

## SETTINGS

Scenario: 1111

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

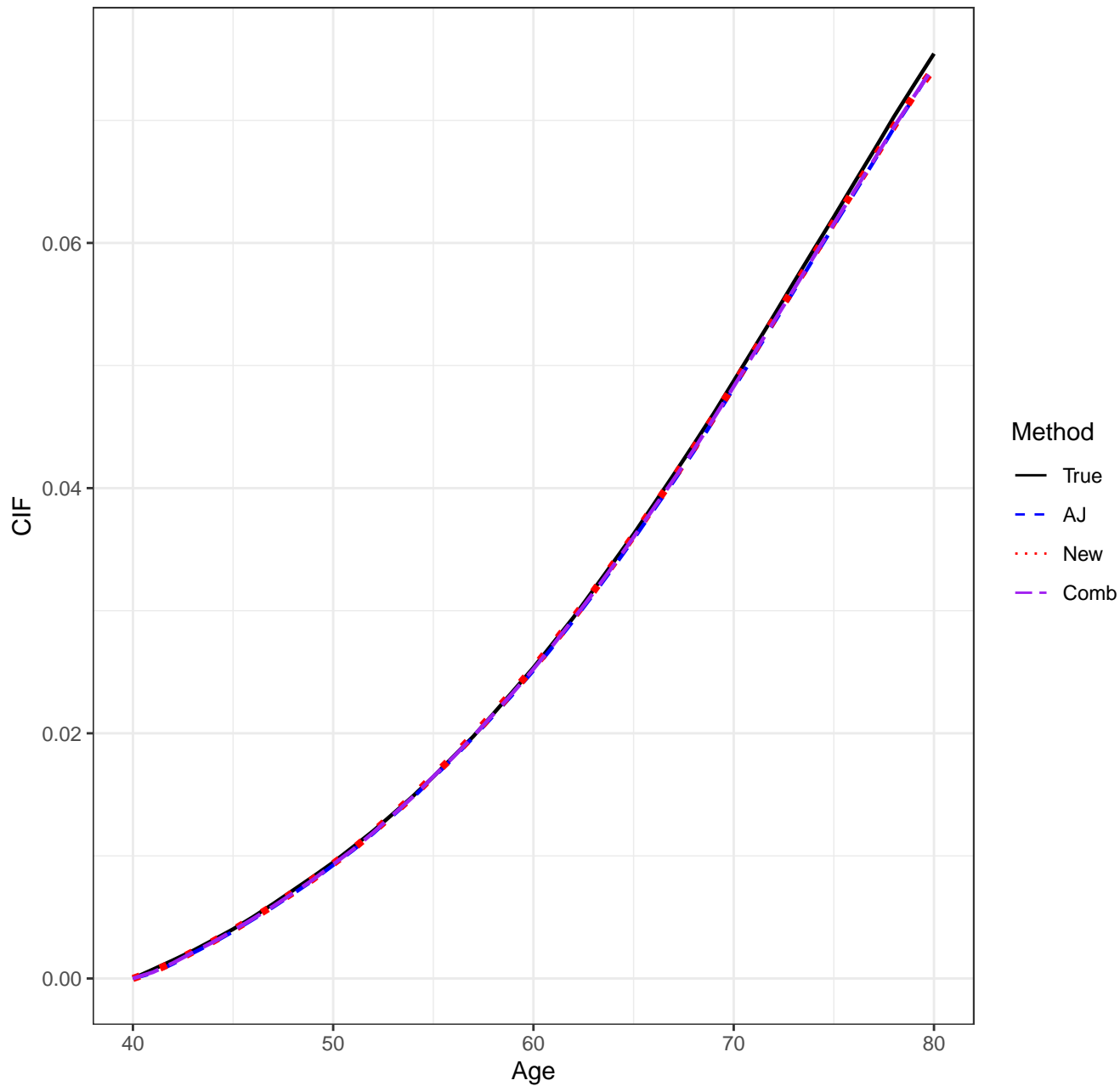
pointwise CI's done by: normal-theory

auxflg = FALSE

