

# ICD-10 Impact on Provider Reimbursement



Patricia Zenner, RN

By October 1, 2013, entities covered by the Health Insurance Portability and Accountability Act (HIPAA), including health plans, healthcare clearinghouses, and healthcare providers, will be required to use ICD-10 for HIPAA-covered transactions that contain any diagnoses or hospital inpatient procedures.<sup>1</sup> Although it is impossible to quantify the impact at this time because of too many variables and unknowns, this white paper provides a general discussion of the potential areas of impact of ICD-10 on provider reimbursement in the short term along with a look at what will likely happen in the long term.

Because ICD-10 is only required for diagnoses and inpatient procedures, and because ICD-10 will not replace the Healthcare Common Procedure Coding System (HCPCS), of which Current Procedural Terminology (CPT) is a component, only some reimbursement schemes will be affected.

Essentially all reimbursement schemes based on ICD-9 will be directly impacted by ICD-10 implementation. Even when intending to maintain budget neutrality (i.e., no impact on reimbursement), changes in payment amounts are inevitable because of the differences in ICD-9 and ICD-10 diagnosis and procedure codes. There are two major factors in the potential effect on provider reimbursement:

- (1) The differences in the codes sets that cannot be accounted for because of unavoidable compromises in the conversion, or what we refer to as *inherent impact*.
- (2) Any conscious effort to take advantage of the more precise ICD-10 code set to change reimbursement, i.e., intentional impact.

## INHERENT IMPACT

In the very words of the Centers for Medicare and Medicaid Services (CMS), "The whole exercise of converting an ICD-9-CM-based application to an ICD-10-CM/PCS-based one is essentially predicting how coders will code in ICD-10-CM/PCS the same condition or procedure that is currently coded using ICD-9-CM codes."<sup>2</sup>

Even if developers managing the conversion of a process start with the intention to not disrupt the process (i.e., results will be the

same whether the process is conducted using ICD-9 or ICD-10), the differences between the two code sets still mean that some compromises must be made.

Additionally, ICD-10 may provide some benefits related to the coding itself. Based on international experience, we can anticipate that improved documentation will be required to apply the more specific codes. We can also anticipate that the improved documentation will lead to more accurate coding. In turn, this increased specificity in the coding will lead to more accurate payment. Also, in some instances where for certain clinical conditions ICD-9 coding and reimbursement specifications require multiple codes submitted in a precise order, ICD-10-CM provides a single *combination code* that will simplify the coding process and eliminate common errors related to correct sequencing.

## INTENTIONAL IMPACT

We can expect that the greatest impact on reimbursement will be related to modification of the reimbursement schemes themselves. Small changes are likely to be implemented early in the conversion process. More significant intentional modifications will likely occur several years after ICD-10 implementation.

For example, on October 1, 2013, a payor may implement an inpatient facility fee schedule with separate payment rates for a laparoscopic and open procedure that under ICD-9 codes were included together under a single code, a relatively minor change. A more distant but predictable change related to the extensive code detail in ICD-10 will allow CMS to make changes to Medicare Severity Diagnosis-related Groups (MS-DRGs) to better accommodate more accurate payment. Because CMS uses data that are at least two years old to make changes in MS-DRG weights, CMS will need several years of ICD-10 experience before we can expect any significant changes in the MS-DRGs reimbursement schemes.

## POTENTIAL IMPACT ON COMMON REIMBURSEMENT SCHEMES

Although payor/provider reimbursement contracts vary considerably, they encompass a number of common reimbursement schemes. Following is a discussion of some more common schemes and the potential inherent and intentional impacts of the transition to ICD-10.

1 Department of Health and Human Services, 45 CFR Part 162 (Jan. 16, 2009). HIPAA administrative simplification: Modifications to medical data code set standards to adopt ICD-10-CM and ICD-10-PCS. Federal Register, Volume 74, Number 11.

2 Centers for Medicare and Medicaid Services. Converting MS-DRGs 26.0 to ICD-10-CM and ICD-10-PCS. Retrieved Jan. 4, 2010, from [http://www.cms.hhs.gov/ICD10/09\\_ICD10\\_MS\\_DRG\\_Conversion\\_Project.asp](http://www.cms.hhs.gov/ICD10/09_ICD10_MS_DRG_Conversion_Project.asp).

