ANALYTICS and DATA MANAGEMENT

The Analytics and Data Management section of the survey assess an HCO's performance in four topic areas:
1. Analytics Leadership/Structure
2. Data Management
3. Analytical Capabilities
4. Data Governance

Section 1: Analytics Leadership/Structure

(PDF-031) Whom on your executive team is primarily responsible for leading your organization's analytics and data management efforts?
(Check one)
   A. Chief Data Officer (CDO), Chief Analytics Officer (CAO) or similarly titled role
   B. CIO
   C. Other executive (e.g., CFO; COO)
   D. A non-executive team member (e.g., Director of Analytics)
   E. We outsource this function (external data/analytics leader/vendor)
   F. No data/analytics leader

The intent of this question is to ascertain if the HCO has a dedicated person overseeing the HCO's data analytics and data management efforts.

(PDF-032) Which of the following best describe the management of data analytics and staffing in your organization?
(Check one)

A. Across the whole organization, both analytics staff and data management are centralized in one unit
B. Analytics staff are spread across multiple units and data management for the whole organization is through one unit
C. Analytics staff for the whole organization are centralized and data management capabilities are spread across multiple units
D. Across the whole organization, both analytics staff and data management are decentralized and spread across multiple units
E. We don't have a purposeful approach to managing analytics staff or a data management strategy

The intent of this question is to determine how data analytics is structured and staffed in an HCO.

NOTE, for clarity, the question should be read as… "**Which of the following best describe the management of data analytics and (==attendant==) staffing in your organization?**"

Section 2: Data Management

(PDF-033) Which of the following data storage/analytics applications models does your organization use?
(Check all that apply)

  A. Clinical systems on cloud services
  B. Non-clinical systems on cloud services
  C. Data as a service (DaaS)
  D. Infrastructure as a service (IaaS)
  E. Analytics solutions are on cloud services
  F. Analytics solutions are on-premise
  G. Storage virtualization
  H. Redundant data center (Off-site backup)

The intent of this question is to assess the varied ways HCOs store data/house analytics applications.

A. Clinical systems on cloud services

Reliable clinical systems, like Electronic Health Records (EHR) and Medical Imaging, are the foundations of patient-centric care and arm providers with insights and tools to improve health outcomes.

Cloud computing in the healthcare industry describes the practice of implementing remote servers accessed via the internet to store, manage and process healthcare-related data. This is in contrast to establishing an on-site data center with servers, or hosting the data on a personal computer.

Clinical Information Systems solutions on cloud services help clinical teams to aggregate, store, manage, and transmit healthcare data across the entire continuum of care to optimize costs, improve core processes, and empower clinicians with the right data at the right time..

B. Non-clinical systems on cloud services

Non-clinical information system, is a computer system that allows to manage, store, and recheck large amount of medical information in hospitals such as details about treatment given to the patients, health history of patients, prescriptions and other specific remarks, related to patient. This entire information is electronically kept together for the present or future use, this system is also popular as hospital information system.

C. Data as a service (DaaS)

Data as a service (DaaS) is a data management strategy that uses the cloud to deliver data storage, integration, processing, and/or analytics services via a network connection. DaaS is similar to software as a service (SaaS), a cloud computing strategy that involves delivering applications to end-users over the network, rather than having them run applications locally on their devices. Just as SaaS removes the need to install and manage software locally, DaaS outsources most data storage, integration, and processing operations to the cloud. While the

SaaS model has been popular for more than a decade, DaaS is a concept that is only now beginning to see widespread adoption. That is due in part to the fact that generic cloud computing services were not initially designed for handling massive data workloads; instead, they catered to application hosting and basic data storage (as opposed to data integration, analytics, and processing). Processing large data sets via the network was also difficult in the earlier days of cloud computing, when bandwidth was often limited. Today, however, the advent of low-cost cloud storage and bandwidth, combined with cloud-based platforms designed specifically for fast, large-scale data management and processing, has made DaaS just as practical and beneficial as SaaS.

D. Infrastructure as a service (IaaS)

Infrastructure as a service (IaaS) is a form of cloud computing that provides virtualized computing resources over the internet. In the IaaS model, the cloud provider manages IT infrastructures such as storage, server and networking resources, and delivers them to subscriber organizations via virtual machines accessible through the internet. IaaS can have many benefits for organizations, such as potentially making workloads faster, easier, more flexible and more cost efficient.

