WHITE PAPER

Data:
The Steel Thread that Connects Performance and Value

An Encore Point of View

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April 2016

AN ENCORE POINT OF VIEW

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EXECUTIVE SUMMARY

Population health management. Care coordination. Predictive analytics. Performance improvement. Electronic clinical quality measures. What does all this mean? How do we address all these new requirements? There is a common thread that will allow a healthcare organization to begin addressing the transition from volume to value and experience success. That common thread is this: accurate, consistent, reliable data.

Here's a snapshot of what that means:

- *Population health management* – requires access to the full cohort of all patients a health system is responsible for that are covered by at-risk/incentive-based programs and contracts. Requires understanding the historical utilization patterns and quality outcomes, and stratifying the population for appropriate care management to meet quality and cost objectives
- *Care coordination* – requires complete information about a patient from all settings of care to manage patient care effectively, prevent readmissions and Emergency Department (ED) visits, ensure that appropriate preventive measures are taken, and close gaps in care
- *Predictive analytics* – requires an historical base of data to determine patterns and trends that can then be translated into algorithms that automatically identify patients at risk for certain adverse events (e.g., missing an office visit, not refilling a prescription, reference lab results out of range, or frequent ED visits) based on real-time data about the patient
- *Performance improvement* – requires data about patients that measures specific quality and utilization metrics and compares and contrasts different approaches to care to identify optimal clinical processes. Then measures progress on adoption of revised clinical processes and improvement in quality and utilization metrics. The use of data and metrics then supports a continuous performance improvement cycle as new clinical approaches are introduced based on the most up-to-date clinical research
- *Electronic clinical quality measures* – requires data captured in the course of patient care delivery to report quality metrics automatically for regulatory compliance and commercial contract requirements, largely in support of risk-based/incentive-based programs and contracts

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While healthcare has always been "data rich and information poor," the real financial impact of not having current, accurate information about cost, quality, and satisfaction is raising awareness that the data collected in Electronic Health Records (EHRs) across all care settings has additional value. And that the data in other systems – scheduling, practice management, patient accounting, materials management, time and attendance, general ledger – as well as data from outside an organization (e.g., claims data) must be combined with the clinical data across all care settings to provide a holistic view of populations of patients and organizational performance. To ensure that the right data is available in the right format at the right time to support population health management, care coordination and other initiatives that healthcare organizations are involved in, data must be managed, protected, and governed as a valuable asset.

Using data captured in the course of providing healthcare has never been more important. The shift from fee-for-service to fee-for-value demands that healthcare organizations understand the quality and cost of the care they provide to the communities they serve. To succeed in the new world of at-risk contracts while being responsible for both clinical outcomes and the overall health status of defined populations, healthcare providers must be able to make data-driven decisions to support performance improvement. Healthcare organizations must harvest the data from across their portfolios of implemented applications and re-purpose it in pursuing the goal of healthier people at optimal cost. This pursuit requires that organizations integrate and aggregate data from across the continuum, including data from affiliated organizations, and in some cases, non-affiliated organizations and providers.

Harnessing the intrinsic value of data across a healthcare enterprise is a journey, though, and not a task. That journey becomes even more challenging as the boundaries of a healthcare enterprise expand beyond historical limits. It requires the perspective of time and the realization that the foundation established today must be sound, extensible, and scalable. It also requires the recognition that leveraging data as an enterprise asset and being able to turn it into actionable information is not only about technology; people and process are equally important and more difficult to align. While certain fundamentals apply to all organizations, any approach to managing enterprise data must fit the size, scope, and culture of an organization while addressing the realities of at-risk relationships. One thing to keep in mind, however, is that using data to support the measurement, reporting, and analytics required by the industry shift to value-based care always begins at the point when the data is initially captured. The single biggest source of enterprise data is the EHR. When migrating to a new EHR or optimizing an existing implementation, keeping in mind the secondary use of the data captured as a by-product of care delivery should be one facet of workflow decision making.

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IT'S ALL ABOUT THE DATA

With new payment and delivery models, IT leaders are being asked to support a fast-moving target of numerous and varied requirements related to care coordination, advanced analytics, data-sharing, and exchanges with external entities and tele-health, to name a few. The effort to develop electronic reporting capabilities, which support standardized analysis across incentive and value-based programs, is underway. Standardized data capture will be embedded in nearly every aspect of care delivery, from identification, stratification, and assessment of populations and individual patients all the way through real-time care planning and care plan monitoring. This data capture also includes combining and analyzing large data sets from all providers and payers (both within and external to the organization) to calculate the quality and operational electronic measures (eMeasures) required to demonstrate performance.

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A cross-functional data governance structure and process are critical for an organization to harness the value from its data assets. This governance is neither an IT function nor is it a department in the organizational hierarchy. Rather, data governance brings together the key stakeholders from quality, finance, administration, IT, and other areas to make decisions on how data should be captured, standardized, used, and secured. Through data governance, the organization documents by data element, specifying which systems capture the required data. It guides decisions on how to rationalize inconsistencies in data that are allegedly the same. It governs how the data can be used to ensure appropriate access, security, and patient privacy. And if needed data is not captured in a way that is usable (or not captured at all), it identifies the need for changes in workflow and system implementation and engages the right stakeholders to effect the required modifications. These tasks are essential to successful use of data and require the considered support of key stakeholders with top-down commitment across the organization.

