VACUUM ASSISTED CLOSURE® in paediatrics and young people

A consensus document
FOREWORD

Although ample published evidence exists regarding the use of Vacuum Assisted Closure® (V.A.C.® Therapy) in adults, there is little published evidence and much confusion relating to the use of this treatment modality in children. Recognition of this problem prompted the formation of a group of experts who conducted literature reviews, consulted patients, carers and colleagues, developed consensus opinion, and formulated and tested recommendations for the safe and effective use of V.A.C.® Therapy in patients under the age of 18 years.

This useful document presents the major achievement of this process: guidelines that provide clarification and practical assistance to healthcare professionals who work with children and young people receiving V.A.C.® Therapy, whether in the acute sector or in the community.

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The expert working group would like to thank the many nursing and medical colleagues who made important contributions including: Ursula Dickson, Birmingham Children’s Hospital (UK) and Gill Brooks, Birmingham Children’s Hospital (UK). We are also grateful for the contribution from Frances Dooley, Alder Hey Hospital (UK) based on her considerable experience in pain relief management in children.

These Principles of Best Practice guidelines have been produced by an expert working group, led by practitioners at Birmingham Children’s Hospital in the UK to guide practitioners on the use of V.A.C.® Therapy in paediatrics and young children. Please read the disclaimer below before reading the guidelines.

Disclaimer

These guidelines are intended to guide practitioners in the use of V.A.C.® Therapy in paediatrics and young children. The guidance contained herein is not intended to replace individual assessment and personalised treatment of the patient. The authors attempt to base the guidance on best available evidence and ensure that content is up to date at the time of going to press. The guidelines may not necessarily represent the views of all clinicians at The Birmingham Children’s Hospital (BCH).

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In these guidelines it is necessary to use product names to ensure clarity of information or for the purpose of identifying a specific type of product or drug. Where possible, generic product names have been used in preference to trade names or trademarks. Please be aware that use of any trade names listed in this document should not necessarily be seen as an endorsement of the product and that other similar products may be available.
The guidance provided in this document relates the use of V.A.C.® Therapy in paediatric patients, that is in neonates, children, and young people less than 18 years of age.

**INDICATIONS**

V.A.C.® Therapy is used in a wide variety of acute and chronic wounds to:
- remove exudate and reduce periwound oedema
- increase tissue perfusion
- promote formation of granulation tissue
- reduce the complexity/size of a wound
- optimise the wound bed prior to and following surgery
- create a closed, moist wound environment

In paediatric patients, the potential reduction in dressing change frequency associated with V.A.C.® Therapy may have important benefits in reducing anxiety and distress to patients and their parent(s)/carer(s). The nature of the V.A.C.® Therapy dressing provides enhanced dressing security and reduces the likelihood of the patient disrupting or removing the dressing. Box 1 lists paediatric wound types suitable for V.A.C.® Therapy.

<table>
<thead>
<tr>
<th>Superficial/surface wounds</th>
<th>Cavity wounds</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma (e.g. degloving injuries)</td>
<td>Traumatic tissue loss</td>
<td>Heavily exuding wounds</td>
</tr>
<tr>
<td>Partial thickness burns</td>
<td>Dehisced surgical wounds</td>
<td>Infected wounds*</td>
</tr>
<tr>
<td>Skin grafts</td>
<td>Pressure ulcers</td>
<td>Deep sternal wounds</td>
</tr>
<tr>
<td>Skin or muscle flaps</td>
<td>Diabetic ulcers</td>
<td>Congenital open abdominal wounds</td>
</tr>
<tr>
<td>Dermal substitutes</td>
<td></td>
<td>Leg ulcers</td>
</tr>
</tbody>
</table>

*V.A.C.® Therapy is not recommended as a stand-alone treatment for wound infection. It may be used with caution in infected wounds as long as this is in addition to appropriate treatment of the infection.

In addition to the type of wound and the objectives of treatment, the decision to treat with V.A.C.® Therapy will be influenced by a wide range of other factors. These include the availability of equipment and disposable supplies, and accessibility to suitably trained practitioners to monitor treatment and undertake dressing changes. Such factors may be of critical importance in the community setting and dictate how and whether V.A.C.® Therapy is employed.

The duration of use of V.A.C.® Therapy will vary according to treatment goals and response to treatment. For example, the use of V.A.C.® Therapy to prepare a wound for skin grafting may take only a week or so. For definitive closure of a chronic wound V.A.C.® Therapy may be used for extended periods as long as satisfactory progress is made.

