

Developed by the British Columbia Provincial Nursing Skin & Wound Committee in collaboration with NSWOCs/Wound Clinicians from:



<p>Title</p>	<p>Veraflo NPWT Dressing Application: Procedure</p>
<p>Endorsement British Columbia & Yukon</p>	<p>Endorsed for use for: FHA & VCH/PHC; check your Health Authority’s document for any limits & conditions placed upon this practice by your Health Authority.</p> <p>Endorsement pending: NHA, IHA, Island Health, PHSA & Yukon; until endorsement has been granted by your HA please follow your HA’s current document.</p> <p>Not applicable: FNHA</p>
<p>Document Indications for Use</p>	<p>This Negative Pressure Wound Therapy Instill-Dwell (NPWTi-d) function (Veraflo) dressing procedure is used with the multi-use VACUIta4 device and in conjunction with the Negative Pressure Wound Therapy: Guideline. Clients undergoing NPWTi-d require an inter-professional approach to ensure comprehensive, evidence-based assessment and treatment.</p>
<p>Practice Level British Columbia & Yukon</p>	<p><u>British Columbia</u>: In order to carry out NPWT, Registered Nurses (RNs), Registered Psychiatric Nurses (RPNs), and Licenced Practical Nurses (LPNs), in accordance with the British Columbia College of Nurses and Midwives’ scope of practice for their specific designation and their Health Authority(HA)/agency must:</p> <ul style="list-style-type: none"> • Have a HA/agency policy in place to support their designation in providing NPWT. • Have a HA/agency approved/endorsed NPWT decision support guideline. • Have successfully completed additional education for monitoring & managing NPWT. • Have successfully completed additional education for NPWT dressing application. • Have a client-specific NPWT order. • For LPNs, follow an RN/RPN established NPWT wound treatment plan. <p><u>Yukon</u>: Registered Nurses, Registered Psychiatric Nurses and Licensed Practical Nurses refer to organizational policy and practice in accordance with regulatory bodies.</p>
<p>Need to Know</p>	<ul style="list-style-type: none"> • Veraflo NPWTi-d (Instill/Dwell) is one of the four functions on the 3M/KCI VACUIta4 device and supports following goals for an open wound: <ul style="list-style-type: none"> ◦ Wound cleansing; the repeated cycle of instillation, dwell/soak and negative pressure facilitates the breakdown of slough/necrotic tissue and decreases the viscosity of exudate which supports effective removal of debris from wound bed; this improved debris removal leads to less bioburden and a decrease risk of wound infection. ◦ Granulation: new tissue coverage over exposed structures and in visible/non-visible wound bed facilitates quicker wound closure or shorter wait-time for delayed primary closure. • Veraflo is not currently used in the community or long-term care settings. • All undermining/sinus tracts/tunnels must be explored before Veraflo is considered in order to avoid inadvertent instillation of solution into adjacent body cavities. • Do not use Veraflo in the thoracic area, (e.g., sternal open wounds) or the abdominal cavity due to the potential risks to alter the body’s core temperature and retention of solution within the space. • All undermined areas, sinus/tunnels must be explored before Veraflo is considered. • Veraflo is not recommended for sternal open wounds. • Do not use Octenisept, hydrogen peroxide or alcohol-based solutions for instillation. • Phases of NPWT Veraflo Phase 1: This is an initial ‘draw down’ that occurs where the device checks the dressing seal for any air leaks; occur each time a new dressing is applied. Then a programmed ‘cycle’ is created with the following three phase: <div data-bbox="1068 1539 1580 1967" style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <pre> graph TD P1([Phase 1: Initial negative pressure draw-down; occurs with each dressing change.]) --> P2[Phase 2: Negative pressure is released, instillation begins.] P2 --> P3[Phase 3: Dwell/soak of the solution] P3 --> P4[Phase 4: Negative pressure resumes] </pre> </div>

Note: This is a **controlled** document. A printed copy may not reflect the current, electronic version on the CLWK Intranet (www.clwk.ca). Any paper document should always be checked against the electronic version prior to use; the electronic version is always the current version. This DST has been developed as a guide to support nursing practice in British Columbia, however it is not a substitute for education, experience & the use of clinical judgment.



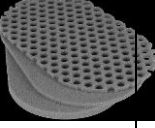
	<p>Phase 2: Negative pressure is de-activated allowing for instillation of pre-set amount of solution.</p> <p>Phase 3: Dwell/soak time (pre-set).</p> <p>Phase 4: Negative pressure is triggered, removing solution and providing active NPWT.</p> <ul style="list-style-type: none"> • Pressure Setting can range from -50 to- 200 mmHg in increments of -25 mmHg; -125 mmHg is the most common target pressure setting for adults. • Therapy Setting can be either Continuous (C) or Dynamic Pressure Control (DPC) that can be adjusted incrementally by -25 mmHg. If continuous therapy is required to ensure an effective seal, (e.g., as in a difficult to seal area, groin, buttocks) do not use Veraflo. • The VACUIta4 Veraflo provides a cassette to hold the instillation fluid bag, (e.g., sterile normal saline) and uses a disposable canister to collect wound exudate/drainage and instillation fluid. • Veraflo requires <u>specialty</u> black or grey dressings for filling the cavity and any undermining/sinus tracts/tunnels. The grey fenestrated foam can be used as filler for explored undermining/sinus tract/tunnel as it is designed to allow for effective instillation fluid and exudate removal. • When using Veraflo black foam, white foam can be used as filler for undermining/sinus tracts/tunnels. • Non-adherent interface layers should be used in conjunction with Veraflo to protect exposed structures. Silver-based non-adherent interfaces cannot be used as the instillation fluid will affect the effectiveness of the silver. • A count of all foam wound fillers/interface layers placed in/out of the wound, is done with each dressing change and documented on approved documentation tools. • Veraflo may be use in conjunction with bandages, garments or off-loading devices by following the bridging instructions. <p>General Safety Considerations for all NPWT Medical Devices</p> <ul style="list-style-type: none"> • Defibrillation: when defibrillation is required in the area of the NPWT dressing, remove the dressing or place the paddles in an alternate position; ensure that the NPWT device is at least 2 meters away from the paddles. • Electrodes or Conductive Gel: do not place EKG or other electrodes/conductive gels in contact with the NPWT dressing/device. • Hyperbaric Oxygen Chamber environment: the NPWT is to be put on hold and a different type of dressing used for the duration of the HBO treatment period. • Diagnostic Imaging: interface layers containing <u>metallic</u> silver may impair visualization with certain imaging modalities; not applicable for VeraFlo as instill/dwell dressing should not contain silver. • Magnetic Resonance Imaging (MRI) environment: device itself cannot go into the MRI environment; dressing can remain in place, remove canister, if applicable, from device. • Cell phones or similar products could affect the NPWT device; move the NPWT device away 2 meters (6.5 feet) away from the device if interference is suspected. • Do not connect NPWT dressings to wall suction.
<p>Bookmarks</p>	<p>Equipment and Supplies</p> <p>Procedure: Applying / Reapplying VACUIta4 Veraflo Dressing</p> <p>Procedure: First Cycle - Instill/Dwell Check</p> <p>Procedure: Removing a VACUIta4 Veraflo Dressing</p> <p>Procedure: Changing the VACUIta4 Canister</p> <p>Procedure: Changing the Veraflo Cassette</p> <p>Managing VACUIta4 Device Alerts/Alarms</p> <p>Managing VACUIta4 Veraflo (Instill & Dwell) Alerts/Alarms</p> <p>Procedure: Bridging – Offloading the Veraflo TRAC pad</p> <p>Procedure: Client Showering</p> <p>Transition/Discharge Planning</p> <p>Client/Family Education and Resources</p> <p>Documentation</p> <p>Bibliography/References</p>

