UK Biobank Sample w/ Accelerometer Data

(n = 103,669)

Poorly calibrated

(n = 11)

Well-calibrated accelerometer data

(n = 103,658)

Implausibly high overall acceleration average of greater than 100 mg

(n = 27)

Reasonable range of average overall acceleration

(n = 103,631)

Wear time under 3 days

(n = 6,517)

Did not have unique hours of wear in 24-hour cycle of >= 24

(n = 454)

Wear time > 3 days and have unique hours of wear >= 24 in 24-hour cycle

(n = 96,660)

Screened out based on genetic quality control criteria

(n = 17,206)

Subjects included in final cohort who met genetic quality control criteria

(n = 79,454)

Subjects included in accelerometer cohort

(n = 75,887)

By Ancestry

(n = 65,079 Caucasian)

(n = 10,808 Other)

Subjects with prevalent CAD at baseline

(n = 1,980)

Subjects with missing covariates

(n = 1,587)

(n = 77,474)

By Ancestry

(n = 66,180 Caucasian)

(n = 11,294 Other)

1629 incident CAD WITH missing and 1368 WITHOUT missing covariates

These standards from beginning of “Paper 3 Analysis.R” and courtesy of Oxford Wearables github (largely consistent w/ all studies I have seen using this data)

# Did cohort filtering in cohort screener:

# Process:

# Data quality - good calibration = YES, Overall acceleration average is <= 100 mg, wear duration overall is >= 3 days

# Unique hours of wear in a 24 hour cycle >= 24

# Flowchart:

# 103669 at baseline

# 11 have poor calibration, so 103658

# 27 have implausibly high accel average, so 103631

# 6517 had wear time under 3 days, so 97114

# 454 did NOT have unique hours of wear in 24 hour cycle of >= 24, so 96,660

# DIDNT ADD CLIPPING RESTRICTIONS...

AFTER RESTRICTING TO THOSE WHO WERE GENOTYPED AND MEET KINSHIP INCLUSION CRITERIA:

Subjects WITHOUT INCIDENT CAD

(n = 77,474)

0 75845

1 1629