MASTER DATA MANAGEMENT
7 QUESTIONS TO CONSIDER

Building Master Data Management Solutions
for ACO's: 7 Questions to Consider

While healthcare has always been dependent on data, the transition to value-based reimbursement dramatically raises the stakes. Specifically, it requires a degree of integration between data sources that previously was not required under a fee-for services regime. It also raises the ante for data quality. It is not enough to simply bring disparate sources of data together and hope that the inherent variability of the sources is somehow reconciled. To be useful, integrated data must adhere to a common set of standards and nomenclature so that it can be effectively put to work. This is especially critical for Accountable Care Organizations (ACOs). One approach to this issue is the deployment of a Master Data Management system (MDM). An MDM solution allows a healthcare enterprise to standardize and pool critical data into a single database, providing a common point of reference for ACO reporting and management. This white paper discusses 7 questions to consider in preparing for and implementing an MDM for ACOs.

ByteSizedSolutions

1. Is your data ready?

To be effective, an ACO must not only modify clinical operational practices—the way care is provided—but it also needs to report on the outcomes of these modifications. Did they work? Specifically, were the modifications effective in terms of the requirements of the ACO? A primary source of data to answer these questions resides with payers in the form of claims, eligibility and pharmacy benefits information. While data standards exist for these items, the way they are implemented at the individual payer level is highly variable. Managing this variability is not only labor intensive, but potentially impedes the ability of an ACO to effectively assess its performance. Master Data Management directly addresses the issue of data quality and data variability by introducing processes and technology that standardize and normalize large data sets coming from multiple data sources. These normalized data sets provide the basis for ACO performance analysis and management.

2. Are your people ready?

Implementing a Master Data Management solution is both a technical and organizational endeavor. Issues of data stewardship and data governance assume a new level of importance when pooling and transforming data from multiple sources. The MDM needs to reflect both ACO requirements, as well as the practical considerations of the data sources. As a result, an MDM team representing the diverse stakeholders of the organization must be established to oversee the design and implementation of the solution. Additionally, once the MDM is in place, staff and leadership are required to manage the system from both an operational and data stewardship perspective.

## 3. Do you understand your requirements?

Since the primary use case for MDM (at least within the context of an ACO) is providing for data for reporting and other clinical or financial tools, the first step is understanding these requirements. This means bringing together ACO subject matter experts, business owners of third party tools that will consume the MDM data, and IT staff that will be tasked with managing it. MDM service providers can be very helpful in this process by providing an outside, objective perspective. The combination of internal and external teams help facilitate a thorough vetting of the core assumptions and requirements of the project.

4. What tools and services do you need? And where will you get them?

An MDM is not an off-the-shelf project. It is highly customized to meet an organization's specific requirements. As a result, an MDM is typically deployed by third party service providers that bring together a unique combination of healthcare domain knowledge, data integration tools and project management skills. Here are some of the characteristics that one should consider in an MDM service provider.
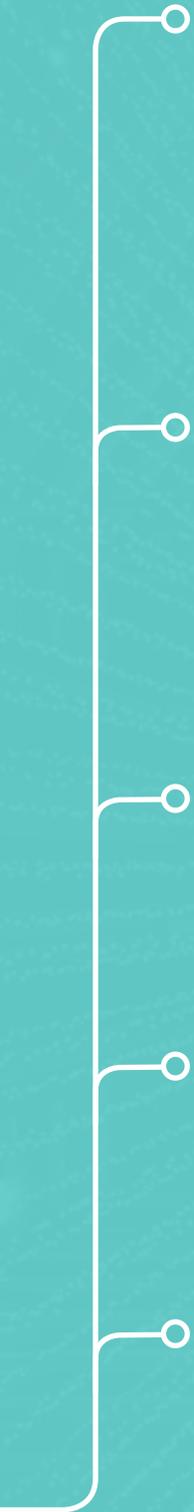
Healthcare domain knowledge and experience:

Healthcare is unique, with idiosyncrasies and requirements that will be challenging for service providers with limited healthcare experience. Ideally, your MDM service provider has a grasp on both the technical aspects of the project (data integration and standardization) and organizational needs (defining requirements, data governance and data stewardship). Your service provider should be able to guide you on the subtleties of MDM design & support as well overseeing the technical implementation. Experience with organizations of similar size to yours is also essential from a technical and project perspective. Can they handle your data requirements? Can they manage complex projects with many moving parts?

Data tools:

The heart of an MDM system is the deployment of sophisticated data tools that are capable of consuming and modifying source data in a manner that meets the project requirements. In contrast to traditional ETL (extract/transfer/load), an MDM system raises the bar in terms of data quality and management. As a result, service providers should have tools that not only offer robust data cleansing and validation, but also means of evaluating data completeness (what data is missing), as well as data lineage and audit tracking (where did the data come from, who has touched it). These tools are necessary for ensuring the quality of incoming data, while providing efficient data management tools when exceptions occur.

Programming capability:

It is reasonable to assume that not all the myriad requirements of an MDM project will be met by the deployment of established tools. Therefore, it makes sense to contract with MDM service providers capable of developing customized components. This capability helps ensure a robust solution that is fully integrated within the project.

Vendor support and agility:

Deployment of an MDM is an iterative process requiring dynamic feedback between the healthcare organization and the service provider. This favors smaller, focused service provider teams capable of understanding nuanced and changing requirements with the ability to respond quickly and creatively. Your service provider needs to be agile and innovative enough to successfully support you.