	Date of Creation Appendix A: Fill Assist
Related Documents	Negative Pressure Wound Therapy: Guideline Wound Management: Guideline Wound Cleansing: Procedure Wound Packing: Procedure NPWT Safety/Monitoring Check Flow Sheet: Documentation Tool NPWT Level One Monitor & Manage Learning Plan: Education Requirements & Competencies NPWT Level One Monitor & Manage Competencies: Education Requirements & Competencies NPWT Level One Monitor & Manage: Learning Module NPWT Level Two Dressing Application Learning Plan: Education Requirements & Competencies NPWT Level Two Dressing Application Competencies: Education Requirements Competencies NPWT Level Two Dressing Application - Open Wound Dressing Principles: Learning Module

Equipment and Supplies

VACUIta4 and Instill/Dwell Supplies needed:

- VACUIta4 NPWT device - site/agency owned or rented
- Dressing Kits (sterile)
 - Veraflo Cleanse: black spiral (pull-part) foam (small, medium, large) or grey foam rope
 - Veraflo Cleanse Choice: two grey solid foams & one fenestrated (medium)
 - Kits also includes:
 - Specialty Veraflo transparent film drape
 - Wound ruler
 - 3M Cavilon no-sting skin prep
- VeraTRAC single pad/tubing set
- VeraTRAC Duo (double) pad/tubing set (for large or vertical wounds)
- Veralink cassette (holds a 100-1000mL irrigation solution bag)
- VACUIta4 canister (500 mL or 1000 mL)
- NPWTi-d solution as per prescriber’s order should be at least room temperature

Grey Rope Foam	
Black Spiral Foam	
Three Layer Grey Foam	

Dressing Supplies

- Personal protective equipment (PPE) including safety glasses, gloves, gown, and mask, as required.
- Dressing tray - depending upon the type of tray (Complex or Major) some of the following supplies may be included in tray. More than one dressing tray may be needed given the wound size.
- 30 mL syringe and irrigation tip catheter or an 18 - 19-gauge irrigation device, if needed
- Sterile normal saline (NS) - 100 mL or more and should be at least room temperature
- Sterile scissors
- Sterile gloves - 1 pair
- Clean gloves - 2 pairs, if taking photos, then 3 pairs
- Foam tipped applicator, metal probe or sterile cotton tip applicator
- Ruler, measurement guide, or paper
- Alcohol swab(s)
- Sterile 2x2 gauze (for protecting tubing ends, if needed)
- Procedure pad(s)
- A camera, if required for wound documentation
- Pen to document the packing pieces

Additional Supplies (as per the prescriber’s order or care plan)

- White foam for deep undermining, sinus/tunnels
- Meshed non-adherent contact layer (no silver-based products)
- Ostomy strips, rings or paste, if needed
- Adhesive remover, if needed
- Hair clippers/scissors

Note: This is a **controlled** document. A printed copy may not reflect the current, electronic version on the CLWK Intranet (www.clwk.ca). Any paper document should always be checked against the electronic version prior to use; the electronic version is always the current version. This DST has been developed as a guide to support nursing practice in British Columbia, however it is not a substitute for education, experience & the use of clinical judgment.





Applying & Reapplying VACUIta4 Veraflo Dressing Click here for the Removing VACUIta4 Veraflo Dressing	
Steps	Rationale/Key Points
1. Review the orders: <ul style="list-style-type: none"> • Read the NPWT order and overall care plan. • Review allergies and sensitivities to products. 	The transparent acrylic drape has an adhesive coating which may cause an adverse reaction in the client who is allergic/hypersensitive to this material.
2. Prepare the client: <ul style="list-style-type: none"> • Assess client's pain/anxiety for appropriate medication(s); allow time for medication(s) to take effect. • Explain procedure to client/family; obtain verbal consent, if possible. • Position client for the procedure. 	Clients undergoing NPWT may experience pain and anxiety; provide pain management strategies, medications, education, reassurance, and position for comfort.
3. Set-up for the procedure: <ul style="list-style-type: none"> • Gather the supplies, including instillation fluid (normal saline or solution as per the order). • Perform hand hygiene; put on clean gloves. • Set up sterile dressing tray and establish a sterile field. Designate one side of the sterile field for cutting wound fillers/interface layers. • Add NPWT kit supplies to the sterile field. • Add sterile scissors and interface dressing if using. • Add supplies needed for peri-skin protection (e.g., skin barrier wipe, hydrocolloid) or filling creases, (e.g., ostomy ring, or ostomy paste). • If needed, add hair clippers/scissors outside the sterile field. • Place pen and camera outside sterile field. • Take down the current dressing. • Remove gloves, perform hand hygiene and don clean gloves. 	<p>If using two dressing trays, the NPWT kit and other dressings for filling/packing the wound can be opened with the second dressing tray.</p> <p>The kit's barrier wipe package is sterile. Ostomy rings or ostomy paste are not sterile therefore need to be placed on the edge of the sterile field.</p>
4. Clip hair, if needed: <ul style="list-style-type: none"> • Using clippers/scissors, clip the hair in the area where the dressing will be applied. Clip as close to the skin surface as possible. • Avoid shaving whenever possible. 	<p>Hair can make it difficult to achieve an airtight seal and may cause pain during drape removal.</p> <p>Shaving can cause skin irritation and may lead to folliculitis and/or a skin infection.</p>
5. Assess and cleanse the wound: <ul style="list-style-type: none"> • Use a 15 cm foam tipped applicator, metal probe or sterile cotton tip applicator to explore the depth & direction of undermining, sinus/tunnels. • Cleanse the wound and peri-wound with at least 100 mL of NS. Use moistened gauze and forceps to remove loose slough/debris. • Complete a full wound assessment. • If taking photos for documentation, remove gloves, perform hand hygiene, take photos and then put on clean gloves. • If NPWT is being re-applied, determine the appropriateness of ongoing NPWT. 	<p>If the measurement of an undermined area or sinus/tunnel is beyond 15cm, do not process unless there is an order to do so. Inform prescriber of this new finding.</p> <p>Cleansing the wound bed and peri-skin aids in removal of exudate, loose hair, and promotes visualization of wound bed tissues.</p> <p>Assessing wound length, width, and depth, and the depth of the undermining, sinus/tunnels helps to determine the size, type and number of wound filler(s) needed. These measurements also provide an objective assessment of wound healing.</p>

Note: This is a **controlled** document. A printed copy may not reflect the current, electronic version on the CLWK Intranet (www.clwk.ca). Any paper document should always be checked against the electronic version prior to use; the electronic version is always the current version. This DST has been developed as a guide to support nursing practice in British Columbia, however it is not a substitute for education, experience & the use of clinical judgment.

