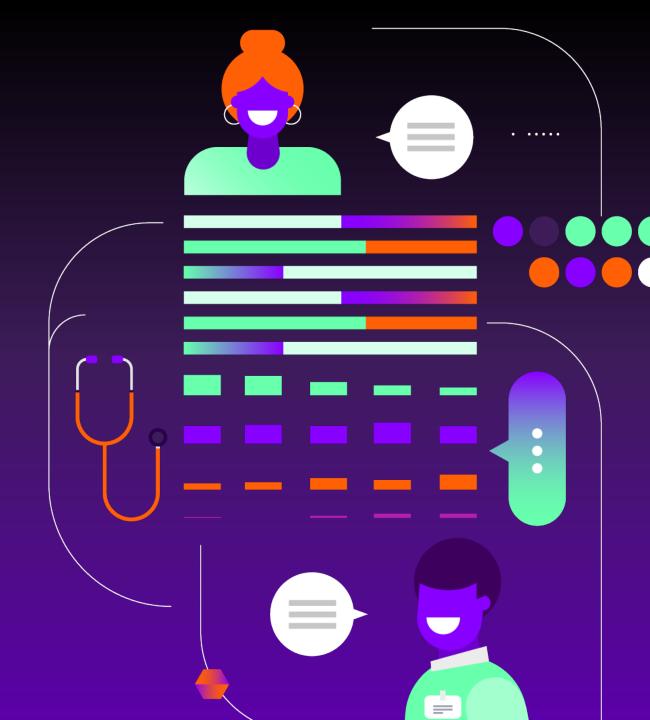




2024 HIMSS MARKET INSIGHTS SURVEY

# The current state of healthcare analytics platforms

Data utilization within hospitals and health systems according to executive, IT, technology, and clinical leaders



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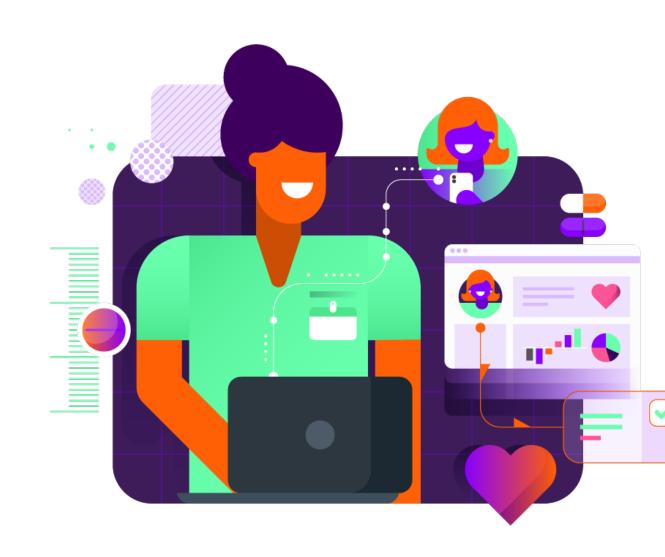
Looking for an overview of these results? Check out the executive summary at <a href="mailto:arcadia.io/exec-summary">arcadia.io/exec-summary</a>

#### Research overview

HIMSS Market Insights surveyed healthcare leaders in December 2023 to understand their perspectives on the use of data analytics platforms.

The research uncovered:

- Perceived value of data analytics and analytics platforms
- Organizational usage of data to make decisions
- Applications and technologies integrated with data analytics platforms
- Considerations and goals related to the usage of analytics platforms
- Challenges or barriers to adopting new platforms/tools



1

#### Data is key to the success of healthcare organizations

The most important objective data empowers for organizations is to improve the quality of care. Additionally, leaders say it is important that data can aid in improving workforce productivity (30%), identify cost-saving opportunities through analytics (29%), and improve care management (26%). The biggest opportunities to make data more useable are cross-team collaboration (62%) and enhanced data literacy (58%).

2

### Healthcare leaders agree that platforms unlock the potential of data

Healthcare leaders nearly unanimously agree that data platforms are critical for their organizations. The issue of creating a trustworthy data asset to enable stakeholders is of particular importance for leaders in integrated delivery networks and organizations with 7,500+ employees. Organizations with more than 15,000 employees also say their organizations have plans to make significant improvements to their analytics to keep up with innovations in artificial intelligence (44% vs. 24% of those with <15,000 employees).



#### The ideal data platform enables better patient care and decisionmaking on a fully centralized solution

Leaders say that analytics platform must-haves include improving data quality (81%), implementing a comprehensive enterprise data solution (65%), enabling clinicians and staff to leverage data to improve their productivity (61%), and the ability to consolidate data across multiple disparate platforms (60%). Off-the-shelf accelerators and the ability to leverage unstructured and non-traditional healthcare data are more often seen as nice-to-have features.

#### Key takeaways

4

### Al, non-traditional data, and unstructured data are top priorities for healthcare leaders

Leaders are making plans to integrate artificial intelligence/machine learning/large language models (84%), aggregation of non-traditional healthcare data (56%), and aggregation of unstructured data (55%) with their data analytics platforms. More than two-thirds of leaders have integrated care management, quality measurement, and patient engagement/outreach. Multi-facility worksites are particularly interested in the aggregation of non-traditional healthcare data (70% among IDNs and multi-hospital systems vs. 44% of AMCs, stand-alone and specialty hospitals).

5

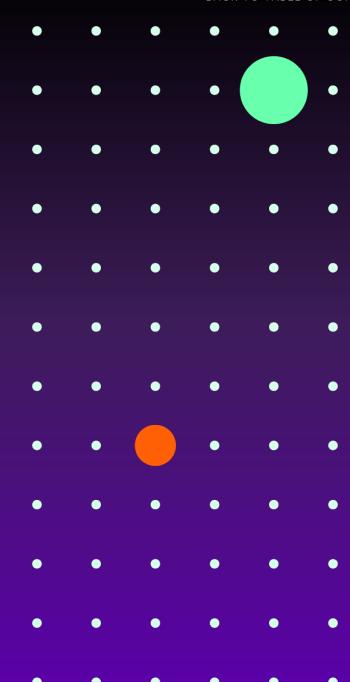
#### Adopting a fully centralized data platform is challenging

The biggest barriers to data analytics platform adoption include competing strategic priorities and the perceived complexity of integration and onboarding. A lack of internal resources is particularly challenging for organizations with lower annual revenues (47% among those with revenues of \$1B or less vs. 24% of those with >\$1B in revenue) and for not-for-profit or government organizations (43% vs. 6% of those in for-profit organizations). Resistance to change among staff/clinicians is a significantly bigger barrier for multi-hospitals (56% among multi-hospitals vs. 19% of all other worksites).



Hear leaders from top healthcare organizations discuss these results at <u>arcadia.io/bigdata</u>

## Detailed findings



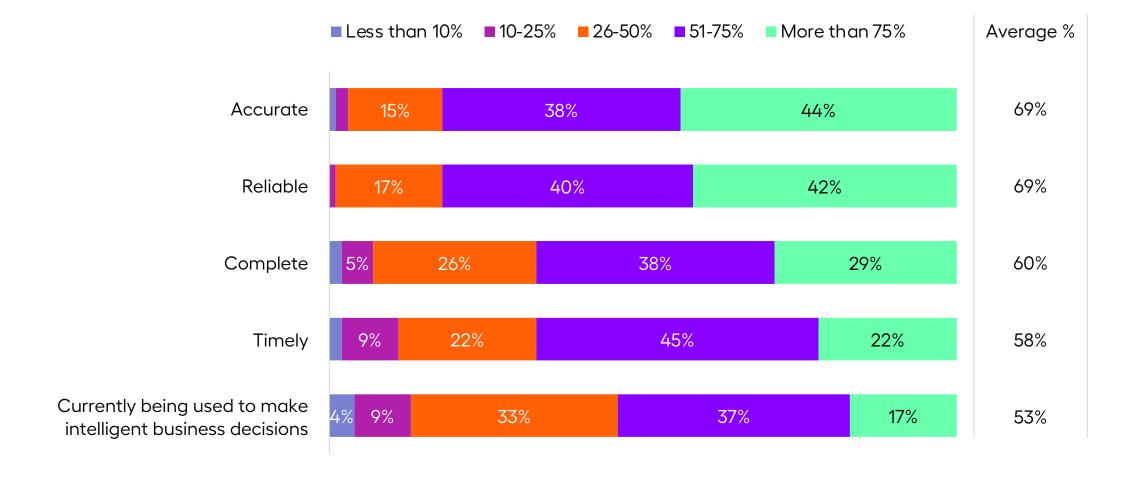
WE ASKED:

What percent of your organization's data would you estimate is ...?

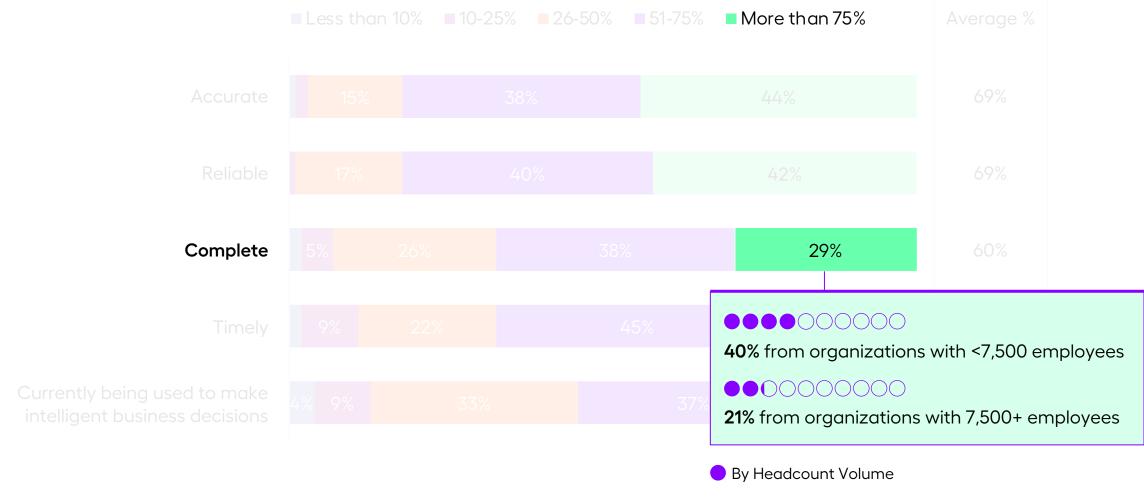
4-in-5 healthcare leaders trust the accuracy and reliability of their data. However, more than half report that, on average, 53% of this data informs business decisions.



#### What percent of your organization's data would you estimate is ...?



Leaders in organizations with <7,500 employees are more likely to say their organization's data is more than 75% complete compared to their counterparts in larger organizations.



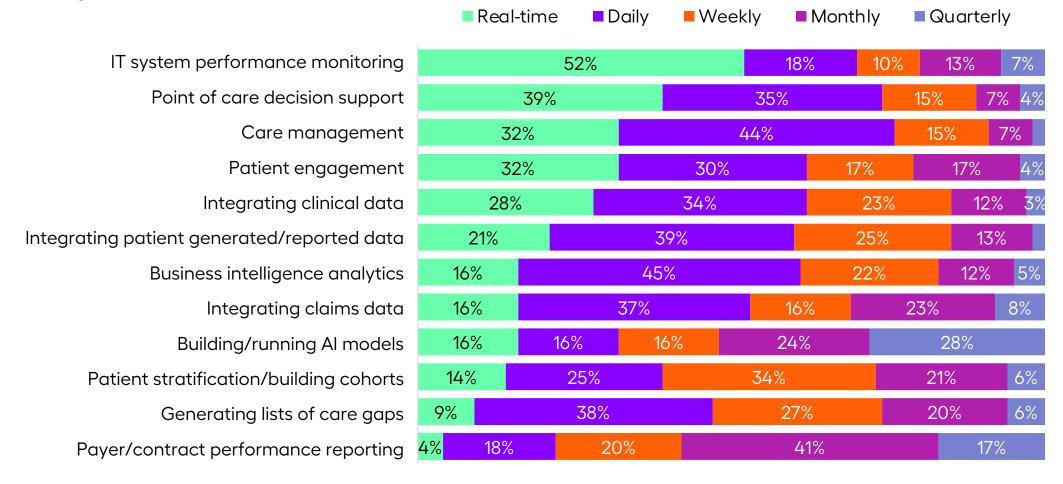
WE ASKED:

What is your organization's current data recency/refresh rate for each of the following tasks?

Healthcare organizations most often refresh IT system performance monitoring in real-time. Point-of-care decision-making and care management tasks often refresh daily or in real-time.



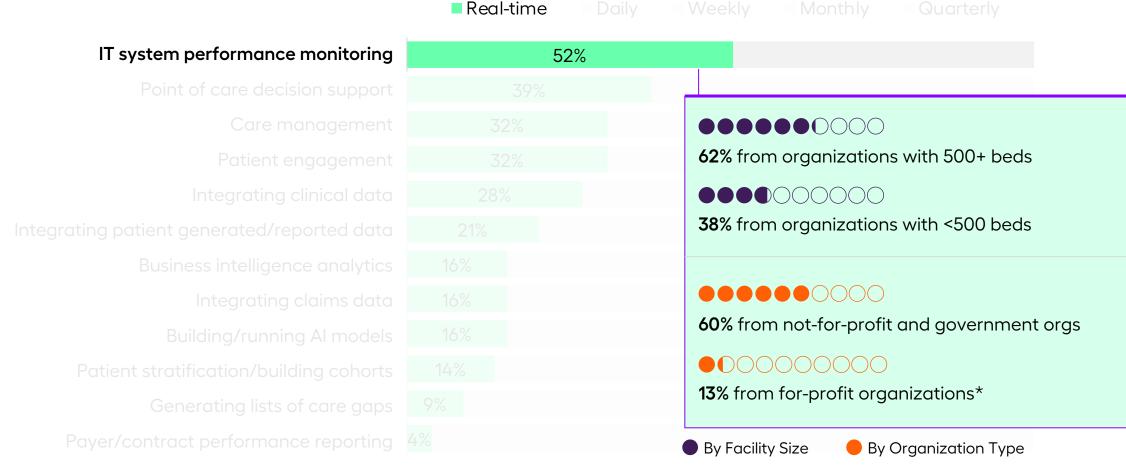
## What is your organization's current data recency/refresh rate for each of the following tasks?^



<sup>^</sup>Excluding 'Not Applicable' responses (shown separately on subsequent slide)
Data labels <3% not shown
Base varies based on organizational activities related to each task; n = 57-98

Not-for-profit or government organizations and those with 500+ hospital beds more likely have IT system performance monitoring refreshing in real-time.

#### What is your organization's current data recency/refresh rate for each of the following tasks?^

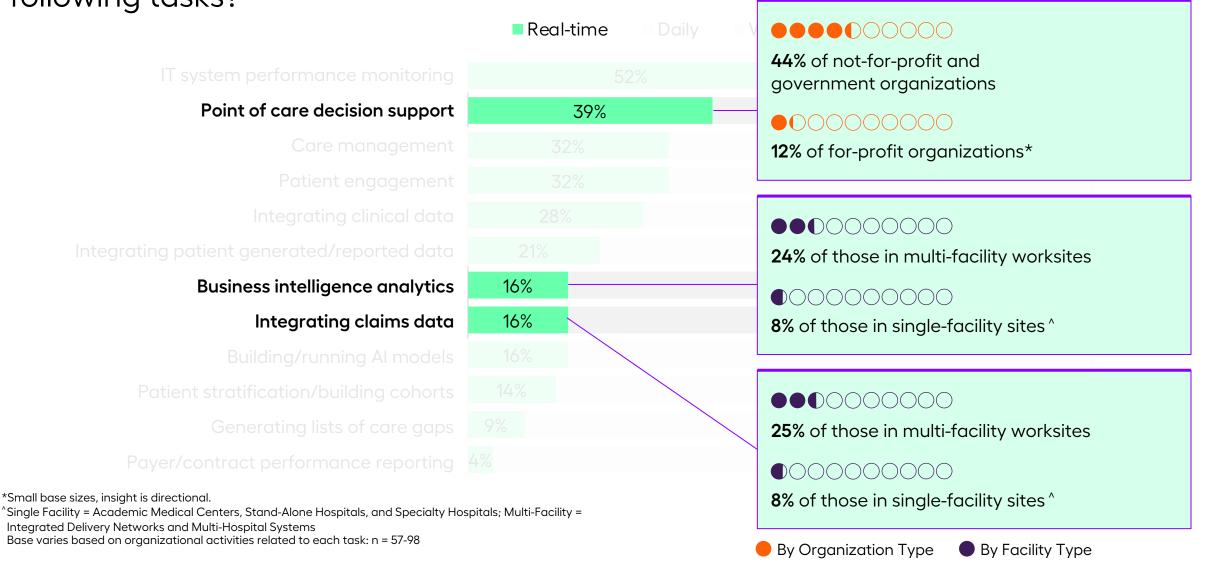


<sup>\*</sup>Small base sizes, insight is directional...

