

# Skin and Wound Care Training – Video Transcript

Welcome to today's Developmental Disabilities Division webinar. My name is Stacy Haitsuka.

I'm a member of the Developmental Disabilities Division training team, and I'm helping to facilitate today's webinar.

Today we're going to be talking about skin and wound care.

We will be hearing from two presenters, and I'd like to briefly introduce them now. Dr. Ryan Lee...

Dr. Lee is our medical director here at the Developmental Disabilities Division.

He will be sharing with us... some information to help us to know how the topic of skin and wound care relates to participants who receive services from the Developmental Disabilities Division.

And, Dr. Katherine Oliver is here. Dr. Oliver is a subject matter expert in wound care... with many years of experience... in various community and in-patient settings.

We are so thankful for both of them for being here today... to present on this topic.

So... Dr. Lee is going to share a proper introduction of... Dr. Oliver (and her background) before she starts.

Today...we are recording... the webinar so we'll let you know... when it's available on our DDD website, and you'll be able to pick it up there... (for both the recording and the handouts).

Okay. Questions... if you have questions for Dr. Oliver during today's webinar, you should put those questions into the Q&A... forum.

So, you can find that... either it's above or below my... camera screen here.

You should be able to... click in there, and type your question into that Zoom box. Okay.

During the presentation, Dr. Oliver will take a couple [of] times to pause, and we'll take a look at the questions that are in there... and be able to answer... as many as we can. Alright. Okay.

So, I'm going to turn my camera off and mute my microphone— as we transition to Dr. Lee to start us off with today's presentation.

Thank you, Dr. Lee.

**Dr. Lee:** Yeah, thanks Stacy! We can get going with the next slide.

So, I will be brief— just so you guys know just setting the table for Dr. Oliver to do the main portion of the discussion.

But, the reason why we are... here with Dr. Oliver is to discuss... wound care, skin ulcers... and those types of injuries to the body that may have relevance.

And, we study things at the DDD called adverse events. And, these happen... these are events that happen to our participants.

And, during the fiscal years of 23 and 24, there were a total of 51... adverse events... that were reported related to skin problems. And for reference, we have about 3,500... participants within our division.

The mortality review is a committee that I sit on also. This is... this reviews people who pass away within our... division.

And, in 2024 fiscal year, there were two participants who had deceased, and they were residing in licensed and certified settings. And, they were found to have a stage 4 pressure ulcer... when they were hospitalized.

This did not... this may not have directly correlated with their death, but... we do feel that pressure ulcers (especially at high stages) provide a significant risk... to mortality or death.

We want to prevent... early death.

We want early detection of skin injuries (especially in our population that is more vulnerable with I/DD). Next slide please.

Adverse event reports with skin problems per island. So, you're looking at data... in fiscal years 23 and 24.

And, these are just some raw numbers there. On the left, fiscal year 23, demonstrated Oahu had the highest.

We do have the largest population of participants on Oahu... but in fiscal year 23 there was about 18. And then... Big Island of Hawaii 7, Maui 1, and Hawaii 3.

And, it remained roughly the same for fiscal year 24. Next slide.

So, Dr. Katherine Oliver... comes to us as highly credentialed and qualified to present this... information to us.

She's on the American Board of Wound Management... and certified wound

She is board certified as an emergency room physician... and practiced wound care for the past 8 years. She grew up on... Hawaii Island, and went to the same place I went to, John A. Burns School of Medicine.

She did her emergency medicine training at a... little place in California called Stanford.

Some of you may have heard of it. [Laughing] And... she did a fellowship also in emergency medicine and ultrasound and education. So, she's an academician... coming from such a prestigious place.

She's worked at the Queen's Medical Center... emergency department for 13 years, and some urgent care too.

She staffs the wound clinic— so she has practical experience... currently... and she continues to consult on wounds... through the Queen's Medical Center.

Her life is well-rounded. It looks like she enjoys running, gardening, lei making, and... she has a couple high school daughters (or maybe more than that). She didn't specify.

But, daughters competing in tennis, and cross country, and track events.

But, let's welcome... Dr. Katherine Oliver.

**Stacy:** Mmm...hmm.

**Katherine:** Alright. Okay, so I'm going to transition to... my screen here. We can see if we can do that.

Here we go. Share.

Sharing screen is paused.

[Inaudible]

Why is that not working? Should I try... I'm going to stop sharing, and share again.

**Stacy:** I would recommend that. Yeah.

Stop and do one more time.

**Katherine:** Let's do that.

Hmm.

Any ideas?

**Stacy:** Maybe on your Canva? Did we leave Canva up on full screen? You might have to bring it down back into... Canva (just as the working slides).

**Katherine:** Okay... so, I'm back there now.

**Stacy:** Okay.

**Katherine:** I'll just refresh.

**Stacy:** Okay.

**Katherine:** Sorry guys! [Laughing] We tested this out beforehand, and it worked fine.

**Stacy:** Yeah... OK.

Sometimes it gets stuck in a full screen mode.

**Katherine:** Yeah. Okay. Let's try...

**Stacy:** And then, bring it up just like you would be editing it. And then... once you have it on the screen, then put it in full screen mode. There you go.

**Katherine:** That better?

**Stacy:** There you go!

**Katherine:** Whew!

Okay, now we got full screen. Okay. Alright. And, people can hear me. Okay.

I'm used to talking to people that I can actually see. So, this is always a little interesting.

**Stacy:** You're doing great!

**Katherine:** Okay. Thanks so much for joining me this afternoon. I am so surprised and honored that so many people decided that they thought this would be... a useful way to spend their afternoon.

So, thank you for the lovely introduction. But really, what I want to do is... make this a valuable... experience for you... that you come away with some... usable... information and... ways to take care of people.

So, there's lots of types of wounds out there. I think more... I thought... would be most helpful... is we'll really focus mostly on pressure wounds today.

And, I'll talk... we'll talk about like... learning how to identify them and how we typically classify and describe them.

I wanted to add in a few mimics— so things that maybe look like pressure ulcers but not actually from pressure. That can kind of trick you.

And then, we'll talk about how to prevent these wounds... (as far as we know), and how we go about treating them.

And, along the way, I want to add in a little bit of tips and tricks that I think could be helpful.

And, my goal is to talk... some... (maybe about 30 - 40 minutes).

And then, I want to have some time for you to ask your questions...that are particular— because this first time I'm talking to you.

So... I'm guessing what I think is going to be helpful, but I really want to hear from you think is... what you'd like to know.

Okay. So, as Ryan said already,... pressure sores are (in particular)... are very concerning events.

Part of the reason that we worry about them is that they're very expensive to take care of.

They usually result (or can result) in people needing to be hospitalized (which is expensive).

The care in the hospital is also expensive. And, like you said, that... occasionally it does result in somebody dying from their wound. Usually, the wound gets infected— and that's from that infection that that happens.

And then, also for the caregivers, I think it's really important to drive home that... when someone you're... taking care of your... (you said participants), if they have a pressure wound, the amount of time that takes to take care of that wound usually increases your workload by about 50% (which is huge).

So, if we can find ways to prevent these wounds from happening, we do a lot of good things. So that's what I wanted to stress there.

One thing I wanted to kind of... start with (for pressure sores) is... how do they happen?

