

Kent Imaging – Providing Actionable Data to Assist with Wound Healing and Support Positive Patient Outcomes



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CEOCFO: *Mr. Lemire, according to the Kent Imaging site, your mission is to "Help Improve Outcomes and Reduce Complications in as Many Patients as Possible." How so?*

Mr. Lemire: Our approach is to develop tools and solutions for physicians that aid them in clinical decision-making. We do this by providing insight into the viability of tissue in and around the wound – helping them to understand what is happening below the surface, and to ensure that the treatment and healing protocols they are putting in place are well vetted. Our solutions provide actionable data to assist with wound healing and support positive patient outcomes.

CEOCFO: *Why are wounds still such a big problem?*

Mr. Lemire: I think there is a lot that we all still need to understand about how wounds form, the complexities of the healing process, and how these wounds react to different treatments. There is only so much the physicians can do as patient compliance also plays a big role in the success of therapeutic treatments. Patients may often be missing some of the information or tools they need to really understand what is happening or why they are being asked to do it. Offloading, for example, is a big part of treatment. Ensuring that the patient is staying off the wound and giving it the opportunity to heal is critical, but many patients won't do it because it's inconvenient.

CEOCFO: *What is the approach at Kent Imaging and what have you developed?*

Mr. Lemire: Tissue oxygenation can be a predictor of healing and can provide insight that a change of care plan may be warranted. Kent has developed an imaging device called Snapshot_{NIR} that uses near-infrared light to look at tissue oxygenation in and around the wound. The device shows if oxygen is getting to the wound, and if this oxygen is offloading into the tissue. It also helps to confirm if the treatments physicians are using to increase oxygenation are making a difference, whether that is hyperbaric oxygen therapy (HBOT) or an advanced wound therapy such as a skin substitute. Changes to a wound can be subtle and often not visible with the eye. Diagnostic tools like Snapshot_{NIR} are extremely valuable in really understanding what is happening below the surface in the microvasculature network of the tissue.

CEO CFO: *What is near-infrared light and how clear-cut are the results?*

Mr. Lemire: Snapshot_{NIR} reads the presence of hemoglobin in the tissue and whether that hemoglobin is carrying oxygen or not. Hemoglobin has reflective properties when it comes to different wavelengths of light and these reflected wavelengths are excellent at telling us what is happening within and around a wound and provides a means for the physicians to document and track changes over time.

When we take an image with Snapshot_{NIR}, it generates data that will allow the physicians to quickly see if there is an acceptable amount of hemoglobin that is carrying oxygen or not, and what that ratio is. From this information, they can better understand what the underlying issue may be. For example, if there is an issue with venous congestion, which means there is blood and oxygen being delivered to the wound area, but it is not getting out, it is congesting in the wound causing problems. It will also show if there is arterial insufficiency, which means there is not enough arterial blood getting to the region and patients may need to be sent off to vascular to increase the amount of arterial blood that gets into the wound.

The great thing about the technology is that it is completely non-invasive. You do not touch the wound, or the patient, and multiple images can be captured. Some of the existing technology that has been used in the past requires a lead to be placed on the tissue that must be warmed-up for a significant amount of time beforehand, or you would need to inject the patient with dye. These methods are not conducive to capturing images in the examination room, wound clinic or on a ward. Imaging with near-infrared spectroscopy (NIRS) is very actionable and low-risk for the patient.

CEO CFO: *Are you selling the device or software; what is the physical product?*

Mr. Lemire: We are selling the device (Snapshot_{NIR}) that is used for imaging and we are also selling the solution to integrate the images into the electronic medical record (EMR). At the end of the day, you want to get the information into the patient chart which also enhances communication with the other specialty groups caring for the patient.

CEOFCO: *Does the doctor need much training to read the image? Is there much decision-making that the doctor has to make or is it pretty clear-cut?*

Mr. Lemire: There is training required because there are many different types of wounds, and each stage of the wound presents differently on the device. We take the time to educate medical professionals on the different wound phases and interpretation considerations to understand how the imaging is indicative of what is happening in both the wound and in the therapy that they are applying to that wound.

CEOFCO: *What is the 4.0 version that was not in the earlier versions?*

Mr. Lemire: We have several important improvements in this latest iteration of Snapshot_{NIR}. It is faster and therefore more economical to use. One of the biggest things is that you now do not have to calibrate the device every time you use it. Reducing the amount of time it takes for physicians to get ready and start imaging is a big workflow improvement. "Time is tissue," so the sooner images are taken, the sooner you can understand what is going on.

