



# The Revenue-Threatening Link Between CMI and DRG Shifts

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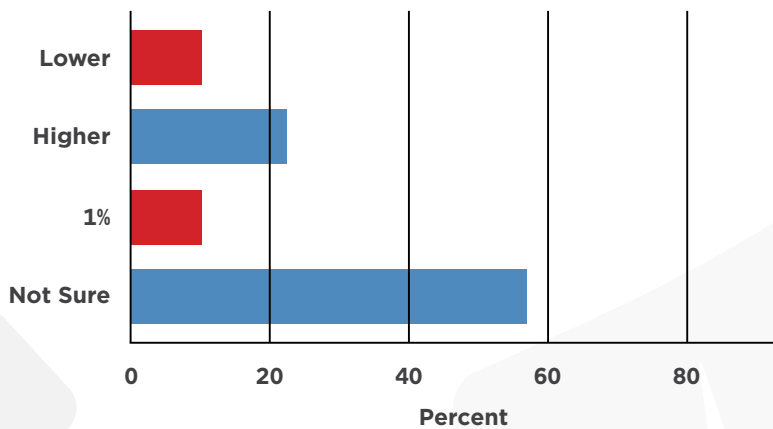
CFOs and other executives must keep a close eye on updated productivity standards and other revenue cycle performance benchmarks. As they seek to maintain and enhance revenue in this era of shrinking margins, their organizations' Case Mix Index (CMI)—the weight of which is assigned by the Centers for Medicare and Medicaid Services (CMS) based on length of stay, severity of illness, and resource utilization—becomes a focal point that warrants a closer look. By viewing CMI as an indicator of warning signs, organizations can identify different or less-than-adequate DRG assignments post-ICD-10 implementation<sup>1</sup>.

CMI is calculated by summing the DRG weights for all Medicare discharges and dividing by the total number of discharges, and a number of factors can affect a hospital's CMI. These include volume changes in certain DRGs as well as documentation and coding improvements (including those made in preparation for the transition from ICD-9 to ICD-10). After identifying the major areas of change associated with the ICD-10 transition, C-level executives have a clearer picture at the affect DRG shift is having on CMI.

Prior to the implementation of ICD-10, CMS predicted that there would be a shift in DRGs as we moved from ICD-9 to ICD-10. This shift was expected to be statistically insignificant and only affect CMI in about 1% of cases. Overall, CMS expected coding issues (such as loss of a malignant hypertension code in ICD-10 and increased use of combo codes) to have a greater effect than DRG shifts.

Now, post ICD-10, one informal survey found that 22% of respondents believed their CMI shift to, in fact, be higher than the predicted 1%. Poll results indicate that 10% felt it was lower, 10% indicated it was at 1%, and 50% really didn't know what the CMI change was for their organizations. With this high level of unknown across organizations, this barometer measuring the relationship between CMI and DRG shifts may be an underused metric.

**Have you seen a DRG shift in line with predictions?**



**Care Mix Index (CMI)** is a measure of the relative complexity and severity of patients treated in a hospital. CMI serves as the basis for payment methodologies administered by CMS and other third-party payers.

A higher CMI means more reimbursement dollars for providing care because it indicates that a hospital is treating a sicker patient population. CMI is the foundation for the methodology by which a healthcare organization receives payment from CMS.

CMI is the sum of all DRG-relative weights divided by the number of patients for a specific period. The adjusted average cost per patient would reflect the charges reported for the types of cases treated in that year. It's important to remember that CMI at different hospitals can vary—one HCO may serve more complex cases than another. Most organizations have tracked and reported their top 25 diagnoses and DRGs under ICD-9 and must next prepare to track and report the same data for comparison under ICD-10.

## It's Not Just About Finding a Code.

To help ensure organizations maintain and protect the revenue stream today and in the days, months, and years ahead, it's critical to determine that the correct DRGs are selected. Finding a code is one thing. Understanding how the documentation links to accurate codes and ensuring correct reimbursement is quite another. Differences in coding guidelines will result in cases grouping to different DRGs in ICD-10.

<p><b>For example</b>, consider a patient admitted with anemia related to carcinoma of the left lung in which only the anemia was treated:</p>	<p><b>By contrast</b>, consider a patient admitted with anemia related to carcinoma of the colon in which only the anemia is treated:</p>
<p>ICD-9: 285.22 (anemia), 162.9 (ca lung) = DRG 812 RW 0.8572            ICD-10: C34.92 (ca lung), D63.0 (anemia) = DRG 182 RW 0.8553  <b>Reimbursement difference = -\$11</b></p>	<p>ICD-9: 285.22 (anemia), 153.9 (ca colon) = DRG 812 RW 0.8572            ICD-10: C18.9 (ca colon), D63.0 (anemia) = DRG 376 RW 0.9093  <b>Reimbursement difference = \$265</b></p>

Although the two examples above both have anemia related to carcinoma, the reimbursement is significantly different. This appears to be minor impact, yet with a large volume of cases this will cause a DRG shift.

Once healthcare organizations have identified high-risk DRGs, it's important to turn a critical eye to find the cause of any shift. Auditing medical records will reveal the cause of the shift—or lack thereof—and will yield valuable insight on possible deficiencies and areas for improvement. Another thing to keep in mind is that while organizations do not manually calculate DRGs, using an encoder can take you to a DRG that may not be appropriate considering new guidelines and documentation. The coding team will want to ensure the DRG is appropriate and not just accept the encoder's recommendation.

