

## Telehealth Wound Healing Presenting

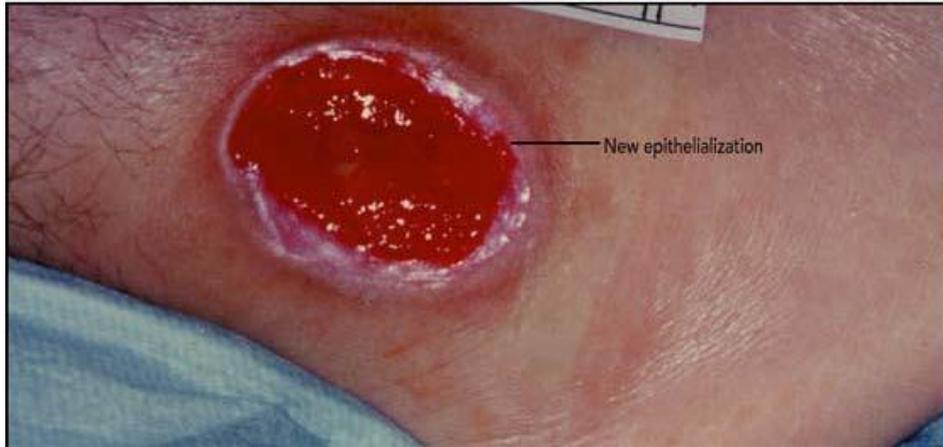
### 1. SCOPE

- 1.1. MCHS Telepresenters
- 1.2. Facilities and departments included in the scope listed above are further defined in the [Scope Definition Resource Guide](#) if not specifically outlined above

### 2. DEFINITIONS & EXPLANATIONS OF TERM

- 2.1. Abbreviations
  - LPN – Licensed Practical Nurse
  - MA – Medical Assistant
  - MCHS – Marshfield Clinic Health System
  - RN – Registered Nurse
- 2.2. Definitions
  - Telepresenter – an RN, LPN or MA who is trained to use technology such as digital stethoscope, otoscope, examination camera etc. to facilitate comprehensive exams under provider guidance.
  - Sharp/ Surgical Debridement – Includes the use of a scalpel, forceps, scissors, hydro surgery devices, or lasers to remove dead tissue. Debridement is required to convert the chronic wound bed into an acute wound so that the wound healing cascade can get a fresh start. Sharp debridement is considered the “gold standard” by clinicians. It can also cause pain so a topical anesthetic such as lidocaine gels or creams may be required.
  - Wound Debridement – The removal of dead, damaged, or infected tissue to improve the healing potential of remaining healthy tissue.
  - Biofilm – Is essentially an invisible “layer” formed by an extracellular matrix that binds to the wound base, whether dermis, fascia, muscle, tendon, or bone.
  - Acute Wounds – Normally wounds proceed through an orderly process that results in sustained restoration of anatomic and functional integrity.
  - Chronic Wounds – Have failed to proceed through an orderly and timely process to produce anatomic and functional integrity, or proceed through the repair process without establishing a sustained anatomic and functional result.
  - Actively Infected Wounds – Contain surrounding erythema, swelling, induration, tenderness, purulence and malodor.
  - Chronically Inflamed Wounds – May have a rim of surrounding erythema, even without other local clinical signs of infection.
  - Tissue forceps – Helpful in grasping the tissue.
  - Scalpels – Used to slice off thin layers of tissue.
  - Curettes – Useful in removing the biofilm that accumulates on top of both fresh and chronic granulation tissue.

- Bone Rongeurs – Useful for removing hard-to-reach soft tissue and for debriding or taking biopsy of bone.
- Wound Assessment – Is written record and picture of the progress of the wound-is a cumulative process of observation, data collection, and evaluation.
- Edema – The presence of shiny, taut skin or pitting impressions in the skin adjacent to the ulcer but within 4 cm from the ulcer margin.
- Edema Assessment:
  - ◊ 1+= slight pitting – no visible change in the shape of the leg (skin indents 2mm).
  - ◊ 2+= somewhat deeper pitting; no marked change in the shape of the leg (skin indents 4mm).
  - ◊ 3+= pitting is deep; leg is full and swollen (skin indents 6mm).
  - ◊ 4+= pitting is very deep; leg is very swollen (skin indents 8mm +).
- Drainage Assessment – Is the exudate. Be sure to note amount, color and odor.
- Exudate – Is the accumulation of fluids in the wound, which may contain serum, cellular debris, bacteria, and leukocytes.
- Serous exudate – Is clear or pale yellow.
- Serosanguinous exudate – Is blood tinged serous fluid.
- Pulse Assessment – Assess for strength (i.e. absent/present, equal) and/or a three point scale of – 3+= bounding, hyperkinetic, 2+= normal, 1+= weak, thready, hypokinetic, 0= absent; Regularity – regular or irregular; Equality – bilaterally are the pulses equal or not.
- AgNO<sub>3</sub> – Silver nitrate to assist in hemostasis.
- SurgiCel – Is a hemostatic agent (blood-clot-inducing material) made of an oxidized cellulose polymer.
- Hemostasis – The stopping of bleeding or hemorrhaging in an organ or body part.
- Granulation – The formation of tissue in the wound base.
- Erythema – The presence of bright or dark red skin or darkening of ethnic skin color immediately adjacent to the ulcer opening.
- Epithelialization – To become, or cause a part of the body to become, covered with epithelial tissue, as in the healing of a wound.



