



<b>CLINICAL MEDICAL POLICY</b>	
<b>Policy Name:</b>	Negative Pressure Wound Therapy in the Outpatient Setting
<b>Policy Number:</b>	MP-022-MD-PA
<b>Approved By:</b>	Medical Management
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<b>Application:</b>	All participating hospitals and providers
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### **Disclaimer**

***Gateway Health<sup>SM</sup> (Gateway) medical payment and prior-authorization policy is intended to serve only as a general reference resource regarding payment and coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.***

\*All medical policies are available on the Gateway provider website at:

<http://gatewayhealthplan.com/MedicalPolicies>

### **POLICY STATEMENT:**

Gateway Health<sup>SM</sup> provides coverage under the durable medical equipment (DME) benefits of the Company's Medicaid products for medically necessary electrically powered 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 Pennsylvania *HealthChoices* Agreement Section V. Program Requirements, B. Prior Authorization of Services, 1. General Prior Authorization Requirements.)

### **DEFINITIONS:**

**Prior Authorization Review Panel** – A panel of representatives from within the Pennsylvania 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), subatmospheric 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).

## **PROCEDURES**

1. The following medical necessity criteria must be met:
  - a. The patient must be 12 years of age and older; AND
  - b. A complete wound care program has been tried which includes all of the following:
    - i. Documentation in the medical record by a licensed medical professional on the current and previous wound care management, wound healing progress; AND
    - ii. Wound care physician notes contain wound measurements, a minimum of once a month, that documents the progress of the healing wound and anticipated duration of vacuum-assisted wound therapy (i.e., degree of wound healing required); AND
    - iii. Controlling of comorbid conditions diabetes, nutritional issues, pressure relief at wound site, etc.; AND
    - iv. Operative note or wound care notes if requests are for treatment in surgical and/or traumatic wounds.

Use of vacuum-assisted wound devices in the outpatient setting are considered medically appropriate for the following conditions:

- Chronic Stage III or IV pressure ulcers (>90 days) that have failed to heal despite optimal wound care when:
  - High-volume drainage interferes with healing; AND/OR
  - Standard dressings cannot be maintained due to anatomic factors; AND
  - The patient's incontinence and/or moisture issues have been appropriately managed; AND
  - There has been use of group 2 or 3 support surface for pressure ulcers on the trunk or pelvis
- Neuropathic (e.g., diabetic) ulcers
  - The patient has been actively involved in a comprehensive diabetic management program; AND
  - Pressure on a foot ulcer has been appropriately reduced
- Venous or arterial insufficiency ulcers or chronic ulcers of mixed etiology
  - Compression bandages or garments have been applied appropriately; AND
  - Elevating the affected extremity has been maintained while the member is sedentary; AND

- Ambulation/leg exercises that promote circulation have been encouraged and utilized; AND
- For initiation of vacuum-assist wound device in the home setting, the ulcer must have been present for at least 30 days
- Traumatic or surgical wounds (e.g., preoperative flap or graft, exposed bones, tendons, or vessels) needing accelerated formation of granulation tissue not achievable by other topical wound treatments (e.g., comorbid conditions of the member that will hamper appropriate healing with other topical wound treatments) and no contraindications to negative pressure wound therapy
- Wounds refractory to standard wound regimens
- Burns
- Complications of surgically created wounds (e.g., 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
- Wound care sets will be 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 will be limited to 10 per month in most cases. Documentation must be provided showing evidence that a large volume of drainage exists (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 member. Therefore, coverage for more than one pump per member for the same time period will be considered noncovered and not medically necessary.

