

# Optimizing HCC Coding for Accurate Reimbursement in Healthcare

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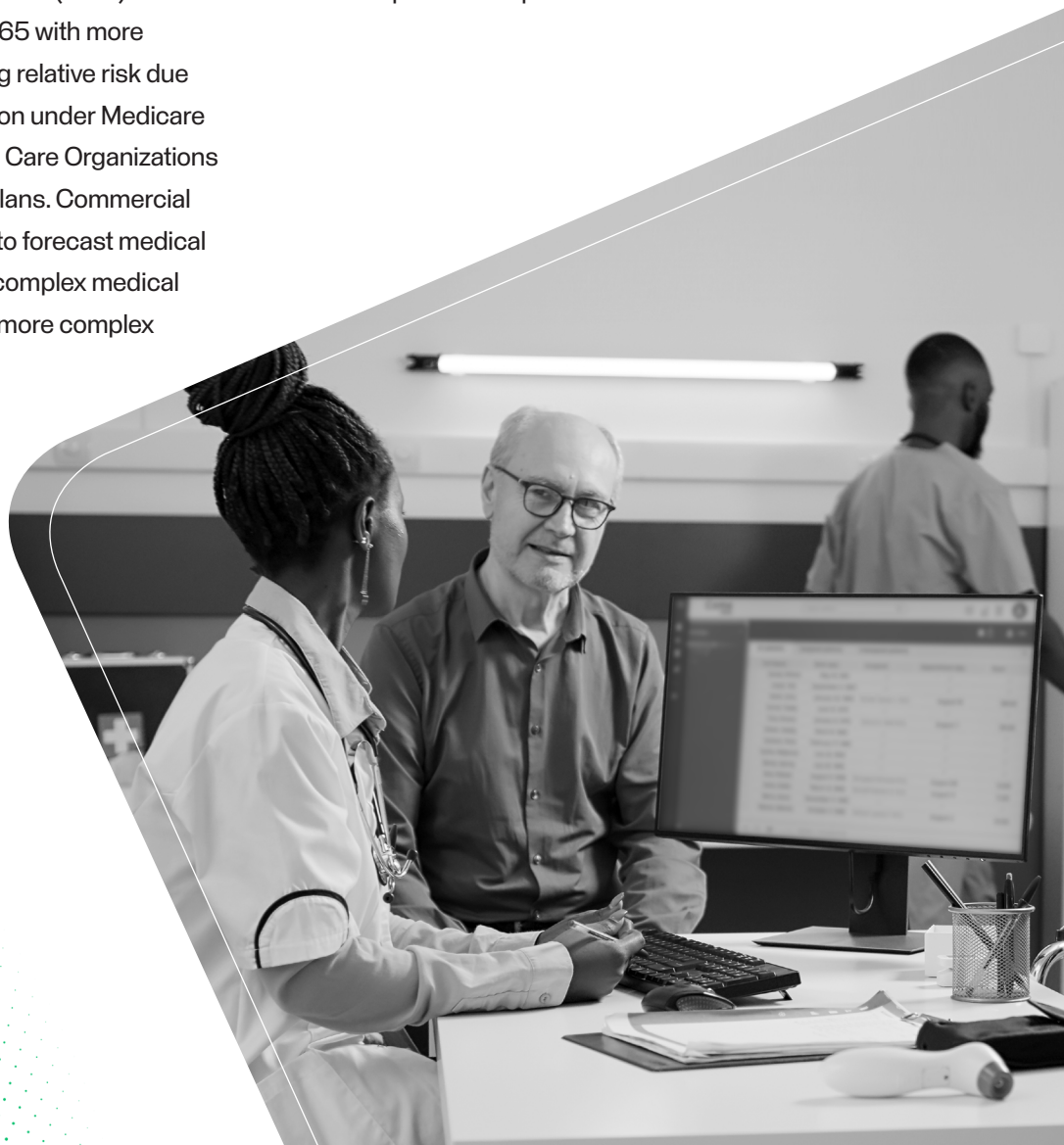
# 1.

## Introduction

First introduced under the Balanced Budget Act of 1997, Hierarchical Condition Category (HCC) codes are integral to the healthcare system's ongoing transition from fee-for-service to a value-based care model of reimbursement – a transition that requires providers to better manage patient costs based on clear, concise, and comprehensive pictures of their patients' health and medical conditions.

HCC is a risk-adjustment model originally created by the Centers for Medicare and Medicaid Services (CMS) to forecast medical costs for patients over 65 with more complex healthcare needs<sup>i</sup> by measuring relative risk due to health status for payment determination under Medicare Advantage (MA), as well as Accountable Care Organizations (ACOs) and some Affordable Care Act plans. Commercial payers also use risk-adjustment coding to forecast medical costs by patient, particularly those with complex medical and/or multiple chronic conditions. The more complex the patient's medical needs, the higher the provider's reimbursement.

