



CLINICAL MEDICAL POLICY	
<b>Policy Name:</b>	Negative Pressure Wound Therapy in the Outpatient Setting
<b>Policy Number:</b>	MP-022-MD-PA
<b>Responsible Department(s):</b>	Medical Management
<b>Provider Notice/Issue Date:</b>	02/01/2023; 03/01/2022; 02/13/2021; 02/17/2020; 03/18/2019; 04/15/2018
<b>Effective Date:</b>	03/01/2023; 04/01/2022; 03/15/2021; 03/16/2020; 03/18/2019; 04/15/2018; 12/01/2016
<b>Next Annual Review:</b>	12/2023
<b>Revision Date:</b>	12/21/2022; 12/15/2021; 12/16/2020; 12/18/2019; 12/19/2018; 12/12/2017; 08/09/2017; 03/15/2017
<b>Products:</b>	Highmark Wholecare <sup>SM</sup> Medicaid
<b>Application:</b>	All participating hospitals and providers
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#### Policy History

Date	Activity
03/01/2023	Provider Effective date
01/12/2023	PARP Approval
12/21/2022	QI/UM Committee review
12/21/2022	Annual Review: No changes to clinical criteria. Reformatted 'Procedure' section numbering. Added TAG determination information, HCPCS codes A9272, K0744, K0745, & K0746 are considered experimental/investigational. Updated 'Summary of Literature' and 'Reference Sources' sections.
04/01/2022	Provider effective date
02/01/2022	PARP Approval
12/15/2021	QI/UM Committee Review
12/15/2021	Annual Review: No changes to clinical criteria. Made minor formatting changes to Procedures section. Updated Summary of Literature and Reference Sources sections.
03/15/2021	Provider Effective Date
02/02/2021	PARP Approval
12/16/2020	QI/UM Committee Review
12/16/2020	Annual Review: removed broken hyperlinks, updated Summary of Literature and References, added Hayes review, added the following ICD-10 codes: S41.001A-S41.019A, S41.031A-S41.039A, S41.101A-S41.119A, S51.001A-S51.019A, S51.031A-S51.039A, S51.081A-S51.819A, S51.831A-S51.839A, S61.501A-S61.519A, S61.531A-S61.539A,

	S71.001A-S71.019A, S71.031A-S71.039A, S71.101A-S71.119A, S71.131A-S71.139A, S81.001A-S81.019A, S81.031A-S81.039A, S81.801A-S81.819A, S81.831A-S81.839A, S91.001A-S91.009A, & S91.031A-S91.039A
03/16/2020	Provider effective date
12/01/2016	Initial effective date

## **Disclaimer**

Highmark Wholecare<sup>SM</sup> medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

## **Policy Statement**

Highmark Wholecare<sup>SM</sup> may provide coverage under the durable medical equipment (DME) benefit of the Company's Medicaid products for medically necessary electrically powered negative pressure, vacuum-assisted wound closure therapy.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

(Current applicable PA HealthChoices Agreement Section V. Program Requirements, B. Prior Authorization of Services, 1. General Prior Authorization Requirements.)

## **Definitions**

**Prior Authorization Review Panel (PARP)** – A panel of representatives from within the PA Department of Human Services who have been assigned organizational responsibility for the review, approval and denial of all PH-MCO Prior Authorization policies and procedures.

**Licensed Health Care Professional** – For the purposes of this policy, a licensed health care professional is a physician, physician assistant (PA), registered nurse (RN), licensed practical nurse (LPN), or physical therapist (PT). The practitioner should be licensed to assess wounds and/or administer wound care within the state where the beneficiary is receiving vacuum assisted wound closure therapy.

**Vacuum Assisted Wound Closure Device** – A type of medical therapy that involves the use of suction (negative pressure) underneath airtight wound dressings to promote the healing of open wounds that have been resistant to previous treatments. Device is also known as: Wound VAC, negative pressure wound therapy (NPWT), vacuum assisted wound closure, sealed surface wound suction (SSS), sub atmospheric pressure therapy or dressing (SWT), foam suction dressing and vacuum pack technique (VPT), vacuum sealing technique (VST), incisional negative pressure wound therapy (INPWT), closed incision management (CIM) topical negative pressure therapy (TNP) and prophylactic negative pressure wound therapy (PNPWT).

**Exudate (drainage)** – Interstitial fluid produced by the body in response to tissue damage. Exudate production is essential for moist wound healing. Normally, the production reduces overtime but there are wounds that do not heal as expected, which will produce excessive exudate or no exudate. A wound should not have extreme wetness or dryness in the healing process.

**Wound healing** – The improvement occurring in either surface area (length x width) or the depth of the wound.

## **Procedures**

1. Powered Negative Pressure Wound Therapy (NPWT) may be considered medically necessary when ALL of the following criteria are met for ALL wound types:
  - A. The patient is 12 years of age or older; AND
  - B. A complete wound care program has been previously attempted which includes ALL of the following:
    - 1) Documentation in the medical record by a licensed medical professional on the current and previous wound care management and wound healing progress; AND
    - 2) The patient has a complex wound where size, depth, location, complications, exudate amount, etiology and/or other specific factors support non-feasibility of healing with moist topical dressing; AND
    - 3) Wound care physician's notes contain an initial wound measurement followed by measurements at a minimum of once a month. Documentation must show the progress of the healing wound and anticipated duration of vacuum assisted wound therapy (e.g., degree of wound healing required); AND
    - 4) Controlling of comorbid conditions, diabetes, nutritional issues, and pressure relief at wound site (**Note:** Please see the *Contraindications* and *Precautions* sections below) ; AND
    - 5) Operative note or wound care notes if requests are for treatment in surgical and/or traumatic wounds; AND
    - 6) If the initiation of NPWT occurred during an inpatient stay, the initial date of service is to be documented; AND
  - C. The patient has ANY ONE of the following wound conditions:
    - 1) **Chronic Stage III or IV pressure ulcers (>30 days):**
      - a. Standard dressings cannot be maintained due to anatomic factors; AND
      - b. The patient's incontinence and/or moisture issues have been appropriately managed; AND
      - c. There has been use of group 2 or 3 support surface for pressure ulcers on the trunk or pelvis; OR
    - 2) **Neuropathic (e.g., diabetic) ulcers**, where the patient has been actively involved in a comprehensive diabetic management program, and any foot ulcers have been appropriately reduced using medically appropriate modalities; OR
    - 3) **Venous or arterial insufficiency ulcers or chronic ulcers of mixed etiology:**
      - a. Compression bandages OR garments have been applied appropriately; AND
      - b. Elevating the affected extremity has been maintained while the member is sedentary; AND
      - c. Ambulation/leg exercises that promote circulation have been encouraged and utilized; AND

- d. For initiation of vacuum assist wound device in the home setting, the ulcer must have been present for at least 30 days; OR
- 4) **Traumatic or surgical wound (i.e., preoperative flap or graft, exposed bones, tendons, or vessels)**
  - a) Burns; OR
  - b) Complications of surgically created wounds (i.e., dehiscence, post-sternotomy disunion with exposed sternal bone, post-sternotomy mediastinitis, or post-operative disunion of the abdominal wall) which may include the use of skin grafts to assist in wound closure.

2. The following supplies are considered medically necessary for NPWT, including:

- Wound care sets (HCPCS code A6550) limited to up to 15 dressing kits per wound, per month. Documentation must be provided to support the medical necessity for requests in excess of limitation.
- Canister sets (HCPCS code A7000) limited to 10 per month in most cases. Documentation must be provided showing evidence that a large volume of drainage exists (i.e., documentation shows an exudate amount greater than 90 ml of exudate per day).

**Note:** Vacuum assist devices are capable of accommodating more than one wound dressing set for multiple wounds on a patient. Therefore coverage for more than one pump per patient for the same time period will be considered not medically necessary.

3. Continuation of Services

- Continuation of the powered vacuum assist wound device is considered medically necessary following an initial two week therapeutic trial or a subsequent period if the treatment has resulted in documented improvements of the wound.
- Coverage for the medically necessary powered vacuum assist wound device will end when the treating physician reports adequate wound healing has occurred to the degree where the device may be discontinued.
- There must be documentation by the wound care physician regarding wound healing. Documentation of wound progress measurements include:
  - Decrease wound size (length, width, depth, undermining, tunneling)
  - Increased granulation tissue
  - Increase epithelialization
  - Decreased wound odor
  - Decreased wound pain
  - Decreased volumes of exudate
- Continued use of the therapy should be reviewed against outcome criteria at the beginning of therapy, at each dressing change or, at a minimum of every two weeks and reported on a monthly basis.
- Recent laboratory values should not demonstrate that a contraindication exists.

**Note:** In some circumstances, the use of the treatment modality when initiated in the inpatient setting may not meet the criteria for use in the outpatient setting. In this case, a review for medical necessity determination by a Medical Director must be performed.

