How Far Can You Swim Upstream? Practical Solutions to Addressing Social Determinants of Health in the Ambulatory Care Setting

Transcript

[Upbeat theme music plays]

Dr. Clancy

Welcome to Rounding@IOWA, a continuing medical education podcast developed by and for healthcare teams. I'm your host, Dr. Gerry Clancy, Professor of Psychiatry and Emergency Medicine and Senior Associate Dean for External Affairs here at the University of Iowa's Carver College of Medicine. Today, we will discuss guidance for clinicians to assess and act upon social determinants of health in the ambulatory setting. Our specific objectives include, first, we hope our participants can appreciate the breadth and depth of social determinants of health. Second, we hope our listeners can gain new skills in identifying and engaging parts of our community that may be at higher risk of poor health outcomes. Our expert guests today are Dr. Michael Haugsdal and Dr. Diane Reist. Dr. Reist earned her Bachelor's in Pharmacy from the University of Iowa, then her PharmD degree from the University of Florida. She has served as the President of the Iowa Pharmacy Association and the Iowa Pharmacy Board of Directors. She has been a clinical pharmacist at the University of Iowa since 2013, doing research in translational care, and now staffs in a post-acute care transitions of care ambulatory clinic. Dr. Reist is also an adjunct assistant professor at the University of Iowa College of Pharmacy in the Department of Pharmacy Practice and Science. Dr. Haugsdal is a clinical associate professor in the University of Iowa's Department of Obstetrics and Gynecology. He serves as the medical student clerkship director for that department. He received his bachelor's and MD degrees at the University of Iowa, and then his residency training at the University of Iowa Hospitals and Clinics. To both of you, welcome to Rounding@IOWA.

Dr. Haugsdal

Thank you, Dr. Clancy.

Dr. Reist

Thank you. We're happy to be here.

Dr. Clancy

And thank you both for joining us, and thank you for the work you do. I just provided our listeners your official title and a summary of your training. Could you give us a better idea of your daily efforts and what a work week might look like for each of you? And let's start with Dr. Reist.

Dr. Reist

Thank you. Yes, as Dr. Clancy mentioned, I am working in ambulatory care, a post-discharge clinic that sees patients who have been admitted either to the hospital or the emergency room. And the team that saw them felt that they needed a little bit more TLC due to social determinants of health and other issues. We get patients from 18 to 108 with all kinds of medical issues. And most of the time, a whole list of social determinants of health also. Very complex patients. I also work in population health with our ACO population. And as we're here to talk today, kind of a side gig is our Upstream Initiative, which you'll hear more about.

Dr. Clancy

Great, great. So a lot of variety and a lot of complexity every day, a lot of problem solving.

Dr. Reist

Absolutely.

Dr. Clancy

Michael, how about you? What's a work week look like for you?

Dr. Haugsdal

Yeah, I have a lot of variety, but some of my consistency week to week is I'm a general OB-GYN physician. And so I do always have 1 1/2 days of clinic where I'm seeing OB patients and gynecologic patients. A wide variety there. You know, a lot of people from the community come to Iowa, whether their health is complex or not, but we get a lot of patients from quite a distance, you know, for more complex obstetrical and gynecologic issues. After that, my work week can go lots of different directions. Some weeks I'm doing a little bit more clinical where I'm operating in the main operating room or the ambulatory surgery center doing minor and major cases or supervising resident cases in their clinics. So I get to interact with learners at the graduate medical education level. And then as you mentioned in our introduction, I recently took over as the clerkship director for medical students coming through the Carver College of Medicine. And so there I'm in charge of organizing, maintaining, and kind of seeing the curriculum for students, all medical

students and physician assistant students who rotate through OB-GYN as part of their undergraduate medical education. And prior to that, I've had other roles in education. I've served as the community director for the William Bean Learning Community. And so education has sort of been another niche of mine, along with working with Dr. Reist with the Upstream Initiative.

Dr. Clancy

Great. Again, lots of variety. That's why I love being an academic. And something also near and dear to my heart has been understanding and trying to improve on social determinants of health. So let's begin our discussion with defining social determinants of health.