E. Analytics solutions are on cloud services

Cloud analytics describes the application of analytic algorithms in the cloud against data in a private or public cloud to then deliver a result of interest. Cloud analytics involves deployment of scalable cloud computing with powerful analytic software to identify patterns in data and to extract new insights.

F. Analytics solutions are on-premise

On-premises, also known as self-hosted, is a setup that allows databases and software to be implemented 100% on your own infrastructure. In practice, it means knowing where your data is stored, how it's handled, and who gets hold of it. This is because you keep the data on your servers.

G. Storage virtualization

Storage virtualization is the pooling of physical storage from multiple storage devices into what appears to be a single storage device -- or pool of available storage capacity. A central console manages the storage. Storage virtualization separates software from the hardware infrastructure to provide flexibility and scalability of storage resources. More and more companies are adopting this technology because storage virtualization helps them consolidate and manage their scattered data under a single console.

H. Redundant data center (Off-site backup)

A redundant data center architecture duplicates critical components—such as UPS systems, cooling systems and backup generators—to ensure data center operations can continue even if a component fails.

(PDF-034) Which of the following data sources send data to your organization's Enterprise Data Warehouse and/or Operational Data Store?
(Check all that apply)

  A. Clinical/EHR platform(s)
  B. Revenue cycle management
  C. Supply chain management/ERP
  D. CRM (Acute/Ambulatory/LTPAC)
  E. Patient monitor (near) real time data capture
  F. Artificial Intelligence/Machine Learning solutions
  G. Population health tools (Acute/Ambulatory/LTPAC)

The intent of this question is to assess the varied data sources the HCO is able to "digest" via the HCOs' Enterprise Data Warehouse (EDW) and/or Operational Data Store (ODS).

> An **enterprise data warehouse** (EDW) is a database, or collection of databases, that centralizes a business's information from multiple sources and applications, and makes it available for analytics and use across the organization. EDWs can be housed in an on-premise server or in the cloud.

> An **operational data store** (ODS) is a type of database that's often used as an interim logical area for a data warehouse. ODSs are designed to integrate data from multiple sources for lightweight data processing activities such as operational reporting and real-time analysis

A. Clinical/EHR platform(s)

When a provider collects clinical data on a patient, it is stored in electronic health records (EHRs). EHRs are created, managed and reviewed on an EHR platform designed to share information across a full spectrum of healthcare organizations.

B. Revenue cycle management

Revenue Cycle Management (RCM) refers to the process of identifying, collecting, and managing the practice's revenue from payers based on the services provided. A successful RCM process is essential for a healthcare practice to maintain financial viability and continue to provide quality care for its patients.

C. Supply chain management/ERP

Supply chain management (SCM) involves planning, execution, control, and monitoring of supply activities. An ERP solution takes care of physical aspects of supply that includes storage and transportation and the market aspect of effectively managing demand and supply to meet customer demands. Leading *enterprise resource planning* (ERP) systems typically support supply chain management (SCM) activities, including planning, procurement, manufacturing, inventory management and order management.

D. CRM

A healthcare CRM tracks marketing progress throughout the campaign lifecycle, giving real-time information on performance. Healthcare CRMs also produce detailed reports, attributing revenue to specific campaigns and tactics.

E. Patient monitor (near) real time data capture

A system designed to be continuously connected to patients, alerting clinicians to changes in patients' vital signs markedly reducing the time required to collect, analyze and apply patient data as actionable insights.

F. Artificial Intelligence/Machine Learning solutions

Artificial Intelligence: A system that may utilize machine learning and predictive analytics to assess a situation and either recommend or take actions that maximize chances of success/positive outcomes.
Machine Learning: Process of developing algorithms that can improve automatically through experience and by the use of data; it is seen as a building block of artificial intelligence.

G. Population health tools

Population health management (PHM) tools help clinicians aggregate and analyze data to create a comprehensive, actionable clinical picture of each patient.

(PDF-035) How would you characterize the adoption of technology designed to automatically review patient data in your EHR and alert caregivers when their patients are out of compliance with key quality indicators, in the following areas of your?
(Check one per row)

  Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.

  Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.

  Not Adopted: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution

	Fully Adopted	Partially Adopted	Not Adopted
A. At discharge/checkout			
B. Any time after being admitted into the facility (Acute/INTL Acute/LTPAC/INTL LTPAC))			
C. In the emergency department (Acute/INTL Acute)			
D. In the physician office/clinic (Ambulatory/ INTL Ambulatory)			

The intent of this question is to assess the HCO's proactiveness in managing patient data in order to meet varied clinical quality goals.

  The **key quality indicator** metric measures the quality of excellence of a task or project. To find quality, you compare two or more items against each other that are similar to see which has the best results. You rarely measure quality with just one number, like some other metrics.

(PDF-036) How would you characterize the adoption of <u>automated real-time dashboards</u> designed to deliver the following data to your organization's clinical and operational personnel (leaders and individual clinicians)?
(Check one per row)

Automated real-time dashboards: Presents context sensitive [transformed] data insights immediately when time is of the essence, for shared or individual consumption with limited ability to manipulate; constantly updated.

(PDF-037) How would you characterize the adoption of personal data visualization tools designed to deliver the following data to your organization's clinical and operational personnel (leaders and individual clinicians)?
(Check all that apply)

Personal Data Visualization tools: Offer the ability to re-structure queries and "drill-down" into the core data marts, filter information by a variety of parameters (date/time, patient, provider, disease, payer, etc.) on the fly

Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.

Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.

Not Adopted: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution

	Fully Adopted	Partially Adopted	Not Adopted
A. Clinical quality metrics			
B. Clinician productivity metrics			
C. Patient volume metrics			
D. EHR utilization/ performance data			
E. Population health metrics (Acute/Ambulatory/LTPAC)			
F. Patient engagement/ satisfaction metrics			
G. Social Determinants of Health (SDoH) metrics (Acute/Ambulatory/LTPAC)			
H. Human Resources, staff availability, staff need, metrics			
I. Critical supplies/pharmaceutical metrics			
J. Safety data/metrics			
K. Patient throughput/Length of stay (LOS)			
L. Operating Room utilization, capacity metrics (Acute/INTL Acute)			

The intent of these two question is to assess the varied ways HCOs leverage technology in sharing select data with HCO personnel, and the extent to which the technologies are used throughout the organization.

A. Clinical quality metrics

A Clinical Quality Measure can be measures of processes, experiences and/or outcomes of patient care, observations or treatment that relate to one or more quality aims for health care such as effective, safe, efficient, patient-centered, equitable, and timely care.

B. Clinician productivity metrics

Physician productivity metrics focus on clinician processes like patient throughput, billing, and physician revenue.

C. Patient volume metrics

This data refers to the flow of patients to an HCO including; Number of patients by department, by specialty. Time of appointment and length of visit.

D. EHR utilization/ performance data

Measuring EHR performance involves addressing the completeness of data inputted into the EHR. Data "completeness" is dependent upon the definition of completeness being used but should consider: documentation, breadth, density, and predictive.

E. Population health metrics

Population Health Metrics covers a broad range of topics encompassing health state measurement and valuation, summary measures of population health, descriptive epidemiology at the population level, burden of disease and injury analysis, disease and risk factor modeling for populations, and comparative assessment of risks to health at the population level.

F. Patient engagement/ satisfaction metrics

Patient engagement metrics are a measure of how well a healthcare organization is engaging with patients throughout the care continuum. They help you understand whether patients are getting the care and support they need when they need it.

Patient satisfaction surveys capture self-reported patient assessments of multiple touchpoints during their medical care experience. Depending on what aspect of patient satisfaction is being measured, examples may include responsiveness of staff, clinician communication, technical skill, and hospital environment.

G. Social Determinants of Health (SDoH) metrics

Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

H. Human Resources, staff availability, staff need, metrics

HR metrics are data points that allow you to track key human resource and recruitment activities like employee performance, retention, compensation, engagement, cost-per-hire, time-to-hire, and more.

I. Critical supplies/pharmaceutical metrics

Supply chain metrics or KPIs are performance indicators used by businesses to assess and optimize the efficiency and productivity of various supply chain processes. This visual information can be used to manage inventory, sales, shipping, suppliers, and more.

