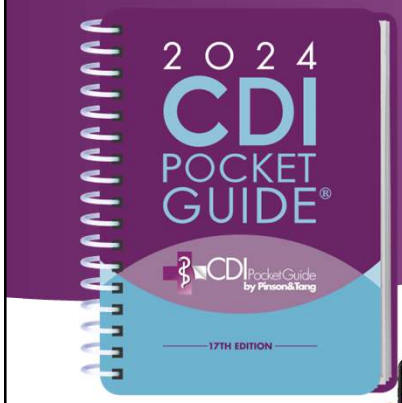

March 28, 2024

CDI Pocket Guide®

Diabetic Complications

Pinson&Tang

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Pinson&Tang

About Us

Richard Pinson

MD, FACP, CCS, CDIP

Dr. Richard Pinson is a physician, educator, administrator, and healthcare consultant. He practiced Internal Medicine and Emergency Medicine in Tennessee for over 20 years having board certification in both.

Cynthia Tang

RHIA, CCS

Cynthia brings over 35 years of experience in coding and clinical documentation integrity, and health information management. For over 30 years she has traveled across the country implementing successful and sustainable coding and CDI programs in hundreds of hospitals.

CDI Pocket Guide by Pinson&Tang

We created the **CDI Pocket Guide®** in 2008 because we wanted to provide this information to all hospitals, large or small. At the time, the only way to receive training in this field was with large-scale, expensive consulting projects. We thought we could bring this pocketful of information with the clinical criteria to identify important diagnoses to any individual who was interested in working in the CDI and coding field. Our CDI Pocket Guide® quickly became a best-selling book and an industry standard, and many consider it to be their CDI "bible".

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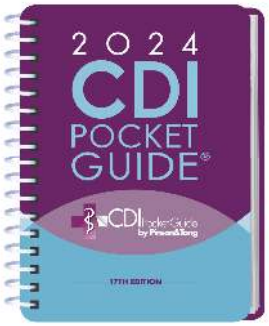
CDI Pocket Guide®



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Encephalopathy & Delirium
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Liver Disease and Failure
Malnutrition
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Neoplasms
Pneumonia
Respiratory Failure
Sepsis
Shock
Trauma: Parts 1 & 2

Cause And Effect
Clinical Validation
Complications of Care
HCCs: Impact to Payers & Providers
Patient Safety Indicators & Complications Of Care
Selecting the Principal Diagnosis
The Compliant Query
2024 CDI Pocket Guide® Updates

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Diabetic Complications

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Agenda

2024 CDI Pocket Guide®
Pages 133-137

- History of Diabetes
- Definitions and Diagnostic Criteria
- "With" Rule and Conditions NEC
- DRG and CMS-HCC Impact
- Questions and Case Studies
- Q&A

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History of Diabetes Mellitus

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Early descriptions date back to 1550 B.C.

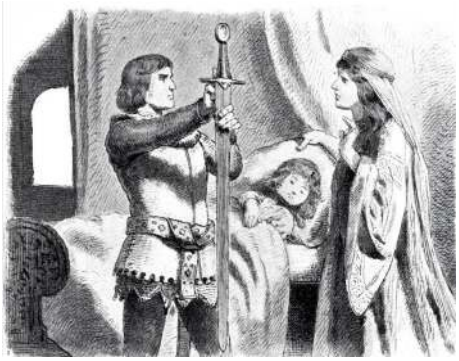
The term diabetes traces back to the 3rd century B.C.

1889: Discovered the role of the pancreas in the pathogenesis of diabetes and the term diabetes mellitus was first used

1920: Insulin discovered

1966: First pancreas transplant

2021: Stem cell therapy



Diabetes = Greek for "siphon" or to pass through
Mellitus = Latin for "sweet"

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Definition of Diabetes Mellitus

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Diabetes is a chronic metabolic disease characterized by elevated levels of blood glucose, which leads over time to serious damage to blood vessels, eyes, kidneys, and nerves.

It occurs when blood **glucose** is too high. Glucose is the body's main source of energy. The body can make glucose, and glucose also comes from the food we eat.

Insulin is a hormone made by the pancreas that helps glucose get into your cells to be used for energy.

If not enough—or any—insulin is made or there is cellular resistance to insulin, glucose stays in the blood and does not reach the cells.