- Undermining – Is tissue destruction that occurs around the wound perimeter underlying intact skin, in these wounds, the edges have pulled away from the wound base.
- Induration – Abnormal firmness of tissues with margins.
- Fluctuance – Wavy impulse felt in palpitation and produced by vibration of body fluid.
- Sinus tract (tunneling) – Is a channel that extends from any part of the wound and may pass away from the wound through subcutaneous tissue and muscle.
- Fistulas – Connects viscous organs together (for example, rectovaginal fistula), or connect to the skin (for example, enterocutaneous fistula).
- Maceration – Is a softening of the skin surrounding a wound due to excess drainage or pooling of fluid on intact skin and appears as white, waterlogged area.



- Slough – necrotic tissue that is moist, stringy, and yellow.



- Eschar – In a wound that has become dehydrated, necrotic tissue turns thick, leathery, and black.



- Geography of Chronic Wounds –  $A+B+C=$  The Total Wound
  - A= The wound bed
  - B= The wound edge
  - C= Is the surrounding skin



- Partial Thickness wounds – Refers to as damage to the epidermis and part of the dermis. Common examples are abrasions, skin tears, blisters, and skin-graft donor sites.
- Full Thickness wounds – Extend through the epidermis, dermis, and may extend into the subcutaneous tissue, fascia, and muscle.
- Macro Pictures – Taking picture of the whole body part in relation to the wound.
- Micro Pictures – Taking pictures of just the wound.
- Codec – refers to the use of clinical video systems.

### 3. PROCEDURE BODY

The following document provides direction for telehealth presenters responsible for the presenting of patients to Wound Healing Services or any provider who may need a component of Wound Healing history or physical exam shall be proficient in providing Wound Healing exam data via Telehealth technologies while working within scope of practice.

#### 3.1 Pre-Consult Preparation

- a. Prepare technology according to [Core Telepresenting Procedure](#), including Doppler and iPod.
- b. Prepare wound supplies (i.e. normal saline, roll gauze, 4x4's, debridement supplies).
- c. Complete vital signs to include: temperature, pulse, blood pressure and respirations. Enter results in dashboard under Clinical Observation. Be sure to select the appropriate provider and the necessary package that coincides with the visit.
- d. **Please note:** prior to performing any wound care, the provider must have signed and dated wound care orders in CMR that specifically indicate the wound care that should be performed. It is the responsibility of the Telehealth RN to locate the wound orders in CMR. If the orders are not in place, the Telehealth RN will need to contact the provider's office prior to beginning any wound care.

#### 3.2 Pre-Exam Patient Preparation:

- a. The Telepresenter Dons gloves.
- b. Position patient comfortably on the exam table. Be conscious not to overexpose the patient.
- c. Remove wound dressing and packing. Remove the dressing without ripping, tugging, or tearing off a dressing stuck to the wound. Place in disposable infectious waste bag.

#### 3.3 Clinical Assessment:

- a. Please see [Telehealth Wound Documentation Procedure](#) for required clinical assessment and documentation findings.
- b. Perform edema assessment.
- c. **Please note:** pulses must be checked laying down and not in a wheel chair. If not palpable, use Doppler to check pulses. If a Doppler is used, the provider will want to hear the quality of the pulse during the consult.
- d. If wound is on the legs, measure the calf four inches below the bottom of the patella. Ankle measurements should also be documented. Measure both legs and ankles for comparison.

