



2024 HIMSS MARKET INSIGHTS SURVEY

arcadia.io

The Current State of Healthcare **Analytics Platforms**

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

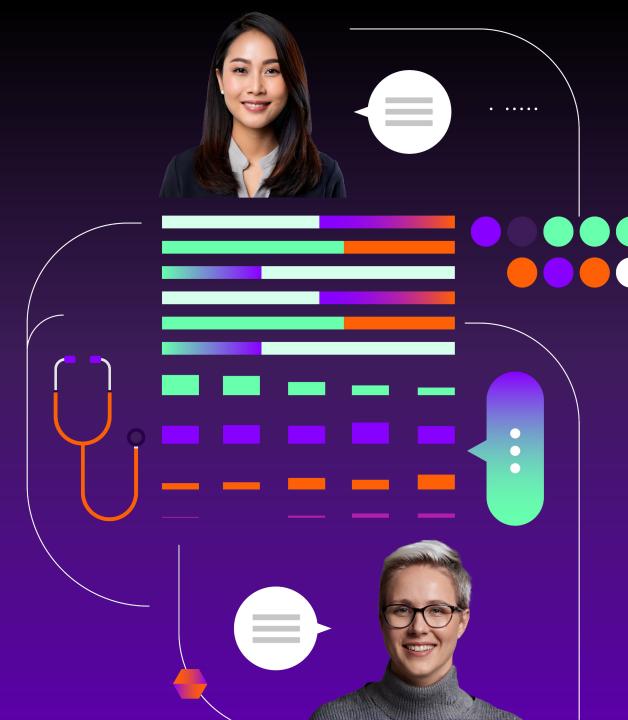


Table of Contents

| Research Overview | 3 |
|------------------------------------|-----------|
| Key Takeaways | 4 |
| Detailed Findings | 6 |
| Organizational Data Status | 7 |
| Data Recency/Refresh Rate | 11 |
| Business Goals Impacted By Data | 24 |
| Making Data More Usable | 32 |
| Opinions on Data Platforms | 41 |
| What Data Platforms Should Solve | 47 |
| Important Goals for Data Platforms | 49 |
| Data Platform Integrations | <u>58</u> |
| Must-haves vs. Nice-to-haves | 71 |
| Barriers to Adoption | 97 |
| Research Methodology | 103 |



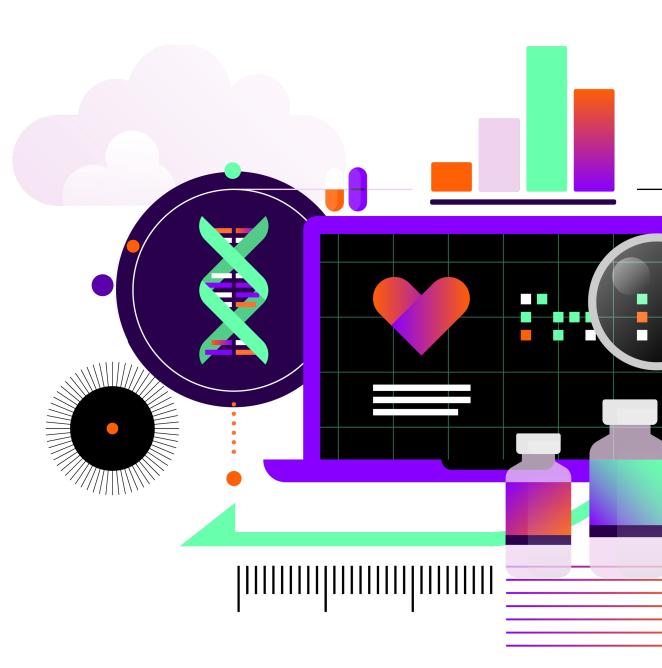
Looking for an overview of these results? Check out the executive summary at arcadia.io/exec-summary

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



Key Takeaways

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).

3

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 nontraditional 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).



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).

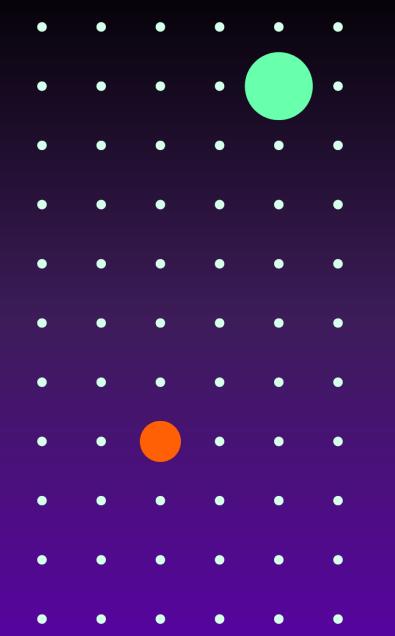


Hear leaders from top healthcare organizations discuss these results at <u>arcadia.io/bigdata</u>



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BACK TO TABLE OF CONTENTS | 6



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Detailed Findings

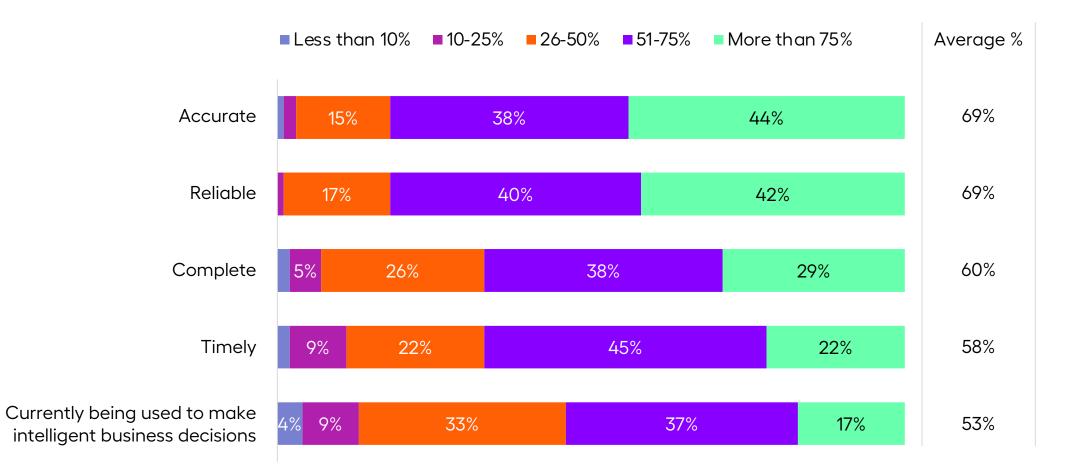
?

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, 47% of this data informs business decisions.



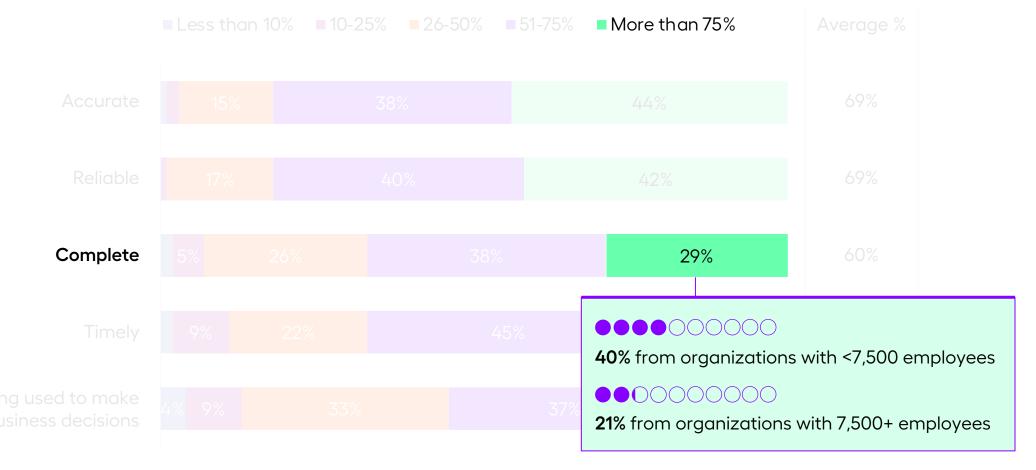
What percent of your organization's data would you estimate is ...?



Data labels <3% not shown Base: Total Respondents; n = 100 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.



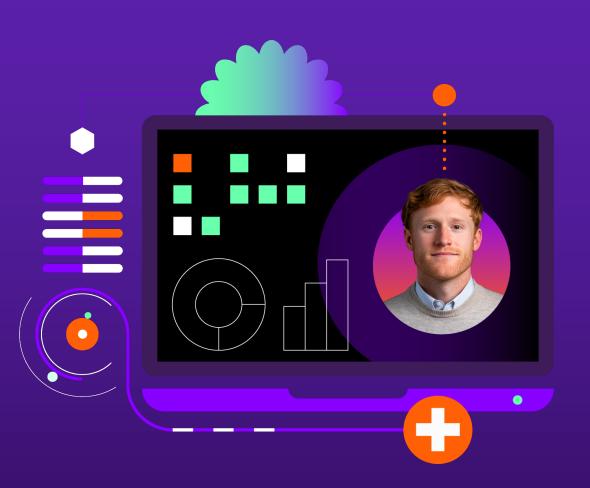
What percent of your organization's data would you estimate is ...?



By Headcount Volume



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.



| | Rec | al-time | e ∎Da | iily 🗖 V | Veekly | | nthly | ■ Qu | arterly | / |
|---|---------------------|---------|-------|----------|--------|-----|-------|------|---------|------------------|
| IT system performance monitoring | | | 52% | | | 18% | 10% | 1. | 3% | 7% |
| Point of care decision support | | 39% | | | 3 | 5% | | 15% | 7% | <mark>4</mark> % |
| Care management | - | 32% | | | 44% | 0 | | 15% | 7 | % |
| Patient engagement | | 32% | | 3 | 0% | | 17% | , | 17% | 4% |
| Integrating clinical data | 28 | 3% | | 34 | % | | 23% | | 12% | 3% |
| Integrating patient generated/reported data | 21% | | | 39% | | | 25% | | 13% | |
| Business intelligence analytics | 16% | | | 45% | | | 22% | | 12% | 5% |
| Integrating claims data | 16% | | 3 | 7% | | 16% | | 23% | | 8% |
| Building/running AI models | 16% | · · | 16% | 16% | | 24% | | 28 | 3% | |
| Patient stratification/building cohorts | 14% | | 25% | | 34 | 4% | | 21% | | 6% |
| Generating lists of care gaps | 9% | | 38% | | | 27% | | 20% | 6 | 6% |
| Payer/contract performance reporting | <mark>4%</mark> 182 | % | 20% | 6 0 | | 41% | | | 17% | |

^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.

| | Real-time Daily | Weekly Monthly Quarterly |
|----------------------------------|-----------------|--|
| IT system performance monitoring | 52% | |
| | | |
| | | |
| | | 62% from organizations with 500+ beds |
| | | |
| | | 38 % from organizations with <500 beds |
| | | |
| | | |
| Building/running Al models | | 60% from not-for-profit and government orgs |
| | | ● 0 0000000 |
| | | 13% from for-profit organizations* |
| | | By Facility Size By Organization Type |

*Small base sizes, insight is directional..

