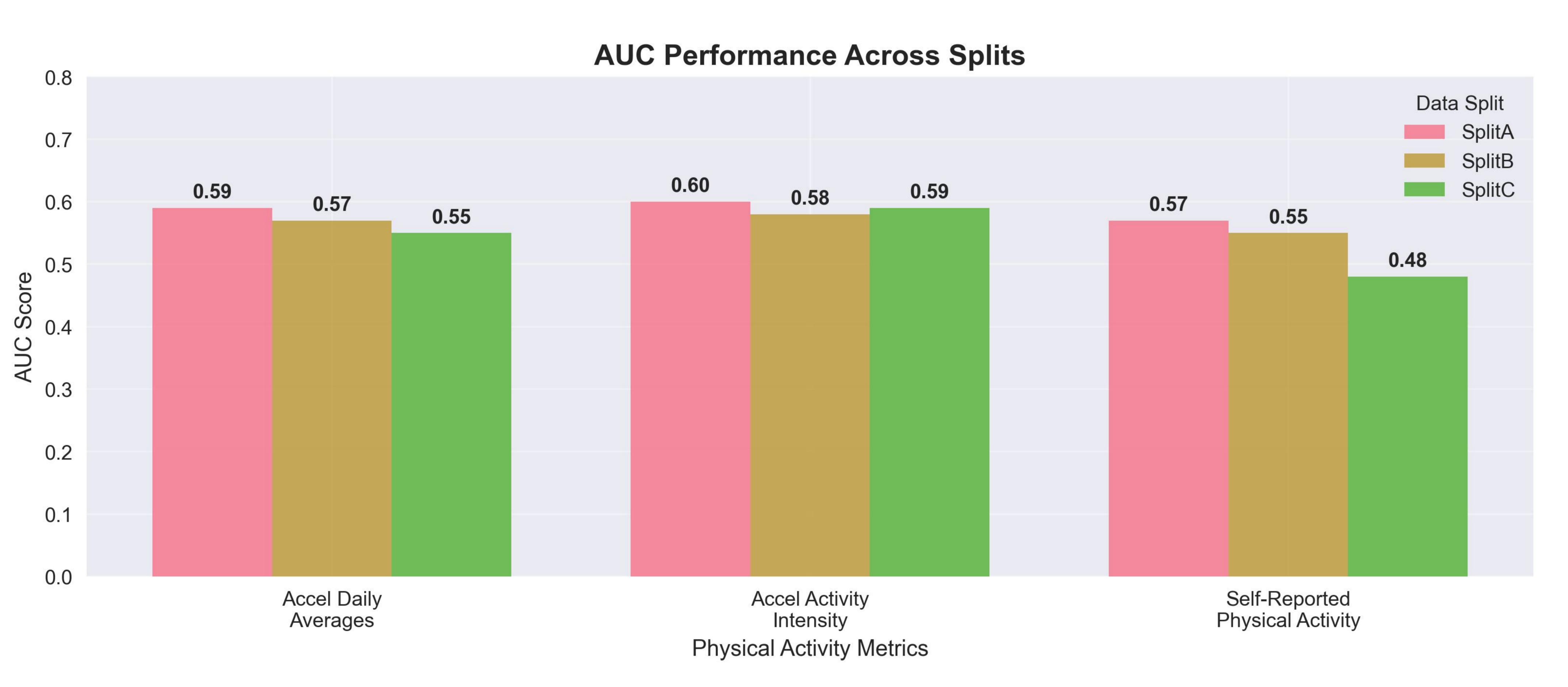
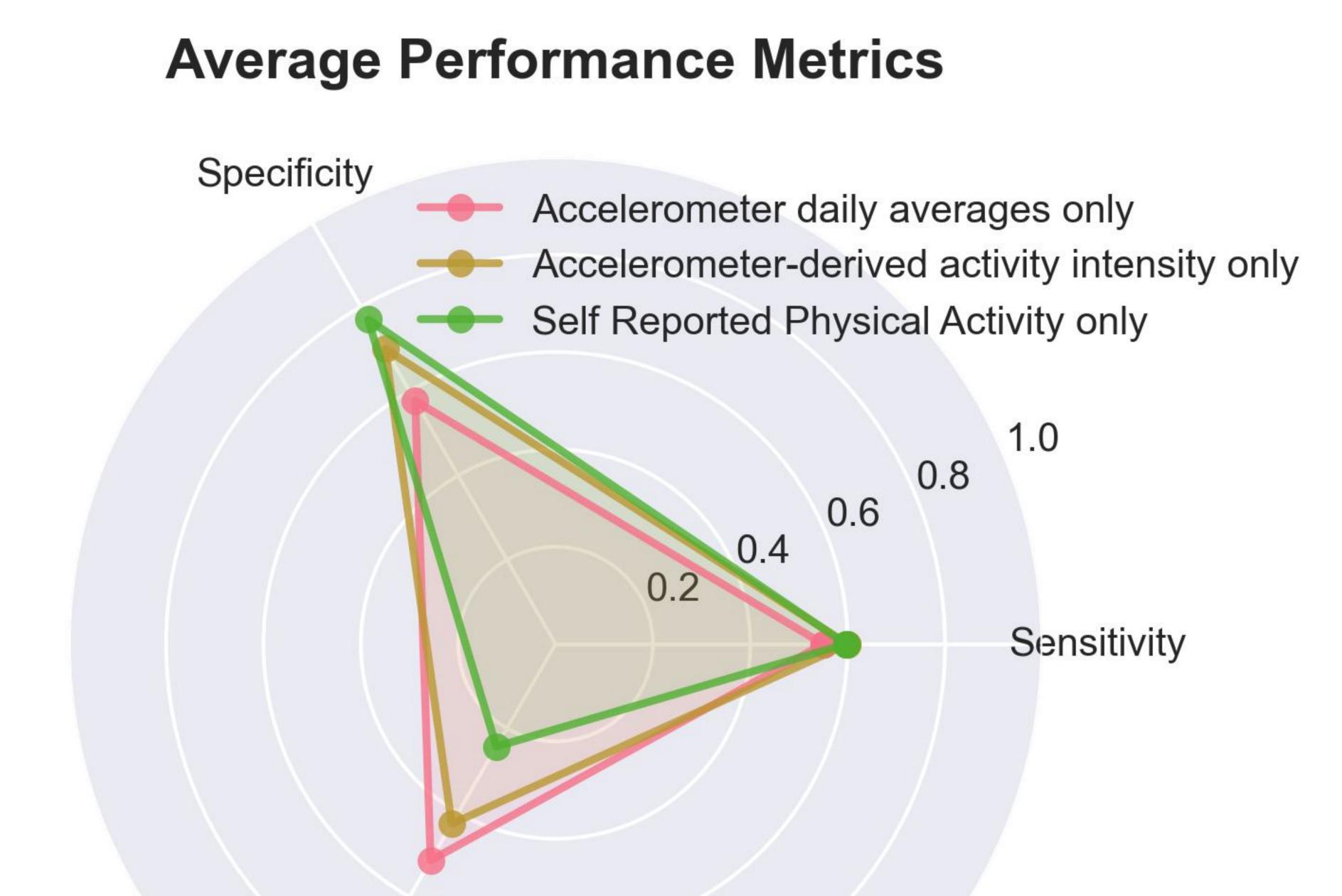