Steps	Rationale/Key Points
<p>6. Ensure the peri-wound and surrounding skin is level; use the following as needed for fill in any creases or hallows:</p> <ul style="list-style-type: none"> • Apply ostomy rings or strips to level the affected area. • Use ostomy paste to fill in creases. 	<p>Ensuring a level surface will assist with achieving an airtight seal.</p>
<p>7. Transition to sterile technique:</p> <ul style="list-style-type: none"> • Remove clean gloves; perform hand hygiene. <ul style="list-style-type: none"> ○ If using a second dressing tray, set it up as well as the contents of NPWT dressing kit. Add sterile scissors and any other sterile dressing needed. Designate one side of the sterile field for cutting foam wound fillers. Perform hand hygiene. • Don sterile gloves. 	<p>Note: dressing tray instruments used to in the previous steps are no longer sterile as they have been handled with clean gloves and therefore cannot be used to complete the dressing change.</p>
<p>8. Prepare peri-wound skin:</p> <ul style="list-style-type: none"> • Apply skin film barrier to the peri-wound and surrounding skin; let dry (30 seconds). • Picture-frame the wound, if needed: <ul style="list-style-type: none"> ○ Transparent Drape: <ul style="list-style-type: none"> ○ Cut drape into at least 5-7cm wide strips. Cut the drape before removing the backing layer. ○ Remove backing piece #1 and lay the drape along the wound edge, and over at least 5-7 cm of the peri-wound and surrounding skin area. ○ Remove backing piece #2 of drape and remove blue tabs at perforation line. ○ Repeat process until entire wound has been framed. ○ Smooth strips into place to ensure a good seal between the drape and the skin, especially at the wound edge itself. ○ Ostomy Paste <ul style="list-style-type: none"> ○ Run a thin line of ostomy paste around the wound edge/periwound skin. ○ Hydrocolloid Strips: <ul style="list-style-type: none"> ○ Cut hydrocolloid sheet into wide strips. ○ Place strips around the wound leaving a 1cm margin from the wound edge. 	<p>Skin barrier film wipes protect the skin from adhesives, help maintain an airtight seal, and may extend the dressing wear time.</p> <p>The drape may be cut into strips to make it easier to handle.</p> <p>A wider picture-frame is needed on the peri-wound skin to reduce the risk of prevent maceration from the instillation fluid.</p> <p>Ensuring the hydrocolloid is not applied at the wound edge will decrease the potential for the hydrocolloid coming into contact with the instillation solution; hydrocolloids soak up fluid and therefore there is an increase risk of a breach in the seal.</p>
<p>9. Prepare the interface layer:</p> <ul style="list-style-type: none"> • Cut to fit, either: <ul style="list-style-type: none"> ○ Fenestrated foam <u>or</u> ○ Meshed non-adherent layer <u>or</u> ○ White foam. 	<p>The non-adherent layer must be meshed such as a non-antimicrobial dressing (e.g., silicone) dressing.</p> <p>Do not use silver-based non-adherent layer products, as the instillation solution may negatively affect its effectiveness.</p> <p>White foam may also be used to protect areas of concern (i.e., tendon, bone, blood vessels, or sutures).</p>

Steps	Rationale/Key Points
<p>10. Prepare the wound filler(s): Cut foam pieces over the previously designated sterile drape area; not over the wound. Rub off any loose particles from the cut foam pieces.</p> <ul style="list-style-type: none"> • For shallow undermined areas; cut to fit one of the following: <ul style="list-style-type: none"> ○ Black spiral. ○ Grey rope. ○ Solid grey foam • For deep undermining, sinus/tunnels; cut-to-fit one of the following: <ul style="list-style-type: none"> ○ Grey. ○ White foam. • For the wound cavity cut-to-fit one of the following: <ul style="list-style-type: none"> ○ Black spiral. ○ Grey rope. ○ Solid grey foam. 	<p>Grey rope and black foam can be used in shallow undermined area, when the base of the area can be visualized.</p> <p>Grey solid foam and white foam are recommended for use in deep undermining/sinus/tunnel(s) as they have stronger tensile strength and will not break when removed.</p> <p>Ensure all foam pieces are cut narrower at the end that is to be placed into the undermining/sinus/ tunnel.</p> <p>Where possible, place the manufactured edge of the foam face-down on the wound bed.</p>
<p>11. Fill/pack the all the dead space of the wound:</p> <ul style="list-style-type: none"> • Undermined areas and sinus /tunnels are filled/packed first. <ul style="list-style-type: none"> ○ Lightly pack the narrowest end of the foam in the space until it reaches the end of the sinus/tunnel. ○ Pull back by 1-2 cm to ensure the foam end is visible in the wound cavity. • If using an interface layer, line the wound bed. • Then fill/pack the wound cavity with the prepared solid grey foam. • Count the number(s) of pieces used. 	<p>Fill/pack the undermined/sinus/tunnel(s) to support granulation but do not over-pack foam. Do not overfill the areas.</p> <p>White foam must always be covered with grey foam to support proper removal of exudate.</p> <p>Ensure the top layer grey foam is cut larger than the VeraTRAC pad to prevent periwound skin damage.</p> <p>Ensure that the grey foam is 2.5 cm higher than the peri-skin level before applying the specialty Veraflo transparent film drape.</p>
<p>12. Ensure the fill/pack is complete:</p> <ul style="list-style-type: none"> • Ensure that all the foam pieces are in contact with each other. • Ensure that the foam is not in contact with unprotected periwound skin. 	<p>If needed, a bridge can be built for the VeraTRAC pad; see Procedure: Bridging - Offloading the Veraflo TRAC Pad.</p>
<p>13. Apply the specialty Veraflo film drape:</p> <ul style="list-style-type: none"> • The drape can be cut into strips to easier application: <ul style="list-style-type: none"> ○ Cut drape before removing backing layer. ○ Cut drape into wide strips and, if possible, long enough to cover the 5-7 cm prepped area on both side of the wound. ○ Ensure each strip has a blue tab, as it will assist with removal of the backing pieces. • Remove backing piece #1 and lay the drape over the foam and cover at least the 5-7 cm of prepped peri-wound skin. • Remove backing piece #2. • Remove the blue tabs at the perforation line. 	<p>Avoid applying drape in a complete ring around a limb, (e.g., leg or foot), as this leads to compromised circulation. Ensure drape does not cover body orifices, stomas, or drain openings.</p> <p>The wider the strips, the less the number of strips needed to cover the wound, thereby reducing the risk of leak. The blue tab assists with removal of the backing piece.</p> <p>When applying the drape, lay it over the foam and prepared peri-wound skin area; do not stretch it as this may lead to blistering the peri-wound area.</p> <p>The entire 5-7cm prepped area needs to be covered to ensure a good seal during the dwell/soak time.</p>




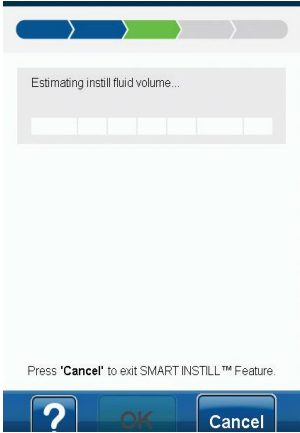
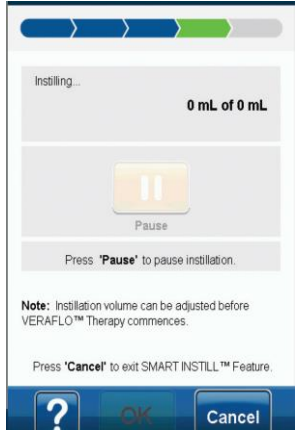

Steps	Rationale/Key Points
<ul style="list-style-type: none"> Add all the strips needed to cover the wound, ensure the strip edges overlap by 3-5 cm to prevent air leakage or leakage of instillation solution. When all drape applied, gently press the drape edges to the skin to achieve an airtight seal. 	<p>The overlap will prevent a leak of either instillation solution or air.</p> <p>Adding a small border of additional drape around the outer perimeter of the dressing may extend the wear time. Remaining transparent drape pieces can be used to patch any air/solution leaks, if necessary.</p>
<p>14. Apply a VeraTRAC pad (Single or Duo):</p> <ul style="list-style-type: none"> With sterile gloves, determine the position of the VeraTRAC pad(s); do so in consultation with the client, if possible. If the TRAC pad(s) are incorrectly repositioned, such as: <ul style="list-style-type: none"> Touching the peri-wound, increasing the risk of developing a pressure injury, or The location significantly interferes with client activities, then the pad(s) need to be repositioned (see Blockage Alert page 16). When using Duo, position the instill pad higher than the suction TRAC pad – the thinner tubing is the instillation line and the thicker tubing is the suction line. Each line has a white clamp and specific sized connector. For each VeraTRAC pad: <ul style="list-style-type: none"> Cut at least a 2.5 cm round opening in the film drape over the foam. Remove layers #1 and #2 and place the pad centrally over the 2.5 cm opening. Apply gentle pressure to ensure the pad rests fully on the foam and is not touching any of the peri-skin. Then gently pull the blue stabilization tab to remove the top layer of the pad. 	<p>Position of the pad/tubing(s) to avoid boney prominences, skin folds, and allow for client comfort and ease of performing ADLs.</p> <div data-bbox="862 512 1555 737"> <p>Single VeraTRAC pad</p> <p>Duo VeraTRAC pad separate instill / suction ports</p> </div> <div data-bbox="967 814 1443 1230"> <p>VeraTRAC Duo (large wounds)</p> <p>VeraTRAC Duo (vertical dressing upper leg)</p> </div> <p>Wound exudate and instillation solution are removed through the foam into the VeraTRAC pad/ tubing and down to the canister. If the drape opening is cut is too small, such as with an 'X' or a 'slit', the opening will close when the negative pressure is applied, causing a blockage alarm.</p>
<p>15. Check to ensure that the drape strips are sufficiently overlapped.</p> <ul style="list-style-type: none"> Gently press the overlapped drape pieces and TRAC pad drape into place. If needed, seal the drape with no-sting barrier wipe. Secure the VeraTRAC pad to the dressing with an additional strip of transparent drape to prevent skin damage. 	<p>Ensure the drape is secure before commencing instillation.</p> <p>Use extra transparent film drape and no-sting skin barrier to help repair leaks and seal micro-cracks in the drape.</p> <p>To reduce tension on the VeraTRAC pad and dressing, secure the tubing to the dressing.</p>

