



## ***2018 NCSBN Scientific Symposium - Practice: Results from the 2017 National Nursing Workforce Survey Video Transcript***

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### **Event**

2018 NCSBN Scientific Symposium

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### **Presenter**

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- [Richard] Cynthia and I are going to split this presentation. So, I will begin with an introduction to the survey. Cynthia will then discuss the results from the RN portion of the survey. It will return to me and I will discuss the results from the LPN version of the survey and then we will discuss some quick conclusions and take questions.

So, this is a collaborative partnership between the National Forum State Workforce Centers and NCSBN. And the background of this survey is that the federal government used to run a survey called the National Sample Survey of Registered Nurses, and it came out consistently every four years, 2000, 2004, 2008.

And when it came time for the next version of the survey around 2012, they cut it for financial reasons. They didn't have money. So, the forum and NCSBN and the nursing community decided it was important that this information be obtained. So, a survey was put together hastily in 2013.

And since then, we've done the survey every two years, 2013, 2015. And this is the survey for 2017 which went out around this time last year, and we are just presenting the results of.

And the reason for the survey is to provide the nation with the most accurate data available on the characteristics of the U.S. nursing workforce. That was the intent. So, some features from this, we... In 2015 was the first time LPN/VNs were included in the survey.

So, you'll see that when we refer to historical data, we can only go back to 2015. So, all active RN and LPN/VN licensees were eligible for survey participation. In order to keep the mailings reasonable, we stratified the survey by state to make sure, because partially we wanted to make sure we had enough of a sample for each individual state and we ensured that by doing stratification.

And a little bit over 150,000 RNs and 150,000 LPNs were selected to be sent the survey. The primary instrument used was the forum's minimum dataset, which has been used for other surveys, which prescribes standardized series of questions to be used.

In addition, we added some questions at the end of the survey on telehealth that you will see the results of. Basically, the survey was sent out via the U.S. post, but also, there was a postcard sent out with an online link where respondents could go to a website online and where you fill out the survey online that way if desired.

And we followed up with three mailings to... Three first-class mailings to make sure we got the proper response rate. Also, the mailing list for Utah came in a little bit later than everything else, so we had to do some additional mailings with Utah and I think that stretched out the procedure longer than we had intended it to be.

But the data was collected and afterwards, we conducted a non-response bias analysis because we're aware that various groups respond at different rates. Men tend to respond less than women to the surveys. Young people tend to respond less than older groups to surveys, and actually non-white populations tend to respond less than white Caucasian populations.

We didn't have the data to adjust for white Caucasian, but we had the data to adjust for age and gender and we did so. And in addition, we had to apply the post sample stratification weights to adjust for the population size of the states involved. Afterwards, a descriptive analysis was conducted. And a little bit more here that, you know, this is the responses that we had.

We had over 48,000 RNs respond. We had 40,000 LPNs respond and once again, most of the responses came back... It says paper there, 75.9% for LPNs, 71% for RNs via paper and that refers to, they filled out the form and sent it back as opposed to going online.

But I can tell you the online proportion was higher this year than it was for the 2015 survey, so that's at least trending in the right direction. And without further ado, I'm going to pass it to Cynthia. - [Cynthia] Good afternoon. I think we're really an example of what our keynote speakers said in terms of teamwork and working together. And so, again, I'd like to thank the National Council State Boards of Nursing for the opportunity to allow the National Forum of State Nursing Workforce Centers to partner with them in this endeavor since 2013.

I also want to acknowledge my two cohorts from the national forum that really had great participation in this. It was an exciting opportunity, but we worked very hard and that was Judy Berg from California HealthImpact. And also Pam Lauer, the researcher and director of the Texas Nursing Workforce Center.

And so, I really would like to acknowledge them in this presentation. I think with research, many times we'll see things and we'll say, "Well, I could've told you that, you didn't have to do the research" But, again, from our speaker, we found that the data will speak louder than our hunches when we're trying to really change policy. And so, our goal is that even though we're collecting data at the state level, it's great to have national data that you can compare with as well.

So, I will begin with sharing some of the findings and we'll just be highlighting. I encourage you to read the supplement with all of the findings. It's some really great information and you find information that's specific for your interest, for your state. So, begin with registered nurses. Okay. So, the median age, went through the survey, we found that the median age for the RN workforce was 53 years of age, and which was not different.

This is from a 2015 and in 2013 it was 52 years. So, that... Oh, and we found also that 51% of the RN workforce that were respondents to this survey, were 50 years and older. And we also noted that there was a 2.2 percentage point increase in the number of RNs that responded to this survey that were 65 years or older.

And I think we all can recognize that, in our healthcare workforce, we're talking about baby boomers, and an aging workforce. And are we preparing our workforce really to be able to address the demand for healthcare, when we have this tsunami of nurses leaving the workforce?

