HEALTHCARE COST AND UTILIZATION PROJECT (HCUP) RECOMMENDATIONS FOR REPORTING TRENDS USING ICD-9-CM AND ICD-10-CM/PCS DATA

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RECOMMENDATIONS FOR REPORTING TRENDS USING ICD-9-CM AND ICD-10-CM/PCS DATA

The Healthcare Cost and Utilization Project (HCUP) has developed recommendations for reporting statistics (e.g., counts, rates, averages) that are based on HCUP data with a mixture of ICD-9-CM and ICD-10-CM/PCS codes.[1] These recommendations apply to calendar year 2015 data (which includes both ICD-9-CM and ICD-10-CM/PCS codes), as well as reporting trends that span the October 1, 2015 transition date (before and after the introduction of ICD-10-CM/PCS).

ICD-10-CM/PCS was implemented in the U.S. on October 1, 2015, thus administrative data that are annual, calendar-year files that span the transition dates, such as the 2015 HCUP databases include both coding schemes:

- Nine months of data with ICD-9-CM codes (Jan 1, 2015 to September 30, 2015)
- Three months of data with ICD-10-CM/PCS codes (October 1, 2015 to December 31, 2015).

Table 1 lays out recommendations for using 2015 HCUP databases that contain both ICD-9-CM and ICD-10-CM/PCS codes, depending on the purpose of the analysis.

These same recommendations apply to reporting trends across years that include both ICD-9-CM and ICD-10-CM/PCS codes.

The HCUP team is continuing to conduct analyses on the impact of the ICD-10-CM/PCS coding system on the examination of trends in health care in the United States. The most recent reports and guidance for doing analysis with ICD-10 data can be accessed on the HCUP-US Web site under ICD-10-CM/PCS Resources.

[1] ICD-9-CM: International Classification of Diseases, Ninth Revision, Clinical Modification; ICD-10-CM/PCS: International Classification of Diseases, Tenth Revision, Clinical Modification/Procedure Coding System.

Table 1. Recommendations for Reporting Statistics Using Data that Include both ICD-9-CM and ICD-10-CM/PCS Codes

Do Analyses Focus on Diagnoses or Procedures?	Recommendation
Yes—Analysis is based on diagnosis and procedure codes (i.e., uses ICD-9-CM and ICD-10-CM/PCS codes)	The first step should be to analyze the data by discharge quarter (HCUP data element: DQTR) to determine whether there is discontinuity in the categorization because of the transition from ICD-9-CM (in DQTR=1–3) to ICD-10-CM/PCS (DQTR=4).
	Based on this analysis, if there is a discontinuity across the two coding systems in the frequency of cases within a diagnosis or procedure code or category of codes, report data in a way that acknowledges the discontinuity. • Example 1: Report fourth quarter data separately from the previous three quarters of data. This approach is demonstrated in the HCUP Fast Stats online tool that visually separates information in figures that cross coding schemes. • Example 2: Report information from only one coding scheme. This approach will be taken by the National Healthcare Quality and Disparities Report[b] for reporting 2015 estimates for the AHRQ Quality Indicators using only the ICD-9-CM data in the first 9 months of 2015 data. Although the number of discharges or visits will not be an annual number, rates (e.g., per 100,000 population) can be produced by multiplying the denominator (the population estimate) by 0.75 to reflect that only three-quarters of the numerator data are used.
	If there is no apparent discontinuity in the number of cases from the 3rd to the 4th quarter, it is reasonable to report an annual statistic using all four quarters of 2015 data, but acknowledge that the coding of the underlying conditions and procedures changes during the time period and was examined prior to reporting an annual result.
No—Analysis is not based on diagnosis or procedure codes	For 2015 data that include nine months of ICD-9-CM and three months of ICD-10-CM/PCS, it is reasonable to report annual statistics based on a full 2015 calendar year of data when reporting national or State-level information overall or when reporting by expected payer or other patient or hospital characteristics (i.e., ICD-9-CM and ICD-10-CM/PCS codes are not used)
	Similarly, when doing analysis that spans years (e.g., 2014-2016) that include both ICD-9-CM and ICD-10-CM/PCS, but that do not use diagnosis or procedure codes, it is reasonable to report statistics without any further evaluation.

Abbreviations: AHRQ, Agency for Healthcare Research and Quality; HCUP, Healthcare Cost and Utilization Project; ICD-9-CM: International Classification of Diseases, Ninth Revision, Clinical

Modification; ICD-10-CM/PCS: International Classification of Diseases, Tenth Revision, Clinical Modification/Procedure Coding System.

[a] The Clinical Classifications Software provides a method for classifying diagnoses or procedures into clinically meaningful categories, which can be used for aggregate statistical reporting.

[b] U.S. Department of Health and Human Services. 2015 National Healthcare Quality and Disparities Report and 5th Anniversary Update on the National Quality Strategy. AHRQ Publication No. 16-0015. Rockville, MD: Agency for Healthcare Research and Quality; 2016. https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/nhqdr15/2015nhqdr.pdf. Accessed March 6, 2017.