**APPLICATION TO PRACTICE**

The guidance in this document should be used in conjunction with the policies and procedures of the relevant healthcare organisation(s).
CONTRAINDICATIONS AND CAUTIONS
The contraindications and cautions for the use of V.A.C.™ Therapy in paediatric patients are similar to those in adult patients (Box 2).

**Box 2 | Contraindications and cautions for V.A.C.™ Therapy in paediatric patients (adapted from2)**

<table>
<thead>
<tr>
<th>Contraindications</th>
<th>Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment is refused</td>
<td>Close proximity to vital structures: ensure these are adequately protected with overlying fascia, tissue or other protective barriers</td>
</tr>
<tr>
<td>Untreated osteomyelitis</td>
<td>Anticoagulant therapy</td>
</tr>
<tr>
<td>Wound contains:</td>
<td>Enteric fistula</td>
</tr>
<tr>
<td>- exposed blood vessels or organs</td>
<td>Pain score above a threshold determined by local guidelines) (see page 11)</td>
</tr>
<tr>
<td>- open joint capsule</td>
<td>Healthy periwound margin &lt;2cm (see page 7)</td>
</tr>
<tr>
<td>- fistula (unless enteric)</td>
<td></td>
</tr>
<tr>
<td>- malignancy</td>
<td></td>
</tr>
<tr>
<td>- active bleeding</td>
<td></td>
</tr>
<tr>
<td>- necrotic eschar</td>
<td></td>
</tr>
</tbody>
</table>

Healthcare practitioners should be fully conversant with the contraindications and cautions for the use of V.A.C.™ Therapy in paediatric patients

Imaging
V.A.C.™ Therapy dressings and tubing can be left in situ during X-ray, MRI, fluoroscopy or dye tests. However, the V.A.C.™ Therapy unit must not be taken into an MRI suite as it may damage the MRI equipment or cause damage to the patient/caregiver. The results of imaging tests for wounds containing silver impregnated foams may be distorted2.

Hyperbaric oxygen therapy
The V.A.C.™ Therapy dressing may be removed under the direction of the hyperbaric oxygen therapy (HBOT) clinician to allow oxygen into the wound (see page 9 for information on dressing removal). If the dressing is left in situ during HBOT, the unit and canister should be removed, and the tubing clamped and covered according to the manufacturer’s guidance2.

AUTHORISATION
As a minimum, the use of V.A.C.™ Therapy for wound management must be authorised by the child’s consultant (or designated deputy) and named nurse (or designated deputy) in accordance with local authorisation and/or reimbursement policies.

Consideration of local reimbursement issues is particularly important if the child is to be discharged into the community with V.A.C.™ Therapy.

CONSENT
During the process of obtaining consent, a full explanation of V.A.C.™ Therapy should be given to the child and parent(s)/carer(s), including:
- goal(s) of treatment
- mode of action
- negative pressures to be used
- approximate treatment time
- advantages, disadvantages and potential side effects
- alternative treatment options.
Where possible, an age-appropriate patient information leaflet should be given to the child before consent is obtained, and any questions arising from this answered before therapy starts.

Verbal or written consent for V.A.C.® Therapy should be obtained according to local protocol. Verbal consent must be documented in the child's medical notes.

Discussion of treatment goals during the consent process will assist in managing expectations, and will assist appropriate staff when deciding to end therapy.

COMMUNITY USE
Before applying V.A.C.® Therapy to children in the community, or before transfer of a child receiving V.A.C.® Therapy from hospital to community:

- the adequacy of haemostasis should be ensured and a low risk of bleeding at the wound site should be established
- the suitability of the home environment should be considered
- the parent(s)/carer(s) must understand the safety information, and be able to respond to alarms and follow instructions for use
- where appropriate, children, parent(s) or carer(s) who wish to manage the therapy should be trained and assessed as competent in accordance with local policy or General Medical Council (GMC) or Nursing and Midwifery Council (NMC) guidelines
- the practitioners involved in community care must be conversant with V.A.C.® Therapy and competent to carry out procedures as necessary (see below)
- appropriate V.A.C.® Therapy equipment must be used, e.g. portable units with extended battery life.

PRACTITIONER COMPETENCIES
Appendix 1 (see end of document) outlines the competencies required by hospital and community practitioners to use V.A.C.® Therapy.

In all instances, if the skills are not practised within three months, the practitioner must satisfy his/herself that their skills are in line with current practice, or seek reassessment.