^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

BACK TO TABLE OF CONTENTS | 15

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.

| | Real-time | |
|--|-----------|--|
| | | 44 % of not-for-profit and government organizations |
| Point of care decision support | 39% | |
| | | 12 % of for-profit organizations* |
| | | |
| | | |
| | | 24% of those in multi-facility worksites |
| Business intelligence analytics | 16% | •••••• |
| Integrating claims data | 16% | 8% of those in single-facility sites ^ |
| Building/running Al models | 16% | |
| | 14% | |
| | | 25% of those in multi-facility worksites |
| | | 00000000 |
| sizes, insight is directional. ity = Academic Medical Centers, Stand-Alone Hospitals, and Specialty Hos | | 8% of those in single-facility sites ^ |

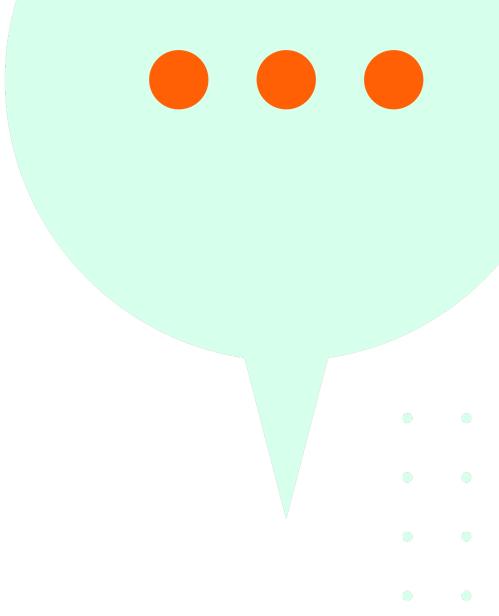
[^]Single Facility = Academic Medical Centers, Stand-Alone Hospitals, and Specialty Hospitals; Multi-Facility = Integrated Delivery Networks and Multi-Hospital Systems Base varies based on organizational activities related to each task: n = 57-98

By Organization Type

| | Real-time | | Monthly Quarterly |
|----------------------------|-----------|---------------|---|
| | | | |
| | | | |
| | | | 0000000 |
| | | 32% | from organizations with 15,000+ employees |
| | | | 0000000 |
| | | 8 % fr | om organizations with <15,000 employees |
| | | | D000000 |
| | 16% | | from facilities with 500+ hospital beds |
| Building/running Al models | 16% | | 0000000 |
| | 14% | | rom facilities with <500 beds* |
| | | | |
| | | 🚽 Ву Н | eadcount Volume 🛛 🜑 By Facility Size |

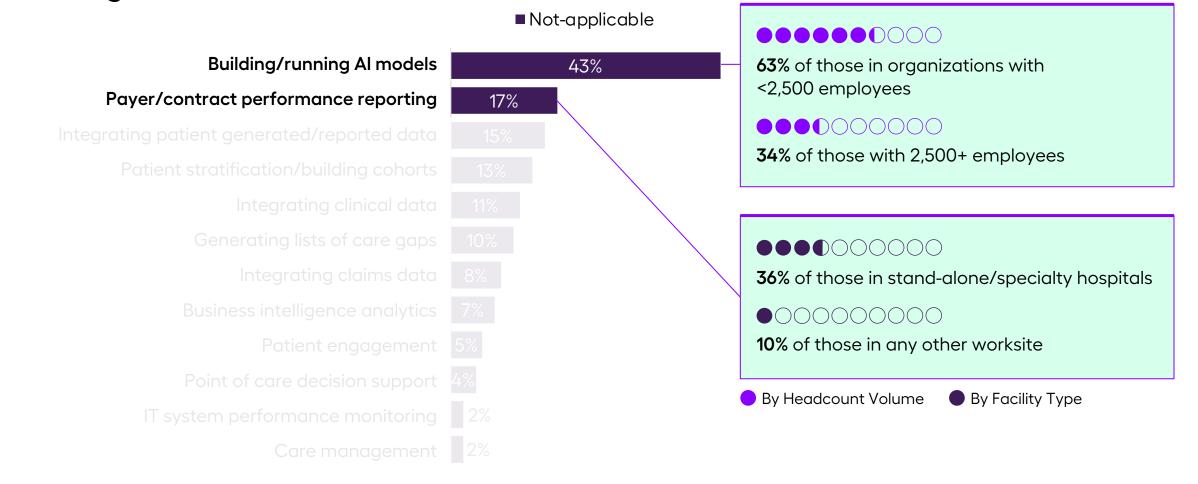
Over 3-in-5 leaders in organizations with <2,500 employees say that their organizations are not currently building or running Al models on their systems.

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



BACK TO TABLE OF CONTENTS | 18





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.



| Building/running Al models | | |
|---|-----|--|
| | | |
| Integrating patient generated/reported data | 15% | |
| | | 27% of those in organizations with |
| | | <2,500 employees |
| | | $\bullet \bigcirc \bigcirc$ |
| | | 10% of those with 2,500+ employees |
| | | |
| | | 19% of those in not-for-profit organizations |
| | | 00000000 |
| | | 0% of those in for-profit or government orgs* |
| | | By Headcount Volume By Organization Type |

■Not-applicable

| | — 14 | |
|----------------------------|------|--|
| Building/running Al models | | |
| | | |
| | | |
| | | $\bullet \bullet $ |
| Integrating clinical data | 11% | 14% of those in organizations with<2,500 hospital beds |
| | | 00000000 |
| | | 0% of those with 2,500+ beds* |
| | | |
| | | By Facility Size |
| | | |
| | | |
| | | |

■Not-applicable

| Building/running Al models | | |
|---|----|--|
| | | |
| | | |
| | | |
| | | 17% of those in organizations with |
| | | <2,500 employees |
| | | 00000000 |
| Business intelligence analytics | 7% | 3 % of those with 2,500+ employees |
| | 5% | |
| | | 16% of those in organizations with |
| | | \$1B or less in annual revenue |
| | | 00000000000000000000000000000000000000 |
| used on organizational activities related to each task: $n = 57-98$ | | By Headcount Volume By Revenue Volume |

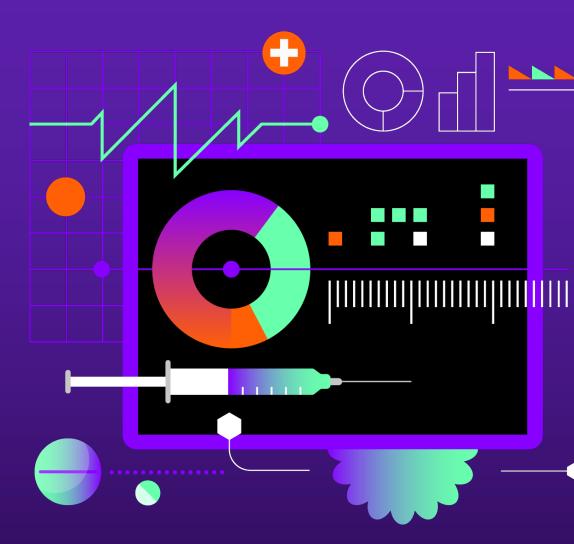
■Not-applicable



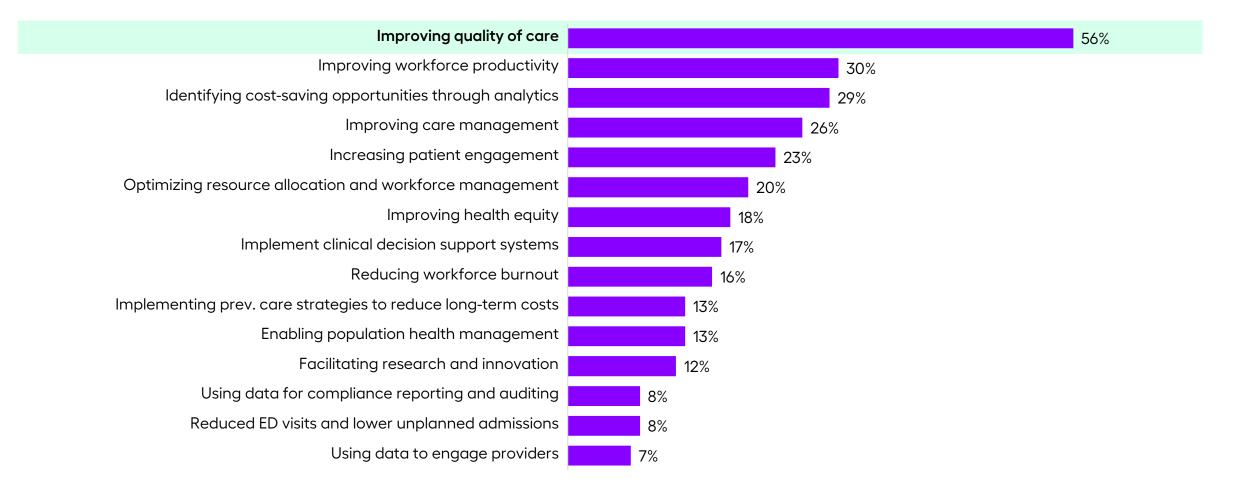


WE ASKED: What are the top three most important business objectives, goals, or strategies that data empowers for your organization?

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.

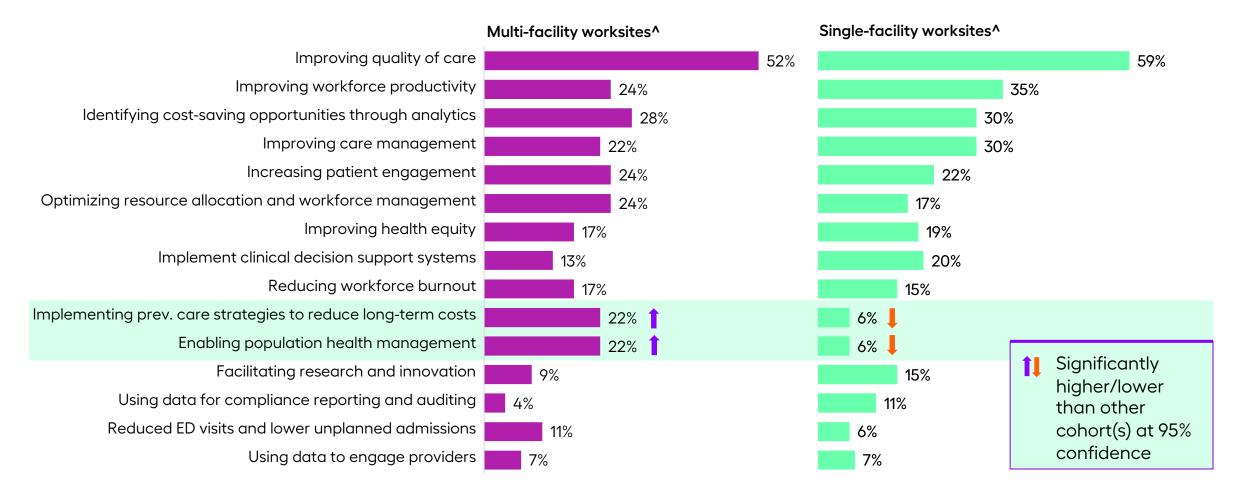


What are the top three most important business objectives, goals, or strategies that data empowers for your organization?



