



NCSBN
Leading Regulatory Excellence

Past Event: 2026 NCSBN Scientific Symposium - Trends in the Aging U.S. RN Workforce: A Comparative Analysis of Nurses Aged ≥ 50 Using Three Waves of the National Nursing Workforce Survey Video Transcript

Event

2026 NCSBN Scientific Symposium

More info: <https://www.ncsbn.org/past-event/2026-ncsbn-scientific-symposium>

Presenter

Charlie O'Hara, PhD, Data Scientist, Research, NCSBN

- [Dr. O'Hara] Hello, my name is Charlie O'Hara. I'm a data scientist at the National Council of State Boards of Nursing, and today we're going to talk about trends in the aging U.S.-registered nursing workforce, a comparative analysis of nurses age 50 and above using three waves of the National Nursing Workforce Survey. This project has been a collaboration both of internal staff at NCSBN, particularly Richard Smiley, Audrey Vok, and Michaela Reid, as well as external collaborators Jill Forcina, Yetty Shobo, and Nena Rich.

Without their contributions, this project wouldn't have any of the good parts it has, and anything you see that puts some concerns in your head, that's all on me. The 2024 National Nursing Workforce Survey found that the median age of the registered nursing workforce was 50. So today we're going to be focusing on this older half of the national nursing workforce. This is a critical source of institutional, professional, and clinical knowledge.

Workforce planners have been concerned about this over 50 workforce, particularly because there's an abundance of nurses who were trained in the wake of what Medicare and Medicaid, as increased funding to nursing education, converged with changing social dynamics and demographic factors to create a huge accumulation of new nurses. This group is now approaching retirement age, and the plot on the right, you can see that in 2020, almost 20% of the registered nurse workforce was over the age of 65.

So a major chunk of the nursing workforce is planning to retire at the same time as the Baby Boomers, a large chunk of the American population is needing more nursing care, creating sort of a vicious cycle. However, working counter to this effect, we've seen both in nursing and across the workforce that older workers have been returning to the workforce and retiring later, partially due to inflation and rising costs.

This has disproportionately affected women and single women. On the graph on the right, you can see the proportion of women over the age of 65 who are actively participating in the labor force. This

reached its peak in 2019, right before the pandemic, and has quickly returned to pre-pandemic levels since. The pandemic also disproportionately affected these older nurses.

They're more likely to be vulnerable to COVID-19, and they're more likely to be caring for older and immunocompromised individuals in the home. So the National Sample Survey of Registered Nurses found that this group was disproportionately likely to, in 2022, report leaving nursing during the pandemic, 7.7% of them versus only 4% of younger nurses.

However, optimistically, 5% of this group, almost two-thirds of those who left, reported either an intent to return to nursing or were unsure if they would return to nursing in 2022. Now, we've seen evidence of this in the Workforce Survey.

One of the top-line results of the survey was that many older RNs returned to practice between 2022 and 2024. And that's what we're going to try to focus on today. There's been little work, relatively, on nurses returning to practice, and much of that work has happened outside of the United States and prior to the pandemic. So getting a better idea of what's going on here now is necessary.

But what we have seen is that returners tend to be female, they tend to be older, and they tend to have caring responsibilities. Often these are people who have left the workforce to care for family and then returned once the care needs were less acute.

So today we're going to focus on three questions. What are the demographic and professional characteristics of RNs over 50? What can we learn about RNs returning to practice after COVID? And how long can we expect RNs over 50 to remain in nursing? To investigate these questions, we performed a sub-analysis of the National Nursing Workforce Survey.

The survey is a biennial national survey of nurses performed by NCSBN and the National Forum of State Nursing Workforce Centers since 2013. It captures a representative sample of the nursing workforce of all 50 U.S. states, Washington, D.C., and some of the island territories. The study has evolved quite a bit over its six iterations with new questions added, items modified, and most importantly for here, up until 2020, this study was done completely via direct mail, and in 2022 and beyond, it has become a mixed-mode approach where some jurisdictions we sampled and then contacted via direct mail, in other jurisdictions we contacted via email, and still other jurisdictions we received data from the Nursys eNotify system, which had been augmented to include some of our questions, and in one case, we received data directly from a state board of nursing that asked a similar survey.

Now, to get an idea of our analytic picture, we're going to focus on three waves of the survey, 2020, 2022, and 2024. 2020 is going to stand in as our pre-pandemic year. As you can see, it overlaps with the COVID-19 pandemic a little bit, but we received some of our data before the outbreak of the COVID-19 pandemic, and even the data that overlaps with the pandemic is more focused on the acute reactions to the pandemic, rather than the long-term strategies and changes to the workforce we observe in 2022.

