

Analytics in Healthcare



First Analytics in Healthcare

It all started around 1970's when the computers gained prominence and was accessible in academic research. The first Medical Diagnostic Decision Support (MDDS) System, INTERNIST-1 was intelligently designed to get test results from users to achieve diagnosis but later it failed due to the following reasons:

- Outperformed by panel of leading physicians.
- Lack of visual interface.
- Modern Machine Learning techniques were yet to be discovered.



Some Common Use Cases

- Cancer Detection
- X-Ray Image Analysis
- Diagnosing Heart Attack
- Predicting Medical Event in Patients
- Managing Spread of Disease
- Medical Insurance Fraud Detection
- Hospital Administrations



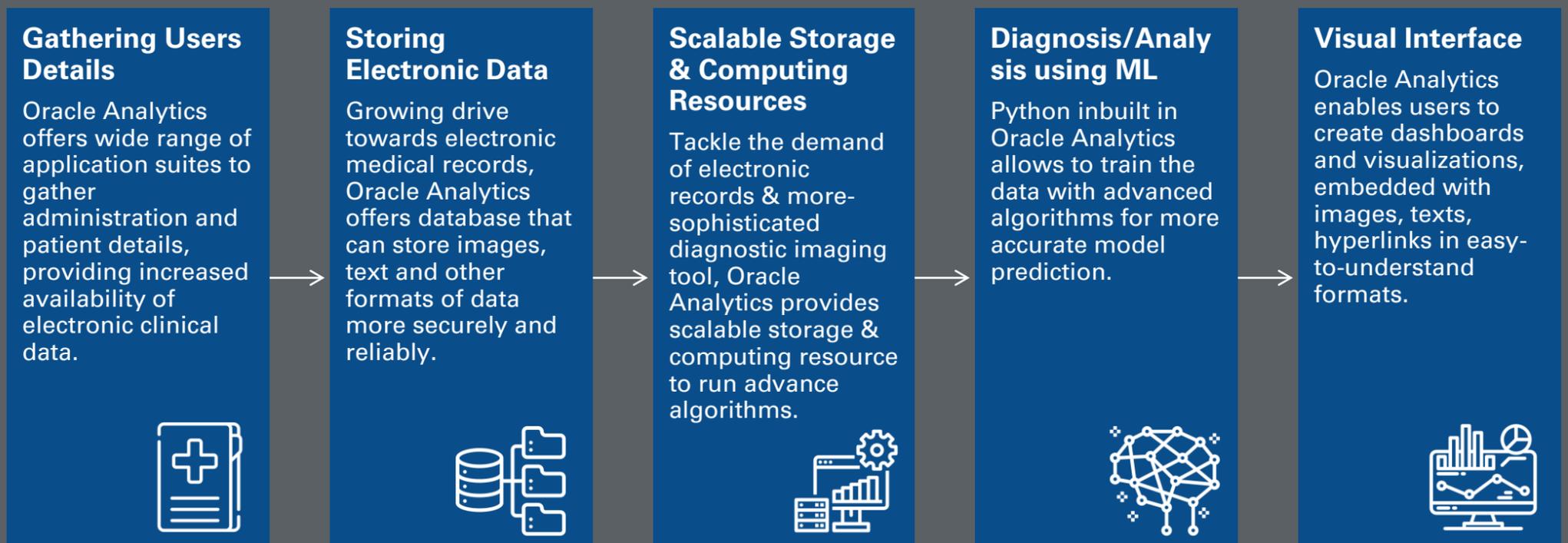
Why Analytics are used in Healthcare?

Analytics is used in healthcare to empower the ecosystem, to improve operational efficiency by reducing cost, to perform clinical data diagnosis and to improve patient care.



92% of healthcare providers now and in the future see the value of cloud services for their organizations.
HIMMS Survey

Oracle Analytics offerings & flow to empower Healthcare



Future of Analytics in Healthcare

- AI enabled Analytics will be used to record the conversation between physician & patient including their facial expression, resulting in health organisations having a better understanding of the patients and predicting the future results for them.
- Analytics and Machine Learning can be used to develop medicine for unseen diseases using gene sequencing.
- Predictive Analytics will be used to identify high risk patients of chronic illness in early disease progression that will lead to optimal staff utilisation & funding.

\$ 24 trillion

Global healthcare spend is expected to increase from \$9 to \$24 by 2040
Bill & Melinda Gates foundation

- Enable initial diagnosis using computer vision in rural areas or where the medical physician is less reachable. Providing front line medical care.