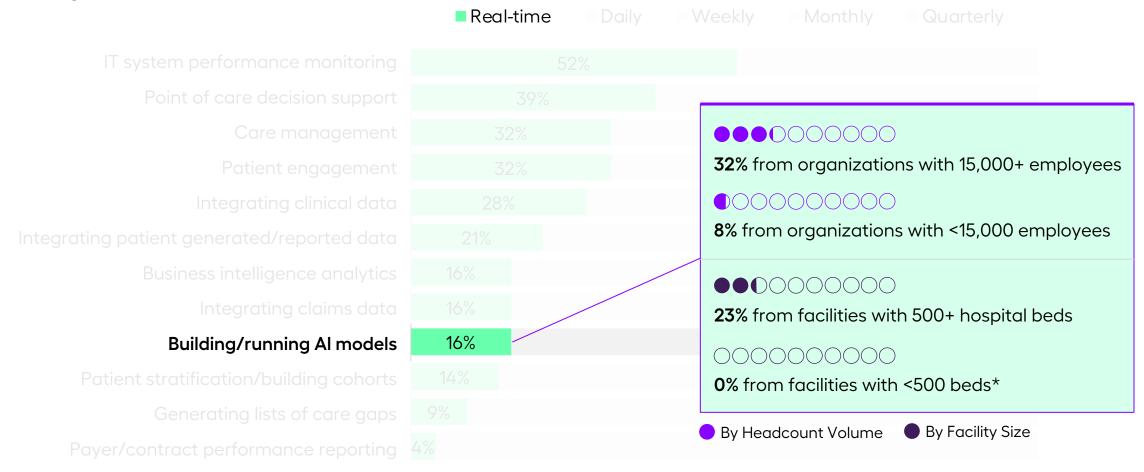
<sup>^</sup>Excluding 'Not Applicable' responses (shown separately on subsequent slide) Data labels < 3% not shown

The incidence of data refreshing in real-time varies for point of care decision support, business intelligence analytics, claims data integration, and the building/running of Al models based on facility type and/or size.

What is your organization's current data recency/refresh rate for each of the following tasks?



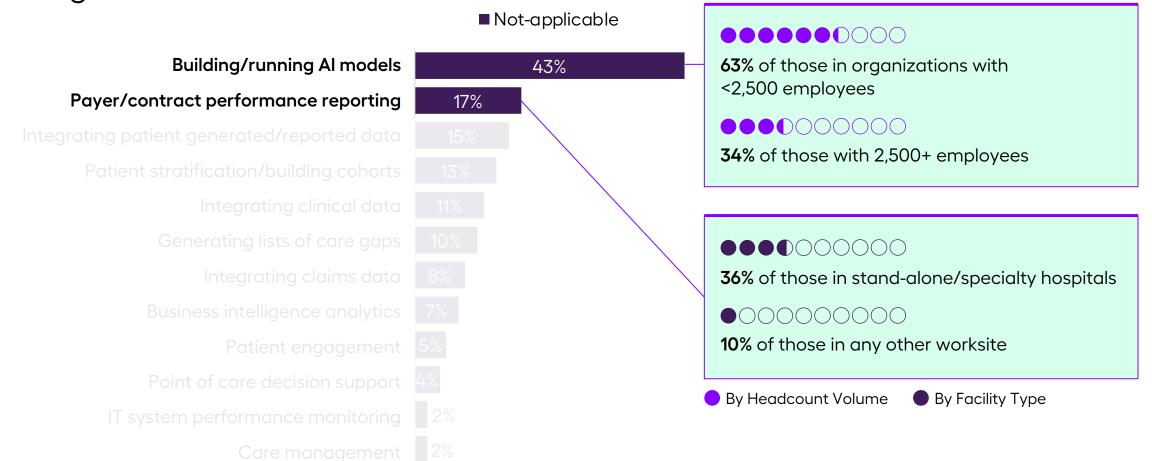
#### What is your organization's current data recency/refresh rate for each of the following tasks?



Over 3-in-5 leaders in organizations with <2,500 employees say that their organizations are not currently building or running Al models on their systems.

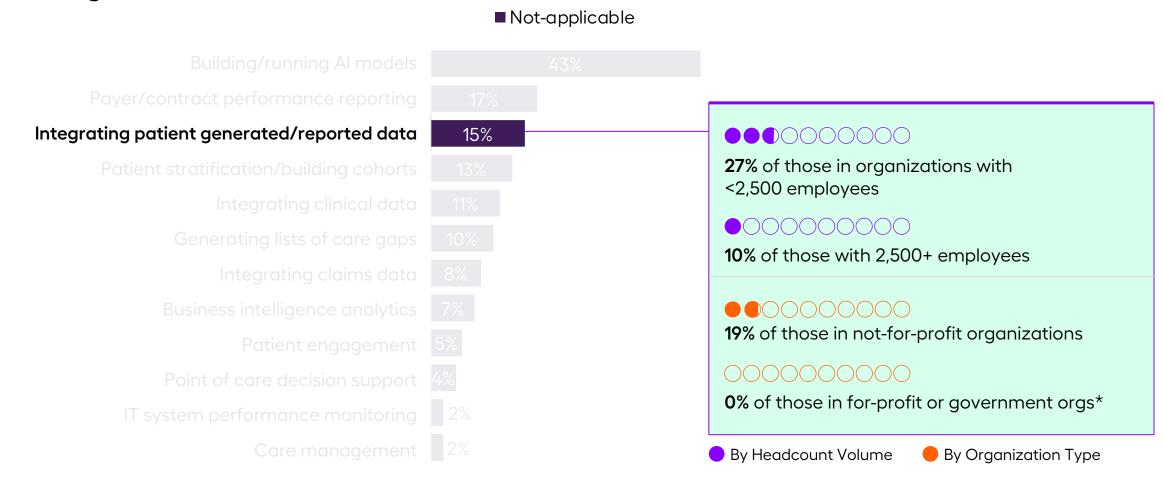
More than one-third of stand-alone and specialty hospitals are not completing payer/contract performance reporting today.

What is your organization's current data recency/refresh rate for each of the following tasks?

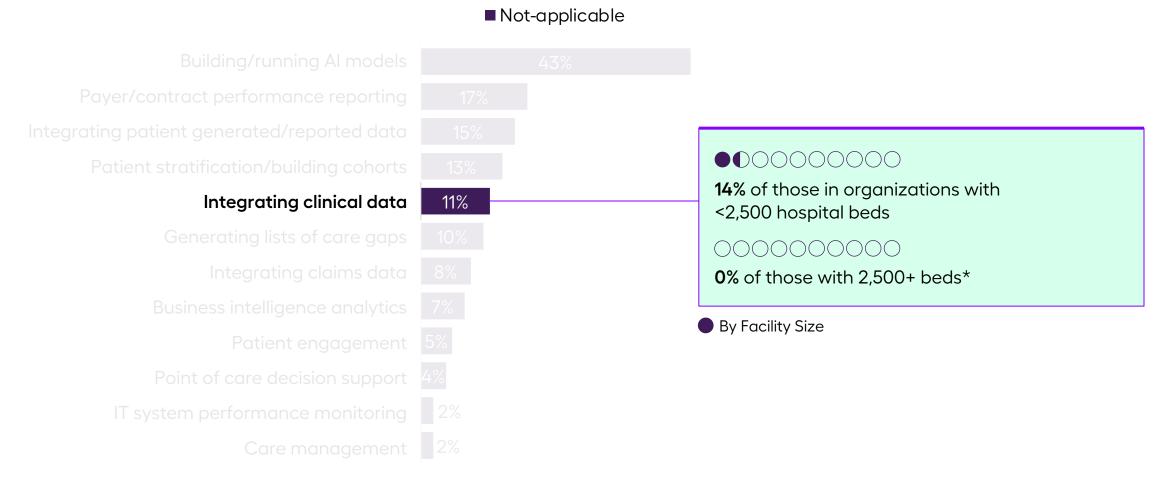


Smaller organizations are more likely to say their systems are not integrating patient generated/reported data or clinical data or running business intelligence analytics today.

#### What is your organization's current data recency/refresh rate for each of the following tasks?



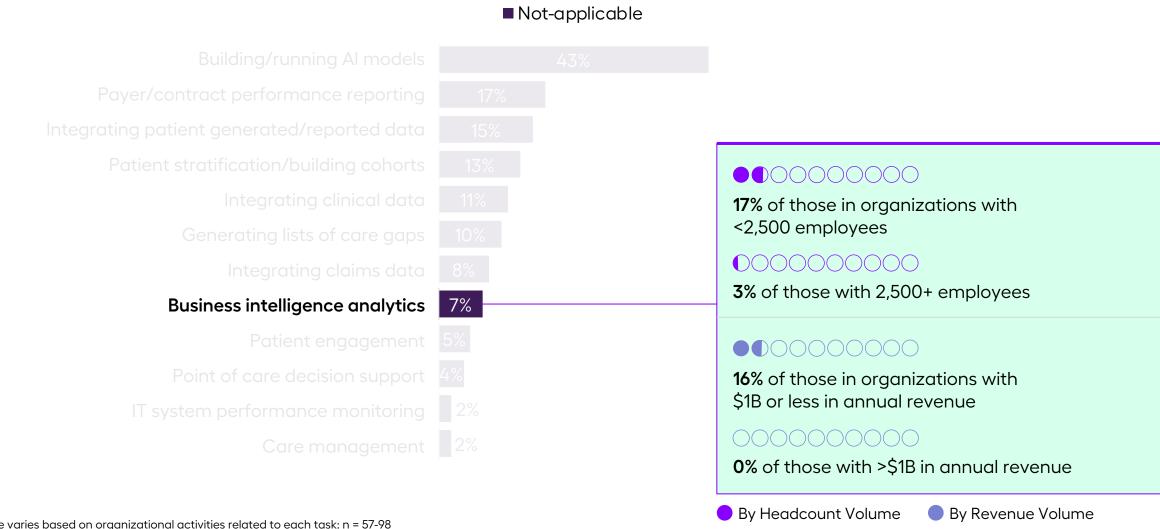
## What is your organization's current data recency/refresh rate for each of the following tasks?



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Base varies based on organizational activities related to each task: n = 57-98

#### What is your organization's current data recency/refresh rate for each of the following tasks?



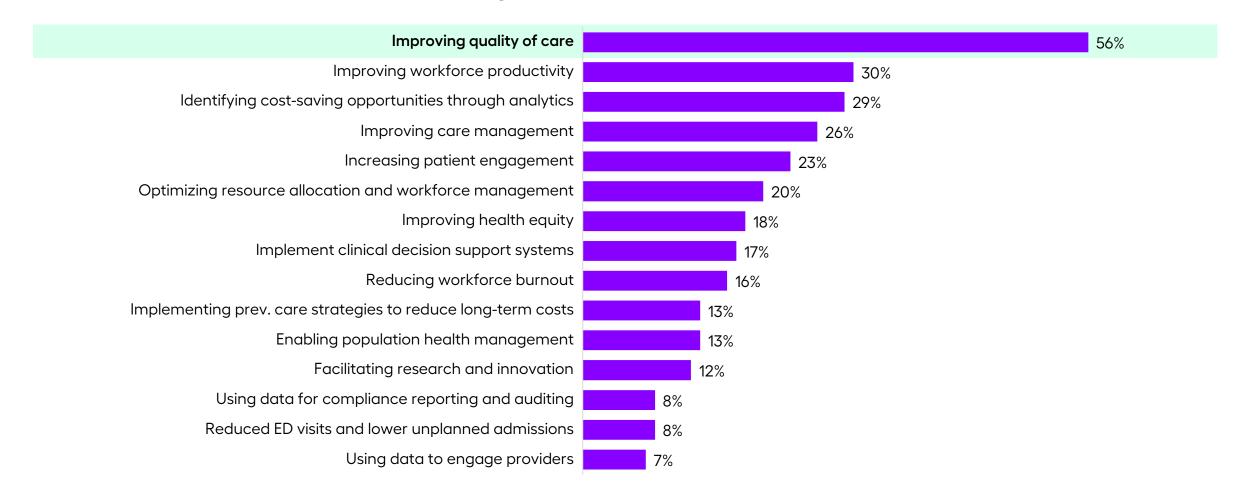
#### WE ASKED:

What are the top three most important business objectives, goals, or strategies that data empowers for your organization?

Most agree that data's role is to enhance the quality of care their organizations deliver. Around one-third recognize its value in boosting workforce productivity and uncovering cost-saving opportunities.



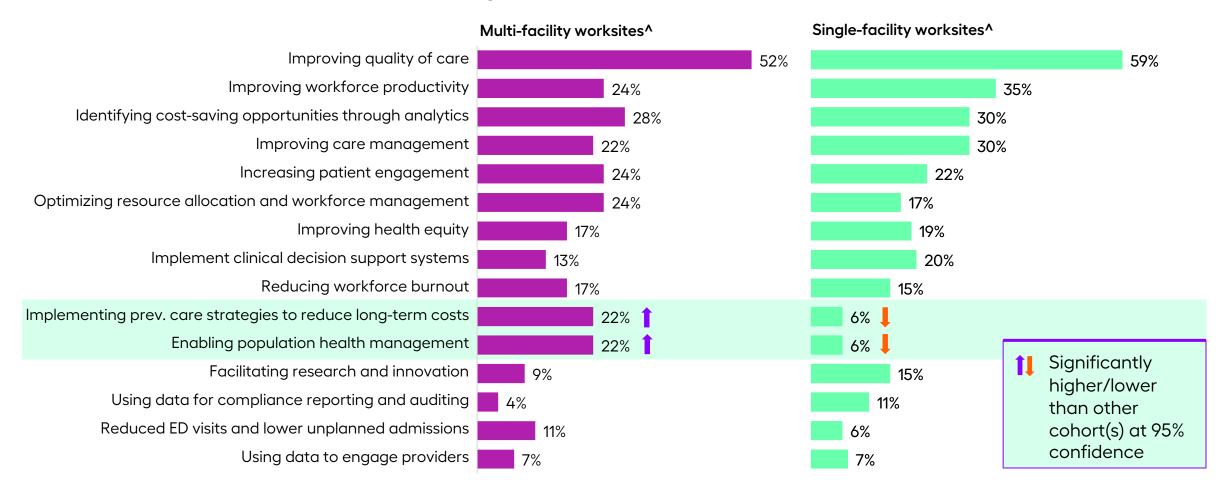
## What are the top three most important business objectives, goals, or strategies that data empowers for your organization?



