Real World Evidence

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For example, pharma companies can use RWE to better understand how various drugs combat diseases among different patients or populations. They can also use this evidence to better direct the design of products or do more selective recruiting for clinical trials.

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Case in point – optimizing treatment for epilepsy

Epilepsy is a debilitating disease whose management is often guided by historic, isolated practices, and personal experience of the clinician.

Ideally, treatment should be directed by an integrated assessment of the patient and a comprehensive review of the most effective treatment options based on specific patient characteristics and their position in the disease trajectory.

Using healthcare analytics, IBM is advancing the development of personalized treatments that take into account the patient’s position in the disease trajectory and desired life quality outcomes.

Predictive analytics and patient similarity

Predictive analytics use techniques from statistics, machine learning, and data mining to analyze current and historical facts and predict future events.

Using real world data, researchers built an outcome prediction model for epilepsy patients to provide decision support for physicians and help them select the optimal treatment regimen.

Smart solutions developed:

- Decision support system that recommends optimal anti-retroviral treatment
- Predictive algorithms that anticipate treatment outcome as defined by need of urgent care, change of treatment, and more
- Patient similarity tools with advanced visualization techniques to track patient journey

Contact us

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