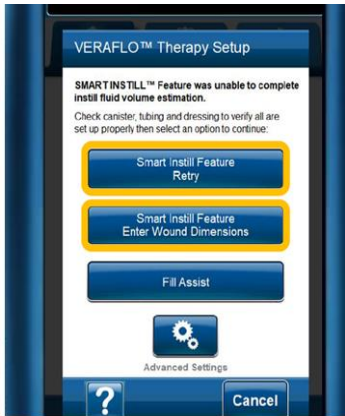
Steps	Rationale/ Key Points
<p>16. Start the device and select Veraflo:</p> <ul style="list-style-type: none"> • Plug in the device, if not already done. • Press/hold Power button, until the light comes ON. • Select Veraflo Therapy (dark blue button) 	<p>Ensure the power cord's green indicator lights up when the cord is plugged into the electrical outlet; if not, plug the device into a different outlet.</p> <p>Never connect the NPWT tubing to wall suction.</p> <p>Veraflo is one of four therapy options shown on the home screen.</p> 
<p>17. Install Vera-Link cassette and solution bag:</p> <ul style="list-style-type: none"> • Prepare cassette: <ul style="list-style-type: none"> ○ Insert the cassette into the pivot slot on left side of the device. ○ Pivot the release tab towards the device. ○ Press firmly and listen for a click. ○ Route instillation tubing into the retention groove on the device handle. ○ Remove the cap from the end of the installation tubing and connect the dressing tubing (presently covered by a sterile 2x2 gauze). ○ Ensure connection is secure. • Prepare the hanger arm: <ul style="list-style-type: none"> ○ Unlock the hanger arm and raise up. ○ Rotate 180 degrees and lock in place. • Prepare the solution bag: <ul style="list-style-type: none"> ○ Connect the new solution bag to the cassette spike. ○ Hang bag on the hanger arm. Adjust the height of the solution bag to ensure that bag hangs freely. Once positioned push the bag/spike securely into the cassette slot. ○ Unclamp both clamps. • Date the cassette. • Date the instillation solution bag. 	<p>Cassette must be installed <u>after</u> the device is powered 'On' and the Veraflo function is selected otherwise a '00000007' system error message appears.</p> <p>The cassette is designed to fit tightly.</p> <p>An alarm will sound if the cassette is not secure. The fluid solution bag rests in this cassette.</p>  <p>The instillation solution is ordered by the prescriber. The instill pump regulates delivery of installation solution.</p> <p>Protect the installation tubing from being kinked or pinched.</p> <p>Position clamps on tubing so they do not cause skin damage.</p> 
<p>18. Prepare the canister:</p> <ul style="list-style-type: none"> • Place drainage canister into right side of the device, if not already in place. • For pediatrics, pre-fill canister as per orders. • Connect VeraTRAC pad tubing to the drainage canister tubing (if not done already). If reusing the canister, cleanse the tubing ends with an alcohol swab and let dry (30 seconds) before re-connecting. • Open the canister tubing clamp. 	 <p>The canister needs to be pushed firmly into place and latched with an audible click to be fully engaged, otherwise an alarm will sound.</p> <p>For neonates and infants, pre-filling the canister reduces the potential for excessive fluid volume loss.</p>

Steps & Rationale/ Key Points

19. Set up the instillation:

- Use Smart Instill Feature for wounds needing greater than 8mL and less than 1500mL of fluid.
- Use Fill Assist ([Appendix A](#)) for wounds needing less than 8mL or greater than 1500ml of fluid.

Start	Step 1 of 5:	Step 2 of 5:
<p>On the Veraflo Therapy Setup screen, press 'Smart Instill Feature Automated Fill'</p> 	<p>Select canister size being used (500mL or 1000mL); should be a <u>new</u> canister. Confirm 'Yes' & press 'Next'.</p> 	<p>System applies negative pressure & does a seal check to ensure an air-tight dressing (Phase 1-Draw Down).</p> 
Step 3 of 5:	Step 4 of 5	Step 5 of 5
<p>System estimates, based upon air in the canister, tubing & dressing, including any bridging, the amount of solution to be instilled. This step may take a couple of minutes.</p> 	<p>Press 'OK' to begin Phase 2-Instill; system turns off the negative pressure & instills the determined amount; will automatically start after 10 seconds if "Ok" is not pressed.</p>  <p>Press 'Pause' to choose a lesser fluid volume than what the system estimated; use the +/- buttons.</p> <p>Press 'Cancel' and remove the fill to restart the therapy set-up.</p>	<p>System sets Phase 3-Dwell/Soak to 10mins every 2hours.</p> <p>Once the dressing has reached its saturation point, the system will start Phase 4-Negative Pressure, (e.g., -125 mmHg) at the end of each soak phase.</p>  <p>Select 'Change Therapy Settings' button if settings need to be adjusted. Return to the Smart-Instill screen & press "OK".</p>
<p>Phases 2, 3, & 4 become the 'Cycle'</p>		

Steps & Rationale/ Key Points	
<p>19a. Collection of Instilled Fluid & Exudate in the Canister: The Smart-Instill feature is designed to determine how much cleansing solution is needed for a specific wound based upon the amount of air within the wound dressing, tubing and canister. With this information the following occurs:</p> <ul style="list-style-type: none"> • The system determines how much cleansing solution needs to be instilled, (e.g., 50mL). • The cleansing solution instilled at each Instill/Dwell, (e.g., q2h) is held in the dressing's foam piece(s) until the all the piece(s) reach their saturation point: <ul style="list-style-type: none"> ○ Given the density of the foam (high(white) or low (black)) and the amount of each type of foam used to fill the wound, it can take a number of instill/dwell cycles until the dressing reaches its saturation point, (e.g., 6 cycles within 12 hours for a very large wound). ○ When the saturation point has been reached, the system starts the negative pressure and all the solution and any exudate is pulled out of the wound and into the canister; <u>note</u> for large wounds this will be seen as a sudden increase in the fluid in the canister, (e.g., 300mL). • For the remaining Instill/Dwell cycles, all of the instilled solution will be pulled off when the negative pressure is resumed at the end of each cycle. • With the next NPWT dressing change, this process is repeated but the time to reach saturation point may be less or more, given the amount of foam needed to fill the wound space. 	
<p>Troubleshooting: if the system was not able to set up an estimated volume, a screen will appear with three choices:</p> <ul style="list-style-type: none"> • Smart Instill Feature – Retry: the system will re-attempt to estimate the instill volume; follow the instructions provided on the screen. • Smart Instill Feature – Enter Wound Dimensions; enter the wound's length, width and depth and then following the instructions provided on the screen. • If neither of the Smart-Instill Features works then do Fill Assist (see Appendix A for steps) 	
<p>20. Clean up workspace:</p> <ul style="list-style-type: none"> • Dispose of the dressing tray and scissors. • Remove gloves and perform hand hygiene. 	<p>Waste contaminated with blood and body fluids is disposed of in biohazard or sharps containers, as per the setting requirements and current policies.</p>
<p>21. Document:</p> <ul style="list-style-type: none"> • Write the number (#) of foam/ interface pieces used on the dressing, or on the dressing sticker. • Date and <u>time</u> on the canister. • Date the cassette. • Date the instillation solution bag. • Current instillation volume on the care plan. 	<p>Document the number of interface and foam pieces as it is critical all pieces are removed at the next dressing change.</p> <p>Writing the time on the canister aids in calculating the in/out fluid balance; subtract the total instillation solution from the total canister drainage amount.</p> <p>Change canister when a Smart Instill set-up is done.</p> <p>Change the cassette every 3 days and when the type of irrigation solution is changed.</p> <p>Change the instillation solution bag every 24 hours.</p>
<p>22. Conduct initial Safety/Monitoring Check:</p> <ul style="list-style-type: none"> • Check the system from the dressing to the power source. • Assess colour, warmth, movement, sensation distal to the dressing, if NPWT is on a limb. • If tubing is a falls risk, secure accordingly. 	<p>It is recommended the device remain plugged in at all times, if possible. VACUIta4 has 6 hours of battery life.</p> <p>Determine the device is working correctly ('ON' is displayed at the top of the screen and the Therapy icon is rotating) then lock the screen.</p>