The practitioner and supervisor should determine the number of supervised practices required to achieve competence, taking into account the learning needs of the practitioner.

Practitioners new to an organisation who wish to undertake V.A.C.® Therapy and who gained competency elsewhere, will need to familiarise themselves with local protocols, and should provide evidence of previous education, training and competency.

 Supervisors who deem practitioner competency should fulfil local requirements for the role and themselves:
- have suitable experience of V.A.C.® Therapy
- be up-to-date with techniques and equipment
- be fully conversant with local protocols.

Practitioners must accept responsibility and be accountable for maintaining their competence through regular clinical experience and development of supporting theoretical knowledge3
Assessment

The following should be assessed before initial application of V.A.C. Therapy and also at each dressing change:

- **Wound**: Assessment should include documenting the type, site, size, and depth of the wound, the condition of the wound bed and periwound skin, and the amount and characteristics of exudate. Where possible, photography should be used in accordance with Institute of Medical Illustrators (IMI) guidelines to record and monitor wound appearance\(^4\). See Box 3 for signs of healing progress.

- **Pain**: An agreed and consistently used pain assessment tool should be used to assess pain at and between dressing changes. See pages 11–12 for more information on pain assessment and management.

- **Psychosocial well-being**: The child, family and carer(s) need to understand why V.A.C. Therapy is required, what therapy comprises and what to expect. The impact of V.A.C. Therapy on the child and the parent(s)/carer(s) should be evaluated, e.g., are sleep, mobility, play or social activities being affected (positively or negatively)?

- **Duration of treatment**: Anticipated frequency of foam dressing change (see page 9) and anticipated therapy completion date (if known) should be documented.

- **Clinical reactions**: The child should be monitored for signs of allergic reaction to materials applied to the skin. If reactions occur or sensitivities to components of the dressings are known, the dressing component should be discontinued or not used, and the clinician directing treatment informed.

- **Nutritional status**: Ensuring adequate nutrition is particularly important for patients with chronic wounds and burns. Nutritional supplements should be administered as prescribed.

- **Size and weight of the patient**: Paediatric patients may be at risk of excessive fluid loss and dehydration. Fluid output should be carefully monitored, and fluid from both the canister and tubing measured\(^2\). Before inclusion of these measurements in fluid balance calculations, account must be taken of any liquid added to the canister when V.A.C. Therapy was set up or the canister changed (see page 9).

Deterioration of the wound or lack of healing progress should prompt comprehensive reassessment with appropriate interventions and/or troubleshooting strategies (see pages 23–24 of V.A.C. Therapy clinical guidelines\(^2\)).

**Box 3 | Signs of wound healing progress with V.A.C. Therapy\(^2\)**

- Wound bed becomes deeper red as perfusion increases
- Gradual reduction of exudate volume over time
- Steady decrease in wound dimensions each week

Where prompted by assessment, appropriate referrals to relevant professionals should be made.

**APPLICATION TO PRACTICE**

Holistic assessment according to local guidelines should be performed prior to initial application of V.A.C. Therapy and at each dressing change.
Before applying V.A.C.™ Therapy or removing or changing dressings, it is essential to ensure that consent has been obtained and documented according to local policy (Figure 1). It is also important to check that the child and parent(s)/carer(s) understand what is involved and that questions are encouraged and answered.

Many patient and parent/carer anxieties will relate to pain: analgesia should be administered as prescribed and given sufficient time to become effective before procedures are initiated (see pages 11–12). Distraction techniques (eg computer games, watching television, music, listening to stories) may be very helpful and should be offered and tailored to the requests and needs of the child.

The initial application of V.A.C.™ Therapy, subsequent dressing changes and final removal should use universal precautions and be treated as aseptic procedures.

Where possible, child/parent/carer involvement should be encouraged, particularly if it is anticipated that V.A.C.™ Therapy will continue for some time

* NB: Canister changes do not necessarily occur at the time of dressing changes (see page 9)
ASSEMBLE EQUIPMENT
- V.A.C.® Therapy unit
- 300ml canister (for safety reasons the 1000ml canister must NOT be used)
- Dressings – the type of foam used will be dependent on the wound and the child, although the V.A.C.® WhiteFoam Dressing is generally recommended to prevent growth of granulation tissue into the foam
- Wound care pack (as necessary)
- Gloves and scissors
- Barrier film dressing.

PREPARE WOUND AND PERIWOUND AREA
If already in place, the drape and foam should be removed (see Removal on page 9).

