

DNA: Discoveries in Action Season 4 Episode 5 Transcript

Mamie Williams: I heard a couple of things that really shook me, and the first was that becoming a nurse for some of the students was a fantasy role.

Peggy Valentine: So a lot of times we think about, when we turn on the news, we look at what's happening in the local community, and we shudder when we talk about the violence is going up and all the things that are happening with the people living at the community. I would like to think that we can look at this model as a way that we can impact change in a community, giving people a chance.

Kim Unertl: How can we change the field over time? You really have to be playing a long game. You can have the short-term successes of people having a great experience in your summer program, but you really have to be thinking in the long term of 10, 15, 20 years in the future of what are the changes that are going to happen because of what you're doing now.

Clark Buckner: Hi there, and welcome back to the third episode in our series about how an academic medical center is reshaping medicine while addressing economic and societal pressures facing nearly every organization right now. I'm your host, Clark Buckner.

In the first episode, we saw how visionary ideas can completely change the trajectory of an organization. In the second episode, we heard how disruptors are modeling business models and trying out new ways to get care to people. In this episode, we're exploring how one of Tennessee's largest employers is thinking about reskilling and upskilling its workforce and fostering the next generation of workers. We're going to hear about partnerships that actually train up people who have never worked in healthcare before. It's really interesting.

It's no secret that we're amid a major shift in how and where many workers do their jobs, not to mention big changes in how Americans think about and pursue higher education or training after high school. The pandemic played a role in shaping the rethink, but so has student loan debt and faster training programs that get people into coding jobs quicker than a two or four-year degree. It's a complicated world, and healthcare is layering on new technology stacks, trying ways to accommodate the demand for flexible schedules, all while facing one of the largest worker shortages ever.

There's a stunning nurse shortage right now and it's projected to worsen in the coming years. There's a physician shortfall over the next decade, and 85% of healthcare facilities don't have enough people in allied health positions, which impacts the flow of care. As the pressure only intensifies, Vanderbilt University Medical Center is starting a pipeline of robust initiatives to encourage more people to join the field, sometimes starting as early as middle and high school.

Dr. Peggy Valentine is the vice president of Allied Health Education, and in just two years introduced an impressive number of programs to find, train and support people who may want to

work in healthcare but face serious time and money obstacles. Rent, daycare, food, gas – all of this keeps climbing and climbing. So what's left for job training or career advancement?

Peggy Valentine: I never had this experience – one word, approved – quickly and we were able to get this first program off the ground and then a few months later, a second program off the ground. Then we had a number of requests coming in from other clinical departments that say, "We have these huge vacancies, can you help us?" We submitted nine proposals and this year, we'll be starting nine new programs.

One of the programs that we looked at my first few months is that, "Oh, we have over 100 vacant positions for medical assistants, and that's a program, we could start right away?" Talking to colleagues, actually, we had a meeting with the president of Nashville State Community College, Shanna Jackson. There we talked about, "What can you do to help us with our vacancy rates?" So she led us to their dean and having conversations with the dean were able to say, "Well, why don't we launch this program?"

So Nashville State will carry out the didactic portion of the learning and the students will come here to Vanderbilt University Medical Center to have a clinical experience. So we mapped out a 12-week program and we worked with our nursing colleagues who would supervise the students. They went through the clinical portion of training and then, after 12 weeks, we launched the first program. So the students started in April and they graduated in July of last year. Most of those, that first class, they're still working here at the medical center and they were employees. You know what I really like about that program? Vanderbilt University Medical Center said, "We will train you to go back to school. You can keep your salary. We'll pay your tuition, your books and your fees. After 12 weeks of this program, then you'll come to work for the medical center as a medical assistant."

That first class, we had variety of students, those who worked in dietary delivering the trays, those who cleaned the floors, and a truck driver and others who had maybe started school and never finished, and it led to a great sense of loyalty for the institution, buy-in, that, "Vanderbilt caress about me, and I'm going to commit to stay here for at least a year as a medical assistant."