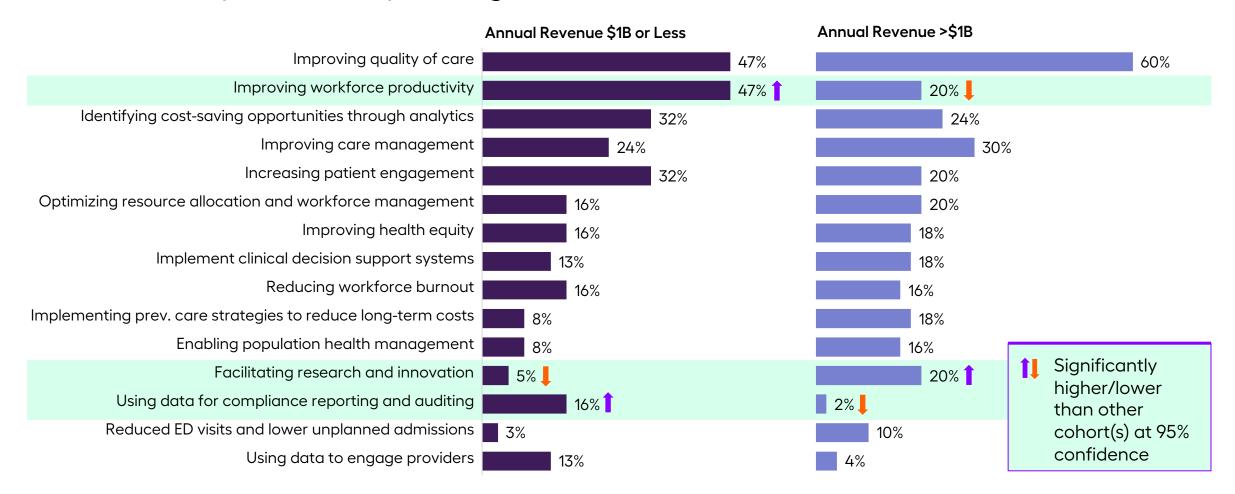
Leaders in multi-facility worksites are significantly more likely than those in single-facility sites to say it is important that data empowers their organizations to implement preventive care strategies and enable population health management.

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



^Single Facility = Academic Medical Centers, Stand-Alone Hospitals, and Specialty Hospitals; Multi-Facility = Integrated Delivery Networks and Multi-Hospital Systems Base: Multi-Facility Worksites: n = 46; Single-Facility Worksites: n = 54 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?

| | <2,500 Employees | 2,500-14,999 Employees | 15,000+ Employees |
|--|------------------|------------------------|-------------------------------|
| Improving quality of care | 53% | 52 | % 61% |
| Improving workforce productivity | 43% | 31% | 20% |
| Identifying cost-saving opportunities through analytics | 40% | 21% | 27% |
| Improving care management | 23% | 38% | 20% |
| Increasing patient engagement | 30% | 24% | 17% |
| Optimizing resource allocation and workforce management | 20% | 14% | 24% |
| Improving health equity | 13% | 14% | 24% |
| Implement clinical decision support systems | 17% | 17% | 17% |
| Reducing workforce burnout | 10% | 21% | 17% |
| Implementing prev. care strategies to reduce long-term costs | 13% | 10% | 15% |
| Enabling population health management | 7% | 17% | 15% |
| Facilitating research and innovation | 0% 📕 | 17% 🚺 | 17% 🕇 |
| Using data for compliance reporting and auditing | 13% | 3% | 7% |
| Reduced ED visits and lower unplanned admissions | 0% 📕 | 3% 📕 | 17% 🕇 |
| Using data to engage providers | 17% | 3% | 2% |
| | 1 | 1 Signific | antly higher/lower than other |

*Small base sizes, insight is directional. Base: <2,500 Employees: n = 30; 2,500-14,999 Employees: n = 29; 15,000+ Employees: n = 41

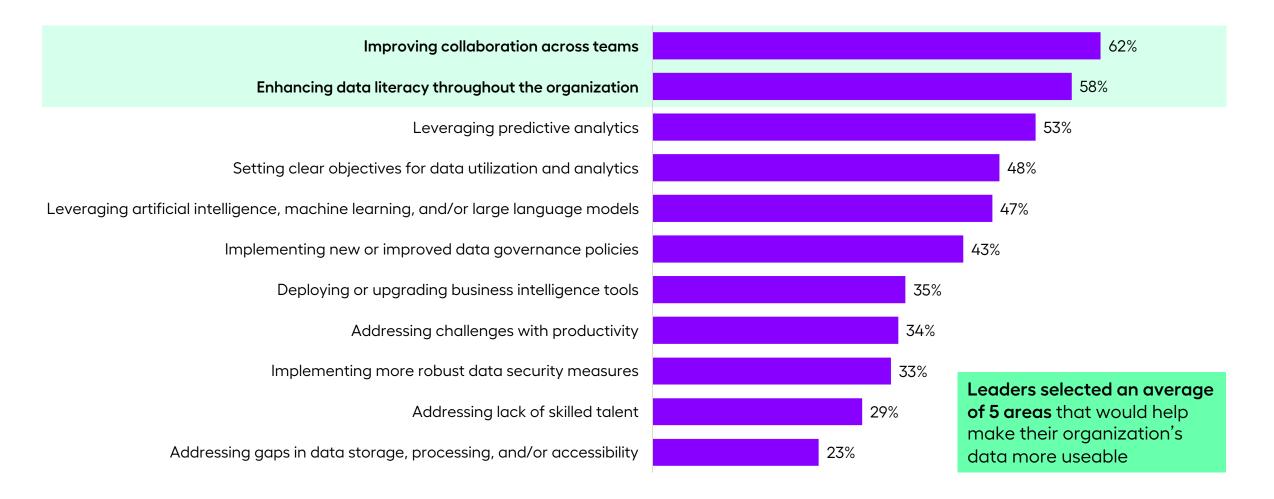


WE ASKED: What would make your organization's data more useable?

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?



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

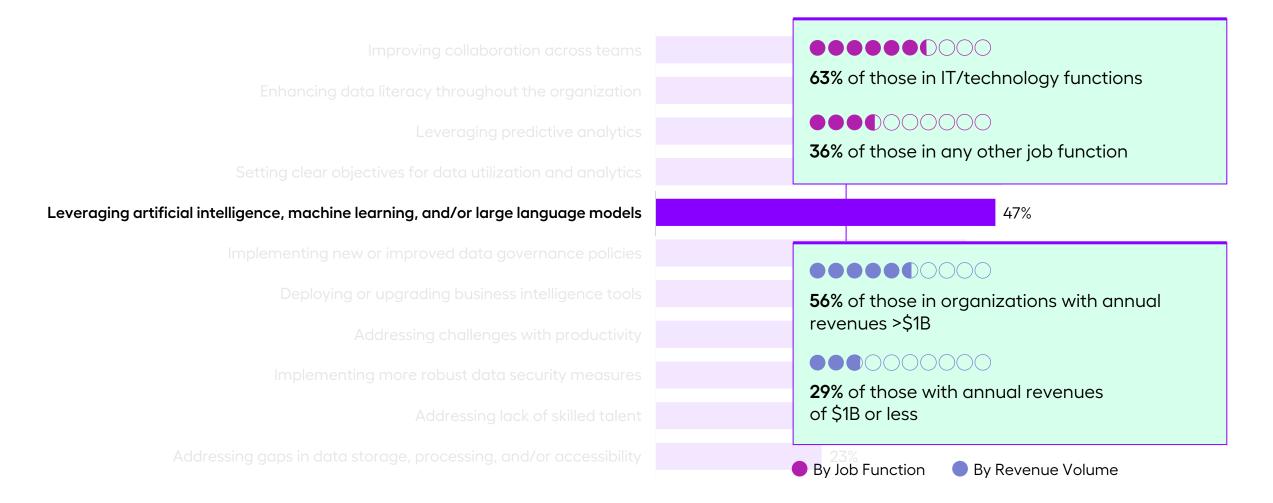
BACK TO TABLE OF CONTENTS | 34

What would make your organization's data more useable?

| | 86% of those in organizations with 2,500+ hospital beds* 6000000 36% of those with <2,500 beds |
|--|---|
| Leveraging artificial intelligence, machine learning, and/or large language models | 47% |
| | |
| | |
| | 66% of those in organizations with |
| | |
| | 66% of those in organizations with |

*Small base sizes, insight is directional. Not displayed: 'Something else' (2%) and 'None of the above' (0%) Base: Total Respondents; n = 100

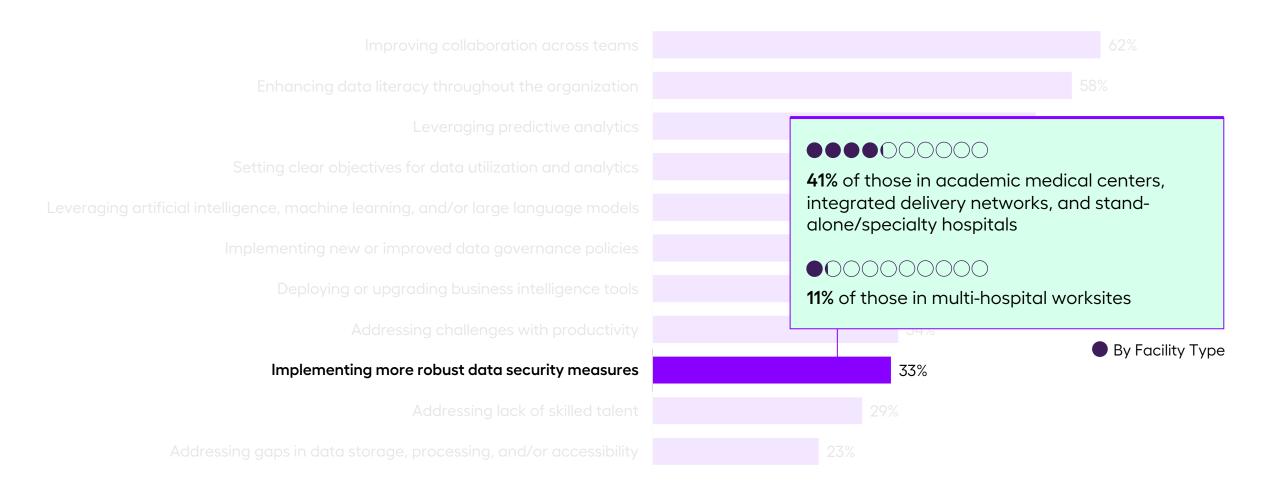
What would make your organization's data more useable?



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?



