
Nursing Education and Workforce Data Panel

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National Academy of Sciences Building
Washington D.C.

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http://nursingworkforcecenters.org/
The National Forum of State Nursing Workforce Centers (National Forum) is a 501c3 non-profit national organization that includes a current membership of 34 state nurse workforce entities. Each nursing workforce center focuses on addressing the nursing shortage within their states and contributes to the national effort to ensure an adequate supply of qualified nurses to meet the health needs of the US Population. State-based nursing workforce centers provide a key connection with the local nursing community and work specific to the needs of their state. Over 70% of workforce centers are co-leads for their state’s Action Coalition as a part of the Future of Nursing Campaign for Action.

Over 80% of workforce centers are engaged in workforce research and data collection which supports the development of collaborations amongst nursing stakeholders. Without current and accurate national data, best policy approaches for resolving the national shortage may not be implemented at the federal level. The responsibility for nurse workforce planning, however, rests largely with state governments (Salsberg, 2003). Without consistently collected state-level data and reliable national benchmarks, legislators and workforce planners at the state level have fewer resources to guide their use of scarce state funding.

In 2008, the National Forum developed a long-term goal of establishing a national repository of nurse workforce data based on state-level contributions of data collected from nurses, employers, and nursing education programs. A national repository of state nurse workforce data would be advantageous for state and national nurse workforce analysts and planners. Consistently collected state-level data would permit state-to-state and state-to-region comparisons. When aggregated to the national level, such a repository would be the most exhaustive and accurate source of information ever assembled on the U.S. nursing workforce; it would be the first based on population-level (rather than sample) data. For this to be possible, states must collect the same information on nurse supply, demand, and education.

Recommendations

Federal funding for state-based data collection, analysis, and analysis of supply, demand and education nursing minimum data sets.

Mandated Supply Minimum Data Set collection at re-licensure, collection of a national database and availability of data for national and state workforce researchers.

Greater availability of education data from national databases, establishment of a national education database and availability of data for national and state workforce researchers.

Funding to increase number of states collecting demand data, collection of a national database and availability of data for national and state workforce researchers.
In 2008, with initial funding from the Center to Champion Nursing in America and in-kind contributions from members, the National Forum embarked on a year-long process to develop National Nursing Workforce Datasets for supply, demand and education. This process which is described in detail in two publications (Moulton, P., Wiebusch, PL., Cleary, BL., Brunell, ML, Napier, DF, Bienemy, C., LeVasseur, SA., Cimiotti, JP., 2012 and Nooney, J., Cleary, B., Moulton, P., Wiebusch, P., Murray, J., Yore, M., Brunell, M., 2010) included collecting surveys, codebooks and reports from each state and other national surveys, compiling a list of all of the variables from all states, determining the perceived important of each variables for forecasting and policy, drafting the initial Minimum Data Set, discussion of draft sets in a day-long summit, gathering public comment by national entities and workforce data experts, final dataset drafting and then ratification by the Forum in 2009. We have provided copies of the National Nursing Workforce Minimum Data Sets to the committee members. They are also available on our website at: http://nursingworkforcecenters.org/

Of National Forum members, currently 25 states collect supply data, 17 states collect demand data and 24 states collect education data. There has been little change over the last seven years in the number of states collecting data. More detail regarding individual state challenges in data collection are described below. Key challenges encountered by states include the lack of sustained funding, issues with which organization has the data, how it is stored and how it shared, and low responses rates especially on demand surveys.
Below is a national map that provides information about which states are collecting supply, demand and education data. This map is under revision from our annual survey and an updated version will be on our website within the next month. Please note that this does not necessarily mean the Forum member is involved in all stages including data collection, analysis and dissemination; but that an entity in the state is involved.