Data governance supports the ongoing tactical process of ensuring data quality. The false narrative that has been repeated over and over is: once we establish a position on our data, our work is completed. However, the reality is that data does not "stay put" once EHR configuration changes and workflow modifications are implemented to capture required data; it needs to be continuously monitored to identify variations as early as possible. For example, one way to

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effectively monitor data quality for electronic clinical quality measures (eCQMs) is to track the calculated rates on at least a weekly basis. Typically, a sudden change in an eCQM rate indicates "broken data" rather than an aberration in clinical care. Sometimes changes are made to data – outside of the data governance process – that result in inaccurate data. Early detection enables early intervention to get things back on track. For example, while monitoring electronic measures for Meaningful Use, one organization saw a sudden decline in Computerized Provider Order Entry (CPOE) adoption from the high 90% to low 30%. Early detection found that someone had gone around the data governance process and added a provider type, then changed many providers to that type. This action was not supported by the measure, however. Once the errant provider type was removed and the providers shifted back to the correct value, the rate returned to the correct level.

HOW POPULATION HEALTH MANAGEMENT USES DATA

Hospitals have historically identified their populations based on geographic boundaries, some of which are real and others a bit fuzzy depending on their location and competitive environment. For example, if you ask the marketing department at a hospital to define their market, they will most likely provide you with a list of zip codes of the market they serve. Whether all those individuals living within a particular zip code use the services of that hospital is another topic of discussion. However, it does serve as a starting point for a healthcare organization to begin understanding the makeup of the patient population they serve.

Taking this market information and analyzing claims data for all patients within that market is a vehicle for the health system to better understand the health status of the patients who reside there. Imagine the value of knowing how many diabetics are in your market and starting to reach out to them with specific information on how to deal with diabetes. By knowing who they are, you can send them information on support groups that your organization already sponsors and educational programs that you are already providing. Most importantly, you can determine if a patient has an identified primary care provider who is actively managing his or her condition and is part of the integrated primary care providers for the health system, or if the patient is ignoring the disease and, as a result, is a frequent flier in your ED. With the right tools, this same query can be extended to any number of disease states and allows you to begin to plan and stratify your patient market with very rudimentary information (e.g., claims data).

Rather than submitting the data for a sample of patients, the eCQM world requires data to be submitted for all patients.

Once the patient population has been identified, you can build on that foundation with data you likely already have available by integrating information from your inpatient and outpatient EHR, lab system, pharmacy system, and other clinical and administrative systems. This integration allows you to start to understand more fully the status of this patient and the risk that he or she represents. Is she part of an existing Medicare Shared Savings Accountable Care Organization (ACO), and, if so, is your organization appropriately managing her care plan? Has the patient received all his preventative care screenings that are an important component of the quality measures used to determine new value-based reimbursement? If not, this is both a quality improvement and revenue opportunity for the healthcare system.

THE ROLE OF DATA IN PREDICTIVE ANALYTICS

Measuring and understanding past performance is an important aspect of improving overall quality and financial outcomes. But closing the barn door before the horse gets out requires predicting the likelihood of adverse occurrences so preventive steps can be implemented. A useful example is predicting the risk of readmission for a given patient while that patient is still in the hospital so steps can be taken to mitigate that risk. Studies have shown that many factors influencing whether or not a patient is at risk for readmission are outside the direct control of the hospital. Psychosocial elements (e.g., support system at home), access to follow-up care with a physician, availability of transportation to get to the follow-up visit are some examples of factors that weigh heavily in determining risk of readmission.

A properly functioning risk of readmission algorithm requires accurate data from a variety of sources (e.g., patient self-assessment, EHR, scheduling, discharge planning). The objective of the algorithm is to tag every patient who is at risk without too many false positives (patients not at risk for readmission). Why is it important to not over- or under-identify patients at risk? To prevent readmissions, healthcare organizations assign care coordinators to follow up with the at-risk patients via a variety of communication channels (e.g., phone, email, text, even home visits). With too many false positives, the care coordinators won't be able to contact every patient and won't have the time available to mitigate obstacles for those patients truly at risk. This inefficiency minimizes the effectiveness of the care coordinators or requires the healthcare organization to hire more care coordinators than are really needed to manage the population. Too many false negatives means patients are "slipping through the cracks." Despite

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the investment in care coordinators, some patients are not getting the attention they need post-discharge, and they end up back in the hospital. Accurate data ensures the readmission algorithm operates in the "sweet spot" between over and under identifying patients at risk.

IN CLOSING...

Data. It's never been more vital not only to the clinical performance, but also to the financial success of healthcare organizations. It must be consistent, accurate, and reliable to support the array of measurement, reporting, and analytic needs of every organization on the journey to value-based healthcare delivery and re-imbursement. Quality data doesn't just happen; every organization can start the journey now to ensure their data forms a firm foundation for their future needs.