



The ICD-10 Transition: Maintaining Financial Integrity

Executive Summary

A successful transition to ICD-10 will touch virtually every component of a provider's administrative and clinical operations, from processes, to people, to IT systems. One critical transition area to address is how ICD-10 will affect reimbursements and cash flows.

The majority of hospital inpatient reimbursement is based on ICD-9 codes and patient classification systems, such as Diagnostic Related Groups (DRG), All Patient Diagnostic Related Groups (AP-DRG) and All Patient Refined Diagnostic Groups (APR-DRGs). These classification systems categorize a set of ICD-9 codes into a diagnostic related group. As ICD-10 migrations progress, there are two factors that could have an unintended impact on reimbursement:

- The grouper logic is changed because ICD-10 classifies clinical conditions and procedures differently from ICD-9.
- Payers may map the ICD-10 codes received from a claim to ICD-9 in order to use existing ICD-9-based systems without any modifications.

Early indications are that there will be shifts in DRGs. Therefore, analyzing the financial impact due to the shift from ICD-9 to ICD-10 is critical to effectively maintain financial integrity.

This white paper explores the potential impacts on reimbursement and frameworks of developing mitigation plans to ensure accurate and timely reimbursements. Additionally, it identifies specific areas of risk, such as issues with individual payers, DRGs or procedures. It is this type of analysis that will enable providers to focus on maintaining financial integrity throughout the transition to ICD-10.

ICD-9 and ICD-10 Payment Analysis and Comparison

Our experience – plus preliminary findings from our recent survey¹ of hospital administrators and CFOs around ICD-10 readiness – shows that these executives are very concerned about the impact of ICD-10 codes on their financial operations and cash flow.

The first step toward alleviating this uncertainty and ensuring that hospitals understand the effects that ICD-10 could have on reimbursements and their potential consequences is to perform a comprehensive financial analysis comparing potential ICD-10 reimbursements with current ICD-9 reimbursements.

Centers for Medicare & Medicaid Services (CMS) conducted an analysis² comparing MS-DRG reimbursement under ICD-9 and ICD-10 schemes. Since a large ICD-10 coded claims database is

Converting ICD-9 to ICD-10 Reimbursements

Mapping and DRG Assignment Approach	Percent of DRG Variance (shift)	Percent of Payment Variance (shift)
ICD-9 to ICD-10 mapping and DRG assignment for the ICD-10 codes.	1.23%	+0.05% (Basically, the payment increase and decrease almost netted, i.e., some hospitals may have an increase in payments, while others may have a decrease in payments.)
ICD-9 to ICD-10 mapping, conversion back to ICD-9 using reimbursement mapping and DRG assignment for the converted ICD-9 codes.	3.23%	-0.38% (Mapping ICD-10 claims back to ICD-9 on average caused patients to be assigned to lower paying MS-DRGs.)

Figure 1

not available, CMS converted 2009 Medicare Provider Analysis and Review (MedPAR) data (about 11 million claims) using General Equivalence Mappings (GEM)³ to ICD-10. It then determined the DRG using an ICD-10-based MS-DRG grouper (Pilot Grouper) and computed the expected reimbursement. Finally, it compared the reimbursement and DRG shift using ICD-9 data as the basis. The results can be seen in Figure 1.

CMS concluded that “although the transition from the ICD-9-CM to the ICD-10 version of MS-DRGs resulted in 1.68% of the patients being assigned to a different MS-DRG, payment increases and decreases due to the changes in MS-DRG assignment essentially netted out, resulting in a minimal impact on aggregate payments to

hospitals (+0.05%) and on the distribution of payments across hospital types (-0.01 to +0.18%).”

However, many hospitals could have very different results because of the differences in case mix, incongruities of the data, coding practices, clinical documentation and reimbursement terms. Therefore, providers must analyze their own data to determine the impact on their revenue.

Conducting the Claims Analysis

Lack of ICD-10 coded claim data will be the first obstacle that providers must overcome in order to conduct the financial impact assessment.

The first step in the process (see Figure 2) is to determine which encounters to analyze for

Financial Impact Analysis: Process Flow

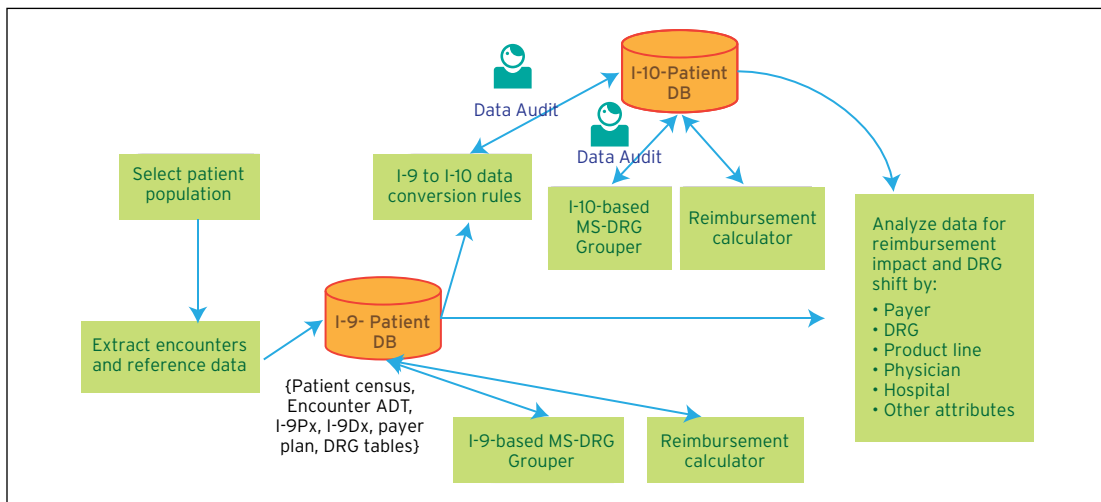


Figure 2

potential DRG and payment variance, typically trailing 12 months of discharged and final billed patients.