HEALTHY BODY

With insulin, receptors absorb glucose and convert it into energy.

DIABETES TYPE 2

There's insulin in the blood, but cells do not respond on it and can't take glucose.

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Four DM Types

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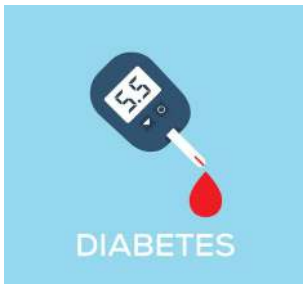
Type 1 Diabetes ("Juvenile")

- Characterized by absolute insulin deficiency
- Typically diagnosed in children and young adults
- Autoimmune destruction of pancreatic beta cells
- Requires lifelong insulin therapy



Type 2 Diabetes ("Adult")

- Primarily due to peripheral resistance to insulin
- Often associated with obesity and sedentary lifestyle
- Pancreas may initially produce insulin, but cells become resistant
- Managed through lifestyle changes, medication, and sometimes insulin therapy

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Four DM Types, continued

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Secondary Diabetes

- Causes: underlying disease (e.g., chronic pancreatitis, cystic fibrosis), certain medications (e.g., prednisone), and toxins (e.g., dioxin used in pesticides)
- Treatment focuses on addressing the underlying cause, alongside diabetes management

Pregnancy-induced Diabetes ("Gestational")

- Develops during pregnancy and usually resolves after childbirth
- Increased blood glucose levels due to hormonal changes
- Raises risks for both mother and baby, including gestational hypertension and large birth weight
- Managed through diet, exercise, and sometimes insulin therapy

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Diagnostic Criteria

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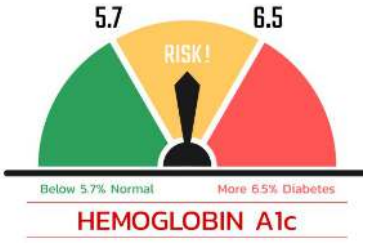
Diagnosis of diabetes is based on any of these:

- HbA1c (Glycated Hemoglobin): **≥ 6.5%**
- Fasting Blood Sugar (FBS): **> 125 mg/dl**
- 2-hour Oral Glucose Tolerance Test (OGTT): **> 200 mg/dl**
- Random Glucose Levels **> 200 mg/dl** with Symptoms of Hyperglycemia: **polyuria, polydipsia, blurred vision**

DM Hyperglycemia: Blood sugar > 140 mg/dl
DM Hypoglycemia: Blood sugar < 70 mg/dl



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Diabetic Ketoacidosis (DKA)

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Insulin facilitates the uptake of glucose by the body's cells. Absolute or relative insulin deficiency prevents glucose from entering cells as a fuel source and causing hyperglycemia. As a result, the liver rapidly breaks down fat (lipids) into ketones to employ as a fuel source instead.

The overproduction of ketones causes them to accumulate and turn the blood acidic (ketoacidosis).

DKA occurs primarily in patients with Type 1 DM but can occur in patients with Type 2 DM.

Diagnostic criteria require **ALL** of the following:

1. Blood sugar > 250 mg/dl
2. Acidosis with pH < 7.30
3. Bicarbonate < 18 mEq/L (CO2 on BMP or HCO3 on ABG)
4. Elevated serum (not urinary) ketones

Exclusion of other causes of the above

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Diabetic Ketoacidosis (DKA): Ketones

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The predominant **ketones** are acetoacetate, acetone, and beta-hydroxybutyrate (BHB).

BHB test can be specifically ordered as a separate test and is believed to be an accurate measure of severity and progression of DKA.

Normally, BHB is:

- undetectable (< 0.6 mmol/L)
- 1.0 mmol/L requires attention
- > 3.0 mmol/L (as in most DKA cases) is severe.

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Euglycemic Diabetic Ketoacidosis

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Diagnostic criteria:

1. **Relatively lower blood glucose (< 250 mg/dL)**
2. pH < 7.30, and
3. Bicarbonate < 18, and
4. Elevated serum ketones (e.g., beta-hydroxybutyrate > 3.0)

Exclusion of other causes of the above

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Diabetic Hyperglycemia Hyperosmolar State (HHS)

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Characterized by:

- Severe hyperglycemia (blood sugar > 600),
- Hyperosmolarity (high concentration of glucose and electrolytes especially sodium) and dehydration without significant ketoacidosis,
- Usually some alteration in consciousness (coma if severe).