Dr. Haugsdal

Yeah, I can kind of take us into the start here. When we are thinking about social determinants of health, we define that really as social drivers or social determinants. And they are the conditions in which people are born, grow, work, live, age, really just the wider set of forces and systems shaping the conditions of their daily life. We also like to, when we're teaching people about what we do, we like to appreciate the relationship between health disparities, which is sort of another important term to understand, and social determinants or social drivers. And I've got a quote that I kind of use for that. It says, while health disparities are the differences in health quality and outcomes among patients that are related to social, economic, or environmental conditions, the social drivers or social determinants of health are the actual factors such as lifestyle, age, environment, all those things that affect the patient's health quality and outcomes. In terms of our discussion today, the things, the categories of social drivers that you'll hear us probably reference, the big one for us is food and nutrition or food security or food insecurity. And then we do a little bit with transportation. But we have dabbled in about 7 categories. Those 2, and then including others like personal finance, shelter or homelessness, health literacy, social support, and legal aid as well.

Dr. Clancy

Sure, sure. You know when I was in Tulsa for some years, I was impressed by how much the built environment had an impact on social determinants of health as well, and just the ability to exercise because of the built environment that was around some individuals. Great. Diane, anything you want to add to that?

Dr. Reist

When I first started getting into social determinants, I was really quite horrified to see the studies coming out that showed no matter what we as healthcare providers do to help our

patients, that only accounts for different amounts in different studies, but possibly 20 to 30% of whether or not they're going to be successful in their healthcare outcomes. The rest of it, the other 80, 70, 80% is social determinants. And that is quite frustrating when you think about the amount of dollars and the amount of care that we put in to try and help our patients.

Dr. Clancy

Yeah. And I couldn't agree more. And, you know, I'm sure we'll talk more about this. It takes more than healthcare providers to solve some of these issues. And again, back in my work in Tulsa, I engaged the mayor on a lot of this stuff. So yeah, great.

Dr. Reist

Yes, yesterday I was listening to Governor Newsom talk about the homeless problem in his state. And it really does, you know, to coin that old phrase, it takes a village to try and address these issues.

Dr. Clancy

It really does. Great. Well, an endeavor that you both are involved is called the Upstream Initiative. What is upstreamism and how are you using it to address social determinants of health?

Dr. Reist

Yes, upstreamism, I love it because everyone, when you tell them that, they look at you like, what is that? And it's always fun to explain it to them. In fact, I make, when we get new students that volunteer with us, I've in the past made little rafts out of graham crackers and Teddy Grahams to explain it. So I wish I could share that with you guys today. But when you think about upstreamism, the first person that comes to mind is Dr. Rishi Manchanda. He's kind of the father of upstreamism. He and Dr. Berkowitz have really embraced this idea and tried to get healthcare providers throughout the country to look at helping their patients with social determinants through upstreamism. The best way to describe it is through the old social work parable of upstreamism. So imagine you are, there's three friends walking through the forest, and all of a sudden they come upon this beautiful stream that's running through the forest. And all of a sudden they hear children screaming, and they wonder, oh my goodness, where are these children screaming? So they run to the water's edge and see that there are all kinds of children that can't swim, and they're in this fast-moving stream, and the stream is going over a waterfall, and we're losing all of these children. So the first friend who is kind of the rescuer jumps into the water and starts grabbing kids and pulling them out and tossing them up on shore to the other two, trying to rescue them. In

healthcare, we think about the trauma surgeon, the intensive care unit pharmacist, the ED physician, some of those folks who are jumping right in there, intensive care nurse, ED nurses. The second friend says, well, I don't swim very well. So they grab a bunch of logs, tie them together, put them in the water, and float out on the raft so that they can start pulling the children in onto the raft. And in upstreamism, we think of this as the raft builder. These are folks like primary care physicians, the community pharmacist, the physical therapist that they see, and other folks that are kind of doing standard care. The 2 then look around as they're starting to wear out and think, where did our third friend go? How did they, they just disappeared on us. Well, the third friend went farther upstream and they yell at him and say, what's going on? Come back here and help us. And the friend said, no, I'm going upstream to find out who or what is throwing these children into the water to begin with. That is an upstreamist. Finding out what's causing the problems before they truly become problems or at the source. That is exciting to be able to do that because the bane of my existence is rework in anything. And that is a lot of times what we are doing in healthcare is rework rather than preventing problems.

Dr. Clancy

Absolutely. So how did this start at the University of Iowa?