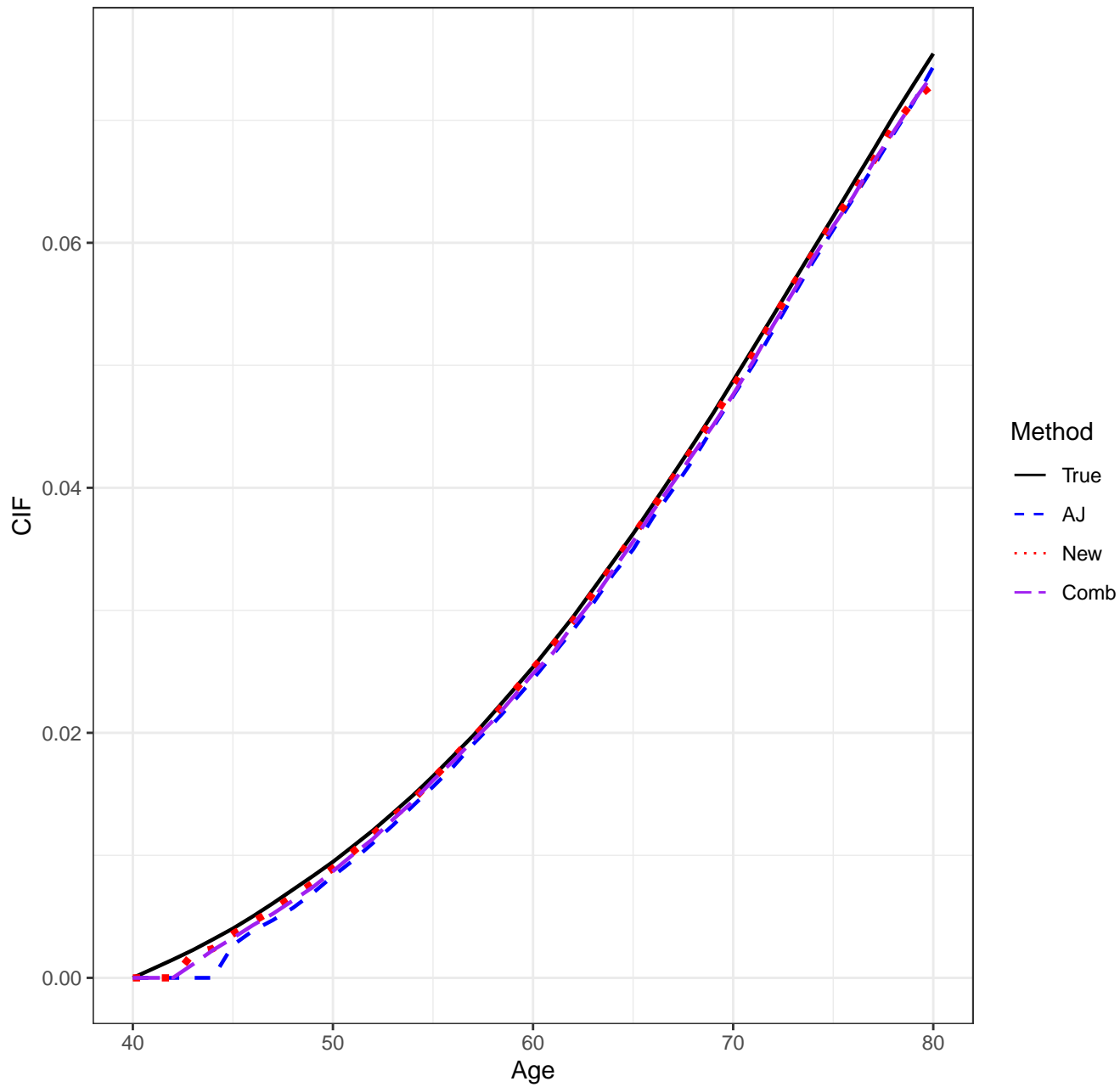
bootstrap weights: normal

Date/Time: 2024-01-11 21:23:01.701094