If necessary, the wound should be debrided, and the wound and periwound area irrigated, in accordance with local guidelines.

Only practitioners deemed competent should perform wound debridement
A barrier film dressing should be applied to the periwound area. This will help to produce a seal that enables the unit to maintain a negative pressure on the wound.

**The wound must have a perimeter of at least 2cm of viable intact skin so that a seal can be maintained**

*Where skin is fragile or bridging is necessary, it is possible to use an appropriate dressing, eg a hydrocolloid dressing or V.A.C.® Gel Strips. However, this should be discussed with the child’s consultant or a member of the woundcare team.*

**APPLY THERAPY**

**Foam**

The foam(s) should be cut to the wound dimensions, ensuring the wound base, sides and any undermined areas are covered. The number of pieces of foam inserted into the wound should be documented. Force should not be used to push the foam into the wound, and the foam should not be compressed.

Unless V.A.C.® WhiteFoam Dressing is used, a single layer of wide-meshed, nonadherent material may need to be applied to the wound bed before foam insertion to prevent adherence.

**Drape**

The drape should be sized, trimmed and applied to cover the foam dressing and a 2cm periwound border. The drape can be ‘patched’ as necessary and should not be placed under tension.

**SensaT.R.A.C.® pad**

After a central section of the drape is lifted by pinching up a fold, a 2.5cm hole should be cut in the drape with scissors. The SensaT.R.A.C.® pad should be applied directly over the hole.

**Neonates and infants** with small wounds may require an additional piece of foam under the SensaT.R.A.C.® pad to prevent pressure damage from the disc.

Gentle pressure can be used to facilitate adhesion of the pad to the drape. The tubing should be secured with tape to the patient to prevent pulling. Checks should be made to ensure that the pad and tubing are not pulling on the wound area or inhibiting patient mobility, handling or pressure area care.

**Canister**

The 300ml canister may be prefilled with a volume of sterile water or sterile saline according to the child’s age (Table 1, page 8) before connection to the dressing or unit. Prefilling the canister may allow more accurate measurement of fluid/exudate loss or provide early warning of a rapid or large fluid loss (eg significant bleed). The volume of saline should be documented on the canister to ensure this amount is deducted from the total fluid balance.
Once the canister has been connected to the unit, the dressing tubing should be connected to the canister tubing, and both clamps opened. The unit should be switched on and set to the agreed negative pressure (Table 2), cycle (ie intermittent or continuous negative pressure) and intensity. In general, continuous negative pressure should be used because intermittent negative pressure enhances granulation tissue formation, which is usually already robust in children. However, the individual child and wound will determine which form of negative pressure is used.

Once the unit has been programmed, the ‘therapy on/off’ button should be pressed to activate negative pressure and ‘collapse’ the dressing. Dressing integrity should be ensured by listening for leaks and observing the unit’s seal function (if available), and by checking that the drape is smooth. Consider starting with the lowest recommended negative pressure, because children generally tolerate this better.

### Table 1 | Volumes of sterile water or sterile saline for prefilling the 300ml canister

<table>
<thead>
<tr>
<th>Age</th>
<th>Volume (ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonate</td>
<td>275</td>
</tr>
<tr>
<td>Infant</td>
<td>250</td>
</tr>
<tr>
<td>Child (2-12 years)</td>
<td>200</td>
</tr>
<tr>
<td>Adolescent</td>
<td>150</td>
</tr>
</tbody>
</table>

### Table 2 | Recommended negative pressures for children

<table>
<thead>
<tr>
<th>Age</th>
<th>Negative pressure (mmHg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonates and infants</td>
<td>-25 to -75</td>
</tr>
<tr>
<td>Children and adolescents</td>
<td>-75 to -125</td>
</tr>
</tbody>
</table>

**APPplication to practice**

Where appropriate, eg if V.A.C.® Therapy is applied to a limb, palpate distal pulses to ensure circulatory patency and check that the patient has no tingling or numbness.

Wound swabs are only necessary where clinical signs of infection are present.

Discontinue therapy if there is frank pus or excessive bleeding under the dressing, or noted in the tubing or canister, and investigate and treat.

The unit should only be switched off (for a maximum of 2 hours in any continuous 24 hour period) if:
- there is a problem with the unit
- if a seal cannot be achieved or maintained
- an intervention is required, eg CT or MRI scan
- there is a change in the child’s clinical condition that contraindicates V.A.C.® Therapy
- treatment goals have been achieved

Do not use V.A.C.® Therapy with any other products or equipment, eg wall/portable suction or non-V.A.C.® foam.
Dressing removal and canister change

V.A.C.® Therapy dressings should be changed every 5–7 days when applied to skin grafts or dermal substitutes. For all other wounds, dressings should be changed every 48–72 hours.

