Past Event: 2022 NCSBN APRN Roundtable- Sexual Abuse: Value of Nurse Practitioner Inpatient Hospital Staffing Video Transcript

Event
2022 NCSBN APRN Roundtable

More info: https://www.ncsbn.org/16412.htm

Presenter

respiratory illness, GERD, abdominal pain, arrhythmias, anemia, coronary artery disease and angina, lower respiratory disease, ag.e[7(ow]

This was actually a study that was funded by NCSBN and thus appears in the "Journal of Nursing Regulation." And we compared acute care nurse practitioners to primary care nurse practitioners. And this was an extensive survey. We love doing surveys. And these were surveys of just nurse practitioners in these four states.

It was a survey that was distributed by mail. The nurse practitioners had the option to present it in a written format and return it via the mail or do it online. We used the well-validated Dillman method, with multiple surveys, and postcards, and reminders, and telephone calls.

And the survey was extensive. It had numerous measures. The ones presented here are actually demographic and practice characteristics, the Nurse Practitioner Organizational Climate Questionnaire, and nurse practitioner reports, what they're saying about the quality of care in their hospitals. And, of course, we used the typical descriptive and inferential statistics to examine these nurse practitioners by practice site.

We found that we had survey responses from 1,263 acute care nurse practitioners and 2,343 primary care nurse practitioners. We did see a significant difference in age, the acute care nurses had a tendency to be a bit younger, on average, 47.9 years of age, where primary care nurse practitioners were 50 years of age.

There was a little bit more of a gender diversity in acute care, and this was significantly different, where we saw a larger percentage of men as nurse practitioners in acute care at 10.1% compared to 7.9% in primary care. There was a marginally significant difference in race, where we saw a slightly larger percent of non-white nurse practitioners being employed in acute care settings, 17.9%, versus 15.3% in primary care.

And there were no significant differences in ethnicity. Sadly to say that our Hispanic nurses, if they're out there, they're underrepresented in almost every survey that we see, whether they be federal surveys, those, you know, executed through the federal government, or surveys by individual investigators.

So that leads us to believe that we really have to do a better job at attracting Hispanic nurses, not only into traditional RN roles, but into nurse practitioner roles. And we see here that only 7.6% of our advanced practice RNs in acute care are Hispanic, 6.1% in primary care. And there were no significant differences in the years in their position.

They were, on average, seven to seven and a half years in practice. When we looked at their practice characteristics, we found that the acute care NPs were a little bit better educated, where 89% of them had a master's degree compared to 87% in primary care, slightly larger percent had a doctor of nursing practice, acute care 6.5% as opposed to 5.5% in primary care.

We did see some differences in education specialty, and I didn't find this surprising. A larger percent, and it's a significantly larger percent, of nurse practitioners in acute care trained as adult NPs. When we looked at the family NP role, there was a larger percent of family NPs in primary care, 55.2%.

And that is what we would expect to see. Again, in these other specialties, neonatal nurse practitioners, it's not surprising to see a significantly larger percent in acute care hospitals at 7.1% compared to less than 1% in primary care. Pediatric nurse practitioners was quite similar between acute care and primary care at roughly 9.5% across. Mental health NPs, similar percentage in acute care and primary care at roughly 2.5%.

When we asked if they were confident that patients could manage their care at home, again, an overwhelmingly large response that was positive, yes, but significantly different. Roughly 95% to 96% of nurse practitioners stated that they felt that their patients could manage their care at home. It's a little bit lower in the acute care nurse practitioner response, but those are sicker patients.

If you're being released from a hospital, as opposed to leaving a clinic visit, you could see where there might be a little bit more concern on a discharge from a hospital, that there might be issues with care. When we gathered reports on nurse practitioner ratings of the organizational climate, we saw that...when we asked them about professional visibility, there were significant differences here, where actually the primary care nurse practitioner thought that they had better visibility, professional visibility, 3.1%, acute care nurses reported lower visibility at 2.9%.

When we asked them about the relationships between nurse practitioners and administration, the acute care nurse practitioners rated this a little lower at 2.7%, primary care rated it higher at 3.0%. Again, a significant difference.

When we asked them about the relationships between nurse practitioners and physicians, there was no difference here. Both of them rated as 3.4%. And when we asked them about independent practice and support, there were significant differences, where these acute care nurse practitioners gave a higher score of 3.6% compared to the 3.4% score reported by primary care nurse practitioners.

Going on further to look at the nurse practitioner workforce in acute care. Again, data from four states, California, Florida, New Jersey, and Pennsylvania, from 2016. Again, survey and data and a publication with colleagues, led by Linda Aiken and her staff, a publication that appears in the journal, "Medical Care."

And this was very similar to the nurse practitioner survey sent out at the same time, but this survey was sent to registered nurses. We also had CMS data from the HCAHPS survey, so that's the Hospital Consumer Assessment of Healthcare Providers and Systems.

We also had the CMS, that's Medicare Spending per Beneficiary reports. And we also had data on hospital characteristics from the American Hospital Association Annual Survey. And, again, we used a variety of descriptive and inferential statistics to compute the findings that are presented. And what we found is we categorized these data by nurse practitioners per 100 beds and whether a hospital had less than 1, 1 to 2.2 NPs, or greater than 3 NPs per 100 beds.