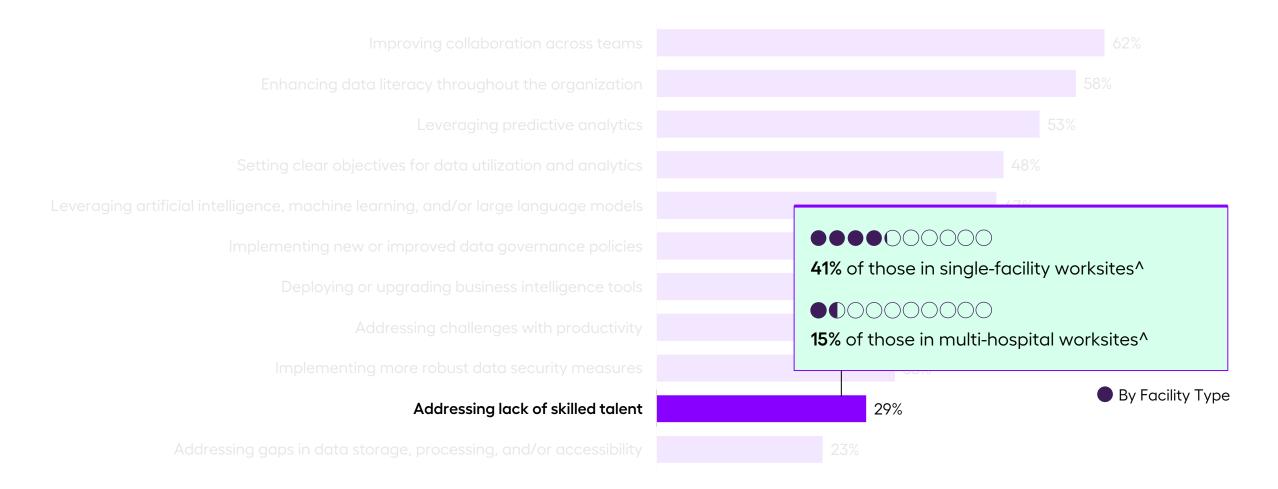
Not displayed: 'Something else' (2%) and 'None of the above' (0%) Base: Total Respondents; n = 100

BACK TO TABLE OF CONTENTS | 39

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?



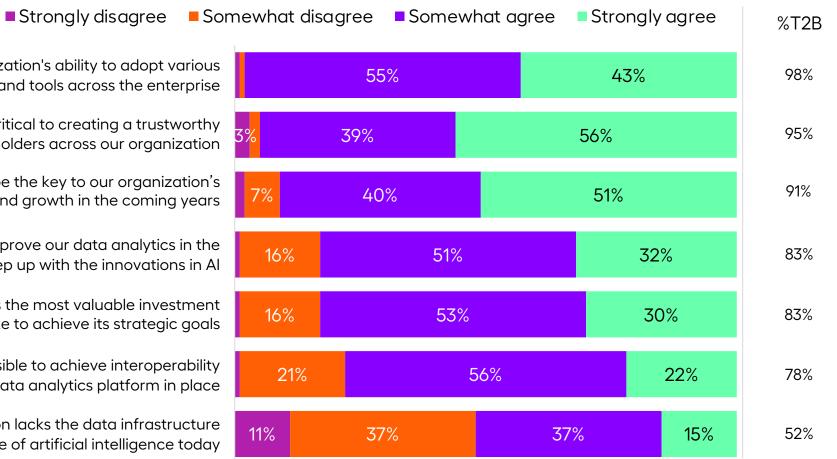
[^]Single Facility = Academic Medical Centers, Stand-Alone Hospitals, and Specialty Hospitals; Multi-Facility = Integrated Delivery Networks and Multi-Hospital Systems Not displayed: 'Something else' (2%) and 'None of the above' (0%) Base: Total Respondents; n = 100 •••

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.



Data platforms are critical for our organization's ability to adopt various technologies and tools across the enterprise

> Data analytics platform(s) are critical to creating a trustworthy data asset to enable stakeholders across our organization

> > Data analytics will be the key to our organization's success and growth in the coming years

My organization has plans to significantly improve our data analytics in the next 12 months to enable us to keep up with the innovations in Al

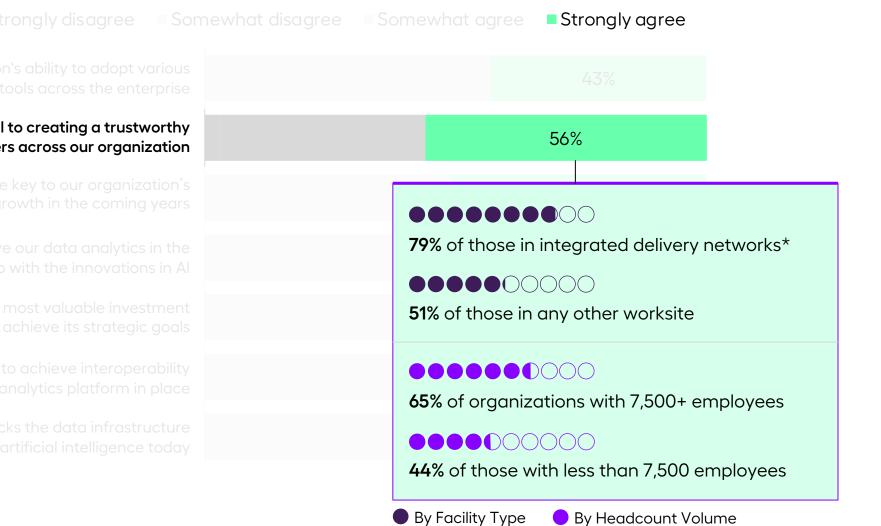
> A robust data analytics platform is the most valuable investment my organization can make to achieve its strategic goals

> > It is not possible to achieve interoperability without having a robust data analytics platform in place

My organization lacks the data infrastructure necessary to fully realize the value of artificial intelligence today 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.

BACK TO TABLE OF CONTENTS | 43

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



Data analytics platform(s) are critical to creating a trustworthy data asset to enable stakeholders across our organization

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.

Strongly agree Strongly disagree Somewha

Data platforms are critical for our organization's ability to adopt various technologies and tools across the enterprise

Data analytics platform(s) are critical to creating a trustworthy data asset to enable stakeholders across our organization

Data analytics will be the key to our organization's success and growth in the coming years

My organization has plans to significantly improve our data analytics in the next 12 months to enable us to keep up with the innovations in Al

> A robust data analytics platform is the most valuable investment my organization can make to achieve its strategic goals

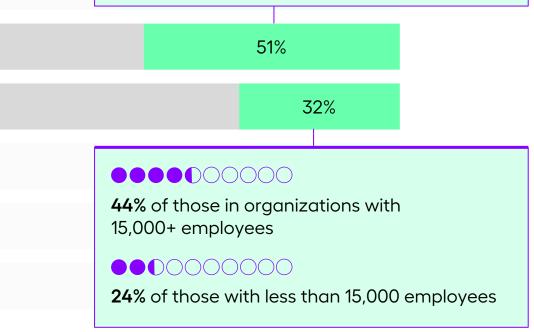
> > It is not possible to achieve interoperability without having a robust data analytics platform in place

My organization lacks the data infrastructure necessary to fully realize the value of artificial intelligence today

66% of those in organizations with 15,000+ employees

•••••000000

41% of those with less than 15,000 employees



By Headcount Volume

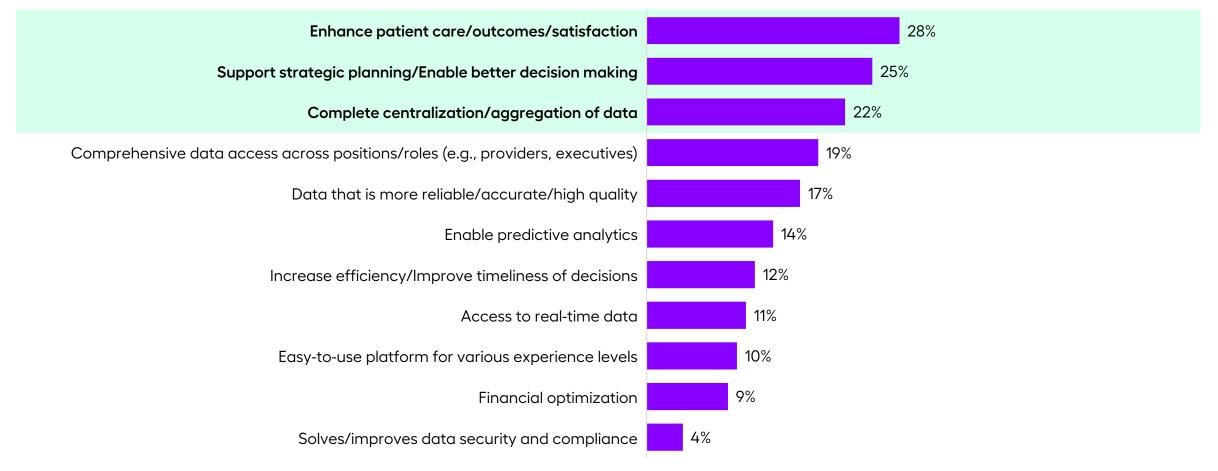
WE ASKED:

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.

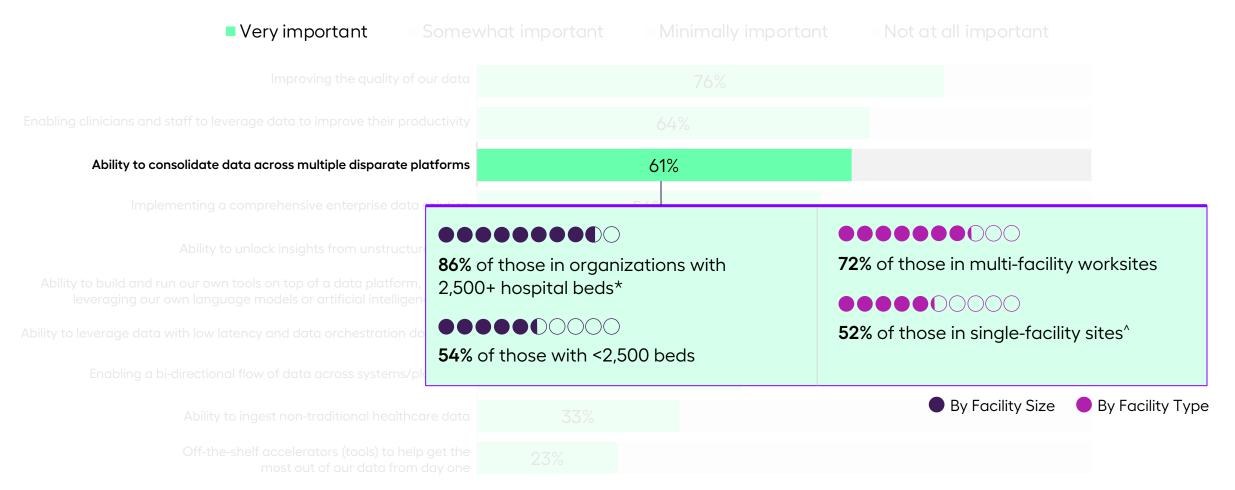


When considering your organization's strategies for data analytics platforms, how important are each of the following goals or considerations?

| Very important | what important 🛛 | Minimally importan | t Not at c | III important | %T2B |
|---|------------------|--------------------|------------|---------------------|------|
| Improving the quality of our data | 76% 2 | | 22% | 98% | |
| Enabling clinicians and staff to leverage data to improve their productivity | | 64% | | <mark>31%</mark> 5% | 95% |
| Ability to consolidate data across multiple disparate platforms | 61% | | 33 | 3% 6% | 94% |
| Implementing a comprehensive enterprise data solution | | | 36% | 7% | 92% |
| Ability to unlock insights from unstructured data | 49% | | 40% | 11% | 89% |
| Ability to build and run our own tools on top of a data platform, such as leveraging our own language models or artificial intelligence tools | | | 38% | 13% 3% | 84% |
| Ability to leverage data with low latency and data orchestration downtime | 38% | | 46% | 16% | 84% |
| Enabling a bi-directional flow of data across systems/platforms | 43% | | 33% | 24% | 76% |
| Ability to ingest non-traditional healthcare data | 33% | 43% | 43% 22 | | 76% |
| Off-the-shelf accelerators (tools) to help get the most out of our data from day one | 23% | 45% | | 31% | 68% |

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.