The stakes are high when it comes to coding for reimbursements under the HCC model in today's complex and expanding value-based reimbursement system. HCCs are now the preferred method of risk adjustment for the Medicare population which, according to figures from CMS, includes nearly 60 million people on both Part A and Part B, approximately 30.2 million of whom are enrolled in a MA plan.<sup>ii</sup> Doing it correctly is crucial to Medicare providers and MA plans that wish to be appropriately reimbursed for the care provided to patients and beneficiaries.



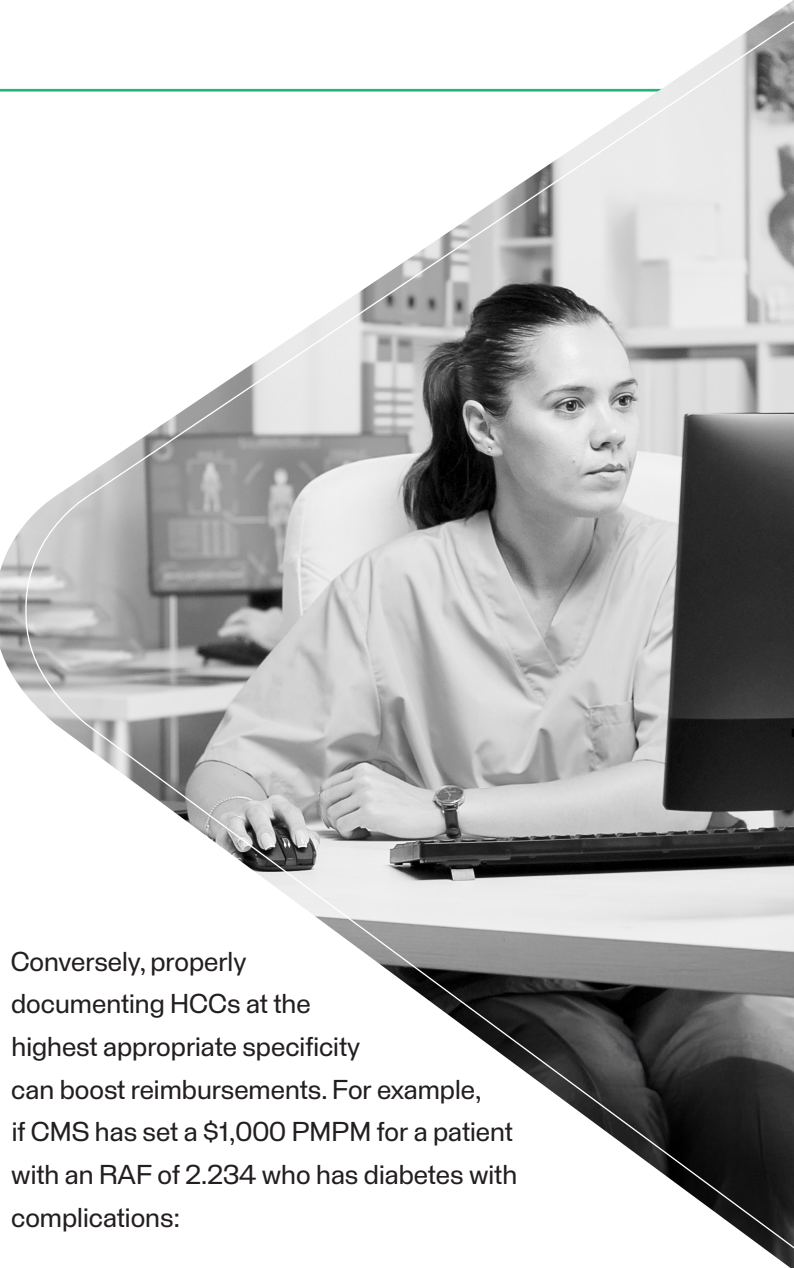
## 2.

# Accuracy is Critical

HCC is a highly complex model under which there are approximately 7770 diagnosis codes that map to 115 HCC categories, each representing diagnoses with similar clinical complexity and expected annual care costs.<sup>iii</sup> Any error can significantly impact reimbursements and the overall bottom line – both positively and negatively.