Dr. Reist

Through some work that I was doing with the transitional care research, we had started to put together a resource list, a community resource list of resources within each county that we were working with that could help patients with their social determinants. Someone found out about that and said, hey, I've got a group you should meet. And it was Dr. Craig Syrop, who is emeriti with the university right now, probably busier now than he was when he was in practice, and several other folks who had heard several medical students who had gone through all of their didactic training and learned about social determinants of health and how to help folks, and then got out on their clinical rotations and realized no one was doing anything with it. They were very frustrated with that because why did we learn about it if we're not going to do anything? But early on, folks really didn't know what to do because it is complicated and it does take time and money. So we got together and we decided let's address this issue. Since it was students that led it, which is marvelous, we gathered together more medical students, pharmacy students, masters of health administration students, and kind of got the group started.

Dr. Haugsdal

Some nursing as well.

Dr. Reist

Yes, now we've added nursing and law students.

Dr. Haugsdal

Just to add to kind of the start of our team's story, I think one student that deserves a lot of credit, Dr. Reist would agree, is Emily Boevers. And she was a medical student around the time that the team was coming together. And I was still a resident. I wasn't part of the team back in 2015 or 2016. But Dr. Boevers went on to do an OB-GYN residency, I think in Kansas. And now she's back in Iowa, serving one of our more rural communities up in Waverly, and is still a huge advocate for reproductive health and social determinants of health. And I think a unique aspect, she was able to sort of ask these questions and get this project going within OB-GYN because of a good opportunity called a healthcare delivery science management and policy distinction track. It was a formal component of her undergraduate medical education that gave her mentorship and sort of a framework to explore topics and projects within that realm. And so we've tried to continue that spirit by encouraging students who volunteer with us to come up with new projects or new endeavors related to the upstream mission and use it for those distinction tracks as well.

Dr. Clancy

Great. Well, I just finished teaching a course to faculty around value-based healthcare and getting away from fee-for-service world where volume and intensity of procedures are the most rewarded. So let's talk a little bit about the cost effectiveness of thinking about upstreamism.

Dr. Haugsdal

I think maybe we should start by explaining a little bit of what our ground level work is, and then I think sort of that will translate into where we see improved outcomes and such. So we've kind of described to you guys that our effort is multidisciplinary, and it primarily uses student volunteers, and they're the workforce and the idea makers. But then our team is mentored or facilitated by Dr. Syrop, Dr. Reist, and I. And it's all volunteer run. And essentially where Dr. Boevers, when she was a student, working with Dr. Reist and Dr. Syrop, the focus was put on the effects of diabetes in pregnancy and helping patients to achieve better glycemic control because in the setting of a high-risk pregnancy where a patient, pregnant patient, has diabetes, really food is sort of considered medicine. Food, day-to-day snacks, meals, it really affects their glycemic control, and that can be very challenging for them during pregnancy. Adding to that challenge can be personal finance difficulties, other social factors that can then lead them to experience food insecurity. And so Diane sort of mentioned earlier about, it's a stark reality when a physician realizes that

their care and interaction with the patient in a clinic really only contributes 20 to 30% to their health quality and outcomes. The other 70 to 80% is determined by their environment and their waking hours outside of the clinic. So when patients come in with poor glycemic control, we really have a choice to make. We can think that maybe this patient isn't being compliant, or we can think there's got to be other factors affecting this. And so we started to look at the incidence of food insecurity in our high-risk OB patients with diabetes. And we found that ranges anywhere from 12 to maybe even 25% at any, you know, quarterly with our data. And so we found a need there. And so some of those resources that Diane's team had collaborated on building, we started providing those to patients who we screened as positive for food insecurity. And we started doing that, I think, around 2008. And we've kept up a consistent effort to screen all of our high-risk OB patients, as long as we have volunteers that are up to being in clinic, for food insecurity and transportation access. And then if they screen positive, we provide them with resources. And so that's sort of our central project. Maybe later we'll talk about some offshoots, but I think it's just important to set the stage for what we are doing.

Dr. Clancy

Great. Diane, what would you like to add to that?