Like their name says, it starts from pressure.

So, the skin is getting pressure from a hard surface... and then also... on the inside, it's getting pressure from the bone. And so... that's what that picture on the left shows. It's someone sitting down.

And, that's... that yellow thing is their sacrum and coccyx bone. And, you can see that... where the coccyx (or that red part at the bottom) is coming into contact with a hard surface.

And, the way... the reason I have a picture of an iceberg to the right of it is... that sometimes what we think is more likely happening... is that the damage to the skin is actually happening initially closest to the bone.

So, what that means is... that sometimes the pressure wound is already forming, and we have no idea.

You know, maybe the patient will complain that... maybe their back hurts a little bit, but... you'll look, and you'll say, "Oh, it looks fine. I don't know why it's... maybe it's just arthritis or something like that."

But, then, we start to see the skin changes.

And, those skin changes can be very late. And so... meaning that there's already a lot of tissue damage that's happened.

And so... by the time we see that... then sometimes the wound is already really big (even though when you look at the skin it looks very small).

And, that explains why sometimes (even when you start doing the things to improve pressure source, they will continue to look worse. But, it's really not that they're getting worse, it's that you're finally... seeing the full iceberg (everything that was below the surface).

**Stacy:** Dr. Oliver, sorry about that. Your slides, I know you're describing which one you're on, but we cannot see you advance them.

**Katherine:** Uh... huh.

**Stacy:** So... did you already... switch it into Canva full screen?

**Katherine:** Yeah, it's in Canva full screen.

**Stacy:** Okay. Because we're still only seeing... your first page in Canva edit.

So, I'm just wondering if maybe it's because... (yeah), you might have to....

**Katherine:** Maybe we stay in this mode. Can you see that?

Stacy: Mmm... hmm.

**Katherine:** The objectives slide.

**Stacy:** Yes.... can see... can see. It might be just...

It's not automating for you.

**Katherine:** Let's just do it this way. You can just see the behind the bones. Okay. So... here's the picture of the pressure sore (sorry), and the sacrum, and how it's kind of a pressure wound... is between a bone and the skin.

**Stacy:** Okay.

**Katherine:** Alright. We can see pressure... a location of pressure source now. Is that okay?

**Stacy:** Got it. Looks great!

**Katherine:** Yeah... okay. Okay. So, this line just kind of gives you a sense of where the common places to look... for where pressure sores will commonly appear based on the position that the person is commonly in.

So, for instance, if the person is lying down on their back... the high risk... most high-risk areas are going to be at their heels, at their sacrum which is kind of over the lower butt... their elbows or shoulders, and back of the head.

But, to be honest with you, it's mostly the butt and the heels that are the most common ones we'll see.

But, you can see if they're lying on their side, then you're going to get the bony areas on the leg too.

So, sort of the hip area... greater trochanter— which is kind of like the widest part of your body.

And, that bone there. The ankle can get it.

I don't have a lot of stomach sleepers, but you can imagine that can happen. And then, when you're sitting... then again it's on your... hip bone. So, kind of either cheek... and again the heels.

And, if they're sitting in more of a chair, you can get on the feet too. So, in general, you're mostly concentrated on the butt area.

So, sacrum, ischium, and greater trochanter. So, kind of all in that on that lower area.

But, the important thing to remember is that... while I've stressed that it's over a bony area, if have a device on (say like a mask for oxygen, or you have a cast, or a brace), those areas can cause pressure in... areas that you wouldn't necessarily expect. So, keep that in mind, too.

Okay. So, pressure sore classification. I don't expect you guys to learn all this today but... I think it's good to kind of have a sense of how we describe wounds.

So... basically there's kind of like six options... for what type of pressure sore you have. And, they are described as... there's one through four.

And then, there's one that you're like... I don't know how deep it is. And, we call that one un-stageable.

And then, there's one that is called a "deep tissue injury," and it really hasn't gotten to the surface yet.

And so, we don't really know (it's kind of evolving).

And so, let's break down each of these a little bit.

So, we'll start with stage one.

Stage one... it's kind of a trick question, because it's not actually a wound yet. So, the skin is totally intact.

But, one of the things that'll make it kind of stand out is that when you touch over that area of redness, it doesn't blanch.

So, for most times, if you have like a rash on your skin (and maybe like an insect bite or something like that), and you press your finger on it... it'll go from pink to like normal skin color. And then, when you let go, then the pinkness will come back.

With pressure sores that are at stage one, it does not blanch. It does not lose that pink color. It stays constant.

So, that's a way to distinguish (you know) something... like a rash from a stage one pressure wound.

Again, it's usually over a bony prominence. It can start to look like it might be a little infected. I mean... it's painful it can be warm to touch

And, the darker your skin color, you can imagine... it's a little harder to see. So, you want to keep that in mind, too.

So, that's stage one. So, stage one, nothing open, red spot that doesn't blanch. Okay.

Let's move on to stage two.

Stage two, again... we... now we have an open wound. And, the way I like to describe this one is it kind of looks like a blister that just opened up.

So, you know, like if you got... wore a new pair of shoes, and you got a blister and then it popped... it's got a really smooth surface. It's kind of pink in color.

That's what a stage two pressure sore looks like. So, equate stage two with a blister.

Stage three... this is the most common one I see. And, so this is one that's a little bit deeper than your stage two.

This is the one that's going to look a little bit... a little bit dirty.

It's going to look like... it's got some stuff on it. Maybe some yellow stuff... maybe some brown stuff. It's probably draining more.

And so, that's what a stage three is.

And then, stage four is the most serious of the... wounds. And, that's the one where... not only does it go down into skin, but also you have other structures exposed.

So, you have muscle exposed, or you have bone exposed, or tendon. And, these wounds are often really... oddly shaped. They'll have some tunnels that go will go off somewhere or (you know) really complicated shapes to them. Okay, so that's one through four.

And then, you have your un-stageable. And these ones... sorry they're a little bit gross... but good thing we're doing this after lunch.

They are also full thickness lost, but you really can't see the bottom of them.

So, you don't really know... is this a stage three or could it be a stage four?

And, you're not going to know until you do what's called debridement where you take all that... dead tissue (that yellow / black stuff off) and see what you have at the base of the wound.

So, oftentimes when a patient's first admitted to the hospital say they have... one of these wounds, we'll classify as an un-stageable wound (until we figure out what's at the base of it).

And then, the last one... is a suspected deep... tissue injury.

This one can look a lot like a bruise. You can see that on the picture there. The color is a really maroon color, and the surrounding skin can kind of look... kind of swollen. And, these ones are... I most often see them in patients that say...

I'll have some... an older patient that had a fall at home and was... unfortunately on the ground for maybe like 20 hours (or something awful like that).

And, when I first see their wounds in the emergency department (when they first come in), they often will look like this.

So, it's kind of an earlier... in the game of the... wound.

Okay. So, that's all of those six ones. So, I figured this is the perfect time for quizzing. And, quizzing, this is just a way to kind of... kind of get this into your head (as far as these wound types... and classifications), and help... I'm hoping to make it a little bit more memorable. So, if you don't get it right, who cares?

It's just a matter of trying to (like) learn this stuff a little bit. Okay.

