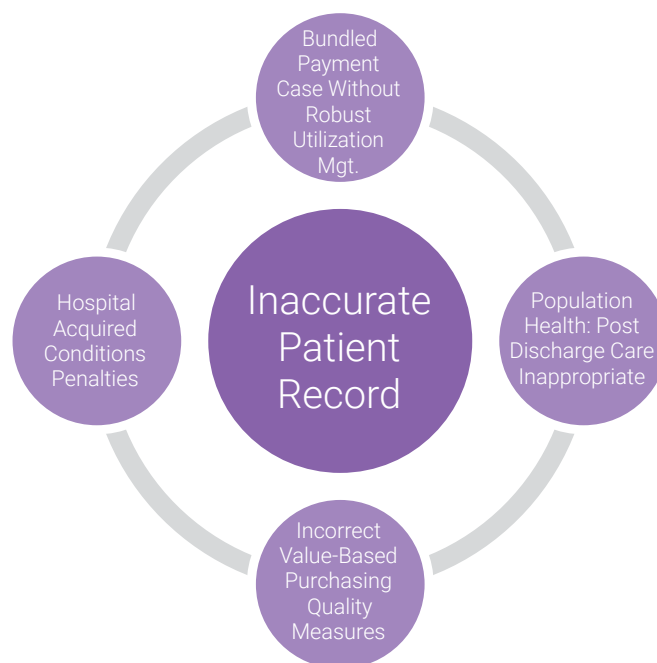# The New Technology-Enabled Health Information Management Ecosystem

The Health Information Management (HIM) area is growing in strategic significance due to its direct impact on an organization's success or failure with reform initiatives such as value-based purchasing and population health management. As data stewards, HIM professionals are critical to the success of information governance and data analytics in the emerging population health management programs.[1] As a result, a new broader view of HIM is emerging to better address the critical area where clinical and financial data and processes meet.

This area of convergence is responsible for rendering the final patient record and directly affects revenue and quality outcomes. However today in many institutions a more traditional view of HIM still endures, one that is less nimble and adaptive to the evolving challenges facing health care organizations. Health care providers need to adopt a new approach to their HIM operational model and enabling technologies in order to thrive in the new era of health care.

Examples of potential problems related to poor rendering of patient records

Bundled Payment Case Without Robust Utilization Mgt.

