PINC ᴬᴵ
APPLIED SCIENCES

7 EXAMPLES OF HOW TO USE HEALTHCARE DATA TO ACCELERATE EVIDENCE INTO ACTION

The quantity of data available to modern healthcare organizations is unprecedented, with more data generated every day. This abundance of data offers nearly limitless possibilities for generating real-world evidence, and real-world evidence has the potential for use in nearly every sphere of healthcare.

From postmarketing surveillance to identifying high-risk patients, real-world evidence is one of the most powerful — but underused — tools that government agencies, healthcare providers and life science companies can have in their toolboxes. Real-world evidence, with the right data as a foundation, represents a paradigm shift in how research is conducted.

Here's seven examples of how your organization can use this wealth of data to accelerate evidence into action and the types of questions that can be answered:

1

Burden of Illness

A burden of illness report describes the epidemiology and disease state burden of relevant diseases, including current treatment.
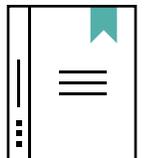- What is a hospital's total cost of care for a breast cancer patient?
- What is the economic burden of acute kidney injury in US hospitals?
- How are patients who present to the Emergency Department with migraines treated?

2

Outcomes Research

Outcomes research evaluates the end results of therapeutic treatments on the healthcare system and processes of care for patients and populations.
- In patients with atrial fibrillation, how does the use of a new oral anticoagulant affect the readmission rates for stroke?
- Do patients who receive a particular drug/device in the real-world setting have the same outcomes as those patients in clinical trials?
- What are the top 10 drugs for patients admitted with Crohn's disease and do they impact readmissions to the hospital?

3

Market Analysis

Market analysis determines the products or treatments for a given disease state highlighting patient, visit and hospital characteristics.
- What is the percentage of use of opioids vs non-opioids for post-operative pain?
- What does the typical brand specific drug patient look like? Where is it being used? By whom? What are the characteristics of the patients?
- What is the update of biosimilars in the US hospital market?

4

Risk Assessment, Predictive and AI Modeling

Risk assessment and predictive modeling look at the risk factors for and estimates of the probability of an outcome or differences in outcomes based on historic data and characteristics of patients, visits and hospitals.

- What are the risk factors associated with readmissions for patients who have had percutaneous coronary intervention procedures?
- How does the use of one class of drug correlate to negative outcomes compared to another class of drug?
- We are trying to design a protocol for our new anti-diabetic agent; what patient demographic and/or co-morbidities contribute to poor circulatory outcomes like amputation?

5

Comparative Effectiveness

Comparative effectiveness analyzes the differences in the efficacy of multiple therapeutic interventions, including outcomes, safety and harms.

- What is the difference between my drug/device vs the competitor?
- Do patients getting non-opioids after surgery have shorter length of stay than those taking opioids?
- What is the difference in bleeding rates for patients receiving different anticoagulants?

6

Health Economics Research

Health economics research helps understand the economic impact of therapeutic treatments on the healthcare system and processes of care for patients and populations.

- What is the typical patient vs hospital cost for treatment of non-small cell lung cancer with guidance-based therapy?
- What is the effect on total patient cost, including readmission cost, for colon surgeries performed by open, laparoscopic, or robotic surgical techniques?
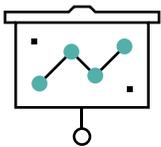
7

Market Trends

Market trending gives a look at real-world uptake of products in the market and/or a comparison of uptake versus competitive products.

- For a particular drug, can you tell me whether my drug or a competitor's drug is being used more often?
- What percentage of adults use a particular product compared to children and how has that changed from five years ago?
- What are the market trending patterns of a specific drug in both the inpatient and hospital outpatient setting?

Whether your organization is interested in evaluating novel testing and treatment options, supplying health systems with life-saving medications and equipment, or in ensuring patients can continue to manage their chronic conditions, PINC AI™ Healthcare Data offers a robust and comprehensive real world data set.

Find out what sources fuel PINC AI™ Healthcare Data. Get the facts.