So, I like to do things by cases. So, this is case number one. This is a 77 year-old female who is at her first day in a skilled nursing facility.

Her history is that she had been admitted to the hospital two weeks ago (because she had a lung infection or a pneumonia).

During that time in the hospital, she was in the intensive care unit for a little bit... and she even had to be intubated... to help her breathe for a while, but she's been off of that for about a week now.

And, she's starting some PT (or physical therapy) to get her strength back, but she has this wound on her on her backside. It's kind of on her upper sacrum.

So, taking a look at this wound and... and I would like you to kind of make a guess of what stage you think this wound is.

I'm going to just pause for a moment, let you contemplate, and then we'll move to the next slide, and I'll show you the answer.

Okay. Alright. Let's go!

So, this is a stage three decubitus ulcer. So... full thickness.

You can see some little bits of slough or yellow stuff on it. There's nothing that fully covers the wound. So, it's like it's not that un-stageable one.

And, you'll have to kind of trust me on this one, but there's no tendon. There's no muscle or bone exposed.

So, this is the most common one I see is stage three— so I figured we'd start there.

Okay, let's do another one. So, this is case number two.

This one is a 63 year-old male. He has a history... he's been at the skilled nursing facility for about a week now.

He had a tibia and fibula fracture— so a fracture of his lower leg... that happened three weeks ago. And, he had surgery for it, and they did... open reduction internal fixation. So, they kind of fixed the bones, and then they put him in a cast.

Okay. and he... had the cast at the time he got to the skilled nursing facility.

So, it's been on there for a few weeks now (yeah).

And, he's been complaining of increasing heel pain for the past 3 days.

And then you remove the cast, and you see that his heel looks like this.

So, how would you stage this wound?

So, you can see it looks really dark.

Give you a moment to think about it.

[Microphone Noise]

Okay, so this is a deep tissue injury. Okay, so the skin is still intact, but it's really dark (kind of a maroon purple color).

And, this is a pressure injury that occurred from the cast. And, we see this every once in a while.

Alright, on to case number three.

Oh boy... I don't want that thing. Sorry, guys.

Okay. So, this is a 84 year-old female recovering from a really bad urinary tract infection.

And for the past week, she's finally well enough to transfer the chair. But, she's kind of agitated, and she's refusing to do physical therapy.

She has a diaper for some intermittent incontinence.

And on exam, you see a non-blanching area of the skin on the buttocks. Okay. How would you stage this one?

Okay.

Alright. So, this is a stage one pressure sore, right? Because there's... it's non-blanching. You've got intact skin.

That area of redness is over the ischium (or kind of one of the butt bones that, you know, is what gets sore when you sit for a long time).

You've got this history of increased sitting, and there's no signs of maceration or shear.

Very good. Okay. Next one. So, this is case number four.

This one... I'm going to explain a little bit, but this is a 56 year-old male who has had a spinal cord injury... and he arrived at the... at this care facility with a stage four pressure wound. So, this one had... some tendon exposure. And, when you look at the top left picture here... this one here, you can kind of see that like shiny white stuff. That's muscle or tendon. Okay?

So, that's at the center of his wound. So, that's makes it a stage four.

Okay. And then, as you go to the right you can see... oh this is how his wound has been progressing over time.

So, he's... you see it's getting smaller and smaller. And then... oh yay... it actually heals up. Okay. And... what happened is that the patient was discharged from the skilled nursing facility at the time of the bottom left photo... okay— so where this... blue circle is.

So, my question for you (and this is.... I'm going to be upfront... this is kind of a trick question)— how would you stage this wound?

Okay.

So, this is a stage four pressure wound. And, you know, obviously it was a stage four up here.

But, what's not obvious is... that why is it stage four here? Because, we don't have any muscle or tendon exposed anymore.

And, you can take my word for it, there's no bone exposed either.

We just see subcutaneous fat. So, why is this a stage four? And, the reason is that... with pressure wounds, we do not do reverse staging (as they get better).

So... if you start as a four... you're always a four. That wound is always a four (until it completely closes up).

Or, if you go to the point of a stage three— even as it gets healed and smaller, it never goes to a stage two... a stage one.

It always stays a stage three. Couple reasons for this: one is that as that wound heals... it's filling in with granulation tissue (which is almost as strong as the original skin, but not quite).

So, even though it heals, it's never really... the same. And so, it's always going to be an area that's weaker than before the wound ever occurred.

Okay? So, you never get 100% strength back.

Like bones... when they break... they heal, and they heal stronger often.

But, with skin... when it heals you're lucky if you get 80 to... 80% of the original strength of that area for (particularly for a large wound).

The other reason is... has to do with... when you're trying to get devices for offloading.

Often times, if you... did reverse staging a patient would lose their qualification for certain types of beds, or mattresses, or cushions, or that sort of thing.

But, we know that they're still at the same level risk that they were at before. And so, that's the other reason that they don't do reverse staging.

So, that's why you can look at a wound sometimes... and I'll tell you: "It's a stage four."

And, you're like... you'll look at it, and you'll say, "No, that's a stage three."

And, it may be that they were stage four before, and they've... gotten better.

Okay. Alright. I think this is the last one of the bunch. So, hopefully you guys are hanging in there with me.

Case number five. So, this is a 72-y old male who's recovering from COVID, and also had congestive heart failure exacerbation.

Previously was walking around, but now it's a little bit weaker, so kind of de-conditioned.

They restarted the Lasix 3 days ago, and now he's putting out a lot of urine because he's a little bit swollen.

And, this is what they have on the backside. And, they're asking you: "How would you stage this?"

Okay. So... sorry... another trick question.

So, you would initially think like, well, maybe this is like... a stage two, right? It looks like... or maybe stage one. You have to kind of get a closer look to see if it's open.

But, if you touched it... it would blanch. Sorry, I should have told you that.

But, it's also really wet. And so, this is moisture-associated dermatitis.

So, basically this is in some ways like a diaper rash. You know... the skin has been wet too long, it's getting irritated and you're having skin break down.

Okay. So, sometimes... I'll see patients that are diagnosed with a pressure wound... (when actually they don't have a pressure wound).

They have a moisture associated dermatitis. And, at this time of the year (when the weather is really hot), we see this a lot.

And, in addition, sometimes there's two processes going on. The patient will have... some pressure wound component. And, they will also have a moisture associated dermatitis (on top of things).

And so, you have to kind of treat both of those things to get them better.

Okay.

So, moisture-associated dermatitis is a mimic for a pressure sore. The other one I wanted to put in there... was shearing forces. This is kind of what happens when you get skin tears from sliding or dragging.

And, that usually happens with either the patient transferring themselves (trying to get in and out of bed, or in and out of chairs) or from, you know, well-meaning, you know... care providers that are trying to transition somebody. And, instead of being able to kind of lift them fully, they're trying to slide them a little bit. And, that causes tears in the skin.

And, you can kind of see... kind of at the top of this wound area where you kind of see like there's some skin that's kind of... been pulled off (and that sort of thing). And so, that's kind of a common way to kind of... try and determine like... this looks a little bit more like a sheer force than actually a pressure wound.

Pressure wound doesn't usually have that peeling of the skin on the edges.

Okay, quiz is over. Good job everybody with (you know) doing your thing with identifying pressure wounds.