And we found...now, these are nurse reports, these are reports from registered nurses who are working with nurse practitioners. And we had surveys from 22,273 registered nurses. And we found that a registered nurse would rate the hospital highly as the number or percentage of nurse practitioners on their units increased, where we saw only 27% rating the hospital highly if there was less than an NP on their unit.

And that increased to 37.2% if there were 3 or more. When we asked the registered nurse, "Would you definitely recommend your hospital to family or friends?" 38.2% said they would if there was less than or no NPs on their unit, where that almost went to half, where 51.3% reported they would recommend the hospital to family or friends.

When we asked on report of excellent for quality of care, only 33.6% of registered nurses rated the quality of care of excellent until they increased the number of NPs on their unit to 3-plus, where that increased to almost 46%.

When they were asked to grade their hospital as A or B on patient safety, 66.5% of registered nurses thought their hospital deserved that grade. But when you increased the number of nurse practitioners to plus 3, that increased to 47.3%. Similar, when we asked the registered nurse about an A or B grade on the prevention of infections, originally, 68.4% reported that their hospital did well in preventing infections, with a grade of A or B.

But that increased when you added 3 or more nurse practitioners to 75.3%. Similarly, when we asked

when we looked at hospital efficiency, defined as Medicare spending per patient, we found that Medicare spending on average was 1.019%.

And in this case, you really want it less than 1%. When you go slightly above 1%, you're excessive spending. And we found if you added 3 or more nurse practitioners, that spending went down to 0.993%. So you had efficiency noted in resource spent.

When we looked at our multi-barrier regression model that was adjusted for all patient hospital and nurse characteristics, we found that increasing the nurse practitioners on a unit was associated with a 35% increase in the odds that nurses would highly report their hospitals, that the hospitals were great.

They were doing a good job. Again, when we increased the number of nurse practitioners on the unit, we found that there was a 44% increase in the odds that a nurse would recommend the hospital to family or friends. Similarly, as you increased the number of nurse practitioners, there was a 33% increase in the odds that a registered nurse would report the quality of care as excellent.

Again, and all of these are by increases in the nurse practitioner workforce, was associated with a 20% increase that an RN would give the hospital a grade of A or B, a 23% increase in the likelihood that a nurse would give the hospital a grade of A or B not only on patient safety, but on the prevention of infections.

Additional nurse practitioners added to the unit was associated with a 20% increase in the odds that an RN, a registered nurse, felt confident that patient management would resolve patient care problems, a 17% increase in the odds that patients could manage their care upon discharge, an 8% decrease in the odds of burnout, a 7% increase in the odds of job satisfaction, and a 14% increase in their intent to stay, as in the registered student nurses intend to stay in their unit.

When we looked at the patient outcomes, and again, in fully adjusted models, we found that increasing nurse practitioners on the unit was associated with a 11% decrease in 30-day mortality, and a 1% decrease, these were odds ratio, so a decrease in the odds or the likelihood of mortality or readmission, both of which were statistically significant, and a 4% decrease in length of stay, another finding that was also statistically significant.

So increase in nurse practitioners overall at the end of the day resulted in a sizeable decrease in 30-day mortality, which is an important finding. When we look at nurse practitioners in Georgia, and I have to bring this in because, of course, right now, I'm here in Georgia and recording for Georgia.

The situation here isn't the best that I'd like to report for our nurse workforce. But I think it's important to just show what happens in some local areas in the country. So some of these data are from a report that we had compiled through Emory University, Yin Li is my colleague and others.

And these were some of the findings of what we found here in Georgia. We found, like in other parts of the country, there was a dramatic increase in the number of nurse practitioners. Now, these numbers are smaller and such, so you see...because the sample sizes are so exaggerated and they're kind of small, that you see a little bit of jumping around in the graph, but there's growth.

No matter how you look at it, there was growth in CNRAs, and nurse practitioners, and certified nurse midwives. These are data from the American Community Survey, and these are similar to findings we've

seen nationwide. What we do see, again, from the American Community Survey on our nurse practitioners, this is a weighted sample of 8,049.

And I'll mention a little bit about data later. The actual sample surveyed here in Georgia through the American Community Survey was only 59 nurse practitioners, but based on statistical weighting, the sample was brought up to 8,041. And we found that on average, they were 41 years of age, overwhelmingly female, 92%, very similar to the national average.

We're a little more diverse here in Georgia. The population of nurse practitioners that are white is roughly 67%. The nurse practitioners that report they are black at 28%, and then a lower percentage of Asians and others. Again, Hispanic nurse practitioners are just poorly represented at 2.4%.

When we looked at practice characteristics, we looked at their level of education. Roughly 73% in Georgia prepared at the master's level, 8% at the doctorate. Again, 23% are employed in acute care, roughly that's what we're seeing nationwide.

If you recal

we know this among nurses and advanced practice nurses, is one strategy to recruit and retain nurses and improve the quality of care.

And the important takeaway here is that these organizational strategies cost nothing. They cost nothing.