Dr. Reist

It is really frightening sometimes when you stop to think that everything you've done and you still see bad results, dig a little deeper. I can remember a patient who ended up in the hospital with diabetic ketoacidosis. They swore they were taking their insulin just as they were prescribed. And they were in the hospital for a few days. We adjusted their insulin downwards because they were doing so well. We discharged the patient back home and patient called us saying that their blood sugars were back in the 500s. We checked with the patient. They had been, they had a perfect record, you know, log of their blood sugars, the amount of insulin that they were giving themselves was fantastic. You know, why is it going awry? But we thought a little bit deeper and kind of sat down with the patient and said, what is really going on? And the patient finally broke down and told us that they had lost their job, they were pregnant and not used to adjusting their blood sugars, didn't want to tell anyone that because they lost their job, they also lost their insurance and they could no longer afford their insulin. Even though they were writing down, they were giving themselves the insulin so that the doctor wouldn't be mad at them. They were completely not controlled due to this. So by having students who we do put through empathy training, and work with them on how to speak with patients, they were able to dig that information out, and then we were able to help that patient.

Dr. Clancy

Great. So let me circle back now. This is very noble, good work. Can you make it make sense cost-wise?

Dr. Haugsdal

Diane might have some input there, but from the global view, because we are a volunteer team, there's very low inputs financially. And so anything that we gain, whether it be students getting an educational experience, patients getting connected with resources, other health care providers and health care staff learning more about our project. And then the academic projects that the students do and carry out into their next step of training. We've had a few grants along the way to fund special projects or certain resources. But for the most part, we operate without any funding. So we really mostly reap benefits, but they come after some hard work. We've done some looking at data to see if we've actually made a financial impact on our institution or our population. We looked at the first couple of years, the patients that we saw, and we were able to draw a lot of associations as far as the social needs and with different demographics, but we also started to look at the newborn statistics, and we're going to be curious going forward if we can find decreased NICU or neonatal intensive care unit stays, things that would really affect the financial aspects, saving patients, payers, institutions, money and resources by working upstream. Diane, what might you add to that?

Dr. Reist

Sure, this was certainly a concern because it's very difficult in healthcare sometimes to show cost savings versus just chopping off the bottom line. And by having a volunteer organization, it's all volunteer. I worry every year because sometimes volunteer organizations don't continue. but I have been so impressed with the group of students that we have worked with every single year. There's a new group that steps up and takes it seriously. One of our goals was because we had all been clinicians working in the environment, we wanted to make sure that we did not disrupt the workflow at all. So we have timed things so that the student slips in to interview the patient after the nurse is done with them, before the provider comes in to see them, slip back out, the student then does their work in pulling together resources for that specific patient in their specific living environment. And then once the provider is done with them, the student slips back in to provide that information and help to the patients. We even have them go through training to help patients fill out WIC applications and get other resources. This was very important to us because we knew if we slowed down the whole process, number one, it wouldn't be accepted by everyone, and number two, it would be more costly. So we feel that we've really hit the mark on that one.

Dr. Clancy

It's got to be great additional experience for the students. What level of students are you able to work with here?

Dr. Haugsdal

I mean, typically we, I mean, we'll start recruitment, I think next week or then the following week with the new M1, first year medical students that are excited to get involved in extracurricular things. We also do reach out to undergrad students. That's something we've started in the last couple of years. And so we'll have some really interested students follow through their whole medical school career working with us and sort of moving our project forward. At one point we had 24% medical students, let's see, 40% pharmacy, 15% undergrad, 13% from the College of Public Health representation. So we really are multidisciplinary and interprofessional and at varying levels of education and training.

Dr. Reist

Most of the students that we work with are graduate students in the medical sciences programs. However, we've had undergrad students who want to get into the medical sciences who have seen this as a great way to get experience with working with patients. And one of our newest endeavors, we've continued, we're not stagnant, we continue to do surveys to find out what needs the patients do have. Our latest endeavor in that has been our deep dive survey to find out if there are other issues that we need to address. And we have found that there is a fair number of patients that have medical legal issues. So we've gone to the College of Law and have a law professor who is interested in helping work with us. as well as we've had several college of law students that have joined us as well. So this is, hopefully we'll be able to expand what services we do provide.

