

OPTIMIZING NUTRITION CARE AT CHRISTIAN HOSPITAL WOUND CARE & HYPERBARICS CENTER

Featuring :: Kaylan Goldstein, RD; Matt Flick, MBA; Andria Bozardi, RD

TRANSCRIPT

Maura: I hope you're ready, listeners, because on today's podcast episode, we are talking all about wounds. And not just any wounds, but the chronic slow-healing type like pressure injuries, for example, or diabetic foot ulcers. These types of wounds impact billions of people across the United States, and they're especially hard to heal. Plus, they can increase the risk of infections. They can make it harder to maintain your mobility, and they can require prolonged treatment, which of course can mean higher treatment costs.

Maura: This wouldn't be an Abbott Nutrition Health Institute podcast without me telling you nutrition is an essential part of the wound healing process. It provides protein and nutrients that helps wounds to heal. And while the benefits of nutrition and wound healing are definitely clear, there are also some unique challenges we need to address. For instance, because most wound care is provided in outpatient clinics, the onus is really on patients to know how, and to even remember to properly manage their diets.

Maura: And of course, sometimes it takes a variety of therapies too, which in turn requires the help of a variety of healthcare professionals to appropriately heal a wound. So it's complicated, right? But, perhaps there are best practices that can help healthcare professionals and patients ensure nutrition therapy protocols outside the inpatient setting. I'm Maura Bowen and I'm speaking today with three experts, Kaylan Goldstein, Matt Flick, and Andria Bozardi, who will tell us how their wound care team at Christian Hospital in St. Louis, Missouri, here in the United States, established a stronger emphasis on nutrition and wound care through better care coordination.

Maura: First I should note, we're still in the middle of a pandemic, of course. So the recording quality you hear today might be a little different from what you're used to. We're all dialing in from the comfort of our homes and offices today. Secondly, my warmest welcome to each of our experts who are here with us. Hello to you all. And thanks for joining us on the podcast.

Matt: Hello Maura.

Kaylan: Hi, thanks for having us.

Andria: Yeah. Thank you.

Maura: All right. Thanks. So because our mamas raised us right, I want to make sure we do a quick roll call and some proper introductions. So would you mind telling us a little bit about yourselves, like your names and your current role and your background? Kaylan, would you mind going first?

Kaylan: Sure. So thank you Maura for having us today. As you stated, my name's Kaylan Goldstein. I'm the clinical nutrition manager at Christian Hospital. And I've been working in this position for over three years now, but I've been a dietitian in this hospital system for eight years. I am contracted with Morrison Healthcare for which I am also

the regional clinical nutrition manager. So I enjoy getting to wear a couple of different hats as a clinical dietitian.

Maura: Thank you, Kaylan. And how about you, Matt?

Matt: Thanks so much. So my background is, I've got about 16 years worth of healthcare operational leadership. My current role actually has me in a regional leadership role, with outpatient wound care and hyperbaric medicine, within Christian Hospital and a couple of other hospitals within the BJC healthcare system. Similar to Kaylan, I actually do wear a secondary hat with Healogics, who is actually a partner and helps us operate our outpatient Wound Care Center.

Maura: Great. Thanks, Matt. And Andria.

Andria: Hey Maura, as you said, my name is Andria Bozardi, I'm a clinical dietitian at Christian Hospital. I've been working at Christian for about four and a half years. My primary responsibility is patient care, and I mostly see patients on our oncology, hematology and renal floors.

Maura: Excellent. Thanks, you all. So to set the stage for our listeners, can you tell us a little bit about Christian Hospital.

Matt: Christian hospital is a great community hospital, located in North St. Louis County, in St. Louis, Missouri. It is a great hospital that serves a community that desperately needs a lot of supports and a lot of care, as a very unique and diverse social economic community that it serves. And it has a number of different specialties that it provides the community from surgery to cardiothoracic surgery, to other cardiological services, to pain management, to obviously dietary services, and then as well as outpatient wound care.

Maura: So you're all here today to talk about how you've used nutrition therapies and better care coordination to improve the outcomes of your wound patients. So Kaylan, correct me if I'm wrong. I think the story starts with you and Matt, is that right?

Kaylan: Yes.

Maura: I'm wondering what prompted you to undertake a new way of working and what challenges were you in facing to prompt you to take this action?

Kaylan: Yes, that's right. It really did all start with a pressure injury. I was sitting in on a wound prevention meeting when a nurse educator brought it to everyone's attention that she agreed we could all look at nutrition as a means to help decrease rates of pressure injuries. So once I heard the word "nutrition," I knew I was on board. Working as a dietitian, I feel like nutrition is often forgotten about since it's not something you necessarily see.