**National Forum Member Data Collection of**

**National Nursing Workforce Data**

**January 2014**
The National Forum has also worked towards developing national aggregate datasets for supply and demand. In 2012, the National Forum contacted the National Council of State Boards of Nursing and we entered into a partnership to collect a National RN Sample Survey in 2013 using the National Forum’s Nurse Supply Minimum Data Set. This partnership has continued and we are working together on the 2015 National Nursing Workforce Study which was described by NCSBN during this panel. More information about the study can be found at https://www.ncsbn.org/workforce.htm

In the interest of attempting to collect a national demand data set, we submitted a funding proposal to the Robert Wood Johnson Foundation to aggregate the 13 states that collected demand data in 2011. The funding proposal was not funded. The National Forum is currently revising the Supply Minimum Data Set to update some of the response categories and to also develop a smaller essential elements dataset for those states that lack the funding to collect the full minimum data set. The National Forum is also an active member with the Interagency Collaborative on Nursing Statistics (ICONS) and have compared our Minimum Data Sets with the established definitions available on the ICONS website at http://www.iconsdata.org/

The following information was collected in the past two weeks in preparation for this presentation and in response to the questions posed to the panelists. It is not meant to be an exhaustive list of all Forum Centers, but does provide information about the diversity of issues regarding data collection, key challenges and their recommendations for improved state-based data collection. More information can be obtained through each state’s contact.

1. Please briefly describe your state (including all entities) successes in nursing workforce data collection (supply, demand and education) and analysis.

<p>| California Institute for Nursing and Health Care | California has excellent supply and education data. Supply data is collected every two years via a sample survey. UCSF collects and reports all the data - supply and education, on behalf of the Board of Nursing, and the demand data with private foundation support. Because of the large numbers of licensed RNs in CA (more than 400,000), the sample survey is quite accurate in describing the supply of RNs in the state. Demand data has been grant funded over the past 8 years, and captures only employment which is hospital connected. Long term care, community clinics, ambulatory clinics, home health/hospice are only captured if they are connected to an acute care hospital. |
| Judee Berg <a href="mailto:judee@cinhc.org">judee@cinhc.org</a> |</p>
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<td><strong>Colorado Center for Nursing Excellence</strong></td>
<td>The only significant source of RN workforce data in Colorado is the State Board of Nursing. The BON collects RN license data from all of Colorado’s 60,000 RNs, but does not do any analysis or projections and only makes the data it collects available in very limited ways, “to protect confidentiality”. Accordingly, we know how many RNs are licensed in Colorado, and for about 50% of them we know their education levels (assuming they kept this voluntary data field up to date). There is no entity in the state that does any regular nursing workforce projection analysis, except for the Center.</td>
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<tr>
<td>Karren Kowalski</td>
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<td><a href="mailto:Karren.kowalski@att.net">Karren.kowalski@att.net</a></td>
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<td>Brian Kelley</td>
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<td><a href="mailto:bkelley@ColoradoNursingCenter.org">bkelley@ColoradoNursingCenter.org</a></td>
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<td><strong>Florida Center for Nursing</strong></td>
<td>The Florida Center for Nursing conducts a biennial nurse employer survey in the odd years. During the even years we complete an analysis of nurse supply data collected as a part of the license renewal process. Annually the Center surveys all LPN, pre-licensure RN, and post-licensure RN/ARNP programs producing 4 reports (the fourth is on nurse faculty).</td>
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<tr>
<td>Mary Lou Brunell</td>
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<td><a href="mailto:MaryLou.Brunell@ucf.edu">MaryLou.Brunell@ucf.edu</a></td>
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<td><strong>Georgia Nursing Leadership Coalition</strong></td>
<td>The Georgia Nursing Leadership Coalition has recently obtained state nursing workforce supply data (from re-licensure surveys) and is working to develop a report. We also worked with a company (Burning Glass) to obtain supply data from online advertisements and are developing a report on our findings. We have great relationships with doctoral program directors and have been able to collect enrollment, graduation and diversity data for the students in doctoral programs since 2010. We also have a great relationship with the Board of Nursing and, if they are able (legally and logistically), they provide us with any education data we request.</td>
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<tr>
<td>Rebecca Wheeler, PhD, RN</td>
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<tr>
<td><a href="mailto:ganursingcoalition@gmail.com">ganursingcoalition@gmail.com</a></td>
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<td><strong>Hawaii State Center for Nursing</strong></td>
<td>The Hawaii State Center for Nursing conducts biennial (odd year) registered nurse surveys for the purpose of tracking and reporting on nursing workforce trends. The data inclusive of MDS informs future nursing workforce planning and policy in the State of Hawaii. In 2015, the Hawaii State Center for Nursing, in collaboration with the Hawaii Board of Nursing (HBON), completed its fifth population based supply survey of Licensed Practical Nurses</td>
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<tr>
<td>Laura Reichhardt, MS, A-GNP-C, RN</td>
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<td><a href="mailto:lrnr@hawaii.edu">lrnr@hawaii.edu</a></td>
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(LPNs), Registered Nurses (RNs) and Advanced Practice Registered Nurses (APRNs) licensed by the HBON.