Dr. Clancy

Great. We did have a medical legal clinic at the University of Oklahoma. When I first approached the chief legal counsel that I said I wanted to put a lawyer in the clinic, he looked at me like, what are you talking about? And that was my opportunity to educate him on the social determinants of health. So great, great track record there. What is the patient's response to this extra level of attention and care? This must be a unusual first time visit for some of these patients.

Dr. Haugsdal

Yeah, there's really a, you know, we hear from our volunteers and volunteering ourselves, there's a continuum of responses. For the most part, patients are very grateful and humbled by attention to these factors and sort of that appreciation that we know as

providers that you as a patient are doing your best with what you have. And we want to learn if there's other ways outside of clinic encounters and testing and medications that we can help you. And the ones we focus on are food insecurity and access to transportation. Because some of these patients get to a point in their pregnancy where they need to be seen weekly and they may be coming two to three hours. There is a stigma attached to being food insecure or having social needs. And so we do occasionally have patients who are a little bit taken aback and don't want to disclose such information to us at that time. It sometimes depends on their background, demographics, or immigration status. They worry that it could make things worse for them. You know, and an important point that we always like to bring up is that there's a lot of institutions that mandate screening for social determinants of health once a year. In a pregnancy, we see a patient at least probably 8 to 10 times. We try to screen them at every visit because we've learned that social factors are very dynamic and that can change in a moment between visits for a patient. We've done some looking at our data of, you know, who screens positive and negative on what visit, you know, this is. And we have seen patients, you know, up to 2% finally screen positive, not that it's a good thing, but at their 7th screening. A lot of them will screen positive at their first, second screening, but we can go way out to that 7th screening where either they maybe feel more comfortable sharing that with us so that we can help, or circumstances have changed and they are now experiencing food insecurity.

Dr. Clancy

Sure. So Diane, you mentioned earlier that you know some of the county resources. So when somebody presents with immediate needs, is it on your clinic and on your team, or how do you work with those that are also possibly available to you as far as assistance?

Dr. Reist

Yes, we're kind of proud of the fact that I think Michael had mentioned a little bit that we had worked with the one of the local agencies, HACAP, to look at some funding and projects that would be able to give us the ability to address their needs immediately. And we have food boxes on hand that are stored in the clinic. It is shelf-stable food, like they might get at a food pantry, that we can, our students, volunteers, screen the patient for a number of members of the household, what their needs are, and they're able to provide them with food boxes up to two, three, four at a time to help them with their immediate needs. Some counties don't have food pantries, and so this has really helped some of those folks. In our deep dive survey, we looked at how many patients were having to cut down on meals or skipping meals and were surprised to find that there were an awful lot of those patients and that isn't appropriate for our high-risk OB patients. So that kind of helps spur us in continuing our food pantry on-site project.

Dr. Haugsdal

And I really think our food box distribution program is really sort of the culmination of a journey we took. We started working with the local food banks, learning about the services and the resources that they can provide. And we had this idea before the pandemic for a food pantry in the hospital so that any patient could get a even like a prescription to visit the food pantry. When you bring that sort of resource into an institution as big as we are with lots of requirements and compliances, we got a lot of big eyes looking at us as far as, oh, this is, there's a lot to think about here to be compliant and an appropriate, and the idea of a food pantry sort of transitioned with discussion with other community resources like HACAP into being able to distribute sort of just in time, acute need, shelf stable food boxes just from our clinic. And that's something that we started a couple of years ago. And like Diane said, we will give as many boxes as might be appropriate to that patient. We consider their household size, you know, whether they've got uncles, friends, you know, living with them, how many children, and we've got kind of a handy grid that gives us an idea of how many food boxes might be beneficial to them. And this is sort of the representation of our medical partnership with HACAP, and that's been a process too, but really fruitful on the other end to actually be able to provide in the moment resources that the patients can take home that day.

Dr. Clancy

So let's take a step back. Both of you two are educators and clinicians. Kind of personally, what have you learned from this work as far as the magnitude of social determinants of health? You know, we started off by Diane talking about 20% of our health is determined by direct delivery of care and 80% is much more of these environmental and social factors. Personally, what would you both say in your experiences with this clinic, how much social determinants of health are drivers of overall health?

