Empowering healthcare with trustworthy AI, ensuring quality care for all...



Al Validation, Safety and Management for Healthcare

Building Equity into the 3 D's (Design, Development, and Deployment) of AI in Health and Human Services

# Al Safety & Bias Mitigation Methods Throughout The Al Lifecycle

### Social Mitigation Methods

#### Teams

- Pathway Programs
- Upskilling Data Scientists & Researchers

#### Al Governance

- Local Policy and Procedures
- Stakeholder Engagement
- Including Patients, Clinicians, Leadership, Ethicists

#### Regulations

- Europe
- US
- •FDA QS & CBMP
- •HHS/ONC Final Rule

Data creation
Origination of data
used to train and
evaluate an AI model

Model deployment
Real-world
implementation and
use of the AI model

AI life cycle

Model evaluation Testing of the AI model to evaluate performance and efficacy Model development Iterative algorithmic formation process to build the AI model

**Data acquisition** 

of data to train and

evaluate the AI model

Gathering or purchasing

## Technical Mitigation Methods

# Standards & Frameworks

- DHHS Trustworthy AI Playbook
- Promoting the Use of Trustworthy Al in the Federal Government
- NIST AI Risk Management
   Framework
- •ISO 42001 AI Management Standard

#### AI/ML Methods

- EqualityML Toolkit
- •Al Fairness 360
- Fairlearn

# Validation & Monitoring

- Equality AI
- Epic



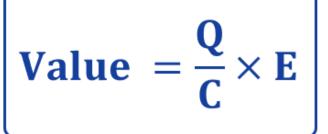
Ng, M.Y., Kapur, S., Blizinsky, K.D. et al. The Al life cycle: a holistic approach to creating ethical Al for health decisions. Nat Med 28, 2247–2249 (2022). https://doi.org/10.1038/s41591-022-01993-y Cary, M.P., Jr., Hohmann, N. S., Hohmann, L. A., et al. (2023). Mitigating Racial And Ethnic Bias And Advancing Health Equity In Clinical Algorithms: A Scoping Review. Health Affairs, 42(10). https://doi.org/10.1377/hithaff.2023.00553

# Role of Policy Makers in Building Equity into the 3D's of AI in Health and Human Services









### Al Management Standards

Define and incentivize adoption of a standard that prioritized health equity

# Research & Innovation

Fund research and innovation that advances the use of AI for health equity

## **Education & Training**

Fund education, workforce development and training opportunities for clinicians, researchers and data science community to promote diversity & health equity

## Al for Healthcare Value

Launch a new CMS Innovation
Center model to test new
payment and service delivery
models that align AI with value,
including health equity, quality,
and access