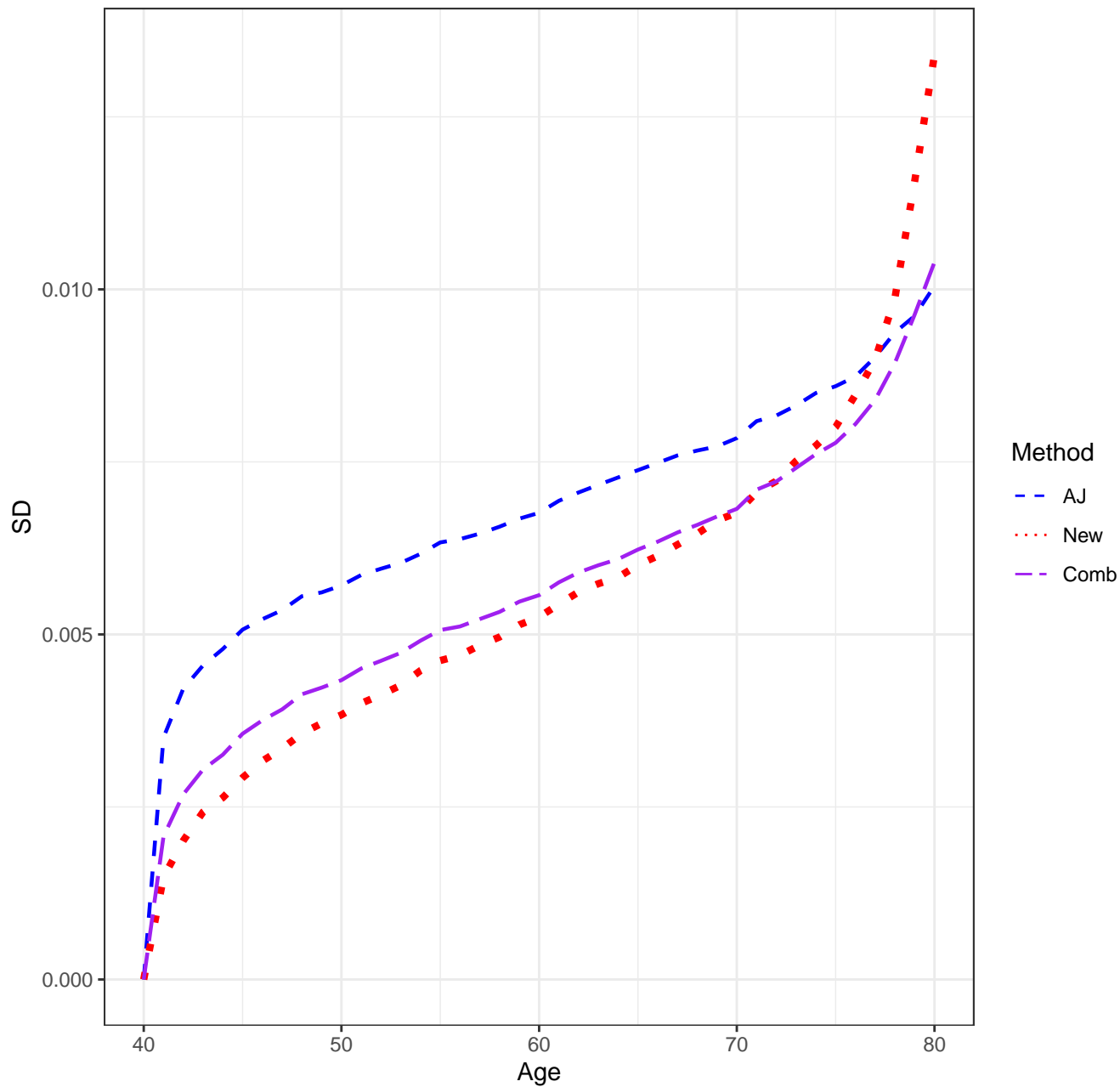
Scenario 1111, n=2500, Means



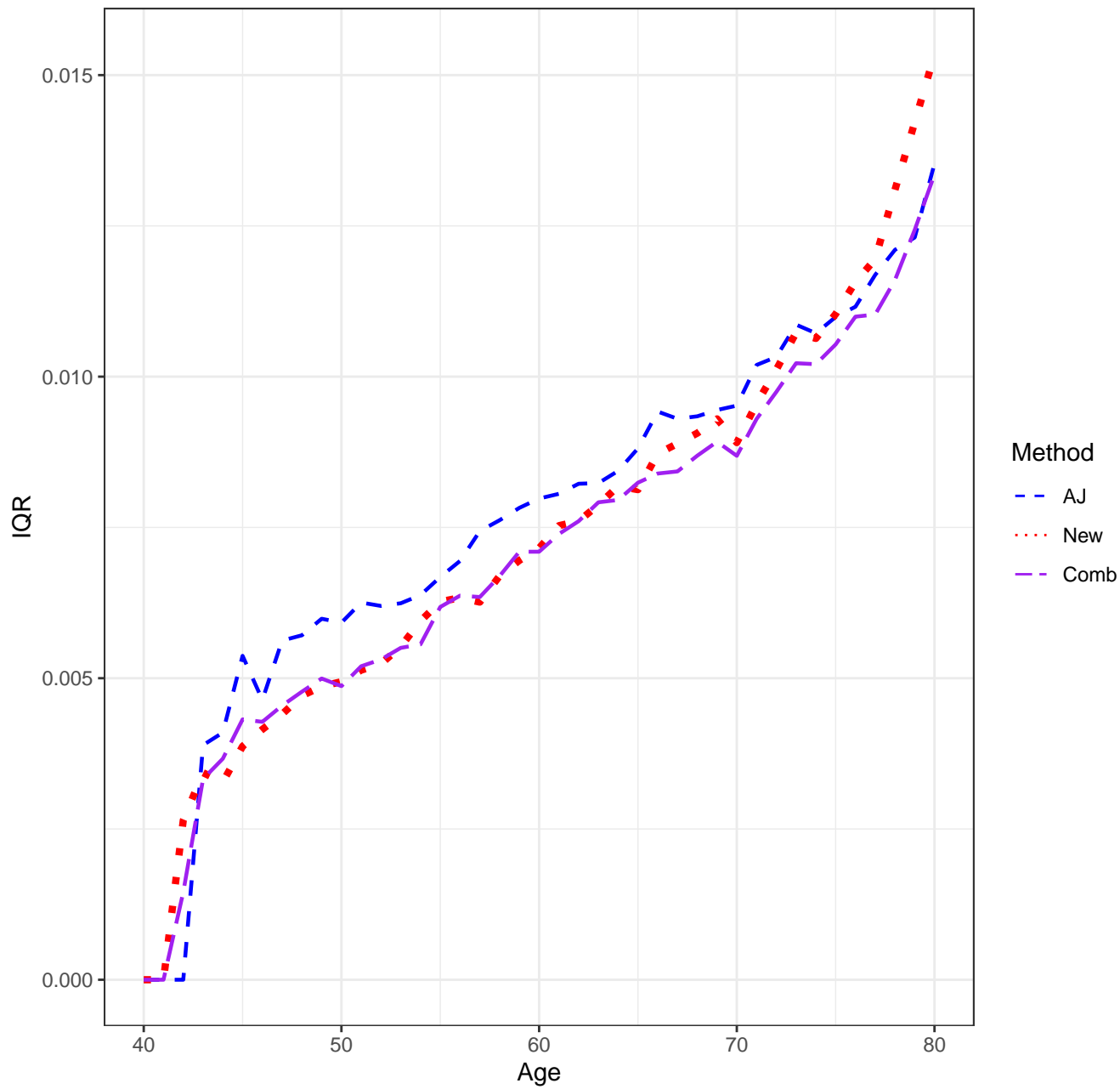