The Hawaii State Center for Nursing conducts an annual educational capacity survey inclusive of MDS for the purposes of collecting and generating nursing student and faculty trend data. The information is disseminated to inform and influence nursing education policy and planning to aid in meeting future workforce need.

**Idaho Alliance of Leaders in Nursing**
Margaret Henbest
mhenbest@nurseleaders.org

Nursing Workforce data in Idaho is collected at the time of re-licensure through a survey which accompanies the license application. Most nurses complete this voluntary survey. Annually the schools of nursing report to the Idaho Board of Nursing information and students and faculty. This information is shared with and analyzed every other year by our Idaho Department of Labor, health professions research team. The IDOL uses this and its own data resources (wage matching, unemployment claims, sector analysis etc) to compile the finished report “Idaho Nursing Overview”. The funding for this effort has been through the IBN to the IDOL. In FY2015, the grant was awarded to the Idaho Alliance of Leaders in Nursing, who in the future will sub-contract with the IDOL for continuation of this research. The IBN grant potentially is large enough to finance expanded work in the future.

**Illinois Center for Nursing**
Linda B. Roberts, MSN, RN
Linda.b.roberts@illinois.gov

All data collection includes MDS; the Board of Nursing collects education data – an annual report is required by statute, ICN collects supply data and has collaborated with others to collect demand data; both the Board of Nursing and IL Center for Nursing are located within IL Department of Financial and Professional Regulation – a regulatory agency.
Supply: supply data for RNs, LPNs and for the first time in 2016 APNs with individual on-line licensure renewal, participation is voluntary. In IL approximately 95% RNs renew online, 85% LPNs renew online, APNs same % renew online-approximate. RNs & APNs renew every other year/even years, LPNs renew every other year/odd years. Prior to collection with on-line licensure renewal the last IL report was in 2007.
| **Indiana Center for Nursing**  
Kimberly Harper, MS, RN  
CEO  
kharper@ic4n.org | Demand: have not collected since 2011, at that time were working in partnership with another government agency & data was acute-care facilities only.  
Education: MDS collected annually is mandated by NPA for all pre-licensure education programs.  
   
| **Iowa Center for Nursing Workforce**  
Laura R. Hudson, MSN, RN  
Laura.Hudson@iowa.gov | The Indiana Center for Nursing in collaboration with the Indiana Professional Licensing Agency (State Board of Nursing) and the Indiana University Health Workforce Studies Program have created a very positive relationship that allows for all groups to work collaboratively to collect and analyze workforce data for supply, education and demand across Indiana.  
   
The Iowa Board of Nursing collects the nursing minimum data set supply information through the licensure process, and is mandatory for all licensees to answer. Education data is gathered from the heads of programs in the approved schools of nursing. Demand data is collected in part by the state’s hospital association, and is shared with their member organizations.  
An Advanced Practice Nursing Tracking System is in place and annual surveys are conducted by the Iowa Health Professions Tracking Center in the Office of Statewide Clinical Education Programs at the University of Iowa Carver College of Medicine.  
   