So again, very important information. Okay. Looking at gender. Again, we know that nursing is predominantly female profession, but we're excited that the percentage of the males in our workforce are increasing. We found that with respondents, 9.1% of our respondents were males, which is a 2.5 percentage point increase from 2013.

So, we're increasing in number. Another interesting fact that we found was that, in terms of the number of males from minority populations, in that 15.8% of the Hispanic nurses that responded to this survey were males, 15.5% were Asian, and 14.9% were native Hawaiians.

It's interesting also to note, though, that only 7.8% of white Caucasian respondents were males and only 8% to 8.2% were black. So, again, this is information. How do we address this for our communities? How does this compare to our state level data? With another interesting point in terms of gender and age, we found that the males, we had a higher percentage of males that were among our younger age groups, whereas a lower percentage in our older.

So that means that, again, male workforce is expected to grow. That's what we're seeing with this data. Racial, ethnic diversity. In this particular survey, the National Forum actually took the supplied minimum data set that was used for this and we actually...

It was re-ratified in 2016 because we went through it, and wanted to make sure that all the elements were still relevant in the health care... as health care is transforming. And one of the things that was done was to separate the question ethnicity from race. And so, we had a question asking in terms of ethnicity, are you Hispanic or if you're of Hispanic origin.

And then we had the racial question. As you can see here, in our country, about 39% of our population are represented by minorities. Yet, in our health, in our RN workforce, there's only 19.3% that are represented by minorities. And this is being addressed. Whenever I work with data and whenever I share data with stakeholders, I always... We don't just collect data to be collecting data.

We're collecting data to see what changes need to be made. How can we increase, for instance, increase the diversity of our nursing workforce? We know that the Institute of Medicine report on the future of

nursing is looking at this. They're looking at... We know the research has been done in terms of looking at healthcare disparities and health equities and having health care providers that mirror the population that you serve. So, this is, again, rationale for why we're collecting this data, okay?

And also, in this particular slide, initially, when Richard and I were going over the slides, I said, "Wow, this looks kind of..." You know, it takes a while to look at this and get the idea of what's going on and I don't know if the pointer will work. But what this slide is really showing, if you can just look at the Hispanic population, that you can see there's a higher percentage of Hispanics in the younger age cohorts, than in older cohorts, which means that we're getting...

As the more younger nurses are coming in, we're going to have more diverse population within a younger population. Okay. Initial level of nursing education. Again, this is very interesting. Across the country we're talking about education progression, looking at the recommendations from the Institute of Medicine report, and having 80% of our workforce being BSN prepared by 2020.

Well, I think we all realize that we may not make that particular goal, but we're definitely moving toward it. And so, we're excited to see that 41.7, almost 42% of our workforce said that their initial licensure as education was at the baccalaureate level, the BSN level and that's actually a 6.2 percentage point increase from 2013.

So, we're really making strides in that area and that's very exciting. Something else that's interesting though, but then our diploma nursing and associate degree nursing, there was actually a drop in terms of percentage points, 7.3 percentage points since 2013. So that, what is that telling us? Again, looking at the data and talking about education progression, talking about BSN by 2020.

And something else I thought was interesting... Again, you look at this data, you say, "Wow, you know, this is neat. This is important information." When I look at the LPNs, and there was an increase in percentage points in terms of the percentage of a proportion of LPNs that... RNs started out with their LPN. So, that's great showing that progression in terms of going from LPN to an RN, we have an articulation program.

I think every state may have that. But how do we increase that, the number of LPNs going back to get their RN degree? Okay. Next, highest level of nursing education. Again, looking at that IOM report, but not just looking at the IOM report, again, because I always like to say, we're not just trying to do this, or look at this information, What the literature has shown, the research has shown that the higher the education of the nurses taking care of our patients, the better the outcomes are.

So, this is what this is about. It's not just about saying, "We're going to meet a goal of 80% BSN by 2020." There's a rationale behind it, and so, what we found in this data of the respondents that responded to this survey, 64% indicated that they had a BSN, a higher degree in nursing. Again, in this survey, we had two different questions related to higher education.

Higher education in terms of nursing education and higher education in terms of non-nursing. This particular question deals with our nursing education. This number, this percentage actually exceeds what the Center for Champion Nursing in America, the Future of Nursing: Campaign for Action, has on their

dashboard, which is 54% of the nursing workforce. So, I think that that's exciting information. And, again, comparing this information with your state-level data is key.

The number of RNs credentialed as APRNs, we had almost 10% of the RNs responding to this survey indicating that they were credentialed as APRNs, which is a 7.3 percentage point increase from 2013. And as you can see, you can look at the nurse practitioners, tremendous increase in terms of, and it's constantly on the upscale.