Kaylan: As dietitians, we see patients come in often with wounds and we'll start them on a nutrition supplement to help promote wound healing. But they will tell us that they don't think they can afford it or be able to continue it at home. So not only have I looked at research articles on my own, but I've seen it on a personal level as well. My brother was in an accident seven years ago, that caused him to be quadriplegic. So he drinks his nutrition supplement when he notices he's starting to have some skin breakdown and it's incredible how much it has helped heal his skin. He's even told his other friends about it in support group.

Kaylan: So in other words, I am passionate about wound healing, both personally and professionally, but I wasn't really sure what else I could do. And around that same time, our Abbott rep, Tracy had provided us with a wound healing webinar, which prompted me to reach out to Matt. We just so happened to teach our new employee orientation sessions back to back and we developed a connection that way. So long story short, we decided to look for grants to find funds for patients, to give them this nutrition supplement at no cost, with the hopes of improving

rates of wound healing, preventing hospital readmissions. And ultimately, improving our patient's quality of life.

Kaylan: While brainstorming grant ideas, we all received the hospital wide email about a grant opportunity, within our own hospital foundation. Andria was my dietitian to volunteer, to do a comprehensive research and wrote the grant. We submitted it and it was approved and here we are today.

Maura: That's when you established and implemented Christian Hospital's nutrition program, is that right?

Kaylan: Correct. Once we received approval from the grant, we figured out the financial process approval to purchase that much of the nutrition supplement. I still remember how excited we were on the day we received that shipment. It took a bit to get started. We all sat down, we discussed criteria, Matt looked at his data and that's how we determined our inclusion criteria. Then we identified who we needed to educate about this and then communicated it with relevant parties, such as our wound care nurses. Andria created a handout for our nutrition supplement to provide education on the product and a compliance calendar, for patients to track their intake.

Maura: It seems like gaining alignment is sometimes one of the most important steps in establishing and implementing a program like this one. So can you tell us what it took for your team to gain that proper support? For instance, how long did it take and who did you rely on for that?

Kaylan: I think a couple of us can speak to this, but I think it took months. We ended up relying mostly on our dietitians and staff at the Wound Care Center to identify both inpatient and outpatient participants. Then once we identified them, the dietitians heavily relied on the case managers to know if the patient would be following up with our Wound Care Center, because that was one of the required criteria, so we could track their progress.

Matt: Yes. So I think the other thing we learned as we've gone through our operations and the outpatient Wound Care Center is, especially our patients who experience chronic wounds. There are so many barriers that they have to health. There doesn't seem to be a standard way to actually address nutrition, especially when it comes to wound healing. It's more of, "Hey, take a multivitamin," or, "Hey, make sure you eat better." When it comes to nutrition, there is no standard in there. So that was a barrier to really understand and help educate our providers and our staff to be able to communicate that then to our patients to make sure that we're getting past that barrier as well.

Maura: So maybe tell us more about your pilot program. Can you tell us what sorts of patients you included in your mix of participants?

Andria: For the pilot, we included patients with lower extremity wounds with a history of diabetes. Initially, we also had the criteria that these patients would have an ankle-brachial index of less than one or an albumin of less than four. So this was based off of previous studies which suggested that this population of patients would likely see benefit from nutrition supplementation, particularly one containing arginine.

Andria: We were also concerned at the beginning of the pilot that there may be an overwhelming number of patients if the only two criteria are diabetic, lower extremity wounds. So we felt the need to make the criteria more specific. However, as the pilot went on, we found that we were more successful with recruiting participants with only having two inclusion criteria. It really just helps simplify the process since there were multiple parties involved in screening participants.

Andria: Our only other criteria is that they're having wound care done at the Wound Care Center. And this was essential to the pilot so that we could track the patient's outcomes. And also confirmed that they were being compliant with drinking their supplement twice daily. So really there were only three criteria for patients to be able to be included. And that was a lower extremity wound, a history of diabetes and having their wound care done at the Wound Care Center.

Matt: The other piece to that regarding patients who are willing to receive care on our outpatient basis at the Christian Hospital Wound Center is so much to provide a control to this pilot program and to truly understand the impact that nutrition would be having on our patients after we've implemented these modalities and this protocol. To truly gain an understanding of, how are our patients doing prior to starting this pilot, with the, what I would say, maybe unstructured intervention from a nutritional standpoint, to what we're doing now with the pilot process and making sure that we now have a structured process for our patients. And trying to address the needs of the patient for nutrition.

Maura: Can you tell us a little bit about the methodology you followed?

Andria: We asked the participants who qualified for this pilot to drink their nutrition supplements two times daily. We wanted to compare the time it takes for their wounds to heal compared to the Wound Care Center's historical averages of those same types of wounds but without the same nutrition supplementation. So our control group is the data from prior patients at the Wound Care Center.