#### 4. Contraindications

The wound being treated must be free of the following absolute contraindications for NPWT:

- Exposed anastomotic site
- Exposed nerves
- Exposed organs
- Exposed vasculature
- Malignancy in the wound
- Necrotic tissue with eschar
- Non-enteric and unexplored fistulas
- Untreated osteomyelitis
- Severe peripheral arterial disease (i.e., Ankle Brachial Pressure Index  $\leq 0.5$  needs investigation, and if appropriate, revascularization prior to commencement of vacuum assist device)
- Patient is an active smoker
- Obesity
- Poorly managed diabetes
- Uremia
- Ascites
- Anemia
- Jaundice
- Steroid use

#### 5. Precautions

The following factors have been identified as risks to wound healing and should be adequately addressed by the ordering provider:

- Malnourished patients who have not received adequate nutrition/nutritional supplements (e.g., hyperalimentation).
- Neuropathic or circulatory compromise
- Non-concordant or combative patients
- Patients with infected wounds; they may require more frequent dressing changes
- Patients with burns-the devitalized burned tissue must be debrided prior to application of NPWT
- Patients with wounds in close proximity to blood vessels, delicate fascia, vital organs or exposed tendons (ensure adequate protection with overlying fascia, tissue or other protective barriers)
- Bone fragments or sharp edges could puncture protective barriers, vessels, or organs causing injury. Any injury could cause bleeding, which, if uncontrolled results could be fatal.
- The wound dressing must be removed if defibrillation is required in the area of dressing placement. Failure to remove the dressing may inhibit transmission of electrical energy and/or patient resuscitation.
- The wound therapy unit is MRI unsafe and should not be taken in the MRI environment; dressings can typically remain on the patient with minimal risk in an MRI environment.
- Hyperbaric Oxygen Therapy (HBOT): the wound therapy unit is unsafe in the hyperbaric oxygen chamber and is considered a fire hazard. Care must be taken with the wound dressing to ensure HBOT compatible.
- Precautions need to be taken in patients receiving long-term anticoagulant therapy, hemophilia and patients with hemoglobinopathies, such as sickle cell.

- No vacuum assisted wound device has been cleared for use in infant and children (the patient's size and weight should be considered when prescribing this device).
6. NPWT services are considered not medically necessary under ANY of the following circumstances:
- For use on newborns, infants, and children. The safety and effectiveness has not been established, and there are no NPWT systems are cleared for use in these populations.
  - In the judgment of the treating physician, adequate wound healing has occurred to the degree that NPWT may be discontinued and the wound can be anticipated to heal completely with another wound care treatment(s).
  - Any measurable degree of wound healing has failed to occur over the prior month. Wound healing is defined as improvement occurring in either surface area (length X width) or depth of the wound.
  - The patient/caregiver is unable/unwilling to follow the plan of care.
  - The wound has developed evidence of a wound complication contraindicating continued use of the device.
  - NPWT that extends beyond 4 months (this includes NPWT applied in an inpatient setting prior to discharge to the home) is considered not medically necessary and does require a Medical Director review.

Any conditions not listed in criteria above will be considered not medically necessary since the scientific evidence has not been established. Examples of indications that are not medically necessary include, but are not limited to:

- Use of the device following cardiac surgery not meeting medical necessity criteria listed above
- Use of the device following surgical excision of pilonidal sinus and/or recurrent pilonidal disease
- Use of device as a preventive/prophylactic intervention in patients with surgical wounds, such as a diagnosis of diabetes or obesity as risk factors, ventral hernia repair or post cesarean delivery, post knee arthroplasty or kidney transplantation.
- Use of chemotherapeutic agents in intermittent instillation with use of NPWT

In any of these situations, the Medical Director may override criteria when, in their professional judgment, the requested service is medically necessary.

Use of a non-powered vacuum assist device (e.g., *SNaP*® system) or a battery operated, disposable system (e.g., *PICO*™ system) (HCPCS code A9272) have not been proven in peer-reviewed literature as medically effective and are not medically necessary for the treatment of acute and/or chronic wounds.

If it is determined during the course of treatment for an initial wound that the NPWT system will be applied to additional wounds, all additional wounds must meet the criteria listed in this policy to determine medical necessity.

## 7. DME

The negative pressure wound therapy device (HCPCS code E2402) is classified as a DME rental item and may be subject to prior authorization requirements.

8. Post-payment Audit Statement

The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by Highmark Wholecare at any time pursuant to the terms of your provider agreement.

9. Place of Service

For the purposes of this policy, the proper place of service for vacuum assisted wound therapy is in the home setting.

### **Governing Bodies Approval**

The VAC device received premarket approval to include the indication of partial-thickness burns on December 20, 2002.

On November 13, 2009 the U.S. Food and Drug Administration (FDA) released a Medical Device Alert regarding the use of NPWT systems. The alert notified medical practitioners of possible death or serious complications due to the use of the vacuum assisted wound therapy systems. Per the FDA, it had received reports of six deaths and 77 injuries associated with this device over the two years. Major complications reported included bleeding and infection. The alert provided the recommendations to reduce risks with the device:

1. More careful selection of patients for vacuum assisted wound therapy.
2. Assure that patient monitoring is performed frequently in an appropriate care setting by a trained practitioner. To determine the frequency of monitoring, the provider must consider the patient's condition, including wound status, wound location and comorbidities.
3. Proper training must be obtained prior to prescribing and using the device.
4. Instructions for proper home use of the vacuum assisted wound therapy device to the patient and/or caregiver must be given. This instruction is to include how to use the device, potential complications and their signs and symptoms, and management of complications.

In addition, the FDA listed the following contraindications for vacuum assisted wound therapy:

- Necrotic tissue with eschar present
- Untreated osteomyelitis
- Non-enteric and unexplored fistulas
- Malignancy (within the wound)
- Exposed blood vessels, nerves, anastomoses, or organs

The FDA release an updated Safety Communication on February 24, 2011 regarding major complications of the vacuum assisted wound therapy device. The update addressed the use of the device in the treatment of infants and children. Specifically 'The safety and effectiveness of vacuum assisted wound therapy devices in newborns, infants and children has not been established at this time and currently, there are no such devices cleared for use in these populations. The FDA defines a child as 'greater than 2 to 12 years of age' (U.S. FDA Premarket Assessment of Pediatric Medical Devices, 2004). No NPWT device has been cleared for use in infants and children.

NPD 1000 NPWT System previously manufactured by Kalypto (Smith and Nephew, St. Petersburg, FL) is a proprietary battery powered NPWT system that absorbs and lock-in small amounts of exudate without a collection container. The dressing drainage capacity is 70 cc. The Centers for Medicare and Medicaid

(CMS) has reclassified the device as a portable wound suction pump. The device is marketed as the smallest, lightest and most portable battery operated system available. The device received FDA approval in October 2008.

**List of Device Names U.S. Food and Drug Administration 510(k) clearance (this list is not all-inclusive):**

ActiV.A.C.® Therapy Unit  
Chariker-Jeter Wound Sealing Kit  
Engenex® Advanced NPWT System  
Exusdex® wound drainage pump  
EZCARE Negative Pressure Wound Therapy  
Genadyne A4 Wound Vacuum System  
InfoV.A.C.® Therapy Unit  
Invia Liberty Wound Therapy  
Invia Vario 18 c/i Wound Therapy  
Medela® Invia Liberty pump  
Mini V.A.C.®  
NPD 1000 Negative Pressure Wound Therapy System  
Prodigy™ NPWT System (PMS-800 and PMS-800V)  
PRO-I™  
PRO-II™  
PRO-III™  
RENASYS™ EZ Negative Pressure Wound Therapy  
SVEDMAN™ and SVED™ Wound Treatment Systems  
V.A.C.® ATS™  
V.A.C.® Freedom™  
V.A.C.® Instill Device  
V.A.C.® Therapy Unit  
V.A.C.® (Vacuum Assisted Closure™)  
V1STA Negative Pressure Wound Therapy  
Venturi™ Negative Pressure Wound Therapy

**CMS**

The Centers for Medicare and Medicaid Services (CMS) has published the following guidance:

- Local Coverage Determination (LCD) Negative Pressure Wound Therapy Pumps (L33821)
- Local Coverage Article (LCA) Negative Pressure Wound Therapy Pumps - Policy Article (A52511)

The Pennsylvania Department of Human Services Technology Assessment Group (TAG) workgroup meets quarterly to discuss issues revolving around new technologies and technologies or services that were previously considered to be a program exception. During this meeting, decisions are made as to whether or not certain technologies will be covered and how they will be covered. TAG's decisions are as follow:

- Option #1: Approved - Will be added to the Fee Schedule
- Option #2: Approved as Medically Effective - Will require Program Exception
- Option #3: Approved with (or denied due to) Limited/Minimal Evidence of Effectiveness - Will require Program Exception
- Option #4: Denied - Experimental/Investigational



As of May 2012, the TAG workgroup assigned mechanical wound suction, disposable (i.e., Snap smart negative pressure wound care system) an Option # 4, specifically for HCPCS codes A9272, K0744, K0745, & K0746.