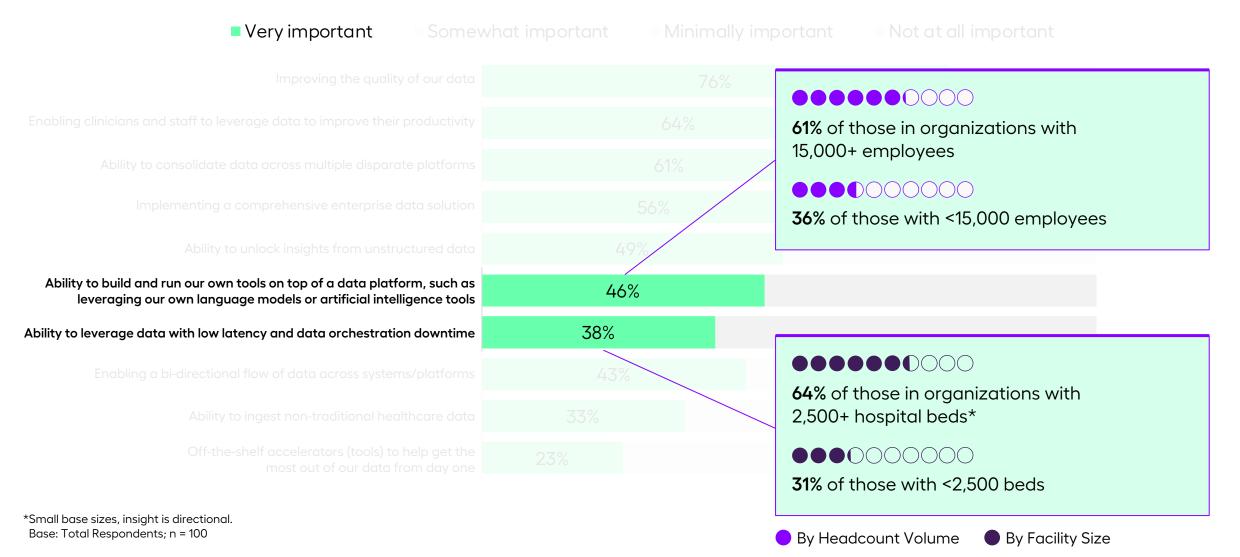
When considering your organization's strategies for data analytics platforms, how important are each of the following goals or considerations?



*Small base sizes, insight is directional.

[^]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. \mathbf{O} \mathbf{O} \mathbf{O}

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

| Very important | it important Minimally i | mportant Not at all important |
|---|--------------------------|--|
| | | |
| | | |
| | | |
| | | 77% of those in organizations with 2,500+ hospital beds* |
| | | |
| | | 33 % of those with <2,500 beds |
| Ability to leverage data with low latency and data orchestration downtime | | |
| Enabling a bi-directional flow of data across systems/platforms | 43% | 50% of those in organizations with >\$1B in annual revenue |
| | | |
| | | 29% of those with \$1B or less in annual revenue |
| | | |

By Facility Size

By Revenue Volume

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?

| Very important | t important Minimally i | mportant Not at all important |
|--|-------------------------|--|
| | | |
| | | |
| | | |
| | | 49% of those in organizations with 15,000+ employees |
| | | 0000000 |
| | | 22% of those with <15,000 employees |
| | | |
| | | 42% of those in organizations with |
| Ability to ingest non-traditional healthcare data | 33% | >\$1B in annual revenue |
| Off-the-shelf accelerators (tools) to help get the most out of our data from day one | 23% | 16% of those with \$1B or less in annual revenue |
| | | By Headcount Volume By Revenue Volume |

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?

| | Must have | Not needed | | |
|---|-----------|------------|-----|-----------------|
| Improving the quality of our data | 81% | | | 6 |
| Implementing a comprehensive enterprise data solution | 65 | 5% | 32% | |
| Enabling clinicians and staff to leverage data to improve their productivity | 619 | 37% | | |
| Ability to consolidate data across multiple disparate platforms | 60% | | 35% | 5% |
| Ability to build and run our own tools on top of a data platform, such as leveraging our own language models or artificial intelligence tools | | | 46% | 6% |
| Enabling a bi-directional flow of data across systems/platforms | 40% | | 57% | |
| Ability to leverage data with low latency and data orchestration downtime | 5 V /- | | 56% | <mark>5%</mark> |
| Ability to ingest non-traditional healthcare date | 38% | | 60% | |
| Ability to unlock insights from unstructured date | 33% | | 63% | 4% |
| Off-the-shelf accelerators (tools) to help get the most out of our data from day one | | 64 | % | 8% |

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?

| | Must have | Nice to he | ave Not needed |
|---|-----------|------------|---|
| | | | |
| Implementing a comprehensive enterprise data solution | | 65% | |
| | | 61% | |
| | | 60% | 76% of those in organizations with |
| | | | 15,000+ employees |
| | | | |
| | | | 58% of those with <15,000 employees |
| | | | By Headcount Volume |
| | | | |
| | | | |

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?

| | Must have Nice to h | |
|---|---------------------|---|
| | | 64 % of those in organizations with 2,500+ hospital beds* |
| | | |
| | | 33 % of those with <2,500 beds |
| | | |
| | 48% | 51% of those in organizations with 15,000+ employees |
| Enabling a bi-directional flow of data across systems/platforms | 40% | |
| | | 32% of those with <15,000 employees |
| | | |
| | | 45% of those in not-for-profit or government organizations |
| | | 00000000 |
| | | 17% of those in for-profit organizations* |

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.

BACK TO TABLE OF CONTENTS | 63

By Revenue Volume

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?

| | Must have | Nice to he | ave Not needed |
|--|-----------|------------|--|
| | | | |
| | | 65% | |
| | | 61% | 59% of those in organizations with |
| | | 60% | 15,000+ employees |
| | | | 000000025% of those with <15,000 employees |
| | | | |
| Ability to leverage data with low latency and data orchestration downtime | 39% | | |
| | | | 50% of those in organizations with >\$1B in annual revenue |
| | | | ●●●0000000 |
| | | | 24% of those with \$1B or less in annual revenue |

By Headcount Volume

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?

| | Must have Nice to h | |
|---|---------------------|---|
| | | 68% of those in organizations with 2,500+ hospital beds* |
| | | |
| | | 29 % of those with <2,500 beds |
| | | |
| | | 51% of those in organizations with 15,000+ employees |
| | | |
| | 39% | 29 % of those with <15,000 employees |
| Ability to ingest non-traditional healthcare data | 38% | |
| | | 44% of those in organizations with >\$1B in annual revenue |
| | | |
| *Small base sizes insight is directional | | 24% of those with \$1B or less in annual revenue |



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.

BACK TO TABLE OF CONTENTS | 67

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?

| | Must have | Nice to have | Not needed |
|--|-----------|---------------------------------|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | 00000 |
| | | 32 % of tho organization | se in not-for-profit or government ons |
| | | |)00000 |
| Off-the-shelf accelerators (tools) to help get the most out of our data from day one | 10 /- | | e in for-profit organizations* |

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

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?

| | Must have | Nice to have Not needed |
|--|-----------|--|
| | | ••0000000 |
| | | 17% of those in organizations with <2,500 employees |
| | | 00000000 |
| | | 1% of those with 2,500+ employees |
| lity to build and run our own tools on top of a data platform, sucl everaging our own language models or artificial intelligence tool | | 6% |
| | | |
| | | 12% of those in organizations with |
| | | • |
| | | <500 hospital beds |
| | | |

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.



Plan to implement in next 12 months

Plan to implement in 24+ months

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

Already implemented

| | No p | lans to implement | | | | | | | |
|--|------|-------------------|--------|-----|--------|--------------------|-----|---|----------------------|
| Care management | 70% | | | | | | 14 | % 7 | % 7% |
| Quality measurement tools | 69% | | | | | | 2 | 0% | <mark>5%3%</mark> 3% |
| Patient engagement/outreach tools | 67% | | | | | 14% | 8% | 7% 4% | |
| Self-service reporting/dashboards | 60% | | | | 2 | 1% | 112 | % 6% | |
| Aggregation of structured data | 57% | | | | | 29% | | <mark>6% </mark> | |
| Predictive analytics | | 48% | | | 23 | % | | 4% | 7% 8% |
| Risk suspecting tools | | 46% | | | 19% | <mark>7%</mark> 21 | | , Z | <mark>4%</mark> 10% |
| Payer/contract performance management | | 40% | | | 23% | | 22% | 4 | <mark>%</mark> 11% |
| Aggregation of unstructured data | | 33% | | 28% | / D | 18 | 3% | 9% | 12% |
| Aggregation of non-traditional healthcare data | | 30% | | 30% | | 16% | 0 | 10% | 14% |
| Artificial intelligence/Machine learning/Large language models | 7% | 43% | / 0 | | | 26% | | 15% | 9% |

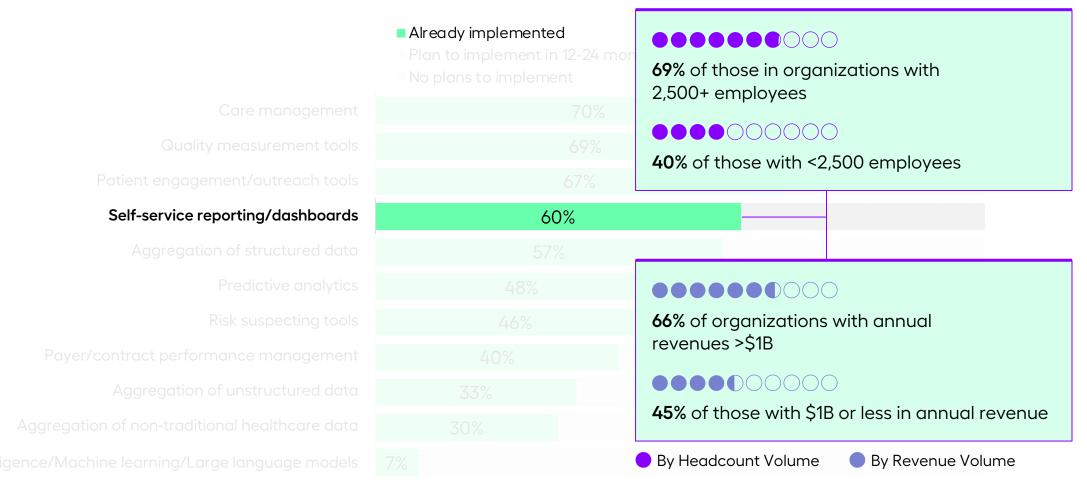
Plan to implement in 12-24 months

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.

