In ICD-10-CM, coding of adverse effects, poisonings, and toxic effects is nothing new, although often times defining the differences can be confusing, making the coding process more difficult. Underdosing, however, is a new concept in ICD-10-CM and the coding guidelines associated with this condition are very different.

A review of the Guidelines helps clarify these concepts. We’ll start with the overview:


Codes in categories T39-T65 are combination codes that include the substance that was taken as well as the intent. No additional external cause code is required for poisonings, toxic effects, adverse effects and underdosing codes.

- Do not code directly from the Table of Drugs and Chemicals. Always refer back to the Tabular List.
- Use as many codes as necessary to describe completely all drugs, medicinal or biological substances.
- If the same code would describe the causative agent for more than one adverse effect, poisoning, toxic effect or underdosing, assign the code only once.
- If two or more drugs, medicinal or biological substances are reported, code each individually unless a combination code is listed in the Table of Drugs and Chemicals.

Now let’s look specifically at each of the topics.

**Adverse Effect**


When coding an adverse effect of a drug that has been correctly prescribed and properly administered, assign the appropriate code for the nature of the adverse effect followed by the appropriate code for the adverse effect of the drug (T36-T50). The code for the drug should have a 5th or 6th character "(x)" if the example T36.(x)K5.

Examples of the nature of an adverse effect are tachycardia, delirium, gastrointestinal hemorrhage, vomiting, hypokalemia, hepatitis, renal failure, or respiratory failure.

Now we have been given directions on how to determine if there has been an adverse effect and the sequencing of the codes, let’s practice. We will only work through the adverse effect coding.

**Adverse Effect Scenario:** Hematuria due to Coumadin, taken as prescribed, for atrial fibrillation.

**What needs to be coded?**

1. Hematuria which is the adverse effect of the medication K31.9
2. Adverse effect of Coumadin, the drug was taken as prescribed T45.515A
3. Atrial fibrillation, the original condition being treated I48.91

**ICD-10-CM TABLE OF DRUGS and CHEMICALS**

- T39 Poisoning by, adverse effect of and underdosing of nonopioid analgesics, antipyretics and antirheumatics
- T45.51 Adverse effect of anticoagulants
- T45.515 Adverse effect of anticoagulants
- T45.516 Adverse effect of anticoagulants
- T50 Poisoning by, adverse effect of and underdosing of diuretics and other and unspecified drugs, medicaments
- T50.1x Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x1 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x2 POISONING BY LOOP [HIGH-CEILING] DIURETICS
- T50.1x3 POISONING BY LOOP [HIGH-CEILING] DIURETICS
- T50.1x4 POISONING BY LOOP [HIGH-CEILING] DIURETICS
- T50.1x5 POISONING BY LOOP [HIGH-CEILING] DIURETICS
- T50.1x6A Poisoning by, adverse effect of and underdosing of diuretics and other and unspecified drugs, medicaments
- T59 Toxic effect of other gases, fumes and vapors
- T59.8 Toxic effect of other gases, fumes and vapors
- T59.891 Toxic effect of other specified gases, fumes and vapors
- T59.892 Toxic effect of other specified gases, fumes and vapors
- T60.4X2 Toxic effect of other gases, fumes and vapors
- T60.4X3 Toxic effect of other gases, fumes and vapors

**Toxic Effects Scenario:** 85 year-old presents with acute exacerbation of his chronic systolic heart failure due to taking half of his lasix prescription. He states he doesn't want to have to get up at night to urinate. 

**What needs to be coded?**

1. Acute on chronic systolic heart failure I50.23
2. Underdosing of Lasix T50.1x6A
3. Noncompliance with medication 291.128

**ICD-10-CM TABLE OF DRUGS and CHEMICALS**

- T50.1x Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x1 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x2 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x3 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x4 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x5 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x6 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x7 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x8 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics
- T50.1x9 Poisoning by, adverse effect of and underdosing of loop [high-ceiling] diuretics