**DRGs and Other Case Rates**

DRGs are the most common inpatient reimbursement scheme for government and commercial payors, and ICD-9-CM diagnosis and procedure coding is the sole basis for DRG classification. For these reasons, inpatient hospitals of all providers have the greatest opportunity to experience a financial impact from the transition to ICD-10.

There are a number of DRG classification systems used for a variety of purposes, including reimbursement, case-mix adjustment, and comparative reporting. At least for now, MS-DRGs are the only DRG classification scheme that has been adapted to ICD-10. Certainly other DRG schemes—All Patient Diagnosis-Related Groups (AP-DRGs), and All Patient Refined Diagnosis-Related Groups (APR-DRGs)—will also be converted, but when and how is undetermined.

**The Conversion Process**

CMS collaborated with 3M to create ICD-10-based MS-DRGs with the goal of having the same patient with the same condition assigned to the same MS-DRG regardless of the coding scheme. We elaborate on the process to help in understanding the potential implications of the transition.

Using the General Equivalency Mappings (GEMs) created by CMS and the Centers for Disease Control and Prevention (CDC) to

assist in the conversion, a number of codes did not map easily to the MS-DRGs. Developers had to use clinical review to address overly broad ICD-9 procedure codes that mapped to a multitude of anatomically specific ICD-10 codes in order to assign only the anatomically appropriate ICD-10 codes corresponding to each of the 25 Major Diagnostic Categories (MDC), e.g., gastrointestinal, cardiovascular. Additionally, when the GEMs mapped a single ICD-10 code to more than one ICD-9 code and the ICD-9 codes were assigned to separate DRGs, the developers determined code assignment based on analyzing Medicare (MedPar) inpatient data frequency. If there was a dominant ICD-9 code billed, they used frequency as the basis for the assignment. If frequencies were similar, they chose the closest match in terms of code meaning. Figure 1 provides an example where, even though ICD-9 530.82, Esophageal hemorrhage, was billed more frequently than ICD-9 530.89, Other disease of the esophagus, in the FY2007 MedPar data, they assigned ICD-10 K22.8, Other specified diseases of esophagus, to the same DRGs as ICD-9 530.82 (DRGs 391 and 392) because they believed it to be a closer clinical match than to have all records submitted represent an esophageal hemorrhage.

In their final report on the conversion process, CMS provides specific data on efforts related to MDC 6, the first MDC to go through the ICD-10 MS-DRG conversion process; see Figure 2 below.<sup>4</sup>

**FIGURE 1: EXAMPLE OF DRG MULTIPLE CHOICE OVERRIDING MEDPAR 2007 FREQUENCY<sup>3</sup>**

ICD-10-CM CODE	ICD-9-CM CODES	MUTUALLY EXCLUSIVE LIST	MEDPAR RECORDS
<b>K22.8 OTHER SPECIFIED DISEASES OF ESOPHAGUS</b> <i>INCLUDES: HEMORRHAGE OF ESOPHAGUS NOS</i>	<b>530.82 ESOPHAGEAL HEMORRHAGE</b>	<b>MAJOR ESOPHAGEAL DISORDERS (368-370)</b>	<b>10,167</b>
	<b>530.89 OTHER DISEASES OF ESOPHAGUS</b>	<b>ESOPHAGITIS, GASTROENTERITIS AND MISCELLANEOUS DIGESTIVE DISORDERS (391-392)</b>	<b>8,685</b>

**FIGURE 2: DATA ON CONVERSION OF MDC 6 MS-DRGS TO ICD-10**

CODES IN MDC 6	DIAGNOSIS CODES	PROCEDURE CODES	TOTAL
<b>NUMBER OF UNIQUE LISTS OF CODES</b>	≈ 200	≈ 300	≈ 500
<b>MODIFIED BY CLINICAL REVIEW</b>	1%	9%	5%

**FIGURE 3: CONFLICT EXAMPLE: PLACED IN CC CATEGORY USING FY 2007 MEDPAR FREQUENCY**

ICD-10-CM CODE	ICD-9-CM CODES	MUTUALLY EXCLUSIVE LIST	MEDPAR RECORDS
<b>R78.81 BACTEREMIA</b> <i>INCLUDES: SEPTICEMIA NOS</i>	<b>038.9 UNSPECIFIED SEPTICEMIA</b>	<b>MAJOR COMPLICATION/COMORBIDITY</b>	<b>567,036</b>
	<b>790.7 BACTEREMIA</b>	<b>NON-MAJOR COMPLICATION/COMORBIDITY</b>	<b>104,815</b>

3 Centers for Medicare and Medicaid Services. Converting MS-DRGs 26.0 to ICD-10-CM and ICD-10-PCS. Retrieved Jan. 4, 2010, from [http://www.cms.hhs.gov/ICD10/09\\_ICD10\\_MS\\_DRG\\_Conversion\\_Project.asp](http://www.cms.hhs.gov/ICD10/09_ICD10_MS_DRG_Conversion_Project.asp).

