And then the agreement among studies overall that the DNP project was to improve quality and patient outcomes. We saw that there is significant variability in how the DNP projects were implemented among programs. DNP graduates have great potential to impact patient and system-level outcomes and they translate evidence into practice and health policy, and by using skills and interdisciplinary collaboration.

Many of the DNP graduates work as direct care providers who required only a master's degree and therefore may not be utilizing the full scope of their DNP preparation, and they may not be recognized for that level of education that they hold. So, the review of the DNP curricula. A curriculum review is conducted to assess curriculum variability in the DNP programs.

In this review, we found that the majority of the BSN-to-DNP programs focused on NP education. The majority of the Master's-to DNP programs also focused on NP education. For students in a BSN-to-DNP track, there was close to an even three-way split among securing preceptors, right?

They secured them through collaboration between schools and students, giving students the primary responsibility of finding a preceptor and then giving schools the primary responsibility of finding the preceptor. In the MSN-to-DNP tracks, the burden on the students to find preceptors was somewhat greater.

Thirty-nine percent of the DNP programs require student-school collaboration, 33% as the primary responsibility is on the student, and 28% placed the primary responsibility on the school. So in the review of the DNP curricula in our sample, the majority of the DNP programs, they did not maintain contractual clinical site partnerships and they didn't have guaranteed preceptorships or graduate placements.

On average, BSN-to-DNP tracks, they required 74 credit hours, MSN-to-DNP tracks required 38 credit hours. These are just on average. These are averages and they vary based on transfer credits and different requirements at different schools.

All the DNP programs in the sample required a DNP project. Most of the schools followed the AACN recommendations for that project. There was great variability in the projects as to whether the project was implemented in a clinical setting, the extent to which the academic or policy... the project was academic or policy-oriented, whether secondary data analysis is permitted.

And finally, projects being carried out in groups. We found as the time went on, more DNP projects were being carried out in groups. Practicum hour requirements, they were mostly consistent across the programs, right? Five hundred hours of students required 1,000 post-baccalaureate practice hours.

I mean, this was consistent, and remains consistent in our programs. Given the wide range of projects that are approved, there is going to be variability in the number of hours that are devoted to direct care. Key informant interviews. Primary data was collected using in-depth interviews with the following stakeholders.

There were 14 DNP graduates, 13 employers, and 15 academic leaders. And we sought to get an understanding of the perceptions and experiences of DNP graduates in the workforce. So, when asked about key differences between the MSN and DNP-prepared nurses, most graduates, employers, and academic leaders all indicated that DNP graduates have a larger and more diverse skill set, particularly in the areas of leadership, evidence-based 0 g0 G[illegible] mean, taan, tad

And greater knowledge of policy, economics and the business side of nursing. Of the 13 employers interviewed, most could not readily identify differences in the provision of direct patient care by MSN and DNP-prepared nurses. Academic leaders couldn't identify differences in clinical skills between MSN and DNP-prepared nurses. And we at AACN released new essentials.

So, I'm hoping that the new essentials will be able to help us more clearly define these roles. DNP graduates and employers expressed a lack of understanding among employers and other healthcare professionals about the DNP degree, particularly around the skill sets of DNP graduates, which roles they should fill and if the goal is to produce NPs, nurse leaders, or both.

Academic leaders and DNP graduates provided similar views on the key differences between BSN-to-DNP and MSN-to-DNP graduates. Academic leaders noted that differences in advanced practice experience, critical thinking skills and knowledge between these two student groups may affect their student experience and their post-graduation employment opportunities.

Employers or academic leaders feel that they play a greater role in the organizations. And then in looking at evidence-based practice, translating evidence into practice. And employers, you know, as I

of advanced nursing roles and primary employment positions and largest number of respondents were NPs.

And followed by the nurse executive role. The most respondents graduated from a Master's to DNP track, and then we have 13% in the BSN-to-DNP track. And then the majority of respondents attended a blended learning program or a program that was 100% online, 30% of the respondents.

And then most respondents were full-time students. The highlights from the regression analysis that was conducted. Regressions were used to analyze correlations between the DNP program and individual characteristics and outcomes of interest. The outcomes of interest included respondent satisfaction with their decision to obtain the DNP degree, the skills qualified or prepared to do after obtaining a DNP degree, and the skills that were improved following their DNP program.

And then the positive impacts of the DNP education. So, a linear probability model was used to explore the correlations between these outcome variables. Administrators, nurse executives, nurse faculty relative to NPs were more likely to be extremely satisfied with their decision to obtain a DNP degree.