Scenario 1111, n=2500, Medians



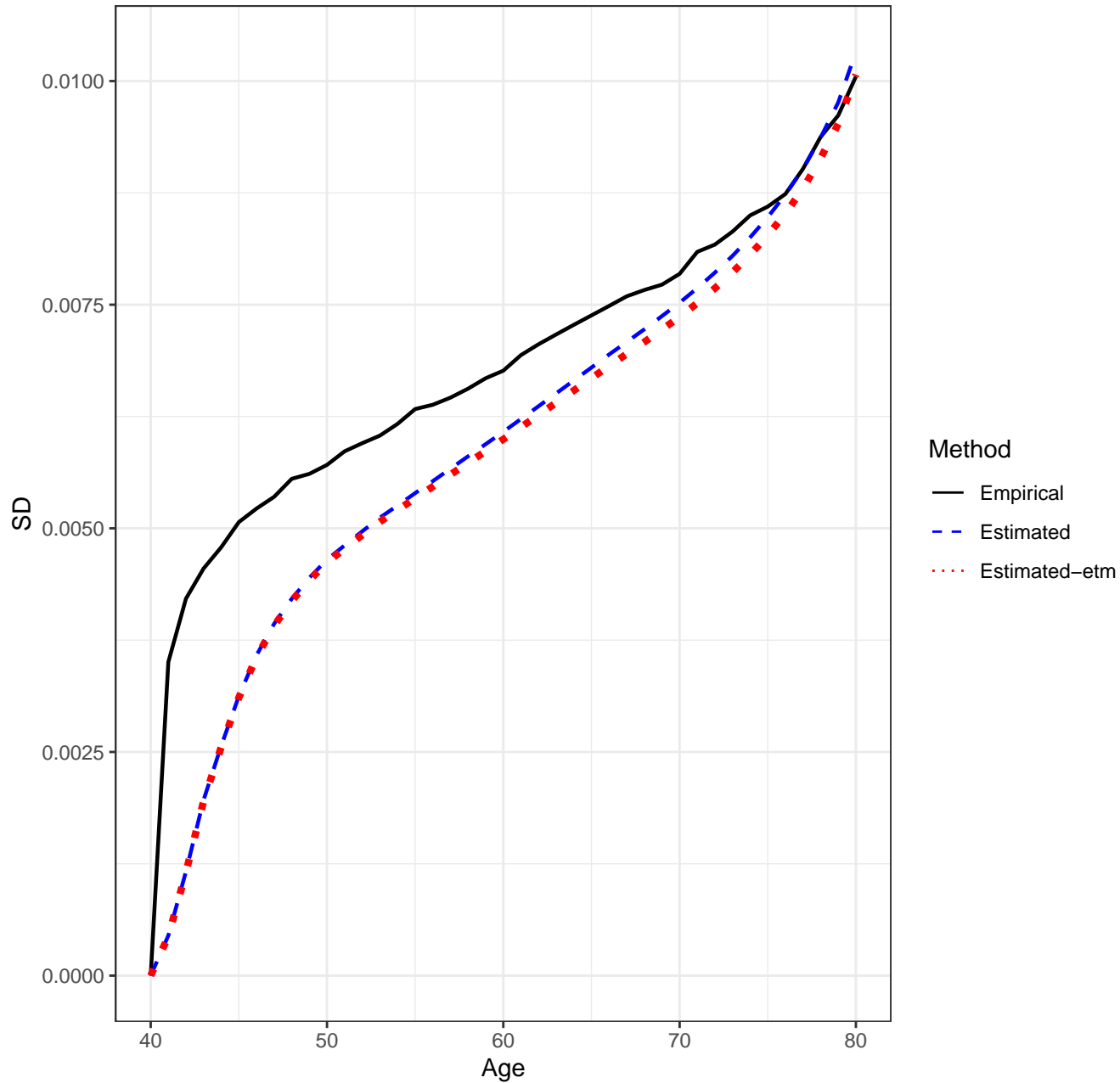
Scenario 1111, n=2500, SD'S