When I came on board, there were over 1,000 vacant positions in allied health. When you break them down into different areas, we know that there were over 80 vacancies, for example, in surgical technology. When we look at the laboratory, there were hundreds of vacancies. Because Vanderbilt is such a big place, you need a lot of allied health professionals to support the work that's being done. So altogether, the medical center employs over 4,000 allied health professionals.

So when I came on board, there were over 1,000 of these positions that were vacant. So I was brought on board to help fill those vacancies by growing new programs, partnering with other schools that can help us or taking advantage of the number of visiting students we have come

here every year. When you add the numbers together, there may be as many as 1,000 allied health students who come from different parts of the country to have that Vanderbilt experience. So we can take advantage of those opportunities to grow allied health.

We look at this generation of students coming out of high school, many of them don't want to take on a lot of debt, especially those individuals from diverse communities, they refuse to take on a lot of debt. They want convenience of education. They want to study when they want to study. They don't want to be in a structured classroom environment. They want education to be flexible. They want to learn when they want to learn, and so these workforce development programs do all of that.

It's quick. You can get a credential sometimes within a matter of 10 to 12 weeks. You have some online component, you study at night or when it's convenient for you to study. You may have some lectures to attend, but for the most part, it's very flexible, and a lot of what we call on-the-job training where you're working alongside a preceptor who will show you what they've learned and this is how they would approach this particular problem, and this is what they would do to address the needs of this particular patient.

So when Vanderbilt University Medical Center steps in to pay the tuition, you don't have that challenge. When Vanderbilt steps in and says, "You can keep your salary, then you don't have to worry about paying for... where going to get money to pay childcare or buy food or gas in your car to go to school?" The short-term effect, and you're guaranteed a job when you finish. I love higher education, but that's a rarity that you're going to come out of this program and you have a job waiting for you. People that you've trained with are going to continue to support you in this new role that you have. To me, it's unheard of, and it's a win-win for the institution. It's a win-win for the employee and the community. Everyone benefits.

Clark Buckner: Did you know that food insecurity is common among college students? About 38% of students at two-year schools are food insecure and 29% of those at four-year schools, that's staggering. We need a mindset shift around supporting people so they can go back and train for new jobs, and creating flexible training programs for students are invaluable for communities.

Given the macroeconomic conditions that keep tiding people's wallets, these programs have even more importance for workers and aspiring students. Training and learning, working and living, these are symbiotic in communities and it's for that reason that VUMC's president and CEO, Dr. Jeff Balsler, sees workforce recruitment and retention as one of the top priorities for the medical center.

Dr. Jeff Balsler: I think it's fair to say that along those lines, healthcare has a workforce crisis. It's in the news and it's very real. We, like all healthcare systems, have had tremendous shortages in virtually every care area you can imagine. But what happens in times of crisis is we actually have to look hard at what's really needed, and we are no longer in a position where we

can just sit back and people come. So what is it that we can do at Vanderbilt that other places may not be able to do quite as well so we can attract the folks we need? It turns out we're a training center. We're an academic medical center, so rather than just train doctors and nurses, why aren't we training everybody? So that's essentially the story around allied health, because if you really talk to people about what they want, they want to grow all the time.

They don't want to stop growing once they have a job at Vanderbilt or anywhere else. So creating these allied health programs where we're actually taking people from a job where they may be here but they're just not really excited about it anymore and training them to do something they are excited about, where they feel like they have more potential to grow, isn't just a workforce strategy, it's a satisfaction strategy. It's a happiness strategy. It's a paradigm shift. It's like take our academic nature and broaden its applicability, right? What we are better at than certainly a lot of healthcare systems and we sometimes hope better than a lot of places, period, is training and education. It's in our DNA, so to speak. Why are we just limiting that to the traditional things we train in? Because it's really a capacity of our workforce to train.

People come here because they want to train. They want to take care of patients and train. They want to do research and train. Why are we limiting that? Makes no sense at all. So shifting that perspective to, "Well, this is what we train in and then for all these other roles we just recruit people," never really made any sense. We just did it that way. I guess what this is forced us to do, which is good, is rethink all of that. Because it not only allows us to have a solid pipeline of people to do those jobs, but perhaps more importantly, when you have training programs in an area, it forces you to think about the career development of people in that discipline. And you don't do that the same way unless you train in that area. So we actually become much better educated about people who are in these allied health professions and can help guide them and grow them throughout their career here because we have allied health programs. It's not just about getting them here. That's the point I want to make.