Iowa Workforce Development (IWD) uses different tools that capture data on the nursing occupations as part of their overall collection of labor market information data collection. Information is collected in cooperation with the Federal Department of Labor’s Bureau of Labor Statistics, Employment & Training, and IWD’s own collection of data.  
BLS -Occupational & Employment Statistics – semi-annual survey of employers regarding occupations and wages  
ETA - Occupational Projections – using OES data to project occupational employment 2 and 10 years out  
IWD Laborshed Study – A household telephone survey, 6,000 person, statewide survey covering many topics (employment, wage, benefits, age, education, likeliness to change/accept new employment) |
| **Louisiana Center for Nursing**  
| Cynthia Bienemy, PhD, RN, bienemyc@lsbn.state.la.us | The Louisiana State Board of Nursing has been collecting nurse supply data on all of its licensees for many years. It is through the work of the Center for Nursing and involvement with the Forum of State Nursing Workforce Centers that the Supply MDS has been fully incorporated into the licensure renewal application. Items from the Education MDS have been incorporated into the Annual Reports received from all pre-RN licensure and APRN programs in Louisiana. The Demand MDS was incorporated in the 2010 and 2014 Nurse Employer Surveys. Nurse Demand is indeed the most difficult data to obtain. In 2010 we had a 46% overall response rate and in 2014 we had a 41% response rate surveying all healthcare facilities in the following industries: hospitals, psychiatric hospitals, long term care facilities, home health, hospice, public health, ambulatory surgical care centers, dialysis centers, rural health clinics, and federally qualified health care centers. The Louisiana Center for Nursing received funding from the Louisiana Health Works Commission and the Louisiana State Board of Nursing to develop Louisiana’s Multi-regional Statewide Nursing Workforce Forecasting Model in 2013 which projects RN, APRN, and LPN nurse supply and demand through 2020. |
| **Missouri Center for Nursing**  
| Tina Lear, MHA  
tina@mocenterfornursing.org | Missouri is not currently collecting any data. |
| Montana Center to Advance Health through Nursing | Montana’s Board of Nursing collects licensure data on a 2-year renewal cycle for nurses. The Minimum Data Set is inserted into the online renewal form, but it is currently used only on a voluntary basis. In 2012, there was a 30% response rate, but in 2014 only a 10% response rate despite urging from the BON, MT Hospital Assn, Educators, and Montana Nurses Association. The BON also collects graduation and NCLEX pass rates from pre-licensure nursing programs only. The Montana Healthcare Workforce Advisory Committee (of which MHA and the BON are members) does review basic employment statistics from the state Department of Labor and Industry, whose economists sit on the committee. |
| New Mexico Center for Nursing Excellence | **Supply**

The New Mexico Board of Nursing captures data during licensure/renewal process using the Forum’s minimum data set. Per legislation, all health professional licensing boards licensure and survey data is housed at the NM Center for Health Workforce Analysis (NMCHWA) at the University of New Mexico.

The NM Center for Nursing Excellence/New Mexico Action Coalition (NMCNE/NMAC) is in process of building relationship with the NMCHWA to discuss analysis and reporting of supply data.

**Demand**

Although the NMCNE/NMAC conducted a demand survey in 2013, the participation was low and data not as robust as hoped for. There is currently a workgroup working on a new survey that we hope to have disseminated in late 2015/early 2016.

**Education**

The New Mexico Board of Nursing surveys all nursing schools in the state. |
| New York Nursing Workforce Center | Nursing data in New York State, including supply, demand and education data, is collected and analyzed by the Center for Health Workforce Studies (www.chws.abany.edu) which is state government funded and is based at the School of Public Health, University at Albany, State University of New York (SUNY). The Center for Nursing at the Foundation of NYS Nurses, designated as the NY State Nursing Data Workforce Center, works collaboratively with the CHWS |
in an advisory and dissemination capacity. Nursing workforce data is a sample survey using data from the American Community Survey (ACS)\textsuperscript{2} and New York State Education Department (SED) licensure data. Nursing education data is obtained from an annual survey of Deans and directors of RN education programs and includes information about applications, admissions, and RN graduations from their programs, as well as barriers to expanding student capacity and their assessment of the local job market for newly trained RNs. The primary goals of this analysis are to document trends in RN graduations regionally and statewide and to understand how these trends may affect the supply of RNs in New York. The research conducted by CHWS supports and promotes health workforce planning and policymaking at local, regional, state, and national levels. Today, CHWS is a national leader in the field of health workforce studies, and the only one uniquely focused on the oral health workforce.

**North Dakota Center for Nursing**

Patricia Moulton, PhD

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The North Dakota Board of Nursing collects the Supply minimum data set during relicensure and the education minimum data set through annual surveys with education programs. The Demand minimum data set had been collected periodically from hospitals and long term care and less frequently from other employers. ND has developed a projection model that utilizes ND Workforce Development demand projections and existing supply data. Supply, education and demand data along with data from ND Workforce Development and other entities are combined into one overall workforce report every two years.