On the other hand, 2024 is going to stand in as showing our bounce back from COVID-19. Coming a year after the end of the national emergency, it will help us understand what has returned to normal after the COVID-19 pandemic. And here you can see the number of registered nurses by age in both 2020 and 2022 scaled up to population estimates.

We can see the blue line represents 2020, the green line represents 2022, and looking at these distributions, you can see a pretty marked change. Older nurses were more represented in 2020 than

2022, where we see a significant increase in younger nurses. Here we can see the 2024 workforce compared to the 2022 workforce.

The orange line represents 2024, green still represents 2022, and you can see that these lines relatively track each other with two major differences. One, and we'll put a pin on this for later, we can see that nurses in their 30s appear to have left since 2022, whereas more importantly for us, you can see a marked increase in registered nurses who were actively licensed with this orange bump far above the green bump.

You may be wondering, Charlie, you know, older nurses are more likely to be retired. Is that all we're seeing? So here I've shown you the number of registered nurses actively working in nursing, and you can still see this pattern remains basically the same. If you look on the right here, this represents an estimated increase of over 350,000 registered nurses working in nursing over the age of 50 between 2024 versus 2022.

These are not just new RNs who got licensed between 2022 and 2024. The over 50 workforce has been licensed for a median of 32 years, and less than 10,000 are estimated to have been licensed in the last two years.

So this 350,000 increase is really reflecting a large number of registered nurses returning to the workforce. So let's take a look at what older nurses look like in 2024. None of the results on this slide should be particularly surprising, but if you look at the plot on the right, you can see that the blue circle represents those nurses over the age of 50.

The orange circle represents the baseline proportion in the nursing workforce. If the blue dot is to the left of the orange circle, that means that the older group of nurses are less likely to fall into the group represented on the left. What we can see here is the nurses over the age of 50 are less diverse than the general nursing population. We can see they are less likely to be nonfemale, which here represents those who identified as male or nonbinary.

They're less likely to identify as nurses of color, which here is those who didn't identify as white or Caucasian, less likely to identify as Latino or Hispanic. Further, we can see that they're less likely to be in direct patient care, less likely to be working in hospitals, staff nursing, or to be in acute critical care or medical surgical, really in these high acuity environments.

Now we're going to spend some time talking about some of the changes since 2020 in the older nursing workforce, specifically those changes where we see kind of a bounce back after COVID-19. These are going to help us make inductions about the nurses who have returned to the workforce. Unfortunately, our survey doesn't have an ability to track nurses specifically from year to year as it's a cross-sectional survey.

And we didn't have a question directly asking about whether a nurse returned to the workforce, but we've added one for 2026 and beyond that. So let's talk about gender as our main case study here. You can see in 2020, about 92% of nurses identified as female. This fell to around 90% in 2022 and has bounced back some in 2024.

And to understand what we can about returning nurses, we need to do a little bit of induction. So this figure on the right represents the different ways nurses flow in and out of the workforce in this period.

I'm going to start on the far right here, looking at retirement. One of the main changes could be if more male nurses are retiring than female nurses, we would expect to see the proportion of female nurses to go up. However, what we see is retirees were 94% female in 2024. So this would make the proportion of female nurses go down if all else was held equal. Going clockwise, we can think about the nurses who recently turned 50, who wouldn't be in this group in 2022, but now are in 2024.

And unsurprisingly, based on the correlations between age and gender in the nursing workforce, this group was more likely to be male than the older workforce as a whole, 90% identified as female. So this group, if we looked at it alone, would make the proportion of nurses who identify as female go down rather than up.

Then we can think about the newly licensed nurses. And as we talked about before, this is an extremely small proportion of the workforce, so it's not going to have a major effect. So any change that would drive the proportion of female nurses up in 2024 compared to 2022 has to be either from gender identity changing between cycles or, more likely, returning nurses being predominantly female, which we've seen in previous literature.

And now I think we have some pretty strong evidence that this is what has happened here. Now let's look at the employment picture. It's going to be a little bit harder to do the same little type of induction that we did before, just because nurses are more likely to change employment status during the pandemic, specifically as the pandemic forced demand into particular places.