Dr. Haugsdal

I think that it has taught me that when I'm seeing patients, whether it's in my personal clinic, private clinic, or if I'm working with the residents and medical students to see patients, we regularly as providers, we have those complex patients whose stories have a lot of variables in it, medical and social. And oftentimes, we are very focused on the medical, the scientific aspects of their clinical context. And what I've learned is, when I have a patient that seems complex to me or complicated, instead of just digging deeper into the clinical aspects, I remind myself to take a step back. Let's see if other social factors might even be a primary contributor to their clinical context and their concerns. So it's caused me and it's taught me to take a pause instead of just trying to go full speed ahead with science and medicine and take a more holistic approach. I've also learned that

personally that this is a big issue. And it's very daunting. And when you bring it up, it's hard to really spend an hour even wrapping your mind around the problem, let alone possible solutions and, how it's going to change the way we practice in our clinics where we got to move patients through. But what we have done is we just keep steadily moving forward and making small investments of time from many, many people who are interested and committed to the same mission. And over six years now, we've made progress. Sure, we could have made more, but we're modeling a positive influence and a positive change. And so I think when you're faced with these large challenges, don't think that you have to change everything all over all at once. We've found our niche in this high-risk OB clinic, and we've practiced and applied different principles of public health, and we've seen positive outcomes that can then be shared with other departments, other areas of the institution. And we always hope that our students who have been involved take that to their next destination.

Dr. Clancy

Diane, same question to you as far as kind of wisdom lessons from this work for you?

Dr. Reist

Sure. When we first started this endeavor, Dr. Syrop, I think of him as a visionary. He kept saying, you know, one of these days we're going to have to address these issues. Someone is going to make us. And that is true. Back in 2015, CMS, Center for Medicare Medicaid Services, started to put together a plan for providers to look at social determinants because it was known, it has been known for a long time that it is a huge problem. That's finally coming to fruition. CMS as well as Joint Commission, which many hospitals have surveyed them, are requiring folks to keep track of of what social determinants. Right now, unfortunately, it's still more in a data collection phase. But as we progress and have our data, then hopefully more resources can be devoted to taking care of these issues. When we first started with the high-risk OB clinic, I believe we had about 33% of our patients screening out as having either food insecurity, food appropriateness, or transportation issues, which may not seem like a whole lot until you think about how many people that really is. In my work with the Transitions of Care Clinic, 100% of the patients that I see have social determinants. And it is actually extremely rewarding. And those of you out there that know about the triple aim and the quadruple aim, how we've been trying to improve healthcare, reduce costs, and improve the patient's experience and the provider's experience, it is extremely rewarding as a healthcare person to be able to help someone with an issue that is causing problems. A lot of times with all the burnout that we hear about, it is often caused by the fact that we are trying to see too many patients in too short

a time. That's still an issue, but if we can actually truly help them to overcome some of these issues, then that's totally worth it.

Dr. Clancy

Yeah, great. Well, CMS has been very clear that by 2030, they want 100% of Medicare and Medicaid patients in some type of population health related value-based care payment system. So Dr. Syrop's visionary comments about sooner or later we're going to have to do this, I think it's very much on the near horizon as far as this. So this is not fringe work that you're doing at all. It will be very, very mainstream as far as rather than just delivering a service, we're actually improving health, so hats off to both of you. You kind of alluded to it as far as the dauntingness. Are there any other negatives to this work? Is there anything that causes you to say that it's not worth it?

Dr. Reist

It's always worth it. I don't feel that. My only fear with this group is because we are a volunteer organization, I worry that we aren't going to have students who are willing to or want to do this. But again, I just am totally amazed that every year we end up with some very dedicated individuals.

Dr. Clancy

Great. Michael, anything on that one?

Dr. Haugsdal

No, I can't really think of any negatives. There are, I mean, there are challenges, there's a lot of challenges, but still those challenges are opportunities for these students to see that they can be overcome. And then again, they take that experience and those strategies for overcoming such challenges to their next step.

Dr. Clancy

Great. So Michael, you know this as an obstetrician that one of our outlier health statistics for the state of Iowa is maternal mortality. We are much higher ranked in a negative way in this area than one would expect. Any comments on how this work ties into high-risk OB and morbidity and mortality around pregnancy?