## 2. 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
- There must be documentation by the wound care physician regarding wound healing. Documentation of wound progress measurements includes:
  - Decrease wound size (length, width, depth, undermining, tunneling)
  - Increased granulation tissue
  - Increase epithelialization
  - Decreased wound odor
  - Decreased wound pain
  - Decreased volume of exudate
- Continued use of this therapy should be reviewed against outcome criteria at the beginning of therapy, at each dressing change, or at a minimum every two weeks and reported on a monthly basis
- Recent laboratory values do not demonstrate a contraindication exists

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

## 3. Contraindications

The wound being treated must be free of the following absolute contraindications for vacuum-assisted wound therapy:

- Exposed anastomotic site
- Exposed nerves
- Exposed organs
- Exposed vasculature
- Malignancy in the wound
- Necrotic tissue with eschar present
- Non-enteric and unexplored fistulas
- Untreated osteomyelitis
- Severe peripheral arterial disease: Ankle Brachial Pressure Index  $\leq 0.5$  needs investigation, and if appropriate, revascularization prior to commencement of vacuum-assist device
- No vacuum-assisted wound device has been cleared for use in infant and children

Precautions:

- Malnourished patients who have not received adequate nutrition/nutritional supplements
  - Additional caution should be used for patients with neuropathic or circulatory compromise
  - Non-concordant or combative patients
  - Patients with infected wounds, as 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, could be fatal.
  - Defibrillation - the 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.
  - Magnetic Resonance Imaging (MRI) - the 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 therapy unit is unsafe in the hyperbaric oxygen chamber and is considered a fire hazard. Care must be taken with the dressing to ensure HBO compatibility.
  - Precautions need to be taken in patients receiving long-term anticoagulant therapy, hemophilia and patients with hemoglobinopathies, such as sickle cell.
4. The vacuum-assist wound therapy services are not covered and considered not medically necessary when:
- 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 other wound care treatments; OR
  - 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; OR
  - The member/caregiver is unable/unwilling to follow the plan of care; OR
  - The wound has developed evidence of a wound complication contraindicating continued use of the device

Conditions other than those listed above will be considered not medically necessary since the scientific evidence has not been established. The Medical Director must override criteria when, in his/her 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) have not been proven, in peer-reviewed literature, to be medically effective and are considered not medically necessary for the treatment of acute and/or chronic wounds.

Prophylactic negative pressure wound therapy after ventral hernia repairs and the use of chemotherapeutic agents in intermittent instillation with negative pressure wound therapy are considered not medically necessary.

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.

5. DME

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

6. Post-payment Audit Statement

The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by Gateway Health<sup>SM</sup> at any time pursuant to the terms of your provider agreement.

7. Place of Service

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

8. Governing Bodies Approval

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

On November 12, 2009, the U.S. Food and Drug Administration (FDA) released a Medical Device Alert regarding the use of negative pressure wound therapy 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:

- More careful selection of patients for vacuum-assisted wound therapy
- 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.
- Proper training must be obtained prior to prescribing and using the device
- 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

To review the full text of the FDA warning, please see:

<http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/PublicHealthNotifications/ucm190658.htm>.

The FDA released 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).

Additional information is available at:

<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/IVDRegulatoryAssistance/ucm124105.htm>.

### **Summary of Literature**

Negative pressure therapy has been used in clinical applications for over 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 have been studied in a number of clinical contexts.

It is important to note that these devices are adjunctive therapy that 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).

Numerous indications for use of NPWT include:

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

Negative pressure wound therapy (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 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, allows 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, reportedly 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.

CMS partnered with the AHRQ and commissioned a review of NPWT devices. AHRQ contracted with the ECRI Institute Evidence-based Practice Center to perform the review (AHRQ, 2009). A technology assessment report on NPWT prepared for the AHRQ found that "the systematic reviews of NPWT reveal several important points about this technology. First, all of the systematic reviews noted the lack of high-quality clinical evidence supporting the advantages of NPWT compared to other wound treatments. The lack of high-quality NPWT evidence resulted in many systematic reviewers relying on low-quality retrospective studies to judge the efficacy of this technology. Second, the other systematic reviews found no studies directly comparing different NPWT devices or components have been published. Direct comparison studies are especially important in determining which dressing approach (foam or gauze) may provide the best potential for wound healing. Third, other systematic reviews concluded that NPWT must be evaluated according to wound type. Wound healing varies according to the type of wound being treated, and NPWT benefits described for one wound type cannot be transferred to other wound types. Most wound types have too little high-quality NPWT evidence to judge if NPWT is better than standard care for specific wounds. Studies comparing foam to gauze are needed for each wound type before decisions can be made about which systems or components offer significant therapeutic distinctions."