Particularly, we can see here, direct patient care increased in 2022 and has decreased back towards 2020 levels in 2024. And this can be seen in a lot of our more common specialties. The proportion of older nurses working in acute care jumped from less than 10% to near 12% in 2022 and fell back down in 2024.

Similar things can be seen in perioperative, med-surg, and geriatric gerontology. What this tells us is that, one, yes, many nurses moved into direct patient care because of the demand during COVID. We've heard many anecdotes of this happening. But I think we also have evidence that the inverse could happen as well. A nurse who was moved away from the bedside, working in a more peripheral setting, saw the writing on the wall.

The pandemic needed them to return to the bedside, and they chose to leave the workforce for a few years and then return once the national emergency was over. And this can be partially represented by this other line here. The other clinical specialties, which we had 31 options of clinical specialties, so these really represent kind of more peripheral options, has jumped significantly since 2022. We've seen evidence that registered nurses over 50 have returned to the workforce in 2024.

And this has supported the health of the workforce in that year. But how long are these returning nurses going to stay? Long term, what effects are we going to see? Interestingly, looking at employment, instead of these spikes we saw in direct patient care, we see that the proportion of older nurses actively working in nursing jumped in 2022 and remained at that level in 2024.

This effect is largely driven by the decrease in the proportion of nurses who are actively licensed but identify as being retired across all three cycles of our workforce survey. There's a few ways to think about this. First, many registered nurses who previously reported being retired may have returned to nursing. This is the one I'm going to kind of push you towards.

Obviously there's other possibilities. Historically, registered nurses are likely to maintain their active license long after they've retired, and it's possible that during COVID-19 many of them changed their mind about that. They decided they wouldn't ever return to nursing and let their license lapse. We also may have seen real losses in this older group of registered nurses who are disproportionately likely to suffer severely from the COVID-19 pandemic.

On top of these proportional data, we can look at our estimates. And what we see is the registered nurses who are retired has increased since 2022. So this is not simply a picture of attrition. It's not just that nurses who are retired or were retired no longer have active licenses. Instead, we must see some nurses returning to the workforce.

So we've seen that nurses have returned to the workforce, but what is their experience like? Since 2022, we added a question investigating nurses' experience with emotional exhaustion and burnout, and we've seen since 2022 each of these items has decreased, showing kind of an optimistic note.

However, many of these values are still relatively high. Over 40% of nurses over 50 report being emotionally drained or feeling used up more than a few times a week. And we asked nurses whether they plan to retire or leave nursing in the next five years.

And unfortunately, we've seen that this proportion has increased across all three cycles. In fact, in 2024, we added additional options to distinguish between those who just plan to retire and those who plan to leave nursing. And for the first time, those who plan to retire is a bigger proportion of the older workforce than those who intend to stay.

So while we've seen many nurses returning, we see some evidence that they may not be here by the end of the decade. So the question remains, what drove the returning nurses back into practice? Previous research has found that major motivators for returning to practice are often tied to whatever circumstances led the nurse to leave practice in the first place.

Often this may be personal, such as taking care of family or moving to a new state, or it could be a global pandemic. Once the acute circumstances have eased a little bit, we often see nurses feeling the freedom to return to practice.

Simultaneously, especially as we see economically on certain times and high inflation, salary becomes a strong driver, especially for older single women in the workforce. So that drives many to return. Some also cite feeling unfinished business tied to nursing that they want to continue. So the main things I want you to take away from this talk is that nearly 350,000 more RNs over 50 were working in nursing in 2024 compared to 2022.

So we see many nurses have returned, but nearly 750,000 intend to leave by the end of the decade. Now this intent to leave may not fully materialize. In times of economic hardship, many workers un-retire and return to nursing. At the same time, many will push off retirement for a few more years.

But we can't rely on economic hard times maintaining the health of the nursing workforce long term. What this does show us is that currently inactive nurses represent a real source of potential nurses that can maintain workforce health.

By focusing on return to practice refresher programs and targeted policies, we can help support the health of the workforce long term. And to take you way back to halfway through this talk, we talked

about how the differences between 2022 and 2024 were not only more older nurses returned, but many nurses in their 30s left. That's a new pool of nurses who we can target with return to practice refresher programs and try to bring back in to buoy the health of the nursing workforce long term.

Thank you.

- [Jason] Charlie, thank you for the presentation. I see a few questions already in the Q&A chat, so let's just kick it right off.

Why was there such a massive return of nurses to the workforce in 2024?