Not displayed: 'Something else' (2%) and 'None of the above' (0%) Base: Total Respondents: n = 100

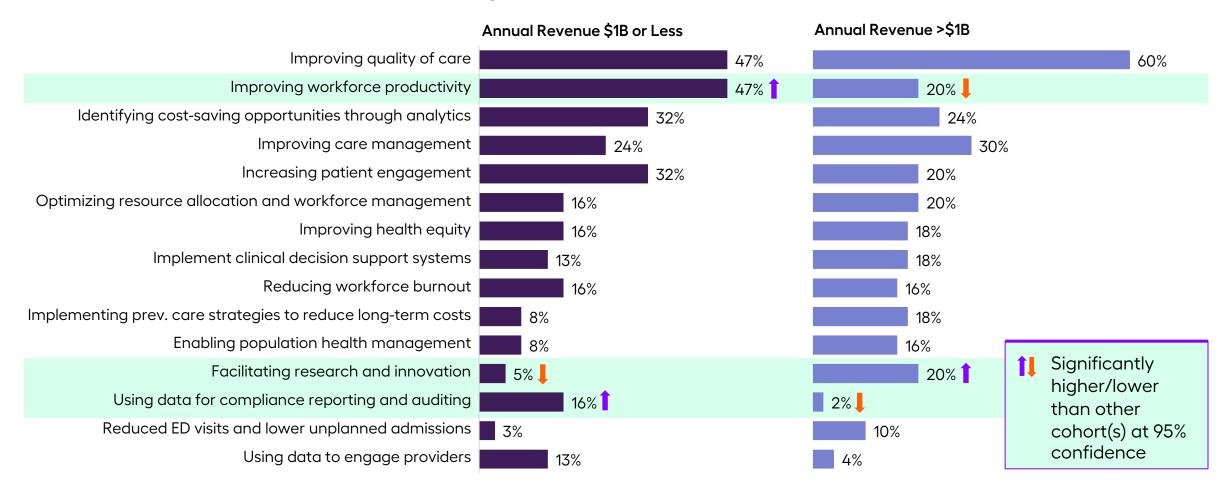
Leaders in multi-facility worksites are significantly more likely than those in single-facility sites to say it is important that data empowers their organizations to implement preventive care strategies and enable population health management.

#### What are the top three most important business objectives, goals, or strategies that data empowers for your organization?



For leaders in organizations with annual revenues of \$1B or less, it is important that data enables workforce productivity improvements and aids in compliance reporting and auditing. On the other hand, organizations with more than \$1B in annual revenue are more likely to see value in using data to facilitate research and innovation.

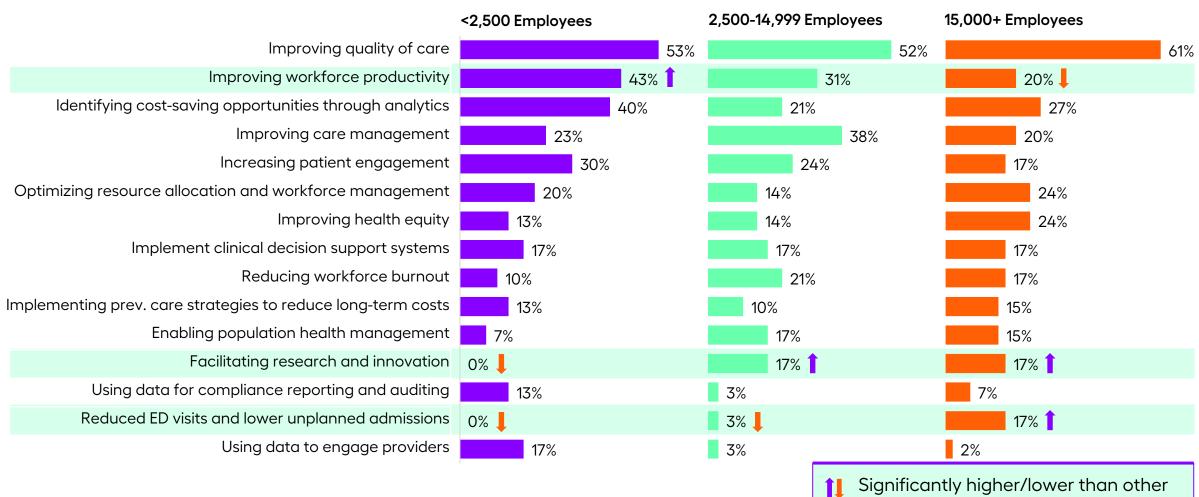
## What are the top three most important business objectives, goals, or strategies that data empowers for your organization?



Organizations with smaller employee counts are more likely to say that leveraging data to improve productivity is important, while those in larger organizations see greater value in facilitating research and innovation and reducing emergency department visits and lowering unplanned admissions.

cohort(s) at 95% confidence

## What are the top three most important business objectives, goals, or strategies that data empowers for your organization?



WE ASKED:

What would make your organization's data more useable?

Healthcare leaders report a variety of strategies and tactics that would make data more useful. Top areas include team collaboration, data literacy, and predictive analytics usage.

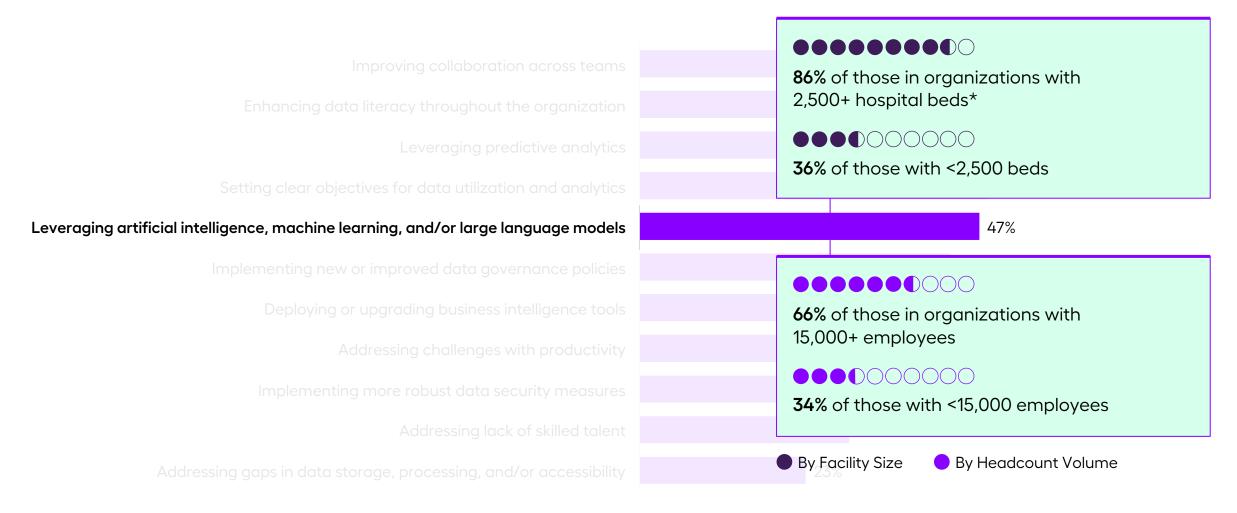


#### What would make your organization's data more useable?

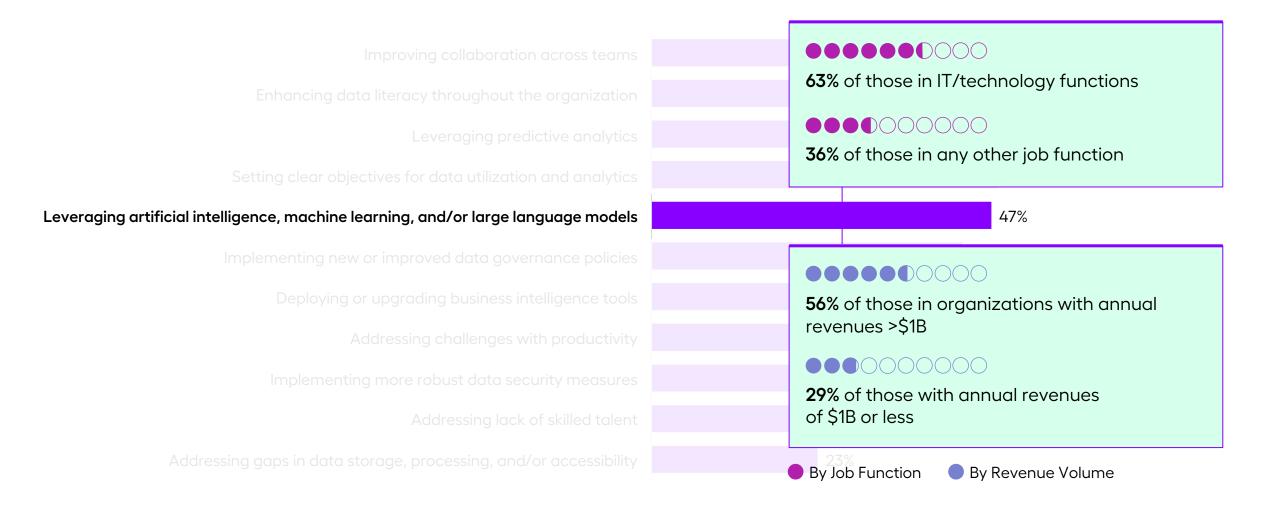


Leveraging artificial intelligence, machine learning, and/or large language models is significantly more top-of-mind for IT/technology leaders and those in larger organizations.

#### What would make your organization's data more useable?

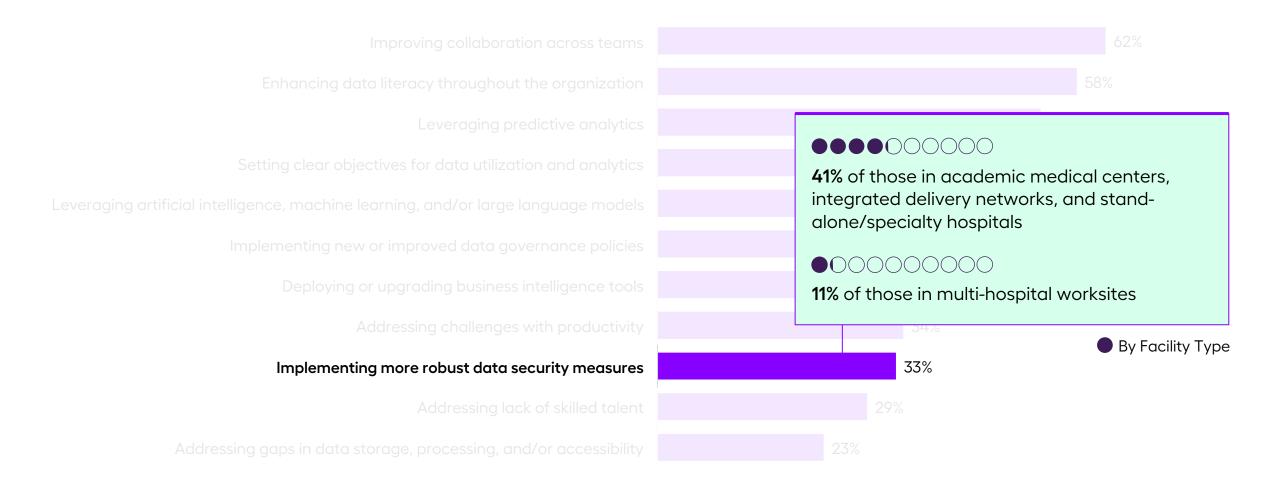


#### What would make your organization's data more useable?



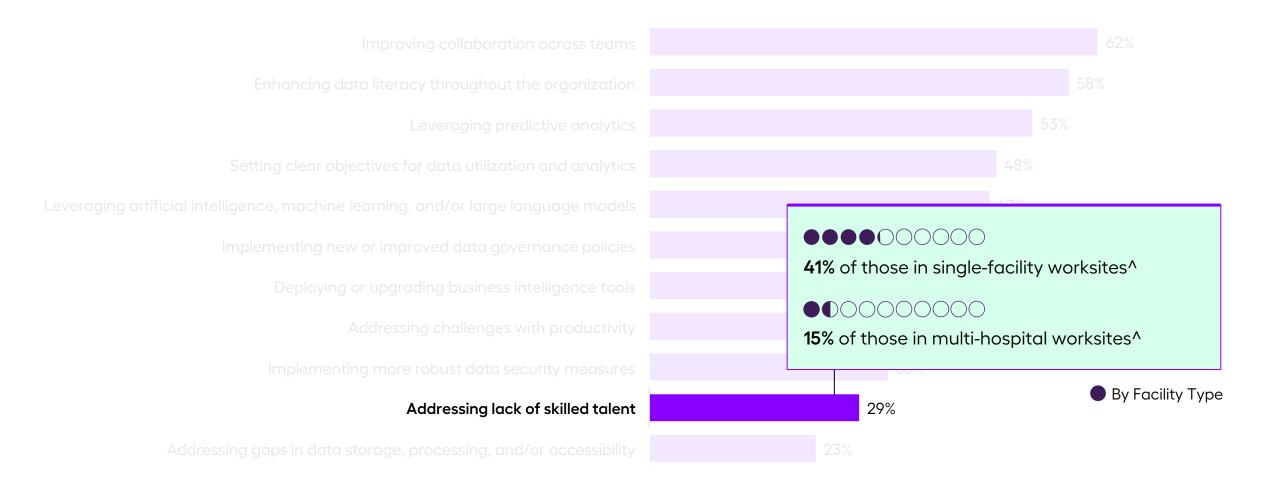
Those in academic medical centers, integrated delivery networks, and stand-alone or specialty hospitals are more likely to say it would be helpful to implement more robust data security measures to improve data useability.

### What would make your organization's data more useable?



Addressing a lack of talent is significantly more top-of-mind for leaders in single-facility worksites.

### What would make your organization's data more useable?



<sup>^</sup>Single Facility = Academic Medical Centers, Stand-Alone Hospitals, and Specialty Hospitals; Multi-Facility = Integrated Delivery Networks and Multi-Hospital Systems Not displayed: 'Something else' (2%) and 'None of the above' (0%)

Base: Total Respondents; n = 100



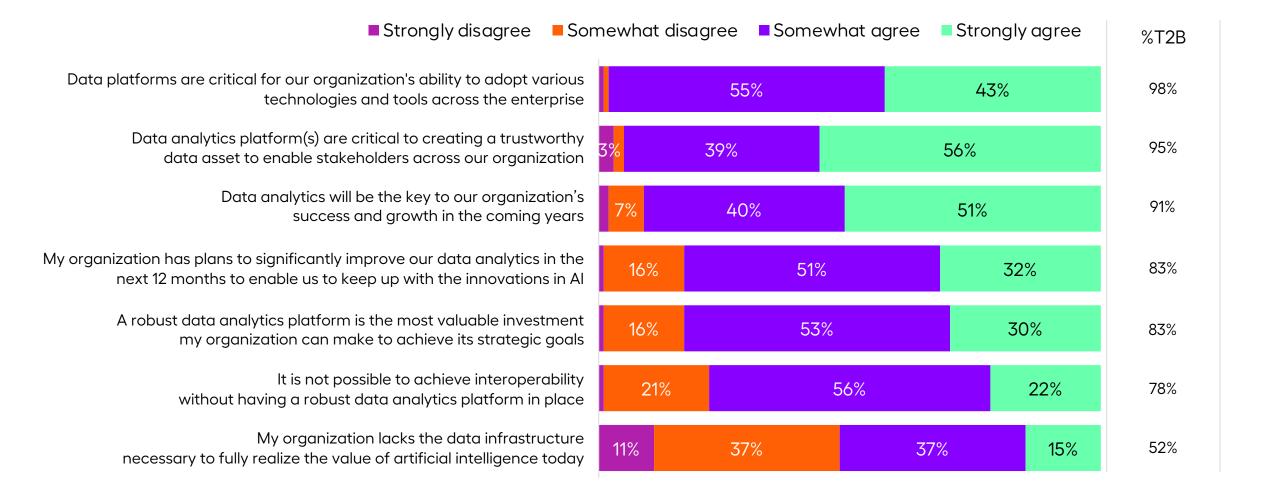
WE ASKED:

Please rate your level of agreement with each of the following statements.

Most leaders agree on data's vital role in their organization's success. A majority say that data platforms are key to creating reliable data assets and adopting technology.