Hospital Acquired Conditions Penalties

Inaccurate Patient Record

Population Health: Post Discharge Care Inappropriate

Incorrect Value-Based Purchasing Quality Measures

The Problems with the Traditional Approach to HIM

The traditional narrower view of HIM has typically included clinical documentation improvement (CDI), coding and release of information areas. However, this legacy HIM definition is too limited and doesn't include all the critical functions of the true HIM ecosystem that affects the patient records and a provider's final reimbursement and quality outcomes. This *New HIM Ecosystem* includes not just coding and CDI, but also case management (CM), utilization review (UR), quality and the clinician community – all the areas encompassing the patient record influencer community.
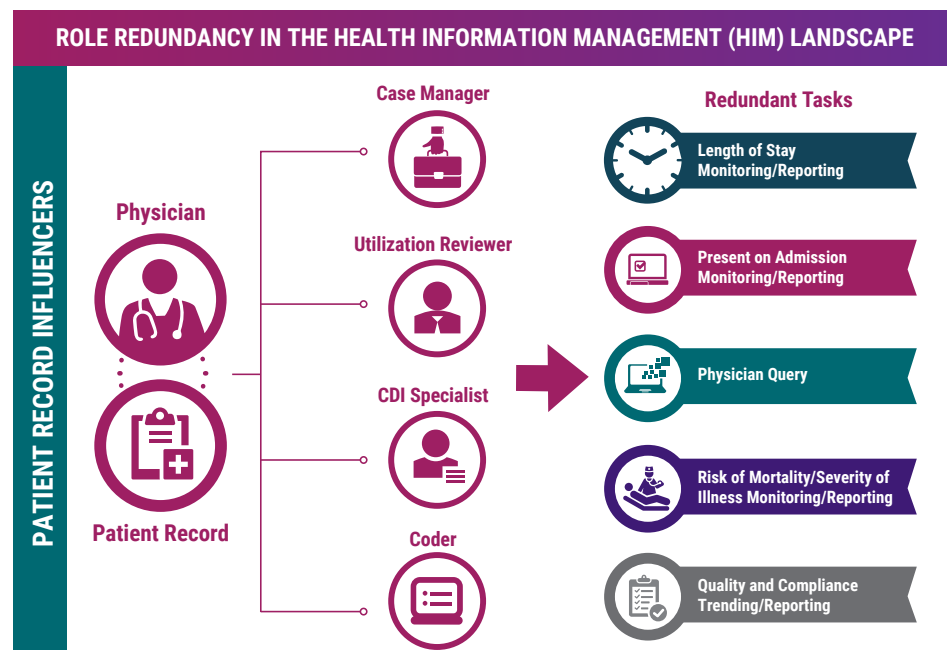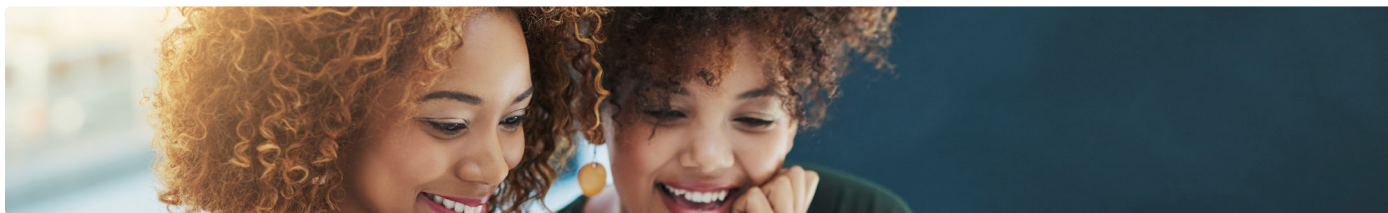
New HIM Ecosystem

Includes coding and CDI, case management, utilization review, quality and the clinician community – all the areas encompassing the patient record influencer community

The members of this community have many common goals and interrelated tasks, but the current reality is that they often act in a very siloed manner, which can cause problems. For example, a case manager who fails to properly document or communicate to a CDI specialist and/or coder about a patient's Present on Admission (POA) condition adversely affects the accuracy of the patient record and the final revenue and quality outcomes, especially pertaining to potential Hospital Acquired Conditions financial penalties. As a result of this narrow HIM view, the management structure has historically been disparate, compounding the lack of coordination and collaboration. Traditionally, roles related to CDI, coding, CM and UR have operated too independently and with little collaboration. Also, too many redundant tasks among these roles create problems such as:

- **Inefficient use of resources**
- **Physician query fatigue**
- **Data quality issues (multiple sources of truth)**
- **Lack of coordinated oversight of key performance indicators (KPIs) and goals**

ROLE REDUNDANCY IN THE HEALTH INFORMATION MANAGEMENT (HIM) LANDSCAPE

PATIENT RECORD INFLUENCERS

Physician

Patient Record

Case Manager

Utilization Reviewer

CDI Specialist

Coder

Redundant Tasks

- Length of Stay Monitoring/Reporting
- Present on Admission Monitoring/Reporting
- Physician Query
- Risk of Mortality/Severity of Illness Monitoring/Reporting
- Quality and Compliance Trending/Reporting

> As technology changes HIM processes, it also changes HIM professionals' roles and the education and skills necessary to get their modified jobs done."
>
> **Health Information Management 2025: Current 'Health IT Revolution' Drastically Changes HIM in the Near Future," Chris Dimick, AHIMA, March 2016.**

Many of the past HIM-related business problems have been exacerbated by underutilized or inappropriate enabling technology. A lack of integrated systems and automated workflow to support all the roles and drive associated processes in the *New HIM Ecosystem*, as well as the absence of the innate ability to easily and quickly share critical information, feeds a siloed and uncollaborative culture. Too little native integration among systems has led to higher IT costs, poor data governance, lack of broad data visibility and incomplete technology-driven workflows.

In order to thrive in the new era of health care, providers need to reorient their traditional operational model to the *New HIM Ecosystem* with reimagined process flows and new roles to focus on accuracy, quality, reimbursement impact and compliance to more effectively address regulatory and reimbursement complexity.