Maura: Matt, I know earlier you mentioned that you all encountered a barrier or two when you were trying to lift the program off the ground. What other challenges did you all face along the way? For instance, were there places along your journey that maybe were harder than you expected, but also maybe went more smoothly than you expected?

Matt: As you could probably imagine a global pandemic wreaks havoc on any type of pilot programs, especially when it comes to healthcare. So that was an unexpected challenge that we navigated. But, I'd say the biggest challenge, and this is more anecdotally from my own personal experience, was the reluctance and the hesitation of our patient population to actually buy into this. There was something very shocking in the response to some of our patients when offered some options as far as how we could properly address and more methodically address their nutritional needs.

Matt: And the unwillingness of the patient to actually commit to taking a certain supplement, a certain amount of times a day for a certain period of time. For those of us who work in healthcare, there was some assumption that, if someone's going to provide you an opportunity, especially at no cost to that, that would be an easy sell. But so that was probably the most eye-opening experience. It really to try to circumnavigate that. It was really a case of, we had to get a better understanding of the needs of our patients and those barriers, like I said before. And try to connect with them on their level to provide options and opportunities. So, it was just a matter of exploring different options, especially with different products and different options within similar product lines in order to appease the needs of our patient population.

Matt: The other thing is I think, and this wasn't necessarily surprising, but I would say something that was really refreshing to see is, is when Kaylan and Andria and myself went out into the hospital community and to the different departments and spoke about what kinds of things we were doing with this pilot.

Matt: It was amazing the amount of responses we got and the amount of excited response that we got from all the various ancillary departments of the hospital. And it was a case of, when we started this pilot program and started writing the grant, it was essentially was just the three of us. It was just myself and Kaylan and Andria working on this. And then before you know, when we started having monthly meetings in the middle of this pilot process, the meetings went from coordinated a schedule for three people to coordinate a schedule schedules for about 15 different people. And that was really, again, a testament to how excited the hospital is for helping out the community.

Matt: But more so, the various stakeholders within the hospital, understanding really, truly what the needs are, from a nutritional standpoint, within the hospital and then more so within the community that the hospital serves.

Kaylan: I would agree, and I can tag onto what Matt said too is I think another part of their buy-in is we provided the staff with a sample of the nutrition supplement. So giving them the opportunity to taste it while learning about it, I think really established a good connection. So it was really fun. Like it's something I really believe in and am passionate about.

Maura: Thank you for mentioning that your participants needed a little convincing to get started. I just am wondering your take on why it took some convincing. Can you speak to that a little bit?

Kaylan: Malnutrition causes a lengthy list of problems, which includes a delay in wound healing. Malnutrition, however, it's not often discussed or identified professions outside of dietitians, unless it's become severe because that's when you can physically see it. A patient may be having medical issues caused by malnutrition, but those symptoms are treated first and not necessarily addressing the underlying cause. A person can be obese and malnourished at the same time, but others may look at that person and think, "Oh, they have enough fat stores to last a while." Which isn't how the body works. The same concept of this mindset applies to a patient following a diet for medical reasons, such as congestive heart failure or diabetes.

Kaylan: Dietitians, on the other hand, they have a strong focus on prevention as part of their education. So that's where I think the struggle is, to have participants in program advocates to understand the connection. Healthcare in our country has a strong focus on treatment, others often forget about preventative measures. Providers can check off a box saying they've prescribed a medication to a patient, and that is something they can control. But they may check off their box for nutrition, even though they may have just casually advised their patients, "Exercise more, eat less cake."

Kaylan: And that doesn't really give them much guidance. That's just my interpretation of how I've seen nutrition not be everyone's first thought. And I do understand it's difficult to get people motivated to make changes, and that can't happen in a quick appointment with their doctor. But a referral to an outpatient dietician is always an option.

Maura: I wanted to ask you about the pilot, how long has it been running and what sorts of results did you expect to see?

Matt: So we started the pilots, back in 2018. And so it's actually been running now for almost close to two years. And some of the things that I was expecting to see, and again, having seen wound outcomes now for almost 11 years, I expected to see really a minor change in the time it takes for our patients and their diabetic wounds to heal up. On a median days to heal standpoint, our Wound Care Center here at Christian Hospital, has made it as a heal of 28 days. So my expectation was maybe would move that needle, maybe a day or two, in the right direction if we were to properly address the nutrition aspects of the patient.

Matt: And the reason why I expected only just a minor movement in one direction is because there's so many factors. And so many things that go into healing a patient's chronic wound, that just adjusting one thing would not be an astronomical adjustment in the outcome of a patient's wound.

Maura: So that's a great benchmark and it leads me into my next question, which I think is kind of fun because it's always great to compare expectations to what happens in reality. So what results did you actually see?