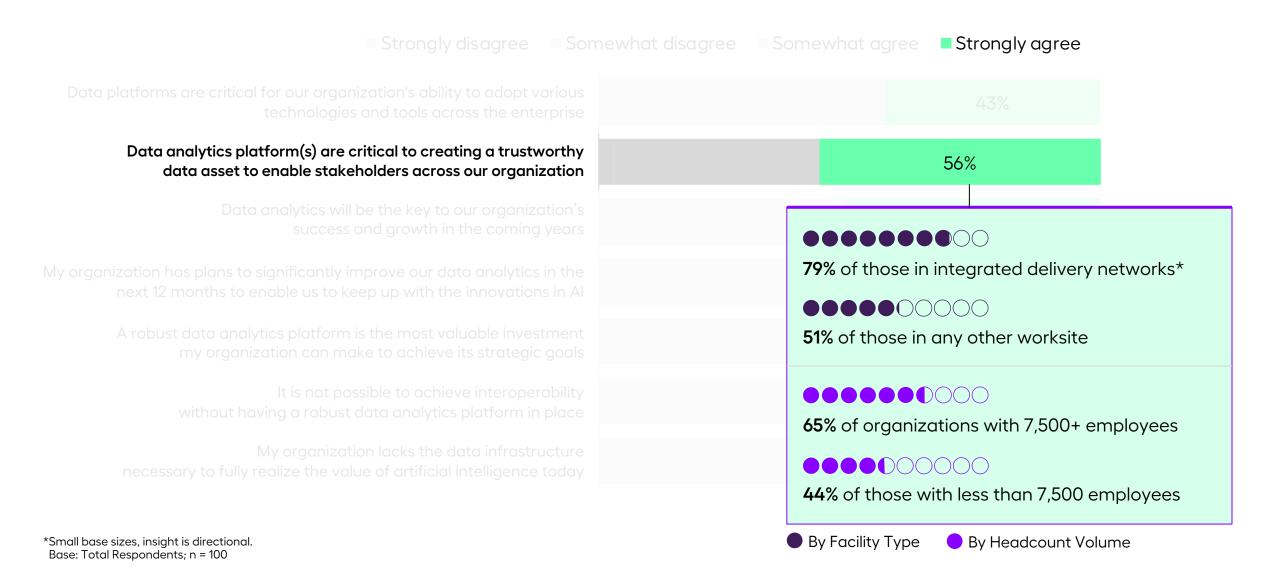


#### Please rate your level of agreement with each of the statements below.



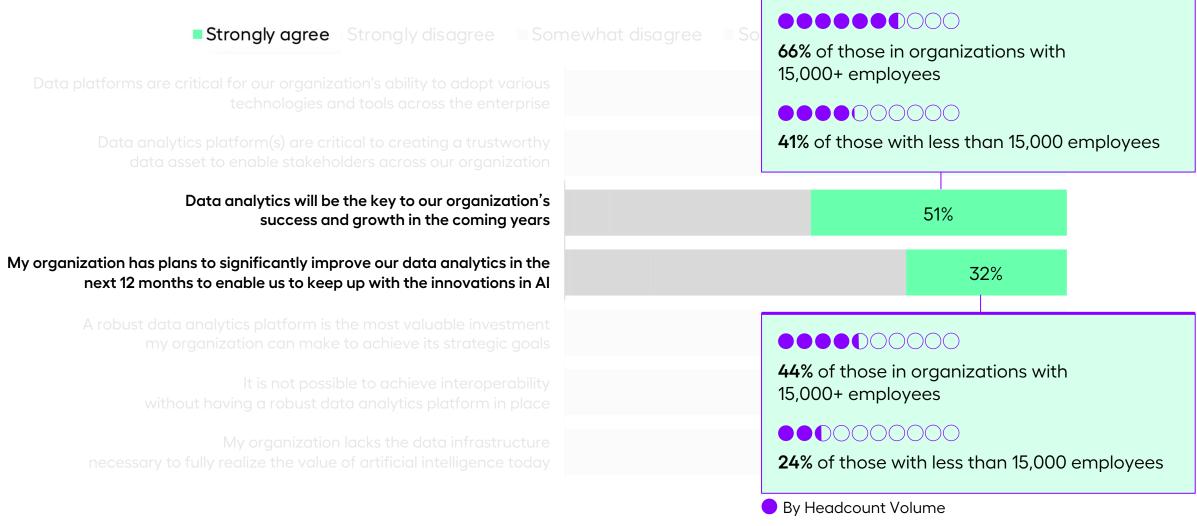
Leaders working in integrated delivery networks and those in organizations with 7,500+ employees feel more strongly that data analytics platforms are critical to creating a trustworthy data asset.

#### Please rate your level of agreement with each of the statements below.



Those in organizations with 15,000+ employees are more likely to say data analytics will be the key to their organization's success in the coming years and that they have plans to improve their analytics in the next 12 months to keep up with innovations in artificial intelligence.

#### Please rate your level of agreement with each of the statements below.



<sup>\*</sup>Small base sizes, insight is directional. Base: Total Respondents; n = 100

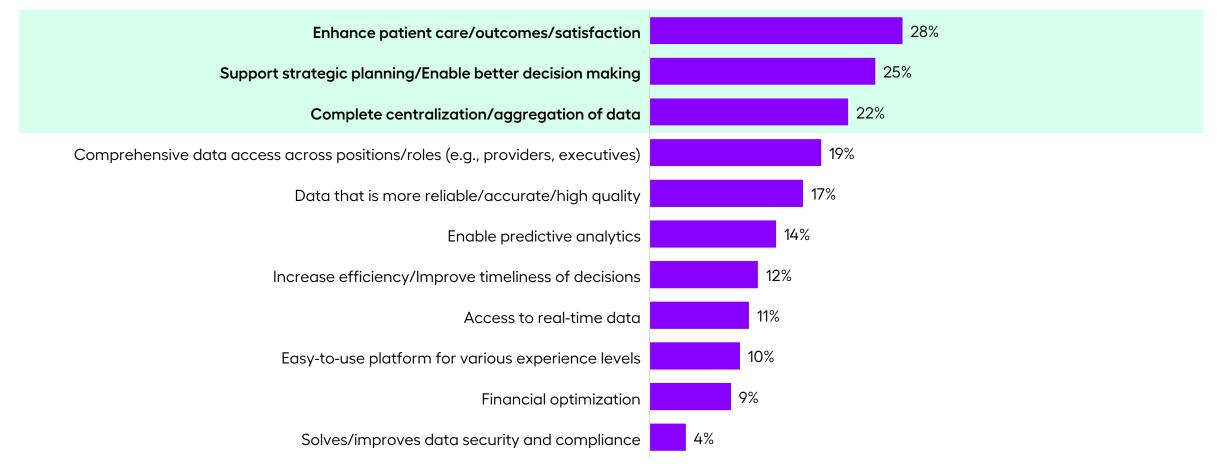
#### WE ASKED:

In an ideal world, what would a data analytics platform ultimately solve for your organization? What would you want to accomplish with a data platform if you had a magic wand?

Healthcare leaders don't agree on the ultimate goal of data analytics platforms. Some want a platform to support patient care, others strategic planning and decision-making. Centralizing data management is comparatively important.



In an ideal world, what would a data analytics platform ultimately solve for your organization? What would you want to accomplish with a data platform if you had a magic wand?



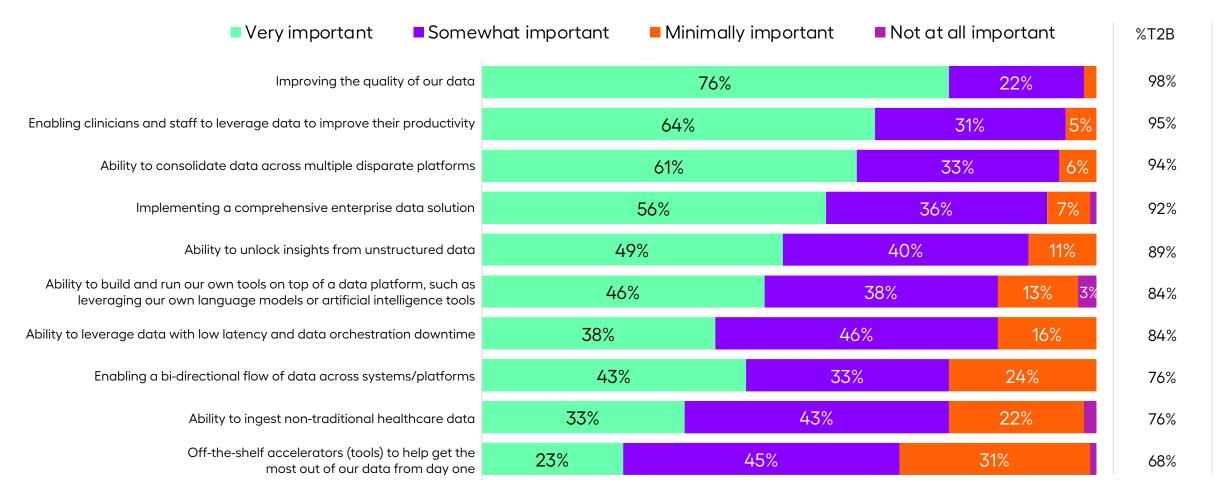
Not displayed: 'Other' (3%) Base: Total Respondents; n = 100 WE ASKED:

When considering your organization's strategies for data analytics platforms, how important are each of the following goals or considerations?

When it comes to data analytics platforms, the most important goals are improving data quality and workforce productivity. Consolidating disparate data sources and implementing enterprise data solutions follow close behind.



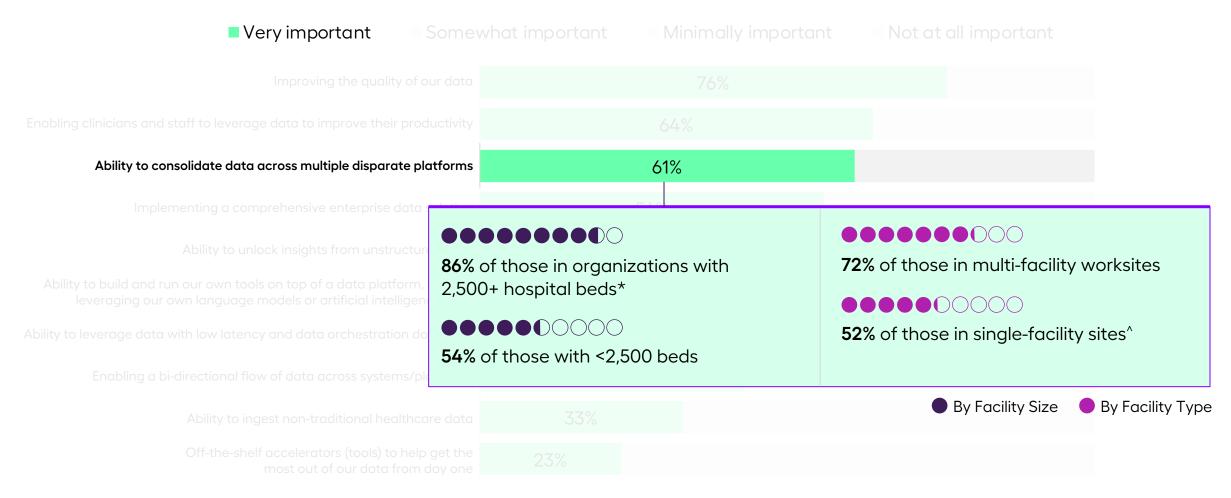
## When considering your organization's strategies for data analytics platforms, how important are each of the following goals or considerations?



Data labels <3% not shown

Not displayed: 'Something else' (2%) Base: Total Respondents: n = 100 Leaders in larger organizations place greater importance on the ability of analytics platforms to consolidate data, allow them to build and run their own tools on top of the platform, and offer low data latency and orchestration downtime.

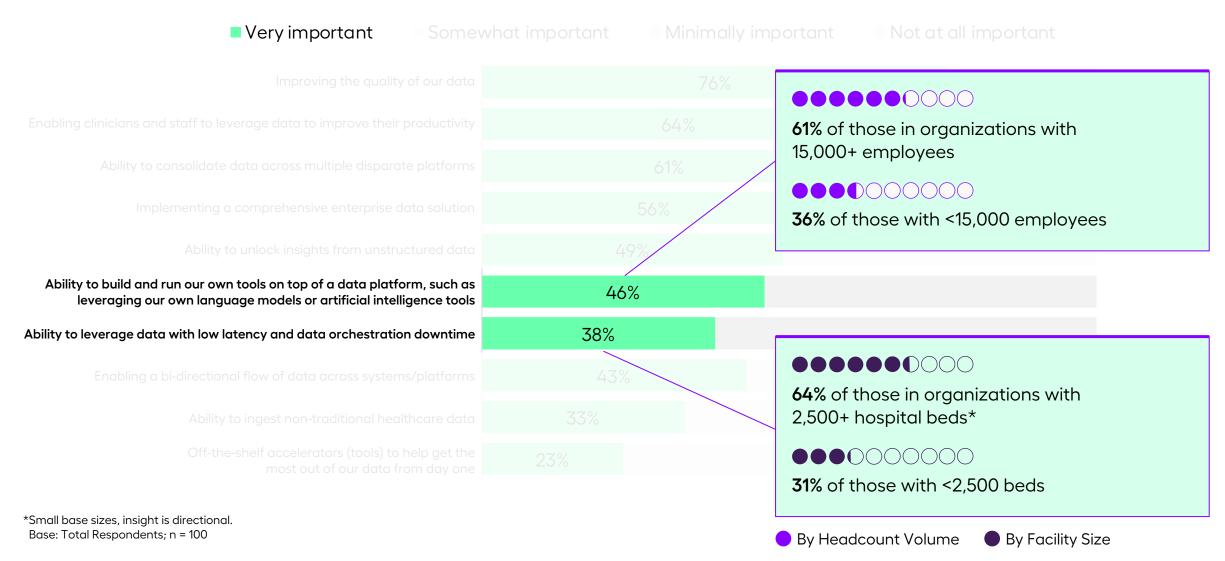
## When considering your organization's strategies for data analytics platforms, how important are each of the following goals or considerations?



<sup>\*</sup>Small base sizes, insight is directional.

<sup>^</sup>Single Facility = Academic Medical Centers, Stand-Alone Hospitals, and Specialty Hospitals; Multi-Facility = Integrated Delivery Networks and Multi-Hospital Systems
Base: Total Respondents; n = 100

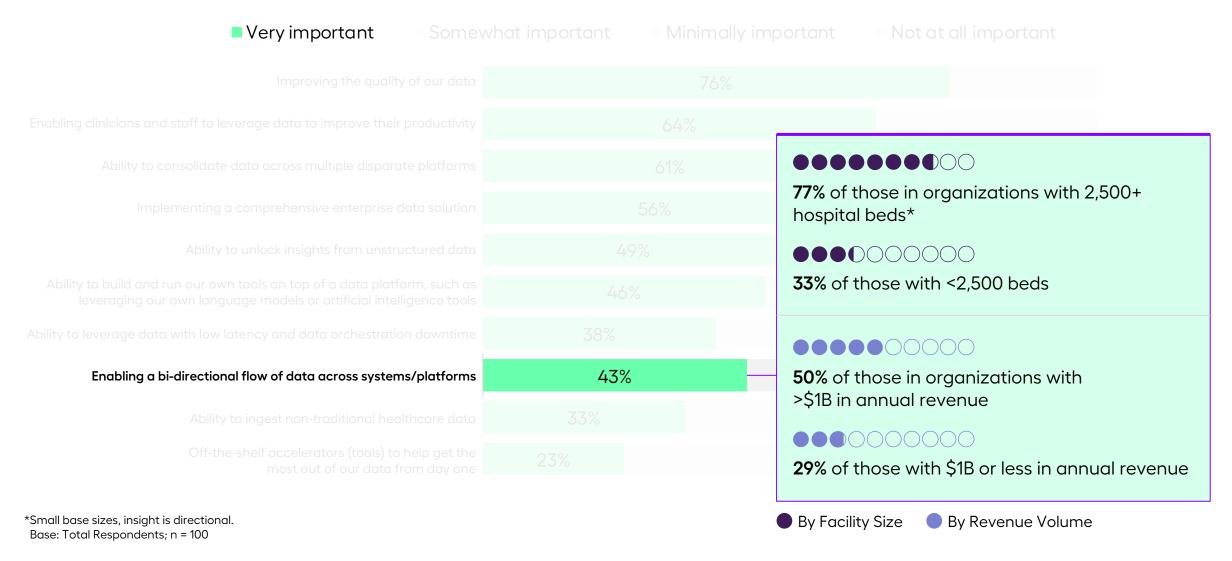
## When considering your organization's strategies for data analytics platforms, how important are each of the following goals or considerations?



Healthcare leaders in larger organizations also place greater value on a data platform enabling a bi-directional flow of data across their systems and platforms.