I wanted to take kind of just a really quick break here, see if there's any questions about identifying pressure wounds or staging (and that sort of thing) before I go on to the next topic.

**Stacy:** I don't see anything new in the Q&A yet.

**Katherine:** Yeah, so far so good?

**Stacy:** Mmm... hmm.

**Katherine:** Ok. Alright... excellent! Okay.

So, next thing I wanted to talk about was... prevention.

Okay. There's that saying (right)— an ounce of prevention is worth a pound of cure.

So... we're going to do kind of a brief overview of those things. I think when you're talking about prevention... the main components that come to mind for me is movement

The more somebody moves, the less likely they're going to be stuck in one position with pressure in one area. Okay?

And, we'll talk a little bit more about each of these elements as... through the next slides.

The next component is what's called "offloading". So, that's my picture of floating here.

Just getting (you know)... relieving that pressure. Third one is hydration. Fourth is nutrition, and the fifth one is inspection. Yeah.

Okay. So, let's talk a little bit about movement.

So, this is one... they come out with this... sort of these guidelines. You know if you're sitting... then maybe every 20-30 minutes you should get up. I should probably take this my own advice for me when I'm sitting and doing my charts from... patient care.

And... I would... I'd say (like)... it's sometimes... it's nice to have defined things to do.

But, this is really just a (you know)... a suggestion of a place to start.

You know, if you're sitting for long periods of time, maybe try and getting up every 20 to 30 minutes (see if that helps with... with preventing things).

In general with lying down, if you're at higher risk for developing [a] pressure sore, then we'll usually turn... recommend turning people every two hours.

That every two hours is definitely something we'll recommend once they have a wound.

Prevention... you don't have to do every two hours.

But... it is something to kind of consider— that if you're lying in bed, you know, some people are lying in bed all day... then probably moving them every few hours is a good idea—whether that's just shifting from side-to-side, or (you know) front-to-back (that kind of thing).

And then, the more you can move and walk around (as long as it's can be done safely)— that's really helpful.

And, from my perspective... when I'm having a patient coming to the wound clinic, the thing that can be really helpful for me is to have... the caretaker (if the patient is not able to tell me themselves), give me a sense of what their daily activity is like.

You know... some of my patients will have family members come in and say: "You know what... grandpa gets up, he goes and sits in front of the TV, and he's there all day."

And, that's important information for me to know. Sometimes I get the story that... they not only spend the day in their recliner, but they also sleep in their recliner too.

And, that definitely changes my (you know) tact or plan of care for those patients when I know kind of... in general... how do they spend their day?

Offloading. So, you know, a lot of you, if you're involved in this, you're probably familiar with some of these concepts already.

But, offloading... (you know), the thing... that simple thing that you can do is... do what's called floating.

So, say somebody has a wound on their heel. So, it's right here.

Then you can put a cushion underneath, and then there's nothing touching that heel— so it's floating.

And, that's a great way to get pressure off of a wound.

Some people will have... a prevalon boot. This is commonly used in the hospital. It's like this little pillow that's kind of... velcroed around their... foot. That can be really helpful for getting pressure off of the wound.

Positioning is... is helpful too. So, if down here I have pictures of some wedge cushions that are... say this person has kind of an area on their right side that's either got a sore... or is (you know)... looking like it might get one. Then if we prop them up on their left side... then they can... they can offload that area.

This helps a lot for people... because a lot of times you have a preference for which position you sleep in at night.

And so, and especially if there's... if we have an older patient, and they're not able to (you know)... follow the instructions really well, just putting a little wedge under there gets the... job accomplished.

If someone is in a wheelchair... or just any kind of chair (I guess in reality), if they... do what we call "push-ups" in the chair where they kind of put their arms down and push up and just relieve the pressure on their bottom, (say trying to do it like 10 times an hour, or something like that)— that can be really effective, and... maintaining the circulation... to that area.

Hydration. So, that's also... important factors are (you know) taking in liquids (especially in my older patients). They don't like to drink as much fluids.

So, sometimes having them eat fruit is a way to get them to... to get their fluids in.

And, then also applying moisturizer. There's some... research that's coming out that's showing that... if you keep... if you apply moisturizer once or twice a day, you might decrease... the development of pressure sores... on various parts of the body (because the skin is just a lot stronger when it's moisturized, than when it's really dry).

So... it's a way that's really (you know), quite easy to do. So, I kind of... I encourage my patients to do that.

If you have pressure sores... on the... bottom area (like I said earlier), there's also often a problem with like too much moisture there— whether that's from sweat, or if it's from urine, or diarrhea.

And so, having kind of a cream on there to kind of serve as a barrier... to keep that stuff off of the surface of the skin... is a really good idea. The bottom left one (the Calmoseptine), you can get... (you know) over the counter. So, it's something you could just decide to go pick up yourself if you had that issue.

The one I most often use in the clinic is called "Triad", and that's on the right there.

That one... often we you need help with getting that ordered for you.

It tends to be a little bit thicker than the Calmoseptine— and that's why we like it a little better.

But, all of those things are helpful for... controlling the moisture on a wound.

Next one is nutrition. So, the way I like to describe it to patients is that protein... I look at it's like the building block for new skin.

So... a lot of times, I'm trying to... encourage patients to eat more protein

And, I like to use whole foods first. So, you know, like... try and get some more fish or chicken... beef / pork in your diet. If you like vegetable sources, and that's beans and tofu.

Some of my patients do not have a really good appetite. So, then I'll suggest (you know)... there's protein shakes.

Or, you can be kind of sneaky, and use a protein powder, and put it in whatever food they like.

I had one patient that really just liked ice cream, and that's really all they would eat

And, they were 95, and they were just like... that's all I'm going to do.

So, we just put the protein powder in the ice cream, and it worked really well (actually). So, it's kind of neat.

There's some other things like Juven. Juven has... got peptides... (which are the components of proteins), and some vitamins— and those things... can really help with... with some people if they're... if they're having a hard time taking in... the elements that they need to build new skin.

Okay. And, next one is inspection. And, this one is really helpful... for like... when family members or caretakers come in, and they have pictures of the wound (or patients will have pictures of their wound)... and they're like, "Do you want to see the pictures?" And, I was like... "Yes, I want to see the pictures." And, they're able to show me... kind of what this wound has done over... you know, because sometimes I'm seeing them after they've had this wound for several weeks.

So, yes, please take lots of pictures of the wound. I find that really, really helpful.

And, I think that's my biggest tip... for when you're managing wounds—because it can convey so much information to a... physician by looking at it...and also kind of timed it... like dates it... so that, you know, (like)... Oh... I think it was like two weeks ago, but when you look at the photo it's got the date on it— so you know exactly when it was like that.

The other things... that are really helpful for inspection that you can kind of keep track of is... how much drainage is coming out.

And, what's really helpful for me to know is like... how often... are you having to change a wound (because it's soaking through the drain... and soaking through the dressing).

So, for instance, if it's like once a day, that's one thing. If it's five times a day, that's a totally different scenario.

And I'll adjust my like dressing plan based on that. And, lastly, how painful is this wound?

If this wound is really painful, then there are other things on my mind, you know, like whether there might be some infection or something.

And, if it's not painful, and it looks like it should be, then we know that maybe there's some problems with sensation that we need to take into account.

