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**Date:** August 13, 2015

**From:** Center for Consumer Information & Insurance Oversight (CCIIO),  
Centers for Medicare & Medicaid Services (CMS)

**Subject:** **Draft Fiscal Year 2016 ICD-10 Crosswalk for HHS-HCC Risk Adjustment Model**

The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) has been developed as a replacement for ICD-9-CM and is scheduled to be implemented in the United States beginning on October 1, 2015, in the last quarter of the 2015 benefit year of HHS-operated risk adjustment. All data reporting for the HHS-operated risk adjustment program must include ICD-10-CM codes for claims with dates of service on or after October 1, 2015. In an effort to prepare issuers for this implementation, CCIIO has prepared this document to describe our approach to mapping ICD-10 codes in the HHS-operated risk adjustment model. Additionally, we are providing a draft crosswalk mapping of the ICD-10 diagnosis codes to HHS-operated risk adjustment hierarchical condition categories (HCCs) for stakeholder feedback. The ICD-10 crosswalk is posted on the CCIIO webpage under the section labeled “Premium Stabilization Programs,” under “Regulations & Guidance” in Excel format for your review (<https://www.cms.gov/CCIIO/Programs-and-Initiatives/Premium-Stabilization-Programs/index.html>).

**We encourage issuers to provide feedback on the draft fiscal year 2016 (FY16) ICD-10 crosswalk mapping by submitting comments via email to [hshccraops@cms.hhs.gov](mailto:hshccraops@cms.hhs.gov). All comments should be submitted by August 31, 2015.** After reviewing stakeholder feedback, we will post the final ICD-10 HCC crosswalk prior to ICD-10 implementation on October 1<sup>st</sup>. The final ICD-10 crosswalk will be incorporated into the risk adjustment DIY software tables, as well as our EDGE server operational code.

## **Background**

The HHS-HCC risk adjustment model uses diagnosis codes in the current year to predict medical and drug spending in the same year. The diagnostic classification system underlying the HHS-operated risk adjustment model begins by mapping all ICD-9-CM diagnosis codes to diagnostic groups, or DXGs, and then maps the DXGs to hierarchical condition categories (HCCs).<sup>1</sup>

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<sup>1</sup> Descriptions of the HHS risk adjustment model and its use of HCCs can be found in the 2014 Payment Notice (78 FR 15410) and in the Medicare & Medicaid Research Review Article, “The HHS-HCC Risk Adjustment Model for Individual and Small Group Markets under the Affordable Care Act.” [https://www.cms.gov/mmrr/Downloads/MMRR2014\\_004\\_03\\_a03.pdf](https://www.cms.gov/mmrr/Downloads/MMRR2014_004_03_a03.pdf)

There are currently over 14,500 ICD-9 diagnosis codes. ICD-10 has approximately 70,000 diagnosis codes. Because of the increase in the number of diagnosis codes, changes in the code structure, and significant differences between the two code sets, mapping the ICD-10 codes to ICD-9 codes, DXGs, and HCCs has been a multi-year process involving careful examination. The underlying DXGs were revised to account for differences between ICD-9 and ICD-10. Multiple iterations of the ICD-10 HHS-HCC crosswalk were developed to account for annual changes in the preliminary ICD-10 code sets from FY12 through FY16.

The key principle in the ICD-10 to HHS-HCC crosswalk development was to match the ICD-9 HHS-HCC crosswalk as closely as possible. However, differences between ICD-9 and ICD-10 in terms of code structure, specificity, and underlying clinical classification necessitated differences between the crosswalks in some instances. In these instances, CCIIO relied on General Equivalence Mappings (GEMs), certified coders, clinical review, and analysis.

CMS and the Centers for Disease Control and Prevention (CDC) created the GEMs as a tool for translating between the ICD-9 and ICD-10 code systems. The GEMs have been updated periodically to account for ICD-9 and ICD-10 code changes, public comment on existing mappings, and ongoing internal review for accuracy and completeness. The GEMs include forward mappings (ICD-9 to ICD-10) and backward mappings (ICD-10 to ICD-9). For risk adjustment purposes, CCIIO used the GEMs backward mappings. This approach allowed us to map most ICD-10 codes to ICD-9 codes (or directly to DXGs) and use our existing crosswalks to map ICD-9 codes to DXGs and then DXGs to HCCs.

Within the GEMs, the majority of ICD-10 codes have a single 1:1 exact match or approximate match to an ICD-9 code. However, some ICD-10 codes may have multiple 1:1 approximate matches to choose from if the content of the ICD-10 code is of different specificity than the corresponding ICD-9 codes. Additionally, ICD-10 codes with multiple concepts frequently have combination mappings (e.g., 1:2 or 1:3), and the GEMs may include a mix of 1:1 and combination mappings to choose from.

### **ICD-10 Combination Codes**

A combination code is defined as a diagnosis code encompassing two or more clinical conditions. Combination codes exist in the ICD-9 classification also, but are much more prevalent and extensive in ICD-10. A majority of these ICD-10 combination codes contain the underlying conditions as well as associated symptoms or manifestations. Under the ICD-9 classification system, the conditions in many instances would be coded separately. In general, when given the choice of a single mapping or a combination mapping, CCIIO selected combination mappings to better match ICD-9 mapping, which means these ICD-10 codes could map to more than one HCC.

### **ICD-10 Episode of Care Codes**

Several ICD-10 code sets use a 7th character in the ICD-10 code to identify the sequence of the service in episode of care, for example: A – initial encounter; D – subsequent encounter; or S –

sequela (late effect). Frequently, the D codes have a GEMs mapping to a nonspecific ICD-9 aftercare code and the S codes to a late effects code, one or both of which might be in non-payment HCCs. CCIIO re-evaluated code sets to determine cases in which in addition to the initial treatment, we would want to include aftercare or late effects in payment HCCs to indicate ongoing care.

**ICD-10 Code Specificity Differences**

In many cases, ICD-10 code sets have greater or different specificity than the corresponding ICD-9 code sets. The default GEMs backward mapping is frequently to the least specific ICD-9 code. CCIIO re-evaluated code sets to determine if codes should be remapped directly to DXGs rather than ICD-9 codes (and thereby possibly different HCCs than the corresponding ICD-9 codes) to account for the newly specified details within the ICD-10 code.

**ICD-10 Clinical Changes**

Some codes present in ICD-9 were clinically redefined or reclassified within ICD-10. A code might have the same label in ICD-9 and ICD-10, even though its clinical meaning had changed as conveyed through different code subtext. CCIIO re-evaluated these codes and in some cases changed their payment HCC mapping.

**Summary Statistics for the FY16 ICD-10 HHS-HCC Crosswalk**

Below are summary statistics from the calendar year 2015 HHS-HCC crosswalks, comparing the FY16 ICD-10 code counts to the FY15 ICD-9 code counts.

Summary Statistics	V04 HHS-HCC Model	
	ICD-9	ICD-10
Total number of unique codes	14,567	69,823
Total number of unique codes in payment model	3,473	7,685
Percent of unique codes in payment model	24%	11%
Codes mapping to exactly 1 payment HCC (before hierarchies applied)	3,466	7,402
Codes mapping to exactly 2 payment HCCs (before hierarchies applied)	7	283
Codes mapping to exactly 1 payment HCC (after hierarchies applied)	3,466	7,617
Codes mapping to exactly 2 payment HCCs (after hierarchies applied)	7	68