A good place to start implementing improvement is looking at team skills and refreshing DRG skills (especially as not many coders have memorized ICD-10 codes linked to DRGs yet). After all, with so many years spent making ensuring coders knew ICD-10, are their DRG skills now at peak performance?

### Don't know the state of your CMI and DRG shift(s)? Here are steps to take:

- Identify what has happened to the top 20 DRGs
- Compare with CMS predictions
- Examine DRG without CC and MCC
- Divide top-dollar DRGs in separate categories
- Identify short LOS with specific Dx
- Locate missing documentation

## Targeting Opportunities for Improved ICD-10 Education

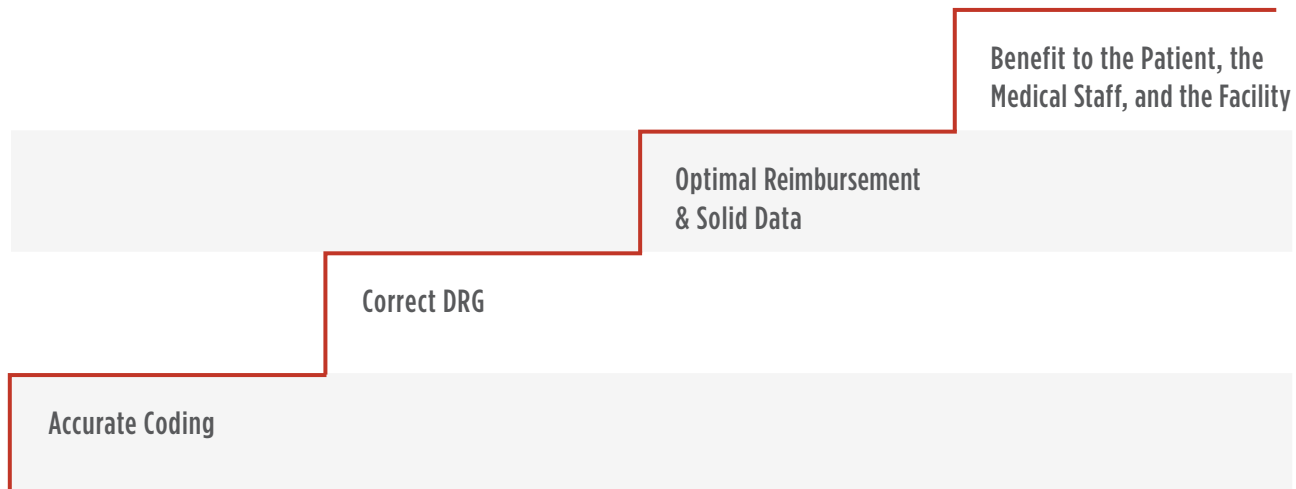
The need to account for CMI fluctuations, both declines and rises, is increasingly important as healthcare organizations encounter new cost pressures and ever-changing regulations. Any major shift in CMI is of great concern to executives. For example, a large increase could result in refunds to CMS and payers if auditing reveals inaccurate coding and DRGs. On the other hand, declining CMI results in a negative impact on revenue and it could indicate a need for improved documentation. Both of these can be quickly improved through focused education and regular documentation audits.

Continuous education is key, but not everyone has completed in-depth instruction. Consider that half of the

respondents in one 2015 post-ICD-10 survey<sup>2</sup> reported spending less than \$10,000 on training and software updates in preparation for ICD-10. In addition:

- 5% spent more than \$50,000
- 14% spent between \$10,000 to \$49,999
- 20% of respondents didn't know how much was spent

In today's environment, critical thinking skills are crucial for the coding team to ensure they can see the impact of documentation on coding, coding's impact on DRG assignment, and DRG's impact on CMI. These skills can be taught to improve and/or maintain coding and revenue.



To be the most effective, education must be tailored to the specific trainee; in this case, the adult learner. Understanding why and how adults learn and incorporating critical thinking skills and the learner's preferred learning style will help the healthcare organization attain the goals set for each employee and increase the chances of teaching success. Adults learn best, studies have found, when convinced of the need for knowing the information, so demonstrating a clear link between the correct DRG assignment and the organization's financial success can be excellent motivation<sup>3</sup>. Providing a challenge to the learner without causing frustration is also important.

Keep in mind that coding is not black and white. It is an art and not a science, so it's important to maintain complete documentation to support patient care while ensuring accurate coding in all areas—from ICD-10-CMS and PCS to DRG.

Not only is it important for coders learn critical thinking skills to better understand these differences, but it is vital to link documentation to what can be coded and to focus on helping coding teams understand what documentation may be missing so they can complete the clinical picture. With this holistic view, organizations will be able to more easily identify DRG shifts and their impact on CMI—protecting revenue in the process.

If you are concerned about CMI in your organization, start with the seven steps outlined above, create an auditing plan, evaluation your coding teams' DRG skills, and provide education on DRGs.



### **About The Author**

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Laurie brings close to 30 years of experience in healthcare, healthcare information systems, and product management to Career Step, where she drives the product management of the company's offerings. Prior to joining Career Step, Laurie served in various executive positions with companies such as xG Health Solutions, WellPoint, Resolution Health, QuadraMed, Kaiser Permanente, SoftMed, 3M HIS, and Stanford Health Services. She has also served on various boards and committees within the American Health Information Management Association (AHIMA) and is a respected leader in health information management. Laurie holds a bachelor's degree in Information Systems Management from the University of San Francisco.

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