Procedure: Preparation for Dwell/Soak Phase	
Steps	Rationale/Key Points
1. Verify the configured parameters are correct as ordered: <ul style="list-style-type: none"> ▪ Instill Volume ▪ Dwell/Soak Time ▪ NPWT time ▪ Target Pressure ▪ Intensity 	
2. Check that the client's position is maximized to support the dwell/soak phase.	If needed, support the anatomical location/area during the Instill and Dwell cycles, as the dressing may be susceptible to leaks; support the wound area with surface contact or pillow(s) to prevent bulging of drape if the wound is in a dependent position.
3. Monitor the dressing during the dwell/soak phase; repair any leaks as needed.	Use extra film drape and no-sting barrier wipe to repair leaks and seal micro-cracks in the drape.

Procedure: Removing a VACUIta4 Veraflo Dressing	
Steps	Rationale/Key Points
1. Plan to remove the dressing when the Veraflo cycle is in its VAC negative pressure phase.	When the device is in its' VAC NPWT phase, then the instillation is removed.
2. Review the client's chart: <ul style="list-style-type: none"> • Read NPWT orders and overall care plan. • Review the documented packing count. 	
3. Prepare the client: <ul style="list-style-type: none"> • Assess the client's pain/anxiety for appropriate medication(s), allow time for the medication(s) to take effect. 	The client undergoing NPWT may experience pain and anxiety. Provide pain management strategies, medications, and reassurance.
4. Set-up for dressing removal: <ul style="list-style-type: none"> • If during the NPWT phase, ensure the device is OFF for at least 30mins <u>or</u> • Plan to do dressing removal following the dwell/soak phase. 	Turning off the device releases the therapy and allows wound exudate to collect on the wound bed, aiding in release of the foam.
5. Prepare for the procedure: <ul style="list-style-type: none"> • Gather supplies to reapply the dressing or to apply an alternative dressing. • Position the client for the procedure. • Clamp dressing, canister, cassette tubing(s). • Disconnect the canister and protect the tubing ends, if re-using. • Perform hand hygiene & don clean gloves. • Set up a sterile dressing tray with NS. 	Protect the dressing tubing ends using the protective cap, if available. If not available, use a sterile 4x4 gauze dressing to cover both.
6. Check packing count on dressing: <ul style="list-style-type: none"> • Check the NPWT dressing for the number of interface layer(s) and wound filler(s) used with the previous dressing change. 	Counts of the interface layer(s) and wound filler(s) should match. Ensure this count matched the packing count documented in the client's chart.
7. Release the transparent film drape: <ul style="list-style-type: none"> • Select a drape edge, with one hand gently stretch it away from the wound; with the other hand slowly push the skin down to release the skin from the drape. • Repeat steps around drape edges. 	A peeling motion can cause epidermal stripping, irritating the peri-skin and surrounding skin. If edges do not release easily, use an adhesive remover.

Note: This is a **controlled** document. A printed copy may not reflect the current, electronic version on the CLWK Intranet (www.clwk.ca). Any paper document should always be checked against the electronic version prior to use; the electronic version is always the current version. This DST has been developed as a guide to support nursing practice in British Columbia, however it is not a substitute for education, experience & the use of clinical judgment.

Steps	Rationale/Key Points
<p>8. Remove the wound filler(s):</p> <ul style="list-style-type: none"> • Using forceps and additional NS, start at the wound edge and gently remove the wound fillers from the wound bed. • Remove the interface layer(s), if present. • Remove all the foam from any undermining, sinus/tunnels and any loose specks of foam from the wound bed. • Count all interface layer(s)/ wound filler(s) to ensure removal. If the count does not match documentation, notify the Physician/NP. 	<p>If the wound filler(s) is still adhering to the wound bed, add more NS. Consider use of a non-adherent interface dressing when the dressing is reapplied.</p> <p>Retained wound filler(s) pieces and dressings can increase the risk of wound infection.</p> <p>Report any interface or wound filler miscounts in the Patient Safety Reporting system.</p>
<p>9. Remove gloves and perform hand hygiene.</p>	
<p>10. To reapply another NPWT dressing, use the Procedure: Applying/Reapplying VACUIta4 Dressing or apply alternative dressing as ordered.</p>	

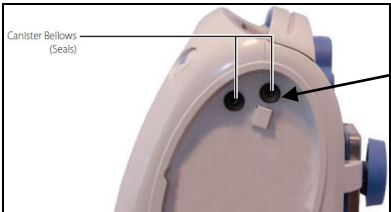
Procedure: Changing the VACUIta4 Canister during Veraflo Therapy	
<p>Change the canister whenever a new Smart Fill set-up is done, when the canister is 3/4 full, or at least every 7 days.</p>	
Steps	Rationale/Key Points
<p>1. Assemble equipment and supplies:</p> <ul style="list-style-type: none"> • Sterile replacement NPWT canister • Alcohol swab x 1 	
<p>2. Set up for the procedure:</p> <ul style="list-style-type: none"> • Perform hand hygiene and put on PPE if needed. • Press the Pause/Resume button. • Close all the tubing clamps. • Open the sterile canister package and leave the canister resting in the sterile packaging. 	<p>Therapy can be paused for 15 minutes to change the canister. The canister can be changed at any point in the cycle.</p>
<p>3. Prepare the tubing connector site:</p> <ul style="list-style-type: none"> • Scrub the canister and dressing tubing connection sites with alcohol swab (30 secs). • Assess volume of drainage in the cannister using the graduated marks. • Detach the dressing tubing from the old canister tubing. 	<p>Alcohol must be allowed to dry for 30 seconds for it to be effective.</p>
<p>4. Change the canister:</p> <ul style="list-style-type: none"> • Keeping the new tubing tip sterile, attach the canister tubing to the dressing tubing. • Press the tab to release the canister from the device. • Click the new canister in place on the device. • Unclamp both tubing clamps. • Press Start/Stop to resume therapy. • Date and time the canister. 	<p>The alarm will sound if not fully clicked into place.</p>
<p>5. Clean up the workspace:</p> <ul style="list-style-type: none"> • Discard used canister/supplies appropriately. • Perform hand hygiene. 	

