

What are healthcare analytics?

Data gives actionable insights

See solutions

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Overview

Understanding healthcare analytics

Healthcare analytics refers to the use of vast amounts of collected data to provide organizations with actionable insights. These insights are developed through analytical disciplines to drive fact-based decision making. In turn, these decisions improve planning, management, measurement and learning.

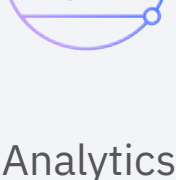
As healthcare organizations around the world are challenged to reduce costs, improve coordination with care teams, provide more with less, and focus on improving patient care, analytics will be especially important. Primary care physician and nursing shortages are requiring overworked professionals to be even more productive. Plus, new businesses entering the market and new approaches to healthcare delivery will increase competition in the industry. Building analytics competencies can help healthcare organizations harness big data to create actionable insights that can be used by healthcare providers, hospital and health system leaders, and those in government health and human services to improve outcomes deliver value for the people they serve.

As tumultuous as the current healthcare environment is, it's expected to become even more complex over the next several years. Challenges such as evolving market dynamics, increasing governmental regulation and more demanding consumers will require smarter, more informed decisions from organizations so they can remain competitive and deliver value in their communities.

Read case study

Benefits of healthcare analytics

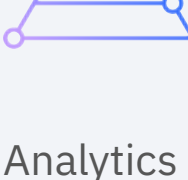
Deliver quicker outcomes



Analytics can help cut through complex datasets, providing key information to deliver better results in less time.

See how

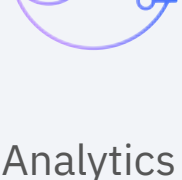
Enact sustainable change



Analytics can help to explore issues and determine the best methods to make effective progress.

Discover change (PDF 1.3MB)

Mitigate risk



Analytics can carefully measure and evaluate data to drive clinical and operational improvements.

Choose wisely

Expansion

Demand drives healthcare analytics' expanding role

Healthcare organizations around the world have long been challenged to reduce costs, improve coordination and provide more with less. But these pressures are now being supplied by a more sophisticated population, insistent on higher value and better-quality care.

In this new paradigm, strategies that support analytics-driven decision making across the enterprise are crucial. There is currently a strong demand for the following:

Value



As patients continue to contribute to their healthcare costs and share experiences more readily in the digital age expectations of quality will rise.

Watch the video (05:48)

Elder care



Aging populations require care and support, making population and predictive health analytics even more crucial.

Read case study

Transparency



As fraud and healthcare costs are exposed and regulations evolve, a greater degree of transparency is required.

Learn about price transparency

Ready to incorporate healthcare analytics?

Employ the power of big data to address your healthcare challenges. Take the next step today.

Book a consultation

Artificial intelligence

Healthcare analytics and artificial intelligence

The first step towards smarter health is to seek out smart tools. Solutions like cloud and healthcare analytics are invaluable for health data management, process automation and data-backed decision making in healthcare.

Artificial intelligence (AI) solutions and machine learning platforms go one step further. These tools are capable of absorbing tremendous amounts of data – both structured and unstructured – and can learn from many types of data including audio, video, images and more.

They weigh information and ideas from a vast number of different sources, then offer hypotheses and predictive analytics for the user to consider. Along with each response, the platform assigns a confidence level for every insight.

Armed with the results of those analyses, healthcare providers, researchers and leaders can more easily identify connections, correlations and patterns connected to the challenges they're working to solve and see potential ways to address.

Understand AI in medicine

Predictive analytics

Improving outcomes with predictive analytics

Healthcare organizations are increasingly using analytics to unlock and apply new insights from data. These tools can be used to drive clinical and operational improvements to address business challenges.

Increasingly, healthcare organizations are moving toward a model that will incorporate predictive analytics. The transition from information gathering and report generation to data analysis and predictive capabilities is taking analytics to the next logical level. Predictive analytic tools use information from the past to predict future activities combined with model scenarios using simulation and forecasting. This will enable organizations to create more personalized approaches to health engagement and decision-making, as well as help them uncover fraud and predict consumer behaviors.

Ultimately, organizations will want to be able to take advantage of the full capabilities of predictive analytics to provide decision makers with sophisticated tools for decision making. The insights created with speed, scale, currency, breadth and depth could influence outcomes and potentially lead to improved results in areas of patient care, operational performance and financial success.

Explore predictive analytics

A healthy population

Population health analytics

Population health management (PHM) is an effort to strive for higher quality, lower costs and better patient care. To get a handle on PHM, healthcare systems should consider steps such as augmenting the staff with more technology and benchmarking performance. Other valuable steps that can be taken include:

Building a data lake

This approach integrates different varieties of data to generate reports showing where quality measures have been met and gaps exist.

Creating population profiles

By compiling patients' socioeconomic status, environment and access to transportation, one can pinpoint the needs of specific subgroups.

Monitoring near-term costs

By using the capabilities of healthcare IT systems to extract utilization metrics, a company can manage costs in advance.

Solutions

IBM Watson Health healthcare analytics solutions

IBM® Watson Health™ solutions enable a smarter, more connected healthcare system that can assist clinicians in delivering better care and empowering people to make better choices. In addition to the company's investment in health technology research and innovation, IBM healthcare solutions could help organizations achieve greater efficiency within their operations, collaborate better to improve outcomes, and integrate with new partners to build a more sustainable, personalized and patient-centric system focused on value.

IBM Health Insights



Analyze, visualize and report complex population health data.

Visualize data

IBM Market Expert



Comprehensive market analysis helps shape smart business strategies.

Shape strategy

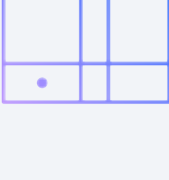
Health and Human Services



Uncover insights from data to drive more effective programs for vulnerable populations.

Discover insights

Explorys EHR Solutions



Leverage longitudinal, patient-level data to efficiently and confidently generate evidence and insights.

Find evidence

Watson Health Top Hospitals



IBM measures hospital performance and leadership for thousands of US providers.

Explore the best

Access and Value Connect



Understand and communicate the value of your product using real-world evidence.

Communicate now

Resources

Value of healthcare analytics

From insights to outcomes, building analytics competency can help harness big data.



High-performance data

Top-performing healthcare organizations are optimizing their systems with high-performance analytics.



Enterprise analytics

How analytics can help payers face a changing healthcare marketplace.