4 Centers for Medicare and Medicaid Services. Converting MS-DRGs 26.0 to ICD-10-CM and ICD-10-PCS. Retrieved Jan. 4, 2010, from [http://www.cms.hhs.gov/ICD10/09\\_ICD10\\_MS\\_DRG\\_Conversion\\_Project.asp](http://www.cms.hhs.gov/ICD10/09_ICD10_MS_DRG_Conversion_Project.asp).

Developers used the same methods to convert the Complication/Comorbidity (CC) and Major CC (MCC) lists. Of the 5,019 codes in the ICD-9-CM-based version of the CC and MCC lists, 98 were not explicitly replaced by ICD-10-CM code(s) because of outmoded terms and *unspecified* ICD-9-CM codes; another 99 ICD-10 codes could have been placed on both the CC and MCC lists, thereby necessitating resolution of these *conflicts* using frequency data (82 codes) or clinical review (17 codes). See Figure 3 on page 2 as an example where developers used frequency data to place ICD-10 R78.81 onto the MCC list.

Additionally, a number of frequently coded ICD-9-CM code CC/MCC pairs were replaced by one ICD-10-CM combination code. Therefore, one of those ICD-10 codes recorded as the principal diagnosis will be assigned to a *with* CC/MCC MS-DRG, even if there are no secondary diagnoses recorded. Developers also assigned the 501 ICD-10-CM diagnosis codes with no plausible ICD-9-CM equivalent into an MDC and medical ICD-10 MS-DRG group.

### Conversion Implications

There are several reasons to believe the ICD-10 MS-DRGs will likely produce some different reimbursement results compared to ICD-9-based MS-DRGs:

- In MDC 6, the 5% of codes requiring clinical review was based on GEM mapping and the portion of codes that did not cleanly map. That portion could be higher or lower for the other 24 MDCs. CMS did not provide any additional data, although it did identify that other translation issues were discovered where the assignment logic is especially complex, such as the cardiovascular and orthopedic MS-DRGs.
- Additionally, that 5% does not account for service frequency, billed code volume, or impact on dollars. When using the GEMs to map the codes and applying the volume of billed services, the percentage of claims or dollars related to codes not *cleanly* placed into a DRG will likely be higher or lower than 5%.
- In those instances where an ICD-10 code could be placed into more than one MS-DRG, MedPar data were used in the process to select only one. Commercial health plan frequency data may have produced different results. Therefore, when applying CMS-designed ICD-10 MS-DRGs to a commercial population,

MS-DRG assignment (i.e., case mix) may vary more than with a Medicare population.

- The improved code specificity in ICD-10 will eliminate some ambiguity that exists with the lack of specificity in ICD-9. That *clarity* may produce a different MS-DRG assignment.
- Although the total number of codes with complex mapping is small, the total volume and dollar magnitude related to the changes to CC/MCC lists are unknown.

Because the Inpatient Psychiatric Facility Prospective Payment System (IPF-PPS) for psychiatric facilities and Medicare Severity Long-term Care Diagnosis-related Group (MS-LTC-DRG) for long-term hospitals both use the same MS-DRG grouper, they will be similarly affected.

### Risk-adjusted Reimbursement

Risk-adjusted reimbursement is most common in Medicare and Medicaid programs, although its popularity is growing. For example, CMS reimburses Medicare Advantage plans based on ICD-9-CM-based Hierarchical Condition Categories (HCCs) and pharmacy HCC (Rx-HCC) models.

CMS will no doubt create ICD-10-based HCCs and will likely attempt to keep the same conditions within the same categories, at least during the transition process—although initially, much as with the ICD-10 MS-DRG conversion process, there will be some level of compromise that will inevitably affect reimbursement.

Although a few of the more than 5,500 ICD-9 diagnosis codes in the HCC and Rx-HCC models have no ICD-10 map, we believe that, with thoughtful conversion, the ICD-10 HCC developers will be able to include the conditions in the ICD-10 HCCs without altering the intent. The largest potential impact is in the significant number (more than 1,000) of HCC ICD-9 codes with more than one ICD-10 option.

