The new revenue cycle management:
Migration to a single vendor for clinical and financial processes

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The rapidly evolving healthcare industry is raising a new question for healthcare providers: do they stay "best-of-breed" for electronic health records (EHR) and revenue cycle management (RCM) systems or do they embrace an integrated, single vendor solution?

New government regulations and changing reimbursement systems have shifted the industry's focus to outcomes and quality. To successfully migrate to this new value-based reimbursement system, healthcare organizations must be able to comprehensively capture clinical and financial data and analyze outcomes.

The question for providers then becomes determining how to effectively meet this new demand for accuracy, system interoperability, and adaptability. For large providers with multiple acute care and ambulatory facilities, these decisions can result in hundreds of millions of dollars in infrastructure costs and software investments. After all, the long term implications of system choice can impact an organization's overall strategy long after the implementation is complete. Here, we explore which system strategy – best-of-breed or single vendor – may best support providers in the transition to value-based reimbursement, and ultimately, what the EHR and RCM system of the future may look like.

The Rise of Technology in Healthcare

While technology was incorporated into both the clinical and financial aspects of healthcare during the 1980's and 1990's, the two systems developed independently of one another.

During the 1980's, RCM systems were designed to communicate with and collect payments from government and third-party health insurance companies. When the National Uniform Billing Committee introduced the first national uniform Medicare bill in 1982, providers finally had the necessary standardization to build an electronic billing system. Basic mainframes were created to input standard data into the now-uniform bill, creating a place to record accounts receivable and submit claims. Revisions to the uniform bill were released in 1992 and 2004, generating the institutional claim standard we know today – and the means through which 98% of Medicare hospital claims are submitted.[1]

However, revenue cycle systems still remained separate from clinical information systems. Providers, especially physicians, were growing frustrated with the logistical problems of paper records and limited accessibility of clinical data, and began developing an electronic solution of their own. EHR became increasingly popular in the 1990's, implemented most often to address specific departmental or facility needs such as cardiology or surgery. Many

providers started with homegrown systems, though new commercial vendors also began to emerge including GE Healthcare, athenahealth, and Epic Systems.

With both EHR and RCM systems now electronically enabled, providers had the opportunity to communicate across the two systems. Yet most providers chose EHR and RCM vendors independently, picking the best-of-breed and creating interfaces to link the systems. In some cases, multiple EHR's and RCM's were used within the same health system. Departments like laboratory, radiology, and surgery would often feed their separate data streams into a central repository. In some cases, these systems fed multiple repositories, causing further issues with interoperability and data management.

Variation between systems and communication protocols often led to difficulties with data integrity and system management, even sometimes impacting the information transfer needed for handoff communication, a critical component of patient safety. And just as there were diverse and distinct demands within hospital systems, so too were there custom needs between hospital systems. Individual approaches to EHR and RCM practices created little demand for standard features like common technical requirements, decision support for meeting state and federal guidelines, or the ability to interact with other systems to coordinate care.

The Path to Integration

Looking to further standardize these billing practices, the Centers for Medicare and Medicaid Services (CMS) introduced new requirements. The 1996 enactment of HIPPA forced providers and payers to use common transaction sets for electronic data interchange.[2]

The introduction of the HITECH Act and the CMS Electronic Health Record Incentive Programs, in 2009 and 2011 respectively, provided incentive payments to providers as they "adopt, implement, upgrade or demonstrate meaningful use of certified EHR technology."[3] Meaningful use has been rolled out in three initial stages, with each stage focusing on a specific point of improvement: data capture and sharing, advancing clinical processes, and improving outcomes.[4] With the advent of ICD-10 in 2015, linking documentation to an individual patient was no longer simply a billing issue, but a regulatory matter with explicit implications to quality and safety linked to RCM systems. Ultimately, by imposing these regulations, offering financial incentives, and penalizing non-compliance, CMS elevated both the clinical and financial importance of care coordination.

The Single Vendor Solution

With value-based reimbursement models emphasizing higher quality and better patient outcomes, providers now needed EHR and RCM systems to access clinical data across the continuum of care and link the financial implications to the patient encounter. Traditional best-of-breed revenue cycle systems do not easily or inexpensively meet these demands as clinical data is stored in separate systems, requiring complex and costly interventions to consolidate the data for analysis and interpretation.