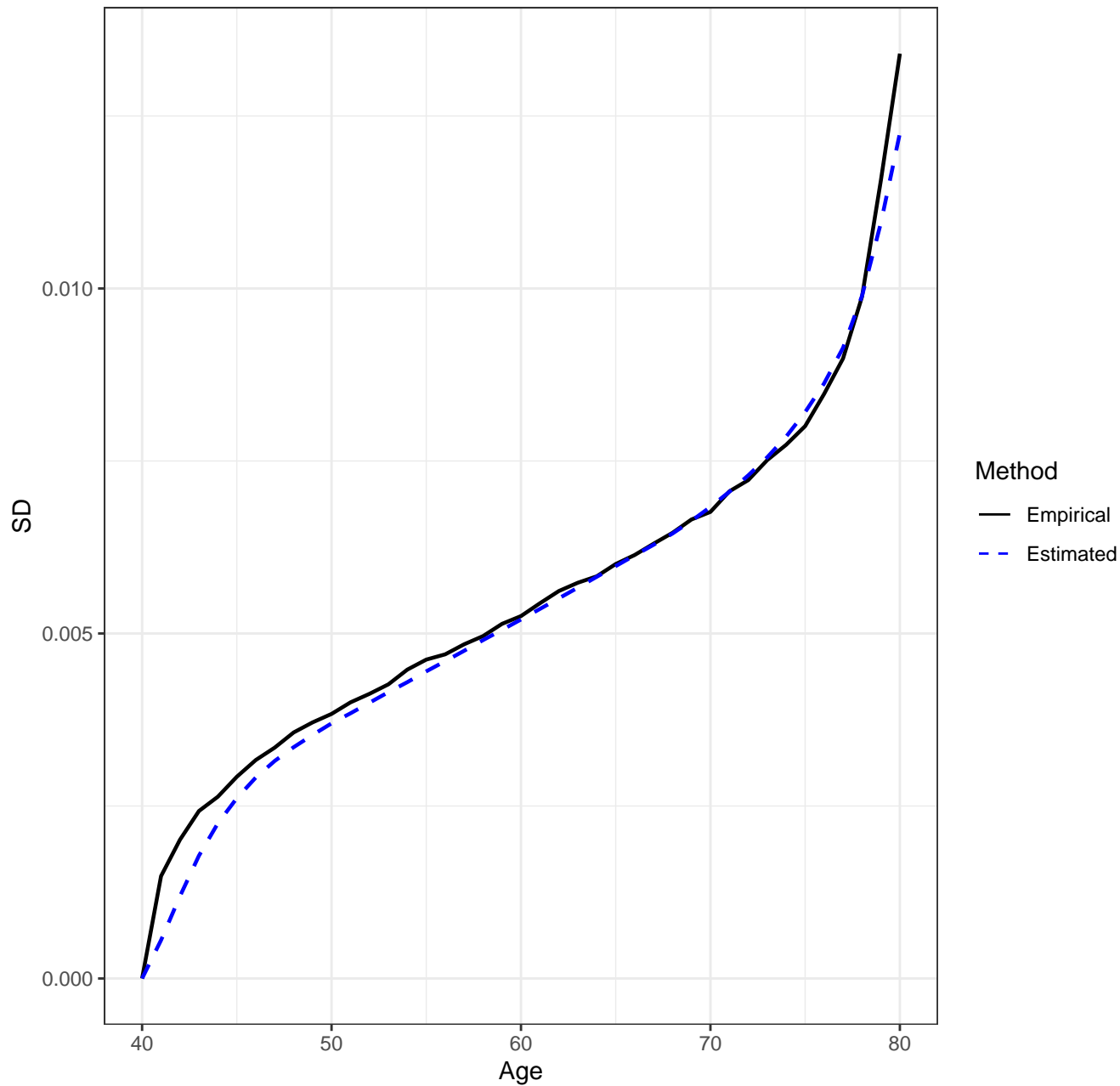
Scenario 1111, n=2500, IQR'S