Elevated urine glucose prevents the kidneys from reabsorbing water causing dehydration and hypernatremia.

HHS almost never occurs in Type 1 DM.

Diagnostic criteria include:

- Blood sugar > 600 mg/dl, and
- Serum osmolality > 320 mmol/L
- Exclusion of DKA: pH > 7.30, bicarbonate > 18, absence of significantly elevated serum ketones

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Hyponatremia with Diabetic Hyperglycemia

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In diabetic hyperglycemia, glucose dilutes sodium which makes the measured sodium level lower than it really is.

A corrected sodium must be calculated to get the true sodium value to determine if a patient has hyponatremia or hypernatremia (or a normal sodium level).

The calculation is: measured sodium + 0.016 x (Glucose – 100).

Case example: Glucose 700 + sodium 128 (apparent hyponatremia).

The corrected sodium level = 137.6 (normal).
Calculation: 128 + [0.016 x 600 (700-100)] = 137.6.

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Diabetic Complications: "With" Rule

ICD-10 and Official Coding Guidelines

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Official Coding Guidelines I.A.15: The word "with" or "in" should be interpreted to mean "associated with" or "due to" when it appears in a code title, the Alphabetic Index, or an instructional note in the Tabular List. The classification presumes a causal relationship between the two conditions linked by these terms.

All diabetic complications listed in the ICD-10 Index (**EXCEPT those indexed as "NEC")** are automatically linked and the diabetes code can be assigned, unless due to another cause or specifically documented as unrelated.

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Diabetic Complications: "With" Rule

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Diabetes "with" complications listed in ICD-10 do not need to be linked by the provider.

Does not apply to diabetes codes that include "not elsewhere classified (**NEC)**"

- Diabetes, diabetic (mellitus) (sugar) E11.9
  - with
    - amyotrophy E11.44
    - arthropathy NEC E11.618
    - autonomic (poly) neuropathy E11.43
    - cataract E11.36
    - Charcot's joints E11.610
    - chronic kidney disease E11.22
    - circulatory complication NEC E11.59
    - coma due to
      - hyperosmolarity E11.01
      - hypoglycemia E11.641
      - ketoacidosis E11.11
    - complication E11.8
      - specified NEC E11.69
    - dermatitis E11.620
    - foot ulcer E11.621
    - gangrene E11.52
    - gastroparesis E11.43
    - glomerulonephrosis, intracapillary E11.21
    - glomerulosclerosis, intercapillary E11.21
    - hyperglycemia E11.65
    - hyperosmolarity E11.00
      - with coma E11.01
    - hypoglycemia E11.649
      - with coma E11.641
    - ketoacidosis E11.10
      - with coma E11.11
    - kidney complications NEC E11.29
    - Kimmelstiel-Wilson disease E11.21
    - loss of protective sensation (LOPS) - see
    - mononeuropathy E11.41
    - myasthenia E11.44
    - necrobiosis lipoidica E11.620
    - nephropathy E11.21
    - neuralgia E11.42
    - neurologic complication NEC E11.49
    - neuropathic arthropathy E11.610
    - neuropathy E11.40
    - ophthalmic complication NEC E11.39
    - oral complication NEC E11.638
    - osteomyelitis E11.69
    - periodontal disease E11.630
    - peripheral angiopathy E11.51
      - with gangrene E11.52
    - polyneuropathy E11.42
    - renal complication NEC E11.29
    - renal tubular degeneration E11.29
    - retinopathy E11.319
    - skin complication NEC E11.628
    - skin ulcer NEC E11.622

DM with Complications NEC

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The "**with**" guideline does not apply to diabetes codes with index entries that include "not elsewhere classified (NEC)" which cover broad categories of conditions, e.g., skin complications NEC.

If a **condition is not listed** as "with" diabetes or it is listed as an "**NEC**" code in the index, there must be a causal relationship established to assign the DM combination code.

A diabetic patient with a "**skin ulcer**" or "**cellulitis**" cannot be coded as:

- Diabetic skin ulcer NEC (E11.622), or
- Diabetic skin complication NEC (E11.628)

…without linkage to the diabetes by the provider.

