a. Data Collection & Pre-Processing 51 Samples 51 Participants 6 Demogr Demographics: Age, Gender, outcomes 3 PA ≥ 3 valid days outcomes 37 Gait outcomes 5-Meter Walking X 2 times b. Models Training and Evaluation c. XAI **Training** i1 Evaluation **Training** i2 Outcomes Evaluation **Importance**

