. Trauma
   r. Women’s Health
   s. Other

23. Please identify the type of setting that most closely corresponds to your secondary nursing practice position.
   a. Hospital
   b. Nursing Home/Extended Care/Assisted Living Facility
   c. Home Health
   d. Correctional Facility
   e. Academic Setting
   f. Public Health
   g. Community Health
   h. School Health Service
   i. Occupational Health
   j. Ambulatory Care Setting
   k. Insurance Claims/Benefits
   l. Policy/Planning/Regulatory/Licensing Agency
   m. Other
n. No Secondary Practice Position

24. Please identify the position title that most closely corresponds to your secondary nursing practice position.
   a. Consultant/Nurse Researcher
   b. Nurse Executive
   c. Nurse Manager
   d. Nurse Faculty
   e. Advanced Practice Nurse
   f. Staff Nurse
   g. Other-Health Related
   h. Other-Not Health Related
   i. No Secondary Practice Position

25. Please identify the employment specialty that most closely corresponds to your secondary nursing practice position.
   a. Acute care/Critical Care
   b. Adult Health/Family Health
   c. Anesthesia
   d. Community
   e. Geriatric/Gerontology
   f. Home Health
   g. Maternal-Child Health
   h. Medical Surgical
   i. Occupational health
   j. Oncology
   k. Palliative Care
   l. Pediatrics/Neonatal
   m. Public Health
   n. Psychiatric/Mental Health/Substance Abuse
   o. Rehabilitation
   p. School Health
   q. Trauma
   r. Women’s Health
   s. Other
   t. No Secondary Practice Position

26. Please list all states in which you hold an active license to practice as an RN or LPN/VN:

   ___________________  ___________________  ___________________  ___________________

27. Please list all states in which you are currently practicing:

   ___________________  ___________________  ___________________  ___________________

28. In what country did you receive your entry-level education?
29. **If you are licensed/certified/recognized as a Nurse Practitioner or Nurse Midwife,** indicate the specialty of the physicians(s) with whom you have a practice. If you have your own practice, please select the specialty that best describes your practice.

*Indicate ONE primary practice specialty and ONE secondary practice specialty, if applicable, from the list below:*

<table>
<thead>
<tr>
<th>Primary practice</th>
<th>Secondary practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>□ Primary Care Specialties (General IM, Family Medicine/GP, General Peds, Geriatrics)</td>
</tr>
<tr>
<td>☐</td>
<td>□ Internal Medicine Subspecialties</td>
</tr>
<tr>
<td>☐</td>
<td>□ Pediatric Subspecialties</td>
</tr>
<tr>
<td>☐</td>
<td>□ Obstetrics &amp; Gynecology</td>
</tr>
<tr>
<td>☐</td>
<td>□ General Surgery</td>
</tr>
<tr>
<td>☐</td>
<td>□ Surgical Specialties</td>
</tr>
<tr>
<td>☐</td>
<td>□ Psychiatry (Adult and Child)</td>
</tr>
<tr>
<td>☐</td>
<td>□ Anesthesiology, Pathology, Radiology and Emergency Medicine</td>
</tr>
<tr>
<td>☐</td>
<td>□ Other Specialty</td>
</tr>
</tbody>
</table>
Glossary of Operational Definitions

Active – a license that is up to date on all licensure and/or renewal requirements.

Certified Nurse Midwife (CNM) – an RN who through a formal post-basic education program has developed expertise in the specialty area of midwifery and who possesses evidence of certification according to the requirements of the American College of Nurse-Midwives.

Certified Registered Nurse Anesthetist (CRNA) – an RN who through a formal post-basic education program has developed expertise in the specialty area of anesthesiology and who possesses evidence of certification according to the requirements of the Council on Certification of Nurse Anesthetists or its predecessor.

Clinical Nurse Specialist (CNS) - an RN who through a formal post-basic education program has developed expertise within a specialty area of nursing practice. In addition to the delivery of direct patient/client care, the role may include consultative, educational, research, and/or administrative components. Certification and/or state recognition may be required for practice as a CNS.

Employed in nursing – A nurse who receives compensation for work that requires licensure and/or educational preparation as a nurse.

Full-time – An individual employed for a full work week as defined by the employer.

Highest level of education – the highest degree obtained; in the event that a person holds the same level of education in two different fields (e.g., a master’s in nursing and a master’s in education) the nursing degree should be selected.

Inactive (in regard to licensure) - A license that was not renewed or a license placed on inactive status at the request of the licensee.

LPN – (or LVN) Licensed Practical Nurse or Licensed Vocational Nurse – An individual who holds a current license to practice as a practical or vocational nurse in at least one jurisdiction of the United States.

Nurse Practitioner - an RN prepared in a formal, post-basic nurse practitioner program, who functions in an independent primary health care provider role addressing the full range of patient/ client’s health problems and needs within an area of specialization. Certification and/or state recognition may be required for practice as an NP.

Part-time – An individual employed less than full time or less than a full work week, as defined by the employer.

Per diem – an arrangement wherein a nurse is employed directly on an as needed basis, less than part-time as defined by the facility and usually has no benefits.

Primary Position – The position at which you work the most hours during your regular work year.

RN – Registered Nurse (RN) An individual who holds a current license to practice within the...
scope of professional nursing in at least one jurisdiction of the United States.

Secondary Position – The position at which you work the second greatest number of hours during your regular work year.