However, a foot ulcer is automatically linked to diabetes without provider clarification: Diabetic foot ulcer (E11.621)

MS-DRG Impact: MCC/CC

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E11.00-E11.01	DM with hyperosmolarity	MCC
E11.10-E11.11	Diabetic ketoacidosis	MCC
E11.641	DM with hypoglycemia with coma	MCC
E11.52	DM with peripheral angiopathy with gangrene	CC

These acute complications would usually be assigned as principal diagnosis.

All other DM complication codes (Type 1, 2, other) are non-CCs.

As a secondary diagnosis, many of the diabetic-related conditions/complications are CCs on their own: skin ulcer, cellulitis, CKD-4/5, osteomyelitis, gangrene, etc.

E11.9, Type 2 DM uncomplicated
L03.116, Cellulitis, left lower limb (CC)

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APR-SOI Impact (standard)

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E1100	4	Type 2 DM with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E1101	4	Type 2 DM with hyperosmolarity with coma
E1111	4	Type 2 DM with ketoacidosis with coma
E11641	4	Type 2 DM with hypoglycemia with coma
E1110	3	Type 2 DM with ketoacidosis without coma
E11311-E113599	2	Type 2 DM with diabetic retinopathy
E1136	2	Type 2 DM with diabetic cataract
E1137X1-E1137X9	2	Type 2 DM with diabetic macular edema, resolved following treatment
E1141	2	Type 2 DM with diabetic mononeuropathy
E1144	2	Type 2 DM mellitus with diabetic amyotrophy
E1152	2	Type 2 DM with diabetic peripheral angiopathy with gangrene
E11610	2	Type 2 DM with diabetic neuropathic arthropathy
E11630	2	Type 2 DM with periodontal disease
E11638	2	Type 2 DM with other oral complications
E11649	2	Type 2 DM with hypoglycemia without coma

Common complications are SOI 1:

- Kidney
- Neuropathy
- Foot ulcer
- Skin ulcer

Nearly all Type 1 DM complications are SOI 2

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CMS-HCC Impact (V28.0)

HCCs 36-38: All same coefficient/weight 0.166

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Diabetes with acute complications: • Diabetic ketoacidosis (DKA) • Diabetic hyperglycemia hyperosmolar state (HHS) • Diabetic hypoglycemia with coma	HCC 36
Diabetes with chronic complications: • Diabetic chronic kidney disease • Diabetic neuropathy	HCC 37
Diabetes without complications (E11.9)	HCC 38

ALL have same coefficient/ weight 0.166

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Principal Diagnosis Impact

Amputation of Toe or Foot

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DRG 255-257	**Upper Limb & Toe Amputation for Circulatory System Disorders**	**0.9910–2.7474**
Look for a DM complication as PDX with **toe amputation** (ex. 0Y6W0Z0): • DM skin ulcer (E11.622) • DM with osteomyelitis (E11.69)		**APR-DRG** 314 Foot & Toe Procedures, SOI 2
DRG 616-618	**Amputation of Lower Limb for Endocrine, Nutritional & Metabolic Disorders**	**1.1615–3.9577**
Look for other DM complication as PDX with **foot amputation** (ex. 0Y6N0Z0): • Look for diabetic peripheral angiopathy with or without gangrene (E11.51, E11.52)		
DRG 239	**Amputation for Circulatory System Disorders except Upper Limb & Toe**	**4.8068**

APR-DRG 305 Amputation of Lower Limb except Toes SOI 2

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Principal Diagnosis Impact

Skin Debridement

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DRG 570-572	**Skin Debridement**	**1.1396—2.9222**
Look for DM complication as PDX as cause of ulcer or cellulitis or reason for admission with **skin debridement** (ex. 0JBP0ZZ): • DM neuropathy (E11.40) Look for evidence of "necrotic" tissue which is assigned to gangrene or DM PVD as cause of ulcer or cellulitis: • DM peripheral neuropathy with gangrene (E11.52) • DM circulatory complication/PVD (E11.59)		
DRG 40-42	**Peripheral/Cranial Nerve & Other Nervous System Procedures**	**1.7398--3.8505**
DRG 264	**Other Circulatory System O.R. Procedures**	**3.2660**

APR-DRG 48 Peripheral, Cranial & Autonomic Nerve Disorders
APR-DRG 197 Peripheral and Other Vascular Disorders

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Question: Diabetes and Cellulitis

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Patient admitted with cellulitis of left toe; history of Type 2 DM on oral meds with associated neuropathy. The patient's blood glucoses ranged from 92 to 102 during the hospital stay.