Industry associations have weighed in on potential strategies. When the Health Information and Management Systems Society (HIMSS) assembled a revenue cycle task force of industry experts, they collectively agreed that "the RCM of the future must be consumer-centric...[and] move away from a siloed approach to a more collaborative and integrated approach."[5] Consolidating these systems brings the revenue cycle closer to the point of care, and when implemented correctly, reduces the convoluted processes and interface requirements.

"The RCM of the future must be consumer-centric...[and] move away from a siloed approach to a more collaborative and integrated approach." [5]

- HIMSS revenue cycle task force of industry experts

Healthcare executives also see that fewer interfaces and instances of human intervention can reduce errors and improve information quality. Dr. Dawn Milliner, Mayo Clinic's chief medical information officer, says having her staff on a common EHR and RCM system will "accelerate innovation, enhance services and provide a better experience for [their] patients."[6]

Michael Prilutsky, VP and director for Epic at Montefiore Health System a large, integrated care delivery system in New York State, notes that implementing Epic's unified EHR system will "enhance the safety, quality, efficiency and convenience of [their] care delivery system" as well as giving patients access to significant pieces of their records through a patient portal.[7]

Beyond these system-wide advantages, there are additional, more discrete benefits to a single vendor EHR/RCM system from a clinical perspective:

- Opportunity to educate physicians and clinical staff on interdependencies between clinical activity, cost of care, and reimbursement
- Ability to address medical necessity edits at the time of service or order and the downstream impacts to the patient/facility (i.e., Medicare Advance Beneficiary Notice (ABN), non-payment, etc.)
- Ability to identify excess costs and opportunities to impact patient throughput, supply chain management, and formulary enhancements expenses
- Enhanced patient experience through improved transparency, sharing of records across facilities, and greater access to medical records through patient portals

- Decreased risk of patient identification error (i.e., multiple medical record numbers for one individual, duplicate charts) and risk of inaccurate or incomplete patient records including patient medical history, allergies, etc.

Recent reports by the Healthcare Financial Management Association, a national member organization of healthcare financial professionals, also identified financial benefits associated with a single vendor EHR/RCM system.[8] These include:

- Improved data integrity and a single source of truth for data and analytics
- Improved revenue capture
- Improved revenue cycle metrics:

  – Improved claim acceptance
  – Reduced denials
  – Reduced cost-to-collect
  – Improved cash collection

The Shift to a Single Vendor Solution

Based on recent industry trends, it appears some providers are embracing a single vendor solution for EHR and RCM systems. Best-of-breed vendors are losing market share – only 1 in 5 providers interviewed by KLAS, a healthcare technology research firm, said they plan to continue using a best-in-breed system. Of the 118 providers surveyed by KLAS, 80% prefer a single system: 55% already have a single inpatient EHR and patient accounting vendor, and an additional 25% plan to move to a single vendor.[9]
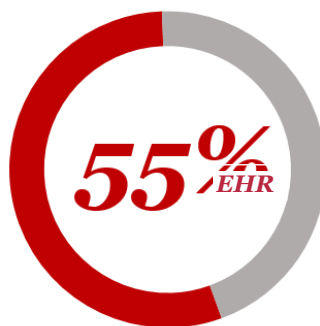
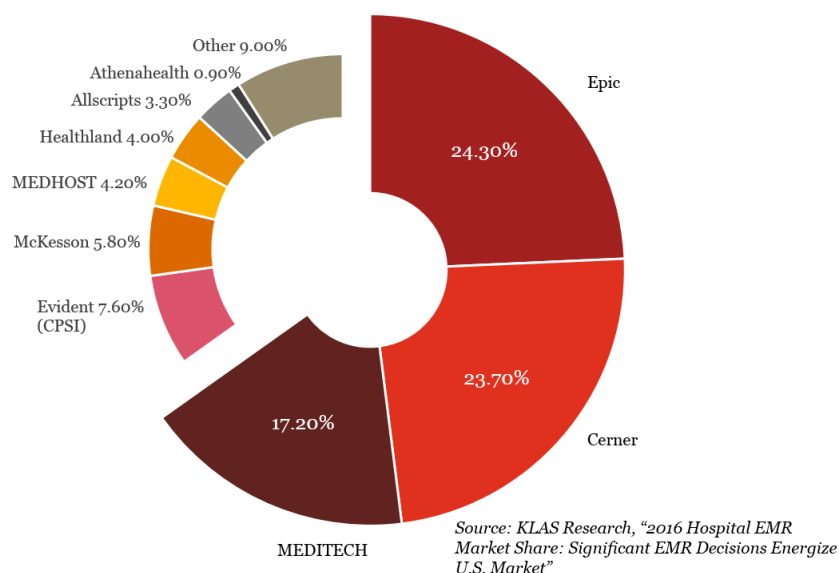**Of the 118 providers surveyed by KLAS**