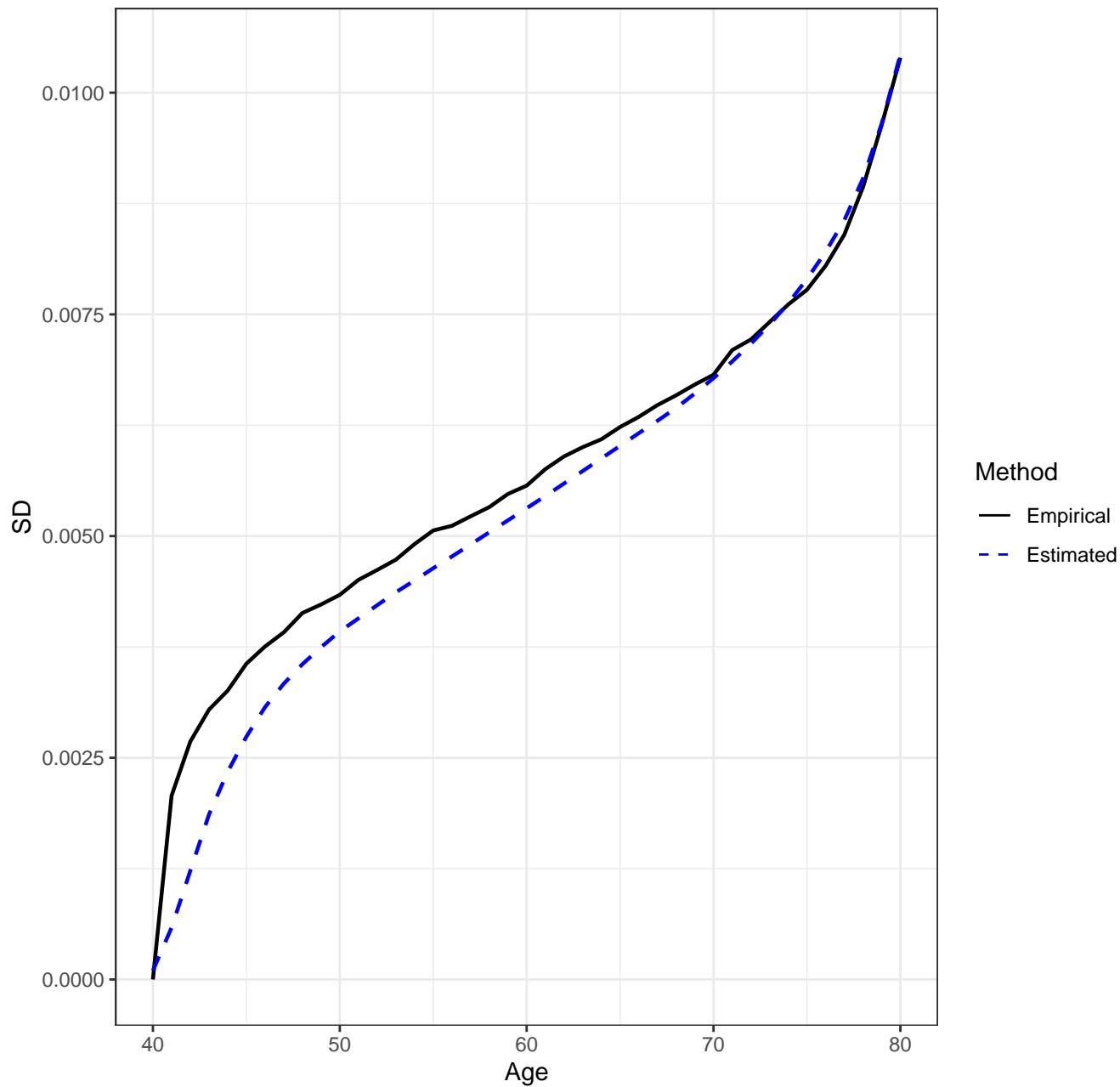
Scenario 1111, n=2500, AJ Estimator, Empirical vs. Estimated SD's