It's about keeping them and growing them and having them feel they can continuously grow while they're here. Because really what we want is people to come and stay a long time. We don't imagine everybody has to come here and stay forever, but the longer people are here, not only do we get more out of it and they get more out of it, but I believe relationships and bonds grow between people, and that creates a fabric of culture across the institution. So having people stay a long time builds culture. It doesn't just build capability. That's why I think the whole business of having travelers in large, large numbers during the pandemic was partly problematic is you don't build culture when people are here for 15 weeks, right?

Clark Buckner: Developing a happiness strategy could have enormous dividends in workplace culture, patient care, and addressing health disparities. As Dr. Valentine sees it, these workforce initiatives are a major component of the underpinning needed to establish more equity at work and in life and in well-being.

Peggy Valentine: This is a prime example of how these workforce development programs can

move the needle on health disparities. Over 70% of those who've come through these programs thus far have been people of color. When you look at the total workforce, not only here at VUMC but around the nation, we know that people of color are less than 5% of many of these health professions, especially when we're talking about allied health, less than 5%. But yet, we've been able to prepare a very diverse workforce. That's important because when we think about health disparities, a lot of times it takes a person who looks like that individual, who will understand why they eat what they eat, why they don't exercise, or they do certain things, because if you're from that culture, you can better identify and you're better able to coach that person into healthier behaviors. So it's my hope that as we continue to prepare this diverse workforce in allied health that we'll be able to move the needle in a greater way when it comes to health disparities.

When you think about the individuals that we are addressing to come into these educational programs, they come from backgrounds who work in housekeeping, who work in dietary. Oftentimes, they're people of color. Oftentimes, they're people who have come from low-income backgrounds, who have had challenges in their life that have impeded their ability to go to college or to be all that they wanted to be. Case in point with a medical assistant program, we had a young man who graduated recently who had some challenges going through the program, personal challenges, one being his daughter was shot in the head. Miraculously, she survived and she's made a full recovery. He also told a story about his door being broken down in the middle of the night by the police looking for someone, but it wasn't him. He had clinicals the next day, the first day of his clinical experience.

So those are some of the challenges that these students have gone through as a result of living in certain communities and trying to better yourself to go to school to be the best that you can be, but yet, he persevered. He was able to complete the program, and now he's working at the medical center.

We have taken trainees from the UpRise program, individuals who may have had a history of being incarcerated for whatever reason, people who've come from backgrounds where they didn't have the money to go to college or people who started college and never finished. As you say, you get caught up in life and caught up in things that happen and it puts you behind. Then when you find yourself in a situation where you've got children now, you can't stop working. You've got to take care of that child and you need to put food on the table. Unless a program like this is available for you to go back to school and to acquire credential, you're sort of stuck.

Clark Buckner: So there are shortages now, but we've all heard Whitney Houston croon, "The children are the future," right? Well, at the moment, we need to be convincing people to be the future of healthcare. The demand for people in healthcare is outpacing the number of teens or young adults choosing to study healthcare; whether they feel the profession is just out of reach or they see the struggles over the past few years in light of the pandemic and aren't interested, or perhaps they don't yet see how their passions could fit into the vast spectrum of opportunities within the field.

Dr. Mamie Williams, senior director for Nurse Diversity and Inclusion and co-director of the Academy for Diverse Emerging Nurse Leaders at the Vanderbilt University School of Nursing, described her efforts to reach the next generation by stepping out into the community to introduce nursing and all its flavors to students.

