Strong Data Fundamentals Critical to Maximizing Data Opportunity

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By Stephanie Crabb, MA, and Leah Fullem, MHCDS

Value-based healthcare IS changing how things work for everyone. The front end of this change—the way that clinicians, patients, and caregivers participate in healthcare—is anchored by the electronic health record (EHR) and the increasingly robust constellation of specialty and supporting applications, connected devices, and platforms. On the back end, revenue and financial models—the business of healthcare—are being redesigned to align with improved outcomes and efficiency. And at the center of this transformation lie data and information.

Healthcare organizations like the University of Vermont Health Network (UVMHN) are increasingly turning to formalized data governance (DG) and enterprise information management (EIM) to ensure that their data and information assets are at the ready to support the value-based mission.

Creating dedicated, operational centers of excellence for data management and analytics is a growing trend in healthcare. With the rise of these new organizations comes new functions and roles, many well-suited to the skills and expertise of health information management (HIM) professionals.

Getting Started with Data Governance

UVMHN had long anticipated the critical role that data and information would play in its future. The organization attempted to implement DG for the first time in 2009 and again in 2012 without success. But 2017 ushered in renewed focus and resolve.

As UVMHN has grown, so has its data and information footprint. As the organization began to execute on more integrated delivery strategies and entered into value-based care, their disparate data environment was proving not only inefficient, but inadequate. UVMHN's first step toward correcting this issue was to standardize and streamline its application portfolio, resulting in the selection and implementation of many new network-wide solutions. These investments and the foray into value-based care provided the opportunity to revisit data governance and data stewardship principles to support better analytics.

An Analytics Steering Committee (ASC) was formed with senior leader representatives from information technology, finance, human resources, marketing and communications, population health and quality, clinical integration, physician leadership, and accountable care to drive next steps. The ASC initiated a current capabilities and readiness assessment for data governance with an expert third party that offered a framework for data governance specifically designed for healthcare. The assessment yielded many findings, but the most significant was that internal demands for data and analytics had grown beyond UVMHN's capacity to successfully respond. The assessment also found the following issues:

- Lack of processes to field, clarify, and respond to requests for needed reports and analytics support
- Duplication of effort across different departments resulting in conflicting or redundant reports and analytics support due to different source systems, tools, methods, definitions, etc.
- Lack of trust in reports and analyses due to inconsistent data quality
- Inconsistent availability of timely data and information for leaders and staff to make key decisions
- Single points of failure for certain reporting functions, such as staff without backup, documentation, or reliable tools
- Unclear data ownership
- A well-intentioned but undereducated workforce (i.e., data and data management)

Using the reference framework provided by the expert third party, and based upon the assessment findings, a three-year roadmap for data governance and data management was documented and adopted.

Taking Simultaneous Action with Data Governance and Enterprise Information Management

Coming out of the assessment, the ASC, chaired by UVMHN's chief executive officer, adopted a "failure is not an option" mindset. The ASC took a bold step to cement its mindset with action. It proposed the inclusion of an operational objective for UVMHN's fiscal year 2018 strategic plan that called for the creation of an organizational structure for data management, analytics, and reporting. The proposed objective was adopted in the strategic plan as proposed. Not only did UVMHN choose to embark on something greater than the establishment of data governance, typically a voluntary function in most organizations, but the organization also appreciated that to realize its vision data management needed to be operationalized as its own network function. The ASC did more than make a verbal proclamation—it prioritized these efforts and codified them in the enterprise strategic and performance-based compensation plan to hold themselves and other key stakeholders across UVMHN accountable.

Work began simultaneously in earnest on these two parallel paths—data governance and enterprise information management operations.

Network Data Governance

A Network Data Governance Council was formed and began meeting in February 2018. The council, with a membership of over 25 individuals representing more than 20 clinical and operational functions (including HIM), has documented its charter, documented the first-ever enterprise data governance policy, initiated its first data quality improvement effort for the provider data domain, and formed three working committees—Policy, Training/Education, and Data Quality—to plan and respond to the healthcare network's needs in these areas. The Network Data Governance Council meets monthly and has decision-making authority to implement network policies and standards for DG. The council membership is diverse with varying levels of data experience and expertise. These early formative months have also focused on core education to raise the "data IQ" of council members to equip them with the critical knowledge and confidence needed to execute on the charter.

Data Management Operations

The three-year DG roadmap established the plan for an iterative build of a data management office (DMO) that would centralize strategy, operations, accountability, and authority for data management. The "DMO 1.0" scope of work and leadership structure that was documented in the three-year roadmap was validated and refined throughout the summer of 2018. This was a collaborative process between operations, human resources, and executive leadership as it represented the "first-of-its-kind" build of a new network service.

Figure 1

Adopting a data governance framework creates structure and context and offers the content and vocabulary that people need to be successful. A framework offers guidance regarding the work that needs to be done and provides the guard rails to keep the work on track, as well as measure progress.