We have updated the user interface, added tools to enhance the image review, made improvements to image navigation, and provided better reporting to help get the data into the clinical chart and integrated into the overall workflow. Making workflow improvements is a high priority and most of these upgrades came directly from clinician and client feedback. We take our clinicians' feedback very seriously and respond with constant improvements to enhance the use of the device.

CEOFCO: *What has been the reception from the medical community; is education needed?*

Mr. Lemire: Learning new technology is something that takes time. The early adopters experience the value very quickly but understanding and interpreting the images takes time and training for any imaging device. There is still a lot of education to do to understand the technology and how to apply it in clinical practice and workflow to improve outcomes and reduce complications for patients.

CEOFCO: *How do you reach out to practices and hospitals, and should you reach out to patients as well?*

Mr. Lemire: We educate the medical community by participating in, and working with, organizations that create medical education that is CME certified. We work closely with key opinion leaders who understand the technology and are willing to communicate the benefits [of this technology] to clinical practice and patient outcomes. This type of communication usually takes place at industry events (trade shows) and through educational webinars or symposia.

We also share customer stories, educational newsletters, publications, and case studies about the technology, and more importantly, how clinicians have used this technology to heal wounds. And of course, we have a dedicated team of product and clinical experts.

CEOFCO: *Where does cost come into play?*

Mr. Lemire: Understandably, cost is a concern, especially in smaller clinics. COVID has consumed most of the dollars over the last few years so when new technology is considered, it can be challenging to secure the required funding when COVID remains the focus. Reimbursement is also important, and we are working with CMS (Centers for Medicare & Medicaid Services) to get the required reimbursement codes to provide clinician payment for the use of this innovative technology. When applied effectively, the technology will save costs. It can help to reduce the time it takes to heal wounds because clinicians have a better understanding of what is happening on a regular basis, providing them with the insight to make faster and more effective decisions regarding the care continuum.

If a patient comes in to see a doctor and the doctor suspects they have a broken arm, what is the first thing they do? They send them for an x-ray. While wound care has been absent of those types of obvious technologies, Snapshot_{NIR} is one of those technologies that help physicians understand the likelihood of wound healing - whether or not there is oxygen coming into a wound with visual, actionable data. It can illustrate to medical professionals the need to deal with the oxygenation insufficiencies first because any other treatment they try will not be effective if they don't.

CEOCFO: *Is there maintenance needed on the device?*

Mr. Lemire: Other than keeping it clean and the battery charged, there is no maintenance that is required.

CEOCFO: *Are you strictly in the US at this point?*

Mr. Lemire: US, Canada, and some international markets.

CEOCFO: *Do you see some areas as better prospects than others, whether it is cities, larger facilities, or geographies?*

Mr. Lemire: Chronic wounds are pervasive worldwide which means that anywhere clinicians are seeing the value in this insightful, actionable data is a good candidate for the device. Clinicians using advanced wound therapies to heal chronic wounds would certainly benefit. In the US, we have several key opinion leaders who see the value in this technology, and they are helping us promote it.

CEOCFO: *Are you seeking funding, investment, partnerships?*

Mr. Lemire: Not at the moment. We were a year-and-a-half ago when we successfully secured funding from TVM Life Science. They have been a fantastic partner, and very supportive, not only from the financial aspect but also as members of our board, providing guidance. We are happy with how this partnership has gone.

CEOCFO: *How do you deal with some of the frustration in knowing you have something that can make a real difference for a lot of people, and it is such an arduous process to get it fully adopted in the way it should be?*

Mr. Lemire: Having clear objectives that are measured is a big part. The Kent team has been creating technology for many years. We have great experience in this area. We believe in the vision and the technology, and we know it takes time to be adopted, especially in

healthcare. We are managing the expectations of the team and are a very patient group of Canadians. We understand that we will succeed in time.

CEOCFO: *With so many new ideas to look at in health, why pay attention to Kent Imaging?*

Mr. Lemire: The technology that we are developing with the use of near-infrared imaging is unique and extremely valuable. It is starting to change the way clinicians treat both acute and chronic wounds with actionable insights they never had before. Not only is that invaluable to the clinician but the ability to communicate to the patient what is happening and how they can better participate in the healing of their own wounds is very impactful.

When we start showing patients their images and say "This is how your wound has changed from last week to this week, and if you follow this course of treatment between visits, you are going to continue to see these (oxygenation) numbers go up," all of a sudden, their eyes widen and they perk-up a little bit and say, "Oh, now I see what you are trying to do." The patient immediately becomes more engaged. Without patient compliance, the success of treating wounds can falter. Our technology is helping to change that.