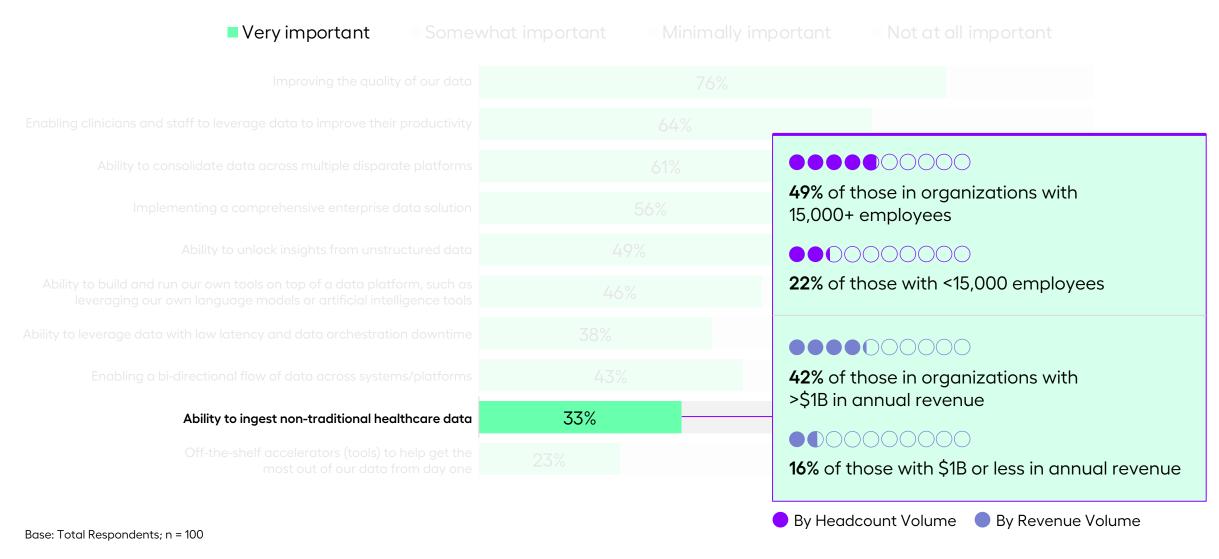


## When considering your organization's strategies for data analytics platforms, how important are each of the following goals or considerations?



Additionally, the ability to ingest non-traditional healthcare data is significantly more important to those in larger organizations.

## When considering your organization's strategies for data analytics platforms, how important are each of the following goals or considerations?



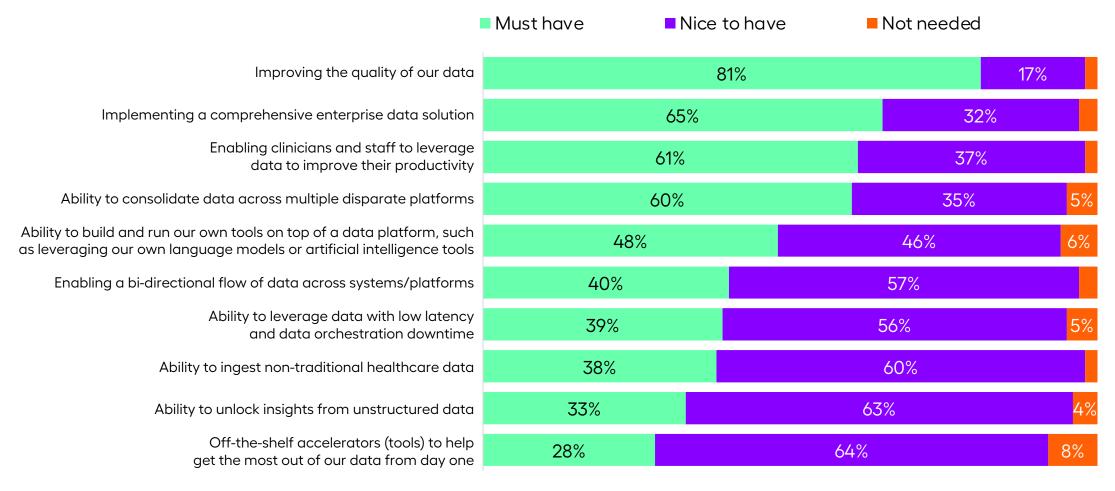
#### WE ASKED:

Considering the capabilities and benefits of data analytics platforms available on the market today, which of the following items do you consider must haves vs. nice-to-haves?

Healthcare leaders agree that data quality is the primary benefit of a data analytics platform. 3-in-5 also consider workforce productivity, data consolidation, and a comprehensive enterprise solution must-haves.

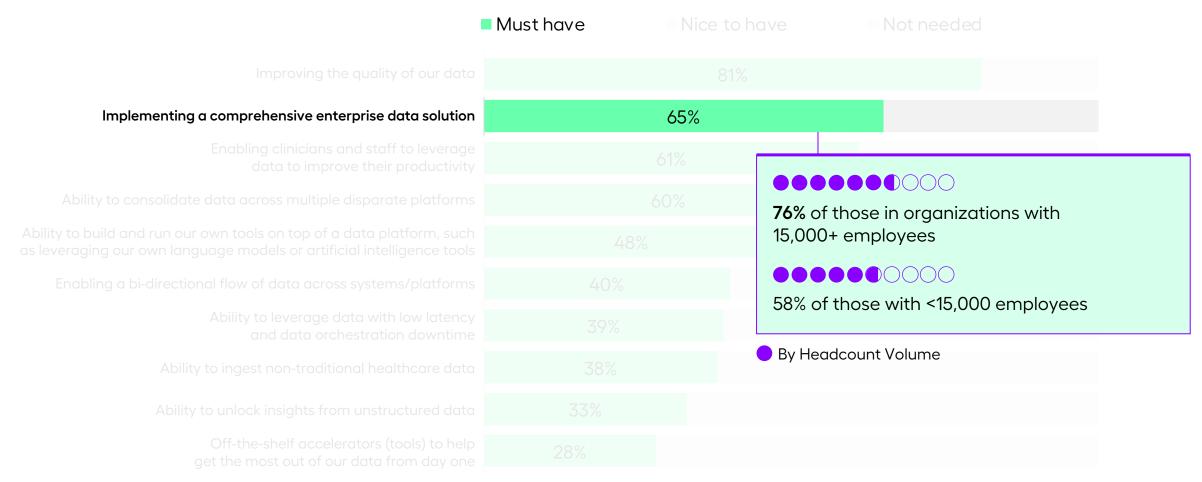


Considering the capabilities and benefits of data analytics platforms available on the market today, which of the items below do you consider must haves for a data platform to offer? Which would you consider a nice-to-have for a data platform to provide?



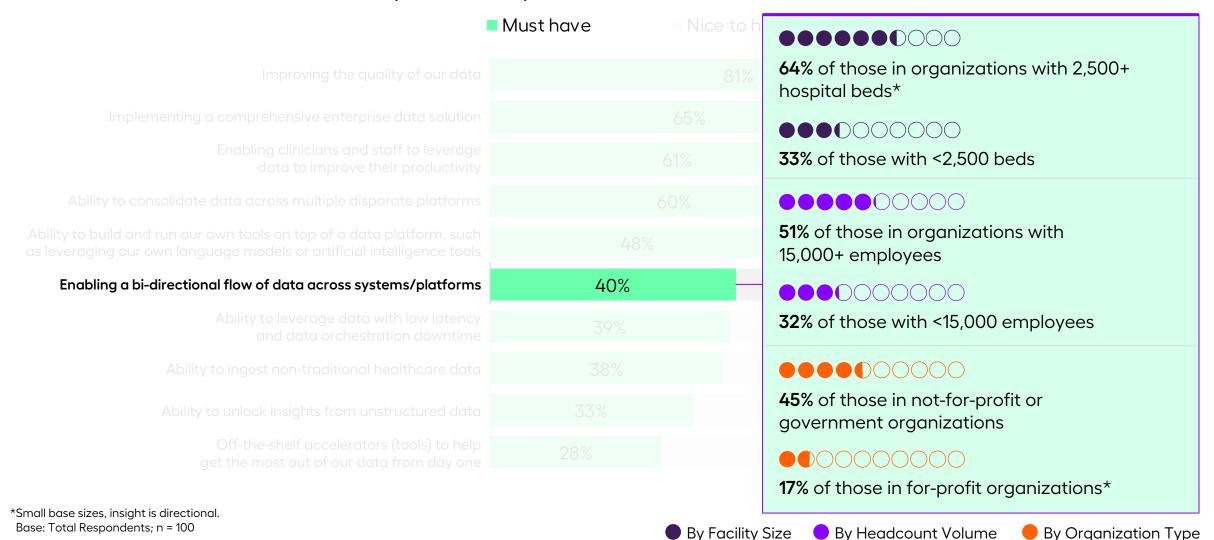
Data labels <4% not shown Not displayed: 'Something else' (2%) Base: Total Respondents: n = 100 Implementing a comprehensive enterprise data solution and enabling a bi-directional flow of data are more top-of-mind to leaders in larger organizations when they think about data analytics platform offerings.

Considering the capabilities and benefits of data analytics platforms available on the market today, which of the items below do you consider must haves for a data platform to offer? Which would you consider a nice-to-have for a data platform to provide?



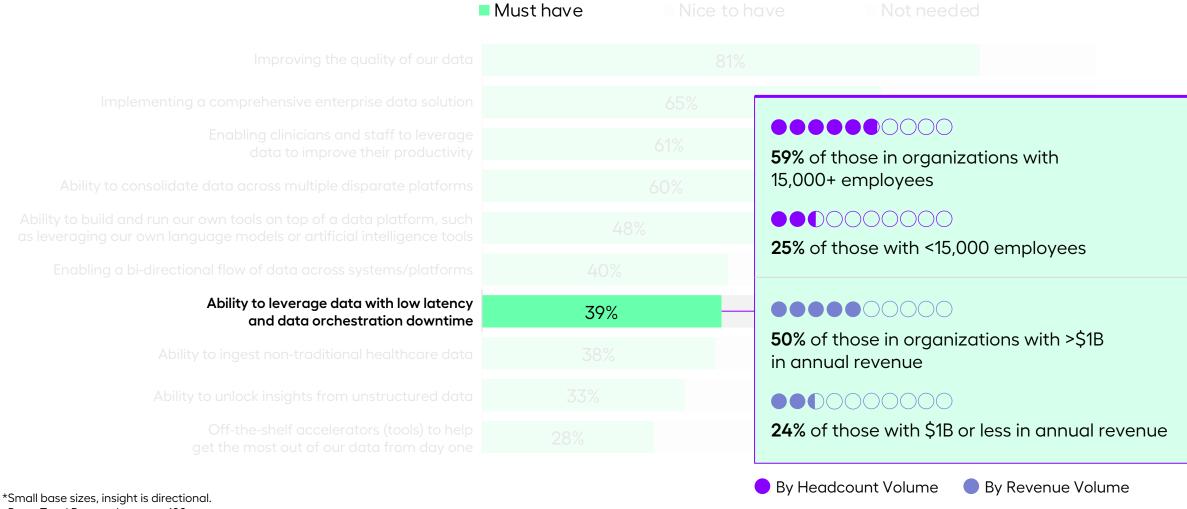
<sup>\*</sup>Small base sizes, insight is directional. Base: Total Respondents; n = 100

Considering the capabilities and benefits of data analytics platforms available on the market today, which of the items below do you consider must haves for a data platform to offer? Which would you consider a nice-to-have for a data platform to provide?



Leaders in larger organizations are also more likely to say that the ability to leverage data with low latency and orchestration downtimes must be offered by a data analytics platform.

Considering the capabilities and benefits of data analytics platforms available on the market today, which of the items below do you consider must haves for a data platform to offer? Which would you consider a nice-to-have for a data platform to provide?

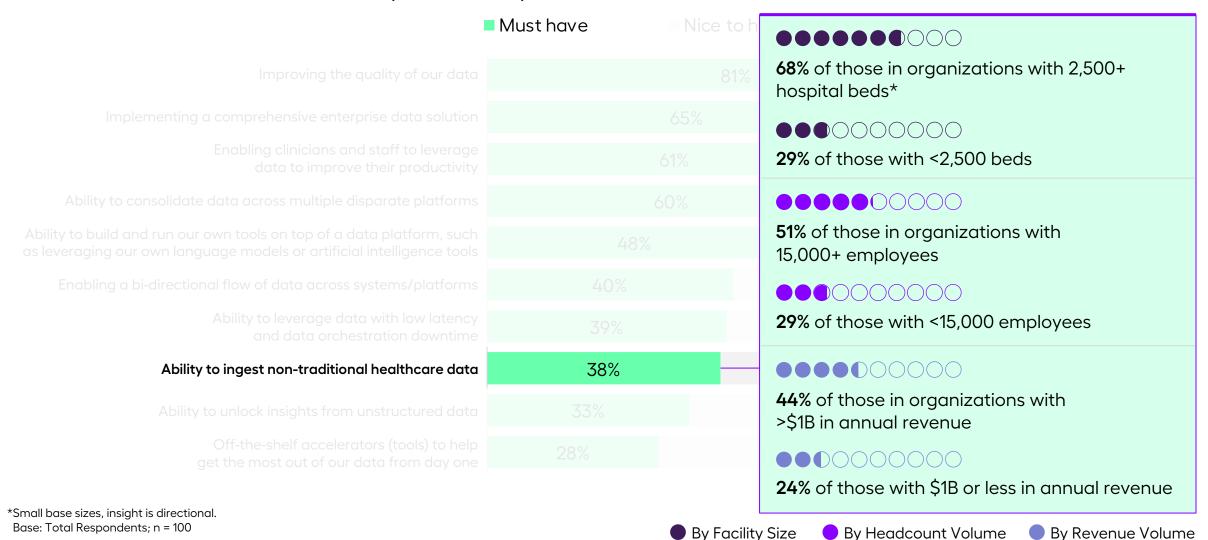


Base: Total Respondents; n = 100

Additionally, the ability to ingest non-traditional healthcare data is more critical for leaders in larger organizations.

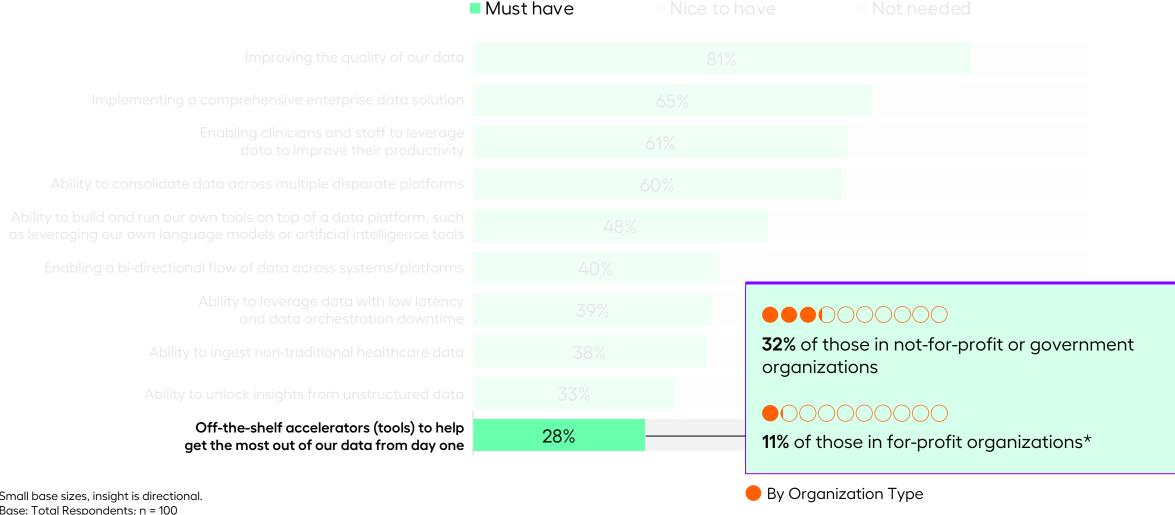


Considering the capabilities and benefits of data analytics platforms available on the market today, which of the items below do you consider must haves for a data platform to offer? Which would you consider a nice-to-have for a data platform to provide?