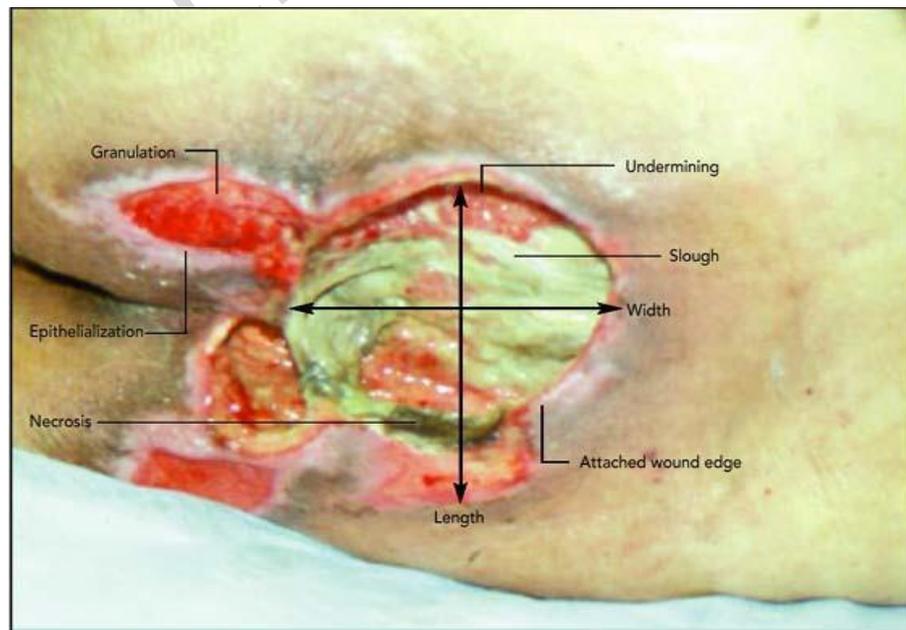
**e. PLEASE NOTE: All measurements should be in centimeters.**

#### 3.4 Cleansing the wound:

- a. Clean around the wound with a mild soap and water. Pat dry.
- b. Clean wound using normal saline and to loosen a dressing that has adhered to the wound.
- c. Debride wound of any crusting or callus. Please refer to [Wound Debridement Procedure](#).
  - **Please note:** there should be a signed Informed Consent in the patients CMR prior to performing any debridement. If the Informed Consent is not in CMR, contact the provider's office so that this can be reviewed with the patient by the provider, and the Informed Consent can then be signed.
- d. Cleanse the wound bed and the surrounding skin after debridement with normal saline.

3.5 **Wound Measurement:** Look carefully at wound edges to determine whether they are distinct, to ensure accurate measuring of wound edges. Take the following steps:

- a. **Step 1:** To establish an anatomic landmark; identify the location of the patient's head and always mark the 12:00 at the patient's head regardless of the position of the patient.



Continue to mark for 3:00, 6:00, and 9:00 accordingly.

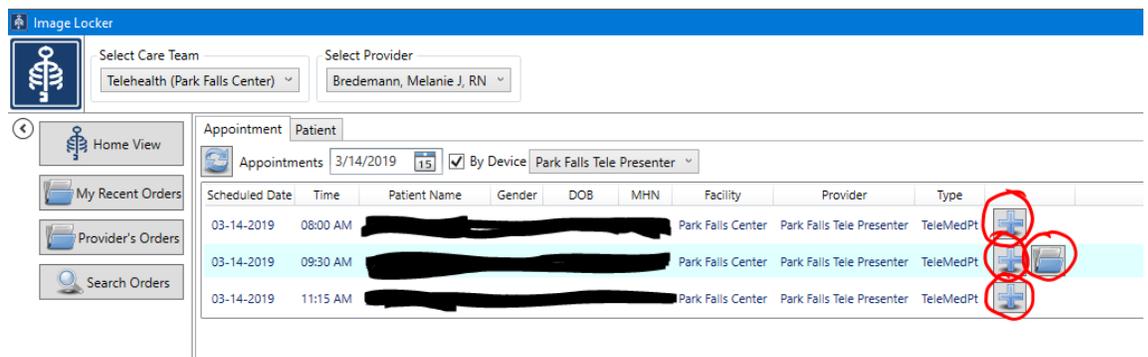
- b. **Step 2:** Measure wound edge to wound edge starting with the 12:00 -6:00 edge, then measuring 3:00-9:00 edge at the longest point.
- c. **Step 3:** Measure depth of the wound using a moistened cotton tip applicator, place into the depth of the wound to be measured, grasp the applicator at the level of the skin. While still grasping the applicator, remove from the wound and place next to disposable wound measurement ruler. Measure undermining if present.