- Yeah, I think there's obviously when you first think about the period of time from 2020 to 2024, you're thinking about the pandemic. And so when you think about nurses returning after the pandemic, we often think about those nurses being nurses who left because of the pandemic.

But I think that's only a part of the story. While the pandemic may have led a number of RNs to retire early and then change their mind later or take a break, there are so many nurses who were already taking a break, who were already caring for family, doing something else.

And so now I think what we might see is like, take an example, an RN who is taking a break from nursing full time because they have young children at home. They're planning to go back into nursing when their kids go back into school. And then 2021, 2022, their kids are doing remote Zoom school. They don't see the option they thought they were going to have.

Earlier we talked about this. You return to nursing when the freedom to... the thing that made you leave kind of resolves. And I think what we end up seeing is this real backlog of all these people who were planning to return maybe in 2020, maybe were planning to return in 2021. And then whether it's things didn't get easier for them like they thought they would, or they looked at the situation and went, I don't know if I want to jump back into my nursing career in the middle of the pandemic, they may have waited another year or two.

So I think 2024 really shows this backlog of returning nurses showing up.

- For younger nurses that might return, what incentives are there in place or what incentives might be put in place to bring them back into the nursing workforce?

- Yeah, that's a really interesting question. And I think there's, I've done some other work on particularly the early career nurses who have left and, or what's driving their burnout in the past. And I think, you know, there's a real factor for the nurses who showed up and started nursing in 2019, and then faced the pandemic immediately.

Many of these nurses became, you know, senior nurses on their floor within the first few years of nursing, as other older, more experienced nurses left for travel, they left for other reasons that everyone was just getting moved around.

I think some of the big things that people have talked about are issues like, I think compensation, I think in a lot of ways just seeing that the situation has changed. And in a lot of ways, it may not have changed.

But if we can show that to nurses who have left that they aren't going to be facing the same levels of burnout, that they are being, you know, taken seriously and respected by their systems, stuff like that, I think we can really help move nurses back in.

- Charlie, thank you for that. Question came in, in terms of your research, whether any trends were observed by setting or by title?

- Yeah. So I think there's a few major factors here. The big things are, a lot of these kind of match what are seen by younger counterparts during the pandemic. So we see a lot of increases in hospital nursing, the proportion of nurses in hospital, proportion of nurses in public health, unsurprisingly, spiked during the pandemic, and fell down later.

I think the, a similar effect can kind of be seen in staff nursing. Staff nursing, as a title, is kind of an interesting picture, because rather than showing a spike between 2020 and 2024, especially among these older nurses, you see kind of a plateau between 2020 and 2022.

And then a drop in 2024. I read that as the effect of the pandemic kind of slowed down the... it caused a spike that made the otherwise trend of older nurses leaving staff nursing kind of dissipate and not be seen.

I think we can also, there's also some interesting stuff to look at looking at the specialization of experienced RNs. So back when I was talking about specialty on one of those slides, I talked about how the, you know, the second most commonly chosen specialty on our survey was other clinical specialty. This is really, a similar thing exists for both title and setting as well.

And this is really a difference between these more experienced nurses over the age of 50 and those compared to the younger nurses. So I believe it's around 13% of RNs under the age of 35 said they work in an other setting, not one of the ones we chose versus, oh, sorry, 13% of experienced nurses chose other versus only 6% of the RNs under 35.

So what we're really seeing is that the more experienced nurses have probably specialized into, you know, I dove into their specifications of what other means. There's just so many options out there that we can't ask all of them. And so we're kind of seeing that with a lot of these experienced nurses.

- Thank you, Charlie. And we've got just about a minute, so we don't quite have to go into speed round. But if the answer for this is fairly brief, have you noticed anything in terms of the level of education of nurses that are returning to the workforce?

- Yeah, absolutely. That's a good question too. I think one of the things we see is a strong trend towards greater education. So the, especially in this older group, we see that the proportion who have a master's degree or above in nursing has increased almost 10 percentage points since 2020, from around 17% to around 27%.

And I think this trend is also seen in the younger nurses as well. But overall, we're seeing more experienced nurses getting higher educational degrees, and many more moving into APRN roles.

We see around 6% in 2020 said they worked as APRNs, whereas almost 12 in 2022 and 2024 said they work as APRNs. So it's almost doubled in that time.

- Well, Charlie, that was right on the dot. So thank you for your research. Thank you for taking the time to answer questions. And folks, you know the drill. Back to the lobby and choose which of our next two concurrent sessions you'd like to attend. Thanks so much.

- Thanks, Jason.