

A NEW STANDARD OF CARE

When Ryan Dirks, PA, CWS, agreed to provide on-site wound treatment to a skilled nursing facility, he had no idea that what he was about to experience there would launch his career on an entirely new trajectory – one with the overarching goal of transforming the face of wound care.



United Wound Healing's specialists are on a mission to improve wound care programs across the nation.

This was back in 2007 when Dirks had been working as a physician's assistant in Seattle, focusing primarily on sports medicine and orthopedic surgery. He was also a father to newborn twins, with very little room on his plate for extra-curricular projects. So, when a surgical colleague asked him if he'd be willing to travel to a skilled nursing facility to see to a patient's chronic wound, he was reluctant to say yes. But upon learning that this patient was on a ventilator and could not be transported comfortably to a wound care center, Dirks agreed to help out for six weeks, expecting fully that once those six weeks were up, he'd move on.

When he arrived at the care home, however, something shifted.

"I went in thinking I would have to be responsible for everything, that I would have to manage all aspects of that patient's care," recalls Dirks. "But when I got there, I met a wound care nurse on staff who knew more about wound care than I did. There was also a physician who was managing all of the patient's complex medical problems. There was a dietitian, a nutritionist, and a physical therapist. There were so many competent members of the medical team on staff that I thought, 'What on earth do you guys need me for?'"

But after a few weeks, Dirks did see a clear way he could help. As he worked with members of the facility's care team to assess, treat and monitor his patient's wound, it became increasingly evident that, while incredibly skilled at their various roles, the professionals on staff

had a tendency to work independently of one another. A long-time believer that a team-centered, interdisciplinary approach to patient care is the key to successful treatment outcomes, Dirks began to focus on getting the different practitioners to talk and work together.

"I started by telling them that if they wanted me to keep coming, we'd have to meet at 5 a.m. to do wound rounds, because that was the only time I could meet, and we'd all have to sit down afterward and talk about all aspects of the patient's care together, as a team — the nutrition, the therapy and the medicine," says Dirks. "In a short period of time, the silos were broken down and patients' wounds at the facility started healing very quickly."

Not only did this team-centered approach to wound care help to enhance patient outcomes, it also strengthened staff morale. The results were so encouraging that Dirks kept going, well past the initial six weeks he had committed to. And he brought his dual wound care/team-building services to other skilled nursing facilities as well — first a couple, then a few more, and more after that, until he realized that what he was doing as a side job needed to become something bigger.

"I decided I should launch a company, because these facilities kept asking for people to come in and help build stronger teams, but there was only one of me," he says.

And with that, United Wound Healing was born.



"We know that oxygenation is probably one of the best biomarkers for wound healing," says Dirks, who has incorporated the Snapshot_{NIR} device into his team's daily workflow.

EMBRACING A TEAM-CENTERED APPROACH

Launched officially in 2015, United Wound Healing (UWH) partners with skilled nursing and assisted-living facilities, as well as home health organizations, to provide advanced wound and skin treatment to patients, while simultaneously working to support and improve each organization's wound care program.

"We started out just in the state of Washington, and in that first year we were taking care of patients and building teams in 25 centers," says Dirks. "Over the following 12 months, we grew to more than 120 centers. And today, we work with about 350 locations across eight different states."

Currently, UWH employs approximately 50 people, including three medical directors, a board-certified dermatologist, a general surgeon, a podiatrist, and around 30 nurse practitioners and physician assistants — all skin and wound care specialists — who go out and deliver the on-site care.

"There's not a lot of us," says Dirks, "but on any given day we have about 100,000 lives under our care. We see about 25,000 new patients a year."

Here's how it works: each UWH skin and wound care specialist oversees a distinct geographic territory, where they perform weekly skin and wound rounds at the company's partner facilities, practicing a distinct approach they call Team-Centered Skin and Wound Care®. In its essence, this process centers on working with a facility's full in-house care team to treat the entire patient, not just his or her wounds, but also any other conditions that co-exist.



UWH's primary camera and tissue assessment tool, Snapshot_{NIR}

We view and assess the skin conditions together," explains Danae Kissner, PA-C, CLT, CWS, a UWH skin and wound care specialist whose territory comprises rural communities in central Washington. "I'll do bedside debridement, drain abscesses and provide other forms of wound treatment while talking with the providers and specialists who are more directly involved in the residents' care. Then I work with them to determine a team approach for how to best treat each patient, because there's a million things you can do to treat a wound, but what's reasonable, available, and the best fit for the patient and the facility all need to be taken into consideration."

Armed with extensive training in advanced wound care, UWH's traveling specialists also rely on the latest advancements in portable wound care technology to help bring about positive patient outcomes.

"We really feel that technology is a starting point for communication," says Dirks, who goes on to say that one of the most useful — and utilized — tools in UWH's mobile tool kit is the Snapshot_{NIR} device from Kent Imaging.