Nearly one-third of leaders in not-for-profit or government organizations say it is important that a data analytics platform offers off-the-shelf accelerators to help them leverage their data from day one.

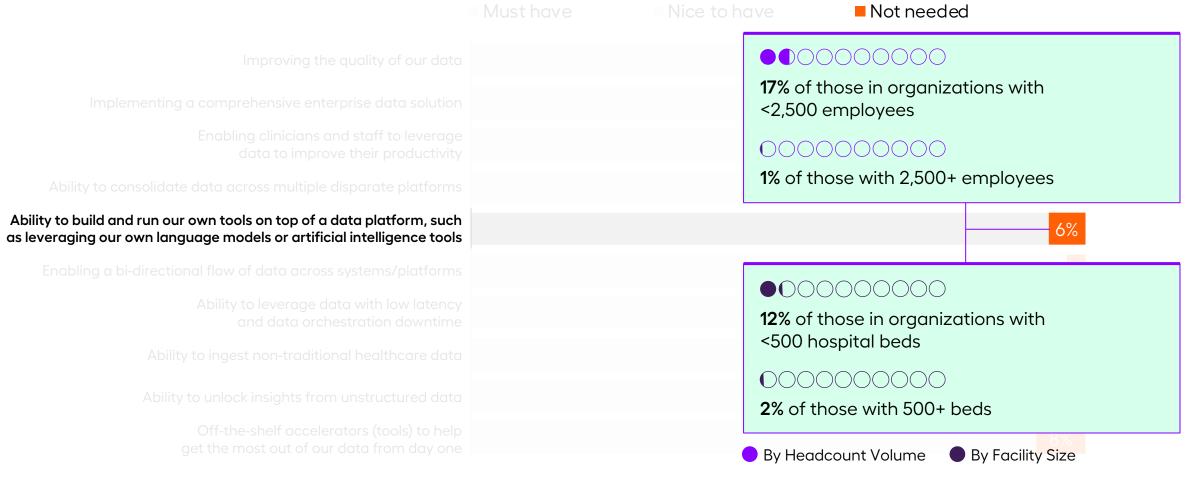
Considering the capabilities and benefits of data analytics platforms available on the market today, which of the items below do you consider must haves for a data platform to offer? Which would you consider a nice-to-have for a data platform to provide?



\*Small base sizes, insight is directional. Base: Total Respondents; n = 100

Nearly 1-in-5 leaders in organizations with less than 2,500 employees say that the ability to build and run their own tools on top of an analytics platform is not needed.

Considering the capabilities and benefits of data analytics platforms available on the market today, which of the items below do you consider must haves for a data platform to offer? Which would you consider a nice-to-have for a data platform to provide?



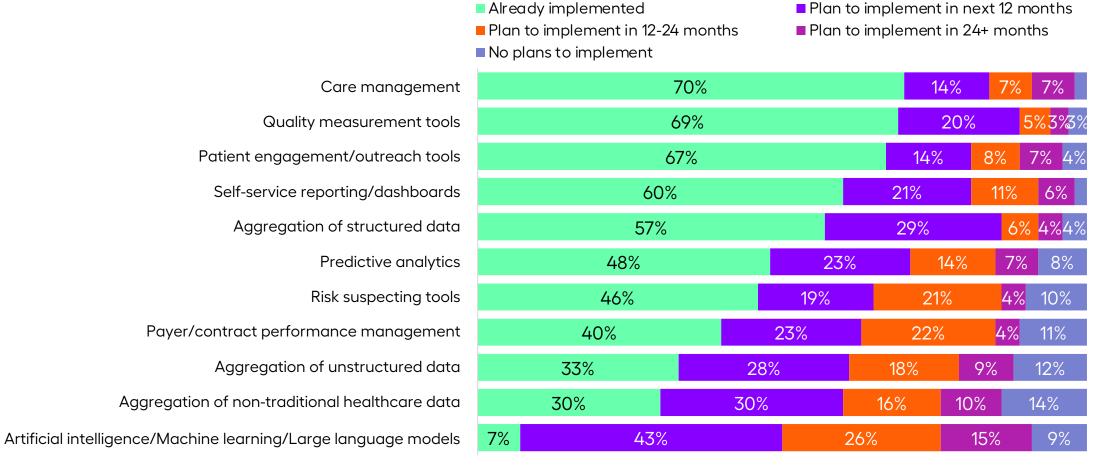
Data labels <4% not shown Not displayed: 'Something else' (2%) Base: Total Respondents: n = 100 WE ASKED:

Which of the following applications or technologies is your organization either planning to integrate or has already integrated with a data analytics platform?

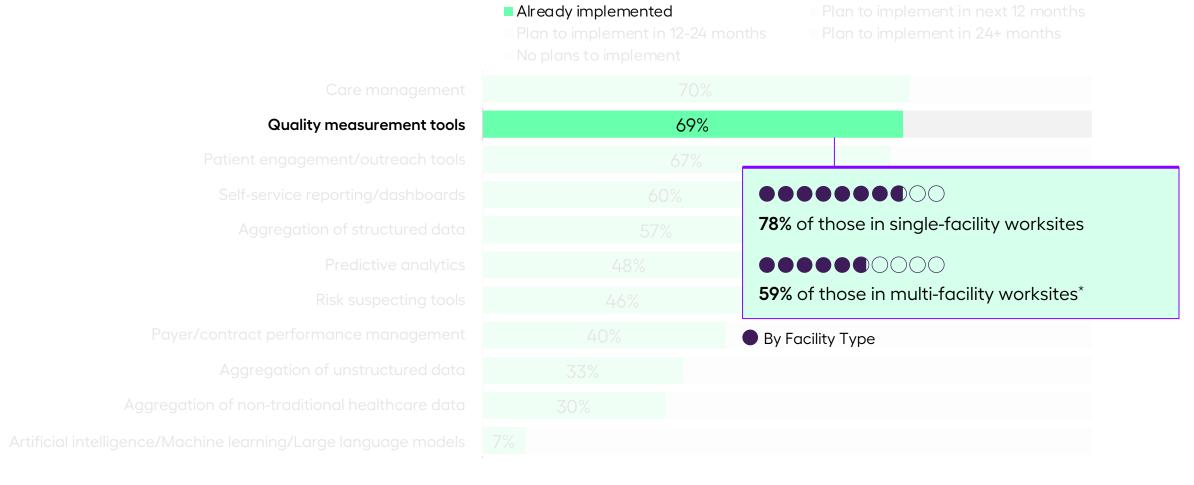
Over half of leaders have integrated core technologies with a data analytics platform. These include care management, quality measurement, patient engagement tools, self-service reporting, and aggregation of structured data.



# Which of the following applications or technologies is your organization either planning to integrate or has already integrated with a data analytics platform?

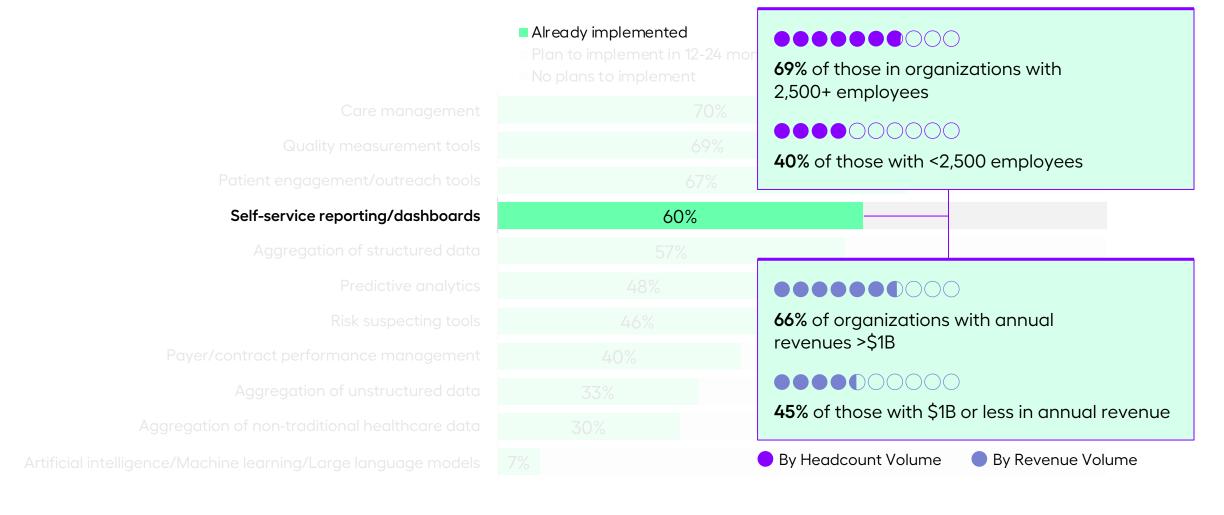


Data labels <3% not shown Not displayed: 'Something else' (1%) Base: Total Respondents; n = 100 Leaders in single-facility worksites are significantly more likely to say they have already implemented quality measurement tools with their data analytics platforms; those in larger organizations more often say self-service reporting/dashboards have already been integrated.



<sup>\*</sup>Single Facility = Academic Medical Centers, Stand-Alone Hospitals, and Specialty Hospitals; Multi-Facility = Integrated Delivery Networks and Multi-Hospital Systems.

Base: Total Respondents; n = 100



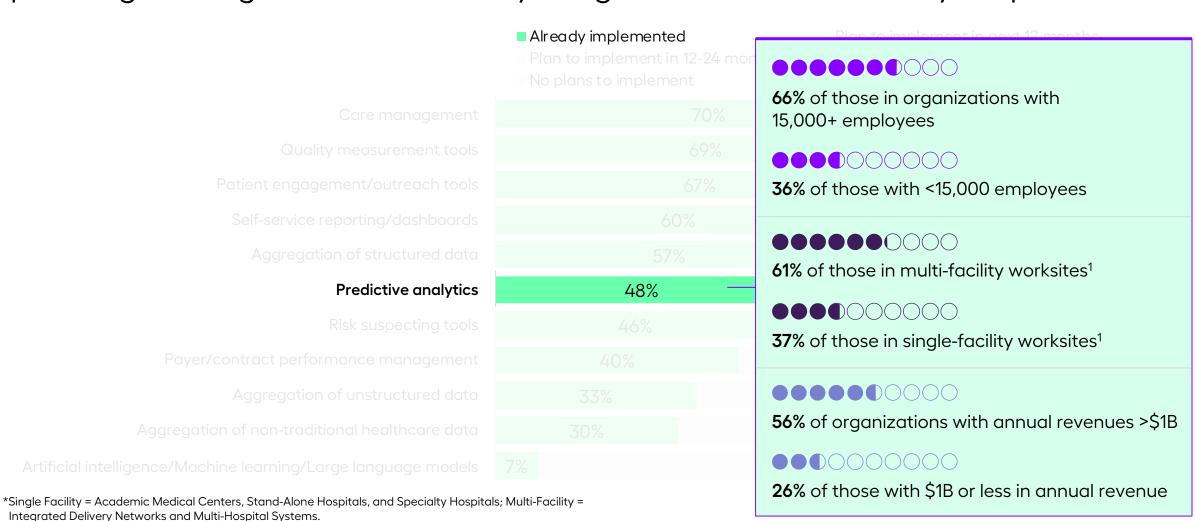
Larger organizations are significantly more likely to have already integrated predictive analytics with their analytics platform.



By Revenue Volume

Base: Total Respondents; n = 100

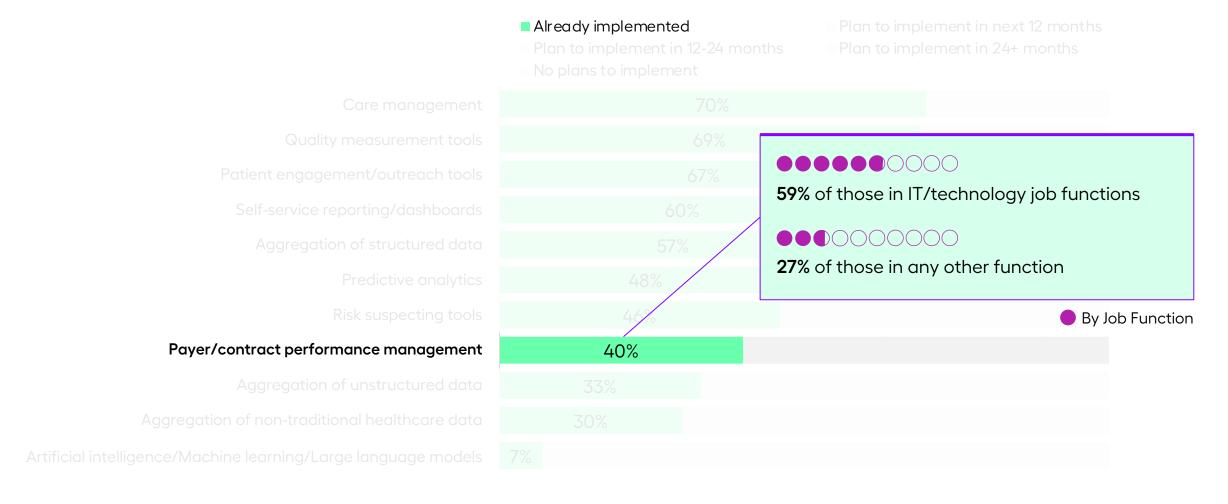
# Which of the following applications or technologies is your organization either planning to integrate or has already integrated with a data analytics platform?



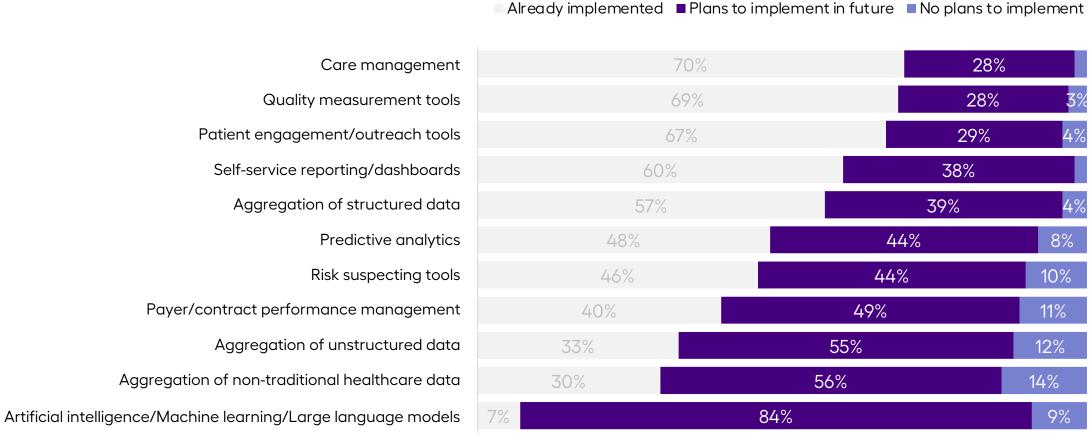
By Headcount Volume

By Facility Type

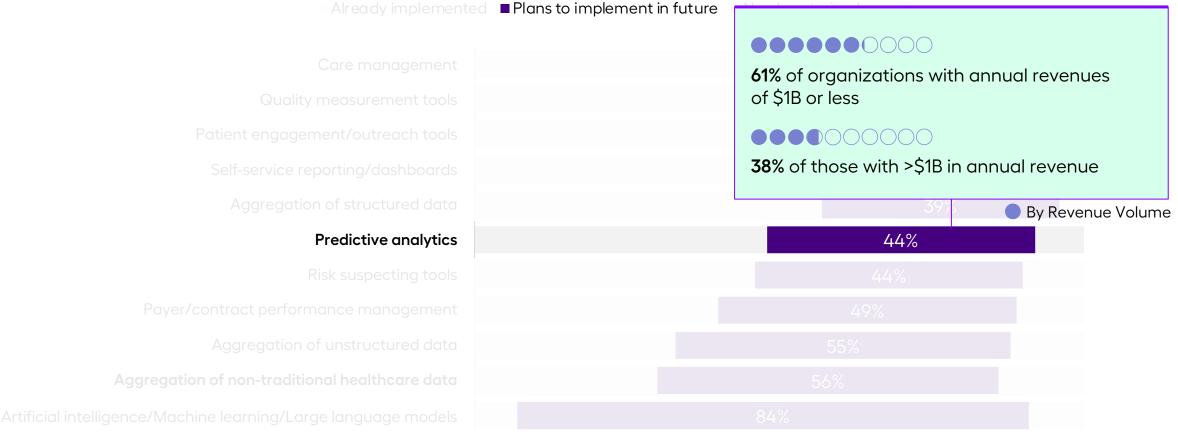
Interestingly, IT/technology leaders are more likely to say they have already integrated payer/contract performance management with their analytics platforms than those in other job functions; this may be highlighting differences in familiarity with all aspects of their analytics platforms.