Procedure: Changing the Veralink Cassette	
<p>Change the cassette every 3 days and when the type of instillation solution is changed.</p> <p>When changing the cassette, the solution bag is changed at the same time.</p>	
Steps	Rationale/Key Points
<p>1. Assemble equipment and supplies:</p> <ul style="list-style-type: none"> • Sterile replacement Veralink cassette • Solution bag as per order • Gauze sterile 2x2 • Alcohol swab x 1 • Appropriate PPE 	
<p>2. Set up for the procedure:</p> <ul style="list-style-type: none"> • Perform hand hygiene and put on PPE. • Open sterile Veralink cassette packaging, leave the cassette resting on the sterile packaging. • Press the Pause/Resume button. • Close the two tubing clamps. 	<p>Therapy can be paused for 15 minutes to change the cassette. This can be done at any point in the cycle.</p>
<p>3. Disconnect the cassette with the instillation tubing:</p> <ul style="list-style-type: none"> • Press down on the cassette release tab to release the old cassette; this will have the solution bag attached. • Cleanse the instillation and dressing tubing connection site with the alcohol swab, let dry (30 secs); then disconnect. • Protect the dressing tubing end with a sterile gauze. • Discard the old solution bag and cassette. 	<p>Alcohol must dry for 30 seconds to be effective.</p> <div style="display: flex; justify-content: space-around;">   </div>
<p>4. Install new cassette and solution bag:</p> <ul style="list-style-type: none"> • Prepare cassette: <ul style="list-style-type: none"> ○ Insert the cassette into the pivot slot on left side of the device. ○ Pivot the release tab towards the device. ○ Press firmly and listen for a click. ○ Guide instillation tubing into the retention groove on the device handle. ○ Remove the cap from the end of the installation tubing and the sterile gauze from the dressing tubing; connect the tubing. Ensure connection is secure. • Prepare the hanger arm: <ul style="list-style-type: none"> ○ Unlock the hanger arm and raise up. ○ Rotate 180 degrees and lock in place. • Prepare the solution bag: <ul style="list-style-type: none"> ○ Connect the new solution bag to the cassette spike. ○ Hang bag on the hanger arm. Adjust the height of the solution bag to ensure that bag hangs freely. Once positioned, push the bag/spike securely into the cassette slot. 	<p>Apply very firm pressure until the cassette clicks firmly into place. The alarm will sound if not fully clicked into place.</p> <p>Apply pressure to push tubing securely into the groove.</p> <p>Prepare the solution arm so it is ready to hold the solution bag.</p>

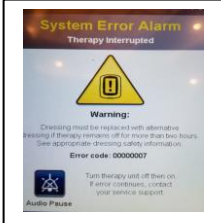
Steps	Rationale/Key Points
<ul style="list-style-type: none"> • Open both clamps. • Ensure the cassette spike and solution tubing is not kinked or pinched. • Date the cassette • Date the instillation solution bag. 	
<p>5. Clean up the workspace:</p> <ul style="list-style-type: none"> • Discard the old cassette and used supplies appropriately. • Perform hand hygiene. 	

Managing Veraflo (Instill/Dwell) Alerts/Alarms	
Alerts and Alarms	How to Correct the Situation
<p>Veralink Cassette Not Engaged Alert:</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when the cassette is not fully engaged. • This alert is accompanied by a repeating audible tone. 	<ul style="list-style-type: none"> • Remove the Veralink cassette from the device by pushing down on the cassette latch release tab. • Inspect the cassette and device to ensure there are no foreign objects/debris interfering with the cassette or connection points. • Ensure the cassette's pivot connection, on the end with the tubing spike, is securely engaged within the pivot slot on the therapy device. • Reattach the cassette to the device and ensure it is fully engaged. An audible click indicates the cassette is properly installed. • Press Pause/Resume therapy to restart therapy.
<p>Veraflo Solution Bag/Bottle Empty Alert:</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when the instillation fluid is empty. • This alert is accompanied by a repeating audible tone. 	<ul style="list-style-type: none"> • Remove the empty solution bag or bottle from the Veralink cassette. • Attach a new solution bag or bottle and place it on the adjustable solution container hanger arm. • Press Pause/Resume therapy to restart therapy.
<p>Veraflo Fill Assist Inactive Alert:</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when the Fill Assist volume has not been accepted within 15 minutes of using Fill Assist. • This alert is accompanied by a repeating audible tone. 	<ul style="list-style-type: none"> • Select 'Reset' to return to the Home Screen. • Select 'Therapy Settings'. • Reconfigure the therapy, if needed. • Verify that the 'Fill Assist' slider is set to ON
<p>Veraflo Tubing (cassette to dressing) Blockage Alert:</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when the instillation of the VeraTRAC Pad is blocked. • This alert is accompanied by a repeating audible tone. 	<ul style="list-style-type: none"> • Check tubing connections • Check the wound to see if the foam is compressed, if not search for air leak by pressing down on drape and moving slowly around the wound, Patch the air leak area with a piece of transparent drape. • Ensure the cassette tubing solution is still liquid and flows freely. If the solution has degraded to a thicker consistency, change any or all of the following: Veralink cassette, VeraTRAC pad tube set, or the solution bag or bottle. • Check client positioning or any external compression devices that may impede flow. • Resume therapy.
<p>3M/KCI Customer Service: Phone: 1-800-668-5403</p>	

Managing VACUita4 Device Alerts/Alarms Page 1 of 2

Alerts and Alarms	How to Correct the Situation
<p>Blockage Alert & Alarm:</p> <ul style="list-style-type: none"> A solid yellow symbol will appear indicating a possible blockage. This alert / alarm is accompanied by a repeating audible tone. This alert and alarm may appear as a low alert or medium alarm. 	<ul style="list-style-type: none"> Ensure the VeraTRAC pad, dressing tubing, and canister tubing are not bent or blocked in any way and that the canister is fully engaged. If this does not work, lower the tubing and the NPWT device below the wound level. This may correct the problem. If this does not work, press RESET and return to the HOME screen. If the device is not ON, press the Pause/Resume button to restart therapy. If this does not work, remove and reposition the TRAC pad(s): <ul style="list-style-type: none"> Ensure the device is OFF - press the Start/Stop button. Using sterile gloves, remove the existing VeraTRAC pad(s). Seal the initial hole with film drape. Assess and choose a new location for the VeraTRAC pad. Wipe the drape with alcohol swab, let dry (30 seconds). Trim out a 2.5 cm round hole in the drape. Reapply the VeraTRAC pad and secure it in place using strips of film drape. Restart the device.
<p>Canister Full Alarm:</p> <ul style="list-style-type: none"> Solid yellow symbol will appear when the canister is full. This alarm is accompanied by a repeating audible tone. The canister release button will flash. 	<ul style="list-style-type: none"> Check the graduated marks on the canister. A full canister is approximately 500mL or 1000mL, depending on the size of canister used. If the canister is not full, press the Pause/Resume button. If the canister is full, press RESET and return to the home screen. Change the canister and press the Pause/Resume therapy button to resume therapy.
<p>Canister not Engaged Alarm:</p> <ul style="list-style-type: none"> Solid yellow symbol will appear when the canister is not fully engaged. This alarm is accompanied by a repeating audible tone. The canister release button will flash. 	<ul style="list-style-type: none"> Remove the canister by pressing on the Canister Release Button. Inspect the canister to ensure no foreign bodies/debris are interfering with the canister and device mating surfaces. Ensure both canister seals are present and sitting correctly. Re-attach the canister to the device, ensuring that the canister is fully engaged (push firmly into place if needed) and latched. An audible click should be heard, indicating that the canister is properly installed. Press the Reset button to return to the Home screen. Press Pause/Postpone button to restart therapy.
<p>Therapy Inactive Alarm:</p> <ul style="list-style-type: none"> Solid yellow symbol will appear when the therapy has been paused for more than 15 minutes with the device powered on. This alarm occurs with a repeating audible tone. 	<ul style="list-style-type: none"> Press RESET to return to the HOME screen. Press Pause/Resume to restart the therapy. To shut OFF therapy, press and hold the POWER button.

Note: This is a **controlled** document. A printed copy may not reflect the current, electronic version on the CLWK Intranet (www.clwk.ca). Any paper document should always be checked against the electronic version prior to use; the electronic version is always the current version. This DST has been developed as a guide to support nursing practice in British Columbia, however it is not a substitute for education, experience & the use of clinical judgment.