J. Safety data/metrics

safety metrics are a useful framework to measure how well your health and safety policies and procedures are working. They provide you with valuable insight into any areas that can be adjusted to avoid potential hazards or incidents before they happen.

K. Patient throughput/Length of stay (LOS)

Patient throughput (a.k.a. patient flow) refers to the movement of patients from one location to another. Patient throughput starts from the time a patient is discharged until the time the next patient is placed in the appropriate location.
Length of stay (LOS) is a clinical metric that measures the length of time elapsed between a patient's hospital admittance and discharge. LOS can be calculated on a hospital-wide basis or by therapy area, including acute myocardial infarctions (heart attacks) and diabetes.

L. Operating Room utilization, capacity metrics

Simply calculated, operating room prime time utilization equates to the percentage of available minutes filled with case minutes during business hours. This simple metric avoids the complications and pitfalls that too often hinder other efficiency metrics.

Section 3: Analytical Capabilities

(PDF-038) How would you characterize the utilization of data analytics to support the following business functions in your organization?

> **Used Extensively**: A condition where authorized clinical staff generally leverage the technology/solution on a routine basis.
> **Used but not Extensively/Limited Use**: A condition where authorized clinical staff generally leverage the technology/solution as an exception or few authorized clinical staff leverage the technology/solution on a routine basis.
> **Use Not Authorized**: A condition where the organization does not authorize the use of employee-owned devices in the care of patients.

	Used Extensively	Used but not Extensively/Limited Use	Not Used
A. Setting enterprise strategy/driving transformation			
B. Patient care, care paths, and/or other clinical purposes			
C. Operational decision making			
D. Value-based care management (Acute/Ambulatory/LTPAC)			
E. Safety and Quality			
F. Population health			
G. Marketing and promotion (Acute/Ambulatory/LTPAC)			
H. Supply and supply chain decisions			
I. Finance and budgeting			
J. Facilities and building management			

The intent of this question is to assess the usage of data analytics by an HCO.

A. Setting enterprise strategy/driving transformation

Enterprise Transformation refers to any complex or fundamental organizational change that impacts how its core business is conducted. It can be caused by internal or external factors, but the result is a shift in how the organization relates to its wider economic environment.

B. Patient care, care paths, and/or other clinical purposes

A care pathway creates a consistent standard of documentation that provides the basis for ongoing audits. Not only do these multidisciplinary tools improve the quality and efficiency of patient care, but they are also effective communication tools between healthcare professionals to maintain standardized outcome-oriented care.

C. Operational decision making

Operational decisions are those decisions that are adjusted more frequently in correspondence to the current external and internal conditions, which usually have impacts for no longer than a year or even a day.

D. **Value-based care management**

Value-based care ties the amount health care providers earn for their services to the results they deliver for their patients, such as the quality, equity, and cost of care.

E. **Safety and Quality**

Quality has been defined by the federal Agency for Healthcare Research and Quality (AHRQ) as "doing the right thing at the right time for the right person and having the best possible result." Patient safety is simply defined by the World Health Organization as "the prevention of errors and adverse effects to patients associated with health care.

F. **Population health**

Population health refers to the health status and health outcomes within a group of people rather than considering the health of one person at a time.

G. **Marketing and promotion**

Marketing focuses on increasing the awareness of a product and getting it in front of potential customers. Promotions are the final step of marketing – they provide the needed incentive to turn visitors into buyers. All in all, marketing vs promotion is about awareness vs conversion.

H. **Supply and supply chain decisions**

Supply Chain Management (SCM) involves the flow of information and products between and among supply chain stages to maximize profitability. The major functions involved in SCM are the procurement of raw materials, product development, marketing, operations, distribution, finance, and customer services.

I. **Finance and budgeting**

Financial budgeting is the process of planning company expenses and revenues for a time period. Budgets set forth the plans of management in financial terms. This includes allocating financial resources and identifying available cash flows for required spending.

J. **Facilities and building management**

Building and facilities management is the efficient coordination of all activities related to keeping physical spaces and infrastructures operational; from single buildings to complex campuses used for a range of revenue-generating sites, like retail, manufacturing, and healthcare.

