



ACCOUNTABLE DELIVERY  
SYSTEM INSTITUTE®

# THE VALUE OF INTEGRATING EMR AND CLAIMS/COST DATA IN THE TRANSITION TO POPULATION HEALTH MANAGEMENT

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## EXECUTIVE SUMMARY

When EMR data is combined with claims/cost data, a physician gains a complete view of a patient's medical history. In this white paper, we discuss the importance of combining claims, EMR, admission, lab, and pharmacy data, and how information supported by tools and workflows — helps health systems, payers and providers make value-based decisions and achieve population health management.

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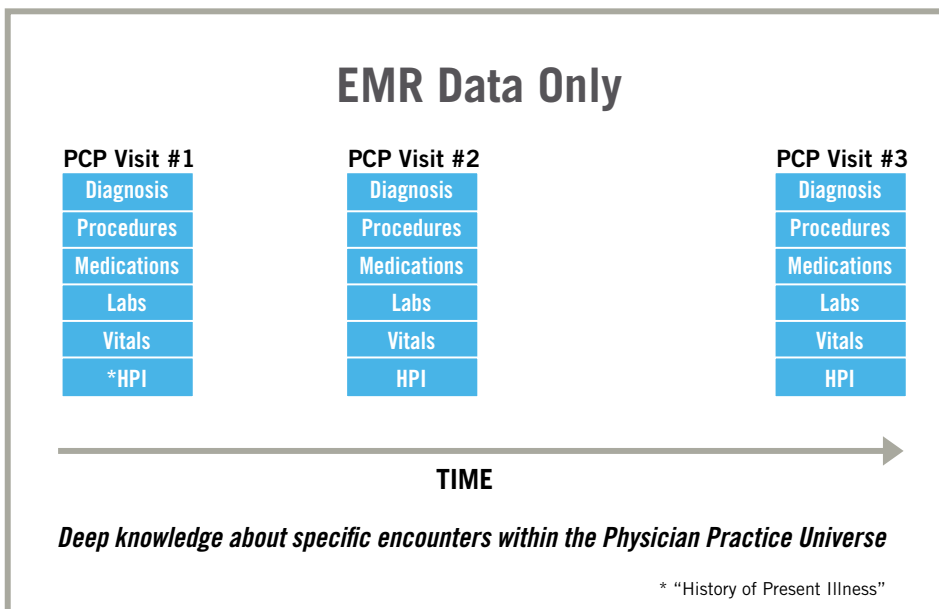
# THE VALUE OF INTEGRATING EMR AND CLAIMS/COST DATA IN THE TRANSITION TO POPULATION HEALTH MANAGEMENT

In the transition to accountable care, health care systems and provider groups have scaled new heights rapidly through integrating data. Adding claims/cost to EMR data enables informed value-based decisions by offering a complete view of a patient's health care history. With this view, providers become true population health managers with the power to achieve better health outcomes, lower costs and improved patient plus physician satisfaction.

## THE ASTONISHING SPEED OF DIGITIZATION

As recently as four years ago, paper was used for 80 percent of physicians' patient records and 90 percent of hospital patient records. Today, meaningful use preparations are underway for the majority of health systems and providers in order to improve patient care.<sup>1</sup>

TYPE OF DATA	CATEGORY OF DATA
EMR	Clinical and quality
Practice Management	Cost
Claims/cost	Clinical, cost, utilization
Lab/imaging	Clinical, quality, cost
Pharmacy	Clinical, cost, utilization
HIE	All



Many physicians began digitization by converting paper charts into electronic medical records (EMRs). As shown in Figure 1, EMRs capture deep knowledge about patient encounters within a practice. Billing charges feed into EMRs from a practice management (PM) system.

Figure 1. EMR Data. Source: Lumeris.

Source: Diana Manos, "Mostashari proud of progress so far," Healthcare IT News, <http://www.healthcareitnews.com/news/mostashari-praises-hit-progress> (accessed October 17, 2013).