Managing VACUIta4 Device Alerts/Alarms Page 2 of 2	
Alerts and Alarms	How to Correct the Situation
<p>Therapy is interrupted: This alarm occurs with a repeating audible tone.</p>	<ul style="list-style-type: none"> • TRAC pad, and canister tubing are not kinked or blocked in any way. • Press SEAL CHECK to access the leak detector section. Allow the SEAL CHECK to run its checks. This may take 2 to 3 minutes
<p>Therapy Low Pressure Alarm:</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when the therapy has not reached its target therapy pressure. This alarm is accompanied by a repeating audible tone. 	<ul style="list-style-type: none"> • Ensure the canister is engaged. • Ensure the clamps are open. • Ensure the TRAC pad dressing tubing, TRAC pad, and canister tubing are not bent or blocked in any way. <p>If this does not work, lowering the tubing and device below the wound level may correct the therapy pressure.</p>
<p>Therapy Pressure Deviation Alarm:</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when the wound site positive pressure has exceeded its allowable limits. This alarm is accompanied by a repeating audible tone. 	<ul style="list-style-type: none"> • Ensure the canister is engaged. • Ensure the clamps are open. • Ensure the TRAC pad dressing tubing, TRAC pad, and canister tubing are not kinked, crimped, or blocked in any way. • Check client positioning or any external compression devices that may impede flow. Remove external compression device. • Resume therapy.
<p>Low Battery Alert / Battery Exhausted Alarm:</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when there is 2 hours left before the battery power level is too low to support therapy. This alarm is accompanied by a repeating audible tone. 	<ul style="list-style-type: none"> • Plug in device, ensure the electrical cord indicator show a green dot. • Ensure the cord connections are secure.
<p>Therapy Internal Temperature Alert:</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when the internal temperature of the VACUIta4 therapy device is outside of specified limits. This alert is accompanied by a repeating audible tone. 	<ul style="list-style-type: none"> • Move the NPWT device to an environment where there is air flow. It may take 2 hours for the therapy device to return to the operating temperatures. • Replace the device.
<p>System Error Alarm 00000007</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when Vera link canister is installed prior to the device being powered on or if there is a blockage or faulty sensor. 	 <ul style="list-style-type: none"> • Remove the cassette. • Power Off the device. • Power On the device. • Select the Veraflo function. • Reinstall the cassette. • If issue continues, return the faulty device.
<p>System Error (Device Failure) Alarm / 00000001:</p> <ul style="list-style-type: none"> • Solid yellow symbol appears when there is a system fault with the VACUIta4 therapy device after it has been powered ON. This alarm is accompanied by a repeating audible tone. 	<ul style="list-style-type: none"> • Power device OFF (press and hold the power button), if not already done, then restart to see device will work. If not, replace the device. • If unable to restart therapy in 2 hours, remove the NPWT dressing and apply an alternative dressing. Notify ordering Physician/NP/ NSWOC/Wound Clinician of the situation. • Record the Error Code Number or record '00000001' as KCI will need this information.

3M/KCI Customer Service: Phone: 1-800-668-5403

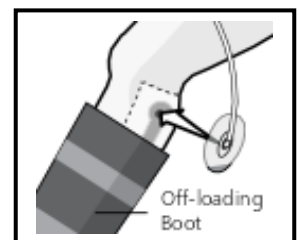
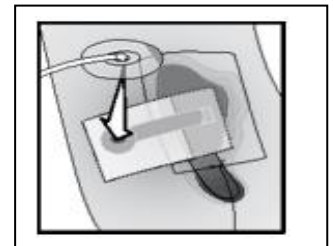
Procedure: Bridging - Offloading the Veraflo TRAC Pad

This procedure is used to offload the Veraflo TRAC pad when placing the TRAC pad directly over a wound site may hinder the client from safely positioning or mobilizing, or when it may create additional pain, pressure, or periwound maceration.

It is recommended that VeraFlo foam be used for the bridging as it is designed for the dwell/soak phase.

Caution: Veraflo bridging may cause skin maceration under the bridge during the instillation soak phase.

Steps	Rationale/Key Points
1. Complete the Veraflo dressing up to Step 11 in Procedure: Applying or Reapplying VacUltra4 Veraflo Dressing	If needed, apply a few strips of transparent film drape to tack the wound's black foam piece(s) in place while laying out the bridge.
2. Identify an alternate site for the Veraflo TRAC pad to be located.	Consider positioning and mobility.
3. Ensure skin barrier wipe and transparent film drape is added to dressing tray.	These will protect the skin under the bridge from the negative pressure.
4. Prepare the skin: <ul style="list-style-type: none"> • Wearing sterile gloves, apply barrier wipe to the skin that the foam bridge and Veraflo TRAC pad will rest upon. • Cut the transparent film drape in 5-7 cm wide strips. • Cut the transparent film drape into an 8 cm circle for the TRAC pad to rest upon. • Cut the film drape into 2.5 cm strips to "tack" the bridge foam pieces in place. 	Skin barriers protects the skin from adhesive and helps to maintain an airtight seal. This will protect the skin from the effects of the suction. Wider strips are needed with Veraflo to ensure an effective airtight seal. Prepare additional strips of transparent film drape to hold the bridge in place.
5. Prepare the offloading bridge & Veraflo TRAC pad foam: <ul style="list-style-type: none"> • Cut the foam piece(s) at least 4 cm wide and 2 cm longer than the distance between the wound dressing and the alternate Veraflo TRAC pad site. • Cut a foam piece 6-7 cm round for the Veraflo TRAC pad to rest upon. 	
6. Create the offloading bridge foam & Veraflo TRAC pad site: <ul style="list-style-type: none"> • Lay down film drape strips from the edge of the wound to where the Veraflo TRAC pad is to rest. • Lay down the bridge foam. • Place the foam for the Veraflo TRAC pad in position. • Ensure all of the foam pieces (from the wound to the Trac pad) overlap by 1 cm. • Apply 2.5 cm film drape strips to 'tack' the bridge foam and Veraflo TRAC pad foam pieces in place. • Cover entire bridge and Veraflo TRAC pad foam with a layer of transparent film drape. 	All the foam pieces must overlap each other by a least 1 cm in order for the negative pressure to be applied through-out the entire dressing (bridge & wound). Ensure bridge foam does not touch unprotected skin. If using more than one piece of transparent film drape, ensure they overlap by at least 3-5 cm. If NPWT is used with an offloading device, bandage or garment, ensure the full length of the bridge is long enough to place the Veraflo TRAC pad outside of the medical device.



Steps	Rationale/Key Points
7. To complete the dressing, return to Step 12 of the Procedure: Applying or Reapplying VACUIta4 Veraflo dressing.	
<p>To Remove the Offloading Bridge</p> <ul style="list-style-type: none"> • Anchor the film drape with one hand, with the other hand gently stretch the drape horizontally away from the wound, and slowly push the skin away from the drape. • Remove any remaining transparent drape. 	<p>A peeling motion can cause epidermal stripping and irritates the peri-skin and surrounding skin.</p>

Procedure: Client Showering
<p>Clients can shower but not have a tub bath. The shower time should be kept short, and if the dressing is to be changed, the shower needs to be taken within the hour before the change.</p> <ul style="list-style-type: none"> • Gather the supplies: alcohol swab, two 2x2 gauze dressings and tape. • Turn the device “OFF”. Wash hands. • Using an alcohol swab, cleanse the connection point of the dressing tubing and the cannister tubing and disconnect. Place each end in a sterile 2x2 gauze and tape securely. • Using an alcohol swab, cleanse the connection point of the dressing and the irrigation solution and disconnect. Place each end in a sterile 2x2 and tape securely. • Place the device where it will not get wet. • To avoid water getting into the tubing; ensure that the dressing tubing is positioned downward during the shower; the device has a one-way valve that will not allow water to run thru the tubing into the dressing. • The dressing is waterproof but should not be exposed to direct shower spray. If necessary, cover with a plastic sheet/tape. • After showering, pat the dressing and tubing dry. <ul style="list-style-type: none"> ○ Reconnect the two tubing. Open both tubing clamps. ○ Leave the device OFF until the dressing is changed (should be within the hour).