### **Summary of Literature**

Negative pressure wound therapy (NPWT) is a vacuum assisted wound healing procedure that has been used in clinical applications for more than five decades. The concept of applying topical negative pressure in the management of wounds emerged in the late 1980s and is increasingly used for a wide variety of wounds. The merits of vacuum assisted wound therapy in the outpatient setting for a variety of wounds such as ulcers related to pressure sores, venous or arterial insufficiency or neuropathy and other wounds have been studied in a number of clinical contexts. NPWT has triggered accelerated wound healing in the outpatient setting which has reduced wound dressing, visits to specialists, and hospitalizations. An additional positive result of NPWT include significant antibacterial effects by reducing subcutaneous edema. NPWT devices are classified as either powered (requiring electric power source) or non-powered (mechanical) or battery operated (Lukasz, 2014). It is important to note that NPWT devices are adjunctive therapy and are not intended to replace good basic wound care (i.e., daily wound measurements of dimension and depth, wet dressing applications, necrotic debridement, adequate overall nutrition, and minimization of disease activity of comorbid conditions).

Application of NPWT can be used for various wound types, including:

- Decubitus (pressure) ulcers
- Neuropathic ulcers
- Ulcers related to venous or arterial insufficiency
- Dehiscence wounds or wound with exposed hardware or bone
- Post sternotomy wound infection or mediastinitis, or
- Complications of a surgically created wound where exhibiting accelerated granulation therapy is necessary and cannot be achieved by other available topical wound treatment.

NPWT applies a localized vacuum to draw the edges of the wound together while providing a moist environment conducive to rapid wound healing. The development of negative pressure techniques for wound healing is based on two theories: (1) the removal of excess interstitial fluid (exudate) decreases edema and concentrations of inhibitory factors, and increases local blood flow; and (2) stretching and deformation of the tissue by the negative pressure is believed to disturb the extracellular matrix and introduce biochemical responses that promote wound healing.

NPWT systems include a vacuum pump, drainage tubing, and a dressing set. The pump may be stationary or portable, may rely on AC or battery power, allow for regulation of the suction strength, has alarms to indicate loss of suction, and has a replaceable collection canister. The dressing sets may contain either foam or gauze dressing to be placed in the wound and an adhesive film drape for sealing the wound. The drainage tubes come in a variety of configurations depending on the dressings used or wound being treated. The electric pump applies intermittent or continuous negative pressure to an open cell foam or gauze wound dressing. The dressing evenly distributes pressure to the wound surface. In early stages of healing, fluid is withdrawn by the device, removing inhibitory factors and reducing bacterial counts. In later stages, tensile forces applied to surrounding tissues by the dressing are thought to stimulate cellular proliferation and protein synthesis.

According to one NPWT vacuum pump manufacturer (Smith-Nephew), optimal wound healing has occurred when:

- Initial therapy objectives have been met
- 100% granulation tissue in the wound bed
- Granulation tissue level with the surrounding skin
- Patient's overall condition/wound is improving
- Wound bed is ready to take a skin graft/flap
- Exudate levels less than 20-50 mls per day

#### Rationale

In 2012, the Cochrane Review conducted a systematic review of NPWT to surgical incisions using wound healing as the primary outcome of interest. Unfortunately, assessing the efficacy of NPWT by attempting to determine when a surgical incision is "completely healed" is a difficult endpoint to measure. A more clinically relevant question is how the application of NPWT affects the rate of surgical site complications. Zhang conducted a meta-analysis to evaluate the effectiveness and safety of NPWT for diabetic ulcers. Eight qualified studies were identified with a total of 669 patients. Overall, use of the NPWT resulted in a significantly higher proportion of healed diabetic foot ulcers, reduction of ulcer area and shorter time to wound healing. Use of this therapy resulted in fewer major amputations but the rate of minor amputations was not impacted (Zhang, 2014).

NPWT used in a prophylactic role has been reported in primarily observational studies. While there have been a small number of small trials, the use of prophylactic NPWT cannot be supported. Larger randomized trials are needed in order to determine health outcomes and cost effectiveness (Gestring, 2018).

The criteria for incisional NPWT has not been clearly defined and may vary according to incision and patient factors. Reported duration of incisional therapy varies between 1 and 5 days in the literature. Reddix, et al. (2009) reported discontinuation of incisional NPWT at the point when no edema fluid was evident in the device canister for 12 hours, usually 24 to 72 hours after surgery.

There are concerns surrounding the quantification of exudate levels within clinical research and day-to-day treatment of wounds. The characteristics of wound exudate vary heavily, in regards to factors such as wound type, underlying patient conditions, wound bed description, and chronic or acute wound types. These influencing factors make it difficult to standardize a specific exudate level for vacuum assisted wound therapy or any other wound therapy. Gerit D. Mulder, the CEO of the Wound Healing Institute in Denver, Colorado produced an exudate output classification for chronic wounds, including:

1. Absent (dry)
2. Minimal (less than 5cc per 24 hours)
3. Moderate (5-10 cc per 24 hours)
4. High (more than 10 cc per 24 hours) (Mulder, 1994)

According to the Journal of Wound Care (2014), Mulder terminology is familiar in the clinical environment but is not practical in clinical practice due to the numerous factors of wounds. Managing and decreasing exudate production is an important function within NPWT, a licensed clinical professional must assess the fluid quantity and type. A wound vacuum device removes exudate from a wound by applying the negative pressure which can be increased or decreased depending on the needs of the wound.

A 2019 randomized controlled trial conducted by Javed et al., sought to evaluate the efficacy of negative pressure wound therapy for surgical-site infection (SSI) after open pancreaticoduodenectomy. Despite improvement in infection control, SSIs remain a common cause of morbidity after abdominal surgery. SSI has been associated with an increased risk of reoperation, prolonged hospitalization, readmission, and higher costs. Recent retrospective studies have suggested that the use of negative pressure wound therapy can potentially prevent this complication. The group conducted a single-center randomized, controlled trial evaluating surgical incision closure during pancreaticoduodenectomy using negative pressure wound therapy in patients at high risk for SSI. Patients were randomly assigned to receive negative pressure wound therapy or a standard wound closure. The primary end point of the study was the occurrence of a postoperative SSI. The study also examined the financial impact of the intervention. From January 2017 through January 2019, 123 patients were randomly selected at the time of closure of the surgical incision. SSI occurred in 9.7% (6/62) of patients in the negative pressure wound therapy group and in 31.1% (19/61) of patients in the standard closure group (relative risk = 0.31; 95% confidence interval, 0.13–0.73; P = 0.003). This corresponded to a relative risk reduction of 68.8%. SSIs were found to independently increase the cost of hospitalization by 23.8%. It was found that the use of negative pressure wound therapy resulted in a significantly lower risk of SSIs. Incorporating this intervention in surgical practice can help reduce a complication that significantly increases patient harm and healthcare costs (Javed, et al, 2019).

A meta-analysis of RCT of prophylactic NPWT in closed abdominal incisions was conducted in 2019. The study examined whether NPWT may prevent subcutaneous fluid accumulation in a closed wound and subsequently reduce surgical site infections (SSI). This meta-analysis also aimed to determine the effect of prophylactic NPWT on SSI incidence following abdominal surgery. A systematic search of MEDLINE and EMBASE databases was performed using PRISMA methodology. All randomised trials reporting the use of NPWT in closed abdominal incisions were included, regardless of the type of operation. The primary outcome measure was the incidence of SSI, stratified by superficial and deep and organ/space infections. Secondary outcomes were wound dehiscence and length of hospital stay. Ten randomised trials met the inclusion criteria (five Caesarean, five midline laparotomy). The use of NPWT reduced overall SSI (11.6% vs. 16.7%, RR 0.67, 95% CI 0.48–0.95, p = 0.02). The rate of superficial SSI rate was also reduced (6.3% vs. 11.3%, RR 0.57, 95% CI 0.35–0.94, p = 0.03). There was no effect on deep or organ/space SSI (3.2% vs. 4.2%, RR 0.77, 95% CI 0.51–1.18, p = 0.23), wound dehiscence (9.7% vs. 10.9%, RR 0.92, 95% CI 0.69–1.21, p = 0.54), or length of hospital stay (MD 0.06 days, 95% CI –0.11 to 0.23, p = 0.51). This analysis was able to conclude that prophylactic use of NPWT may reduce the incidence of superficial SSI in closed abdominal incisions but has no effect on deep or organ space SSI (Wells, et al, 2019).

There are a number of non-powered, portable, disposable NPWT systems. The Smart Negative Pressure (SNaP®) Wound Care System, received 510(k) clearance from the FDA in 2009 and is designed to remove small amounts of exudate from chronic, traumatic, dehiscent, acute, or subacute wounds and diabetic and pressure ulcers. A single use, disposable NPWT device, the PICO™ system, received 510(k) clearance from the FDA in 2012 and is designed to remove low to moderate amounts of exudate. The system uses batteries instead of electrical power and instead of using a canister, the exudate is absorbed into the dressing. The use of the disposable, single use portable NPWT systems are not supported in scientific literature. Clinical trials fail to provide sufficient evidence to support improvement in net health outcomes compared to alternatives (Armstrong et al., 2012, Gabriel et al., 2013 and Hudson et.al. 2013).