Mamie Williams: So welcoming all types into nursing and ensuring that we have all types of available who are interested in nursing really takes us going to advocacy for the reasons and rationales to have a diverse workforce, educating our existing staff on why it's necessary, and then working on the pipeline. It's nothing that's going to happen overnight. We don't have a bunch of nurses hiding anywhere. We have to go out into our pipeline and expose students who have never been exposed to nursing before to the profession. We have to help them navigate the programs that they need to navigate to get to a nursing role. So it's going to take a concerted effort, resources and a commitment by our executive leadership, our nursing staff to do the mentoring and working with students that maybe are outside their comfort zone, maybe that they've never experienced before, to help them understand that this is a profession that they could be successful in.

It would be very important for nurses at all levels to understand that in order for us to have someone to come to replace us, we're going to have to do the work of going out and promoting our profession to folks who perhaps we never promoted it to before and they don't perceive themselves as able to work in this role. So all nurses out there, this is all of our responsibility. But we have to ensure that folks who have been historically underrepresented in nursing understand that this is a profession that they're welcome to, desperately needed in, and are really integral to us overcoming a lot of the issues that we have within the profession. So we don't have like in past times where there were a large number of nurses who had early retired and could come back into the workforce. We don't have that any longer. We have more than 100,000 nurse deficit in terms of what we need today, and will continue to need, and what is available.

So we have to look at, again, folks who are students who are in high schools that are historically underserved and historically a minority and include folks who have not had a family member who's ever worked in nursing. We have to have them understand that nursing is a profession that's available to them. In that vein, I have a personal experience with it because I'm the first in my family to become a nurse and to graduate from college. Since that time, I've had five other family members to join the profession. My sister's a nurse. I have a niece who's a nurse and two close cousins who are nurses. My mother, shortly after I became a nurse, went back to high school, completed her GED, and then went on to become a certified nurse's aide and worked until she retired as a certified nurse's aide. So I know that having someone you're familiar with working in this role can oftentimes motivate someone to become a nurse. There's just a lack of understanding for a lot of students about what nursing is and how to get into the profession. So students need to be able to both see themselves in the role and also have someone to help direct them to a nursing profession.

So we at VMUC started a mentorship program for a school that is historically underserved in our community, and we went and talked to high school seniors who are part of a healthcare academy. They're being trained to become certified nurses aides. I heard a couple of things that really shook me. The first was that becoming a nurse for some of the students was a fantasy role. So to your point of asking whether students need to see themselves in the role, perceiving nursing as a fantasy had a lot to do with them not having anyone that they knew of who was a nurse and not interacting with nurses. They also were unsure about how to matriculate into a program and into the nursing profession. So because they didn't have anyone to help guide them from their families, that is the role that was needed.

So it's both seeing yourself in the role, having someone who represents you to know that, yes, this is possible for me, but also even if you see someone, how do you actually, step-by-step, programmatically achieve that goal that you have.

In terms of a gateway into the nursing profession, we're now talking about certification stacking in the profession. So what that means is, you start off as a certified nurse's aide, and then perhaps you go to a licensed practical nurse, and then you return to school and you become a registered nurse, whether it's an associate degree or a bachelor's degree. But the emphasis is on exposing yourself to the different levels of nursing and then progressing along. Because for a lot of these students, they want to be able to graduate from high school and have a job, a career. They need to help support their families, and they want to be able to be independent.

So when students say things like, "Oh, I'm sorry, I just want to be a CNA," it's really disheartening because that is a very viable entry-level role into nursing. It's one that we as nurses should help support and expand on to nursing students, to students in high school, and then talk about the other roles in nursing that they could pursue. That isn't the only way that you should pursue nursing and for sure, it's not for everyone. But for a good group of folks, that is a very viable way into nursing, and it's one that we should be supportive of and not telling high school students the only way you can get into nursing is via college because there are other routes that you could slowly progress yourself into the profession.

In terms of a vision for DEI in nursing, it would be that all nurses understand the need to address the lack of diversity that we have within our profession, that all nurses understand on the individual level their responsibility for helping us bring folks into our profession who can continue to do this work and continue to serve their family members and help us to improve the health and welfare of the nation.

Clark Buckner: Using certification stacking to advance careers has been commonplace in nursing for some time. However, other health professions haven't leaned into the practice of upskilling and really, neither has the U.S. workforce as a whole. Once you're off of a training trajectory, it's really hard to get back into motion. Yet, as technology advances and changes who or what algorithm does a task, finding ways to train and offer new skills will be vital. Nursing

provides a real world study at certification stacking.