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 surgical incisional INPWT 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 INPWT affects the rate of surgical site complications.

Zhang (2014) 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.

Discontinuation criteria for *incisional* NPWT have 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.

A non-powered, portable, disposable NPWT system, 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, dehisced, acute, or subacute wounds and diabetic and pressure ulcers. The device consists of a cartridge that acts as the negative pressure source, a dressing, and a strap and can be worn under clothing. The cartridge utilizes specialized springs that generate continuous negative pressure and is preset at negative 75, 100, or 125 mmHg, weighs

less than 3 ounces, and has a 60 cc capacity. The dressing is a hydrocolloid dressing with an antimicrobial gauze wound interface layer. (Powered NPWT systems usually have a foam-based interface layer.)

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 pump is programmed to stop working after 168 hours (7 days) of use and will not restart after that time, even with new batteries.

According to one 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 ml per day
- No improvement/reduction in size of wound is seen in the wound bed following two consecutive dressing changes

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## Procedure Codes

CPT Codes	Description
97605	Negative pressure wound therapy (e.g., vacuum-assisted drainage collection), utilizing durable medical equipment, 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, including topical application(s), wound assessment, and instruction(s) for ongoing care, per session, total wound(s) surface area greater than 50 square centimeters
HCPCS Codes	Description
A6550*	Wound care set, for negative pressure wound therapy electrical pumps, includes all supplies and accessories
A7000**	Canister, disposable, used with suction pump, each
A9272	Wound suction, disposable, includes dressing, all accessories and components, any type, each (Not covered)
E2402	Negative pressure wound therapy electrical pump, stationary or portable

\*Wound care sets will be 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 will be limited to 10 per month in most cases. Documentation must be provided showing evidence that a large volume of drainage exists (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 member. Therefore, coverage for more than one pump per member for the same time period will be considered noncovered and not medically necessary.

## Diagnosis Codes

ICD-10 Diagnosis Codes	Description
E08.8	Diabetes mellitus due to underlying condition with unspecified complications
E08.9	Diabetes mellitus due to underlying condition without complications
E08.00	Diabetes mellitus due to underlying condition without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E08.01	Diabetes mellitus due to underlying condition with hyperosmolality with coma
E08.10	Diabetes mellitus due to underlying condition with ketoacidosis without coma
E08.11	Diabetes mellitus due to underlying condition with ketoacidosis with coma
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication
E08.36	Diabetes mellitus due to underlying condition with diabetic cataract
E08.39	Diabetes mellitus due to underlying condition with other diabetic ophthalmic complication
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
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia
E08.69	Diabetes mellitus due to underlying condition with other specified complication
E08.311	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema
E08.319	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy without macular edema
E08.321	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema
E08.329	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema
E08.331	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy
E08.339	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema
E08.341	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema
E08.349	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema
E08.351	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema
E08.359	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema
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
E08.630	Diabetes mellitus due to underlying condition with periodontal disease
E08.641	Diabetes mellitus due to underlying condition with other oral complications
E08.649	Diabetes mellitus due to underlying condition with hypoglycemia without coma
E09.8	Drug or chemical induced diabetes mellitus with unspecified complications
E09.9	Drug or chemical induced diabetes mellitus without complications