I was asked to send a query to link the cellulitis with the diabetes diagnosis. This did not occur since the provider was linking the cellulitis to poor hygiene.

Should a query be sent to link cellulitis with diabetes? I know there are several manifestation/complication codes that are automatically linked to diabetes.

In this case, it would not be appropriate to query to link the diabetes since the cellulitis was documented as due to another cause. It also results in a lower MS-DRG.

PDX Cellulitis of toe (L03.032): DRG 603 (0.8818)

PDX DM Cellulitis (E11.628): DRG 639 (0.6008)

Do not automatically query for a relationship between a condition and diabetes unless it is not related to another condition, is clinically indicated, and impacts the MS-DRG or APR-DRG (usually PDX only).

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Questions: Diabetes and Cellulitis

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- We have had outside vendors recommend querying for a relationship between cellulitis and diabetes. What indicators should we look for to help identify if cellulitis is due to/caused by the patient's underlying diabetes vs. being unrelated?
- Previously we had been encouraged to query when appropriate to see if cellulitis was due to poorly controlled diabetes. My current hospital disagrees with this and feels that cellulitis is an infection, and not in any way related to diabetes, and we are not allowed to query. One of our providers that I recently queried regarding DM and cellulitis responded: "Certainly it's related to the diabetes because it's way out of control."

Cellulitis is inflammation (usually infection) of the skin and subcutaneous tissues. Typically caused by an initial skin defect that becomes infected.

Clinical findings include redness, swelling, pain, tenderness, proximal lymphadenopathy – usually with a sharp border.

Diabetic cellulitis is usually of the lower extremity and based on clinical suspicion/judgement: diabetic patient with PVD, neuropathy, skin ulcer, or history of minor skin injury (scratch, abrasion), or poorly controlled.

Querying for cellulitis with DM may be appropriate in certain circumstances, i.e., when clinically indicated and impacts the MS-DRG or APR-DRG – usually as principal diagnosis.

Consider developing specific query guidelines regarding when to query for DM cellulitis and other NEC complications.

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Question: Steroid-induced DM

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When is it appropriate to query for elevated glucose as an adverse effect of steroids – for a patient without a diagnosis of diabetes OR has a diagnosis of diabetes?

Patient was given dexamethasone (orally/IV) for treatment of infection.

Patient's glucose was elevated the day after the administration.

For steroid-induced diabetes, the values would have to meet the diagnostic criteria for "diabetes"– see slide 10 or page 133 of the CDI Pocket Guide®.

If the patient's glucose was only elevated the day after administration, it would only be an abnormal lab value.

If the patient already has diabetes, a query would not be warranted.

As a secondary diagnosis, steroid-induced diabetes codes have no CC or APR-SOI status.

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Question: DKA and Hypovolemic Shock

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At our pediatric facility, our providers feel strongly about hypovolemic shock in DKA based on losses and intravascular osmolality. Our team use the following criteria, without specific blood pressure parameters, for assigning hypovolemic shock with DKA:

Hypovolemic Shock Parameters for DKA
40 mL/kg in fluid boluses within 6hrs **OR** 20 mL/kg fluid bolus plus any of the below: • Blood glucose >300 • Pre-renal azotemia • Hypotension • Tachycardia and hypertension • Delayed capillary refill time and/or cool extremities and/or weak peripheral pulses • Mental status changes/lethargy/acute metabolic encephalopathy • Cardiovascular dysfunction • Acute Kidney Injury/Acute Renal Failure (AKI)

40ml/kg in fluid boluses within 6 hours and 20ml/kg are inconsistent with the accepted definition and treatment of shock. The fluid resuscitation standard for shock is refractory hypotension or lactic acidosis following 40-60ml/kg within one hour.