Hayes, Inc.

- Negative Pressure Wound Therapy After Surgery for Pilonidal Disease
  - **D2 Rating** - For adjunctive treatment with NPWT of wounds healing by primary or secondary intention following surgery for pilonidal disease in adult patients. The current body of overall very-low quality evidence does not allow for conclusions to be drawn regarding the benefits and potential associated risks of NPWT as a treatment adjunct over standard wound care methods alone. There is a need for additional, larger well-designed studies to more thoroughly evaluate this therapy and to determine which patients may benefit from NPWT after surgery for pilonidal disease.
- Prophylactic Negative Pressure Wound Therapy in Elective Open Abdominal Surgeries
  - **C Rating** - For prophylactic use of NPWT in patients undergoing elective open abdominal surgery. The current body of overall low quality evidence suggests that there may be a benefit to NPWT over standard sterile dressing in elective open abdominal surgeries, driven by a lower rate of superficial infections; however, recent RCT evidence has not confirmed these findings and uncertainty remains. Significant heterogeneity exists between patient populations, underlying reason for abdominal surgery, and treatment characteristics within the included body of evidence making it difficult to discern which patients might most benefit from this form of prophylaxis.

## **Coding Requirements**

### Procedure Codes

<b>CPT Code</b>	<b>Description</b>
97605	Negative pressure wound therapy (e.g., vacuum assisted drainage collection), utilizing durable medical equipment (DME), including topical application(s), wound assessment, and instruction(s) for ongoing care, per session, total wound(s) surface area less than or equal to 50 square centimeters
97606	Negative pressure wound therapy (e.g., vacuum assisted drainage collection), utilizing durable medical equipment (DME), including topical application(s), wound assessment, and instruction(s) for ongoing care, per session, total wound(s) surface area greater than 50 square centimeters
<b>HCPCS Code</b>	<b>Description</b>
A6550	Wound care set, for negative pressure wound therapy electrical pump, includes all supplies and accessories
A7000	Canister, disposable, used with suction pump, each
A7001	Canister, nondisposable, used with suction pump, each
E2402	Negative pressure wound therapy electrical pump, stationary or portable

## Non-Covered Procedure Codes

*These procedure codes will not be reimbursed without Medical Director Approval.*

<b>CPT Code</b>	<b>Description</b>
97607	Negative pressure wound therapy, (e.g., vacuum assisted drainage collection), utilizing disposable, non-durable medical equipment including provision of exudate management collection system, topical application(s), wound assessment, and instructions for ongoing care, per session; total wound(s) surface area less than or equal to 50 square centimeters
97608	Negative pressure wound therapy, (e.g., vacuum assisted drainage collection), utilizing disposable, non-durable medical equipment including provision of exudate management collection system, topical application(s), wound assessment, and instructions for ongoing care, per session; total wound(s) surface area greater than 50 square centimeters
<b>HCPCS Code</b>	<b>Description</b>
A9272	Wound suction, disposable, includes dressing, all accessories and components, any type, each
K0743	Suction pump, home model, portable, for use on wounds
K0744	Absorptive wound dressing for use with suction pump, home model, portable, pad size 16 square inches or less
K0745	Absorptive wound dressing for use with suction pump, home model, portable, pad size more than 16 square inches but less than or equal to 48 square inches
K0746	Absorptive wound dressing for use with suction pump, home model, portable, pad size greater than 48 square inches

## Diagnosis Codes

<b>ICD-10 Code</b>	<b>Description</b>
E08.40	Diabetes mellitus due to underlying condition with diabetic neuropathy, unspecified
E08.41	Diabetes mellitus due to underlying condition with diabetic mononeuropathy
E08.42	Diabetes mellitus due to underlying condition with diabetic polyneuropathy
E08.43	Diabetes mellitus due to underlying condition with diabetic autonomic (poly) neuropathy
E08.44	Diabetes mellitus due to underlying condition with diabetic amyotrophy
E08.49	Diabetes mellitus due to underlying condition with other diabetic neurologic complication
E08.51	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy without gangrene
E08.52	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy with gangrene
E08.59	Diabetes mellitus due to underlying condition with other circulatory complications
E08.610	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy
E08.618	Diabetes mellitus due to underlying condition with other diabetic arthropathy
E08.620	Diabetes mellitus due to underlying condition with diabetes dermatitis
E08.621	Diabetes mellitus due to underlying condition with foot ulcer
E08.622	Diabetes mellitus due to underlying condition with other skin ulcer
E08.628	Diabetes mellitus due to underlying condition with other skin complications
E08.641	Diabetes mellitus due to underlying condition with hypoglycemia with coma
E08.649	Diabetes mellitus due to underlying condition with hypoglycemia without coma

E08.65	Diabetes mellitus due to underlying condition with hyperglycemia
E08.69	Diabetes mellitus due to underlying condition with other specified complication
E09.00	Drug or chemical induced diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E09.01	Drug or chemical induced diabetes mellitus with hyperosmolarity with coma
E09.10	Drug or chemical induced diabetes mellitus with ketoacidosis without coma
E09.11	Drug or chemical induced diabetes mellitus with ketoacidosis with coma
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication
E09.40	Drug or chemical induced diabetes mellitus with neurologic complications with diabetic neuropathy, unspecified
E09.41	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy
E09.42	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy
E09.43	Drug or chemical induced diabetes mellitus with neurological complications with diabetic autonomic (poly) neuropathy
E09.44	Drug or chemical induced diabetes mellitus with neurological complications with diabetic amyotrophy
E09.49	Drug or chemical induced diabetes mellitus with neurological complications with other diabetic neurological complication
E09.51	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy without gangrene
E09.52	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy with gangrene
E09.59	Drug or chemical induced diabetes mellitus with other circulatory complications
E09.610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy
E09.618	Drug or chemical induced diabetes mellitus with other diabetic arthropathy
E09.620	Drug or chemical induced diabetes mellitus with diabetic dermatitis
E09.621	Drug or chemical induced diabetes mellitus with foot ulcer
E09.622	Drug or chemical induced diabetes mellitus with other skin ulcer
E09.628	Drug or chemical induced diabetes mellitus with other skin complications
E09.641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma
E09.649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia
E09.69	Drug or chemical induced diabetes mellitus with other specified complication
E09.8	Drug or chemical induced diabetes mellitus with unspecified complications
E09.9	Drug or chemical induced diabetes mellitus without complications
E10.10	Type I diabetes mellitus with ketoacidosis without coma
E10.11	Type I diabetes mellitus with ketoacidosis with coma
E10.21	Type I diabetes mellitus with diabetic nephropathy
E10.22	Type I diabetes mellitus with diabetic chronic kidney disease
E10.29	Type I diabetes mellitus with other diabetic kidney complication
E10.40	Type I diabetes mellitus with diabetic neuropathy, unspecified
E10.41	Type I diabetes mellitus with diabetic mononeuropathy
E10.42	Type I diabetes mellitus with diabetic polyneuropathy
E10.43	Type I diabetes mellitus with diabetic autonomic (poly) neuropathy

E10.44	Type I diabetes mellitus with diabetic amyotrophy
E10.49	Type I diabetes mellitus with other diabetic neurological complication
E10.51	Type I diabetes mellitus with diabetic peripheral angiopathy without gangrene
E10.52	Type I diabetes mellitus with diabetic peripheral angiopathy with gangrene
E10.59	Type I diabetes mellitus with other circulatory complications
E10.610	Type I diabetes mellitus with diabetic neuropathic arthropathy
E10.618	Type I diabetes mellitus with other diabetic arthropathy
E10.620	Type I diabetes mellitus with diabetic dermatitis
E10.621	Type I diabetes mellitus with foot ulcer
E10.622	Type I diabetes mellitus with other skin ulcer
E10.628	Type I diabetes mellitus with other skin complications
E10.641	Type I diabetes mellitus with hypoglycemia with coma
E10.649	Type I diabetes mellitus with hypoglycemia without coma
E10.65	Type I diabetes mellitus with hyperglycemia
E10.69	Type I diabetes mellitus with unspecified complications
E10.8	Type I diabetes mellitus with unspecified complications
E10.9	Type I diabetes mellitus with without complications
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E11.01	Type 2 diabetes mellitus with hyperosmolarity with coma
E11.21	Type 2 diabetes mellitus with diabetic nephropathy
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly) neuropathy
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene
E11.59	Type 2 diabetes mellitus with other circulatory complications
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy
E11.620	Type 2 diabetes mellitus with diabetic dermatitis
E11.621	Type 2 diabetes mellitus with diabetic foot ulcer
E11.622	Type 2 diabetes mellitus with other skin ulcer
E11.628	Type 2 diabetes mellitus with other skin complications
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma
E11.65	Type 2 diabetes mellitus with hyperglycemia
E11.69	Type 2 diabetes mellitus with other specified complications
E11.8	Type 2 diabetes mellitus with unspecified complications