## BRINGING THE DATA TO LIFE

Many health systems and providers now use electronic medical records (EMRs), which have significantly increased in core functionality due to CMS’s Meaningful Use adoption incentive program. An EMR allows users to create, store, organize, edit, and retrieve patient records electronically. The advantages of EMRs are unquestionable. EMRs improve communication, access to data and documentation leading to better clinical and service quality. EMR adoption delivers ongoing value as an organization strives for the Triple Aim *Plus One*: better health outcomes, lower costs and improved patient *plus* physician satisfaction.

Yet, “siloeing” clinical data within a health system’s walls restricts the value that providers can achieve.

## EMR DATA INTEGRATION WITH CLAIMS/COST DATA

With EMR/encounter data from a single source, a decision maker’s view of a patient’s health status is only partially complete. Right now, in both a fee-for-service and value-based care world, claims data coupled with EMR/encounter data helps to achieve a more complete view of a patient’s health status across the continuum of care.

Armed with a patient’s entire — or nearly entire — consumption of health care, providers can more effectively close gaps in care, manage cost and utilization and conduct care management outreach by risk score and disease state.

As illustrated in Figure 2, the claims/cost data stream encompasses external health care sources, such as labs, pharmacies, imaging facilities, urgent care centers, and hospitalizations. Added to existing and new emerging data streams — such as data from monitoring devices, scanned charts, patient feedback, and social media — will facilitate further insights.

In addition, claims/cost data helps providers learn about and factor costs into care decisions. This is a welcome change from typical data conditions in providers’ offices, in which:

- PM system billing is limited to charges incurred at the provider’s practice, but does not show what the health plan actually covered.
- Payer data only lists payment status of claims/cost that are at least a month old making it difficult for incompatible systems to produce a composite data view. In comparison, a claims/cost data stream presents up-to-date claims/cost plus costs from outside the health system. It lets providers develop insights based on total health care usage by their patients and populations.

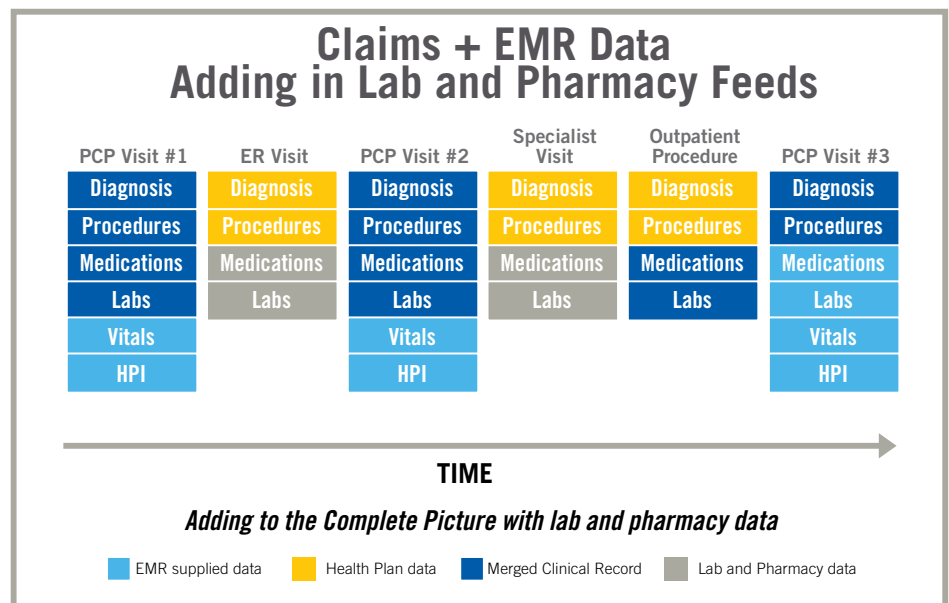


Figure 2. Adding Claims/Cost Data to Clinical Data. Source: Lumeris.