3.6. **Using Image Locker, iPod and image mover, take pictures of the wound.**

- Before beginning to use this process, the Telehealth presenter who is taking pictures needs to be granted access by MCIS to Image Locker and be added to the specific Care Team that he/she will be taking images for.
- Before taking pictures with the iPod, an order needs to be created in Image Locker by the Telepresenter for the patient. The link below is for the Image Locker reference guide; this guide can also be searched for/found in the Learning Library. The Telehealth presenter can also get a brief tutorial from MCIS if he/she does not understand the reference guide. Image Locker Reference Guide: <http://mclweb/learninglibrary/istraining/Documentation/ImageLockerReferenceGuidev1.1.8.0.pdf>
- The Telepresenter should be familiar with creating an order in Image Locker before beginning the process. Make sure to have the appropriate Care Team selected from the drop down box, select you as the provider from the drop down box, make sure the date is correct for the date of the appt. Make sure that the box next to By Device is checked.



- To create the order, click on the Plus sign icon at the end of the patients appointment line, if there is already an order created you will see a File folder icon.



- When creating the order, the Modality, Procedure and Body Part drop down boxes under Examination need to be filled in (Side is optional), the Procedure will be "Wound Photo".

The screenshot shows the 'Image Locker' software interface. At the top, there are dropdown menus for 'Select Care Team' (Telehealth (Park Falls Center)) and 'Select Provider' (Bredemann, Melanie J, RN). Below this, there are navigation buttons: Home View, My Recent Orders, Provider's Orders, and Search Orders. The main area is divided into sections: Patient, Encounter, and Examination. The Patient section shows Name, Address, Gender, Birthdate, and MHN, all of which are redacted with black boxes. The Encounter section shows Facility (Park Falls Center), Provider (Park Falls Tele Presenter (112183)), Date (3/14/2019), and Time (9:30 AM). The Examination section shows Ordering Provider (Bredemann, Melanie J, RN), Modality (VL (Visible Light)), Procedure (Wound Photo (IL9901)), Body part (Thigh), and Side (Left). The 'Procedure' dropdown is circled in red.

- Once the Examination pieces are entered, there are 2 options, you can select Submit Order and Take Picture, and you will continue to move forward in the process of taking the pictures, or you can select Submit Order and this will save the order for a later time; this way, the order can be created ahead of time and then accessed at a later time to take the pictures.
- If the order is created ahead of time, the order needs to be selected by clicking on the file folder icon next to the patient's name, then click on the camera icon to pull up the QR code that is specific to the patient.

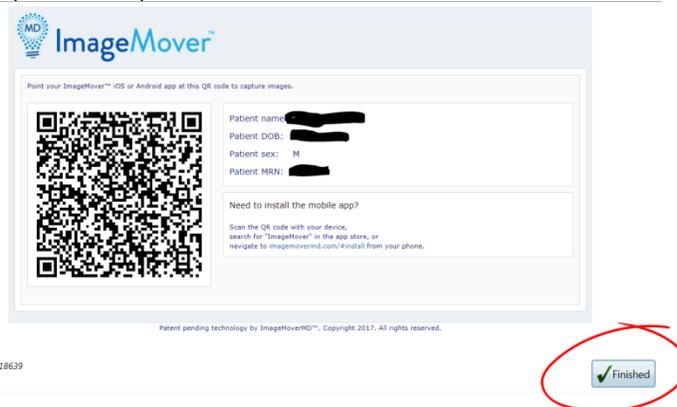
The screenshot shows the 'Image Locker' software interface with the 'Appointments' tab selected. It displays a table of appointments for 3/14/2019. The table has columns for Scheduled Date, Time, Patient Name, Gender, DOB, MHN, Facility, Provider, and Type. The second row is highlighted in light blue, and a red circle is drawn around the camera icon in the rightmost column of that row.

Scheduled Date	Time	Patient Name	Gender	DOB	MHN	Facility	Provider	Type	
03-14-2019	08:00 AM	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Park Falls Center	Park Falls Tele Presenter	TeleMedPt	[Camera Icon]
03-14-2019	09:30 AM	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Park Falls Center	Park Falls Tele Presenter	TeleMedPt	[Camera Icon]
03-14-2019	11:15 AM	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Park Falls Center	Park Falls Tele Presenter	TeleMedPt	[Camera Icon]

- If you have selected Submit order and Take Photograph, a QR code will appear on your screen.
- Turn on the iPod and select the Image Mover app.
- Confirm the patient
- Hold the iPod over the QR code on your computer screen and center the QR code in the square on the iPod screen. You do not need to press any buttons on the iPod, it will automatically accept the QR code when the iPod is held still.



