

## Health Workforce Technical Assistance Center Webinar Series

### “State Health Workforce Data Collection: Opportunities and Challenges”

Katie Gaul, Research Associate, Program on Health Workforce Research and Policy,  
Cecil G. Sheps Center for Health Services Research, UNC Chapel Hill,  
and Deputy Director, HWTAC

*February 12, 2014*

#### Q&A

*Note: Answers are provided from Katie Gaul's perspective, and you may contact her at 919-966-6529 or [k\\_gaul@unc.edu](mailto:k_gaul@unc.edu) with additional questions on this topic or for further information. Due to a technical glitch, we were unable to record the questions that were sent directly to Katie during the webinar, and we apologize for this. If your question is not listed here, please contact her so she can provide an answer and add it to this document.*

**Q: What are the benefits of using licensure data instead of survey data? What if you can't get licensure data?**

A: By using licensure data, you capture 100% of the workforce. In North Carolina, our response rates are generally excellent. Using licensure data also saves money, since it can be costly to conduct surveys. However, for states that are unable to obtain licensure data, surveys are an option. Some states have seen success with their surveys, although they acknowledge challenges in deploying the survey and getting adequate response rates. Some states continuously monitor the workforce by tracking individuals through news clipping services and semi-annual practice surveys, but this can also be costly, depending on the size of the workforce. At least one state is analyzing their all-payer claims data to enumerate and describe the workforce. If all else fails, there are secondary data sources you can use to describe supply, such as the Bureau of Labor Statistics (BLS), but it's necessary to identify and understand their limitations.

**Q: Is NC implementing the national minimum dataset being drafted by HRSA?**

A: We have had our own minimum dataset in North Carolina, which already covers much of what HRSA and their partners have developed. We have worked with our medical and nursing boards to adapt the current licensure questions to more closely match the wording being proposed by the National Council of State Boards of Nursing (NCSBN) and the Forum of State Medical Boards (FSMB) without compromising our ability to compare data longitudinally across the years. Our data tend to be more detailed than the national MDS, but in most cases, our data can be aggregated to match what the NCSBN and FSMB are proposing to collect.

**Q: How did you get your licensure boards to share data with you?**

A: The North Carolina Health Professions Data System (HPDS) started in the 1970s, and at that time, the boards graciously agreed to share their data with us. It was a much more informal process then

that it would be now. In return for them giving us the data, we provided some services early on, including data entry, data cleaning, guidance and analysis. We have maintained excellent relationships with our boards ever since, and our work would not be possible without their continued partnership and support!

This raises another very good question, though. How do you develop data sharing agreements with licensure boards or other agencies involved in collecting data? Some of the keys include emphasizing the importance of health workforce data collection and analysis, getting all stakeholders to the table very early in the conversations, and establishing good relationships. Trust is an important factor. Additionally, when you're working with licensure boards, keep in mind that their duty is to regulate their licensees to help ensure patient safety. They often don't have resources (funding, staff, time) to collect data beyond what's required for regulation, and in some states, current legislation restricts their ability to share data. Help the boards recognize the value of collecting additional workforce data as it relates to evidence-based regulation, and look for ways to minimize burdens on the boards, especially during the initial development period.

**Q: How easy is it to add or change questions?**

A: Because we have very good relationships with our boards in NC, it is very easy for us to engage in conversations about adding or changing questions. Sometimes the boards come to us if there seems to be confusion when licensees answer questions or if they want to make changes. However, we are cognizant of a) the financial cost to the board in working with their vendors to change online renewal questions or doing it themselves; b) the time that it takes licensees to answer all of the questions on their licensure renewal form; and c) the need for comparability across time, so we only request changes or additions when absolutely necessary.

Some states mandate the collection of data through legislation, and this can affect how easy it is to add or change questions. For example, Florida's data collection is legislated, and any time they want to change a question, they must go through a lengthy public comment period, which has the potential to subject the questions to bias from the public and special interest groups.

**Q: Do you have examples of questions that we could ask?**

A: Sure. Contact Katie for more information. In addition, The National Forum of State Nursing Workforce Centers and the FSMB have developed suggested Minimum Data Sets, HRSA has their MDS standards, and the WWAMI Center for Health Workforce Studies at the University of Washington has a questionnaire library containing data collection instruments volunteered by several states.