E13.00	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E13.01	Other specified diabetes mellitus with hyperosmolarity with coma
E13.11	Other specified diabetes mellitus with ketoacidosis with coma
E13.21	Other specified diabetes mellitus with diabetic neuropathy
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease
E13.29	Other specified diabetes mellitus with other diabetic kidney complication
E13.40	Other specified diabetes mellitus with diabetic neuropathy, unspecified
E13.41	Other specified diabetes mellitus with diabetic mononeuropathy
E13.42	Other specified diabetes mellitus with diabetic polyneuropathy
E13.43	Other specified diabetes mellitus with diabetic autonomic (poly) neuropathy
E13.44	Other specified diabetes mellitus with diabetic amyotrophy
E13.49	Other specified diabetes mellitus with other diabetic neurological complication
E13.51	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene
E13.52	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene
E13.59	Other specified diabetes mellitus with other diabetic circulatory complications
E13.610	Other specified diabetes mellitus with diabetic neuropathic arthropathy
E13.618	Other specified diabetes mellitus with diabetic arthropathy
E13.620	Other specified diabetes mellitus with diabetic dermatitis
E13.621	Other specified diabetes mellitus with foot ulcer
E13.622	Other specified diabetes mellitus with other skin ulcer
E13.628	Other specified diabetes mellitus with other skin complications
E13.641	Other specified diabetes mellitus with hypoglycemia with coma
E13.649	Other specified diabetes mellitus with hypoglycemia without coma
E13.65	Other specified diabetes mellitus with hyperglycemia
E13.69	Other specified diabetes mellitus with specified complications
E13.8	Other specified diabetes mellitus with unspecified complications
I70.231	Atherosclerosis of native arteries of right leg with ulceration of thigh
I70.232	Atherosclerosis of native arteries of right leg with ulceration of calf
I70.233	Atherosclerosis of native arteries of right leg with ulceration of ankle
I70.234	Atherosclerosis of native arteries of right leg with ulceration of heel and midfoot
I70.235	Atherosclerosis of native arteries of right leg with ulceration of other part of foot
I70.238	Atherosclerosis of native arteries of right leg with ulceration other part of lower right leg
I70.239	Atherosclerosis of native arteries of right leg with ulceration of unspecified site
I70.241	Atherosclerosis of native arteries of left leg with ulceration of thigh
I70.242	Atherosclerosis of native arteries of left leg with ulceration of calf
I70.243	Atherosclerosis of native arteries of left leg with ulceration of ankle
I70.244	Atherosclerosis of native arteries of left leg with ulceration of heel and midfoot
I70.245	Atherosclerosis of native arteries of left leg with ulceration of other part of foot
I70.248	Atherosclerosis of native arteries of left leg with ulceration of other part of lower left leg
I70.249	Atherosclerosis of native arteries of left leg with ulceration of unspecified site
I70.25	Atherosclerosis of native arteries of other extremities with ulceration
I70.261	Atherosclerosis of native arteries of extremities with gangrene, right leg
I70.262	Atherosclerosis of native arteries of extremities with gangrene, left leg



170.263	Atherosclerosis of native arteries of extremities with gangrene, bilateral legs
170.268	Atherosclerosis of native arteries of extremities with gangrene, other extremity
170.269	Atherosclerosis of native arteries of extremities with gangrene, unspecified extremity
170.331	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of thigh
170.332	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of calf
170.333	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of ankle
170.334	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of heel and midfoot
170.335	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of other part of foot
170.338	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of other part of lower leg
170.339	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of unspecified site
170.341	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of thigh
170.342	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of calf
170.343	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of ankle
170.344	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of heel and midfoot
170.345	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of other part of foot
170.348	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of other part of lower leg
170.349	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of unspecified site
170.431	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of thigh
170.432	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of calf
170.433	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of ankle
170.434	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of heel and midfoot
170.435	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of part of foot
170.438	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of part of lower leg
170.439	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of unspecified type
170.441	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of thigh
170.442	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of calf
170.443	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of ankle
170.444	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of heel and midfoot
170.445	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of part of foot
170.448	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of other part of lower leg
170.449	Atherosclerosis of autologous vein bypass graft(s) of the left leg with ulceration of unspecified site
170.531	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of thigh
170.532	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of calf
170.533	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of ankle

170.534	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of heel and midfoot
170.535	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of other part of foot
170.538	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of other part of lower leg
170.539	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of unspecified site
170.541	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of thigh
170.542	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of calf
170.543	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration
170.544	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of heel and midfoot
170.545	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of other part of the foot
170.548	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of other part of lower leg
170.549	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of unspecified site
170.631	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of thigh
170.632	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of calf
170.633	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of ankle
170.634	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of heel and midfoot
170.635	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of other part of foot
170.638	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of other part of lower leg
170.639	Atherosclerosis of nonautologous biological bypass graft(s) of the right leg with ulceration of unspecified site
170.641	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of thigh
170.642	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of calf
170.643	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of ankle
170.644	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of heel and midfoot
170.645	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of other part of foot
170.648	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of other part of lower leg
170.649	Atherosclerosis of nonautologous biological bypass graft(s) of the left leg with ulceration of unspecified site
170.731	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of thigh
170.732	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of calf
170.733	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of ankle
170.734	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of heel and midfoot
170.735	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of other part of foot
170.738	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of other part of lower leg
170.739	Atherosclerosis of other type of bypass graft(s) of the right leg with ulceration of unspecified site

170.741	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of thigh
170.742	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of calf
170.743	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of ankle
170.744	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of heel and midfoot
170.745	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of other part of foot
170.748	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of other part of lower leg
170.749	Atherosclerosis of other type of bypass graft(s) of the left leg with ulceration of unspecified site
183.001	Varicose veins of unspecified lower extremity with ulcer of thigh
183.002	Varicose veins of unspecified lower extremity with ulcer of calf
183.003	Varicose veins of unspecified lower extremity with ulcer of ankle
183.004	Varicose veins of unspecified lower extremity with ulcer of heel and midfoot
183.005	Varicose veins of unspecified lower extremity with ulcer of other part of foot
183.008	Varicose veins of unspecified lower extremity with ulcer of other part of lower leg
183.009	Varicose veins of unspecified lower extremity with ulcer of unspecified site
183.011	Varicose veins of right lower extremity with ulcer of thigh
183.012	Varicose veins of right lower extremity with ulcer of calf
183.013	Varicose veins of right lower extremity with ulcer of ankle
183.014	Varicose veins of right lower extremity with ulcer of heel and midfoot
183.015	Varicose veins of right lower extremity with ulcer of other part of foot
183.018	Varicose veins of right lower extremity with ulcer of other part of lower leg
183.019	Varicose veins of right lower extremity with ulcer of unspecified site
183.021	Varicose veins of left lower extremity with ulcer of thigh
183.022	Varicose veins of left lower extremity with ulcer of calf
183.023	Varicose veins of left lower extremity with ulcer of ankle
183.024	Varicose veins of left lower extremity with ulcer of heel and midfoot
183.025	Varicose veins of left lower extremity with ulcer of other part of foot
183.028	Varicose veins of left lower extremity with ulcer of other part of lower leg
183.029	Varicose veins of left lower extremity with ulcer of unspecified site
183.201	Varicose veins of unspecified lower extremity with both ulcer of thigh and inflammation
183.202	Varicose veins of unspecified lower extremity with both ulcer of calf and inflammation
183.203	Varicose veins of unspecified lower extremity with both ulcer of ankle and inflammation
183.204	Varicose veins of unspecified lower extremity with both ulcer of heel and midfoot and inflammation
183.205	Varicose veins of unspecified lower extremity with both ulcer other part of foot and inflammation
183.208	Varicose veins of unspecified lower extremity with both ulcer of other part of lower extremity and inflammation
183.209	Varicose veins of unspecified lower extremity with both ulcer of unspecified site and inflammation
183.211	Varicose veins of right lower extremity with both ulcer of thigh and inflammation
183.212	Varicose veins of right lower extremity with both ulcer of calf and inflammation
183.213	Varicose veins of right lower extremity with both ulcer of ankle and inflammation
183.214	Varicose veins of right lower extremity with both ulcer of heel and midfoot and inflammation
183.215	Varicose veins of right lower extremity with both ulcer of other part of foot and inflammation
183.218	Varicose veins of right lower extremity with both ulcer of other part of lower extremity and inflammation