80%: prefer a single system

55%: already have a single inpatient HER and patient accounting vendor

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2015 Acute Hospital Market Share
n=5,250 acute care hospital

- Other 9.00%
- Athenahealth 0.90%
- Allscripts 3.30%
- Healthland 4.00%
- MEDHOST 4.20%
- McKesson 5.80%
- Evident 7.60% (CPSI)
- MEDITECH 17.20%
- Epic 24.30%
- Cerner 23.70%

Source: KLAS Research, "2016 Hospital EMR Market Share: Significant EMR Decisions Energize U.S. Market"

In addition, new entrants are forcing consolidation in the market as traditional best-of-breed vendors exit. Large RCM vendors are looking to build end-to-end capabilities – from clinical to payment and claims solutions – to meet large contract needs:

- Cerner Corp. acquired Siemens Health Services in 2015 to add Siemens' Soarian RCM platform to Cerner's existing EHR and PAS portfolio.[10]
- athenahealth, a physician practice management solution, purchased RazorInsights in 2015 to use RazorInsight's rural and community hospital EHR solution to enter the hospital market.[11]
- Pamplona Capital Management acquired MedAssets in 2015 to combine their Precyse HIM technology with MedAssets' RCM business.[12]

- McKesson Corp. divested their healthcare technology business in 2016 and combined it with Change Healthcare Holdings, a software and analytics vendor, to create a new company with financial solutions and tools for clinical management.[13]
- Epic Systems started offering integrated physician practice management solutions, and in the past 20 years has become one of the largest companies in the enterprise (physician and hospital) market. As of June 2016, almost one-quarter of hospitals (24.9%) use Epic Systems RCM technology and roughly one-fifth (19.4%) leverage Epic EHR for meaningful use.[14]

As a result of the momentum from this consolidation and mounting regulatory pressures, some providers are reevaluating their legacy EHR vendors and moving to an enterprise EHR.[15]

Subsequently, two large EHR and RCM vendors have emerged – Cerner and Epic. According to KLAS, 23.7% of acute hospitals have selected Cerner as their EHR vendor, a close second to Epic's 24.3% market share.[16] In our experience, once providers have made the decision to adopt an enterprise EHR, they also chose to invest in that vendor's RCM system for full integration. In fact, many large health systems are embarking on or have already completed an investment in consolidating their EHR and RCM systems, including Intermountain Healthcare (Cerner), John's Hopkins (Epic), Mayo Clinic (Epic), NYU (Epic), and Montefiore (Epic).[17]

Future Considerations

Looking forward, and as meaningful use continues to mature, there will be additional opportunities for providers with a single vendor EHR/RCM system. Big data analytics solutions have been highlighted across the industry as one of the next big investment areas for hospitals and health systems[14]. Those facilities already using a single-vendor solution may be more prepared to leverage data collected in the EHR/RCM system to drive accountable care measures and improve hospital efficiency. And where best-of-breed systems are less nimble in their response to new dynamics and regulations due to the complexity and cost tied to the number of systems and subsequent

one-off issues, a single vendor solution can accelerate revisions and promote more rapid implementation.

For large providers with multiple facilities and dynamic physician practice models looking to stay competitive in today's rapidly evolving healthcare environment, it is critical to standardize operations across the enterprise and utilize a single vendor EHR/RCM system to more efficiently manage the enterprise revenue cycle. Ultimately, the visibility of data across and between the EHR and RCM environments gives providers the opportunity to manage and improve clinical and financial outcomes in ways not previously possible, functions crucial to surviving – and flourishing – in a value-based reimbursement model.

Note: This content is for general information purposes only, and should not be used as a substitute for consultation with professional advisors.

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