(PDF-039) How would you characterize the adoption of <u>Predictive Analytics</u> in each of the following business functions in your organization?

> **Predictive Analytics**: A variety of statistical techniques from data mining, predictive modelling, and machine learning that analyze current and historical facts to make predictions about future or otherwise unknown events.
> **Fully Adopted**: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.
> **Partially Adopted**: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.
> **Not Adopted**: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution

(Check one per row)

	Fully Adopted	Partially Adopted	Not Adopted
A. Clinical workflows			
B. Revenue cycle management (Acute/Ambulatory/LTPAC)			
C. Supply chain management/ERP			
D. CRM/Patient Engagement (Acute/Ambulatory/LTPAC)			
A. Population Health (Acute/Ambulatory/LTPAC)			
B. Human Resources/Recruitment/Scheduling			

The intent of this question is to assess if Predictive Analytics are used by an HCO in select areas, and if so, how extensively they are used throughout the organization.

A. Clinical workflows

> Workflow analysis, also known as process analysis, involves identifying, prioritizing, and ordering the tasks and information needed to achieve the intended result of a clinical or business process.

B. Revenue cycle management

> Revenue Cycle Analytics uses standard revenue cycle transaction data sets to offer actionable insights to optimize revenue cycle operational and financial performance.

C. Supply chain management/ERP

> Supply chain management (SCM) involves planning, execution, control, and monitoring of supply activities. An ERP solution takes care of physical aspects of supply that includes storage and transportation and the market aspect of effectively managing demand and supply to meet customer demands. Leading enterprise resource planning (ERP) systems typically support supply

chain management (SCM) activities, including planning, procurement, manufacturing, inventory management and order management.

D. Patient Engagement/CRM
The best way to measure patient engagement across the patient lifecycle is through surveys and patient feedback. You can use these tools to track patients' satisfaction levels at each stage of their journey. This will give you valuable insights into what's working well and where you need to make changes.
A healthcare CRM tracks marketing progress throughout the campaign lifecycle, giving real-time information on performance. Healthcare CRMs also produce detailed reports, attributing revenue to specific campaigns and tactics.

E. Population health
Population health refers to the health status and health outcomes within a group of people rather than considering the health of one person at a time.

F. Human Resources/Recruitment/Scheduling
HR metrics are data points that allow you to track key human resource and recruitment activities like employee performance, retention, compensation, engagement, cost-per-hire, time-to-hire, and more.

(PDF-040) How would you characterize the deployment of <u>Artificial Intelligence</u> in each of the following business functions in your organization?

>**Artificial Intelligence**: A system that may utilize machine learning and predictive analytics to assess a situation and either recommend or take actions that maximize chances of success/positive outcomes.
>**Deployed**: A condition where the technology/solution has been tested and implemented in at least one area of the organization and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.
>**Piloting**: A condition where the technology/solution is being tested in at least one area of the organization but not organization wide.
>**Not Supported**: A condition where the organization has not yet tested the technology/solution in at least one area of the organization, has no intention of testing/implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution.

(Check one per row)

	Deployed	Piloting	Not Supported
A. Clinical workflows			
B. Revenue cycle management (Acute/Ambulatory/LTPAC)			
C. Supply chain management/ERP			
D. CRM/Patient Engagement			
E. Population Health			
F. Human Resources/Recruitment/Scheduling			

The intent of these questions is to assess if Artificial Intelligence is used by an HCO in select areas, and if so, the approached for their deployment in organization.

A. Clinical workflows

>Workflow analysis, also known as process analysis, involves identifying, prioritizing, and ordering the tasks and information needed to achieve the intended result of a clinical or business process.

B. Revenue cycle management

>Revenue Cycle Analytics uses standard revenue cycle transaction data sets to offer actionable insights to optimize revenue cycle operational and financial performance.

C. Supply chain management/ERP

>Supply chain management (SCM) involves planning, execution, control, and monitoring of supply activities. An ERP solution takes care of physical aspects of supply that includes storage and transportation and the market aspect of effectively managing demand and supply to meet customer demands. Leading enterprise resource planning (ERP) systems typically support supply chain management (SCM) activities, including planning, procurement, manufacturing, inventory management and order management.