**Ohio Center for Nursing**

Jane Mahowald

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Betsy Houchen

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Supply of nurses: comprehensive RN, APRN, and LPN data is collected with each licensure renewal beginning in 2013. In-depth analysis done by Action Coalition through SIP2 grant. When grant runs out, Ohio Board of Nursing will continue to provide a summary analysis. Raw data is available to all interested parties.

Annually, nursing education data is collected by Ohio Board of Nursing through annual reports submitted by nursing programs. Certain MDS data is included for education and the plan is to incorporate remainder...
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<th>State</th>
<th>Center for Nursing</th>
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<tr>
<td>Oregon</td>
<td>Oregon Center for Nursing</td>
<td>Jana R. Bitton&lt;br&gt;<a href="mailto:bitton@up.edu">bitton@up.edu</a></td>
<td>Oregon has worked diligently with the Oregon State Board of Nursing and Oregon Health Authority to advocate for collection of the minimum data set for supply and education. Supply data is collected when nurses apply to renew their license. OCN estimates that approximately 94% of the recommended variables/answers for the education data set and 85% of the recommended variables and answers for the supply data set. Demand for nurses in Oregon is currently collected by OCN as possible. Surveys on demand for RNs (including APRNs) and LPNs occurred in 2004, 2010 and will be updated in 2015.</td>
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<td>South Carolina</td>
<td>Office of Healthcare Workforce Research for Nursing – South Carolina</td>
<td>Susan Outen&lt;br&gt;<a href="mailto:outen@mailbox.sc.edu">outen@mailbox.sc.edu</a></td>
<td>SC has been collecting supply data with re licensure for many years, the issue is it takes 1-1 1/2 years to get the report. Demand data has been hit and miss through the years but this year we had a 80% return rate!! Education data, we participate in SREB and have had 100% or 97% return rate.</td>
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<td>South Dakota</td>
<td>South Dakota Center for Nursing Workforce</td>
<td>Linda Young&lt;br&gt;<a href="mailto:Linda.young@state.sd.us">Linda.young@state.sd.us</a></td>
<td>The SD CNW is a part of the SD BON, therefore all suggested data elements from the National Forum’s Minimum Data sets (Education and Supply) are collected.</td>
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<td>Texas</td>
<td>Texas Center for Nursing Workforce Studies</td>
<td>Pam Lauer&lt;br&gt;<a href="mailto:Pamela.Lauer@dshs.state.tx.us">Pamela.Lauer@dshs.state.tx.us</a></td>
<td>Key nursing stakeholders in Texas have done a superb job working collaboratively to advance the collection of supply, demand, and education data. Supply data is collected through licensure/licensure renewal by the Board of Nursing. The BON and the TCNWS have collaborated on the collection of nursing education data since 2005. The TCNWS has engaged stakeholders from its advisory committee as well as SMEs from practice to assist in the collection of data through employer surveys. The National Forum’s MDS has been implemented in every data collection effort as possible. We’ve improved response rates every year since the TCNWS has</td>
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started collecting demand data. What started as just surveying hospitals has expanded to home health, long term care, and governmental public health agencies.

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<th><strong>Utah Nursing Workforce Information Center</strong></th>
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| Clark Ruttinger crutting@utah.gov | 1) Nursing Licensing/Renewal- Done through the State’s Department of Professional Licensing (DOPL). Very limited data is collected with the license process. The Utah state legislature has actually instructed DOPL to make the licensure process as simple and non-invasive as possible. The mandatory information gathered at licensure includes name, date of birth, gender, mailing address. Optional information includes email address and school attended.
2) Nursing workforce Surveys- Done through the Utah Medical Education Council’s (UMEC) Nursing Workforce Information Center. The UMEC has done medical workforce surveys of graduate level trained medical professionals as part of it’s analysis of the Utah’s graduate medical education policies since 1997. This has included three past supply surveys of advanced practice nurses. In 2013 the UMEC was appointed the State’s nursing workforce information center and began efforts to collect workforce data on all levels of nursing. The UMEC has initiated nursing workforce surveys in Supply, Demand and Education in accordance with the recommendations of the national minimum data-sets. |