- National Forum of State Nursing Workforce Centers: <http://www.nursingworkforcecenters.org/minimumdatasets.aspx>
- FSMB: <http://www.fsmb.org/pdf/grpol-min-phy-dataset.pdf>
- National Center for Health Workforce Analysis, HRSA: <http://bhpr.hrsa.gov/healthworkforce/data/minimumdataset/>
- WWAMI Center for Health Workforce Studies: <http://depts.washington.edu/uwchws/>

**Q: How have you navigated standardizing data across professions without compromising the nuances of the different professions?**

A: The HPDS has maintained our own minimum data set requirements, which include basic demographic, education and practice characteristics. Since the HPDS began, we have worked with our licensure boards as needed on the wording of the questions on the licensure forms. While some differences remain in how some variables are collected (e.g., race/ethnicity) between boards, the variables are close enough to allow comparison between professions. Again, we are very lucky in North Carolina to have the cooperation of all of our participating licensing boards. We could not do what we do without their support.

**Q: I'm interested in allied health and administrative support workers. They're not always licensed. How do you count them?**

A: Kudos for keeping allied health in mind! Allied health and other health-related professions are tricky. Some allied health professions, like physical therapists and occupational therapists are licensed. Others, like medical assistants, are not. For those professions, we rely on other data sources such as professional associations or the BLS, and we note limitations as appropriate.

**Q: How can you be sure the data are the data? In our state we require all RNs to be licensed. We have a large percent of nurses over the age of 70 that are not working but continue to renew their licenses. We also have a number of nurses living in other states that may have case management responsibilities (ex: insurers) for clients in our state. They have to be licensed in our state and are counted in our workforce though they have never set foot in the state. Do you have a similar situation in NC and how do you deal with this?**

A: I'd counter with the question, "How do you know that your active nurses over age 70 aren't working? Can you tell from the data or is this the word on the street?"

We do have some of these problems in North Carolina, and it is indeed a difficult analytic issue to resolve. We collect self-reported activity status, practice location and hours, but North Carolina is also a member of the Nursing Compact (<https://www.ncsbn.org/nlc.htm>), so it is difficult to get a handle on the exact number of Compact nurses working in our state. If someone reports that they are actively practicing in NC but they do not report any hours worked, we flag them for further investigation and may consider them inactive. We do have some health professionals who live in neighboring states but practice in North Carolina, and we do count those folks in our workforce. We have many checks in place in our data cleaning process to flag unusual characteristics that may determine who is or is not actively practicing within our state.

**Q: How might we all best share item language around some of the tricky topics you mentioned-- active/inactive, "practice setting"?**

A: I'm interpreting this question a couple of different ways.

In terms of the wording of questions to capture workforce data: As I mentioned before, HRSA and their partners have put a lot of work into developing suggested uniform minimum data set questions. The National Forum of State Nursing Workforce Centers and the National Council of State Boards of Nursing (NCSBN) have developed a well-defined set of questions to capture data on the nursing

workforce. The WWAMI Center for Workforce Studies has a library of workforce data collection instruments that states have shared. These are good places to start.

In terms of standardizing definitions: Analytically, it can be difficult to figure out who is active vs. inactive or in what specialty they are practicing, and it has been suggested that we, as health workforce researchers, come up with some standard definitions. I would suggest that sharing knowledge at meetings and through reports (peer-reviewed or otherwise) will help with this.

In terms of how best to share knowledge: There has been no good answer to date. The Health Workforce TA Center may be able to serve as a repository of information, and it's possible that we can produce briefs or facilitate conversations around item language. The idea of starting an online forum has been suggested, but it requires resources to house and monitor the forum, and resources have been lacking.

**Q: Our state is now collecting data and we're having trouble with analysis and dissemination. Do you have any tips?**

A: We would love to speak with you in more detail about this. Often, basic descriptive analyses are easy to run and they are sufficient to answer questions posed by policymakers and other stakeholders. That's a good place to start. When reporting and disseminating data, think of your audience. Keep the language easy to read, illustrate with simple tables, charts and maps, and keep the report short. When distributing the report by web and email, summarize the key findings in short bullets. And don't forget to acknowledge your funder!

**Q: What is your experience advancing data through new media?**

A: In North Carolina, we have not yet broken into the realm of social media. However, we are intrigued by new ways to access and visualize data, and will pursue this further as time and resources allow. Some states have been working on some really nice ideas for storing, querying and visualizing data.