Dr. Jeff Balsler: Well, I think we've learned a lot from watching nursing do this. Because if you really look at what goes on in an academic medical center like ours with nurses, they come through nursing school. They might do our nurse residency, which on its own is a pretty unique offering. Then they might take a job in a certain area and then they leave, and they go into another training program and maybe become a nurse practitioner. Then they come back and then they work in that profession for a while, and then they may do a stint where they're in education in the nursing school. Then they come back and end up in administration.

So we've watched nurses move laterally and vertically in various ways over the years because we've had this robust ecosystem for nurse training and development. Hopefully, what we're learning from that is it works, period. It's not just nursing. We need to create those paradigms across many, many, many areas of healthcare and then maybe beyond healthcare, honestly, because so many of the people we recruit and need at a place like Vanderbilt Medical Center are in finance and human resources and IT and all these disciplines that sit around medicine, and we have opportunities to build that kind of psychology and education culture in those areas as well.

Clark Buckner: What do all the programs and initiatives we've heard about have in common? They're playing the long game. This change and training mindset doesn't shift overnight. This is an investment in the future of the workplace.

As Dr. Kim Unertl shows us, she's the associate professor and director of graduate studies for the Department of Biomedical Informatics, everyone from executives and leaders to the newest among the ranks is a stakeholder in the important work of showing the actually boundless opportunity of medicine, nursing, science and IT. But how do you explain that?

Kim Unertl: It's kind of a wall. You get to this place where you're like, "Well, oh, I'm an associate professor of biomedical informatics." You kind of watch people's attention sort of drift away because they're like, "Okay, too many things going on there." So how do you turn that wall separating you from other people into a door or a window so that they can see into what's happening, and then a door so that once they get excited about it, they can come on in and be part of that environment?

So when we don't have everyone sitting at the table and everyone able to contribute to the design of these systems, we lose out on the insights and catching those scenarios before they become problems. It also changes the direction of research as well. So do we have adequate computer science systems related to women's health? No, we don't have those tools available to us. We don't have enough attention in that space. Partially it's because of who's been designing the technology. I'm not going to assume any bad intentions or anything. It's just you're not seeing things because you just don't have that life experience to be able to contribute those perspectives.

There are so many ways that we are seeing now the impacts of primarily white men directing technology over the years. It's not that it's new information to us that this has been impacting the quality of systems that we're developing, that it's been injecting unintended biases into systems. It's not news, but it's hopefully reached a point where we can realize that everyone is aware about it and trying to improve things at this point. It's things like in the design of technology, even the fact that crash test dummies were designed for a certain body size, a certain shape, that didn't account for the differences between sizes of men and women and children and all of these different things. So it's the physical world, but it's also in computer science as well.

So we have too many examples to count, unfortunately, at this point, of computer systems where either the models were trained on data sets that were not representative of the population, and that influences what the outcomes of the recommendations that those systems make. It's guidelines that are implemented in a way using data that is not applicable across broader populations.

It was funny because the one other woman in my electrical engineering lab and I would joke about how we were the only two in that room, but we looked forward to a time when there were many more women in engineering. Something that I can say at this point in my career is that I'm just disappointed at the lack of progress that we've made in computer science and engineering with attracting more women, but also more people from all groups that have been historically excluded from those fields. It's really, we haven't seen the progress that we had hoped would happen over time.

Clark Buckner: Back in season three of DNA, we learned about the astronaut summer research program geared toward underrepresented high school and college students. Not only does it focus on education, it also provides mentoring on basic adulting to help students succeed once they enter the workforce. That's a characteristic of creating successful support systems, recognizing there's more to a career or being in the workforce than showing up and doing a job. There's time and money management, well-being and energy management.

For Doctors Williams, Unertl and Valentine, the process of fostering a diverse, welcoming, people-friendly workforce five years to 10 years down the road is all about making sure there are stepping stones to help people get into those future jobs. Those steps need to start early, like middle school and high school early.

