Need for Health Information Systems for Risk Adjustment in Medicare

Swapna Nadakuditi

Sr IT Business Systems Analyst Florida Blue

Abstract Information systems in healthcare play a significant role in the success of an organization. The systems help gather data, analyze complex information, and help manage population health and decrease healthcare costs, thereby improving the quality of patient care. With the growing need for communication between information technology personnel and healthcare professionals to address the issues of patient care, it is important for the healthcare professional to have access to the health information systems [1]. Ensuring the systems meet the organization's goal, the patient information is secure, and that the information systems consider the return on investment are some of the things to consider with the design of the system. With the increased use of electronic health data and growing needs for information sharing across domains, good understanding of the systems—including integrations—and data access would allow in significantly improving the efficiency of the processes, thereby meeting the goal of improving patient care [2]

Interoperability is another important need in the healthcare ecosystem. It would allow disparate information technology systems to communicate and exchange information. This would allow everyone in the healthcare organization to have consistent data for patient care and reduce the time it takes to have useful information between practitioners and their patients, which leads to increased patient engagement and improved outcomes. However, as the hospitals and healthcare systems continue to use and manage a wide range of siloed clinical and operational information systems interoperability would be far from reality.

Despite the enormous benefits in accurate coding and documentation, healthcare organizations either have too many different applications, requiring the providers to spend time on documentation in multiple different systems, resulting in provider abrasion and decreased patient care or insufficient tools and applications to provide oversight where most of the processes are handled via phone calls and emails, resulting in an administrative overhead to the organizations. Every year, the providers and the health care organizations face the same issue of maintaining non standardized tools to measure a provider's coding accuracy which is key for getting higher reimbursements and lowering administrative costs

This paper aims to discuss these issues and how to enable the provider to spend more time on patient care with the use of information systems. The proposal also considers the data quality and governance requirements for data exchange between the health care organization, its challenges, and some ways to address these issues.

Keywords Risk Adjustment, Coding, Hierarchical condition category (HCC), Reimbursements, Medicare advantage, Interoperability

Introduction

Risk adjustment is a methodology that is used to predict the cost of healthcare using a metric called a risk score. This helps to balance the risk to the plan associated with members with high healthcare usage which is then adjusted by the members with lower healthcare costs. One of the models used in the risk-adjustment to estimate healthcare cost is Hierarchical condition category (HCC) coding with the goal of providing better quality of care

and accurate reimbursements to payers. An HCC is a list of diagnoses that have been assigned a value for risk adjustment [3].

With the growing Medicare Advantage population in the United States, which would mean the healthcare organizations should improve coding accuracy to remain financially viable [4].Inaccurate diagnosis or mapping an incorrect HCC to a diagnosis is a compliance issue. Inaccurate HCCs would result in either over payments in reimbursements or underpayments, both of which can be classified as fraud. Some of the most common errors is risk adjustment HCC coding are No MEAT (Monitoring, Evaluation, Assessment and Treatment) in the diagnosis codes, discrepancy between the billing diagnosis codes to the description in the medical record, not documenting chronic conditions every year at least once and chronic conditions not documented as chronic.

Need for Health Information Systems for Risk Adjustment

The need for improved analytics tools for risk adjustment is a result of the various challenges in this space:

1. Increase in Medicare membership – The growing Medicare population in the United States would mean more disease burden and increased cost to treat insurance organizations. And if the members are not insured earlier, it would mean difficulty in estimating the cost as there will be no risk data available.

2. The traditional manual processes - The traditionally time-consuming process of reviewing numerous medical records to validate claims for accurate codes is both error prone and costly and non-sustainable in the long term.

3. Data from multiple sources – Accurate risk coding would require data from multiple sources like labs, historical data, self-reported member information and other supplemental data. Without these various sources of data, could result in inaccurate HCC codes [5].

When it comes to coding for risk adjustment and the measures to increase coding accuracy, physicians have a crucial role. One of the biggest limitations of this is not having a dedicated team of coders to support the physician's office. While it is important to capture the conditions that a patient has that require treatment, it is also important to submit only those diagnosis codes that can be substantiated with the documentation. Therefore, use of information systems would help providers close the gaps between clinical care and specificity in documentation by eliminating the need for manual processes. Collaboration between the physician specialists and coding professionals in the healthcare organization is critical for the success of the RA program and the resulting financial impacts to the organization [6].The traditional methods used to support the risk adjustment process to improve is very laborious, involving the coders' work with the providers using manual processes like emails, phone calls, word documents and the information is spread across multiple different systems. respective desktops. While there are some tools that were developed to reduce manual processes, they have been unsuccessful due to their poor design.

The Health Information systems would help overcome many challenges that exist in the risk adjustment space such as

- Improved automation and data processing with the usage of electronic health records (EHR) and other integrated systems. These systems provide a centralized platform for storing comprehensive patient data, including demographic information, medical history, diagnoses, procedures, medications, and laboratory results. Accurate and detailed patient data are essential for risk adjustment models to assess the complexity and severity of patients' health conditions accurately.

- Faster reimbursements for services rendered specially for value-based payment models such as accountable care organizations (ACOs) and Medicare Advantage plans. Thus, these health information systems support risk adjustment by ensuring accurate data for risk score calculation and plan the future healthcare costs.