PUTTING SNAPSHOT_{NIR}® TO WORK

The latest advancement in imaging technology, Snapshot_{NIR} is a vascular assessment tool that uses near-infrared (NIR) light to provide real-time visualization of soft tissue oxygenation in and around a wound site. Operating much like a digital camera, the device captures images that allow practitioners to assess, document and track blood flow and tissue oxygen saturation — vital components for successful wound healing. "We know that oxygenation is probably one of the best biomarkers for wound healing," says Dirks, who has



incorporated the Snapshot_{NIR} device into his team's daily workflow. Not only do UWH skin and wound care specialists use the device when conducting an initial wound evaluation, they continue to use it throughout a patient's entire treatment pathway to document healing progression.

"Our providers use Snapshot as their primary camera and tissue assessment tool. Whether we're seeing a dermatological problem or a wound, we document all of it with the photography portion of Snapshot," says Dirks. "And then, of course, those wounds where we need to keep measuring oxygenation or do further analysis, we use Snapshot for that as well."

For Kissner, the device is especially helpful when it comes to determining whether a patient needs to be taken off-site for more specialized care. "In rural Washington, access to care is very difficult," she says. "Snapshot really helps me get a view of how bad a wound is, and whether a patient can wait to see a vascular specialist or if they need to go to the ER right away."

If a patient does, indeed, need to be moved somewhere for surgical intervention, the vascular surgeon or ER doctor can easily access all the information captured by the device, from the NIR oxygenation images and Kissner's notes to further insights provided by the patient's in-house medical team.

This easy access to medical files is due, in large part, to technology integration. Each UWH specialist sees anywhere between 20 and 30 patients a day, all of whom deserve as much one-on-one attention as possible. So, in the interest of saving time and avoiding the need for double documentation, the team at UWH worked closely with Kent Imaging to integrate Snapshot_{NIR} with the company's own electronic medical record (EMR). It's been a game-changer.

"By working with Kent on the integration, we've created a lot of efficiency in the documentation process," says Dirks. "Now when I use Snapshot, I just open up my laptop, and everything captured from the device is in my EMR. I then share that communication back to the rest of the facility's team, who will sit down after I leave and do all of their documentation based on the assessment that I did with Snapshot that day."

SHARING INSIGHTS

The UWH team has found that Snapshot_{NIR} can be instrumental in providing information not just to a care facility's medical staff, but to the patients themselves, as well as their families.

"If a patient wants to see the Snapshot images I take, I'll show them, and, depending on their level of understanding, I'll explain how a wound image showing red is good, and how blue is bad," says Kissner.



Danae Kissner, PA-C, CLT, CWS, a UWH skin and wound care specialist.

When imaging a wound with near-infrared spectroscopy, it's the level of light absorption and reflection that conveys tissue health. Light absorption of hemoglobin differs when it is carrying oxygen compared to when it is not, with the colour red showing the highest level of oxygenation at a wound site, and blue showing very low levels of tissue oxygen saturation.

Of course, it's always encouraging when a patient's Snapshot_{NIR} images show a significant increase in the red direction week after week. But Dirks and his team have found that, in long-term care settings, families and care teams can find consolation in the images even when they reveal that oxygenation isn't improving.

"I have one patient who, several months ago, developed a diabetic foot ulcer that became infected," says Dirks. "She was admitted to hospital and, while there, required a partial right foot amputation."

Somehow, explains Dirks, the amputation was performed before the patient was able to see a vascular surgeon. The woman lost part of her fifth toe and some of the bone in front of it. She was then very quickly discharged from the hospital into a skilled nursing facility, which is where Dirks met her.

“We believe that everybody deserves the best skin and wound care possible.”

- Ryan Dirks, PA, CWS



Ryan Dirks, Chief Executive Officer / Chief Medical Officer, United Wound Healing

“Right away we started imaging with Snapshot, and it was obvious that blood flow was a big problem,” he says.

In the days ahead, the patient’s incision wasn’t healing, her wound had opened up, and Dirks and the in-house care team began treating her for osteomyelitis while waiting to get her in to see a vascular surgeon. Meanwhile, the woman and her family were increasingly concerned. “At one point her kids were thinking the team at the nursing facility was putting the wrong dressing on, or that they weren’t doing something right,” says Dirks.

But with the Snapshot_{NIR} images, Dirks was able to show them that their mother had hardly any blood flow to her foot, and that until a surgeon could open up that blood flow, the wound would remain unhealed. While upset at the situation, the family felt better knowing the staff at the care facility was doing what they could.

“There’s a lot that could have been done differently for this patient,” says Dirks. “But where we got the train back on the track was by looking at the NIR images every week and knowing that we still weren’t going in the direction we needed to go. Once she was able to get an endovascular procedure to improve blood flow, her wound began to heal.”

DELIVERING RESULTS

The team at UWH believes that in order to achieve the best possible patient outcomes within a care setting, both the patients and their entire care team – the nurses, the therapists, the family members – need to feel nurtured, encouraged and informed. And this team-centered approach has led to outstanding results: chronic wounds treated by UWH specialists heal twice as fast compared to the national average.

“Our mission is pretty simple,” says Dirks. “We believe that everybody deserves the best skin and wound care possible, and quite honestly, at least in our country, people in nursing homes often get the level of skin and wound care that we would’ve given somebody 20 years ago. That’s why we’re constantly trying to set a new standard – I think we’re obligated to bring these patients the tools and processes that can get them the best results.” ■