# **Chapter 4 Scenarios:** Endocrine, nutritional and metabolic diseases (E00-E89)

## **Diabetic hypertension**

A 74-year-old man was recently diagnosed with severe hypertension that his physician documented as due to his type 2 diabetes. He also has stage 2 chronic kidney disease, which is also related to the diabetes. The physician confirmed that his additional diagnosis of right heart failure, which predated his diabetes diagnosis, is unrelated to the hypertension. He takes oral hypoglycemic medication. The hypertension is the focus of care.

Description	Code
Primary: Type 2 diabetes mellitus with other circulatory complications	E11.59
Secondary: Hypertension secondary to endocrine disorders	I15.2
Secondary: Type 2 diabetes mellitus with diabetic chronic kidney disease	E11.22
Secondary: Chronic kidney disease, stage 2 (mild)	N18.2
Secondary: Right heart failure, unspecified	150.810
Secondary: Long term (current) use of oral hypoglycemic drugs	Z79.84

There is no assumed relationship between hypertension and diabetes. However, in this scenario, the physician specifically connected the diagnoses. Thus, it is captured first with E11.59 followed by I15.2. Stage 2 diabetic chronic kidney disease also requires two codes to fully capture the diagnosis: E11.22 and N18.2. While there is normally an assumed relationship between hypertension and heart failure, the physician confirmed the two are unrelated and are thus coded separately, in accordance with coding guidelines.

#### Diabetic macular edema

A 73-year-old man admitted to home care has just been prescribed insulin for his type 2 diabetes. However, the retinopathy and macular edema from his diabetes is severe enough that it has caused legal blindness. Skilled nursing is ordered for teaching and training regarding insulin and use of insulin syringes with magnifiers. The patient's clinical record indicates that he has refused any COVID-19 vaccine due to personal religious beliefs about vaccination.

Description	Code
Primary: Type 2 diabetes with unspecified diabetic retinopathy with macular edema	E11.311
Secondary: Legal blindness	H54.8
Secondary: Long-term (current) use of insulin	Z79.4
Secondary: Unvaccinated for COVID-19	Z28.310
Secondary: Immunization not carried out because of patient decision for reasons of belief or group pressure	Z28.1

There's a "code first" note at H54.8 instructing to assign first the reason for the legal blindness - in this case, that would be the one all-inclusive code for diabetic macular edema, E11.311. The long-term (current) use of insulin should be coded, if it is anticipated that the need for insulin will be ongoing. It should not be used for short-term insulin use. Coding guidelines indicate that a code should be assigned when a patient is reported to be unvaccinated or under-vaccinated for COVID-19. The reason, when known, should additionally be coded, per instructional notes at Z28.3-.

#### Diabetes with renal manifestation

A patient is admitted to home health for teaching and training about his diabetes with stage 2 chronic kidney disease. He is not currently taking insulin. The patient's medical record indicates a history of stable chronic systolic heart failure and hypertension.

Description	Code
Primary: Type 2 diabetes mellitus with diabetic chronic kidney disease	E11.22
<b>Secondary:</b> Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	I13.0
Secondary: Chronic systolic (congestive) heart failure	150.22
Secondary: Chronic kidney disease, stage 2	N18.2

When the type of diabetes is not stated, the default is type 2. There is an assumed relationship in the ICD-10 classification between diabetes and any specific condition listed under "with" in the alphabetic index, and a combination code describes these two conditions: E11.22. Note that E11.22 instructs the coder to use an additional code to identify the stage of chronic kidney disease. Therefore, N18.2 is additionally assigned. The current ICD-10 classification also assumes a relationship between hypertension and chronic kidney disease, as well as hypertension and heart failure, therefore a combination code from category I13.- is assigned and precedes both the heart failure and chronic kidney disease codes.

### Amyloidosis with arthropathy

Physical therapy is ordered for a patient who has right shoulder arthropathy due to amyloidosis. Additional diagnoses of "secondary diabetes", polyneuropathy, and gastroparesis are also reported by the physician.

Description	Code
Primary: Organ limited amyloidosis (localized)	E85.4
Secondary: Arthropathy in other specified diseases elsewhere, right shoulder	M14.811
Secondary: Other specified diabetes mellitus with diabetic polyneuropathy	E13.42
Secondary: Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy	E13.43
Secondary: Gastroparesis	K31.84

Amyloidosis can be limited to one organ; e.g., the musculoskeletal system, the heart or the brain. This is an etiology (amyloidosis) and manifestation (arthropathy) pairing. It is evident when searching the alphabetic index for "arthropathy in (due to) "amyloidosis" and you find "E85.4 [M14.8-]." Therefore, the etiology (the amyloidosis) must be immediately followed by the manifestation (the arthropathy). Additional codes for the secondary diabetes with manifestations of polyneuropathy and gastroparesis are added as these are important comorbid conditions that impact the patient's rehabilitation prognosis and the comorbidity adjustment for payment. Secondary diabetes, when not further specified is coded to E13.-. Gastroparesis should be assigned using the combination code for diabetes with autonomic (poly) neuropathy. While the assignment of the additional code to identify gastroparesis, K31.84, more specifically, is not required, it may be optionally assigned according to Q1 2016 Coding Clinic guidance.