Hypotensive and lactic acid parameters for shock are:

- Age 0–28 days = SBP < 60 mmHg
- Age 1–12 mos = SBP < 70 mmHg
- Age 1–9 yrs = SBP < 70 mmHg + 2x age
- Age ≥ 10 yrs = SBP < 90 mmHg
- Or lactic acidosis (any age)

Most of the specified clinical criteria and fluid resuscitation stated are consistent with severe dehydration but do not meet the widely-accepted standards for shock.

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Case Study: DM and Traumatic Wound

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Payer DRG denial

ED: 61-year-old male with a PMHx of diabetes with significant lower extremity neuropathy, s/p right great toe amputation, who was seen at outside facility on 6/22 with worsening left foot pain after stepping on a nail in a field yesterday. He inadvertently stepped on a piece of wood with a nail in it. Transferred for surgical evaluation.
Dx: Puncture wound to left foot, soft tissue gas infection, concern for necrotizing soft tissue infection.

ID Consult: BCx were negative and superficial wound culture grew Oxacillin-sensitive Staph hominis, tetanus was updated. Xray notable for some foreign bodies as well as soft tissue air. Due to concern for necrotizing fasciitis, he was started on Vancomycin, Zosyn, and Clindamycin at OSH.
Dx: Necrotizing left foot soft tissue infection s/p guillotine left TMA (6/23) and formalization left TMA (6/26).

6/22 Left foot x-ray: Small densities in the plantar midfoot soft tissues consistent with foreign bodies. Dorsal mid to forefoot soft tissue gas, extending proximally, with dorsal forefoot soft tissue swelling. Apparent small foci of soft tissue gas in Kager's fat pad.

Path: Necrosis and mixed acute and chronic inflammation focally extended to skin and soft tissue margins. Underlying bone with no evidence of osteomyelitis.

Discharge Summary:
Left diabetic foot infection 2/2 foreign body
Left foot x-ray on admission w/ c/f soft tissue gas infection

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Case Study: DM and Traumatic Wound, cont.

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	Hospital: DRG 239 (4.6501)		Payer Auditor: DRG 616 (3.7645)	
PDX	E11.52	Type 2 DM with diabetic peripheral angiopathy with gangrene	E11.628	Type 2 DM with other skin complications NEC
SDX	E11.40 A48.0	Type 2 DM with diabetic neuropathy Gas gangrene	E11.51 A48.0	Type 2 DM with diabetic peripheral angiopathy without gangrene Gas gangrene
PX	0Y6N0Z0	Detachment at left foot	0Y6N0Z0	Detachment at left foot

Payer Auditor: Documentation supported an admission for diabetic foot infection. Provider documentation indicated that the pt had sustained an injury (stepped on nail) to his left foot days prior to this admission he presents now with a "diabetic foot infection 2/2 foreign body". The wound was further described as infected and with "gas gangrene" and "left diabetic foot infection 2/2 foreign body". Throughout the record the diagnoses were left diabetic foot infection 2/2 foreign body with soft tissue gas infection.

Auditor is aware of a Coding Clinic 4th Quarter 2017 p. 102 which speaks to sequencing diabetic angiopathy (E11.52) as PDX and using gas gangrene (A48.0) as secondary diagnosis. However, the example in this coding clinic is **vastly different** than this case. That example was in a pt presenting with both gangrene in diabetic due to angiopathy who also had gas gangrene. In this instance however, the patient **had a traumatic injury became grossly infected due to foreign body**. The issue of atherosclerotic gangrene is not present in this situation. The resultant **gas gangrene is a complication of the traumatic injury** in a diabetic patient [see Coding Clinic First Quarter 2021 p. 7-8]. In this case, the foreign body injury evolved to an infection. The infection is the presenting problem and ultimately required an amputation as definitive treatment; and would be classified as **sequela** of the puncture injury. And although the patient may have angiopathy, **it was the infection and not a vascular issue** which necessitated treatment at this time.

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Case Study: DM and Traumatic Wound, cont.

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Coding Clinic 4th Quarter 2017, p. 102

Question: A 71-year-old male with type 2 diabetes mellitus presented to the Emergency Department with a swollen gangrenous right foot that was diagnosed as gas gangrene. Does the Alphabetic Index subentry for "with gangrene"; under the main term "diabetes," include gas gangrene? If so, should we also report code A48.0 to specify the gangrene as gas gangrene? **What are the appropriate code assignments for gas gangrene in a type 2 diabetic patient?**

Answer: Assign codes E11.52, Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene, and A48.0, Gas gangrene. Code A48.0 specifically describes the type of gangrene and provides detail about the patient's condition; therefore it is appropriate to assign as an additional code.