Dr. Haugsdal

Absolutely. It really gets into morbidity because we are finding as a department and as a team in the obstetrics clinic as well as inpatient labor and delivery and the antepartum service that we are caring for patients with many, many more comorbidities and higher

acuity than when, and higher volume of those patients just overall than when I started residency in 2013. And so small changes upstream really do have the potential to impact—you know, some of our prime comorbidities that we've sort of gotten used to is food insecurity, transportation access, but also that leads to maternal obesity, and all of these factors can lead to increased risks for cesarean deliveries, which can be safe, but they come with more risk than a normal spontaneous vaginal delivery. Then you, downstream effects of postpartum hemorrhage, the effects of diabetes, whether it's in and outside of pregnancy or within pregnancy. And then we haven't even talked, you know, details about effects on the neonate and the newborn, you know, growing into a toddler and another one of us around here. And so it really is, it's a focus on some small variables that are important upstream that if we have buy-in from the whole community of healthcare providers and public health, it really has the potential to improve things downstream. So yeah, we're in the thick of it at Iowa as far as volume and acuity of our patients during pregnancy.

Dr. Clancy

Great. Diane, anything you want to link back to your kind of day-to-day clinical work and transitions of care as well?

Dr. Reist

My favorite patient ever was a patient that was so far in the weeds as far as their social determinants, total arm's length list, and was bitter and angry and abusive when they came into clinic, and I wasn't about to let them out without me trying to help them. So I sat them down and used a few words that they could understand. Hopefully no one else heard them. And that patient looked me up afterwards and said, you know what? I just want to thank you because you're the first person that hasn't treated me like I was a dirt ball. You actually listened to me and tried to address the issues that are causing my problems. And I really appreciate that.

Dr. Clancy

Yeah, well done. Well done. So switching gears just a little bit. Earlier on, you mentioned all the different education programs that were involved, medicine, nursing, pharmacy, public health, maybe law in the future. And clearly, the students are a workforce that makes this go. Where do you see that possibly headed as far as education and formalizing it? Michael, you started in the communities, there’s some room to work with it. You're recruiting students, the new group of medical students that is essentially starting today. What could happen next as far as this is more than their off hours?

Dr. Haugsdal

Yeah, we've taken some of those steps recently. I think extending our opportunities to the undergraduate population has been a positive. It's something that we, that's a huge population. We were worried about, how the volume that might show interest, but it's been pretty simple to curate and such. And so we haven't been too overwhelmed. And the ones that we've gotten have been really interested and have come with experience, whether it's personal experience with social drivers and deficiencies there, or they just have a passion to help people. We've become an official student organization at the university. That's something that is fairly new for us. And that presents opportunities for programming and some funding from the student government for the students to do projects. And they've really run with that. They've hosted some speakers along the way, even during pandemic times when people weren't getting together in person. I think Seth, Dr. Seth Berkowitz joined us via Zoom and gave a lecture. And we've also had lectures and didactics by providers here at the university. Those students in that, acting from our student organization perspective, have also organized diaper and period product drives and fundraisers. And so a lot of advocacy and a lot of philanthropy is sort of growing out of our team's mission. And that's been really fun. I think what is the next step for us? I think always we have to be worried about sustaining ourselves and maintaining our team. But also I think we're sort of, I think of us right now as we're kind of entering an era of reflection and we want to reflect back on our data. Data is important. We can learn a lot from that. And so we are going to, you know, and we're in the process of looking at our data of patient outcomes. and neonate outcomes related to how patients have screened positive or negative for our entirety of existence. So back to 2018. And that's hopefully a good amount of time to start showing some associations or significant effects. The other area of reflection that we are looking at is we want to kind of close the loop with our patients. And so yes, we've done needs assessments. We've identified a need. We've got an action plan from our provider perspective to act on those needs for our patients. And we're doing so with providing resources near to where they live and work, providing transportation services, and providing food boxes. But now we want to ask those patients who have utilized those resources what could we improve on? What did we do well? Where did we miss the assignment, per se? And so I actually have a summer student between their M1 and M2 year, they're an M2 now, who worked with our team to interview patients that have screened positive in the last year or two and received our resources. And we're doing qualitative research there to really learn the effects and the perception from our patients. And so we kind of want to bring those, that data back and sort of see if we need to change directions, see if we need to change how we approach the same problem.

Dr. Clancy

Great. Diane, your experiences with the education programs?