Alright, so that's my prevention thing.

This is my slide about treatment. And, the thing I want you to take away with this... is this slide gets really busy.

So, when you're treating a pressure sore, not only do you need to continue all the things that you were doing to prevent the wound from happening in the first place... but then there's all these other things added on top of it.

And, that's why you get this like... significant increased workload (for anybody who's taking care of somebody with... pressure wounds).

So... as far as treatment goes, the offloading gets more fancy, right? You get special beds, you get special cushions and that sort of thing.

The dressings... that's... the thing that we'll spend a lot of time on in the wound center is ordering the dressing (so they have the right supplies).

We'll often get home health nursing to come help with doing some of the dressing changes... because it's a lot of work to change a dressing... multiple times a week, right?

What I often will be doing in the wound clinic is doing what's called debridement— where I'm removing dead tissue with using (you know)... tools like scissors, and forceps and scalpel to cut those... that bad tissue out.

So, we can encourage the good growth coming in. It's very much like pruning a garden. You're trying to prune the wound so that you just have healthy tissue in there.

Occasionally, the wounds will get infected. And so, you'll need to do some antibiotics.

And then, if the wound is really extensive, then they're looking at things like... what's called a wound vacuum. And, that's that picture there.

It's a suction device that helps to kind of suck in the edges of the wound and the bottom of the wound. And, it does a really good job of... managing a lot of drainage when it's really heavy.

And then, occasionally some people will need surgery to... repair their... big wounds.

And, that often will involve being in the hospital for several weeks... and then... having to really protect that area for several weeks after this. So, it's a huge undertaking.

I did want to touch on a few things about dressing.

You could talk you could talk to a wound physician for days about dressings, but I'm not going to overwhelm you with all that stuff.

But the main things with dressings, because this is probably the most common question I get is like, well, what should I put on this wound?

And, I think one of the main things to take away is that... dressings are really good for managing the amount of drainage coming out.

So, you tailor the wound to how much drainage there is. So, for a wound that's not draining very much... if it's a pressure sore on the bottom, I will commonly recommend either the triad or the Calmoseptine cream.

And, you actually don't need a bandage on it.

And... the bandage sometimes will backfire— because it'll trap in moisture, and you've already got too much moisture there to begin with.

For say... a skin tear on the arm, my most common recommendation will be do something like a medicated honey... with a simple sort of non-stick bandage on top of that.

And, I like that one because it keeps the wound a little bit moist. And, I tell patients that wounds like to be not too wet, not too dry. They're kind of like Goldilocks.

If you leave a wound open to air all the time, a lot of patients will ask me like... "Well, I'm just want to leave it open, because it will dry out and heal faster"

And... while wounds that are too wet... are... won't heal faster, wounds that are too dry also won't heal as fast as they could. You want to get it a little bit moist.

So, I try and convince patients to... cover all their wounds— because it'll help them heal faster.

And, the other reason I tell them to do that... is it helps prevent infection.

Wounds that are uncovered are going to be much more likely to get infected.

And then, the third thing that the dressing can do is it can help...protect it from, you know, bumps and scrapes and that sort of thing (and further injury to it).

So, it provides a little bit of padding.

So, at my home, I don't... antibiotic ointment can work well, too. A lot of people will have like maybe a triple antibiotic in their household or... maybe a leftover prescription of maybe Puracyn (or something like that).

I tend to like the honey gel a little bit better than... than those antibiotic ointments for two reasons. One reason is... some people are allergic to some of the antibiotics (and antibiotic ointments)— particularly Neosporin. The neomycin allergy affects people.

And, that can cause rash and make the wound worse.

And, I don't see as much allergic reactions to honey— so that's why I like that one up a little bit better a little bit safer.

The second reason is the ointment sometimes will make a wound too wet.

And so, that's the... and honey (though it does add a little bit of moisture), doesn't.

So, that's why I prefer that one. So, that's what's in my medicine cabinet at home. Umm...

Okay. And then, the other thing I wanted to touch on (since we talked about, you know, maybe some patients needing antibiotics for infection)— a lot of times I get the question... you know, like... "Well, how do I tell if the wound is infected"?

There's the classic symptoms. So, if you see a lot of redness... on the skin, you know, around the wound. So, for instance, goodness, look at this person's leg.

You can see this red streak going all the way up there. So, that's a sign of... what we call "Lymphangitis" (or spreading infection). So, he probably has a wound down here on the foot.

And then, it's spreading through like... the skin and getting worse.

So, that's a definitely sign of redness. Around this wound here... you can see kind of the edges of the wound are looking kind of reddish compared to the outer skin, right?

Usually, there'll be quite a increase in pain when the wound goes from not being infected to being infected. So, if you have a... somebody who's all of a sudden starting to complain of having a lot of pain— that would be concerning.

And then, if the wound is getting bigger. So, say you've been taking pictures of it, and you notice that the wound is getting bigger and bigger. Then... that would be a concern.

And lastly, the drainage. A lot of times people will say, "Oh, you know, the drainage wasn't too bad. Now it's a lot heavier" or... "Now... I can smell it." If you smell it, then there's... then there's bacteria in there. And then... what should happen is... that the patient should get... a culture done.

And, that way we can identify what bacteria is there— so that, you know... we can make sure that we pick the right antibiotics that are going to be most effective.

Okay.

Alright. So, we covered a lot of stuff here. I hope some of that has been... either review for you, some of it new, some of it helpful.

But, we talked about pressure wounds. We said that there's six types.

You know, when you're talking about classifying them, there's stages one through four.

There's un-stageable wounds— when you there's so much debris on the top, you don't know how deep they go.

And then, there's deep tissue injury— which is... hasn't really broken through the skin, but it's that deep, deep purple color.

That's sign of a significant injury.

We talked about how you don't reverse stage. So, if you go to a stage four, you don't go back to a stage three or stage two. You stay at that stage four.

We talked about things that can look like pressure wounds (that are kind of mimics)— so that's the moisture-associated dermatitis, or moisture rash, or diaper rash kind of look.

And then, shearing forces— which is kind of when you slide or... drag the skin on the surface.

We talked about prevention... and those elements there. And then, all the additional things that you would do for treatment.

I feel like the top tips I have is... (you know) like... taking photos of a wound can be really helpful for conveying a lot of information— when you're trying to show somebody the wound over time and how it's been doing.

And, to monitor... someone's activity, (you know)... how much time are they spending in a chair or in bed?

And, if you were going to go out and get some things to have in your own household, (you know) having some honey gel for sure. If you have anybody that's at risk for having (you know), sores... (like bed sore types over the bottom), then having some Calmoseptine (if you had something develop, and it's really early)—would be a good thing to have.

Okay.

Bonus thing is... I found this online that I thought was like a good tip sheet, like if you wanted to review kind of things about skin and pressure wounds. In general, I thought this was a good thing to have—so that's why I threw that in there.

And really, what I wanted to do is just kind of open up to you guys... and... have you asked me questions about anything that you've kind of come across or... were curious about.

Doesn't have to be just pressure wounds.

And, I'm happy to try and... answer those (as best I can) for you today.

**Stacy:** Great. Thank you so much for all of that information. And, like you're saying about having pictures.

I don't know about all the other attendees, but for me, seeing... the photos were very helpful... (very eye opening).