Reorient the HIM Operational Model

Organizations may be served well by finding ways to foster more collaboration among the patient record influencer community. Coders, CDI specialists, case managers, utilization reviewers and quality managers need to become more team oriented, with common goals, clearer task hand-offs and shared performance yardsticks in order to ensure agreement and accuracy of the final patient record.

Roles and their associated tasks need to be reevaluated to avoid redundant efforts. For example, when coders query a physician, other associated players such as CDI specialists and case managers should have access to the query and response information to ensure consensus on patient record issues. Duplicative reporting and monitoring tasks should be reexamined for improved efficiency and stewardship.

Recent trends indicate that these roles are gradually realigning under a single revenue cycle leader. For example, a 2015 American Case Management Association survey[2] of case managers showed a marked increase in the number of case management groups that report to the Chief Financial Officer, from 19 percent in 2011 to 27 percent in 2015.

The advent of the electronic patient record is reshaping HIM professionals' roles and required skill sets. As discussed in a *Journal of AHIMA* article, "As technology changes HIM processes, it also changes HIM professionals' roles and the education and skills necessary to get their modified jobs done. HIM professionals need more project management, statistician and data analyst influences in order to work with electronic data and better adapt essential HIM functions to the future health care environment."[3] For example, with the advances of health information technology, which reduce or remove manual work, newer, more strategic roles such as Knowledge Workers or Surveillance Analysts could replace or reduce the need for traditional coders. These types of roles would be keenly focused on analyzing key data points and understanding how the complex regulations affect patient records (including codes) to ensure compliance and revenue integrity.

Leveraging Technology to Drive a New HIM Model

With the prevalence of EHRs, computer-assisted coding and other technologies, the patient record influencer community is being forced to change. Health care and HIM professionals have been left sprinting down technology's trail-blazed path, working to make the most of health IT systems and new data sets that have only just begun to show the true extent of their potential impact on health management and patient care.[1]
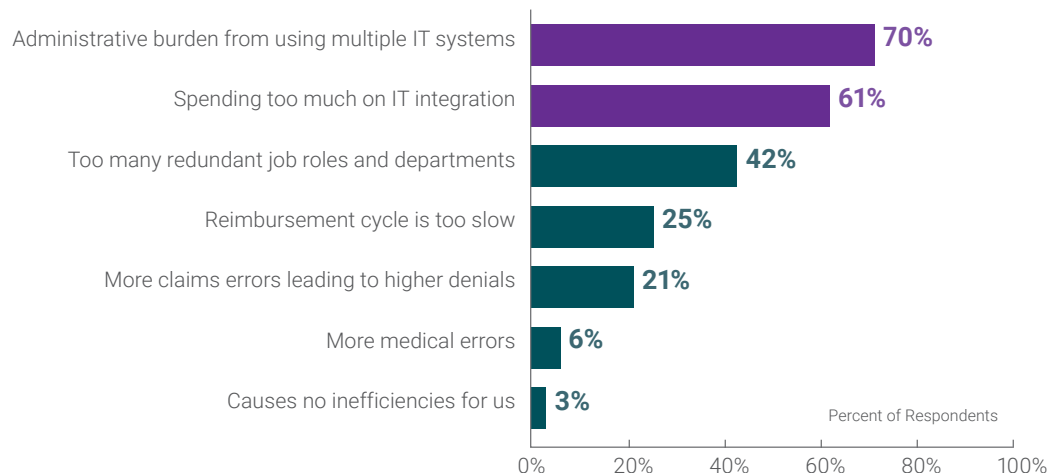
The imperative for collaboration and consensus among the patient record influencer community requires an integrated HIM IT platform, which allows information visibility among all the players and supports patient record data integrity. An integrated system will also help foster the collaboration that has been restricted, in part, by lack of proper IT solutions in the past and minimize redundant tasks. In addition, an integrated system typically provides a lower total cost of ownership versus several unintegrated systems.

