

In the shadow of uncertainty for the future of Generative AI in medicines development:

A collaboration to illuminate the way

DIA Global Annual Meeting 2023 Solution Room

Supplemental Information

Graphic: Current challenges that need to be addressed to ensure the implementation of generative AI for patient benefit

Regulation

- Reliable regulatory frameworks to ensure clarity and compliance for sustainable AI approaches, encompass scope and expectations
- Awareness of AI integration to address the lack of knowledge on effectively integrating AI into existing workflows
- Promote collaborative conversations and discussions on quality, safety, and efficacy to maximize AI's potential.

Validation

- Define validation approaches and industry standards considering regional and local factors
- Address limitations of training data, data restrictions, and assess data performance
- Keep pace with the accelerated progress of AI innovation
- Understand data provenance for enhanced generalizability.

Transparency

- Lack of representative input
- Address misinformation through training and communications
- Incorporate policies to address concerns about job security.

Trust

- Define data methodology and the accuracy of models to establish trust
 - Ensure transparency in model usage
 - Avoid undue reliance
- Build story catalogs on how people are using or have already used large language models.

Ethics

- Enhance societal awareness and stakeholder collaboration
- Maximize patient value and how patients can utilize the results.
- Control patient data rights, privacy, and communication.

Bias

- Overreliance on generative AI outcomes
 - Accuracy of data
 - Hallucinations (precision error)
 - Omission (recall error)
 - Perception of bias
- Enhance “explain-ability” for efficient human verification.
 - Unclear Use Cases.