Reimbursement under the HCC model is determined by mapping a patient's medical history to these codes to create a Risk Adjustment Factor (RAF) score, which represents the estimated cost of caring for that individual based on their disease burden and demographic information. The RAF score is then multiplied by a base rate to set the provider's per-member-per-month (PMPM) reimbursement. Typically, healthier patients will have a below average RAF while sicker patients will be above average.<sup>iv</sup>

Each year, CMS publishes the list of both diagnosis codes and the corresponding HCC category they adjust to within the model. Hierarchies are listed among related condition categories, which set values based on the severity of illnesses, with more severe diagnoses carrying the overall risk scores for families. Failing to properly document HCC codes – or failing to do so at the highest appropriate specificity – results in lower reimbursement rates. For example, HCC 19 (diabetes with no complications) would pay an \$894.40 premium bonus compared to a bonus of \$1,273.60 for diabetes with ESRD, which requires two HCC codes mapping to 18 and 136. (*Payment amounts are examples and may differ based upon patient, region, and other factors.*)



Conversely, properly documenting HCCs at the highest appropriate specificity can boost reimbursements. For example, if CMS has set a \$1,000 PMPM for a patient with an RAF of 2.234 who has diabetes with complications:

- Reimbursement would be just \$673 per month if the condition is not coded.
- If properly coded as E11.9 Type 2 diabetes mellitus without complications under HCC19 Diabetes without complications, the RAF increases to 2.366 resulting in reimbursement of \$1,062 per month.
- If properly coded as E11.41 Type 2 diabetes mellitus w/diabetic mononeuropathy under HCC18 Diabetes w/ chronic complications, the RAF increases to 2.513 for a reimbursement of \$1,312.5.



Other diabetes-related examples:

Diagnosis	ICD-10	HCC	Premium Bonus
Diabetic amyotrophy	E11.44	18	\$1,094.40
Diabetic ketoacidosis with coma	E11.11	17	\$1,094.40
Diabetes with CKD stage 5	E11.22, N18.5	18, 136	\$1,273.60
Diabetes with CKD stage 5 on chronic dialysis	E11.22, N18.5, Z99.2	18, 136, 134	\$1,475.20

*Payment amounts are examples and may differ based upon patient, region, and other factors.*

HCC coding is vitally important under value-based care models and for population health management. Failing to capture a comprehensive and accurate picture of the health and risks of a patient population can lead not only to reduced reimbursements, but also to inaccurate or ineffective decision-making regarding interventions and investments.

For example, risk scores that inaccurately reflect a population's rate of diabetes or congestive heart failure could result in investment into something other than a cardiac care or diabetes center, resulting in poor outcomes and money lost.

Accurately captured HCC categories reveal a population's true health picture. This ensures resources are properly invested in the equipment and services needed to support the population.



### 3.

## Challenges to Accurate HCC Coding

Accurately documenting and coding for HCC is as complex as it is critical thanks in part to its interlocking steps. Hierarchies ensure an individual is coded for only the most severe manifestation among related diseases. Diagnosis codes roll up to diagnostic categories, which are included in condition categories, which then become HCCs. Each mapped diagnosis must be supported with accurate documentation and evidence to ensure timely, accurate, and complete coding and billing.<sup>v</sup>

To get it right, it is important to maximize the use of HCC tables to capture diagnosis codes, complication/comorbid conditions (42% of HCCs), and major complication/comorbid conditions (16% of HCCs). Optimizing Medicare Severity Diagnosis Related Groups (MS-DRGs) assignments that confirm severity of illness and risk of mortality is also vital. “Thus, just as it is in International Classification of Diseases, Tenth Revision (ICD-10) coding, complete and accurate clinical documentation is the foundation for proper HCC assignment.”

However, in addition to its complexity, the HCC documentation and coding process is fraught with challenges. These typically fall into three categories.

- **Incomplete medical records** can lead to undercoding, resulting in lower reimbursements, inaccurate RAF scores, downgrades to lower hierarchical category levels, and bad investment decisions to support the patient population. Coders working in a manual environment may not recognize they are working with incomplete records, exacerbating this particular challenge.
- **Limited resources**, in particular coding specialists with the skills and experience necessary to be able to properly evaluate the patient’s chart and extrapolate the information needed to properly document the appropriate HCC category.
- **Complex and rapidly evolving regulations**, which can be difficult to stay on top of (particularly in a manual environment) leaving coders to work from outdated HCC code sets and guidebooks.

Additionally, many organizations struggle to engage physicians in the query process, which in turn hinders efforts to improve documentation related to risk adjusted coding. Further, because the rate at which physicians embrace technology varies, it often is necessary to employ multiple methods of communication to be successful in risk adjusted and HCC coding.

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# 4.

## Optimizing HCC Coding and Reimbursement

To optimize HCC coding for accurate reimbursement, healthcare providers should focus on several key areas. At the top of the list is adherence to the MEAT criteria (monitor, evaluate, assess/address, and treat) to support proper documentation.<sup>vi</sup>

During risk adjustment documentation and coding, coders use the MEAT formula to help them correctly identify and assign HCC chronic condition diagnoses, which payers also use to account for the overall health and medical cost expectations of each patient enrolled in a health plan. “This is vital, as value-based payment models such as MA and ACO plans that require providers to carry greater financial risk are becoming the norm.”