DNPs over 55 years old, were more likely to be extremely satisfied with their decision to obtain a DNP degree as compared to those under 35. Those under 35, I just want to be clear, were not dissatisfied. They're just not as extremely satisfied.

As compared to NPs, administrators, nurse executives, nurse faculty, they felt more prepared to perform quality improvement and leadership activities. I don't think this is a surprise. I mean, that's where their focus is as administrators and leaders. And then the NPs were more prepared to provide direct patient care.

Administrators and nurse executives were significantly more likely to report improvements in policy, advocacy, organizational change, quality improvement, skill sets as compared to the NPs. And again, these findings, they were the same for the Master's to DNP students as compared to the BSN-to-DNP students, both were the same.

The nurse executives were less likely than NPs to believe that their preparation to work in a clinical setting improved as a result of obtaining a DNP. But here the BSN-to-DNP graduates, they were far more likely to have increased preparation to practice in a clinical setting when entering a DNP program.

And we attributed this to two factors. The BSN-to-DNP graduates, they're less prepared. They may be less prepared than Master's to DNP prepared students to practice in a clinical setting when they're entering into a DNP program. And we saw that from employers' comments and the graduates themselves in their comments.

The BSN-to-DNP tracks focus more on APRN concentrations and preparing for clinical practice. The conclusions from the study. So, I've listed a lot of conclusions here, so I'm just going to touch on some highlights from these conclusions.

As I said, almost all the survey respondents were satisfied or extremely satisfied with obtaining their DNP degree. DNP graduates add value throughout. There was no question that the DNP graduates added value to practice. Racial and ethnic gender diversity.

As I said, that was increased. The racial and ethnic diversity increased, but also males increased from 9% to 14% over that time frame. Increases in the number of DNP programs and students have occurred in both the BSN-to-DNP and MSN-to-DNP tracks.

We saw that the faster pace was the BSN-to-DNP. Here, I just would like to add that having a faster BSN-to-DNP growth in these programs and students going into these programs, we then also have to think about the workload on the faculty. Workload on faculty in schools is much heavier for the BSN-to-DNP students. They require more time in school and they also require more attention when moving through these clinical projects because they don't have the experience.

Not in all cases, but in most cases, they don't have the experience that the MSN-to-DNP student does have. So, I just say that to pay attention also to the faculty here and the workload increases that the faculty are experiencing with this BSN-to-DNP growth. DNP graduates work in a variety of positions, as we said, I mean, clinical positions, different clinical positions in hospitals, ambulatory settings.

They're in academic positions. Majority of DNP programs are mostly online. And that was for this particular study that we did. I just want to look at the percent. Sixty-six percent of DNP programs in 2020 were mostly online and about 72% of the DNP surveyed responded. No evidence was found of lower-quality outcomes connected to online DNP programs.

And I want to stress that because of the employer's comment about the quality of the online programs versus the on the ground programs. We found no evidence in this study to support that, that there was any difference in the quality outcomes of the DNP students or the DNP programs. DNP graduates working in administrative, executive, and faculty roles perceived higher value from the DNP.

Data do not currently exist to carry out DNP outcome studies, and I think this is an area where we need to focus on determining outcomes for DNPs. There needs to be a greater focus on what their individual contributions are in the organization. And, of course, uncertainty remains concerning the skills and value of the DNP.

Again, we need to get a clearer understanding for our practice partners on the value of the DNP degree and what they have to offer in their institutions. Stakeholders have numerous suggestions on how to improve the DNP program and we provided some of those for you.

And some of the suggestions from the stakeholders, again, included the more clinical hours and publication requirements. They also brought up publishing the DNP projects, a more active role in the literature and getting things out there. And then of course, including business classes, finance classes, statistics and then enhancing policy and legislation was also brought out.

So, the recommendations. Recommendations, clarifying the goals and identity of the DNP degree. Here, we want to increase awareness about the goals and identity of the DNP degree. Clarification should be provided regarding the purpose of the degree, right? The roles that the DNP graduates have, the skill sets that they bring to their institutions.

Examine curriculum and rigor of DNP programs and DNP projects. Examine the DNP curricula across schools to identify hallmarks of high-quality, rigorous DNP programs, and develop a process to encourage other schools to adopt these hallmarks.

Engage with APRN certification organizations, encourage nurse practitioner, nurse midwife, CRNAs,