

Converting an ICD-9 Superbill to ICD-10

1. To show the added complexity that providers will face when using ICD-10, we converted a superbill from ICD-9 to ICD-10.
2. A superbill is a form used by medical practitioners and clinicians so they can quickly complete and submit the procedure(s) and diagnosis(s) for a patient visit for reimbursement. It is generally customized for a provider office and contains patient information, the most common CPT (procedure) and ICD (diagnostic) codes used by that office, and a section for items such as follow-up appointments, copays, and the provider's signature.
3. We started with a model superbill created by the American Academy of Family Practitioner's practice management journal, *Family Practice Management (FPM)*. The back of the superbill shows 164 ICD-9 diagnosis codes identified by FPM as being those most commonly used by family physicians.
4. About half of the 164 ICD-9 codes on the superbill are general codes such as "unspecified" or "not otherwise specified." These general codes exist so that all information encountered in a medical record can be assigned a code. While they lack the specificity necessary to infer diagnosis details, they are often used on superbills due to space limitations. Continuing their use in ICD-10 will only further prevent realization of the code set's increased granularity.
5. CMS has published "Generalized Equivalency Mappings" or "crosswalks" that relate every ICD-9 code to one or more ICD-10 codes. We used these crosswalks to convert each ICD-9 code on the superbill to its equivalent ICD-10 code or codes.
6. In some cases the CMS crosswalks were incomplete or possibly inaccurate, and conversion to ICD-10 actually produced far *less* clinical detail than had been provided by the original ICD-9 code. In these few instances we tried to provide an equivalent mapping, while still using more general ICD-10 codes as is typical with superbills. For example:

- The AAFP superbill includes the ICD-9 codes for "845.00 Sprained/strained ankle, unspecified". The CMS crosswalk maps this to two codes: 1) "S93.409A Sprain of unspecified ligament of unspecified ankle, initial encounter," and 2) "S93.409D Sprain of unspecified ligament of unspecified ankle, subsequent encounter."

However, this is incomplete because it does not include a code for a strained ankle. Therefore, we added 1) "S96.919A Strain of unspecified muscle and tendon at ankle and foot level, unspecified side, initial encounter;" and 2) "S96.919D Strain of unspecified muscle and tendon at ankle and foot level, unspecified side, subsequent encounter."

- The AAFP superbill includes the ICD-9 codes for "919.0 Abrasion, unspecified"; "924.9 Contusions, unspecified"; and "919.4 Insect bite". The CMS crosswalk simply maps these to either of two catch-all ICD-10 codes, "T07 Unspecified multiple injuries" or "T14.90 Unspecified injury of unspecified body region".

Such general diagnosis codes submitted by a provider would be insufficient to determine the medical necessity of a procedure. We therefore listed the most residual ICD-10 codes available for each injury type*, e.g. "S90.519A Abrasion, unspecified ankle; Initial encounter".

* Note that there is no single residual ICD-10 code for an Abrasion, Contusion, or Insect bite, respectively—instead, one can only choose among a number of codes for each injury type such as "Abrasion of [particular body part]".

7. The converted superbill may actually need to be considerably longer if CMS finalizes current draft guidance concerning the coding of injuries. The Draft ICD-10-CM Official Guidelines For Coding and Reporting state: "When an injury code is assigned to a medical record, a corresponding external cause code must also be assigned to identify the cause of the injury. Additionally, an activity code (Y93) and a place of occurrence code (Y92) should also be assigned." ICD-9-CM guidelines do not require the use of the external cause codes.
 - To put this in perspective, there are more than 5,000 external cause of injury codes that involve accidents (when no intent is indicated, the default is accidental).