| Care management70%Quality measurement tools69%Patient engagement/outreach tools67% |
|--|
| |
| Patient engagement/outreach tools 67% |
| |
| Self-service reporting/dashboards 60% |
| Aggregation of structured data 57% 78% of those in single-facility works |
| Predictive analytics 48% |
| Risk suspecting tools 46% 59% of those in multi-facility worksit |
| Payer/contract performance management 40% By Facility Type |
| |
| |
| |

*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



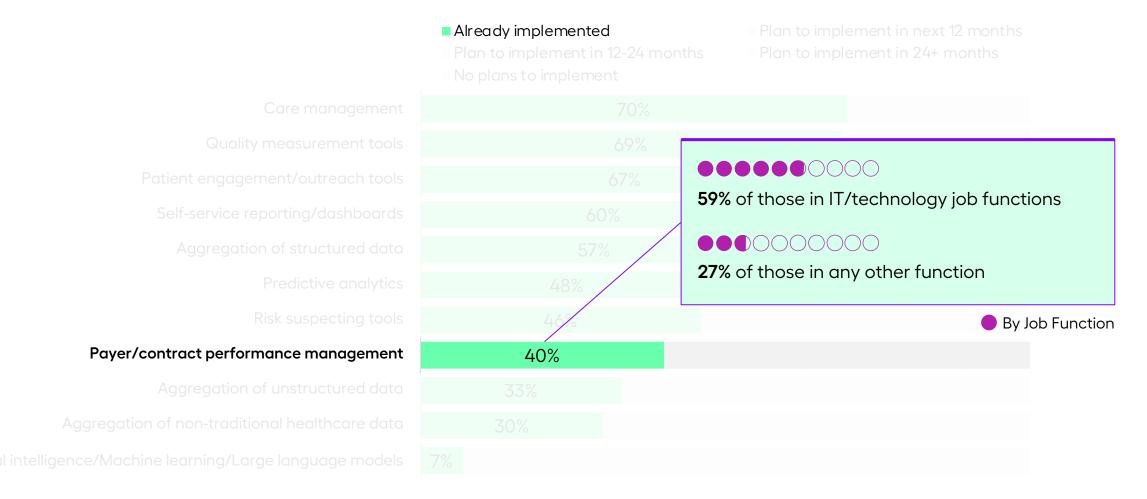
Larger organizations are significantly more likely to have already integrated predictive analytics with their analytics platform. \mathbf{O} \mathbf{O} \mathbf{O}

| | Already implemented | = Plan to implement in payt 12 months | |
|--|--|---|--|
| | Plan to implement in 12-24 mon No plans to implement | | |
| | 70% | 66% of those in organizations with 15,000+ employees | |
| | 69% | | |
| | 67% | 36% of those with <15,000 employees | |
| | 60% | | |
| | 57% | | |
| Predictive analytics | 48% — | 61 % of those in multi-facility worksites ¹ | |
| Risk suspecting tools | 46% | $\bullet \bullet $ | |
| | 40% | 37% of those in single-facility worksites ¹ | |
| | 33% | | |
| | 30% | 56% of organizations with annual revenues >\$1B | |
| | 7% | $\bigcirc \bigcirc $ | |
| adamic Medical Centers, Stand-Alone Hosnitals, and Specialty Hosnitals | o. Multi Egoility – | 26% of those with \$1B or less in annual revenue | |

*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

By Headcount Volume

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.

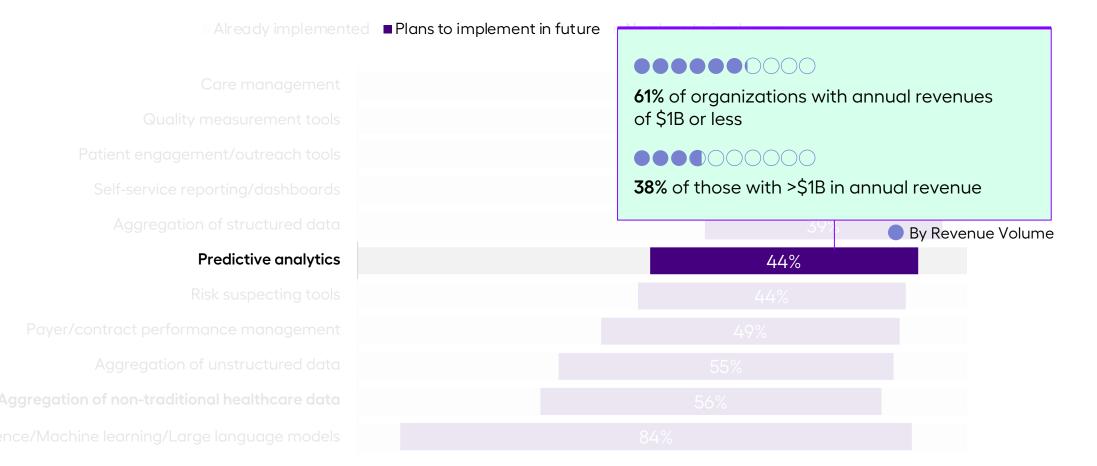


Larger organizations are significantly more likely to say they have plans to implement aggregation of non-traditional healthcare data with their data analytics platforms, while those with less than \$1B in revenue more often say they have plans to integrate predictive analytics.

| | , p | | |
|--|-----|-----|--------|
| Care management | | 70% | 28% |
| Quality measurement tools | | 69% | 28% 3% |
| Patient engagement/outreach tools | | 67% | 29% 4% |
| Self-service reporting/dashboards | 60 | % | 38% |
| Aggregation of structured data | 57% | | 39% 4% |
| Predictive analytics | 48% | 44 | 4% 8% |
| Risk suspecting tools | 46% | 44% | а́ 10% |
| Payer/contract performance management | 40% | 49% | 11% |
| Aggregation of unstructured data | 33% | 55% | 12% |
| Aggregation of non-traditional healthcare data | 30% | 56% | 14% |
| Artificial intelligence/Machine learning/Large language models | 7% | 84% | 9% |

Already implemented Plans to implement in future No plans to implement

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

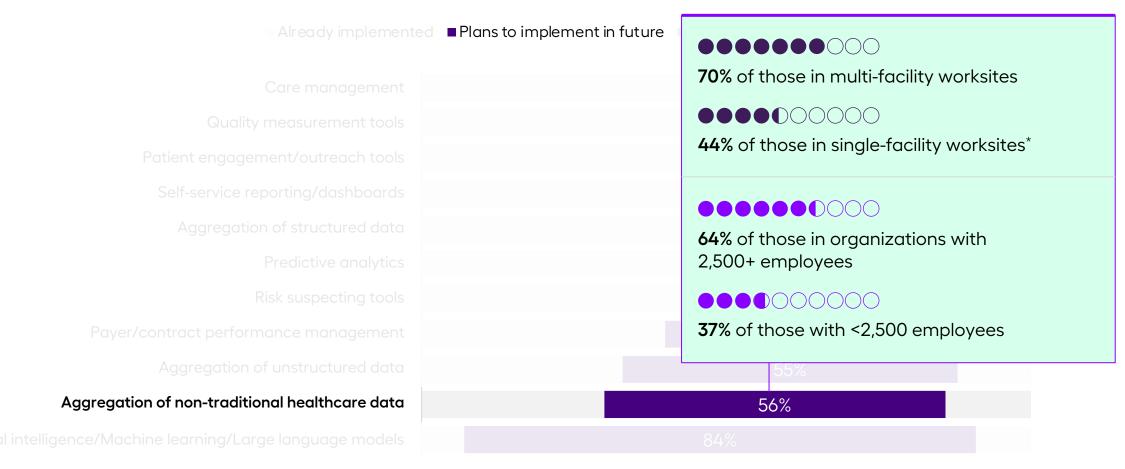


Data labels <3% not shown Not displayed: 'Something else' (1%) Base: Total Respondents; n = 100

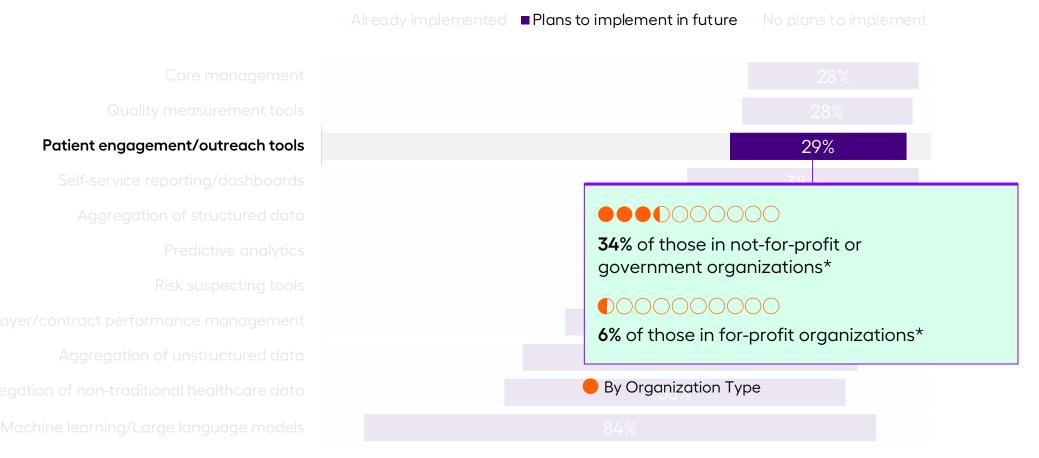
By Headcount Volume

By Facility Type

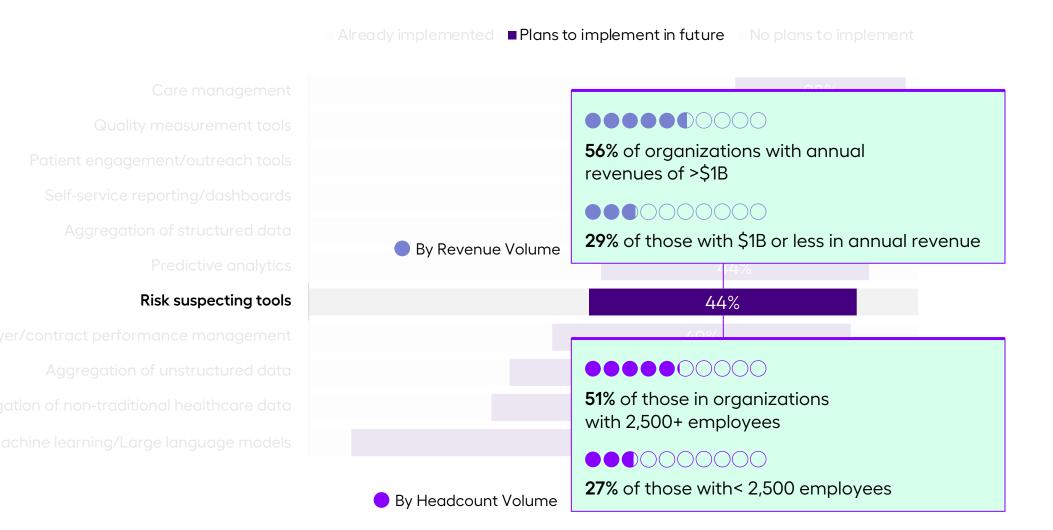
Which of the following applications or technologies is your organization either planning to integrate or has already integrated with a data analytics platform?