And what we see, we've already talked about what? Our younger nurses, our nurses getting out, working for a short period and then wanting to go directly into graduate school to become nurse practitioners. And how do we address that? And we also know about nurse practitioners and the need for primary care, so how do we address that? So, again, very important information. Employment status, 84.5% of the RNs responding to the survey were actively employed and of that 84.5%, 65.3% were working full-time, which is an increase from the 60.4% in 2013.

We also asked, in terms of employment status, for those that are not employed, why aren't you, you know, why aren't you employed? And one of the main reason is taking care of family at home, is the reason for 47.9% of those that were not employed. And I was having a discussion with someone just a few days ago about how do we create a work environment that will be conducive to single mothers?

And would childcare be something? So, again, that makes you start wondering how can we use this data? And we also asked how many positions you hold. And we found that about 14% of the RNs said they held two positions, two nursing positions. Earnings.

Median earnings for RNs are driven more by numbers of years licensed than by age. That was something that was of interest in saying, you know, it's not in terms of... Your age does not predict what your income is. It's more of how long have you been licensed in terms of experience. And so, that's what this slide is showing.

And we also found that men earn more, again, when looking across specialties, in all specialties except for oncology. So, we thought, "that was interesting." And, of course, the specialty with the highest earning was anesthesia at about \$170,000 overall per year. We found that the median earnings rose in most states, with California being the highest, followed by Hawaii and New York and the lowest being South Dakota and Iowa ...would be 54,000 and 58,000, respectively.

Earnings by years. Okay. Let's see. We did that. Employment Setting. Employment specialty... We found that 14% of our RN workforce reported that they worked in acute care, critical care area, followed by med-surg.

But even though we had 8.5% indicating med-surg, that was a decrease from 2013. And what we're hearing more and more is that chief nursing officer having trouble retaining nurses on their med-surg units. So, this kind of tells us. We need to really begin to look at this issue. Telehealth utilization. As Richard said, we asked questions and added questions about telehealth because telehealth is becoming very much more prevalent, especially in our rural areas and our critical access hospitals.

So, we asked... We saw... we found that 54% of our RNs indicated they engage in telehealth, an increase from 48.8% in 2015. And you can see, we asked about the percentage of time that you spend in terms of caring for patients, providing care for telehealth. And you can see the various percentages of time that are listed there. I think I'm going to have to go a little quickly so that Richard can come back on.

Next, we talked about cross-border telehealth and we felt that that was very, very interesting in terms of the number of nurses that were doing telehealth and looking at it in terms of cross-border. And we found that 54% respondents indicated that they were remotely... providing remotely, as I mentioned earlier, but 45% said they were providing phone or electronic services to patients across the border.

And 11% said they were providing services nationally. Of course, most of communication using telehealth, with a telephone being the primary mode, but we also see that there's an increase in the electronic messaging, voice over Internet, even the video call. So, again, telehealth is very important initiative, something that nurses are very much involved in, and we need to continue to monitor and...

See what direction we need to go in that area.

- So, for LPNs, quickly, I'll go through graphs that look similar to what we showed for the RNs and I'll just try to point out whatever differences there might be. For the LPN population, the median age climbed to 54, which is a year older than the median age that we found in 2015. And one thing to note here, unlike with the RN graph, where you saw the bars growing at both ends, both for the youngest and oldest age groups, for this case, the bars are growing for the oldest age group and shrinking for the youngest age groups, which demographically portends to this population simply aging out.

So, there's a lot of demographic forces pushing the total population down for LPNs. Gender distribution, men, 7.8%. It's up from 2015. The race-ethnicity groups with the highest percent of males, Asian.

So, of the nurses, almost 18% of Asian nurses are male followed by Hispanic and then native Pacific got quieter, it's, again, 13.1%. And the proportion of the LPN/VN workforce that is male is expected to grow. Racial diversity.

Once again, almost 40% of the country is from racial and ethnic minority groups. LPNs, it's a little closer to that number. It's 28.9% as opposed to the 19% you saw for RNs. And so, once again, we expect racial and ethnic diversity to increase for the same reasons that you saw, like when you look at the Hispanic/Latino bar here, which is the blue line, you can see that it's at the younger age group on the left-hand side, and then the bar lowers on the right-hand side for the lower age groups and the reverse is the white Caucasian where, clearly, that's an aging population.

Highest level of nursing education, 77.4% had a vocational/practical certificate and then 14.4% diploma. The certificate is even a higher proportion than it was last time, so that's growing.

And that's their education. Employment, 64.7% reported that they are working full time, and that's an increase from 2015. Their primary settings are 31.6% in the nursing home, 14% in home health, 9.5% in hospitals, and their specialties, a little bit over 30% in geriatric/gerontology, which is up by 3 points from 2015.