If infection is present, dressings should be changed according to exudate level (eg to prevent leakage under the drape), but at least every 48 hours.

Analgesia and/or distraction techniques should be administered as prescribed and necessary. After raising the tubing connectors above the level of the therapy unit, the clamp on the dressing tubing should be closed with the unit still running. The canister tubing and dressing tubing are separated.

Once the unit has pulled the exudate in the canister tube into the canister, the clamp on the canister tube is closed and the ‘therapy on/off’ switch is pressed to deactivate the unit. The canister can be changed if required (see below).

The foam should be allowed to decompress completely before the drape is removed.

The drape is removed by gentle stretching parallel to the skin surface and slowly pulling up from the skin. It should not be peeled off. The foam is gently removed from the wound, ensuring that the number of pieces removed tallies with the number inserted.

Dressings should be disposed of according to local infection control protocol.

**CANISTER CHANGE**

The canister should be changed using universal precautions when full (usually every 3–5 days), at least once per week, or as suggested by local infection control policy.

The ‘therapy on/off’ switch should be turned off before canister change. The clamps on both the canister and dressing tubing should be closed. The canister tubing can then be disconnected and the canister removed from the unit and disposed of according to local protocol.

The amount and appearance of the contents should be documented, taking into account the volume of sterile water/saline used to prefill the canister.

The new canister may be prefilled with sterile water or sterile saline according to Table 1 (page 8) and reconnected to the dressing tubing. After both clamps are opened and the pressure, cycle and intensity reset (if appropriate), the ‘therapy on/off’ button can be pressed to switch on negative pressure.

**APPLICATION TO PRACTICE**

If the foam adheres to the wound, consider flushing sterile saline through the tubing before drape removal and allowing it to soak into the foam.
**INFECTION CONTROL**

**On discontinuation of V.A.C.® Therapy**

When therapy is discontinued, the V.A.C.® Therapy unit should be cleaned with detergent and water (or a detergent wipe), then an alcohol wipe, and placed in a polythene bag and stored in the black carrying case provided as per manufacturer’s instructions. The unit should not be immersed or soaked in liquid. A label should be attached to the outside of the case indicating that the machine has been used and is awaiting collection. The unit should be placed in a designated storage facility. The manufacturer should be contacted for collection and decontamination, and the relevant paperwork completed.

**Unit contamination**

If the child has an infection or an infected wound and the outside of the unit is contaminated, the unit should be disinfected according to local decontamination policy, and/or advice sought from the local infection control team.

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**TROUBLESHOOTING**

At the start of each shift, nursing staff must check that the unit is set at the pressure, cycle and intensity prescribed.

**Noise:** If the unit is noisier than usual, often reported as making a ‘croaking’ sound, there may be problems maintaining the set pressure. This should not be ignored. The unit should be checked and reset if appropriate. If problems persist, contact the manufacturer’s representative or telephone the helpline.

**Alarm sounding:** the most common reasons for the alarm to sound are:

- Air leak in the dressing → look and listen for it and apply V.A.C.® Drape over any leaks
- Canister is full → change the canister
- Tubing is kinked or a clamp is closed → unkink or unclamp tubing
- V.A.C.® Therapy unit screen reads ‘Internal Device Error’ → unit is broken and should be replaced

If help is required, contact the local tissue viability team, or the manufacturer:

**DO NOT JUST TURN THE UNIT OFF**
Pain management

The management of pain in children receiving V.A.C.® Therapy has two facets – management of:
- wound-related background pain
- pain resulting from dressing application or change.

This section provides information on the management of procedural pain. The management of background pain and procedural pain should be considered as separate issues. However, plans to manage procedural pain need to take into account any regimen used for background pain.

Essential to good pain management is accurate, ongoing, consistent and documented assessment of pain that uses an age/developmentally appropriate, preferably validated, rating scale. The pain assessment tool used should be in line with local policy. Further information on pain assessment in paediatric patients can be obtained from: www.rcn.org.uk/childrenspain guideline.

PROCEDURAL PAIN MANAGEMENT

Procedural pain management demands a focused and planned approach that includes all members of the team involved, eg medical and nursing staff, the patient and parent(s)/carer(s). Planning should include the timing and location of the procedure, as this may inform the type and/or availability of safe analgesia/sedation.

