Geeky News Discusses How Al Is Augmenting Patient Experience in DCTs



Surrey, United Kingdom Sep 11, 2023 (Issuewire.com) - Geeky News, a premier source of technology and healthcare insights, unveils a new article that explores the profound impact of artificial intelligence (AI) on enhancing the patient experience in decentralised clinical trials (DCTs). Titled "AI Augmenting Patient Experience in DCTs," this article sheds light on the transformative potential of AI within the realm of clinical research.

Often referred to as virtual or direct-to-participant trials, DCTs represent a seismic shift in healthcare research. These innovative trials empower patients to participate in clinical studies from the comfort of their homes, reducing the need for traditional on-site trials.

The COVID-19 pandemic accelerated the adoption of DCTs and hybrid study models, enabling clinical research organisations (CROs) to maintain the continuity of clinical trials amidst the global health crisis.

However, the transition to DCTs has necessitated a heavy reliance on digital technologies, including sensors, wearables, telemedicine, and patient-centric virtual trial interfaces, among others. Here's where AI can help both clinicians and patients with the vast amounts of data generated.

The study's authors underscore the imperative of driving innovation in DCT research models to unlock their full potential and amplify trial outcomes. The remote or hybrid nature of these trials places increased responsibility on participants, potentially leading to protocol deviations and participant attrition.

A critical challenge illuminated in the article pertains to the enhancement of digital health interfaces. According to the authors, the integration of AI automation into trial design can significantly enhance user interfaces, ultimately benefiting trial participants.

Another significant hurdle arises from the escalating volume of data collected during DCTs. While eCOA, ePRO, and eConsent offer flexibility to patients and data integrity to sponsors, they may lead to errors and reduced protocol adherence due to participant input mistakes. The study proposes the application of reinforcement learning (RL), a branch of machine learning (ML), to expedite data entry tasks by sending customised notifications to trial participants, reducing notification frequency.

In certain DCTs, participants must capture images or videos, which can be challenging due to specific guidelines. The authors advocate for the implementation of computer vision, a subset of AI, to automatically assess and correct images and videos, streamlining the process.

Real-time mobility tracking presents another significant challenge for trial participants, especially in DCTs relying on sensors and wearables to monitor patient movement. The study suggests implementing AI models designed for temporal data to reduce the reliance on wearables and sensors while improving the accuracy of movement measurements.

Notably, with over 20% of therapeutics showing variations in response and exposure across racial and ethnic groups, the FDA has underscored the urgent need for minority inclusion in trials. Drawing from research published in the ASCPT Journal, the authors of the article highlight that DCT models can significantly boost patient recruitment and retention rates. High-end DCT platforms like <u>ObvioHealth</u>, encompassing eCOA, ePro, and eConsent, empower participants to contribute remotely, bridging the inclusivity gaps in clinical research and expediting much-needed changes in trial design.

In closing, the article underscores Al's pivotal role in revolutionising clinical research and urges CROs to embrace DCTs as a means to expedite the introduction of life-improving therapeutics to the market.

To read the full article and delve into the future of clinical trials with AI, visit Geeky News today: https://www.geekynews.co.uk/ai-augmenting-patient-experience-in-dcts/

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