Larger organizations are significantly more likely to say they have plans to implement aggregation of non-traditional healthcare data with their data analytics platforms, while those with less than \$1B in revenue more often say they have plans to integrate predictive analytics.



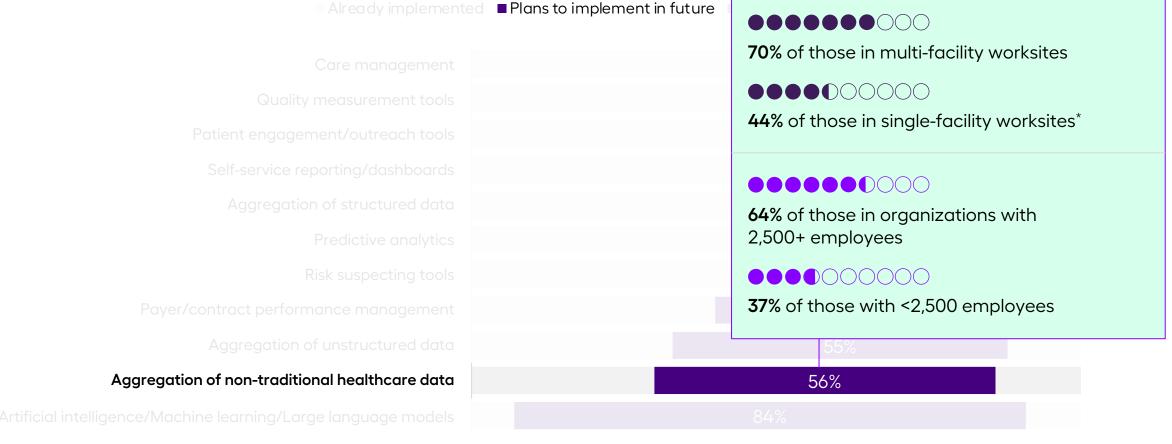
Data labels <3% not shown Not displayed: 'Something else' (1%) Base: Total Respondents; n = 100



Data labels <3% not shown Not displayed: 'Something else' (1%) Base: Total Respondents; n = 100

By Headcount Volume

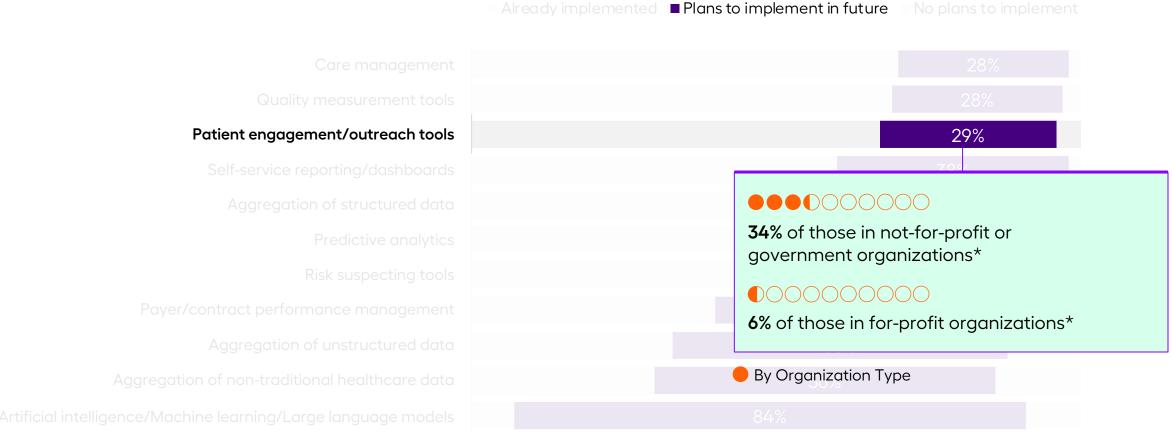
By Facility Type

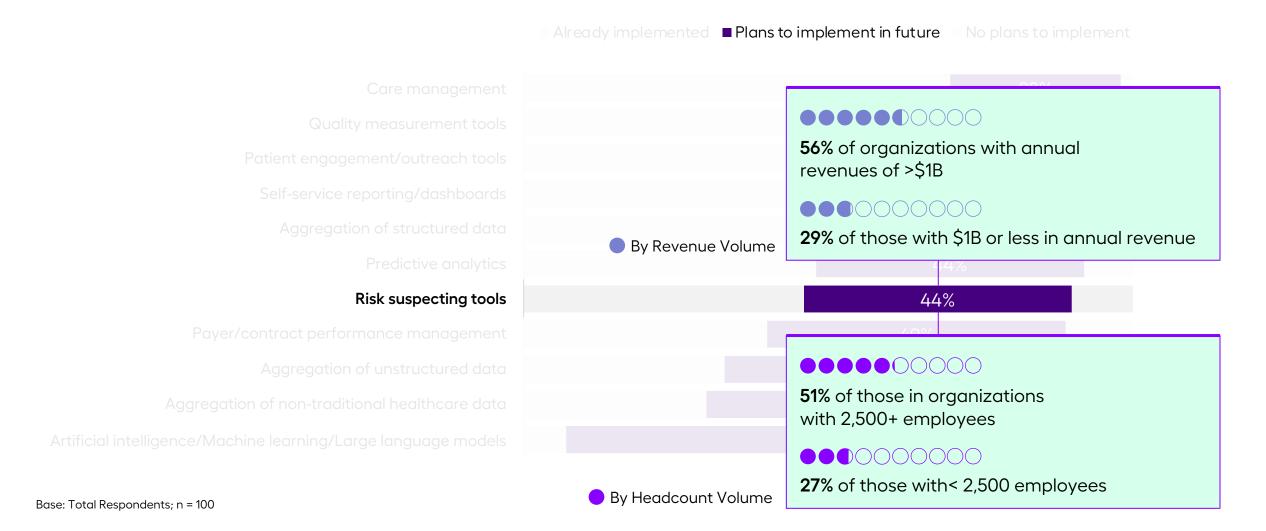


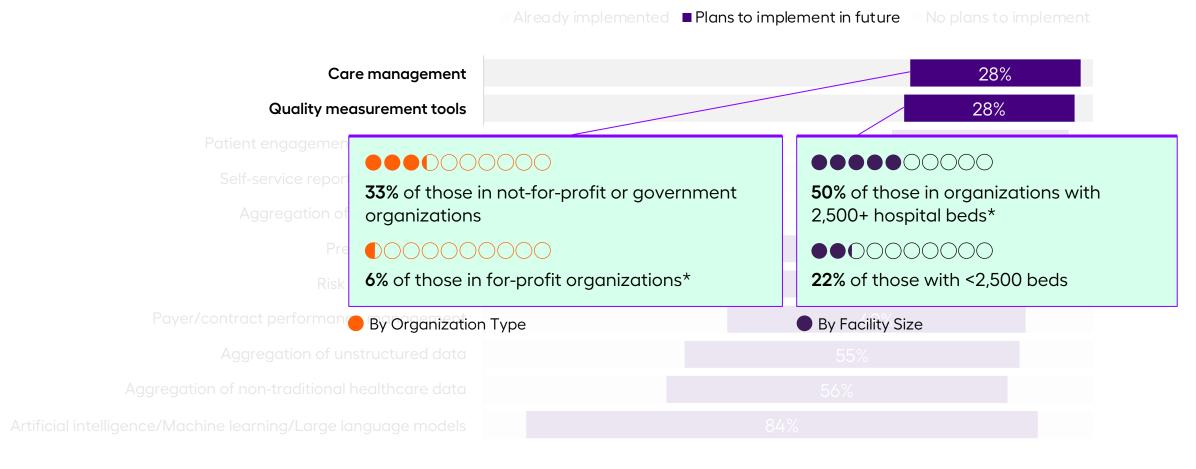
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Base: Total Respondents; n = 100

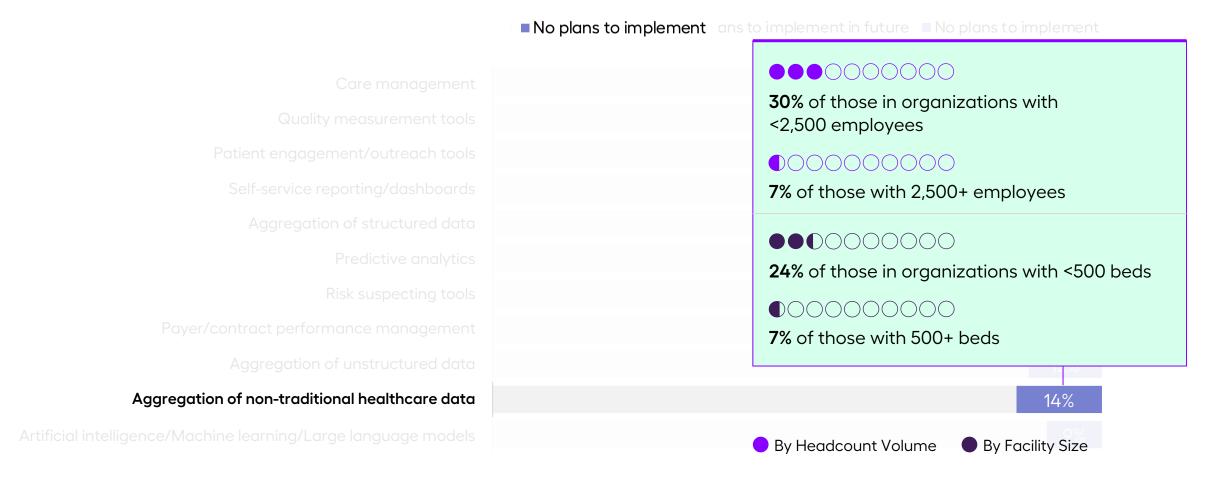
Larger organizations are significantly more likely to have plans to integrate risk suspecting and quality measurement tools with their analytics platform; not-for-profit or government organizations plan to integrate patient engagement and care management.



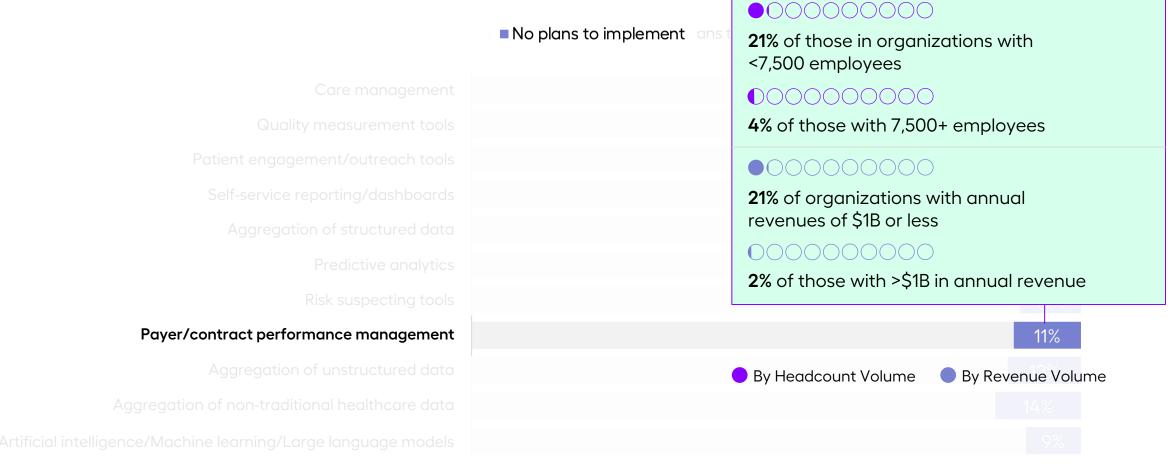


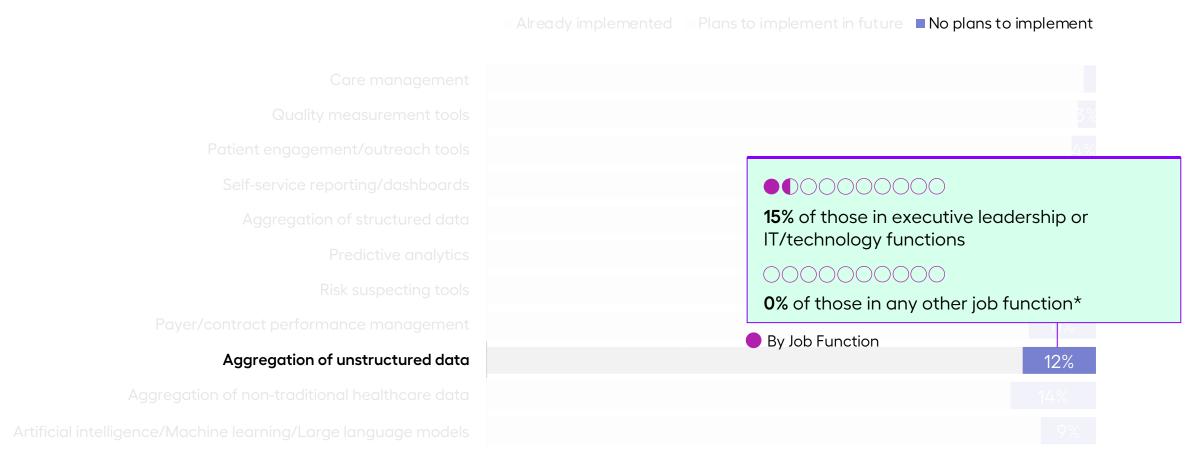


Organizations are least likely to report having plans to integrate the aggregation of non-traditional healthcare data with their analytics platforms; this is particularly true for smaller organizations.

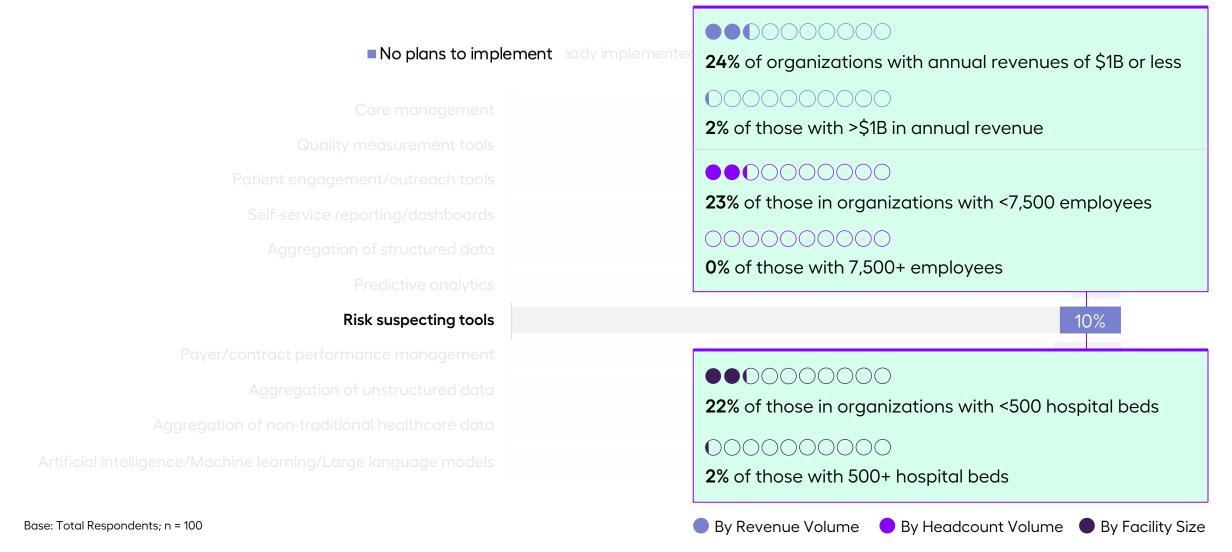


Executive leaders and those in IT/technology functions are less likely to say they have plans to implement the aggregation of unstructured data with a data analytics platform; smaller organizations are less likely to say there are plans to implement payer/contract performance management in their platforms in the future.