I83.219	Varicose veins of right lower extremity with both ulcer of unspecified site and inflammation
I83.221	Varicose veins of left lower extremity with both ulcer of thigh and inflammation
I83.222	Varicose veins of left lower extremity with both ulcer of calf and inflammation
I83.223	Varicose veins of left lower extremity with both ulcer of ankle and inflammation
I83.224	Varicose veins of left lower extremity with both ulcer of heel and midfoot and inflammation
I83.225	Varicose veins of left lower extremity with both ulcer of other part of foot and inflammation
I83.228	Varicose veins of left lower extremity with both ulcer of part of lower extremity and inflammation
I83.229	Varicose veins of left lower extremity with both ulcer of unspecified site and inflammation
I87.2	Venous insufficiency (chronic) (peripheral
I87.311	Chronic venous hypertension (idiopathic) with ulcer of right lower extremity
I87.312	Chronic venous hypertension (idiopathic) with ulcer of left lower extremity
I87.313	Chronic venous hypertension (idiopathic) with ulcer of bilateral lower extremity
I87.319	Chronic venous hypertension (idiopathic) with ulcer of unspecified lower extremity
K68.11	Post procedural retroperitoneal abscess
L89.003	Pressure ulcer of unspecified elbow, Stage 3
L89.004	Pressure ulcer of unspecified elbow, Stage 4
L89.013	Pressure ulcer of right elbow, Stage 3
L89.014	Pressure ulcer of right elbow, Stage 4
L89.023	Pressure ulcer of left elbow, Stage 3
L89.024	Pressure ulcer of left elbow, Stage 4
L89.103	Pressure ulcer of unspecified part of back, Stage 3
L89.104	Pressure ulcer of unspecified part of back, Stage 3
L89.113	Pressure ulcer of right upper back, Stage 3
L89.114	Pressure ulcer of right upper back, Stage 4
L89.123	Pressure ulcer of left upper back, Stage 3
L89.124	Pressure ulcer of left upper back, Stage 4
L89.133	Pressure ulcer of right lower back, Stage 3
L89.134	Pressure ulcer of right lower back, Stage 4
L89.143	Pressure ulcer of left lower back, Stage 4
L89.144	Pressure ulcer of left lower back, Stage 3
L89.153	Pressure ulcer of sacral region, Stage 3
L89.154	Pressure ulcer of sacral region, Stage 4
L89.203	Pressure ulcer of unspecified hip Stage 3
L89.204	Pressure ulcer of unspecified hip, Stage 4
L89.213	Pressure ulcer of right hip, Stage 3
L89.214	Pressure ulcer of right hip, Stage 4
L89.223	Pressure ulcer of left hip, Stage 3
L89.224	Pressure ulcer of left hip, Stage 4
L89.303	Pressure ulcer of unspecified buttock, Stage 3
L89.304	Pressure ulcer of unspecified buttock, Stage 4
L89.313	Pressure ulcer of right buttock, Stage 3
L89.314	Pressure ulcer of right buttock, Stage 4
L89.323	Pressure ulcer of left buttock, Stage 3
L89.324	Pressure ulcer of left buttock, Stage 4

L89.43	Pressure ulcer of contiguous site of back, buttock and hip, Stage 3
L89.44	Pressure ulcer of contiguous site of back, buttock and hip, Stage 4
L89.503	Pressure ulcer of unspecified ankle, Stage 3
L89.504	Pressure ulcer of unspecified ankle, Stage 4
L89.513	Pressure ulcer of right ankle, Stage 3
L89.514	Pressure ulcer of right ankle, Stage 4
L89.523	Pressure ulcer of left ankle, Stage 3
L89.524	Pressure ulcer of left ankle, Stage 4
L89.603	Pressure ulcer of unspecified heel, Stage 3
L89.604	Pressure ulcer of unspecified heel, Stage 4
L89.613	Pressure ulcer of right heel, Stage 3
L89.614	Pressure ulcer of right heel, Stage 4
L89.623	Pressure ulcer of left heel, Stage 3
L89.624	Pressure ulcer of left heel, Stage 4
L89.813	Pressure ulcer of head, Stage 3
L89.814	Pressure ulcer of head, Stage 4
L89.893	Pressure ulcer of other site, Stage 3
L89.894	Pressure ulcer of other site, Stage 4
L89.93	Pressure ulcer of unspecified site, Stage 3
L89.94	Pressure ulcer of unspecified site, Stage 4
L97.101	Non-pressure chronic ulcer of unspecified thigh limited to breakdown of skin
L97.102	Non-pressure chronic ulcer of unspecified thigh with fat layer exposed
L97.103	Non-pressure chronic ulcer of unspecified thigh with necrosis of muscle
L97.104	Non-pressure chronic ulcer of unspecified thigh with necrosis of bone
L97.109	Non-pressure chronic ulcer of unspecified thigh with unspecified severity
L97.111	Non-pressure chronic ulcer of right thigh limited to breakdown of skin
L97.112	Non-pressure chronic ulcer of right thigh with fat layer exposed
L97.113	Non-pressure chronic ulcer of right thigh with necrosis of muscle
L97.114	Non-pressure chronic ulcer of right thigh with necrosis of bone
L97.119	Non-pressure chronic ulcer of right thigh with unspecified severity
L97.121	Non-pressure chronic ulcer of left thigh limited to breakdown of skin
L97.122	Non-pressure chronic ulcer of left thigh with fat layer exposed
L97.123	Non-pressure chronic ulcer of left thigh with necrosis of muscle
L97.124	Non-pressure chronic ulcer of left thigh with necrosis of bone
L97.129	Non-pressure chronic ulcer of left thigh with unspecified severity
L97.201	Non-pressure chronic ulcer of unspecified calf limited to skin breakdown
L97.202	Non-pressure chronic ulcer of unspecified calf with fat layer exposed
L97.203	Non-pressure chronic ulcer of unspecified calf with necrosis of muscle
L97.204	Non-pressure chronic ulcer of unspecified calf with necrosis of bone
L97.209	Non-pressure chronic ulcer of unspecified calf with unspecified severity
L97.211	Non-pressure chronic ulcer of right calf limited to breakdown of skin
L97.212	Non-pressure chronic ulcer of right calf with fat layer exposed
L97.213	Non-pressure chronic ulcer of right calf with necrosis of muscle
L97.214	Non-pressure chronic ulcer of right calf with necrosis of bone

L97.219	Non-pressure chronic ulcer of right calf with unspecified severity
L97.221	Non-pressure chronic ulcer of left calf limited to skin breakdown
L97.222	Non-pressure chronic ulcer of left calf with fat layer exposed
L97.223	Non-pressure chronic ulcer of left calf with necrosis of muscle
L97.224	Non-pressure chronic ulcer of left calf with necrosis of bone
L97.229	Non-pressure chronic ulcer of left calf with unspecified severity
L97.301	Non-pressure chronic ulcer of unspecified ankle limited to breakdown of skin
L97.302	Non-pressure chronic ulcer of unspecified ankle with fat layer exposed
L97.303	Non-pressure chronic ulcer of unspecified ankle with necrosis of muscle
L97.304	Non-pressure chronic ulcer of unspecified ankle with necrosis of bone
L97.309	Non-pressure chronic ulcer of unspecified ankle with unspecified severity
L97.311	Non-pressure chronic ulcer of right ankle limited to skin breakdown
L97.312	Non-pressure chronic ulcer of right ankle with fat layer exposed
L97.313	Non-pressure chronic ulcer of right ankle with necrosis of muscle
L97.314	Non-pressure chronic ulcer of right ankle with necrosis of bone
L97.319	Non-pressure chronic ulcer of right ankle with unspecified severity
L97.321	Non-pressure chronic ulcer of left ankle limited to breakdown of skin
L97.322	Non-pressure chronic ulcer of left ankle with fat layer exposed
L97.323	Non-pressure chronic ulcer of left ankle with necrosis of muscle
L97.324	Non-pressure chronic ulcer of left ankle with necrosis of bone
L97.329	Non-pressure chronic ulcer of left ankle with unspecified severity
L97.401	Non-pressure chronic ulcer of unspecified heel and midfoot limited to breakdown of skin
L97.402	Non-pressure chronic ulcer of unspecified heel and midfoot with fat layer exposed
L97.403	Non-pressure chronic ulcer of unspecified heel and midfoot with necrosis of muscle
L97.404	Non-pressure chronic ulcer of unspecified heel and midfoot with necrosis of bone
L97.409	Non-pressure chronic ulcer of unspecified heel and midfoot with unspecified severity
L97.411	Non-pressure chronic ulcer of right heel and midfoot limited to breakdown of skin
L97.412	Non-pressure chronic ulcer of right heel and midfoot with fat layer exposed
L97.413	Non-pressure chronic ulcer of right heel and midfoot with necrosis of muscle
L97.414	Non-pressure chronic ulcer of right heel and midfoot with necrosis of bone
L97.419	Non-pressure chronic ulcer of right heel and midfoot with unspecified severity
L97.421	Non-pressure chronic ulcer of left heel and midfoot limited to breakdown of skin
L97.422	Non-pressure chronic ulcer of left heel and midfoot with fat layer exposed
L97.423	Non-pressure chronic ulcer of left heel and midfoot with necrosis of muscle
L97.424	Non-pressure chronic ulcer of left heel and midfoot with necrosis of bone
L97.429	Non-pressure chronic ulcer of left heel and midfoot with unspecified severity
L97.501	Non-pressure chronic ulcer of other part of unspecified foot limited to breakdown of skin
L97.502	Non-pressure chronic ulcer of other part of unspecified foot with fat layer exposed
L97.503	Non-pressure chronic ulcer of other part of unspecified foot with necrosis of muscle
L97.504	Non-pressure chronic ulcer of other part of unspecified foot with necrosis of bone
L97.509	Non-pressure chronic ulcer of other part of unspecified foot with unspecified severity
L97.511	Non-pressure chronic ulcer of other part of right foot limited to breakdown of skin
L97.512	Non-pressure chronic ulcer of other part of right foot with fat layer exposed
L97.513	Non-pressure chronic ulcer of other part of right foot with necrosis muscle