Many of the multiple options relate to certain malignant cancers having more specific body parts and separate codes for melanoma in situ and malignant melanoma. Another area of notable difference is that in ICD-10, complications in secondary diabetes mellitus are more specific. Again, with thoughtful conversion, it will not alter inclusion of the intended condition in the ICD-10 HCCs. However,

## FIGURE 4: CONVERSION CHALLENGES FOR DEVELOPERS

**ICD-9 800.13 Closed fracture of vault of skull with cerebral laceration and contusion with moderate [1-24 hours] loss of consciousness. Currently it is in HCC 154 and maps to two ICD-10 code combinations:**

**S06334A Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 6 hours to 24 hours, initial encounter**  
**AND**

**S020xxA Fracture of vault of skull, initial encounter for closed fracture**

**OR**

**S06333A Contusion and laceration of cerebrum, unspecified, with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter**  
**AND**

**S020xxA Fracture of vault of skull, initial encounter for closed fracture**

there are some more complicated conversions that will challenge developers, shown in Figure 4.

The ICD-10 code timing specifications shouldn't be an issue because all ICD-9 codes with a coma duration longer than one hour are in HCC 154. However, because the current HCC model looks for the presence of a single code, developers will have to decide (1) whether a contusion/laceration alone is sufficient, (2) whether a fracture alone is adequate, to qualify for HCC 154, or (3) whether the HCC model needs to be modified to look for both codes.

There may be additional impact in situations where one ICD-10 code maps to more than one ICD-9 code, and either the ICD-9 codes do not all map to an HCC or to the same HCC.

One of the reasons certain conditions were selected to be included in HCCs is that they were defined by more detailed and specific ICD-9 codes. With its increased specificity, ICD-10 will open up much greater possibilities for conditions to be included in the categories. No doubt CMS will take advantage of the increased specificity and make significant modifications in HCC categories, although it may be 2015 or 2016 before enough data is available to analyze the potential changes.

**DRG/Inpatient Case Rate Carve-out, Pass-through, or Add-on Technology Procedures or Diagnoses**

Many commercial insurers may predominantly pay for inpatient care by DRG or case rate, but will *carve out* payment for certain procedures or diagnoses from the DRG or case rate system. This payment scheme is often negotiated to ensure *more appropriate* payment for those services.

It is likely there will be minimal *inherent* impact on payment related to these types of arrangements. Because of the lack of specificity in ICD-9 procedure coding, inpatient carve-out procedures and technology are often reimbursed at a percent of charges, which will not change because of coding, and outpatient procedures are reimbursed based on CPT code, or additional information is needed to pay the claim. Likewise, diagnoses carved out are typically done so in a broad category, with little reliance on coding specifics to differentiate payment levels.

However, it is very likely we will see *intentional* impact through contract revisions that will take advantage of the increased code specificity relative to the procedure's location, device, and approach.

**Episode-based Reimbursement**

The idea of paying a single, bundled fee for an *episode of care* for a certain condition or procedure, such as a hip implant, is becoming more popular. Similar to inpatient carve-outs, it is likely there will be minimal *inherent* impact on payment related to these types of arrangements because, to date, there are few systems reimbursing on episodes of care that define the episodes based on the specificity in the ICD-9 codes. The increased specificity of the ICD-10 codes may change the future development of these programs.

**Performance-based Reimbursement**

The most commonly used measures in most existing health plan or Medicaid pay-for-performance programs are Healthcare Effectiveness Data and Information Set (HEDIS) and HEDIS-like measures. The most common structures are based on either attainment of a specified level of performance or degree of improvement. HEDIS specifications include both ICD-9 diagnoses and procedures in combination with other coding schemes (e.g., CPT, revenue codes). There will be some *inherent* impact of the transition to ICD-10 on HEDIS-based outcomes. For example, the HEDIS Childhood Immunization Status measure criterion includes these ICD-9 procedure codes to help identify immunizations:

ICD-9 PROCEDURE CODES	
99.37	VACCINATION AGAINST PERTUSSIS
99.41	ADMINISTRATION OF POLIOMYELITIS VACCINE
99.45	VACCINATION AGAINST MEASLES
99.46	VACCINATION AGAINST MUMPS
99.47	VACCINATION AGAINST RUBELLA
99.48	ADMINISTRATION OF MEASLES-MUMPS-RUBELLA VACCINE