D. Patient Engagement/CRM

The best way to measure patient engagement across the patient lifecycle is through surveys and patient feedback. You can use these tools to track patients' satisfaction levels at each stage of their journey. This will give you valuable insights into what's working well and where you need to make changes.

A healthcare CRM tracks marketing progress throughout the campaign lifecycle, giving real-time information on performance. Healthcare CRMs also produce detailed reports, attributing revenue to specific campaigns and tactics.

E. Population health

Population health refers to the health status and health outcomes within a group of people rather than considering the health of one person at a time.

F. Human Resources/Recruitment/Scheduling

HR metrics are data points that allow you to track key human resource and recruitment activities like employee performance, retention, compensation, engagement, cost-per-hire, time-to-hire, and more.

Section 4: Data Governance

(PDF-041) Which of the following best describe the scope of your organization's data governance program?
(Check all that apply)
   A. Data governance spans from the Board room to the front lines with regular meetings at all levels. Data governance has clear leadership and an articulated strategy.
   B. The Executive suite and some Chiefs are involved in data governance. The strategy is clear but fluid.
   C. Data governance is managed at the VP and/or Chief Data Officer level. The strategy is evolving and dynamic.
   D. Data governance is handled by the CIO and/or IT. The strategy is more technical that strategic.
   E. Limited data governance with the focus on applications or solutions.
   F. No data governance efforts at this time; defaulting to vendor approaches and recommendations when required.

The intent of this question is to assess the data governance structure leveraged by the HCO.

(PDF-042) How often does your organization's Data Governance committee meet? (Check one)

    A.   Weekly

    B.   Monthly

    C.   Quarterly

    D.   At least once a year

    E.   As requested (no regular cadence)

    F.   We do not have a data governance committee

The intent of this question is to assess the frequency by which the HCOs data governance team meets.

(PDF-043) Which of the following groups engage in your organization's data governance efforts at least every quarter?
(Check all that apply)

    A.   Board of trustees, or committee of the board
    B.   Executive leadership / executive governance
    C.   Chief Medical Information Officer or similar role
    D.   Clinical staff and leadership
    E.   IT leadership
    F.   Analytics and data management leadership
    G.   Front lines staff and data leaders

The intent of this question is to assess the frequency by which the HCOs data governance team meets with varied groups within the HCO.

(PDF-044) How would you characterize the adoption of the following as part of your organization's data governance effort?

Data Literacy Program: An effort designed to assist employees, managers, data analysts and scientists in reading, writing and communicating data in context

Fully Adopted: A condition where the technology/solution has been implemented organization wide and the relevant users are generally utilizing the technology/solution as intended per industry expectations and organizational policy.

Partially Adopted: A condition where the technology/solution has been implemented in at least one area of the organization but not organization wide, or the technology/solution has been implemented organization wide but the relevant users are not utilizing the technology/solution as intended per industry expectations and/or organizational policy.

Not Adopted: A condition where the organization has not yet implemented the technology/solution in at least one area of the organization and has no intention of implementing the technology/solution at this time or has not yet achieved funding approval for the acquisition of the technology/solution

(Check one per row)

	Fully Adopted	Partially Adopted	Not Supported
A. Governance is in place overseeing data from all systems of record at the enterprise level			
B. Governance is in place for our critical and primary systems of record			
C. Governance is in place for our analytics and data management platforms and solutions			
D. Governance is in place supporting data and analytics presentation, reporting, and dashboard solutions			
E. Governance is in place supporting a data literacy program			
F. Governance is in place supporting Artificial Intelligence / Machine Learning			
G. Governance is in place supporting data access, privacy, and security of data			
H. Data governance leverages dedicated software			
I. Data governance engages in and supports Master Data Management solutions			
J. Data governance is in place supporting a [technical] analytics solution architecture and infrastructure strategy			
K. Data governance is in place overseeing an analytics program strategy			

The intent of this question is to assess if varied data governance efforts are used by HCOs, and if so, how extensively they are used throughout an organization.

Data Literacy Program: An effort designed to assist data analysts/scientists in reading, writing and communicating data in context.

Master Data Management (MDM) solutions: MDMs are enterprise software products that support the global identification, linking and synchronization of master data across heterogeneous data sources through semantic reconciliation of master data.