Graphic provided with permission by Immersive

Plans for 2019 and Beyond

As in 2018, UVMHN leadership has prioritized data management in the network's strategic objectives for fiscal year 2019. The 2019 objective centers around the centralization of the DMO functions associated with enterprise reporting and analytics support, as well as the implementation of data stewardship in the network-wide implementation of an EHR system.

Since the start of the 2019 fiscal year in October 2018, UVMHN has installed its network vice president of enterprise information management and analytics and its first two DMO directors, with the remaining DMO 1.0 leaders to be in place by spring 2019. The DMO leadership team is taking action on the development of its own strategic plan and providing tactical, responsive support to a multitude of new application implementations and critical data/information needs.

The most transformative objective for the DMO team in early 2019 is to centralize the request/response process for reporting and analytics support, and to operationalize the response to these requests. This is much more significant than creating a "DMO inbox." The human resources infrastructure required to deliver on this centralized process is a significant change management activity unto itself. The DMO leadership team is laser-focused on understanding how the work of reporting and analytics is being done today so that it can introduce the right changes to harness the human potential and talent that exist in UVMHN and align that talent with more productive processes, tools, and technology.

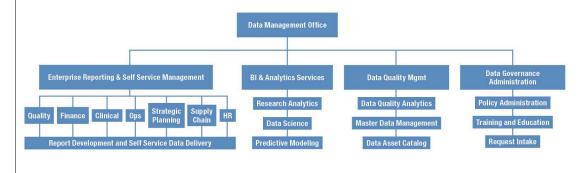
Data stewardship, data quality, workforce awareness and training program development, and next-generation network policy development are the early 2019 priorities for the Network Data Governance Council.

Nearly 100 key contributors to the EHR implementation have been trained on key data stewardship principles and functions. They are serving as "data delegates" inside the implementation to ensure that data management issues/decisions (data dictionary, data-driven workflows and processes, reporting and analytics outputs, etc.) are discussed, documented, and/or escalated in real-time. HIM professionals from patient access, revenue cycle, clinical documentation improvement, and other HIM domains are active contributors and participants on these teams. These data delegates are blazing the trail for broader and more inclusive data stewardship going forward.

The Provider Data Quality Initiative has been mainstreamed with the EHR implementation because getting the provider data set "right" in the implementation is critical. A Provider Data Work Group was spun out of the Network Data Governance Council Data Quality Committee. New technologies for provider credentialing and data-as-a-service "data enrichment" have been procured to improve provider data quality, and data stewardship for the provider data domain is taking shape.

Figure 2: Data Management Office 1.0 Functional Structure

The formation of a DMO creates a number of new functions and newly-formed positions that require diverse skill sets. This figure illustrates the first phase (1.0) of the functional structure of the UVMHN DMO. As more healthcare organizations form DMOs, Analytics Centers of Excellence, and similar organizational structures, new professional opportunities and career pathways will emerge for HIM professionals.



Communication an Important Aspect of Program

From day one, UVMHN understood that success with data management would only be achieved if a shift to data culture was embraced and realized. At the heart of any culture or change management effort is a communications plan.

UVMHN's communications team is represented at the ASC, at the Network Data Governance Council, and in the DMO. A formal communications plan has been documented and is being implemented to educate, engage, and empower the UVMHN workforce with the right information at the right time to participate in the data management initiative.

Lessons Learned

Some of the most significant lessons learned that have been critical to UVMHN's success with their data management efforts are:

- Ensure senior leadership support has been secured and there is the right "tone at the top."
- Understand that implementing DG is a change management effort above all else, and that an organization's culture needs to be supportive of new processes and ideas around data management.
- Be honest about operational, cultural, and tactical readiness, and scope the organization's expectations and effort based on this readiness.
- Adopt or establish a framework and structure for the organization, including a charter, program plan, tactics, and metrics.
- Ensure that staff have adequate empowerment, authority, accountability, and operational support, and that the organization has technical readiness for the journey.
- Anticipate the future evolutions of data management beyond just DG—the subcommittees, the working groups, the stewardship structure, and the operational processes.
- Choose real use cases and improvement projects that provide a burning platform. They may not always be the easiest ones to solve, but they tend to get the best support. Passionate stakeholders, willing to put in the sweat equity, who are given the right roles, training, etc., often become the champions that DG and EIM programs need. Make sure that the work identified meets the litmus test of being meaningful to a key person, to a department, and to the enterprise data strategy.

• Be prepared to move beyond voluntary DG and don't hesitate to consider a data management center of excellence operations model.

Above all, a lesson learned is that the past does not have to be prologue. History does not have to be a hindrance. There are many organizations that have attempted to initiate DG and failed. There are others that have rushed to Big Data without the critical infrastructure that DG and tactical enterprise information management provide. What is most important is to recognize an organization's opportunity and take action on it, while being aware of the response.

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