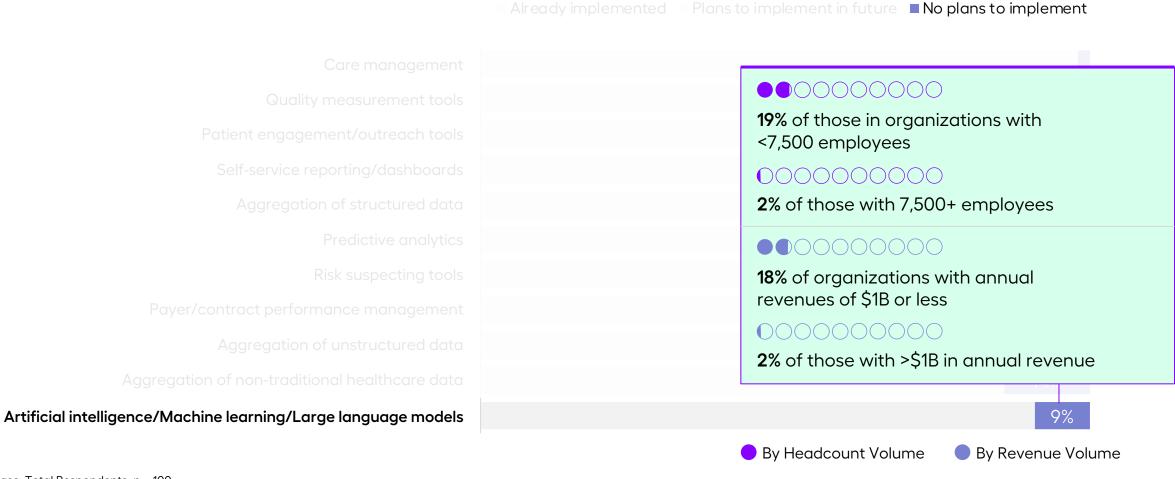




Similarly, smaller organizations are significantly less likely to report plans to integrate risk suspecting tools in the future.



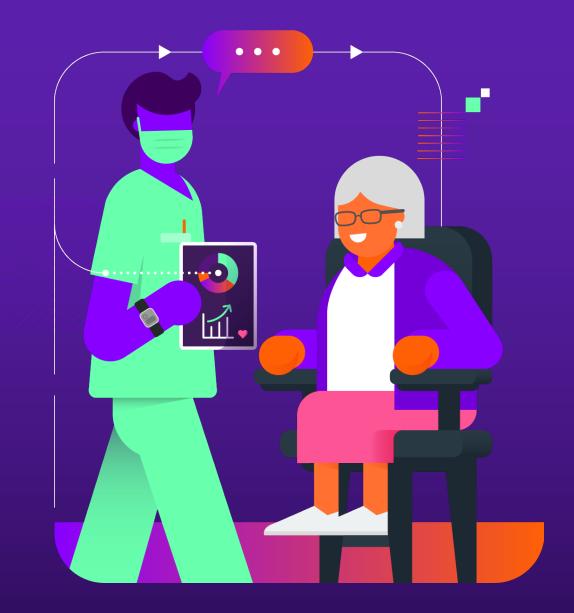
Around 1-in-5 leaders in smaller organizations also say they have no plans to implement artificial intelligence, machine learning, or large language models into their data platforms.

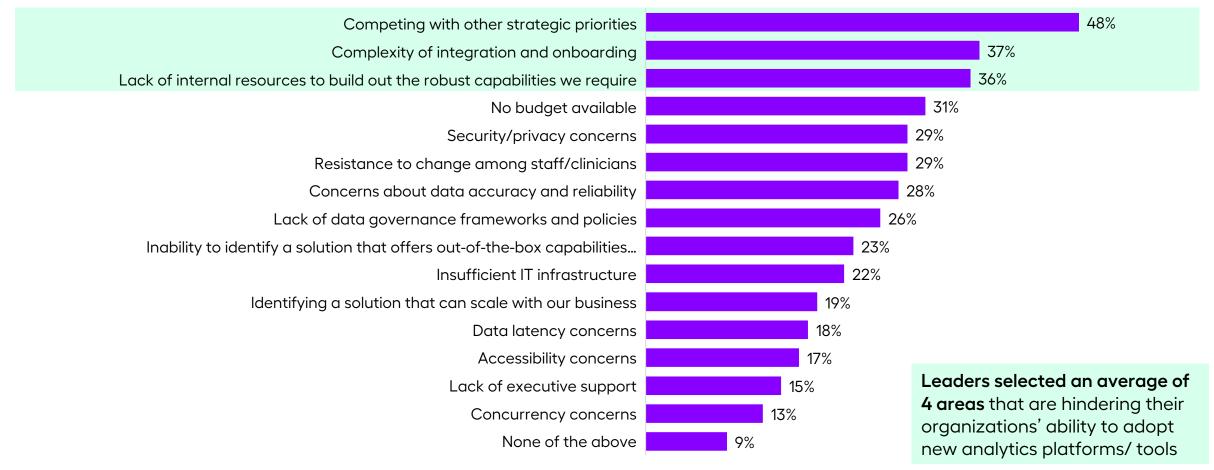


WE ASKED:

Which of the following concerns or barriers does your organization face today when it comes to adopting new data platforms or analytics tools, if any?

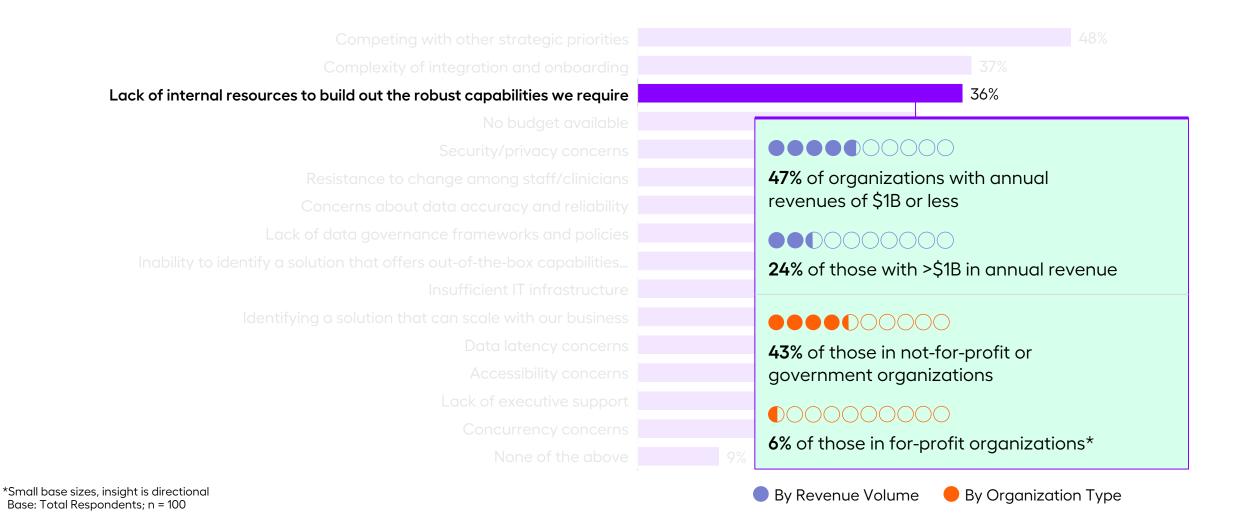
Organizations face many challenges in adopting new data platforms and tools. The most common barriers include competing priorities, the perceived complexity of integration, and a lack of internal resources.





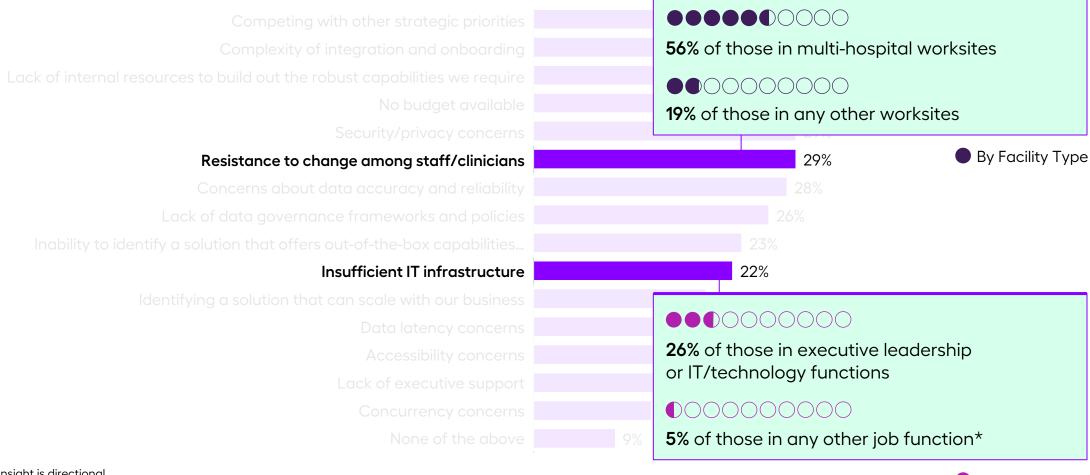
Not displayed: 'Something else' (4%) Base: Total Respondents; n = 100 Organizations with lower annual revenues and those in not-for-profit or government organizations are more likely to say a lack of internal resources is a barrier to adopting new data analytics platforms/tools.

# Which of the following concerns or barriers does your organization face today when it comes to adopting new data platforms or analytics tools, if any?

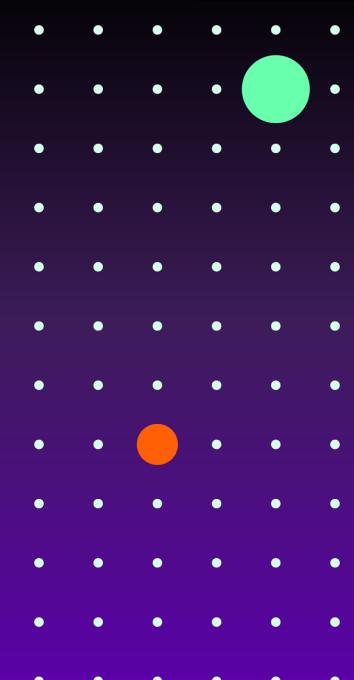


Leaders in multi-hospital worksites are significantly more likely to say they face a resistance to change among staff/clinicians, while insufficient IT infrastructure is more of a concern for those in executive leadership or IT/technology functions.

# Which of the following concerns or barriers does your organization face today when it comes to adopting new data platforms or analytics tools, if any?



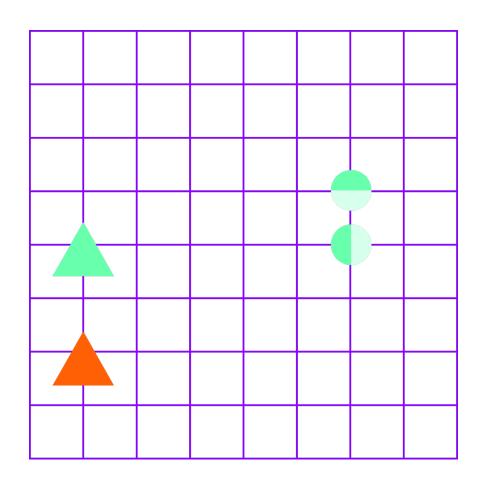
# Research methodology



### Research methodology

### Methodology

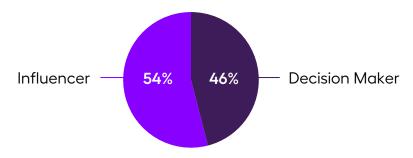
- This research was conducted online amongst leaders (directors and above) in healthcare in the United States.
- Respondents were screened for having a role in the selection and/or strategy/innovation of data analytics platforms at their organization.
- A total of 100 qualified respondents participated in this research.
- This was a blind data collection effort; Arcadia was not identified as a sponsor of the research.



### Respondent profile

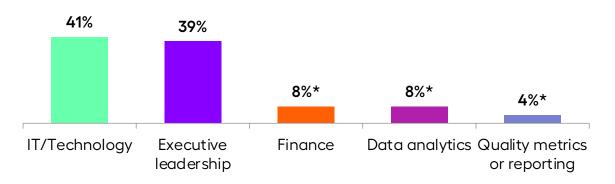
### Role in selection and/or strategy/innovation of data analytics platforms

Which of the following best describes your role regarding the selection of and/or the strategy/innovation of data analytics platforms at your organization



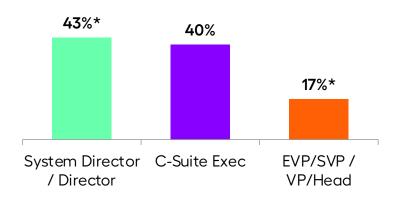
#### Job function

How would you characterize your job role or function?



### Job role

What is your current role?

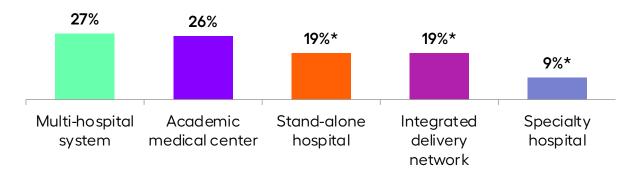


<sup>\*</sup>Small base sizes, insight is directional. Base: Total Respondents; n = 100

### Organizational profile

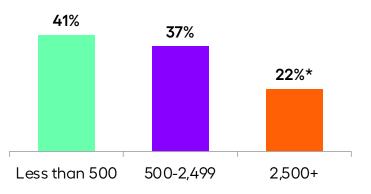
#### Worksite

Which of the following best describes your worksite?



### Number of hospital beds

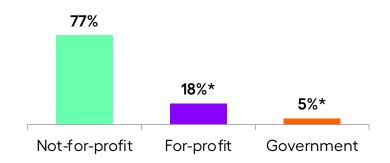
Please tell us the total number of hospital beds in your organization



<sup>\*</sup>Small base sizes, insight is directional. Base: Total Respondents; n = 100

### **Ownership**

Which of the following best describes your health system / hospital ownership?



#### **Annual revenue**

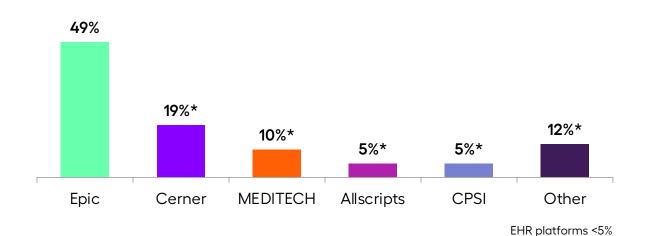
What is your organization's annual net revenue?



## Organizational profile

### EHR platform

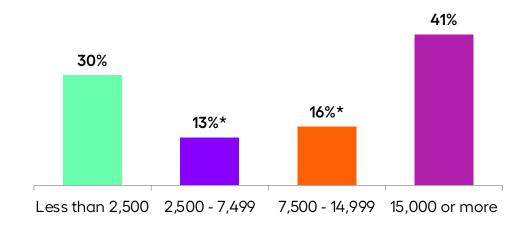
What is your organization's <u>primary</u> EHR (electronic health records) platform?



grouped into 'other'

### Number of employees

Please tell us the total number of employees in your organization.



<sup>\*</sup>Small base sizes, insight is directional. Base: Total Respondents; n = 100

Hear leaders from top healthcare organizations discuss these results at <u>arcadia.io/bigdata</u>



Arcadia transforms data into powerful insights and actions that accelerate healthcare transformation. Our data platform, analytics tools, and services are used by the nation's leading healthcare providers and payers to make informed decisions, improve patient outcomes, and optimize operations. We're on a mission to create a unified fabric for health and dedicated to happier, healthier days for all. For more information, visit **arcadia.io**.