Employment Setting - The setting in which nursing personnel provide nursing services. See examples below:

Hospital (Exclude nursing home units in hospitals but include all clinics and other services of the hospital)
Non-federal, short-term hospital (for example, acute care hospital)
Non-federal, long-term hospital
Non-federal psychiatric hospital (for example, state mental hospital)
Federal government hospital
Other type of hospital

Nursing Home/Extended Care Facility
Nursing home unit in hospital
Freestanding skilled nursing facility (nursing home)
Facility for mentally retarded
Inpatient hospice
Other type of extended care facility

Home Health
Health care (including hospice care) provided in the patient’s home

Correctional Facility
Jail or prisons

Academic Setting
LPN/LVN program
Diploma program (RN)
Associate degree program (RN)
Baccalaureate and/or higher degree nursing program (RN)
Other

Public Health
Official state health department
Official state mental health agency
Official city or county health department

Community Health
Combination (official/voluntary) nursing service
Visiting nurse service (VNS/VNA)
Other home health agency
Community mental health center
Community/neighborhood health center
Planned parenthood/family planning center
Day care center

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Rural health center
Retirement community center

School Health Service
Board of education (public school system)
Private or parochial elementary or secondary school
College or university
Other

Occupational Health (Employee Health Service)
Private industry
Government
Other

Ambulatory Care Setting Employee (e.g., Physician/Dentist office)
Solo practice (physician)
Solo practice (nurse)
Partnership (one or more physicians)
Partnership (one or more nurses)
Group practice (physicians)
Group practice (nurses)
Partnership or group practice (mixed group of professionals)
Freestanding clinic (physicians)
Freestanding clinic (nurses)
Ambulatory surgical center (non-hospital-based)
Dental practice
Health Maintenance Organization (HMO)

Insurance Claims/Benefits
Insurance Company

Policy/Planning Regulatory/Licensing Agency
Central or regional office of Federal agency
State Board of Nursing
Health planning agency
Nurse Workforce Center
Other
Nursing or health professional membership association
Medical supplier (e.g., Drug Company, equipment, etc.)
Other

Employment position/position title – the position an individual holds at their place of employment

Advanced Practice Nurse - An umbrella classification (not an intended title, per se) for the purpose of regulation. Individuals are licensed as Advanced Practice Nurses in the categories of Nurse Practitioner, Certified Registered Nurse Anesthetist, Certified Nurse-Midwife and Clinical Nurse Specialist. Each individual who practices nursing at an advanced level does so with

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substantial autonomy and independence and a high level of accountability. The scope of practice in each of the advanced roles is distinguishable from the others. Each jurisdiction establishes the legal scope of practice for each role.

Consultant/Nurse Researcher – An individual who conducts research in the field of nursing

Nurse Executive - involved with management and administration concerns. They provide leadership roles in the designing of care, the planning and developing of procedures and policies, and administration of budgets in hospitals, health clinics, nursing homes, and ambulatory care centers.

Nurse Manager - An individual who has line management position with 24-hour accountability for a designated patient care services which may include operational responsibility for patient care delivery, fiscal and quality outcomes.

Nurse Faculty – An individual employed by a school of nursing or other type of nursing education program; nurse faculty are generally involved in teaching, research and service.

Staff Nurse – a nurse in direct patient care who is responsible for the treatment and well-being of patients

Employment Specialty – the specific area in which a nurse is specialized or practices

Acute care/Critical Care – nurses in this specialty provide care to patients with acute conditions. They also provide care to pre- and post-operative patients.

Anesthesia – nurses in this specialty provide care to patients receiving anesthesia during operative procedures.

Community – nurses in this specialty provide health care services that focus on both treatment and prevention for all members of the community.

Geriatric/Gerontology – nurses in this specialty provide the special care needed in rehabilitatiing and maintaining the mental and physical health of the elderly.

Home Health - nurses in this specialty provide care for people in their homes, such as those recovering from illness, an accident, or childbirth.

Maternal-Child Health – nurses in this specialty provide medical and surgical treatment to pregnant women and to mother and baby following delivery.

Medical/Surgical – nurses in this specialty provide diagnostic and therapeutic services to acutely ill patients for a variety of medical conditions, both surgical and non-surgical.

Occupational health - nurses in this specialty provide on-the-job health care for the nation’s workforce, striving to ensure workers’ health, safety, and productivity.

Oncology – nurses in this specialty provide care and support for patients diagnosed with cancer.
Palliative Care - nurses in this specialty provide sensitive care and pain relief to patients in the final stages of life. They protect patients from unnecessary, painful therapies, and often provide care at home, in order to maximize meaningful time patients can spend with family and loved ones.

Pediatrics/Neonatal – nurses in this specialty provide care and treatment to young patients ranging in age from infancy to late teens; provide care and support for very sick or premature newborn babies.

Public Health – nurses in this specialty provide population-based community services.

Psychiatric/Mental Health/Substance Abuse - nurses in this specialty aid and support the mental health of patients with acute or chronic psychiatric needs.; pain management nurses who help regulate medications and provide care for those addicted to drugs or alcohol, or who are suffering from other types of substance abuse.

Rehabilitation - nurses in this specialty provide physical and emotional support to patients and the families of patients with illnesses or disabilities that affect their ability to function normally and that may alter their lifestyle.

School Health – nurses in this specialty are dedicated to promoting the health and well being of children of all ages in an academic environment.

Trauma - nurses in this specialty provide emergency care to patients of all ages. These nurses work to maintain vital signs and prevent complications and death.

Women’s Health – nurses in this specialty provided care for women across the life cycle with emphasis on conditions that are particular to women.

Sources: “Definitions” Interagency Collaborative on Nursing Statistics (ICONS) http://www.iconsdata.org/definitions.htm


Healthy People 2000, “Healthy People in Healthy Communities.” http://www.healthypeople.gov/Publications/HealthyCommunities2000/healthycom0hk.pdf