Dr. Reist

Yes. I have lectured at the College of Pharmacy on what we've been doing. I have students that come through all the time to learn about this. They hear about it and they say, oh, I actually want to go and learn something more, which is very cool. And as Michael said, the lecture series that our students have been providing has not only helped to educate students, but existing providers about what's going on. One of our primary goals, the program originally was to help increase organizational capacity at the university, to be able to handle these things and to be able to expand to other clinics, and then also to build those relationships with community-based organizations that is ongoing work, and we've connected with lots of different organizations, from the food pantries we discussed earlier to local vintners and brewers who helped us with raising funds for different projects. The food pantries, we've even looked at color coding things to help patients be able to pick out foods that are appropriate for them. And because of the successes that we have seen, we've received a lot of requests from other institutions who are trying to get their programs off the ground of addressing social determinants. So I've worked with several hospitals in the area to develop a program that might fit in with their populations as well.

Dr. Clancy

Great, great, great, great, great. And I do want to circle back to somebody you mentioned earlier, Michael, and that is Dr. Boevers, who now is, you know, several years out from residency, but is a leader among organized medicine here in Iowa as well. So It's probably not a stretch to say that some of the things she learned through the Upstream Initiative paid off in helping her be a leader in the future as well.

Dr. Haugsdal

Oh, definitely. I think she entered her training for a career in medicine probably with some instincts and interest and passion towards that. But she has grown phenomenally. You know, I came into our team when Dr. Boevers had, was a student and getting her stride here. And I learned a lot from her and still do, keeping up with her on social media and those professional sites. So yeah.

Dr. Reist

It is exciting to see. We still keep in contact with a lot of our students and one of our Masters of Health Administration students is doing great work in Wisconsin right now and with social determinants. Dr. Radica out in California is also implementing some social

determinants of health programs. And Dr. Kim is out in Vermont working with social determinants. So it is so rewarding and exciting to see that these students that we had contact with are carrying on this good work.

Dr. Clancy

Yeah, it is. It is one of the joys of being an educator is when you teach one student in a profound way, they can affect thousands of lives. They really can. So it's great. While we're coming up to our close, what are some of the take-home points for our patients and for our clinicians that you'd like to leave with our listeners? And Diane, let's start with you.

Dr. Reist

Well, the first thing I think of is to other healthcare folks, there's way more to successful health outcomes than a negative test or writing a prescription. We have to be open to address those social determinants and not be afraid to ask those questions. And then work with other folks. There are so many people out there who are trying to address these issues. We just have to be open to finding them.

Dr. Clancy

Michael, how about you? Some take-home points.

Dr. Haugsdal

I'd say be curious, be persistent, and find a good team. So be curious when you have complex patients or complex clinical context to think about how social factors may be affecting that one patient, but also it's worth thinking about whatever patient population you serve, you know, what social factors may you not be appreciating as much. And it really varies from population to population. So that's kind of, be curious and look into it. Be persistent when you are thinking about acting on something. It can be, you know, there's lots of big problems out there, but slow and steady persistence and thoughtful actions do make a difference, even if it's just in your focus of practice with your patient population. Every patient that, you know, if we improve is an important improvement. And then find a good team. What we've found is that, through our community, regionally, nationally, we have just really found great connections with people who are interested in doing similar work and that can provide, they may be a couple steps down the road from us as far as progress and experience so they can give us advice. And then we do that in return to other groups and teams. But even within the university, within the Iowa City corridor community, we have found so many collaborative partners, to help us solve problems. And you think that you're always going to be, it's going to be pulling teeth to find somebody who's interested in providing a resource and such or navigating us to a resource. But we are

always, always just really surprised and grateful for the enthusiasm of community organizations and other teams within the university.

Dr. Clancy

Great.

Dr. Haugsdal

So be curious, be persistent, and find a good team.

Dr. Clancy

Absolutely. Well, to both of you, Diane and Michael, our expert guests, thanks for joining us on Rounding@IOWA. And thank you for the work you've done helping all of our patients, really in a comprehensive way and them seeking our assistance. And thanks for helping our students and setting the foundation for them as well, because it can be career changing, as you've seen and been able to tell us today that those students do carry it forward as they go forward. So well done.

[Upbeat theme music plays]

For our listeners, you can access instructions for continuing education credits within our show notes. And as always, we hope you join us again for another session of Rounding@IOWA.