L97.514	Non-pressure chronic ulcer of other part of right foot with necrosis bone
L97.519	Non-pressure chronic ulcer of other part of right foot with unspecified severity
L97.521	Non-pressure chronic ulcer of other part of left foot limited to breakdown of skin
L97.522	Non-pressure chronic ulcer of other part of left foot with fat layer exposed
L97.523	Non-pressure chronic ulcer of other part of left foot with necrosis muscle
L97.524	Non-pressure chronic ulcer of other part of left foot with necrosis of bone
L97.529	Non-pressure chronic ulcer of other part of left foot with unspecified severity
L97.801	Non-pressure chronic ulcer of other part of unspecified lower leg limited to breakdown of skin
L97.802	Non-pressure chronic ulcer of other part of unspecified lower leg fat layer exposed
L97.803	Non-pressure chronic ulcer of other part of unspecified lower leg with necrosis muscle
L97.804	Non-pressure chronic ulcer of other part of unspecified lower leg with necrosis bone
L97.809	Non-pressure chronic ulcer of other part of unspecified lower leg with unspecified severity
L97.811	Non-pressure chronic ulcer of right lower leg limited to breakdown of skin
L97.812	Non-pressure chronic ulcer of right lower leg with fat layer exposed
L97.813	Non-pressure chronic ulcer of right lower leg with necrosis of muscle
L97.814	Non-pressure chronic ulcer of right lower leg with necrosis of bone
L97.819	Non-pressure chronic ulcer of right lower leg with unspecified severity
L97.821	Non-pressure chronic ulcer of left lower leg limited to breakdown of skin
L97.822	Non-pressure chronic ulcer of left lower leg with fat layer exposed
L97.823	Non-pressure chronic ulcer of left lower leg with necrosis of muscle
L97.824	Non-pressure chronic ulcer of left lower leg with necrosis of bone
L97.829	Non-pressure chronic ulcer of left lower leg with unspecified severity
L97.901	Non-pressure chronic ulcer of unspecified lower leg limited to breakdown of skin
L97.902	Non-pressure chronic ulcer of unspecified lower leg with fat layer exposed
L97.903	Non-pressure chronic ulcer of unspecified lower leg with necrosis of muscle
L97.904	Non-pressure chronic ulcer of unspecified lower leg with necrosis of bone
L97.909	Non-pressure chronic ulcer of unspecified lower leg with unspecified severity
L97.911	Non-pressure chronic ulcer of unspecified part of right lower leg limited to breakdown of skin
L97.912	Non-pressure chronic ulcer of unspecified part of right lower leg with fat layer exposed
L97.913	Non-pressure chronic ulcer of unspecified part of right lower leg with necrosis of muscle
L97.914	Non-pressure chronic ulcer of unspecified part of right lower leg with necrosis of bone
L97.919	Non-pressure chronic ulcer of unspecified part of right lower leg with unspecified severity
L97.921	Non-pressure chronic ulcer of unspecified part of left lower leg limited to breakdown of skin
L97.922	Non-pressure chronic ulcer of unspecified part of left lower leg with fat layer exposed
L97.923	Non-pressure chronic ulcer of unspecified part of left lower leg with necrosis of muscle
L97.924	Non-pressure chronic ulcer of unspecified part of left lower leg with necrosis of bone
L97.929	Non-pressure chronic ulcer of unspecified part of left lower leg with unspecified severity
O24.011	Pre-existing diabetes mellitus, Type 1, in pregnancy, first trimester
O24.012	Pre-existing diabetes mellitus, Type 1, in pregnancy, second trimester
O24.013	Pre-existing diabetes mellitus, Type I, in pregnancy, third trimester
O24.019	Pre-existing diabetes mellitus, Type 1, in pregnancy, unspecified trimester
O24.02	Pre-existing diabetes mellitus, Type 1, in childbirth
O24.111	Pre-existing diabetes mellitus, Type 2, in pregnancy, first trimester
O24.112	Pre-existing diabetes mellitus, Type 2, in pregnancy, second trimester

O24.113	Pre-existing diabetes mellitus, Type 2, in pregnancy, third trimester
O24.119	Pre-existing diabetes mellitus, Type 2, in pregnancy,, unspecified trimester
O24.12	Pre-existing diabetes mellitus, Type 2, in childbirth
O24.311	Unspecified pre-existing diabetes mellitus in pregnancy, first trimester
O24.312	Unspecified pre-existing diabetes mellitus in pregnancy, second trimester
O24.313	Unspecified pre-existing diabetes mellitus in pregnancy, third trimester
O24.319	Unspecified pre-existing diabetes mellitus in pregnancy, unspecified trimester
O24.32	Unspecified pre-existing diabetes mellitus in childbirth
O24.410	Gestational diabetes mellitus in pregnancy, diet controlled
O24.414	Gestational diabetes mellitus in pregnancy, insulin controlled
O24.415	Gestational diabetes mellitus in pregnancy, controlled by oral hypoglycemic drugs
O24.419	Gestational diabetes mellitus in pregnancy, unspecified control
O24.420	Gestational diabetes mellitus in childbirth, diet controlled
O24.424	Gestational diabetes mellitus in childbirth, insulin controlled
O24.425	Gestational diabetes mellitus in childbirth, controlled by oral hypoglycemic drugs
O24.429	Gestational diabetes mellitus in childbirth, unspecified control
O24.811	Other pre-existing diabetes mellitus in pregnancy, first trimester
O24.812	Other pre-existing diabetes mellitus in pregnancy, second trimester
O24.813	Other pre-existing diabetes mellitus in pregnancy, third trimester
O24.819	Other pre-existing diabetes mellitus in pregnancy, unspecified trimester
O24.82	Other pre-existing diabetes mellitus in childbirth
O24.912	Unspecified diabetes mellitus in pregnancy, second trimester
O24.913	Unspecified diabetes mellitus in pregnancy, third trimester
O24.919	Unspecified diabetes mellitus in pregnancy, unspecified trimester
O24.92	Unspecified diabetes mellitus in childbirth
S41.001A	Unspecified open wound of right shoulder, initial encounter
S41.002A	Unspecified open wound of left shoulder, initial encounter
S41.009A	Unspecified open wound of unspecified shoulder, initial encounter
S41.011A	Laceration without foreign body of right shoulder, initial encounter
S41.012A	Laceration without foreign body of left shoulder, initial encounter
S41.019A	Laceration without foreign body of unspecified shoulder, initial encounter
S41.021A	Laceration with foreign body of right shoulder, initial encounter
S41.022A	Laceration with foreign body of left shoulder, initial encounter
S41.029A	Laceration with foreign body of unspecified shoulder, initial encounter
S41.031A	Puncture wound without foreign body of right shoulder, initial encounter
S41.032A	Puncture wound without foreign body of left shoulder, initial encounter
S41.039A	Puncture wound without foreign body of unspecified shoulder, initial encounter
S41.041A	Puncture wound with foreign body of right shoulder, initial encounter
S41.042A	Puncture wound with foreign body of left shoulder, initial encounter
S41.049A	Puncture wound with foreign body of unspecified shoulder, initial encounter
S41.101A	Unspecified open wound of right upper arm, initial encounter
S41.102A	Unspecified open wound of left upper arm, initial encounter
S41.109A	Unspecified open wound of unspecified upper arm, initial encounter
S41.111A	Laceration without foreign body of right upper arm, initial encounter