Expense:

As one evaluates different service providers, it will be critical to get "apples to apples" proposals so that one can effectively compare costs. This can be challenging if different vendors have pricing models that do not match. A way to manage this is to develop requirements documents that define the end state of the project. Since it is reasonable to assume that an MDM project will have some modifications from the original plan, it is essential to understand how vendors deal with change orders.

5. What does implementation look like?
How long does it take?

While an MDM project will be new to most organizations, the implementation steps are like other IT projects. **They include :**

Defining Requirements:

What do you want your system to do? For ACOs, this a complex question that requires a coalescing of financial, organizational, technical and clinical elements. The requirements document is both a vision statement plus a detailed guide to what is necessary to achieve the vision. Requirements should also include staffing for support & maintenance and specifying computing resources to power the MDM solution.

Analysis of Existing IT infrastructure:

An MDM is an add-on to an existing IT infrastructure, not only consuming and transforming data but also populating third party tools. Mapping the existing systems and how they will interact with the MDM provides a practical guide to deployment.

Plan:

The plan brings together your findings into a blueprint for deployment. The duration of the project is related to its complexity (i.e. the number of data feeds, variability among data sources, scope of requirements, and the status of the IT infrastructure). Project timelines can vary from 4 to 18 months. An MDM project plan should be a detailed but dynamic document, subject to modifications as issues present themselves during deployment.

Implementation:

Making the transition from planning to implementation immediately tests all the core assumptions about the project. In the early stages, implementation offers the opportunities to refine and hone working relationships, both internally and with third party service providers. Practical considerations reign, such as providing data access to third party service providers (and completing required paperwork) and overcoming the inevitable system obstacles that are part of probing a complex and secure IT system. Iterations are likely, putting a premium on securing nimble and agile internal teams and external service providers.
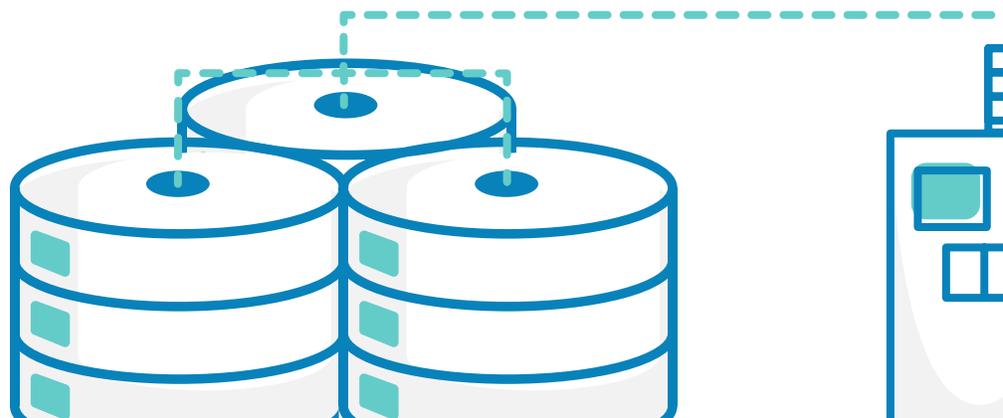
6.   How much will this project cost?

Third Party Service and Software providers:

A vendor quote should provide a clear understanding of how it is priced (project vs. hours), what is included (list of services), what is not included and change order management if the scope of the project changes. Additional fees for software and related maintenance should be included.

IT Expense:

MDM is a processing and storage intensive system that may exceed the capabilities of your current resources. Your MDM service provider should be able help you scope IT requirements so that you can budget and procure.

Internal Resources:

An MDM project requires internal leadership and active participation of key staff members, particularly in the planning stage where requirements are being scoped and defined. As the heavy lifting of planning transitions to implementation, project leads and staff will need to be allocated to work in concert with third party service providers. Since the plan will be iterative based on implementation activity, overall project leadership needs to remain in place through go-live, ultimately transitioning to an active support mode (data stewardship and governance) charged with maintaining the health and vitality of the MDM system.

7.   What is the return on investment?

The cost of low quality data is very high. Managing and correcting exceptions is labor intensive and often complex. Persistent data anomalies also undermine confidence in the data and may constrain the organization in its ability to comply with ACO reporting or management requirements. An MDM solution promises higher quality data with less rework, more efficient data management tools and a foundation for improved ACO management and reporting. The net return: lower labor costs for exception handling and more effective performance against ACO contracts. While ultimately it is the success of clinical operations that will determine return on ACO contracts, it is impossible to assess clinical effectiveness without high-quality data. The two are inextricably entwined.

Summary

ACOs and other value-based reimbursement methods increase the importance of data quality. However, variability among data sources makes achieving this difficult using traditional ETL (extract, transform, load) methodologies. A Master Data Management system increases the quality of incoming data while providing more efficient data management when exceptions occur. Deploying an MDMS system is both a technical and organization endeavor that involves internal project leadership, careful requirements planning among the various stakeholders, and a clear understanding of the existing IT infrastructure. MDM service providers can assist in both the planning and implementation process. Services providers should have rich healthcare domain expertise in addition to technical capabilities. Additionally, they should be both nimble and technically creative in response to both challenges and obstacles that can occur within the project. Master Data Management provides a return on investment by lowering the cost of managing data quality issues and by increasing the ability of the organization to effectively monitor and report on ACO related performance objectives.

If you are interested in a more technical discussion or scoping of your conversion project, we urge you to contact Steve Buttitta of Byte Sized Solutions at **sbuttitta@bytesizedsolutions.com**

Steve Buttitta
President

Byte Sized Solutions Headquarters

8318 Lochlaven Lane
Chapel Hill, NC 27516
Tel: 773.859.7172
Fax: 773.435.6673
sales@bytesizedsolutions.com