Prior to commencing any procedure the patient should be asked if they are experiencing any pain. If pain is present then an appropriate pain assessment tool should be used to identify the intensity of pain.

Paediatric patients respond well to non-drug therapies. These can reduce anxiety, distract and enhance the effect of the pharmacological agents used. As wounds heal and procedures become less invasive, non-drug therapies may be used in isolation, but only after careful assessment of the individual patient. Non-drug therapies include the environment (eg temperature, lighting, location, etc.), distraction and focused play (eg the child reading the story rather than the adult reading to the child), and relaxation and guided imagery (where staff trained in these strategies are available).

The type of analgesia used should be chosen on the basis of the degree of invasiveness of the procedure, as well as likely duration. For example, dressing application or change in a wound that is clearly likely to cause significant pain should be undertaken using strong analgesia, eg morphine, Entonox or fentanyl lozenge. These produce some degree of anxiolysis in addition to analgesia.

It is essential that analgesia is given sufficient time to take effect BEFORE commencing the procedure.

APPLICATION TO PRACTICE

Appropriate analgesia/distraction therapies should be administered as prescribed and as necessary to manage pain resulting from dressing application or change.

Paediatric patients experiencing ongoing background pain should be managed by an appropriately trained healthcare professional and according to local guidelines.
For procedural pain to be well managed, both the physiological and psychological (e.g., anxiety) components of pain must be addressed. In some patients, the psychological component may be managed using non-pharmacological techniques such as those described above. However, in some cases, sedation may also be advisable. Midazolam, for example, provides good anxiolysis, and has amnesic qualities.

Entonox can also be considered, particularly in outpatient and community settings, because the onset and recovery are very rapid.

**Healthcare professionals prescribing for or administering drugs to paediatric patients should ensure that the drugs and doses used are age- and weight-appropriate**

**MONITORING**

All paediatric patients receiving drugs that have a sedative effect should be monitored according to local guidelines. Discharge from the clinical area should only be allowed when the patient has achieved their pre-sedation state.

**Clinicians should undertake an appropriate risk assessment, and use their skill and clinical judgement to guide the type and level of monitoring required during dressing changes**

**DOCUMENTATION**

The name, route, dose and time of administration of drugs given must be recorded along with the time the procedure was commenced. The efficacy of the analgesia can be monitored by assessing the patient’s pain during and immediately after the procedure. This information should be used to re-assess and plan any future dressing changes.
Further reading

SOFT TISSUE WOUNDS

TRAUMA

DEHISCED AND STERNAL WOUNDS

MISCELLANEOUS WOUNDS
### Theory of V.A.C.® Therapy

<table>
<thead>
<tr>
<th>Underpinning theory</th>
<th>Details of assessment and experience</th>
<th>Date achieved</th>
<th>Signature of assessor</th>
<th>Signature of practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Able to explain the theory underpinning the mechanism of V.A.C.® Therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Can discuss the rationale for the appropriate use of V.A.C.® Therapy</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>Can list the contraindications to use of V.A.C.® Therapy in those less than 18 years of age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Is fully conversant with indications for cessation of V.A.C.® Therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Aware of local NHS Trust or healthcare organisation policy and procedure relating to the ordering of appropriate equipment</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Practical skills in the care of paediatric patients receiving V.A.C.® Therapy

<table>
<thead>
<tr>
<th>Underpinning theory</th>
<th>Details of assessment and experience</th>
<th>Date achieved</th>
<th>Signature of assessor</th>
<th>Signature of practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Can explain and demonstrate the importance of giving the child/family/carer(s) adequate information regarding V.A.C.® Therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Able to demonstrate how to accurately assess the wound as part of a holistic approach to care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Able to discuss the importance of accurate documentation of V.A.C.® Therapy and its outcome</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Can correctly and safely apply the V.A.C.® Therapy dressing and set up the V.A.C.® Therapy unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Able to provide holistic care for the child/family/carer(s) whilst receiving V.A.C.® Therapy</td>
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I declare that I have undertaken and achieved the relevant theoretical and practical competencies to enable me to use V.A.C.® Therapy in accordance with the organisation's policy, procedures and protocols, and Nursing and Midwifery Council/General Medical Council guidance.

Signature of practitioner ........................................... Date .................

I declare that I have supervised this practitioner and found him/her to be competent as judged by the above criteria.

Signature of supervisor ........................................... Date .................
This consensus document has been produced in association with the Birmingham Children's Hospital