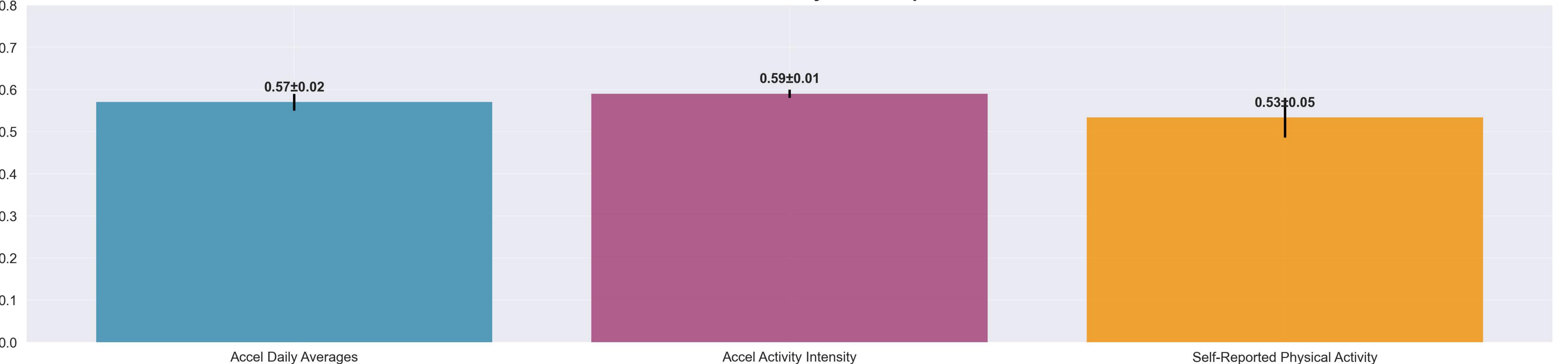
## NHANES Physical Activity Analysis - Comprehensive Dashboard





Balanced\_Accuracy





Physical Activity Metrics

## KEY FINDINGS SUMMARY:

- ACCELEROMETER DATA: Most stable predictive performance across all splits
- Daily averages: Consistent AUC ~0.55-0.59
- Activity intensity: Best overall performance with AUC ~0.58-0.74
- SELF-REPORTED DATA: High sensitivity but low specificity
  - Shows high variability across splits
  - Balanced accuracy suffers due to low specificity
- PERFORMANCE STABILITY:
  - Accelerometer-derived activity intensity maintains ~0.7 sensitivity
  - Keeps specificity around 0.4 across all splits
  - Most reliable for clinical applications
- MODEL IMPROVEMENT:
- Accelerometer data provides modest improvements in clinical models
- Shows clearer gains in clinic-free models
- Self-reported data shows little to no improvement

## Performance Metrics Comparison Across Splits and Physical Activity Measures