I'm not used to seeing those types of (you know) stages of (you know)... wounds

So, that definitely helps me to center myself on what it is that I'm looking at... what I should be aware of... (when I'm making an assessment).

Okay, so we're looking at... several questions in the Q&A. Let me... get some of these out to you.

So, the first couple questions are about... moisturizing... question... for your comments. What about... Vaseline... using it in... the area for moisture... moisturizing during ICP changes?

I don't know if ICP is inter-cranial something change (I'm not sure)... pressure changes.

**Katherine:** Okay. I guess my question is like... which... area of the body are we talking? Like is this up...

like if it's inter-cranial... like is this kind of...

**Stacy:** Head... neck?

**Katherine:** Yeah.

**Stacy:** Hmm...mmm.

So, the other question (similarly-related) is just... in general... can Vaseline be used as a moisturizer?

**Katherine:** Yeah. So, I will say... so I see Vaseline recommended a lot by dermatologists. And, I think it can be a very good one.

For some of... in my practice... a lot of the times what I'm dealing with is wounds on the leg.

That's probably the most common sore I see. And, it's not necessarily from pressure. It's usually from... people have leg swelling, and then their leg kind of opens up, starts weeping. So, I... I'm dealing with wounds that have a lot of liquid.

So, Vaseline (I find) tends to kind of sometimes be too much moisture.

So, if I was just going to say like... a day-to-day like moisturizer for skin, I commonly will recommend things like Cetaphil or Eucerin or CeraVe.

And so... it's kind of like a (you know), comes in a tub in the section of... (you know) Longs or Walgreens that says dermatologists are recommended for sensitive skin.

You want things that don't have perfumes, don't have dyes.

Those ones tend to work really well. The other thing... that you could go like... kind of the more natural route... and... we can... we will recommend like kukui nut oil or coconut oil (if they wanted to use that as their moisturizer for the skin).

One of the plastic surgeons I like to work with... he's.... he loves coconut oil. He's like, "Oh, just use the coconut oil."

And so, he'll be (you know) doing all these complex repairs and (you know) and they'll have these incisions... and he's trying to make sure they stay healthy and he'll be (you know)... you're not putting your moisturizer around the wound. He doesn't want it in the wound.

But, he wants it around... the skin around it— because then if the skin is moisturized, it's a lot stronger. It can hang.

Trying to think of Vaseline... I do use it particularly sometimes when... some of the dressings are sticking too much— you know, that there's not that much drainage.

So, I want it covered, but I don't want every time I remove the bandage that I take stuff with it (if you catch what I mean).

Like I... sometimes when you remove a bandage (especially as on older skin), it can tear the skin or on really young... (you know, babies and that sort of thing, you know), it can remove skin when you take off a bandage. So, having a little bit of Vaseline there can be really helpful (for making it release easily).

**Stacy:** Got it. Okay so... back to the first question.

I got some clarification from the attendees. Thank you so much. So, it's related to incontinence... incontinent supplies. So, how about using Vaseline... to those areas when you're moisturizing during... changing.

**Katherine:** Okay. So, for incontinence, so we're kind of talking about like... the diaper area.

So, my favorite is Calmoseptine or Triad. And, because it... it's kind of... it kind of keeps the moisture off of the skin. It kind of creates a (I think of it like)... a barrier cream.

So... say it's got zinc in it— so it's a very much like... diaper rash cream.

And, it dries a little weird in that you put it on, and it's pretty sticky, and you're kind of tempted to (kind of) want to clean it off when you're putting on the next layer. But, actually, it works better if you just... put another layer on top of it. So, you just want to apply a little bit and you just keep going, and... it works really well.

**Stacy:** Great. Changing subject... to honey gel.

So, can the medicated honey gel... is it over the counter or is it... by prescription? Can you get it from a drugstore?

**Katherine:** So, it's over the counter. It's a little bit harder to find than I think it should be... to be honest with you.

So... I often will order mine on Amazon— partly because I'm busy, and I just don't want to go to the store. And then, part of it is that oftentimes I go to the store and they don't have it in stock that day, and then I get real frustrated.

So, the common brands that we'll use is like the honey or meta honey.

Most of these ones have... is... Manuka honey.

So, Manuka is a tree in New Zealand. And, that tree puts out a lot of pollen that has all these... bioflavonoids.

So, these chemicals that have... that are... fight bacteria. So, when the bees... make their honey from that tree, that honey actually has compared to other types of honey... more

bacterial fighting properties to it. So, that's why you'll see Manuka honey being mentioned as it.

The difference... sometimes I'll get the question of like... "Well can I just use honey from (you know) the grocery store?

You probably could, but we usually don't recommend that.

The medicated honey has been specially treated, so it doesn't have any spores or other kinds of things.

So, it's a... cleaner version— so it's safer. So, I definitely recommend getting that one.

Trying to think of what else I can say about honey. It's unfortunately not covered by insurance— which is a bummer because it works really well.

**Stacy:** And, speaking of insurance, just in terms of a procedural... because a lot of the attendees today here are caregivers or they're... residential... habilitation providers. So, in... when we're talking about these things that you can get over the counter, or you're talking about... different types of... moisturizers or options— is the recommendation though that they still should be... consulting with their... primary care physician... getting that as a written order some kind of... specification for the parameters before they...

**Katherine:** I think it's always helpful to have a bit of advice with these things— because a lot of times.... you're taking a look at the wound, and you're making your best guess of what you think is going to be helpful for it.

And then, you try it out, and then you have to reassess and see if you think it worked or not.

And, that's a lot to ask of a caretaker to figure... all that out on their own.

I mean... I was a ER doc for 13 years before I started doing wound care.

I thought I knew wounds. I'd done car accidents. I'd done (you know) all kinds of things, right?

And, I get to wound care, and I'm like... "I don't know a darn thing." You know? I was... I spent the first year learning a ton. So... it's okay to feel uncomfortable with these wounds because it's... but I think the more you have people kind of guiding you through... (you know) well, that one didn't work as well or that one helped a little bit,

I think it's really helpful. And, again, kind of a framework... of where to start, and then when to reassess, is really helpful (yeah).

**Stacy:** Good... good advice. One more med honey... related question.

Could caregivers request for medicated honey... instead of a triple antibiotic ointment?

For example, when using medicated honey... do we have to cover it with a band-aid or something else?

**Katherine:** I usually recommend covering it. You probably could get away without doing it.

Sometimes... I have some patients that are like, "No, I'm not going to wear a bandage." I'm like, "Okay, let's put the honey on." [Laughing]

It's sticky— so if you're not going to cover it, you're going to be a bit sticky.

So, there's that. Some people (particularly people that are houseless)... we don't tend to use honey for them because it can attract ants.

So, that is sometimes a drawback of the honey.

Keep that in mind. But, if you have a bandage over it, usually that's not a problem for most. And, you know, like... in those kind of situations, it's only the people that are... (yeah) that are... that aren't housed that I've seen them have issues with ants.

**Stacy:** Okay. And, in comparison with the triple antibiotic ointment, do you have any like pros/cons for medicated honey versus the ointment version?