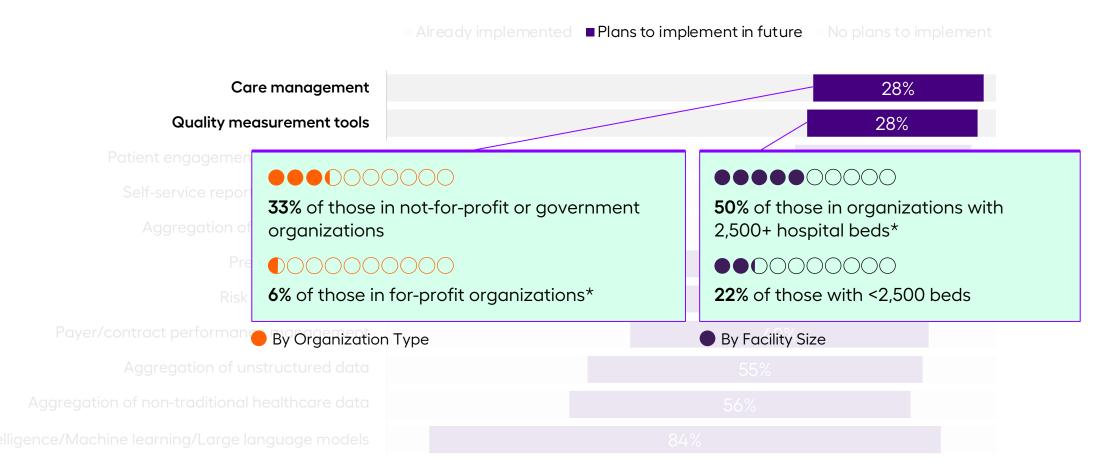
*Single Facility = Academic Medical Centers, Stand-Alone Hospitals, and Specialty Hospitals; Multi-Facility = Integrated Delivery Networks and Multi-Hospital Systems. Base: Total Respondents; n = 100 Larger organizations are significantly more likely to have plans to integrate risk suspecting and quality measurement tools with their analytics platform; not-for-profit or government organizations plan to integrate patient engagement and care management.



*Small base sizes, insight is directional Data labels <3% not shown Base: Total Respondents; n = 100

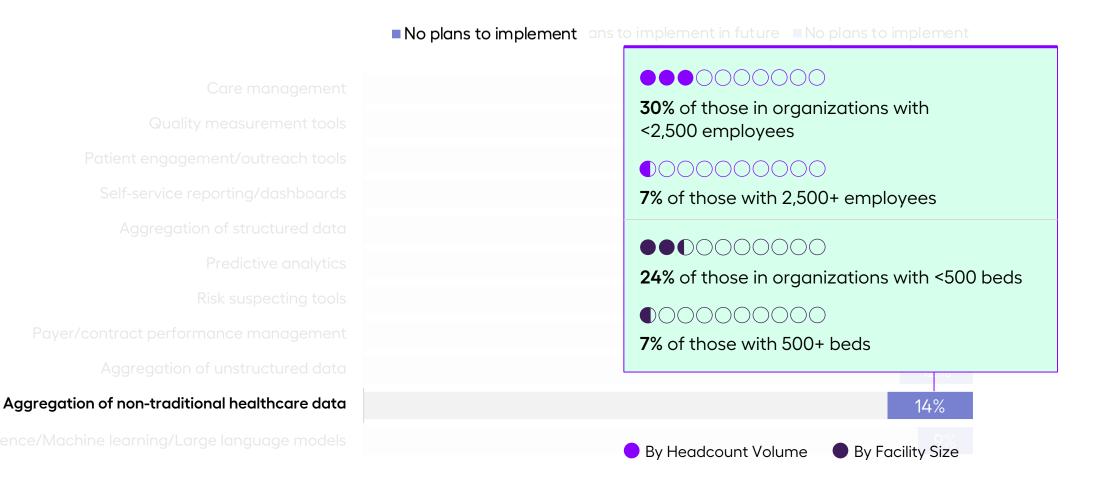


Base: Total Respondents; n = 100

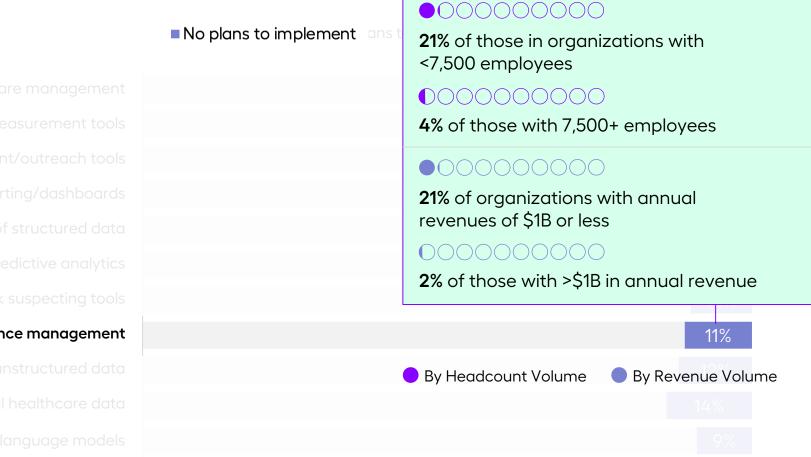


Organizations are least likely to report having plans to integrate the aggregation of non-traditional healthcare data with their analytics platforms; this is particularly true for smaller organizations.



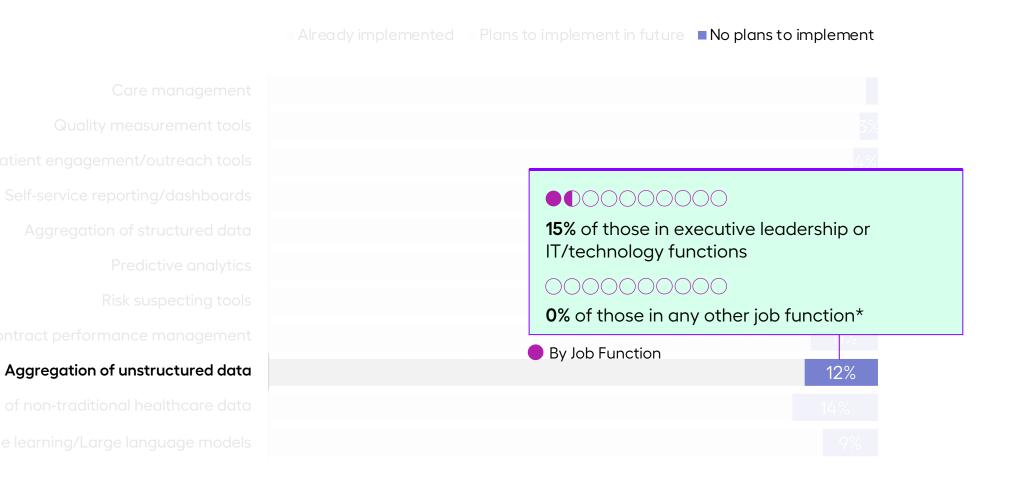


Executive leaders and those in IT/technology functions are less likely to say they have plans to implement the aggregation of unstructured data with a data analytics platform; smaller organizations are less likely to say there are plans to implement payer/contract performance management in their platforms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



Payer/contract performance management

*Small base sizes, insight is directional Data labels <3% not shown Base: Total Respondents; n = 100



Similarly, smaller organizations are significantly less likely to report plans to integrate risk suspecting tools in the future. No plans to implement and y implemented

Care managemen

Quality measurement tool

Patient engagement/outreach tool

Self-service reporting/dashboard

Aggregation of structured data

Predictive analytics

Risk suspecting tools

Payer/contract performance management

Aggregation of unstructured data

Aggregation of non-traditional healthcare data

Artificial intelligence/Machine learning/Large language models

24% of organizations with annual revenues of \$1B or less

0000000000

2% of those with >\$1B in annual revenue

••0000000

23% of those in organizations with <7,500 employees

0000000000

0% of those with 7,500+ employees

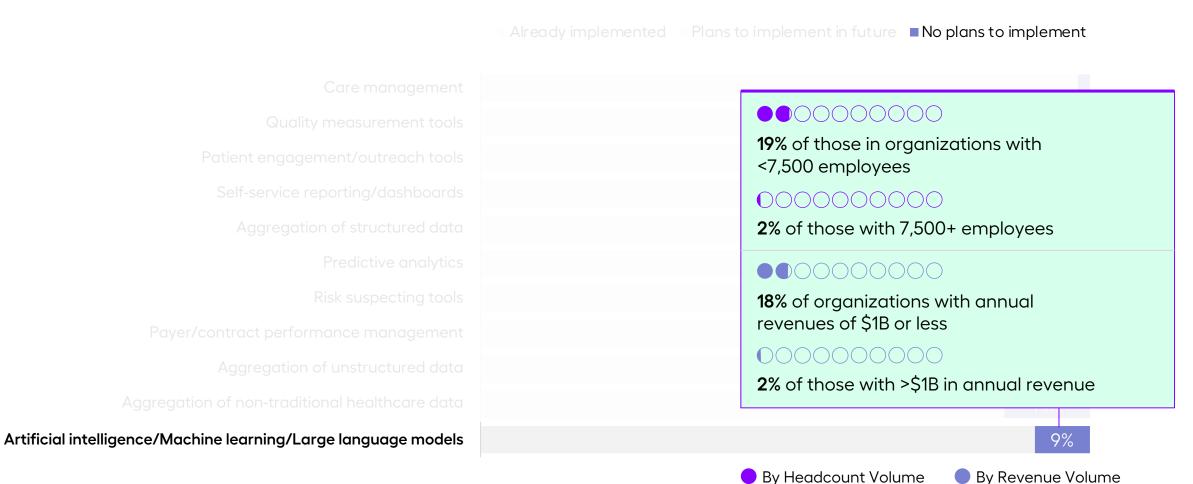
10%

••0000000

22% of those in organizations with <500 hospital beds

0000000000

2% of those with 500+ hospital beds

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. 