And 8.8% in home health, which is down a little from 2015. Telehealth. Like the RNs... There's been an increase in telehealth usage for, you know... Now, over half the nurses are engaged, a half of the LPNs are engaged in telehealth in some form.

And just like with the RNs, we see an increase in cross-border telehealth, both over state borders and national borders in comparison to 2015, and it just looks like these trends are growing and we will be monitoring this. And the usage of various types of communication devices are similar from the 2015 survey for LPNs, in terms of with telephone still being the most popular way this is done, followed by email and electronic messaging.

So, some quick conclusions. The average age of RNs has remained roughly the same since 2015, but there is a slight increase in the proportion of RNs nearing retirement. The average age of LPN/VNs has risen by year since 2015, and there is a distinct increase in the proportion of LPN/VNs nearing retirement.

The proportion of RNs who are male has steadily risen since 2013 and the proportion of RNs in minority groups is expected to increase in coming years. And for LPNs... The proportion, male, is unchanged. Well, it's climbing a little but not much. That didn't move much since 2013.

The proportion in minority groups is larger than that of RNs, and the proportion is expected to increase in coming years. The trend towards RNs pursuing and achieving higher levels of education continues with increasing proportions of RNs entering practice with a BSN, earning master's degrees and earning DNPs.

And that, Cynthia talked about that extensively. You saw that the trend towards that, that it's almost 60... over 60% have that as their highest level of education, which is impressive. The median pre-tax annual earnings, for both RNs and LPNs increased since 2015. We now know that over half of the RNs and LPNs engage in telehealth, which is a rising trend and they are increasing their engagement over state borders and national borders.

And with that... Yeah, I think... If you have any questions for us I can... - We have time for about two questions. -

[Woman 1] This is probably a fairly quick one, but it looks like in 2017, you still only offered the two gender categories and I'm from San Francisco, the home of preferred pronouns. So, I'm wondering if there are plans to include another option for non-binary or any of the number of other terms?

- The demographic questions, what we've tended to do is try to follow what the federal government is doing. And as you may know in the last week, the federal government has indicated a direction and... but really, we've tried to stay with what that is as we do that in, like, our gender categories are consistent with what has been announced there.

So, I mean, I think we're aware of it but it's just not something at the moment we've discussed, but I mean, it's something to keep in mind, so... - [Woman 2] The NPS is asking, you know, when we're doing our surveys, and I was talking to someone on the NPS team from NCSBN, the requirement is to ask

male, female, other, and so, I know in our surveys, in the state of Vermont, over the past couple of years that, around renewal time we offered the "other" category.

- Well, when we.... When the National Forum was actually going over the minimum dataset in terms of the revisions that we were going to make prior to ratification, that question did very much come up. And we did research to see, again, what the federal government was doing, what the Census Bureau was doing and so to stay in line with that, we wanted to continue that, being very much aware that this may very well change within the next few years.

- [Woman 3] I have a question on your telehealth for RN.

- Yeah.

- I'm wondering if you're including educators.

- I think the question was posed to the... It was sent to the RNs and so everyone had option to respond to that question.

- Right, because there's a lot of online education going on and I'm wondering if maybe that's the bump. It's not necessarily the clinical telehealth, but it's the educational that's distance and web-based education. So, I would check something because I teach online, I touch students in every state.

- Okay. That's... - Virtually. So I would say yes, I work in the technology, but I'm thinking we should maybe kind of figure out a way to separate that out. Are you a clinical telehealth user or an educational?

- Oh, I think that's interesting.

- That's an interesting question.

- Yeah. Because I've never equated telehealth with distance education, but you never know. It may very well be.

- This is a, just a quick update. I think the actual text of the question was, "Do you provide telehealth services?"

- So, is there... - Two more questions. I mean, we'll get... You were up, Sam. - [Sam] Is there any further analysis of APRNs?

- Yeah. There is a little bit more. We do have questions on APRN. We didn't include this in this presentation because as you can see...

- But it's in the supplement.

- There is some in the supplement when you get that.

- Very good. Thank you.



- And I think I'd also like to add to that. We were having discussions about this data and how can we do secondary data analysis and APRNs, a further in-depth look at APRNs, were one of the items that came up in our discussion.

- Yes. And final question, I know you were... - [Woman 4] I guess just piggybacking on that, I was looking forward to maybe another project that would assess APRNs and patient safety in full-practice states versus restricted-practice states, if there's any kind of data that says that, you know, there are patient safety issues? I know the data's out there, but...

- Yeah. That's... when we were talking APRNs, that was one of the things that would be in, like, the follow-up study that would be included. Okay. Thank you.

- All right. Thanks to all the presenters.