All of these ICD-9 codes map to two less specific ICD-10 procedure codes:

ICD-10 PROCEDURE CODES	
3E0234Z	INTRODUCTION OF SERUM, TOXOID AND VACCINE INTO MUSCLE, PERCUTANEOUS APPROACH
3E0134Z	INTRODUCTION OF SERUM, TOXOID AND VACCINE INTO SUBCUTANEOUS TISSUE, PERCUTANEOUS APPROACH

Because the ICD-10 codes are less specific, the small portion of immunizations occurring in an inpatient setting will be unidentifiable under ICD-10. This is one example. Therefore, although it may be relatively small, ICD-10 will have some inherent impact on performance results.

ICD-10 will also provide some opportunity to make *intentional* changes to performance measures. For example, in the Use of Appropriate Medications for People with Asthma measure, because ICD-9 asthma codes only differentiate extrinsic and intrinsic asthma, HEDIS uses a complex algorithm of admissions, emergency room visits, and office visits to differentiate persistent asthmatics. ICD-10 codes differentiate mild intermittent asthma from mild, moderate, or severe persistent asthma.

Additionally, if the increased specificity of the ICD-10 codes presents more opportunity to develop credible measures using administrative data, ICD-10 may actually influence the place of performance-based reimbursement programs in the future.

### Hospital Billed Charges

Although ICD-9 diagnosis and procedure codes are often used to help evaluate the appropriateness of billed charges, they are not used to create the charges themselves. Reimbursement based on hospital charges are billed using a *chargemaster*, which provides a price for individual goods, services, and procedures when a separate charge exists and identification of other specific services not included in the chargemaster. ICD-9 codes are not typically part of the chargemaster or other schemes for determining billed charges, as they are largely built on CPT/HCPCS and revenue codes. Therefore, the conversion to ICD-10 should have little if any impact on billed charges.

### Usual and Customary Reimbursement

In the absence of any negotiated rates, payors use a Usual and Customary Reimbursement (UCR) fee schedule to establish the maximum amount they will pay. UCRs for professional services will not be impacted by ICD-10 as they are based on CPT/HCPCS codes. Inpatient UCRs are often based on facility charge data or Medicare DRG rates. As previously discussed, the conversion to ICD-10 should have little if any impact on billed charges. Therefore, if based on hospital charge data, hospital UCRs will not change. However, if inpatient UCRs are based on MS-DRG data, they will eventually be subject to the same changes that occur in the MS-DRGs.

### Inpatient Rehabilitation Facility Prospective Payment System (IRF-PPS)

The initial conversion to ICD-10 will have some impact on reimbursement based on Inpatient Rehabilitation Facility Prospective Payment System (IRF-PPS) as diagnosis codes are used to help determine the payment rate.

Additionally, CMS uses diagnosis data to appropriately identify which facilities qualify as Inpatient Rehabilitation Facilities (IRFs). We expect there will be some impact that is due to the conversion. For example, the ICD-9 codes highlighted in Figure 5 are included in the IRF logic as *qualifying diagnoses*. In both instances, the ICD-10 codes to which they are mapped also represent ICD-9 codes not included in the IRF logic.

Developers will need to decide which ICD-10 codes to include and those decisions will cause some changes to the list of qualifying diagnoses.

Regardless of the decisions made in the conversion, ICD-10 will have some inherent impact on IRF facility identification and reimbursement. Additionally, the increased specificity of the ICD-10 codes may change the future development of the IRF-PPS model.

### Other Reimbursement Schemes

We expect there will be minimal, if any, impact of ICD-10 conversion on Skilled Nursing Facility Resource Utilization Groups (RUG) classification. RUG classification depends on the minimum data set (MDS), which records data on diagnoses, among other clinical data. The impact that diagnoses have on RUG categories is largely based on the diagnoses listed in the MDS by major disease category (e.g., cancer, pneumonia, diabetes mellitus), not ICD-9 code.

The complexity of home-care patients and accurate reimbursement by home health resource groups (HHRGs) are reflected in the assigned diagnosis codes. The OASIS data collection tool requires ICD-9 diagnoses. Select *case-mix diagnoses* or *payment diagnoses* submitted are used to assign the appropriate HHRG. Although many of the HHRG diagnostic categories are broad, there will be some instances where HHRG assignment for the same condition may vary under ICD-10 compared to ICD-9 diagnosis coding. Additionally, the increased specificity of the ICD-10 codes may change the future development of the HHRG model.