## BROADER SPECTRUM OF ANALYTICS INCREASE ACCURACY

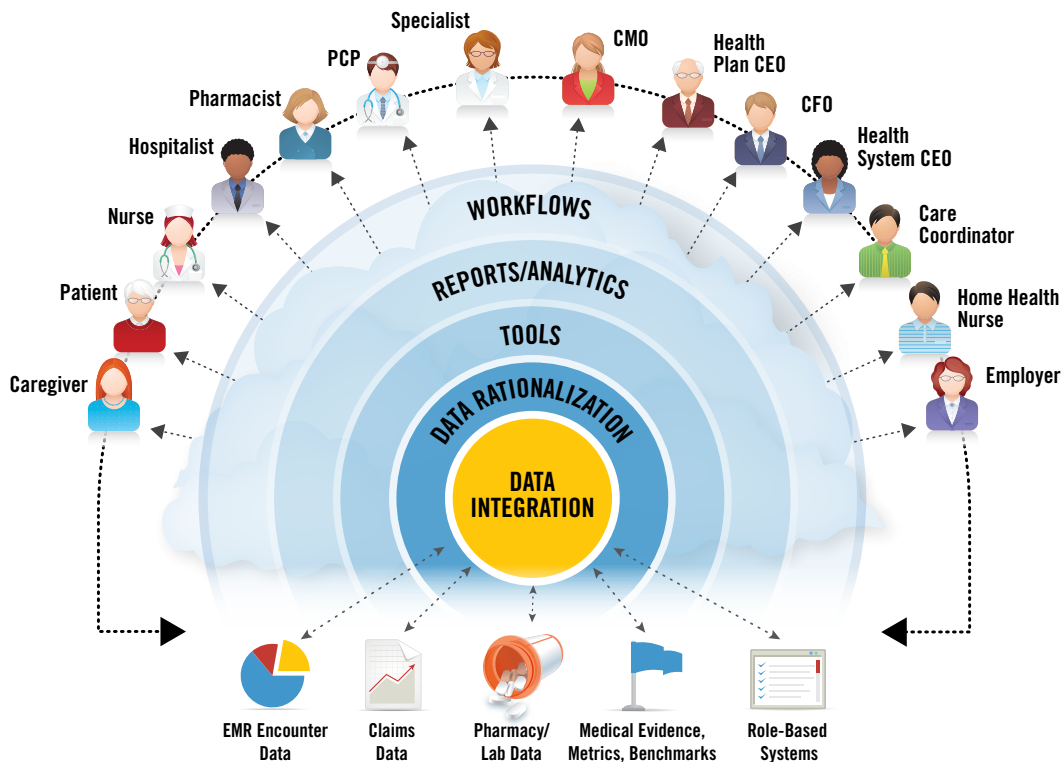
Analytics serve as a powerful tool in enabling value-based care decisions. Analytics become even more powerful when they are fed by numerous data sources and clinical and claims/cost data, including historical health screenings, biometrics, ICD-9/10 codes, CPI codes, and comparative cost information. Once the data is turned into analytics — through Automated Reporting — reports are generated and sent to the stakeholder they impact most. With these reports, a physician's effectiveness is enhanced with the ability to accurately see how many patients in his/her population could benefit from weight management programs to prevent chronic conditions. With advanced analytics and reports, a health system can see what conditions are causing an increase in utilization and cost and implement care management programs, such as diabetes, to manage the reported conditions. Good data yields good analytics and good reports that enhance effectiveness and enable informed decision making.

## “TRUE UP” CREATES BETTER DATA

Data “true up” capabilities are a necessity for empowering providers in value-based care. In a system of coordinated care, “true up” refines the accuracy of information available to all those who have authorized access and enables better decisions, coordinated care and patient health outcomes.

The Lumeris Accountable Delivery System Platform (ADSP)<sup>®</sup>, which was purpose-built for accountable care, has accepted claims/cost data since its beginning. When a provider enters “true up” input, the ADSP shares it across the continuum of care, informing care decisions for individual patients as well as populations.