Coding Clinic First Quarter 2021 p. 7-8

Question: A patient, with type 2 diabetes mellitus, **presented for follow up of a previous traumatic laceration**, which the patient reported had worsened. The provider documented **diabetic ulceration secondary to laceration of the left ankle,** and further described the ulcer as full thickness with breakdown of skin. Are two codes assigned, one for the laceration and one for the ulcer? Alternatively, should only the ulcer be coded? How should this diagnosis be reported?

Answer: Assign codes E11.622, Type 2 diabetes mellitus with other skin ulcer, L97.322, Non-pressure chronic ulcer of left ankle with fat layer exposed, and S91.012S, Laceration without foreign body, left ankle, sequela… In this case, the laceration has evolved to an ulceration. The ulcer is a different problem; requires different treatment; and would be classified as **sequela** of the laceration.

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Case Study: DM and Traumatic Wound, cont.

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CORRECT DRG: DRG 239 (4.6501)		Payer Auditor: DRG 616 (3.7645) INCORRECT	
E11.52	Type 2 DM with diabetic peripheral angiopathy with gangrene	E11.628	Type 2 DM with other skin complications
E11.40	Type 2 DM with diabetic neuropathy	E11.51	Type 2 DM with diabetic peripheral angiopathy without gangrene
A48.0	Gas gangrene	A48.0	Gas gangrene

- Code E11.628, Diabetes with skin complication **NEC**, assigned as PDX by the auditor for "diabetic foot infection" is inaccurate. This code would only be assigned if the patient's infection was not further specified (not elsewhere classified) in the medical record documentation. The patient's "infection" is further specified/classified as "gas gangrene" (a life-threatening infection) which required emergent amputation and is assigned to code E11.52 based on the ICD-10 index and tabular.
- The 2017 Coding Clinic unequivocally supports E11.52 as PDX in this case since the answer is simply "what are appropriate code assignments for gas gangrene in a type 2 diabetic patient", which are the diagnoses in this case.
- The 2021 Coding Clinic does not apply since this was an acute infection/gangrene due to a current traumatic injury and not a diabetic ulceration that was a "sequela" of a prior injury as described in the case example in this Coding Clinic.

NOTE: Documentation of "necrotizing left foot soft tissue infection" by ED and ID and path report supports code M72.6 as principal diagnosis, but a query would have been needed. This would have resulted in DRG 474 (4.0969).

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Case Examples

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#1 - A diabetic is admitted for osteomyelitis associated with a stage 4 pressure ulcer. The patient is taken to the OR for excisional debridement of the ulcer including bone. Would this be coded to a PDX of DM w/other specified complication (E11.69), or would the stage 4 pressure ulcer be the PDX?

Assign code E11.69, DM osteomyelitis, as PDX, M46.28 for osteomyelitis, and L89.154 if sacral pressure ulcer. DM osteomyelitis is the reason for the debridement of the ulcer down to bone.

#2 - A diabetic presents with a gangrenous foot ulcer on the plantar surface of the first metatarsal head. Patient also has atherosclerosis of the anterior/posterior tibial arteries and required angioplasty of these arteries to ensure healing of the ulcer. The patient then had an excisional debridement of the foot ulcer including subcutaneous tissue. What is the PDX, DM w/angiopathy with gangrene or atherosclerosis with gangrene?

Assign DM angiopathy with gangrene (E11.52) as the PDX for the gangrenous foot ulcer as it appears to be the primary reason for admission and treatment. The arterial atherosclerosis is most likely related to the diabetes, and the angioplasty is also treatment for the gangrenous foot ulcer.

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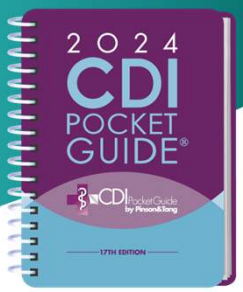
Q & A



Thank you for attending!

All attendees will receive an email with a CEU evaluation link within 24 hours following the live webinar

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