Although the current regulation does not include ICD-10-PCS for ambulatory procedure reimbursement, ICD-10-PCS coding would allow more accurate ambulatory procedure payment. Based on the uniformity and comprehensiveness of PCS coding, the healthcare industry is likely to convert to ICD-10-PCS from HCPCS coding for ambulatory-setting reimbursement methodologies, including Ambulatory Payment Classification (APCs).

ICD-10-PCS was not designed to describe professional services (e.g., there are no provisions for coding evaluation and management services, anesthesia, home health services, etc.) So, although a single procedure coding system would be ideal, we believe the United States will be using CPT/HCPCS for a very long time.

### POTENTIAL IMPACTS ON REIMBURSEMENT UNRELATED TO REIMBURSEMENT SCHEMES

Provider reimbursement will be affected by more than just the changes in the reimbursement schemes. For instance, there are several potential sources of short-term ICD-10 conversion-related

**FIGURE 5: QUALIFYING DIAGNOSES FOR IRF**

ICD-9	ICD-9 DESCRIPTION	ICD-10	ICD-10 DESCRIPTION
23770	NEUROFIBROMATOSIS NOS	Q850	NEUROFIBROMATOSIS (NONMALIGNANT)
23771	NEUROFIBROMATOSIS TYPE I	Q850	NEUROFIBROMATOSIS (NONMALIGNANT)
23772	NEUROFIBROMATOSIS TYP II	Q850	NEUROFIBROMATOSIS (NONMALIGNANT)
2532	PANHYPOPITUITARISM	E230	HYPOPITUITARISM
2533	PITUITARY DWARFISM	E230	HYPOPITUITARISM

reimbursement impact. First, the quality of the coding will be an issue for at least the first six months after implementation, and perhaps longer. Depending on the reimbursement scheme, reliance on coding specificity, provider documentation, and the coders' learning curve may also produce varying code assignments and associated reimbursement for quite a while.

Below we briefly discuss several potential sources of impact beyond the quality of the coding itself.

### Reimbursement Mapping

Because of the complexity of mapping options in the GEMs, CMS developed reimbursement mapping to offer a standardized tool to convert ICD-10 codes to ICD-9 codes primarily for use in legacy systems on a short-term basis. The scheme converts the codes using a one-to-one *best map* or occasionally, when required, a cluster of up to six codes.

The reimbursement mapping process started with the backwards maps, ICD-10-CM to ICD-9 and ICD-10-PCS to ICD-9 GEMs. Most of the ICD-10 codes translated to a single ICD-9 code and many translated to the same ICD-9 code. Where an ICD-10 code translated to more than one ICD-9 code, the developers chose the ICD-9 code by either using Medicare MedPAR and California All Payer (for obstetric and newborn) hospital inpatient code frequency data or through clinical review.<sup>5</sup>

The Final Rule of HHS called for reimbursement mapping to provide a map for over 99% of ICD-10-CM codes and for 100% of the ICD-10-PCS codes. There are no data on the number of ICD-9 codes not used in reimbursement mapping or how the mapping relates to the frequency of billed services so there is an unknown financial impact if this tool is used.<sup>6</sup>

CMS recommends users modify reimbursement mapping to address ICD-9 codes used by their legacy systems that are not mapped. We further recommend users test the mapping using their own frequency data to ensure it adequately addresses the population to which the scheme will be applied.

### Use of GEMs

Each organization will use the GEMs to aid in converting their internal processes to ICD-10. There are a number of reasons use of the GEMs to convert or translate codes will have varying impact on reimbursement:

- (1) Code translation will require organizations to resolve code conflicts and make decisions. Additionally, organizations will make different choices as to whether they wish to maintain *neutrality* or optimize based on the increased code specificity. For the same process, each organization may come up with different results.

- (2) The GEMs themselves and their appropriate use is complex. Mapping procedures vary depending on the purpose of the translation. We expect some organizations will not take the time or invest in tools that automate some of the processes and therefore will have incomplete applications.
- (3) A number of enhancements were made to the GEMs during the MS-DRG conversion process. There are undoubtedly further enhancements needed. As organizations begin their translations, they will either identify and account for GEM deficiencies or will take GEMs at face value and have inaccurate results.