Another key focal point for improvement efforts is the patient population – both individual patients and the global population. Focus on those areas that have the greatest impact on risk adjustment, as well as high value and volume encounters. Implement outpatient clinical documentation improvement (OP CDI) programs where appropriate to close documentation gaps, shore up weaknesses, and improve evidence capture.

In addition to CDI initiatives, there are also several technology tools that can facilitate needed improvements in HCC coding and documentation. These include:

- Computer-assisted coding (CAC) solutions that update automatically when there are code changes.
- Computer-assisted professional coding (CAPC) tools that leverage natural language processing (NLP), natural language understanding (NLU), and machine learning (ML) to automatically annotate documentation and autosuggest ICD-10 with HCC mappings for improved diagnosis capture without supporting evidence and estranged evidence without a diagnosis.
- Use HCC return on investment (ROI) calculators or RAF aggregation tools to optimize HCC coding and accurately capture all relevant diagnoses, leading to increased potential revenue and improved patient care.
- Dashboards that accurately reflect provider’s scores so they can be managed in real time.

Health plan relationships should also be part of any improvement strategy. In particular, request regular updates on what they have as diagnosis codes. This information allows providers to sync with their payers and identify what is missing or no longer allowed.

Further, ensure physician engagement – a tricky prospect with risk adjusted coding – by developing a program that balances the use of auto-generated queries and NLP-based functionality with CDI delivered in ways that are meaningful for each. For example, some providers prefer a checklist in the patient’s medical records while others need more direct prospective OP CDI reviews to bring discrepancies to their attention.

Finally, make judicious use of internal audits. Prospective audits can help improve how physicians document care for chronic patients and how coders code health conditions, translating into improved financial performance. Retrospective audits can bridge documentation gaps and identify where additional provider and coder education is needed. For example, if there is a trend among providers of missing documentation of supportive evidence for diabetes and cancers, exclusive education programs can be developed to address the gap.





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# 5.

## Conclusion

Accurate, compliant HCC coding is critical to the financial health of payers and providers, and to the health of their patient populations. The challenges inherent in the HCC process can be overcome with properly designed and implemented strategies that ensure appropriate documentation to support accurate coding at the highest specificity – leading to significantly improved bottom lines and patient outcomes.



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# References

<sup>i</sup> AGS Health. "Risk-Adjustment & Hierarchical Condition Category Coding: What Are They and Why Do They Matter?" *AGS Health*, AGS Health, 22 Mar. 2023, [www.agshealth.com/blog/risk-adjustment-hierarchical-condition-category-coding-what-are-they-and-why-do-they-matter/](http://www.agshealth.com/blog/risk-adjustment-hierarchical-condition-category-coding-what-are-they-and-why-do-they-matter/). Accessed 14 July 2023.

<sup>ii</sup> Fuglesten, Jeannie, et al. "Half of All Eligible Medicare Beneficiaries Are Now Enrolled in Private Medicare Advantage Plans." KFF, 1 May 2023, <https://www.kff.org/policy-watch/half-of-all-eligible-medicare-beneficiaries-are-now-enrolled-in-private-medicare-advantage-plans/>. Accessed 14 July 2023.

<sup>iii</sup> AGS Health. "Understanding the CMS Hierarchical Condition Category (HCC) Coding Model." *AGS Health*, 14 Apr. 2023, [www.agshealth.com/blog/understanding-the-cms-hierarchical-condition-category-hcc-coding-model/](http://www.agshealth.com/blog/understanding-the-cms-hierarchical-condition-category-hcc-coding-model/). Accessed 14 July 2023.

<sup>iv</sup> "Risk-Adjustment & Hierarchical Condition Category Coding: What Are They and Why Do They Matter?" *AGS Health*, 22 Mar. 2023, [www.agshealth.com/blog/risk-adjustment-hierarchical-condition-category-coding-what-are-they-and-why-do-they-matter/](http://www.agshealth.com/blog/risk-adjustment-hierarchical-condition-category-coding-what-are-they-and-why-do-they-matter/).

<sup>v</sup> Fernandez, Valerie. "Ins and Outs of HCCs." *AHIMA Body of Knowledge*, June 2017, <https://library.ahima.org/doc?oid=302154#.ZC9HuXbMJD8>. Accessed 14 July 2023.

<sup>vi</sup> Poland, Leigh. "Documentation Dilemmas: Does Your Documentation Meet the MEAT Criteria?" *For the Record*, Sept. 2022, <https://www.fortherecordmag.com/archives/Fall22p26.shtml>. Accessed 14 July 2023.

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