Transition/Discharge Planning see [Negative Pressure Wound Therapy: Guideline](#)

- For transition from one acute site to another acute care site.

Client/Family Education and Resources

1. Acute Care:
 - a. When NPWT Veraflo (instill/dwell) is started, teach patient/family the rationale for and the underlying principles of NPWT, as well general information regarding the VACUIta4 device.

Documentation

1. With each VACUIta4 NPWT dressing change, document in the client’s change as per BCCNM/HA/agency documentation standards and include the following:
 - a. The full wound assessment
 - b. The number (#) of grey foam packing pieces removed and replaced
 - c. Document the client’s response to the dressing change.
2. Document NPWT clinical outcomes and care plan revisions as they occur.
3. For Acute Care, document safety/monitoring checks on the [NPWT Safety/Monitoring Check Flow Sheet](#).
4. For Acute Care document canister fluid volume; use the Fluid Balance (In/Out) flow sheets as per unit policy.

5. When a VACUltra4 NPWT dressing is applied/changed in the Operating Room (OR), the following is documented in the OR record:
 - NPWT type: Open Wound
 - Type(s) of wound filler and interface pieces placed in or removed from the wound cavity by the surgical team.
 - Number of pieces placed in/removed from the wound cavity by the surgical team.
6. Report NPWT adverse events in the Patient Safety Learning System or report the safety event according to Health Authority or agency guidelines.

Definition

BCCNM: British Columbia College of Nurses & Midwives

Client: generic term used to describe a recipient of care regardless of care setting; patient in the hospital, client in community; resident in long-term care.

Bibliography/References

Refer to the [Negative Pressure Wound Therapy: Guideline](#) for the master list of references.

KCI. (2017, July). *V.A.C. Ultra4 therapy systems: User manual for clinicians*. (pp. 1-200).

<https://www.veraflo.com/wp-content/uploads/2017/01/VAC-Ultra-4-Therapy-System-User-Manual.pdf>

KCI. (2017). *V.A.C. Ultra negative pressure wound therapy system: Operating Manual*. (pp. 1-396).

Date of Creation

This guideline is based on the best evidence-based information available at the time it was published and avoids opinion-based statements, where possible. It was developed by the Provincial Nursing Skin and Wound Committee and has undergone a provincial stakeholder review.

Created By	British Columbia Provincial Nursing Skin and Wound Committee in collaboration with the NSWOC and Wound Clinicians from across all Health Authorities.
Publication Date	September 2020
Revision Date(s)	March 2022, September 2022, September 2023
Review Date(s)	

Appendix A: Fill Assist

Fill - Assist

Fill Assist function is used on the initial instillation to determine the volume of solution the wound can hold. The instillation can be manually started and stopped to ensure the correct volume. Once determined, this volume is set for each subsequent instill phase of the Veraflo therapy.

If the Fill Assist is OFF – fill the dressing manually using one of the following two methods; use the Default Settings or customize the settings using the Advanced Settings:

a. Default Settings - screen shows automatically; note there are three settings which can be programmed using the +/- button:

- Fill Assist: ON
- Start Phase: Instill
- Instill Volume(mL): Fill Assist(needs to be determined)
- Dwell/Soak Time: 10 mins or use +/-
- VAC (NPWT) Therapy Time: 3½ hours or use +/-
- VAC (NPWT) Target Pressure: 125 mmHg or use +/-
- Intensity: Medium
- VAC (NPWT) Therapy Mode: Continuous

When the settings are correct as per the order, press OK and then see Steps below.

Settings not available to be adjusted using the +/- buttons are managed in Advanced Settings.

b. Advanced Settings - press 'Advanced Settings' button and configure the settings on the two screens:

- Fill Assist: (ON or OFF)
- Start phase: Instill
- Instill Volume (mL): Volume amount to be determined.
- Dwell/Soak Time: Up to 30 minutes; use +/- to make change
- Therapy Time: Use +/- to make a change
- Pressure (mmHg): Use +/- to make a change
- Intensity: Select Low, Medium or High
- Therapy Mode: Use +/- for Continuous or Dynamic Pressure Control

When settings are confirmed as per order, press OK and then see Steps below.

Steps	Rationale/Key Points
<p>Run the initial therapy. As with the Smart Instill feature, there are 4 phases for the initial therapy.</p> <p>Phase 1. Draw Down: The Seal Check Leak Detector function applies negative pressure to draw down the dressing to identify any air leaks; this takes up to 2 ½ mins to complete. Pressure is released to begin the Fill Assist.</p> <ul style="list-style-type: none"> • Assess for leaks and repair, if needed. <p>Phase 2. Instill: The Fill Assist function primes the instillation tubing and fills the dressing to establish the amount of solution the dressing can hold.</p> <ul style="list-style-type: none"> • Press the Start/Stop button to begin the Fill Assist. The amount instilled is visible on the device screen; stop the instill by pressing the Start/Stop button. • During instillation, dressing becomes darker in colour; <ul style="list-style-type: none"> ○ Monitor for saturation: <ul style="list-style-type: none"> ○ If fluid is backing-up/bubbling in the tubing when the Trac-pad is pressed and/or if dressing is close to leaking, stop the instill 	<p>Phases of Veraflo Therapy</p> <pre> graph TD P1([Phase 1: Initial negative pressure draw-down; occurs with each dressing change.]) --> P2[Phase 2: Negative pressure is released, instillation begins.] P2 --> P3[Phase 3: Dwell/soak of the solution] P3 --> P4[Phase 4: Negative pressure resumes] </pre> <p>When the dressing is firmly sealed, wound filler(s) collapses, the dressing appears wrinkled in appearance, is firm to the touch, and no hissing sounds.</p> <p>Do not overfill the foam as it will compromise the</p>

Steps	Rationale/Key Points
<ul style="list-style-type: none"> ○ If over-filled, press the Reset button to stop the fill; use +/- button to draw out extra solution; press Start/Stop when done. ○ If under-filled, use +/- button to add more volume; press Start/Stop when done. ● When the correct instill volume is achieved, press OK. The confirmed volume will be stored in the device's memory for the subsequent instillations. <p>Phase 3. Dwell/Soak: The soak phase has a default setting (1 - 10 minutes).</p> <ul style="list-style-type: none"> ● Monitor the dressing for leaks during each dwell/soak phase; if repairs needed, press the Pause/Resume button to allow time to repair the seal with transparent drape. ● Once the soak phase is complete, if more repairs of the dressing are needed, press the Pause/Resume button (and Press OK to confirm the pause in therapy) and do repair. ● Once leaks are repaired, press the Pause/Resume button (and Press OK to resume therapy) and begin the NPWT. <p>Phase 4. NPWT Phase: NPWT will begin after the dwell/soak is complete and the solution has been removed.</p> <ul style="list-style-type: none"> ● The VACUIta4 home screen is displayed. ● Check that Therapy Time is shown. <p>Phases 2, 3, and 4 become the 'Cycle'.</p>	<p>dressing seal. If overfilled, the solution needs to be removed.</p> <p>The initial prescribed instillation volume will be updated once the first instill is completed.</p> <p>A count-down time clock will appear on the screen telling the time remaining in the soak.</p> <p>Pause/Resume function provides 15 minutes to do leak repairs.</p> <p>When large volumes of instillation solution are used, leakage is possible, monitor the dressing as additional drape may be needed.</p> <p>If needed, support the anatomical location/area during the Dwell/Soak cycle, as the dressing may be susceptible to leaks; support the wound area with surface contact or pillow(s) to prevent bulging of drape if the wound is in a dependent position.</p> <p>Negative pressure therapy will run until the next scheduled Instill/Dwell cycle.</p>