**Katherine:** So, I think I have a lot of referral bias.

So, I see all the people where the antibiotic ointment did not work, right? Because, if it worked at the primary care's office, they don't come to me.

So, I think my best advice is, I mean, triple antibiotics... very accessible, right? Most people have it in their homes.

So, you know, even though it's not my favorite... if you have it handy, try it. If it works, great! Then... you're good.

But, if you find that it's not working, then... my suspicion is it's adding too much moisture, and we need to try something different— either removing ointments altogether (and all gels), and just putting something foam that just absorbs drainage... or we might be able to just shift a little bit to honey.

And, that's not adding as much, and... get the wound... getting better that way. Yeah.

**Stacy:** Alright.

So, a question and a comment. I'm sure you have treated... Kennedy terminal ulcer.

One, where is the most common site? And two, what is the treatment, or goal of care?

**Katherine:** Wow. So, for those that don't know, Kennedy ulcers are sort of... they look a lot like pressure ulcers.

And, in some ways, they're very similar... as far as...it's dying skin tissue (which is what's in a pressure wound, too).

Kennedy ulcers are associated... they're... with being terminal.

So, these are usually people that are probably going to pass away within (I don't know), days to maybe a week.

And, as last I heard, they're very hard to tell the difference sometimes between a pressure sore and what's a Kennedy ulcer.

And so, this comes up sometimes with skilled nursing facilities because it...

if they have a pressure sore, it's considered (you know) kind of a ding against them like, "Oh, you didn't (you know) prevent this ulcer that you should have been able to prevent" (which isn't always the case).

And, or it's a Kennedy ulcer, and it was going to happen no matter what you did— because this person is... passing away (or is dying).

So, they look awfully... pretty similar.

They're a little... but... (I think) in general you just try and make them comfortable— try not let it get infected.

But, that's a really... it's a... it's an interesting topic, because... it's... it creates a lot of... kind of consternation (particularly in the skilled nursing facilities)— of whether it's... something's a pressure wound or a Kennedy ulcer.

Stacy: Okay. In terms of examination and consultation... when... is the recommended time to contact a medical professional to request an exam or consult regarding a pressure sore?

Start with a PCP, or is it better to find a wound specialist (such as yourself)?

**Katherine:** So, I think, most of the time, you'll need to get a referral to come to the wound center.

That can come from several different places. So, we will commonly get them from the primary care physician.

Sometimes, we'll get it from the emergency department... or if somebody was in the hospital, and had a pressure sore, and they'll get referred from the hospital.

So, usually they do need to get some kind of referral. So, if you if this happens in the home, then I think the first call would be to your primary care physician.

Yeah.

[Microphone Noise]

**Stacy:** Okay. Oh okay. This question is about rashes... and specifically in the folds of obese... patients.

What are the best products... to apply for these areas?

**Katherine:** Oh... okay. I'll tell you my favorites. So, you're trying to kind of control the moisture, right?

And then, you're thinking there's probably some fungus in there... that's causing some of that rash too, right?

So, one of the things we'll start with is like Nystatin powder.

So, Nystatin powder has like... because it's a powder, it'll help dry it out a little bit.

The Nystatin sometimes can work for some of the fungal agents (not all of them). So, that's usually where I start.

If I feel like I need more drying capability, there's this stuff called "Interdry"—which basically looks like a gray fabric (like strips of gray fabric). And, you just put that in the creases, and it just stays there, and it helps to kind of wick away that moisture.

And then, sometimes (for some of the fungals) it doesn't really respond to the Nystatin powder. So, the next thing I'll try is Clotrimazol—which is a cream... which is not my favorite because, again, you're adding a little bit of moisture, and you're trying to take it away (take away moisture). But, I find for the stubborn ones... that sometimes works really well.

**Stacy:** Nice. Okay.

**Katherine:** Oh, and then (you know) the other thing I do sometimes too is... you can use a hair dryer.

So, say that just... it's like... it's this time of year, everybody's sweaty. You turn on the hair dryer, you put it on the cold setting.

And then, you just have them kind of (you know) after they get out of the shower (or whatever), just dry those areas out.

And sometimes, that can make a big difference, too.

Sounds simple, but it actually really helps.

**Stacy:** Got it. Got it. To fully... get all of that moisture wick off. That sounds like a good idea.

Okay. Oh, thumbs up. Okay. What is your thought on a wet to dry dressing for stage four?

**Katherine:** Okay. Yeah. So, we use those for quite a bit. So, the beauty of wet to dry... dressings are they are inexpensive.

But... the downfall of them is that they're very labor intensive.

So, commonly if we have someone come into the hospital, they've got a stage four wound, it's... then we will ask... we'll put the orders in to do wet to dry dressing changes three times a day.

And, what that happens is that you're able to kind of like take off a little bit of that slough (or that dead tissue) with each dressing change— but in a manner that's tolerable for the patient, right?

But, if you're asking a family member who works to try and manage changing a butt wound dressing three times a day, they're going to look at you like you're cross-eyed.

Like there's... it's just (you know), it's not feasible.

And then, if the wound is really smelly, in addition... instead of just doing like a wet to dry saline, then we usually will use a solution called Dakin's.

It's also called sodium hypochlorite. It's a diluted bleach solution.

And, that does a really good job with odor— because a lot of times these really deep... stage four pressure wounds have a really strong smell.

And, you just want to... and that's the bacteria in there, and you just want to get that out.

Soaking it in some Dakin's, and then putting that on the wound, and doing wet to dry that way.

Surgeons love wet to dry dressings. And, they are... they're great, but they're just very labor intensive.

So, for a lot of our patients that have... (because I deal with a lot of older patients), they don't have that much dexterity. They can't reach their foot.

Some (you know) a dressing that's done once a day... is feasible by a family member. But, to ask the patient to do it or... a family member to do something multiple times a day... doesn't usually work out.

**Stacy:** Okay. Something... maybe not exactly related, but still related to stage four wound care.

So, the best dressing... for... stage 4... ear to nose bone prominence... what would you recommend?

Or, is it better to keep it OTA— so open to air... all the time?

**Katherine:** Sorry, the ear to...

**Stacy:** Just... it's ear to nose... the bony prominence. So, maybe I'm thinking... ear to nose... so somewhere here. I'm not sure.

**Katherine:** There's a big wound on here. And, what would you do?

**Stacy:** Yeah. What would you do? Or, would you just... leave it open to air, or have it exposed all the time?

**Katherine:** So, trying to think of like ones that I've had recently like... so... and these ones are... these ones are odd— so this may not fit perfectly.

But, sometimes, I'll have patients that have... cancers... of the oral pharynx that will erode through the face. And so, I'll have the issue of... they'll have a wound that's draining quite a bit because (you know), some of the fluids from the mouth are coming out. And then, they have fluid coming out from the tissue... but it's connecting with the mouth. So, I don't want to put anything in there that's going to... taste bad (right?) and not be okay to swallow.

So, for those ones... most often, I'll use like some... gauze... so kind of like a wet to dry (or more of a dry). And then, I'll put some honey on there.

So, I'll put honey (kind of) on the surface of the wound. And then, I'll put some gauze on top.

So, the honey kind of helps with the bacteria in that area. The gauze helps with the drainage.

It's an inexpensive dressing that they can change lots of times a day— because usually they have to change them a lot.

