ƉS MEDIDATA | ARTICLE

EMPOWERING TRANSFORMATION THROUGH TECHNOLOGY

FROM CLINICAL DATA MANAGEMENT TO CLINICAL DATA SCIENCE

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CHALLENGE AND OPPORTUNITY

Traditional clinical data management methods are overwhelmed by the sheer volume of trial data.

A study of 20 Phase III trials reported an average of 97,000 queries per study, highlighting the strain on clinical data managers.[1] Moreover, the data landscape evolves with inputs from various sources like eCOA/ePRO, imaging, wearable sensors, and electronic health records.

The convergence of technological advancements, increased data complexity, and the quest for enhanced business value drives the demand for more skilled clinical data managers with the latest analytical skills.

Rising Demand for Advanced Analytics

The modern business environment thrives on data-driven decision-making. Companies are looking beyond data storage and retrieval, seeking advanced analytical capabilities to gain competitive advantages.

Technological Advancements

Data analysis has become more complex and insightful with machine learning, AI, and sophisticated statistical tools. Clinical data management must integrate these technologies to stay relevant.

Increased Data Complexity

The nature of data itself has evolved, with unstructured data becoming more prevalent. Managing this data requires more than traditional database skills; it requires analytical acumen to extract meaningful insights.

Enhanced Business Value

Clinical data science helps drive greater strategic value, driving business innovation and growth through risk-based approaches and predictive analytics.

1. Stokman P, et al. Risk-based Quality Management in CDM. Journal of the Society for Clinical Data Management. 2020; 1(1): 1, pp. 1–8. DOI: https://doi.org/10.47912/jscdm.20