The procedures and diagnoses codes must then be converted to ICD-10 relevant codes using a forward and backward GEMs map provided by CMS. A cluster of codes must be converted at a time to preserve the clinical intent of the classification. At this point of the conversion, there might be codes that are still unresolved. Use of patient demographic information and description matching may be used to determine the best ICD-10 code, or they can be mapped to the appropriate “unspecified criteria” code. If all else fails, the remaining codes can be converted to ICD-10 by using uniform probability distribution. The converted data must be audited (random sampling) to validate the conversion process.

Once the ICD-10 database is created, DRGs can be determined by feeding this data to the DRG grouper. After the DRG is determined, reimbursement can be computed by using payer-specific (commercial, Medicare, etc.) rate tables.

If a hospital’s billing software is updated to support ICD-10, and if the contracts are updated, then the provider may be able to more accurately compute expected reimbursement by using the converted ICD-10 data. Otherwise, the provider can compute the DRG portion alone by using appropriate rate tables.

After determining the reimbursement, the data can be analyzed for DRG shifts and payment variation by payer, plan, major diagnostic category and service lines, etc. By analyzing this data, hospitals can identify specific areas of risk, such as issues with individual payers, DRGs or procedures, and develop mitigation plans.

Financial Integrity is Key to a Successful Transition

The financial analysis will give hospitals the information they need to work effectively and collaboratively with payers to ensure financial integrity is maintained during the transition to ICD-10 and beyond. Hospital CFOs may need to renegotiate contracts or find alternative payment arrangements to maintain financial integrity. This analysis also presents an opportunity to optimize reimbursement for new services, as well as services where medical technology is being used effectively to improve outcomes and reduce complications.

ICD-10 MS-DRG Grouper

ICD-10 MS-DRG logic was not optimized to take advantage of the specificity and richness presented in the ICD-10 classification system. Instead, it merely replicated the assignment logic of the ICD-9-based DRG grouper as much as possible. CMS claims this was done for two reasons – one is technical and the other is financial:

1. **In order to develop the grouper based on the specificity present in ICD-10, CMS needed a large dataset of claims that were coded in ICD-10.** The dataset that CMS created did not have that specificity – it only contained ICD-10 with as much detail as it could derive by merely looking at ICD-9 codes. To get the additional detail, it would have to review the medical records, which is not practical. Therefore, when additional information was required, they used the uniform probability distribution technique to randomly assign ICD-10 codes from possible alternatives.
2. **CMS’s intent was to minimize the DRG shift and thus avoid payment changes during the transition to ICD-10.** If it tried to optimize the MS-DRG grouper, there would have been a substantial shift of claims across the MS-DRGs, making them inconsistent with existing payment weights. Recalibration of payment weights associated with MS-DRGs requires a large dataset of ICD-10 coded (not converted) claims.

CMS will eventually optimize the ICD-10 MS-DRG grouper by recalibrating the payment weights, as a large ICD-10 coded claim dataset becomes available.

The results of this analysis can be used as a basis for clinical documentation improvement initiatives and educating physicians and other clinicians on the importance of providing comprehensive documentation to increase medical coding accuracy.

Furthermore, the analysis could also be used for developing coding guidelines that are germane to the hospital in order to optimize revenue.

With careful financial analysis and a collaborative approach, hospitals will have the opportunity to realize increased specificity in clinical information that can lead to more accurate reimburse-

ment and improvement of operations. Better information should lead to better quality of care and healthier populations, resulting in reduced healthcare costs in the long run.

Footnotes

- ¹ "Cognizant, Healthcare Informatics Survey," February 2012.
- ² Ronald E. Mills, Ph.D., Rhonda R. Butler, CCS, Elizabeth C. McCullough, M.S., Mona Z. Bao, M.A. and Richard F. Averill, M.S., "Impact of the Transition to ICD-10 on Medicare Inpatient Hospital Payments," *Medicare & Medicaid Research Review*, Vol. 1, No. 2, 2011.
- ³ The GEMs are a comprehensive conversion tool developed by the Centers for Medicare & Medicaid Services (CMS) and the Centers for Disease Control and Prevention to ensure accuracy and consistency in data translation between ICD-9 and ICD-10. The GEMs can be used to convert data from ICD-9 to ICD-10 and vice versa. There are two types of maps: Forward Mapping, or mapping from ICD-9-CM codes to ICD-10-CM and PCS codes; and Backward Mapping, or mapping from ICD-10-CM and PCS codes back to ICD-9-CM codes. All ICD-9-CM codes and ICD-10-CM/PCS codes are included in the collective GEMs. For more information regarding GEMs, please visit www.cms.gov/ICD10.

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