S41.112A	Laceration without foreign body of left upper arm, initial encounter
S41.119A	Laceration without foreign body of unspecified upper arm, initial encounter
S41.121A	Laceration with foreign body of right upper arm, initial encounter
S41.122A	Laceration with foreign body of left upper arm, initial encounter
S41.129A	Laceration with foreign body of unspecified upper arm, initial encounter
S41.141A	Puncture wound with foreign body of right upper arm, initial encounter
S41.142A	Puncture wound with foreign body of left upper arm, initial encounter
S41.149A	Puncture wound with foreign body of unspecified upper arm, initial encounter
S51.001A	Unspecified open wound of right elbow, initial encounter
S51.002A	Unspecified open wound of left elbow, initial encounter
S51.009A	Unspecified open wound of unspecified elbow, initial encounter
S51.011A	Laceration without foreign body of right elbow, initial encounter
S51.012A	Laceration without foreign body of left elbow, initial encounter
S51.019A	Laceration without foreign body of unspecified elbow, initial encounter
S51.021A	Laceration with foreign body of right elbow, initial encounter
S51.022A	Laceration with foreign body of left elbow, initial encounter
S51.029A	Laceration with foreign body of unspecified elbow, initial encounter
S51.031A	Puncture wound without foreign body of right elbow, initial encounter
S51.032A	Puncture wound without foreign body of left elbow, initial encounter
S51.039A	Puncture wound without foreign body of unspecified elbow, initial encounter
S51.041A	Puncture wound with foreign body of right elbow, initial encounter
S51.042A	Puncture wound with foreign body of left elbow, initial encounter
S51.049A	Puncture wound with foreign body of unspecified elbow, initial encounter
S51.081A	Unspecified open wound of right forearm, initial encounter
S51.802A	Unspecified open wound of left forearm, initial encounter
S51.809A	Unspecified open wound of unspecified forearm, initial encounter
S51.811A	Laceration without foreign body of right forearm, initial encounter
S51.812A	Laceration without foreign body of left forearm, initial encounter
S51.819A	Laceration without foreign body of unspecified forearm, initial encounter
S51.821A	Laceration with foreign body of right forearm, initial encounter
S51.822A	Laceration with foreign body of left forearm, initial encounter
S51.829A	Laceration with foreign body of unspecified forearm, initial encounter
S51.831A	Puncture wound without foreign body of right forearm, initial encounter
S51.832A	Puncture wound without foreign body of left forearm, initial encounter
S51.839A	Puncture wound without foreign body of unspecified forearm, initial encounter
S51.841A	Puncture wound with foreign body of right forearm, initial encounter
S51.842A	Puncture wound with foreign body of left forearm, initial encounter
S51.849A	Puncture wound with foreign body of unspecified forearm, initial encounter
S61.501A	Unspecified open wound of right wrist, initial encounter
S61.502A	Unspecified open wound of left wrist, initial encounter
S61.509A	Unspecified open wound of unspecified wrist, initial encounter
S61.511A	Laceration without foreign body of right wrist, initial encounter
S61.512A	Laceration without foreign body of left wrist, initial encounter
S61.519A	Laceration without foreign body of unspecified wrist, initial encounter

S61.521A	Laceration with foreign body of right wrist, initial encounter
S61.522A	Laceration with foreign body of left wrist, initial encounter
S61.529A	Laceration with foreign body of unspecified wrist, initial encounter
S61.531A	Puncture wound without foreign body of right wrist, initial encounter
S61.532A	Puncture wound without foreign body of left wrist, initial encounter
S61.539A	Puncture wound without foreign body of unspecified wrist, initial encounter
S61.541A	Puncture wound with foreign body of right wrist, initial encounter
S61.542A	Puncture wound with foreign body of left wrist, initial encounter
S61.549A	Puncture wound with foreign body of unspecified wrist, initial encounter
S71.001A	Unspecified open wound, right hip, initial encounter
S71.002A	Unspecified open wound, left hip, initial encounter
S71.009A	Unspecified open wound, unspecified hip, initial encounter
S71.011A	Laceration without foreign body, right hip, initial encounter
S71.012A	Laceration without foreign body, left hip, initial encounter
S71.019A	Laceration without foreign body, unspecified hip, initial encounter
S71.021A	Laceration with foreign body of right hip, initial encounter
S71.022A	Laceration with foreign body of left hip, initial encounter
S71.029A	Laceration with foreign body of unspecified hip, initial encounter
S71.031A	Puncture wound without foreign body, right hip, initial encounter
S71.032A	Puncture wound without foreign body, left hip, initial encounter
S71.039A	Puncture wound without foreign body, unspecified hip, initial encounter
S71.041A	Puncture wound with foreign body, right hip, initial encounter
S71.042A	Puncture wound with foreign body, left hip, initial encounter
S71.049A	Puncture wound with foreign body, unspecified hip, initial encounter
S71.101A	Unspecified open wound, right thigh, initial encounter
S71.102A	Unspecified open wound, left thigh, initial encounter
S71.109A	Unspecified open wound, unspecified thigh, initial encounter
S71.111A	Laceration without foreign body, right thigh, initial encounter
S71.112A	Laceration without foreign body, left thigh, initial encounter
S71.119A	Laceration without foreign body, unspecified thigh, initial encounter
S71.121A	Laceration with foreign body, right thigh, initial encounter
S71.122A	Laceration with foreign body, left thigh, initial encounter
S71.129A	Laceration with foreign body, unspecified thigh, initial encounter
S71.131A	Puncture wound without foreign body, right thigh, initial encounter
S71.132A	Puncture wound without foreign body, left thigh, initial encounter
S71.139A	Puncture wound without foreign body, unspecified thigh, initial encounter
S71.141A	Puncture wound with foreign body, right thigh, initial encounter
S71.142A	Puncture wound with foreign body, left thigh, initial encounter
S71.149A	Puncture wound with foreign body, unspecified thigh, initial encounter
S81.001A	Unspecified open wound, right knee, initial encounter
S81.002A	Unspecified open wound, left knee, initial encounter
S81.009A	Unspecified open wound, unspecified knee, initial encounter
S81.011A	Laceration without foreign body, right knee, initial encounter
S81.012A	Laceration without foreign body, left knee, initial encounter

S81.019A	Laceration without foreign body, unspecified knee, initial encounter
S81.021A	Laceration with foreign body, right knee, initial encounter
S81.022A	Laceration with foreign body, left knee, initial encounter
S81.029A	Laceration with foreign body, unspecified knee, initial encounter
S81.031A	Puncture wound without foreign body, right knee, initial encounter
S81.032A	Puncture wound without foreign body, left knee, initial encounter
S81.039A	Puncture wound without foreign body, unspecified knee, initial encounter
S81.041A	Puncture wound with foreign body, right knee, initial encounter
S81.042A	Puncture wound with foreign body, left knee, initial encounter
S81.049A	Puncture wound with foreign body, unspecified knee, initial encounter
S81.801A	Unspecified open wound, right lower leg, initial encounter
S81.802A	Unspecified open wound, left lower leg, initial encounter
S81.809A	Unspecified open wound, unspecified lower leg, initial encounter
S81.811A	Laceration without foreign body, right lower leg, initial encounter
S81.812A	Laceration without foreign body, left lower leg, initial encounter
S81.819A	Laceration without foreign body, unspecified lower leg, initial encounter
S81.821A	Laceration with foreign body, right lower leg, initial encounter
S81.822A	Laceration with foreign body, left lower leg, initial encounter
S81.829A	Laceration with foreign body, unspecified lower leg, initial encounter
S81.831A	Puncture wound without foreign body, right lower leg, initial encounter
S81.832A	Puncture wound without foreign body, left lower leg, initial encounter
S81.839A	Puncture wound without foreign body, unspecified lower leg, initial encounter
S81.841A	Puncture wound with foreign body, right lower leg, initial encounter
S81.842A	Puncture wound with foreign body, left lower leg, initial encounter
S81.849A	Puncture wound with foreign body, unspecified lower leg, initial encounter
S91.001A	Unspecified open wound, right ankle, initial encounter
S91.002A	Unspecified open wound, left ankle, initial encounter
S91.009A	Unspecified open wound, unspecified ankle, initial encounter
S91.011A	Laceration without foreign body, right ankle, initial encounter
S91.012A	Laceration without foreign body, left ankle, initial encounter
S91.019A	Laceration without foreign body, unspecified ankle, initial encounter
S91.021A	Laceration with foreign body, right ankle, initial encounter
S91.022A	Laceration with foreign body, left ankle, initial encounter
S91.029A	Laceration with foreign body, unspecified ankle, initial encounter
S91.031A	Puncture wound without foreign body, right ankle, initial encounter
S91.032A	Puncture wound without foreign body, left ankle, initial encounter
S91.039A	Puncture wound without foreign body, unspecified ankle, initial encounter
S91.041A	Puncture wound with foreign body, right ankle, initial encounter
S91.042A	Puncture wound with foreign body, left ankle, initial encounter
S91.049A	Puncture wound with foreign body, unspecified ankle, initial encounter
S91.321A	Laceration with foreign body, right foot, initial encounter
S91.322A	Laceration with foreign body, left foot, initial encounter
S91.329A	Laceration with foreign body, unspecified foot, initial encounter
S91.341A	Puncture wound with foreign body, right foot, initial encounter

S91.342A	Puncture wound with foreign body, left foot, initial encounter
S91.349A	Puncture wound with foreign body, unspecified foot, initial encounter
T81.31XA	Disruption of external operation (surgical) wound, not elsewhere classified, initial encounter
T81.32XA	Disruption of internal operation (surgical) wound, not elsewhere classified, initial encounter
T81.4XXA	Infection following a procedure, initial encounter
T81.89XA	Other complications of procedures, not elsewhere classified, initial encounter

## **Informational**

### **Pressure Ulcer Stages**

<b>Stage</b>	<b>Description</b>
I	Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area
II	Partial thickness loss of dermis presenting as a shallow open ulcer with a red-pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister
III	Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling
IV	Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often includes undermining and tunneling
Unstageable	Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green, or brown) and/or eschar (tan, brown or black) in the wound bed

## **Reimbursement**

Participating facilities will be reimbursed per their Highmark Wholecare<sup>SM</sup> contract.

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