## ACCOUNTABLE DELIVERY SYSTEM PLATFORM (ADSP)



## PAYERS AS ALLIES, NOT ADVERSARIES

Adding claims/cost and other data in the population management workflow can be done today in collaboration with a payer. Aligned incentives can motivate providers to update the payer's shared portal, creating the single best source of truth for the health care ecosystem.

Tom Doerr, MD, identified the growing relationship that providers have with payers, known for their past reticence in sharing data. In addition to his primary care practice and work as co-founder of Essence Healthcare, Dr. Doerr serves as director of Innovation Research for Lumeris.

“The provider has a new ally in the payer, a former adversary,” said Dr. Doerr. “Payers and providers that are intent upon value-based success recognize that they share values around quality and cost. Within the Collaborative Payer® Model, a willingness to explore collaboration evolves into a foundation for trust.”

Health systems and payers that utilize the Collaborative Payer Model gain mutual benefits through the complementary integration of data.

## THE VALUE OF CLAIMS/COST AND OTHER DATA FOR HEALTH SYSTEM LEADERS

Pioneering opportunities that leverage data for better quality and cost outcomes are at the heart of Lumeris' proven technology-enabled solutions and frameworks, including the Nine C's® of Accountable Primary Care Delivery, the Collaborative Payer Model, Care Management, and Automated Reporting.

Clinical Data Integration through interfacing makes it easier than ever to integrate EMR/encounter data to complete a patient's health status.

There are many types of interfaces that can be used to extract data from an EMR:

Types of Interfaces	
<b>Interface</b>	Exchange of clinical and other information with an EMR
<b>Single Direction Interface</b>	Extracting data from an EMR for use in another application or platform
<b>Bi-direction Interface</b>	Extraction and insertion of data in an EMR from another application or platform
<b>Integration</b>	Exposing clinical data and actionable insights in the physician workflow within the EMR

Once data is extracted from multiple EMRs, aggregated with claims/cost data and exposed within a physician's workflow via the ADSP, real care delivery and business value can be realized by multiple roles, including administrators and providers:

- Physicians and care managers gain easy access to better data for making care decisions, expanding their potential for effective outreach to close gaps in care, and extending their ability to manage the health of the population, sub-populations and individual patients.
- Chief medical officers improve health system quality and value programs through a better understanding of comprehensive patient and population health, and consolidated, up-to-date data that can be accessed and analyzed at any time.
- Chief financial officers apply integrated data in order to optimize the organization's care management, meet documentation requirements, reduce risk, decrease utilization, and improve profitability.

As an example, the chart in Figure 3 shows population management made possible through clinical data integration with claims/cost and other data.

Relative to the amount of fee-for-service (FFS) spending on sicker deciles of the population, the Accountable Primary Care (APC) Model<sup>SM</sup> spent four times more on the healthiest decile (screenings, closing gaps in care, etc.). The APC model overall average spend was 70 percent of FFS expenditure level.