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
E09.311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema
E09.36	Drug or chemical induced diabetes mellitus with diabetic cataract
E09.39	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic 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
E09.61	Drug or chemical induced diabetes mellitus with diabetic arthropathy
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia
E09.69	Drug or chemical induced diabetes mellitus with other specified complication
E09.319	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy without macular edema
E09.329	Drug or chemical induced diabetes mellitus with mild proliferative diabetic retinopathy without macular edema
E09.331	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
E09.339	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
E09.341	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema
E09.349	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
E09.351	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema
E09.359	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema
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
E09.630	Drug or chemical induced diabetes mellitus with periodontal disease
E09.641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma
E09.649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma
E10.8	Type I diabetes mellitus with unspecified complications
E10.9	Type I diabetes mellitus with 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
E10.311	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema
E10.319	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy without macular edema
E10.321	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy diabetic retinopathy with macular edema
E10.329	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema
E10.331	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema

E10.339	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema
E10.341	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema
E10.349	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema
E10.351	Diabetes mellitus due to underlying condition with
E10.359	Diabetes mellitus due to underlying condition with
E10.36	Type I diabetes mellitus with diabetic cataract
E10.39	Type I diabetes mellitus with other diabetic ophthalmic 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
E10.630	Type I diabetes mellitus with periodontal disease
E10.638	Type I diabetes mellitus with other oral 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
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
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema
E11.321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema
E11.331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
E11.339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
E11.341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema
E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
E11.351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema
E11.36	Type 2 diabetes mellitus with diabetic cataract
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic 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
E11.630	Type 2 diabetes mellitus with periodontal disease
E11.638	Type 2 diabetes mellitus with other oral 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
E11.9	Type 2 diabetes mellitus without 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
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema
E13.319	Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema
E13.321	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema
E13.329	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema
E13.331	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
E13.339	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
E13.341	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema
E13.349	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
E13.351	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema
E13.359	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema
E13.36	Other specified diabetes mellitus with diabetic cataract
E13.39	Other specified diabetes mellitus with other diabetic ophthalmic 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
E13.630	Other specified diabetes mellitus with periodontal disease

E13.638	Other specified diabetes mellitus with oral 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
E13.9	Other specified diabetes mellitus without 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
I70.263	Atherosclerosis of native arteries of extremities with gangrene, bilateral legs
I70.268	Atherosclerosis of native arteries of extremities with gangrene, other extremity
I70.269	Atherosclerosis of native arteries of extremities with gangrene, unspecified extremity
I70.291	Other atherosclerosis of native arteries of extremities, right leg
I70.292	Other atherosclerosis of native arteries of extremities, left leg
I70.293	Other atherosclerosis of native arteries of extremities, bilateral legs
I70.298	Other atherosclerosis of native arteries of extremities, other extremity
I70.299	Other atherosclerosis of native arteries of extremities, unspecified extremity
I70.331	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of thigh
I70.332	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of calf
I70.333	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of ankle
I70.334	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of heel and midfoot
I70.335	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of other part of foot
I70.338	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of other part of lower leg
I70.339	Atherosclerosis of unspecified type of bypass graft(s) of the right leg with ulceration of unspecified site
I70.341	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of thigh
I70.342	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of calf
I70.343	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of ankle
I70.344	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of heel and midfoot
I70.345	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of other part of foot
I70.348	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of other part of lower leg
I70.349	Atherosclerosis of unspecified type of bypass graft(s) of the left leg with ulceration of unspecified site
I70.431	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of thigh
I70.432	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of calf
I70.433	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of ankle
I70.434	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of heel and midfoot
I70.435	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of part of foot
I70.438	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of part of lower leg
I70.439	Atherosclerosis of autologous vein bypass graft(s) of the right leg with ulceration of unspecified type





