

Healthcare Data

PAST, PRESENT, FUTURE

WHAT IS BIG DATA?

The term “big data” gained momentum in the early 2000s and refers to data that is large, complex, and rapidly generated. It is collected and mined by organizations for information, learning, and other analytics purposes including predictive modelling. The amount of data created by the healthcare industry through digitized records, medical technologies, and other sources means “big data” could revolutionize healthcare – if used effectively.

1600 BCE

The first known medical record is an Egyptian papyrus text from 1600 BCE

1663

The first use of statistical analysis was a study on bubonic plague mortality in 1663

1969

The first electronic health record was created in 1969



The amount of healthcare data is growing faster than data generated by the manufacturing, financial services, or entertainment industries

30%

In fact, the healthcare industry generates 30% of all data



TYPES OF DATA

1

WHERE DOES HEALTHCARE DATA COME FROM?

Healthcare data is generated from a huge range of sources, from medical records and staff schedules to wellness apps and wearable technology.

2

WHAT IS SYNTHETIC DATA?

Synthetic data is *artificially* created data that stands in for real data while reflecting the actual statistical information from the original data. Synthetic data prevents users from identifying any individuals in the data, making it the most private solution to healthcare data analytics.

The global market for data analytics in healthcare was valued at **\$26 BILLION** in 2019



This market was expected to reach **\$34.27 billion in 2022** and grow **7.5% annually from 2020 to 2027**



BIG DATA COULD:

Reduce healthcare organizations' costs by 25%

Result in earlier diagnosis and improved outcomes

Help prevent disease

Accelerate research and discovery

Improve quality of care

Reduce medical error and adverse outcomes



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