Computer-assisted coding (CAC) and CDI software

and their requisite Natural Language Processing (NLP) technology is maturing and showing great promise to revolutionize the HIM arena, with the ability to aggregate and analyze all patient record data into one system. An American Health Information Management Association Strategic Plan noted, "They (CAC programs) will increasingly be used to pull together disparate parts of the EHR to create the full patient story. These advances will allow HIM professionals and caregivers to spend less time entering information and more time analyzing it to create even greater value for organizations."[4] NLP-enabled technology can drive more accurate coding and documentation by processing and evaluating the patient record through artificial intelligence and suggesting the most appropriate codes. In addition, the NLP technology can be utilized to provide surveillance of the patient record to detect and alert staff to patient documentation discrepancies that may lead to inappropriate reimbursement or inaccurate quality scores.

Workflow technology is also a key ingredient to the

What are the main inefficiencies that using a mix of HIM vendors causes your hospital?

Inefficiency	Percent
Administrative burden from using multiple IT systems	70%
Spending too much on IT integration	61%
Too many redundant job roles and departments	42%
Reimbursement cycle is too slow	25%
More claims errors leading to higher denials	21%
More medical errors	6%
Causes no inefficiencies for us	3%

Percent of Respondents

A 2016 Lambay Advisors study, which interviewed 163 hospital and health system executives, found that hospitals' fragmented HIM vendor base causes critical inefficiencies, most notably the burden for staff of using multiple systems and the significant cost of IT integration.

recipe for a revolutionized HIM area. When combined with an integrated platform, workflow can reach all the key players in the *New HIM Ecosystem* and ensure a full closed-loop process related to rendering an accurate and complete patient record. Given the amount of overlapping tasks in the current patient record influencer community, workflow technology has the power to set up boundaries and process accountability to drive efficiency, clearer role definition and smoother hand-offs.

Analytics technology is paramount to a health care provider's survival in current times. With new reimbursement models driven by bundled payments, quality measures and population health, HIM-related analytics can mine data that is at the heart of this new revenue cycle. Fundamental information, such as services provided to the patient along with related quality measures, need to be accessed immediately and massaged through analytical tools to deliver executive-level, actionable information. Proper analytics will allow performance evaluation of all players in the *New HIM Ecosystem*, so that accountability is maintained and problem areas are identified early.

Summary

Change is constant in this new era of health care, and a revised vision of the traditional HIM arena is necessary in order to meet the new realities faced by health care providers today. With the *New HIM Ecosystem* comes the need to rethink processes, roles and how technology can be leveraged to change and sustain a new, more germane HIM model. With the increasing burden of a fee-for-value environment, health care organizations can become more competitive and financially viable by reorienting their HIM function and its related technologies to better align with the reimbursement and quality imperatives driving today's health care landscape.

About the Authors

Krista Jaroszewski

Krista has served in various health care operations, HIM and IT roles in the last 20 years and is presently acting as the Documentation and Care Integrity Product Manager at nThrive™. She manages the nThrive product portfolio and teams focused on CDI, Care Management, Analytics and Transcription Technology. Prior to this, Krista served as the Director of HIM Operations at nThrive. She has helped companies execute programs and products that drive efficiency and innovation into the HIM market. Her specialties include health care financial and clinical software technologies in the acute and ambulatory markets, operations leadership, revenue cycle management, health care consulting and performance management.

Mark Hendricks

Mark is a HIM professional with more than 20 years of operational, technical, consultative sales and sales management experience in leadership positions. He has extensive experience in technologies supporting health information processes and workflow including coding, abstracting, revenue cycle management, dictation, transcription, speech recognition, document imaging, case management and clinical documentation improvement. He has previously worked for several large health care technology and services firms. Mark is a Registered Health Information Administrator and holds a B.S. degree from the University of Pittsburgh and an MBA from Loyola University. Mark's current role at nThrive is Product Manager overseeing computer-assisted coding and audit solutions.

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[1] "The Next Frontier – Population Health Information Management Presents a New Opportunity for HIM," Bonnie S. Cassidy, *Journal of American Health Information Management Association*, 2013.

[2] "National Hospital Case Management Survey (2015)," American Case Management Association

[3] "Health Information Management 2025: Current 'Health IT Revolution' Drastically Changes HIM in the Near Future," Chris Dimick, AHIMA, March 2016.

[4] "AHIMA Strategic Plan 2014-2017 – Driving the Power of Knowledge," American Health Information Management Association, 2014.