- Once the QR code is scanned, Image mover will bring up a screen on the iPod prompting you to either take a photo or add existing photo (this would be if you took pictures with the iPod prior to creating the order). Most likely you will select take a photo.
- Take the picture (be sure to include a wound measuring reference or tape in the picture)
- You can accept the picture or retake the picture to your desire.
- Once you accept the picture the screen will prompt you to send the picture
- You can take multiple pictures for one session/order
- Once you have completed taking the pictures, select “Exit Session” on the iPod screen. You are now done using the iPod unless you have additional orders/body parts to take pictures of.
- On your computer screen select “Finished” in the lower right hand corner.



- Once you click on “Finished” the pictures are automatically loaded into CMR and can be found under the Imaging tab. If you do not see the pictures under the Imaging tab, you may need to refresh your screen, or close out of CMR then reopen it to view the pictures.
  - Note that if you send a picture by accident, or decide after the picture is sent that you do not want it in the medical record, you will have to place a helpline call to MCIS. You cannot delete the picture yourself once it is in CMR.
- Educate the patient that the photos will be saved in their medical record, but deleted off of the iPod.

### 3.7. Document Findings:

When document is printed it becomes an uncontrolled copy. Please refer to DCS system for most current version.

- a. Prepare a document in Document Manager under your work list labeled Telehealth Patient Note. The document is a Structured Document. Using the Nursing Assessment Macros, and Additional Wound Macros if needed, document findings according to section 3.3 a.

3.8. **Assist Provider with Physical Exam:**

- a. When the provider states they are ready to view the wound, use the hand held video camera to show location/ distribution and close ups of the wound.
- b. Obtain cultures as directed by the provider. Please see Telehealth [Wound Culture Collection Procedure](#)

3.9. **Post Physical Exam Considerations:**

- a. Refer to [Core Telepresenting Procedure](#) for details
- b. Redress the wound with the appropriate dressing based on the provider's orders.
- c. Assist with follow up appointments.
- d. If prescriptions are needed, the patient will obtain from Wound Healing Provider via standard e-prescribing procedures.

#### 4. ADDITIONAL RESOURCES

4.1. References:

Bickley, L. S., and Szilagyi, P.G., *Bates' Pocket Guide to Physical Examination and History Taking*. Ninth Edition. Philadelphia, PA: Lippincott Williams & Wilkins; 2007.

Specimen collection and testing. (2009). In Lippincott's nursing procedures (5th ed., pp.216-219). Retrieved from <http://ovidsp.ovid.com>

4.2. Supporting documents available:

- To Access Document Manager:  
[http://srdweb1/clinic/policies/policy\\_details.asp?RecID=4006](http://srdweb1/clinic/policies/policy_details.asp?RecID=4006)
- Technology Report Form:  
[http://srdweb1/clinic/iqips/Telehealth/technology/TH\\_technology.html](http://srdweb1/clinic/iqips/Telehealth/technology/TH_technology.html)
- [Telehealth Wound Documentation](#)
- [Telehealth Wound Culture Collection](#)
- [Telehealth Wound Debridement](#)

**5. DOCUMENT HISTORY**

Version No.	Revision Description
	Transfer to Document Control
	Was previously Procedure #2905.1  Section 2: Added definitions and pictures. Section 3.3: Added hyperlink to clinical documentation. Section 3.3: Added pictures. Section 3.7: Added hyperlink to document procedure. Section 3.8, B: Add Hyperlink on how to obtain wound cultures. Section 4.0: Added supporting documents and references. Section 4.2: Added link to sharp debridement in Wisconsin.
2.0	Removed Marshfield Clinic Health System, Updated Quick Parts in Header. Updated Scope Statement, Added Telepresenter to section 2.1, updated abbreviations, reformat of section 2, Updated 3.1d with telepresenter changed to Telehealth RN.

**6. DOCUMENT PROPERTIES**

Primary Author: Bredemann, Melanie J

Co-Author(s):

Approver(s): This document has been electronically signed and approved by: Meyer, Chris on: 10/7/2019 7:42:11 AM

This document has been electronically signed and approved by: Simon, Tammy A. on: 10/16/2019 9:15:05 AM

This document has been electronically signed and approved by: Krueger, Kori K MD on: 10/24/2019 11:20:47 AM

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