And, if it's on this area, I think most of the time, patients want something that covers— so that they don't... you know, it's... they can... be around other people. A lot of times they're really (you know) uncomfortable with having a sore [in] that area.

Does that does that help?

[No Audio]

**Stacy:** Okay. Here's a... interesting [question]. So, Ronnie is asking this question. My daughter had a back surgery, and the stitch opened, and it's been open for a long time. It does have drainage. Do you have suggestions?

**Katherine:** Yeah! Okay. So, like the fancy word we use for that is (like) "wound dehiscence", right? So, it was sewn closed... and then at some point in time (like), the stitches either are taken out, or even before the stitches are taken out, you're starting to see the edges separate, right?

So, the things you want to kind of keep in mind is... one is there's something happening to that area where those stitches are... where there's like friction or pressure that's... making that skin not able to do its job and close.

And so, you know, if it's on the area of the back (you know), is it... something that gets (you know), rubbed from a chair or something like that (or when sleeping).

And if that's the case, then you just want to try and pat it and try and offload that area.

That's one idea. Two, it could be moisture.

There could be some drainage that's coming from inside. Sometimes there's some fluid that's underneath where the skin was closed and it was (you know), kind of draining out.

And, you just want to encourage that fluid to come out.

So, putting something on there... like a... some kind of absorptive dressing— whether that's just gauze or... sometimes we'll use like a foam dressing to kind of help suck that fluid out.

And, if you can get that fluid out and the moisture balance right again, then that that area will close.

Every once in a while... there'll be an infection that happens. That's not super common.

We always worry about it, and we're always vigilant for... looking for that. But, sometimes that can be a scenario.

Usually, with that, there'll be a lot more redness around. There'll be pain associated with it. There'll be some pretty... strong signs that that's what's going on.

**Stacy:** Okay, great advice.

In terms of skin appearance, is darker skin appearing in the sacrum area [a] sign of a pressure sore?

**Katherine:** It can be. There's a few other things that can kind of look like it too.

Some people can kind of have congestion of their tissue there. If they don't get around very much, they can have some chronic skin changes there— similar to (you know) if you ever looked at some people as they get older, their legs skin tends to get darker (on their lower leg). That's usually from leaking of... blood from the veins out. And, it's kind of almost like tattooing the skin.

So, sometimes you see that, and you're like, "Oh, is that a pressure sore?" And you're like... and that can be a little hard to tease out. So, I would ask somebody to take a look at it (if you see those kinds of things) to say like... "Is this pressure sore, or is this just kind of... what we call Hemosiderin staining from the veins leaking?"

**Stacy:** Okay. Not related to any previous question... just a question being asked: "Is castor oil a good option?"

**Katherine:** Castor oil? Oh, I'm not super familiar with using that.

I know my dad used to drink it when he was young. So, I'm assuming it's kind of an oily substance.

So, I think it would (you know) provide some moisture.

And, it's probably got (you know) since it's from a fish, it probably has all kinds of good (you know)... omega something or others (either three or sixes, I forget which one).

It's not one I recommend, but I (you know)... I think it probably could have some benefits from a moisture standpoint. Yeah.

**Stacy:** Okay. Something to check in with... when you go to see your PCP for sure.

Okay. And then, just a couple questions... before we wrap up.

So, just wanting to clarify... a stage...and I think this is... you're asking about the quiz question. So, a stage is not reversible until it is closed. Is that correct?

Katherine: Yeah. So, if... (and I wish... I should have looked this up so I made... I get [it] right.

So, once a wound closes, it has to stay closed. I forget how many weeks it is. It has to stay closed.

So, say you close the wound one week and you're like, "Yay, the wound is gone."

And then, they sit a whole bunch, and the wound is open the next week. It's still a stage four.

But, that only counts... (and I'm sorry... I don't remember exactly what the date is, and I don't want to give you a guess because then that's just not helpful)— but at a certain point after it's been healed for a certain period of time, if that... you have a reopening in that same area, then... yes, I think you start the staging over.

But, common sense would tell you that that area is not normal— you know, because it had that big stage four wound there before. So, even if you had to call it another stage... in practicality, you're on the lookout for it to go back to a stage four... if you don't intervene in a... quick fashion.

**Stacy:** Uhh... huh.

**Katherine:** Yeah. But, if you were if you were having to like write it down and put the diagnosis on the chart (and that sort of thing) and say it had been a year (I think that's a safe bet, right?)— if it's been a year... and you're only seeing subcutaneous tissue (and it was a stage 4 two years ago), then you're going to write "Stage 3".

Yeah.

**Stacy:** Okay. Okay... [clears throat] so, can we... get a list of recommended products?

Oh. Oh, okay. I think what they're... saying is... "So, we talked about it, but this is not something that's in the slides."

So, that is probably something I can... work on. What I'm hearing through... the question and answer session about different products that you're mentioning might be helpful to have it written down.

So, I can work on that... on the side. Thank you for mentioning...

**Katherine:** That's why I like to put pictures in... because I was like...

**Stacy:** Yeah!

**Katherine:** "Oh... they can look at the pictures if they want." But, yes, I think that would be helpful.

**Stacy:** Alright. And then, the last question here... back to castor oil: "Is it (castor oil)... is it used... for laxative?"

How would that help... in an ulcer moisturizer?"

**Katherine:** Hmm... so for me, usually diarrhea is my enemy [laughing] with wounds.

So, while you want bowel movements to be regular... a lot of times I am trying to get... keep the poop out of wounds.

So, I guess I don't really have a strong recommend. I don't... I guess I don't have much... I'll be honest. I don't use castor oil— so I don't know. Yeah.

**Stacy:** Okay. Okay... let me close this out here. Alright.

Alright, thank you. We covered a lot of information today... from Dr. Lee sharing... just a few data slides, and to help us to connect the dots with... how does skin and wound care... relate to the population that we care for (that we serve) and the people... that we coordinate and... support, and also through Dr. Oliver's... many slides... (many very good descriptions and of pictures to help us to understand really what are the different stages of wound care), what can we do (what are those options), how can we be proactive, and then (of course) treatment and other things.

So, that was a lot of information that we covered.

But, like I said at the beginning, we... are recording this presentation.

We will make sure that we have... the website link available for you... to view both the video and... handouts.

And, if you have any other questions... things... come to mind, you're not sure, you're welcome... for... parents, for caregivers, please contact your case manager.

Ask them for help. Every... case management unit has a nurse that they can... consult with.

And, if they don't know the answer... there's other folks that they can... consult with as well.

So, we'll make sure that we clarify... anything... that you have questions about.

And certainly, if you have any medical questions (or things that are on your mind)— I think... one of the takeaways... one of the biggest takeaways / tips that Dr. Oliver shared is "take a picture."

Even if you're unsure at that time, you take a picture at the (you know) say today (if you're noticing something).

Tomorrow, you take a picture again, and you can... compare.

That would be very helpful if you share that with... your primary care provider as well.

So, excellent... tips. So, thank you so much... everybody for being here. We really appreciate you spending... the last hour and a half...with us.

So, have a great... rest of your day.

Have a great rest of your week. We appreciate you being here. Mahalo.

**Katherine:** Mahalo. Thank you!

**Stacy:** OK.