I83.005	Varicose veins of unspecified lower extremity with ulcer of other part of foot
I83.008	Varicose veins of unspecified lower extremity with ulcer of other part of lower leg
I83.009	Varicose veins of unspecified lower extremity with ulcer of unspecified site
I83.011	Varicose veins of right lower extremity with ulcer of thigh
I83.012	Varicose veins of right lower extremity with ulcer of calf
I83.013	Varicose veins of right lower extremity with ulcer of ankle
I83.014	Varicose veins of right lower extremity with ulcer of heel and midfoot
I83.015	Varicose veins of right lower extremity with ulcer of other part of foot
I83.018	Varicose veins of right lower extremity with ulcer of other part of lower leg
I83.019	Varicose veins of right lower extremity with ulcer of unspecified site
I83.021	Varicose veins of left lower extremity with ulcer of thigh
I83.022	Varicose veins of left lower extremity with ulcer of calf
I83.023	Varicose veins of left lower extremity with ulcer of ankle
I83.024	Varicose veins of left lower extremity with ulcer of heel and midfoot
I83.025	Varicose veins of left lower extremity with ulcer of other part of foot
I83.028	Varicose veins of left lower extremity with ulcer of other part of lower leg
I83.029	Varicose veins of left lower extremity with ulcer of unspecified site
I83.201	Varicose veins of unspecified lower extremity with both ulcer of thigh and inflammation
I83.202	Varicose veins of unspecified lower extremity with both ulcer of calf and inflammation
I83.203	Varicose veins of unspecified lower extremity with both ulcer of ankle and inflammation
I83.204	Varicose veins of unspecified lower extremity with both ulcer of heel and midfoot and inflammation
I83.205	Varicose veins of unspecified lower extremity with both ulcer other part of foot and inflammation
I83.208	Varicose veins of unspecified lower extremity with both ulcer of other part of lower extremity and inflammation
I83.209	Varicose veins of unspecified lower extremity with both ulcer of unspecified site and inflammation
I83.211	Varicose veins of right lower extremity with both ulcer of thigh and inflammation
I83.212	Varicose veins of right lower extremity with both ulcer of calf and inflammation
I83.213	Varicose veins of right lower extremity with both ulcer of ankle and inflammation
I83.214	Varicose veins of right lower extremity with both ulcer of heel and midfoot and inflammation
I83.215	Varicose veins of right lower extremity with both ulcer of other part of foot and inflammation
I83.218	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
I87.311	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
I87.2	Venous insufficiency (chronic) (peripheral)
K68.11	Post procedural retroperitoneal abscess
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
L89.93	Pressure ulcer of unspecified site, Stage 3
L89.94	Pressure ulcer of unspecified site, Stage 4
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
L89.503	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
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
O24.02	Pre-existing diabetes mellitus, Type 1, in childbirth
O24.12	Pre-existing diabetes mellitus, Type 2, in childbirth
O24.32	Unspecified pre-existing diabetes mellitus in childbirth
O24.82	Other pre-existing diabetes in childbirth
O24.92	Unspecified diabetes mellitus in childbirth
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 1, in pregnancy, third trimester
O24.019	Pre-existing diabetes mellitus, Type 1, in pregnancy, unspecified trimester
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

O24.311	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
O24.811	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
O24.912	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
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
S41.041A	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
S41.121A	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
S51.021A	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
S51.041A	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
S51.821A	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
S51.841A	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
S61.521A	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
S61.541A	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
S71.021A	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
S71.041A	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
S71.121A	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
S71.141A	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

S81.021A	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
S81.041A	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
S81.821A	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
S81.841A	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
S91.021A	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
S91.041A	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
T81.4XXA	Infection following a procedure, 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
T81.89XA	Other complications of procedures, not elsewhere classified, initial encounter

### Pressure Ulcer Stages

#### Stage 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.

#### Stage 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.

#### Stage 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.

#### Stage 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.

**List of Device Names U.S. Food and Drug Administration 510(k) clearance**

ActiV.A.C.® Therapy Unit  
Engenex® Advanced NPWT System  
Exusdex® wound drainage pump  
EZCARE Negative Pressure Wound Therapy  
InfoV.A.C.® Therapy Unit  
Invia Liberty Wound Therapy  
Invia Vario 18 c/i Wound Therapy  
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

\*This list is not all inclusive.