Search

The

change

01

Overview

**Overview** 

Watch the video

importance of healthcare

02

data analytics The big data era brings big

Healthcare revolution

03

**Predictive Analytics** 

patient care

sufficient

an affordable cost.

the best tools available.

analytics.

04

Data-driven insights to improve

The healthcare industry is undergoing landmark changes at

Acute and episodic care models appear to no longer be

Healthcare data is now being collected in real-time

Analytics could potentially result in helping to cure

collecting healthcare data. insight into this vast collection

of sometimes elusive information is the key. Behind these

lofty aspirations are simple goals to become an industry

more focused on value, efficacy and better-quality care at

The right response to healthcare's digital transformation is

an informed approach. The first step begins by leveraging

Cognitive computing is an invaluable asset in health data

healthcare. Artificial Intelligence (AI) and machine learning

interaction taking place with their users. These systems

are capable of absorbing tremendous amounts of patient

data - both structured and unstructured. They collect and

decipher everything from audio and video, to images and

sensory data, to an endless array of population health

But these platforms don't deliver conclusive, definitive

and ideas from a vast number of different sources, and

assigns a confidence level for every insight and answer.

Armed with the results, physicians and researchers are

more easily able to identify the connections, correlations

and patterns to the puzzles they are working to solve. In

healthcare enhance and amplify the work of professionals.

general, AI, cognitive computing and automation in

They enable these professionals to gain new insights,

accelerate discoveries and amplify human knowledge.

Turning data into actionable

To convert healthcare data into actionable insights,

provide and the actual relevancy of that service.

organizations need focused information regarding their

organization's true costs, the quality of the service they

Service models evolving from quantity-based, fee-for-

Clinical devices that were once siloed, connecting and

service models to patient-centric, value-based care

Clinical IT moving towards more centralized and

Collaborative communication tools and real-time

Beyond that, some surprising predictive analytic insights

examples highlighted below, can be acted upon, studied

have come to light. These discoveries, such as some

further and continue to increase the value of an

location sensing devices uniting clinical IT and

connected enterprise IT infrastructures

aggregated with their data

enterprise IT networks

organization's work.

Treatment

decisions

44%

As many as 44 percent of all initial

cancer treatments are modified for

Genetic profiles

Watson Health healthcare analytics

personalized and patient-centric system focused on value.

IBM Watson Health is creating solutions to enable a smarter, more connected

healthcare system that can assist clinicians to deliver better care, empowering

people to make better choices. In addition to the company's investment in

health technology research and innovation, IBM healthcare solutions enable

organizations to achieve greater efficiency within their operations; collaborate to

help improve outcomes; and integrate with new partners for a more sustainable,

Reducing costs

We overhauled thousands of EHRs

Medicare and Medicaid providers.

to remedy USD 60 billion in

Learn more ≡

Accelerating

cancer care

IBM Watson Health extracts

physicians and patients consider

actionable insights to help

all oncology treatment plan

Achieving an

integrated

A clinically integrated

network (CIN) of health data

realized with an appropriate

management can only be

IT backbone that works

together.

 $\rightarrow$ 

network

options with clarity and

confidence.

improper payments issued to

for providers

Interoperability

the second course of treatment.

Case studies

**Clinical trials** 

Speeding up patient

At the Mayo Clinic in Rochester, Minnesota, healthcare

professionals are focused on speeding up the process of

To this point, just 5 percent of Mayo Clinic patients take

part. Nationally the rate is an even more disappointing

3percent. But by using a customized electronic health

matching eligible patients to the appropriate clinical trials.

records (EHR) system for patients with cancer, researchers

solutions

Modernizing

government

Solutions allow government

for populations.

Learn more  $\equiv$ 

Enhancing

health plan

performance

Discovered that a specialty drug

over-the-counter medications by

was comprised of two generic

extensively scouring the HIE.

Unlocking

with IBM

as ever.

Privacy Terms of use Accessibility

healthcare data

Garbage in, garbage out. It

when evaluating automation

and analytics, it's as true in

healthcare data management

Cookie preferences

may be an old saying, but

Health plan ≡

Employer =

agencies to extract meaningful

insights from data to help improve

cost, access, quality and outcomes

health

in conjunction with IBM®hope to raise participation by 10

percent, which they are encouraged will lead to better

Read the case study (PDF, 2.5MB)

matches

outcomes.4

**Solutions** 

Resources

Contact IBM

insights

This movement includes:

systems

Explore more on AI

to consider. Along with each response, the platform

answers. Machine learning systems are designed to base

responses on highest probability. They weigh information

then offer hypotheses and predictive analytics for the user

From there, healthcare professionals continue the process.

management, and a cornerstone of automation in

platforms reason, deduce and "understand" the

Of course, these changes won't come from simply

AI & machine learning in

healthcare data analytics

an accelerated rate. With the greater insights gained

through more effective clinical data management,

traditional structures are quickly being replaced.

In what is now the big data age of healthcare:

every second of every day

age-old health challenges

Case studies

05

Solutions

Responding to the

revolution in

healthcare

**Predictive** 

value

analytics produce

Keeping pace with evidence

Specialists need 160 extra hours a

160h

week to stay current.

25% Twenty-five percent of Japan's population is now over 65 years old.

Increasingly

population

aging

images flagged discrepancies in clinical

sources.

Learn more ≡

data, interpreting images within a

historical context to help expose

relevant patient data from various

Helping

interpret

radiologists

Launching life science solutions

Learn more  $\equiv$ 

life science solutions provide

companies with the analytics and

expertise to develop treatments

more efficiently and effectively.

motion, allowing healthcare providers to capture and

analyze data –all the time,

just in time.

 $\rightarrow$ 

United States - English

real-time analytics IBM Streams enables predictive analytics of data in

Improving with

## Let's talk