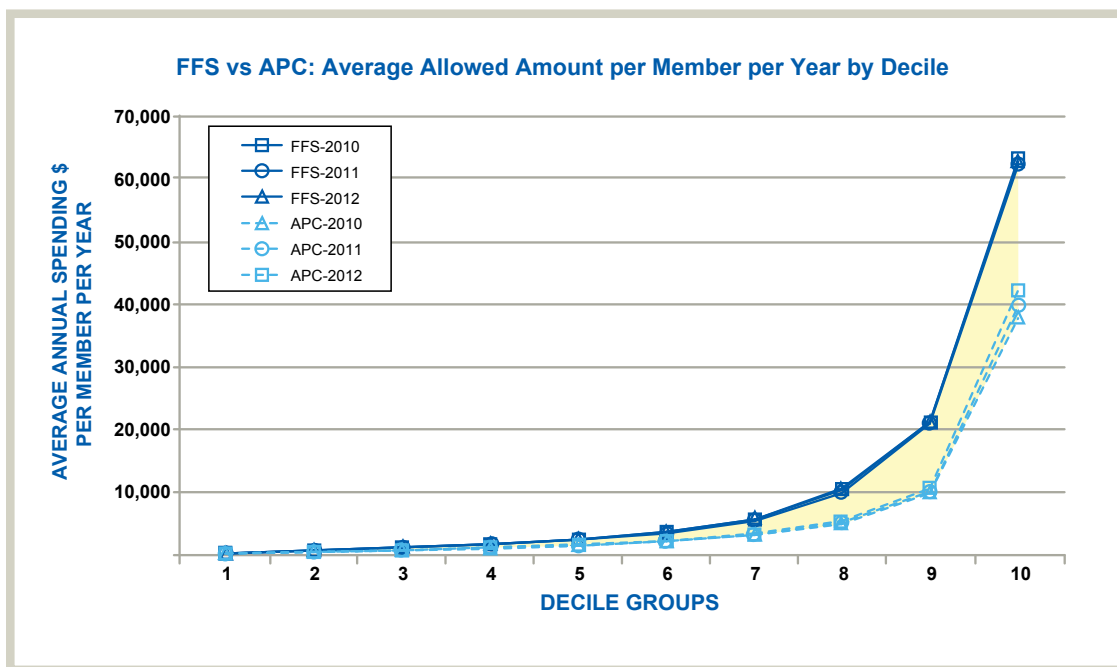


Figure 3. FFS vs. APC. Source: Lumeris.

## LOOKING AHEAD

The industry has embarked upon a new phase of its transformation. Early results indicate that value-based care will deliver on its promise over time.

New capabilities serve as beacons for early adopters that are ready to climb the next peak in their journey. For health systems and providers on the path to value-based care, now is the time to add claims/cost and other data to the population management workflow.

## ABOUT JIM HANSEN

Jim Hansen is an accomplished health industry executive with more than 20 years of experience in organizational leadership, strategy consulting, process improvement, system development, implementation, and operations for health care delivery, health plans, and employer purchasing. Before joining Lumeris, Mr. Hansen led key national policy initiatives to support value-based purchasing/outcomes and health delivery system transformation in his role as Vice President at Dossia Consortium, an employer-sponsored entity. Previously, he served as CEO at CareEntrust and Vice President at IDC Health Industry Insights, as well as holding key roles within First Consulting Group (now CSC), United Healthcare/Optum and HealthPartners Health System. In his current role, Mr. Hansen leads Health Policy for Lumeris and provides consulting services to clients.

## ABOUT LUMERIS

Lumeris is an accountable care delivery innovation company offering health systems, payers and providers operational support, technology and consulting services. Our technology-enabled solutions and services help health care organizations design, build, operate, measure and optimize any accountable care model to accomplish the Triple Aim *Plus One*: better health outcomes, lower costs and improved patient *plus* physician satisfaction. The depth and breadth of Lumeris' solutions—combined with its near decade of experience in accountable care—make the company an ideal partner for any health care organization seeking the benefits of a better connected, aligned and informed accountable delivery system. For more information, 1.888.586.3747 or Lumeris.com.

## ABOUT THE ACCOUNTABLE DELIVERY SYSTEM INSTITUTE

The Accountable Delivery System Institute (ADSI) is the premier resource for hospitals, health plans, and large physician groups seeking proven solutions and practical guidance on establishing successful models of accountable care.

ADSI is led by the seasoned experts who established one of the nation's first successful accountable delivery systems — long before “accountability” was an industry buzzword or there was an acronym to describe it. Through their efforts, they improved the management and delivery of health care by instituting rational economics, new operational processes, and innovative technology to enable value-driven health care decision-making throughout the enterprise. The result: improved revenue, lower per-capita costs, and better patient outcomes.

The ADSI faculty's years of refining this accountable delivery system have yielded valuable insights into what does and does not produce accountable health care. Through ADSI, these insights and solutions are now available to others seeking help in building their own accountable delivery system.

To learn more, visit [www.adsinstitute.org](http://www.adsinstitute.org)