Mamie Williams: We have things like emergency medicine and life flight day camp where students who are from 10 to 15 years old spend one day and they meet EMTs, paramedics, nurses, life flight nurses, the whole gamut, and they talk to them about their role and what it is that they do. Then we have some small educational sessions on becoming a stroke champion so that they feel empowered to, if a family member has a stroke, help them. But it's putting in that mindset of helping and working in the healthcare arena, so that's one way.

Another way is establishing a skills lab or clinical labs in middle schools. So we can't just wait to a student is at high school because sometimes they've already decided on a career by that point. So in middle school, establishing clinical labs with some of our middle school near and in the community and in those clinical labs, they're taught things like hands-only CPR. Again, introducing them to working as a healthcare professional and introducing them to nursing and the like.

Then finally, I mentioned it once before the mentorship program where we go into Pearl-Cohn High School, which is a local high school that trains students in the healthcare academy to be certified nurses aides. Most of the students have a desire to go on to a nursing profession. So we work with those students once a week for whatever it is that they need. We have some pre-prepared talking points with them about being from an underserved background or being the first in your family to be in healthcare and what that's like.

But we also talk to them things about how to complete a college application, and that is in collaboration with the school. So they work with us to identify areas where the students may need help, and we try to do that. So that's a group of nurses who volunteer to do that work, and it's necessary and needed. So those are some of the ways we interact in the community. We also do things like, which it doesn't seem like it, but we go to community fairs. We participate in community fairs, and we talk to people about what's going on with them, but they're able to see nurses outside of the confines of a hospital working in the community and then being very accessible. So I think that helps to really highlight what nurses do and help us to make folks feel comfortable with this.

Kim Unertl: I think there's often a misplaced perception that you shouldn't have to pay high school students because they're learning, and they're going to require a lot more mentoring, they're going to require a lot more hands-on effort. I really always push back against that perception. Just from the perspective of my own experience, there's no point when I was a high school or undergraduate student where I could have done a job and not gotten paid for it. I needed at least to pay for my own gas to get from place to place. But many students contribute to their family's finances. They have jobs to buy their clothes, to manage things. So it's been really important to us all along throughout the program to pay students for the work that they're doing. Whether they're high school students or undergraduate students, you should get paid for your summer internship and for the research activities that you're doing.

We've had this funding gap related to funding the high school component of our program over the years. One of my colleagues, Daniel Fabbri, a few years ago sold a company that he founded as a graduate student. He approached me and said, "What about the summer program? What about high school students? Do you need some funds to support that?" That's always at the top of my list of questions, to be honest. I'm always looking for funding for that. So I said, "Yes, absolutely." He was kind enough to establish an endowment so that we were able to fund high school students for the last two years in our summer program and to pay them a reasonable wage while they're here in the summer, and to really support, in addition, some

graduate student time to help support the high school students specifically, which again, that's all part of that program piece of thinking of, what do you need to make it a good experience for high school students?

Peggy Valentine: Right. But those trainees, that first class, and even classes have come after them, have said, "I have been looking for something like this for years, and when this opportunity became available, I could not believe it," and it changed their lives. It changed the lives of their family. Their children looked at them as heroes. They went back to school. Many of them had never taken an online course, and so at least two of the courses are online. So they had to learn new skills, and they had to learn new ways of thinking and navigating education, but they were successful.

Clark Buckner: Hey, thanks so much for joining us today. If you have a story about how a mentor or a special program helped you jumpstart your career, we would love to hear it. Share it on LinkedIn, and be sure to tag Vanderbilt Health DNA. Maybe we'll even talk about it on our next live chat.

I hope you'll join us next week for the final episode in this four-part series. We'll look at how visionary ideas, disruption in workforce happiness strategies impact diversity and belonging – and longevity – in the workforce. Trust me, my friends, you won't want to miss it.

Until next time, Vanderbilt Health, making healthcare personal. As a reminder, Vanderbilt Health DNA: Discoveries in Action isn't meant to replace any form of medical advice or treatment. If you have questions about your medical care, consult a care provider.