Matt: Yeah. We're actually still in the middle of the study, but we've taken a look at some of the outcomes of our patients who have actually completed through their course of nutritional supplement and actually have healed their wound out. We've seen a 41% wound resolution, of those patients that had a resolution or been discharged from their care at the Wound Care Center. And of those patients that healed, like I said before, we've seen a days to heal benchmark of 28 days.

Matt: But of that 41% that actually healed out as a result of successfully completing the nutritional supplement,

they've had a 19 days to heal, after going through this program. And so it was a really eye-opening experience that, when nutrition is properly addressed and it's addressed more structured with a specific regimen or product, it's amazing what it can do to really provide the foundation for healing of our chronically wounded patients.

Maura: Well, that definitely sounds like a resounding success for your team, so congratulations to you all. I wanted to ask what metrics you pay the most attention to in order to determine whether the team was on the right track.

Matt: Speaking to that specific metric, the days to healed, that is a great benchmark for us to truly understand whether we are doing the right thing for our patients. The other thing that we look at is readmissions. How often are we seeing our patients actually get readmitted back into the hospital. And then candidly, if we're speaking about the patient population within our clinic that is diabetic and has wounds on the lower extremity, our sole purpose here for that patient population is to prevent amputations.

Matt: And so we look at amputation rates and we've actually have not necessarily seen a drop in amputation rates just yet. But again, we're only about 50% through our pilots as far as number of patients being admitted into it. So I expect within the next 50% to actually see an adjustment and that specific metric.

Maura: So with all that in mind, did anything surprise you about your pilot?

Andria: I don't know if this necessarily surprised me, but even just hearing Matt talk now, my heart is melting and I'm excited because I can see now that he's seeing how nutrition has impacted it. And I feel like that was maybe a surprise to him. So my dietitian heart is very happy. Because this is something we all know, believe and see, but then to get someone else to see the same thing, is a real success.

Maura: We love that. So I can see why you all are so excited about these findings because they're really eye opening. And it looks like there's an opportunity too to scale this up. So can you tell us what the future looks like for your program?

Kaylan: I made sure that my ideal future for this is to have a budget, to give this nutrition supplement to patients free of charge. Because it essentially ends up saving money in the long run. And it would decrease the chance of them being readmitted to the hospital. I would also love to see a dietitian staffed in the Wound Center so that patients would have the option and the convenience to see a dietitian right after their appointment with their physician. And that would establish consistent ongoing nutrition interventions to help improve the patient's wound healing and ultimately their quality of lives.

Matt: Yeah. I couldn't agree more, with Kaylan, especially your note about having a closer working relationship. And this is something she and I have explored in years past and just from an operational standpoint and really from a budgetary standpoint. We couldn't make the ends meet, but I think from an effectiveness and an impact that we can potentially make on the patients and the community of North St Louis County, having a dietitian within the Wound Care Center and a part of our operations, would be absolutely fantastic.

Matt: And, we already involved so many different physician specialties in our operations. From general surgery, to primary care, to, vascular surgery, to infectious disease. And to Kaylan's point about the importance of addressing nutrition and doing it properly. As we've seen here, some of the initial results that we're getting out of our study just points to the fact they're just as important as some of those other physician specialties that we already have involved in the operations.

Maura: As we're rounding out this conversation, what advice might you offer to other healthcare teams who are considering establishing their own nutrition programs in the outpatient setting? Do you have any parting words for our listeners?

Kaylan: As a dietitian, I would just say, have your dietitians reach out to your clinics and outpatient offices to establish relationships and remind them about what services your facility might offer. If you're not a dietitian, find out how to connect with one near you and collaborate with them so that you could refer patients to them, or even consider hiring a dietitian to be part of your practice. It truly takes a village to establish and continue a nutrition program, and all key players need to be involved. We all have different knowledge and perspectives to bring to the table, which helps treat the whole picture and not just what we might see in front of us.

Matt: Going back to my operational experience, simply comes down to just having a specific plan, with specific resources and measures. Just like anything else, you plan for retirement, you plan your day, you plan what you're going to eat, and not everybody necessarily has that luxury. And so similar to trying to provide the proper resources to our patients who need the most help, just setting up a plan with good action items that are specific to the patients that need the care. And then on top of that, making sure that the frontline nursing staff, as well as the providers who are getting engaged with these types of activities, have everything they need in order to be successful. And have a clear roadmap as far as what the plan is and what's going to happen.

Maura: This was a great discussion and I really want to congratulate each of you on such a successful pilot. It's been a real pleasure talking with you today, and I really hope you'll come back soon to share an update if you're willing.

Kaylan: Yes, absolutely.

Matt: Yeah, that would be great. Absolutely. We appreciate it as well.

Maura: And for our listeners, thanks for joining us today. As a parting gift, we have provided a printable case study outlining some of the things you've heard today in case you'd like more information. And you'll find a link to this handy document and the transcript for this interview.

Maura: Take care and stay healthy and safe everyone.