**Q: At the 2013 FSMB Annual Meeting, an attendee raised the issue of whether or not it was ethical to require all those seeking licensure (or renewal of licensure) to complete a survey on the grounds that this was disingenuous. In short, because completing a survey was not truly a requirement. Completing a survey should be totally voluntary. What do you think?**

A: This is a very interesting question and a difficult one to answer. While I would love to have response rates of 100%, I know that it is not always realistic. If data are collected through licensure, I believe that it is up to the boards on whether or not they make the questions required. Some states mandate the collection of certain data, so I wouldn't consider this a survey. Other states do not mandate the collection of data, and how states collect the data differs. States that collect data through the licensure process can require that licensees answer questions if their governing regulations allow. Some states include the additional questions but do not indicate whether answers are mandatory or optional, and they do not always force a licensee to answer a question in order to proceed through the form.

If data are being collected through a survey instrument outside of the normal licensure process, it is difficult to make the survey mandatory. I know some states have been frustrated in their efforts. For example, New York attaches a survey with the licensure form and encourages licensees to fill it out, but the survey is not required and response rates have been dropping.

This is a very important issue to keep in mind for states that are considering mandating (by statute) the collection of health workforce data.

**Q: Do you collect demand data?**

A: In North Carolina, we do not routinely collect demand data. We have used measures of demand for specific projects, including

- [Physician projection model](#): With funding from the Physicians Foundation, we are creating a tool to estimate the supply of physicians, use of physician services, and capacity of physician supply to meet the population's use of services in the United States. We're modeling utilization using Medical Expenditure Panel Survey (MEPS) data and population estimates. The tool will be released in early summer of 2014.
- [Allied Health Job Vacancy Tracking Report](#): For 10 weeks in each study period, we counted the number of job ads from online job boards and Sunday newspapers from each of North Carolina's nine AHEC regions for specified allied health professions. We calculated a vacancy index to determine the relative demand of allied health professions compared to its total workforce. This study does not take into account patient utilization of healthcare services, only the employer demand for allied health professionals.
- North Carolina Hospital Workforce Trend Analysis, 2004-2006: The North Carolina Hospital Association conducts an annual workforce survey of their member hospitals. Sample variables include head count and FTE, vacancy rates, turnover, and days to fill positions.

**Q: Do you develop your own forecasting models or is this something you leave to others to do?**

A: In North Carolina, we have done our own basic forecasting models in the past for specific projects, such as our analyses of the dental workforce. We are currently developing a national physician projection model, which we will also be able to use for our state's needs. While we have the capacity to do our own modeling, there are other experts out there, such as Tim Dall at IHS Global, who have assisted states in modeling their health workforce.

**Q: How do you measure population need against workforce distribution?**

A: A classic indicator is providers per population or population per provider, which shows the supply of providers relative to population in an area. However, this doesn't take into account the actual needs and patterns of use of the population. Do you have high utilizers? Do you have an older population with more chronic diseases?

For our physician projection model, we are using Medical Expenditure Panel Survey (MEPS) data to determine patient visits by Clinical Service Area, and population estimates as indicators of utilization, and we have mapped these to physician specialties. See

[http://www.healthworkforce.unc.edu/documents/PF\\_FAQ\\_Aug2012.pdf](http://www.healthworkforce.unc.edu/documents/PF_FAQ_Aug2012.pdf) for more information on the methods for our physician modeling project.

**Q: We have a GIS system that has data layers about our state. We would like to charge for access or use of the data. How do we develop a fee schedule? What do you charge for data request?**

A: How you develop a fee schedule depends on your organization and financial governance. The NC Health Professions Data System has the ability to charge for data requests according to a fee

schedule approved by the University. We charge on a cost recovery basis, and have flat fees for mailing lists and analysis files. We are also able to charge an hourly rate for special requests that require programming time, including maps. Though it is time to consider updating our pricing structure, you can visit <http://www.shepscenter.unc.edu/hp/pricelist.htm> for our current fee schedule.

**Q: I really like the national Health Workforce Information Center for "finding" other state workforce players and projects.**

A: Yes! But sadly, their funding ended, and as of February 28, 2014, HWIC is no longer in service. However, some of the material they created is still available at <http://ruralhealth.und.edu/projects/hwic/archive>. The Health Workforce TA Center is planning to compile a list of who's doing what in each state regarding the collection of health workforce data. If you or someone you know in your state is responsible for collecting and/or analyzing health workforce data, we'd love to hear from you. Please contact Katie Gaul to chat about this. Our hope is that this will allow states to contact each other to ask questions and share knowledge.