- Eliminating redundant processes as the data is immediately available across the cross functional teams as these systems provide a centralized platform for storing accurate and detailed patient data including demographics, socio economic factors, and past medical history. This data is vital for risk adjustment to determine accurate patient health condition.

- Health information systems also help in risk stratification by identifying members with elevated risk for chronic conditions and hospitalizations thus enabling healthcare organizations in creating care interventions for these high-risk members.

- Reduced errors in the codes submitted thereby improving coding accuracy due to Improved communication between the providers and the risk adjustment auditors.
- Improved secondary uses of clinical results and outcomes for purposes such as auditing, public health reporting, quality measurement, etc.
- The health information systems can be used to measure the patient's outcome and utilization of care over a period. Risk adjustment makes use of patient data to measure the effectiveness of patient interventions thus enabling the organizations to implement patient-centered care outcomes.

Another use of information systems is Interoperability as it would improve efficiency since the information presented is consistent across the systems helping practitioners make effective decisions. It can help reduce the healthcare costs by eliminating redundant procedures, decreasing administrative costs involved in manually getting the records and reducing errors. With the advancement of technology, interoperability is no longer a requirement for regulatory purposes, but rather is about improving patient outcomes. The health information systems in conjunction with the other administrative tools and processes would ensure that there is no redundancy and errors in data and accurate information is available on a real-time basis across the muti-disciplinary teams, thus helping to achieve interoperability. With the use of private cloud environment, the data is secured from unauthorized access taking into consideration the required Health Insurance Portability and Accountability Act (HIPPA) regulated standards of protecting the member protected health information (PHI) and sensitive conditions. Thus, properly integrated healthcare data interoperability and clinical support health information tools are essential to ensure payers and providers have the right information at the right time.

Though the benefits in implementing the health information systems are significant there are some barriers that can outweigh benefits if they are not thoroughly thought through [7].

1. Data Quality –One major barrier is the availability and the cost of acquiring meaningful electronic data. Nonstandard data will be a greater challenge for any analytics toolset to process and the poor data quality resulting from the non-standard data and insights derived from this data would be of no use to the organization. Hence it is important to establish governance and standards around acceptable data that can provide better insights.

2. Decentralization of Data – The availability of data in decentralized systems and formats make it challenging to get the 360-degree view of the patient's health condition thus leading to inaccurate risk score calculations.

3. Data Collection - It is important to understand that the massive amounts of data collected do not always translate to meaningful information. It is important to have controls and rules around the data collected and catalogued properly to make the information available. The data collected will be of no real value if it is not easily accessible.

4. System Integrations - Lack of integration of the health information systems with external data sources such as data from wearable devices, the social determinants data limit the risk adjustment models in calculating more comprehensive risk scores.

5. Inconsistent Coding - To calculate risk scores, the coders make sure use of the procedure codes and diagnosis codes (ICD-10). In the absence of standard coding guidelines, there can be inconsistencies among providers in the risk adjustment models resulting in over-coding or under-coding of the patient's risk scores.

6. Data privacy and governance - Highly regulated healthcare data would mean the need to apply privacy and governance rules around the storage, usage, and distribution of member data.

Conclusion

In summary, health information systems are vital for risk adjustment to enable accurate risk assessment, patient care, managing chronic conditions, financial reimbursements, population health management, compliance, and regulatory requirements. By making use of health information systems can achieve efficiency both in terms of health outcomes and the risk adjustment revenue.

It is understood that health information systems' role in healthcare is growing by the day with little resistance. Its abilities to improve healthcare efficiency and quality of career, reduce costs, and effectively respond to disasters, among other goals, make the opportunities provided by the application of analytics broad and far.

However, such a vision is not easily achieved. Challenges including privacy concerns, data standards, and the issues of requiring qualified personnel provide roadblocks for the use of analytics. Despite that, the problems are not too great to overcome and are necessary to ensure that usage of technology in a medical setting continues to grow.

References

[1]. K. Mastrian and D. McGonigle, Informatics for Health Professionals, Jones & Bartlett Learning; 2nd edition, 2019, p. 464.

[2]. W. Bonney, Optimizing the Use and Adoption of Healthcare Information Systems: A Systematic Review, IGI Global, 2018.

[3]. AAPC Leadership Team, "What is Risk Adjustment?," AAPC, 8 3 2021. [Online]. Available: https://www.aapc.com/resources/what-is-risk-adjustment.

[4]. AAFP, "Hierarchical Condition Category Coding," AAFP, [Online]. Available: https://www.aafp.org/family-physician/practice-and-career/getting-paid/coding/hierarchical-condition-category.html.

[5]. K. Marta, "HCC coding: How to improve risk adjustment coding accuracy & efficiency," Invovalon, 2020. [Online]. Available: https://www.inovalon.com/blog/improve-risk-adjustment-coding-accuracy/.

[6]. K. G. Youmans, "The Revenue Impact of CDI and Coding Mismatches and Physician Query Analysis," *AHIMA,* 2020.

[7]. M. J. Ward, K. A. Marsolo and C. M. Froehle, "Applications of business analytics in healthcare," *Business Horizons,* 2014.