The results of these initial surveys are as follows: Education: 20 Institutions providing nursing education in Utah, Online Survey Instrument, 17 Institutions Responded  
Supply: 26,720 Licensed RNs in Utah Surveyed, Paper Survey Instrument, 12,155 responded (42%)  
Demand: Over 1,000 employers surveyed, Approximately 33% have responded, Online/Paper Survey Instrument
| **Vermont AHEC – Nursing Workforce Initiatives** | By engaging statewide stakeholders and participating in the Governor’s Advisory Committee on Healthcare Workforce, a mandatory re-licensure survey for nurses has been established. Analyses of nurse workforce supply data has been done since 2001 but now the response rate is 98% due to the mandated survey process. A State Innovation Model grant (2013-16) has funded a Micro-simulation Demand Modeling Project that will give some guidance to the stakeholders about the nurse workforce of the future needed in primary care. All five of Vermont’s schools of nursing now offer a bachelor’s in nursing. A projection of how to reach 80% BSN prepared has recommended a 365% increase in the RN to BSN graduates. The nursing programs feel they have the capacity to accomplish this in combination with online program from other states. |

| **Wisconsin Center for Nursing** | Wisconsin Center for Nursing, Inc. (WCN) is a 501(c)(3)not-for-profit organization and is the state designated nursing workforce center under contract with the Wisconsin Department of Workforce Development to analyze nursing supply data, develop reports & make recommendations to insure the future workforce. Biennial re-licensure surveys for RNs & LPNs are mandated under WI Stat Chap.106.30. WCN also conducts an annual Wisconsin Nursing Education and Nurse Faculty Supply Survey in partnership with nursing education programs in Wisconsin. The Wisconsin Hospital Association Information Center conducts demand data surveys/analysis on the healthcare workforce in Wisconsin. Recent collaboration between the Wisconsin Council on Medical Education & Workforce (WCMEW) and the Wisconsin Healthcare Workforce Data Collaborative (comprised of multiple healthcare stakeholder partners) merged to promote the |
collection, analysis, forecasting and reporting of data regarding Wisconsin’s healthcare workforce. Its goal is to support data-driven decisions regarding the healthcare workforce needs for Wisconsin’s population.

WCMEW is currently active in a National Governors Association (NGA) grant for an NGA Policy Academy for healthcare workforce strategic planning. The goals of the NGA grant are to reach consensus on the proposed future state for core data area, to identify gaps in proposed supply & demand data sources and process, and to gain a better understanding of other states’ experience with emerging trends in team-based care.

2. Please briefly describe any barriers or challenges your state has encountered in
nursing workforce data collection (supply, demand and education) and analysis.

- The old database the board of nursing used for re-licensure overwrote information so trends could not be identified with the granular detail that would have been helpful, for example to capture when a licensee advanced their education. In 2015, the Board of Nursing is piloting the NCSBN uniform licensure software, so our data will be reported somewhat differently than it has in the past, however moving forward we will be aligned with national data collection efforts.
- We rely on our state’s DOL for demand/need and have not been successful in collecting the minimum data set from the National Forum for their suggested demand data. So we have what is provided by the DOL; so it is not very complete.
- Related to the supply data set – our biggest barrier is maintaining the questions related to the MDS in the relicensing survey. Currently, a state agency has control over the survey content. In an effort to standardize data collection across all health professions, this agency often recommends modifying the survey questions, which could jeopardize questions related to the MDS. It takes diligence to ensure nursing data is being collected consistently. Related to the demand data set – our biggest barriers are funding for the research and encouraging participation of practice partners. Our response rate for the survey in 2010 was approximately 40%. In a smaller state, that response rate makes stratifying the results of the survey extremely difficult.
- To date, the State BON does not see workforce data collection, projection or analysis as part of their responsibility, so the Center and other entities such as a health institute rely on episodic surveys and our best assumptions/analyses to estimate current and future state
nursing workforce dynamics. The BON sees their job as ‘protecting the public safety’ and nothing with respect to workforce analysis or data.

- No resources or single agency to collect demand data. If data collected, analysis of data not done in depth due to lack of resources.
- The collection of nurse demand data is the most difficult because the persons that are asked to complete the survey (employers, human resource, Chief Nursing Officers, etc.) are extremely busy and are already bombarded with surveys from other entities.
- Supply data the issue is it takes 1-1 1/2 years to get the report.
- Although the ACS and SED data sources provide some information on active RNs in our state, it is clear that they are not adequate to provide a comprehensive profile of RNs. There is an urgent need for better data on the RN workforce. More finely grained analysis of RNs regionally in our state or by setting is impossible using only the ACS and SED data. The health care delivery system in our state is changing rapidly, and the role of RNs in the health care workforce is transforming as a result. Without better data, it is not possible to determine if the current workforce is meeting the needs of the state.