### OTHER AREAS IMPACTING REIMBURSEMENT

Certainly, the act of reopening a contract can create the biggest impact on reimbursement as payors and providers often view this as an opportunity to renegotiate contract terms. Additionally, there are several other areas that you will need to consider in your implementation plan.

Organizations will convert benefit coverage and medical policy criteria from ICD-9 to ICD-10. As with other applications, there will be some inadvertent and intentional impact. So, even though outpatient facility Ambulatory Surgery Centers (ASCs), Ambulatory Payment Classification (APCs), and other non-ICD-9-based reimbursement schemes will not be modified, reimbursement may be affected.

Potential workers' compensation, automobile, and other liability cases are often identified using diagnosis and procedure codes. These identification criteria will need to be modified and, because of the increased specificity of ICD-10 codes, organizations will take the opportunity to intentionally optimize their applications to improve subrogation. Also, because many of these organizations are not HIPAA-covered entities, they may be slower to adopt and adapt to ICD-10, which will create an entirely different set of issues.

Likewise, identification systems for fraud, waste, and abuse (FWA) use diagnoses and procedures patterns and pairs of codes to flag potential offenders and identify related claims. Again, there is opportunity to intentionally improve the systems as they are being converted. In fact, the government's economic impact analysis predicted that ICD-10 will produce benefits related to preventing providers from abusing the system because ICD-10 is more specific and there are fewer gray areas in coding. However, as we point out in another Milliman white paper, it is entirely possible that ICD-10 coding could also introduce more coding errors than ICD-9.<sup>7</sup>

One of the more unpredictable sources of impact may be in the change process itself. It is not uncommon for issues to be unearthed when changes are made to a system or application. Likewise, the conversion may create new undetected and unintended changes, either through configuration mapping errors or simply by changing the process.

5 Centers for Medicare and Medicaid Services (May 19, 2009). ICD-10-CM/PCS implementation and general equivalence mappings. National Provider conference call transcript.

6 Ibid., 45 CFR Part 162, January 19, 2009.

7 Zenner P. (October 2009). ICD-10 savings: Who will be the winners? Milliman White Paper. Retrieved March 3, 2010, from <http://www.milliman.com/expertise/healthcare/publications/published/pdfs/icd-10-savings-who.pdf>.

Finally, changes in payor-negotiated and -contracted reimbursement rates are typically based on several years of longitudinal data. During the transition period, pre-October 2013 data will need to be converted to ICD-10 and/or post-October 2013 data will need to be converted to ICD-9. Converted data will not be the same as billed data. In addition to all of the other changes, cost trends may be impacted in unpredictable ways. So any reimbursement adjustments made using that data may or may not be reflective of the actual trend in healthcare costs.

### MANAGING THE RISK

Too many variables and unknowns make it impossible to quantify the impact of the transition to ICD-10—differing goals to replicate or optimize, population differences, coding compromises chosen, reimbursement methodologies used, quality of the documentation to support new codes, accuracy and timeliness of coding adoption, etc. And, although there is no way to eliminate the risk and uncertainty, there are steps organizations can take throughout ICD-10 implementation to manage the risk. The following is only a small list.

During the planning stage, we recommend that organizations identify their goals—replication or optimization—and plan for the time and resources necessary to make thorough and thoughtful changes to applications, systems, and contracts. Develop an implementation *road map* that describes the direction you are heading, what needs to be done to get there, what is needed to make it happen, what parts are not currently present, and how the gaps will be filled. Use that road map to communicate with internal and external stakeholders.

During the preparation stage, for each system and application modification analyze and test the portion of codes not cleanly mapped in order to assess the potential reimbursement impact, modify standardized schemes as indicated (e.g., reimbursement mapping) and modify contracts to provide for the uncertainty that will accompany the transition *data fog*. Carry out comprehensive testing plans that address both intentional and inadvertent changes. Throughout the preparation phase, maintain internal and external communications to relay information on decisions made and their potential impacts.

During implementation, provide adequate resources to ensure timely and accurate coding and reimbursement. Be over-prepared to address issues as they arise.

After implementation, continuously monitor key performance indicators to identify potential issues including case mix, as well as aggregate and case-by-case reimbursement. Actively manage reimbursement to take advantage of flexible contract provisions. Continue to promote frequent and open communication on potential issues encountered and efforts made toward resolution.

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Patricia Zenner is a consultant with the Healthcare Management Group Practice. For more information on ICD-10, please contact Pat at [pat.zenner@milliman.com](mailto:pat.zenner@milliman.com).

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