Base: Total Respondents; n = 100



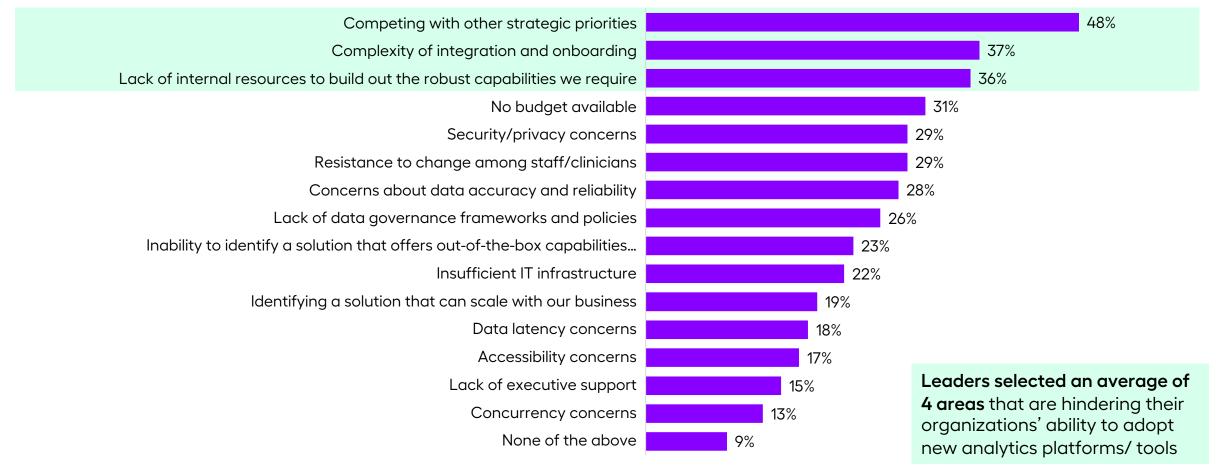
WE ASKED:

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.



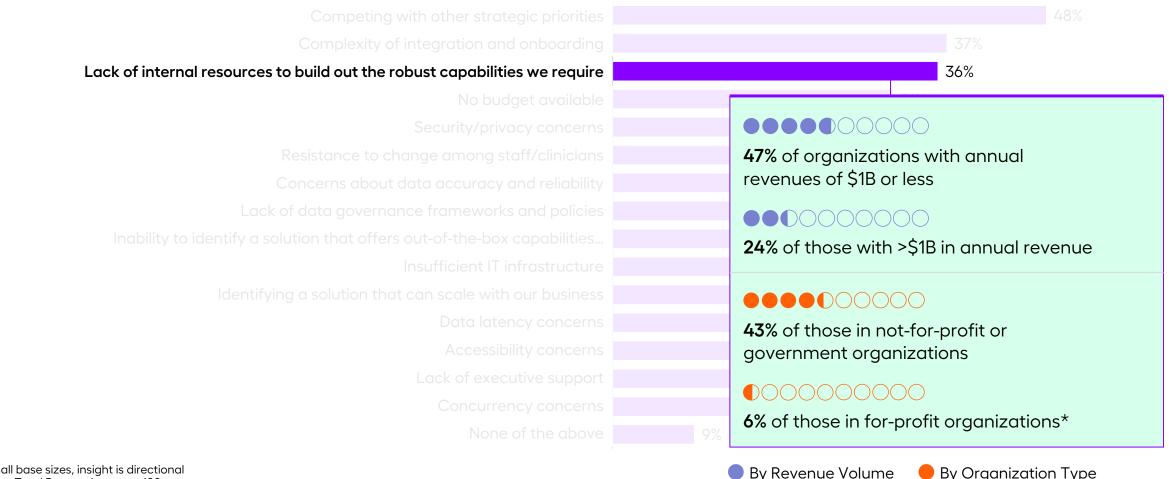
Which of the following concerns or barriers does your organization face today when it comes to adopting new data platforms or analytics tools, if any?



Organizations 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.

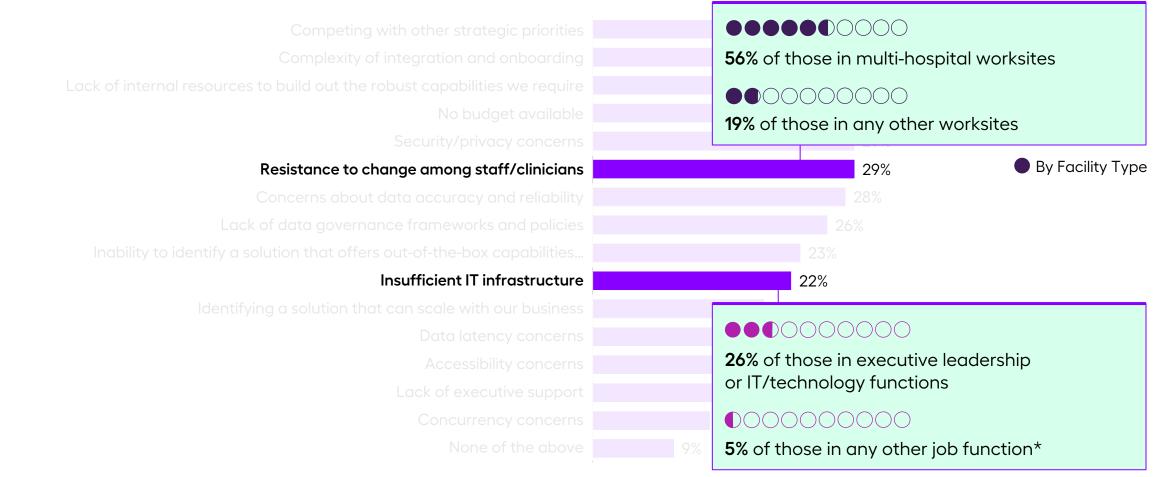


Which of the following concerns or barriers does your organization face today when it comes to adopting new data platforms or analytics tools, if any?



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?

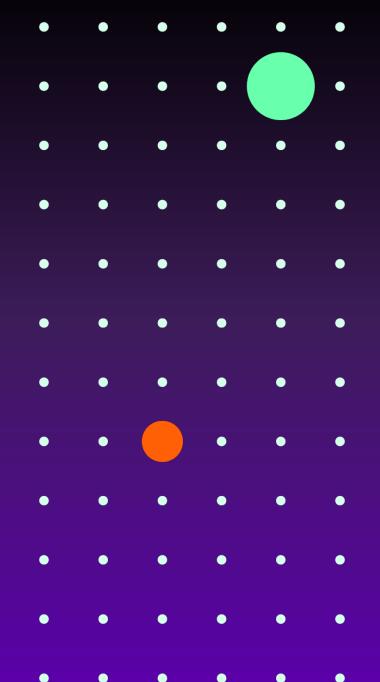




2024 HIMSS MARKET INSIGHTS SURVEY | HEALTHCARE ANALYTICS PLATFORMS

BACK TO TABLE OF CONTENTS | 103

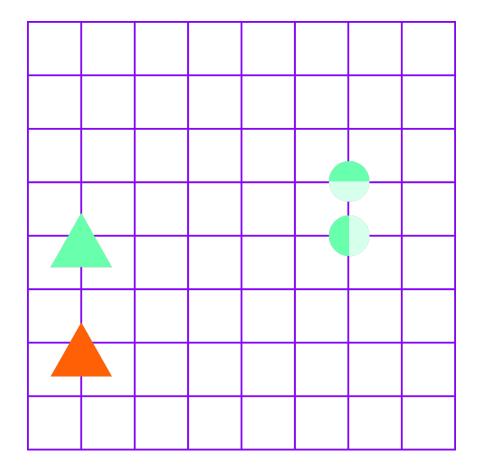




Research methodology

Methodology

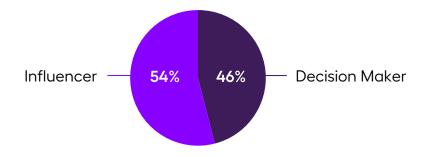
- This research was conducted online amongst leaders (directors and above) in healthcare in the United States.
- Respondents were screened for having a role in the selection and/or strategy/innovation of data analytics platforms at their organization.
- A total of 100 qualified respondents participated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



Respondent profile

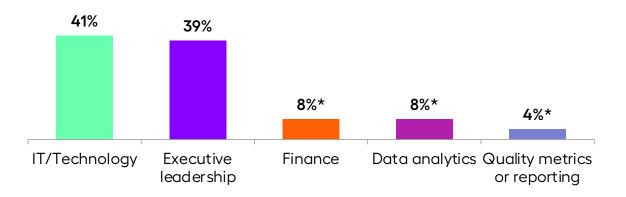
Role in selection and/or strategy/innovation of data analytics platforms

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



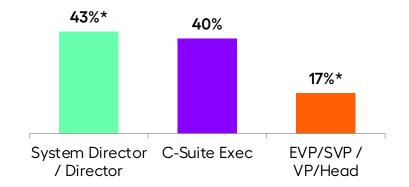
Job function

How would you characterize your job role or function?



Job role

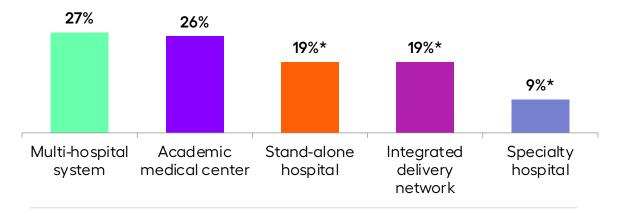
What is your current role?



Organizational profile

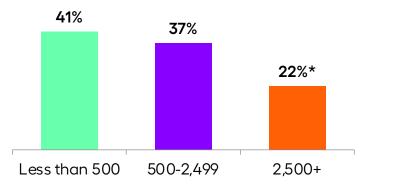
Worksite

Which of the following best describes your worksite?



Number of hospital beds

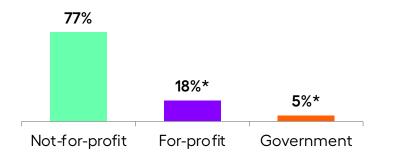
Please tell us the total number of hospital beds in your organization



*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

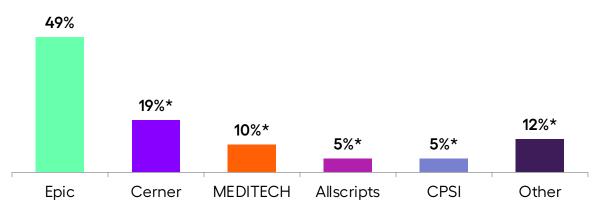
What is your organization's annual net revenue?



Organizational profile

EHR platform

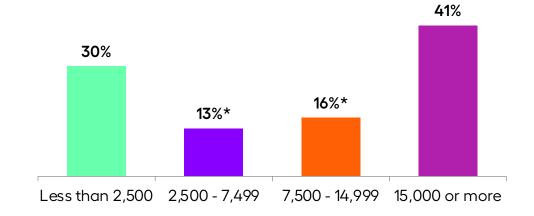
What is your organization's primary EHR (electronic health records) platform?



EHR platforms <5% grouped into 'other'

Number of employees

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



Hear leaders from top healthcare organizations discuss these results at **arcadia.io/bigdata**



Arcadia helps providers, payers, and government organizations transform healthcare data into predictive insights that drive better outcomes, increase revenue, and reduce costs. Our industry-leading platform amasses data from across the healthcare ecosystem and converts it into actionable analytics, Al-driven intelligence, and performance benchmarks, enabling smarter decisions and accelerating impact across the enterprise. National and regional health systems and payers, along with governmental organizations — including Aetna, Cigna, Highmark Blue Cross Blue Shield, Intermountain Health, Ochsner Health, and the State of California — trust Arcadia to operationalize their data and lead the way in data-driven healthcare. Visit <u>arcadia.io</u> for more information.

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