Currently, the Center for Health Workforce Studies collects data on a small number of health professions (physicians, nurse practitioners, physician assistants, midwives, registered nurses, dentists and dental hygienists) through voluntary surveys administered as part of license renewal. However, changes to the license renewal process has resulted in sharp declines in the response rates to these surveys. As a result, data collected through these surveys are insufficient for analyses required for effective health workforce planning. Loss of these data compromises the state’s capacity to secure Health Professional Shortage Area (HPSA) designations and threatens access to the resources associated with HPSA designation.

- Our biggest challenge is getting responses to our employer survey. While hospitals are very responsive, some of the other settings are much harder engage.

- Our state has been trying to obtain state supply data for over two years. We have had huge challenges with the Secretary of State's office - first around communication (getting his office's cooperation by getting in to talk to them), then around IT issues (the IT system is in terrible shape and no one could or knew how to pull the workforce data. One of our coalition members stayed on top of the SOS's office every week and worked through the issues and finally connected the right players with NCSBN. She has continued to stay on top of the process and facilitated communications as we encountered errors/missing data until we finally think we have everything (as of this week!) As far as the demand data - there seems to be some sense of competition among the hospitals here such that they seem reluctant to share data. We are working with the Hospital Association to try to obtain nursing demand data. So far, we have not experienced problems with analysis - with grant funds, we have hired a local Health Policy group to do statistical analyses.

- We have tried (twice) to pass mandatory data collection at licensure renewal without success. The BON only needs statutory authority to require the MDS to be completed before a licensure renewal can be issued, but our legislature does not understand why this data is important and considers it intrusive. Hospital association members don’t even consistently track the types of degrees their nursing staff maintains (ASN or BSN, etc.),
so this data is hard to collect from even the largest employers of nurses in the state. The BON also does not maintain trending data over time regarding graduates and or licensees.

- Our demand data is not comprehensive as it only includes hospitals and facilities associated with them, and as care moves into community settings, that is becoming more important. Also the funding source for the demand data has been a foundation with a specific nursing workforce focus for the past 10 years, and that initiative is coming to a close this year. Future funding is uncertain.

- We have had no support from the legislature in collecting data.

- Most of our occupational data is captured through surveys, so the largest obstacles we have with data collection is getting individuals/employers to complete surveys and the cost associated with conducting surveys. MDS information is gathered every three years in the licensure process. Barriers have included system development and limitations. Analysis is limited to supply only, and is not conducted by a statistician. A recent contract with our state’s workforce development has provided some additional support in the analysis of data. Staffing is limited to part-time basis for this center.

- Challenges include long-term funding sustainability for the state nursing workforce center within today's competition for funding sources and the ever-changing political climate, along with difficulties experienced in meeting the requirements of a data sharing agreement between a non-profit and a governmental agency. Potential challenges include competition among vendors thru the required procurement process & for larger organizations to submit proposals to receive the nursing workforce funds, and become designated as sole source providers to analyze nursing workforce data.

- The employer survey is expensive due to the need to distribute paper instruments via US Mail. Survey participation by employers could be better, especially home health and skilled nursing facilities. Though electronic in format, participation by for-profit education programs is low. Staff expend quite a few hours trying to obtain email addresses for distribution.

- The only real barrier we have is difficulty getting demand information from non-acute care settings. The many LTC organizations and independent clinics are difficulty to identify and get to respond.

- Our biggest barrier has been in gathering supply data. Our state legislature will not allow us to integrate our survey as a part of the licensure process. This means that we must do a paper survey. We get a very high response rate to this survey, however, mailing, data entry and analysis takes time and is more costly than it would be if it were an automated part of the license renewal process. We anticipate only being able to do a nursing supply survey every 5 years. Another barrier is that our state board of nursing does not want to submit survey data to the Nursys system to be included in the national supply data set because it wasn’t collected as part of the license renewal. They feel that submitting the data from the percent of nurses who respond to our survey would be incomplete. Any analysis of this data would require it to be weighted and people looking at the data may not realize this. Our nursing educational institutions have been highly cooperative in participating with the gathering of educational data. There have been some small concerns about sharing proprietary information between competing institutions. Even still, most institutions have provided data. The biggest challenge with our demand survey
data has been identifying all of the nursing employers. We have been able to address this by matching nursing licenses to wage reporting required of employers for unemployment purposes. Resulting in a list of employers paying nurses. These employers have been very cooperative, especially the large hospital systems.

- Barriers are funding to complete data analysis. Data collection is via Survey Monkey, and we have been able renew that fee to continue access. RN response was 30%, LPNs 21.2% Another barrier is accessing the employers for Demand data; hope to have contacts to create team representing employers to collect non-acute demand data next year. Another barrier is funding to complete both initial and deeper-level analysis.

3. **Please briefly describe any suggestions that you have to improve data collection at the state-level and the general nursing field.**

- Consistent use across the nation of the same software for re-licensure so the information from state to state is apples and apples. Reliable funding to report out the information in a uniform manner.
- Data collection would be drastically improved across the country if each state had a well-supported Workforce Center.
- Make it mandatory that the MDS for Supply be included in the licensure renewal process for all states and that the Boards of Nursing partner with their nursing workforce center to analyze and report on the data. If all Boards of Nursing are collecting data from schools of nursing, include the Education MDS in the data collection process and again work with the Nursing Workforce Center to analyze and report on the data. Encourage employers to complete the nurse employer survey and share with them the findings that are pertinent to their healthcare industry. Trending of all of the data over time is extremely helpful to policy makers.
- Consolidate data collection in one agency, or if more than one agency, have them communicate, share data, work together.
- The national NCSBN should make a requirement of all state BONs that they collect and make available to researchers detailed RN workforce information: name, age, work status, work location, education, county or zipcode, email addresses, and other key data fields.
- In order for state initiatives such as the State Medicaid Waiver Delivery System Reform Incentive Payment program and the State Health Innovation Plan to succeed, there is an urgent need for better data and analysis on the supply and distribution of the state’s health workforce. Lack of relevant and timely health workforce data is a significant barrier to developing effective workforce programs and policies that support improvements to the health care delivery system. A strong and stable health workforce monitoring system is key to assuring the availability of accurate data and information on our state’s health workforce.
- Make data collection mandatory with relicensure, also collect zip codes of where people work/deliver care.
• On the state level, consolidate nursing research into one organization and require the use of the MDS.
• Work with all states to pass legislation for mandatory MDS completion upon licensure.
• It would be helpful if AHA, AACN and NCSBN would share their data so we don't have to bombard people with the same survey questions.
• By law, we will begin collecting some information at the time of licensure renewal, but the elements being collected are very basic, and do not include all of the minimum data set. It is also uncertain how the collected data will be analyzed and in what time frames.
• Our state has been very successful with supply and education because of the connection with the Board of Nursing. So my suggestion would be to recommend having a legal agreement or statute/rule that allows the Board to share the information to the centers.
• Consensus & agreement among national level leadership with advisement to states to promote mandated licensure surveys on all healthcare professionals, along with financial support to implement this at the state level. Nursing accrediting bodies to not compete with one another in data collection efforts and instead create one national data repository for nursing education data to be shared freely with the states, instead of charging fees for it.
• Mandatory reporting for all licensed healthcare professions; educational materials for legislators why this data is important and what is done with it; better tracking by the BON (ours sits within the Dept of Labor and Industry) for statistical and projection purposes (and include this in scope of work for DLI economists); improved education for individual nurses to complete the data set.
• Strong encouragement by professional groups for members to participate.
• Data collection would be vastly improved if we could make it an integrated and mandatory part of licensure/renewal. Any national encouragement/ support for effecting this change would be greatly welcomed. Perhaps national efforts could be made to track and publish how many states require workforce data be collected with license renewal and what type of data is gathered.
• Another suggestion to improve data collection/ analysis would be to publish a code book and instructions for why types of analysis are most important to be run on the data being gathered and why this analysis is important to the national conversation.
• Collaboration is key! It is also very important to engage your audience and help them understand the importance of the data being collected.
• Finally, some instruction on how to integrate analysis of the three data sets would be very helpful. How can supply, demand and education data be integrated to create a better projection model?
References