Scenario 1111, n=2500, New Estimator, Empirical vs. Estimated SD's

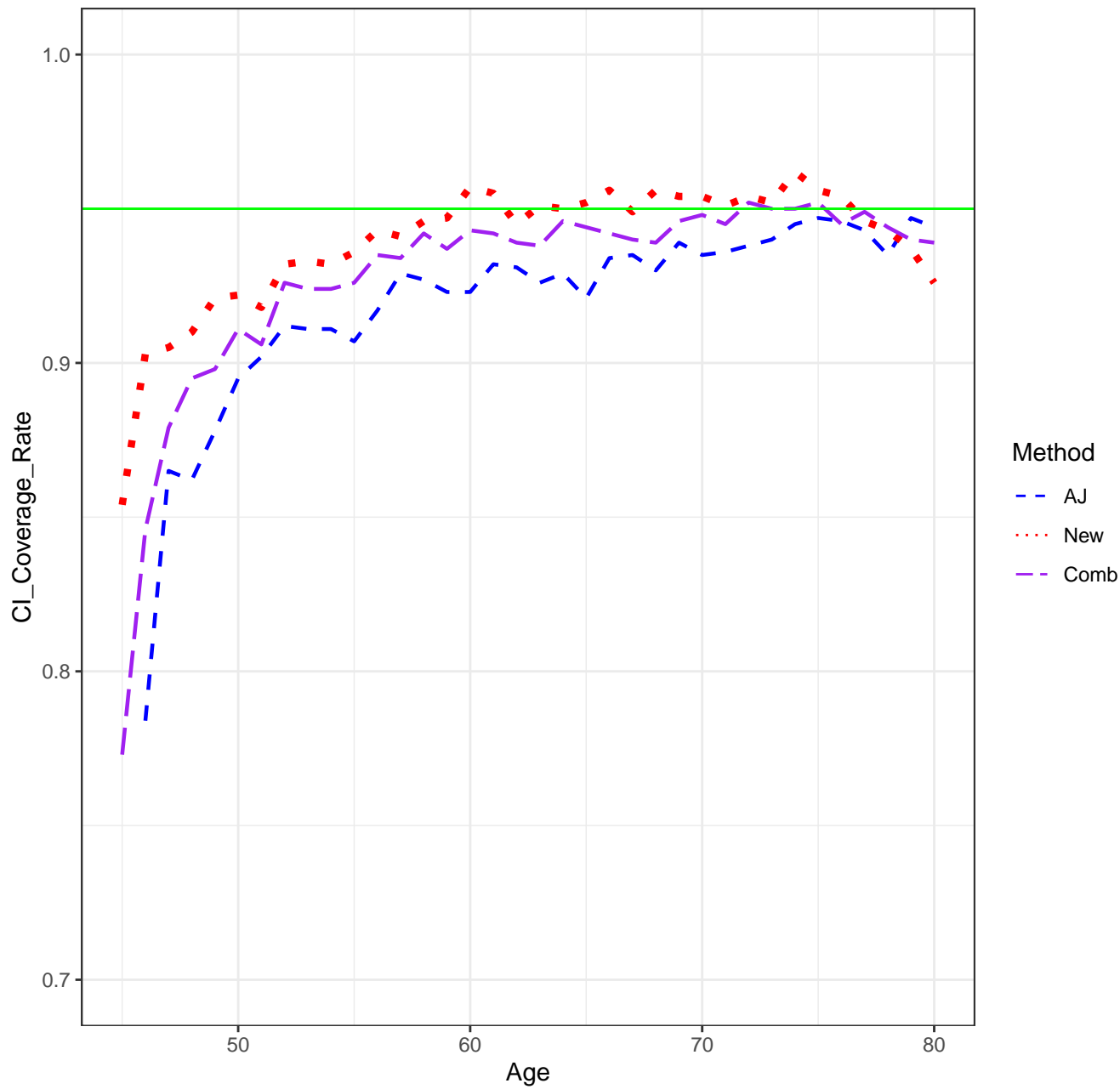


Scenario 1111, n=2500, Combined Estimator, Empirical vs. Estimated SD's

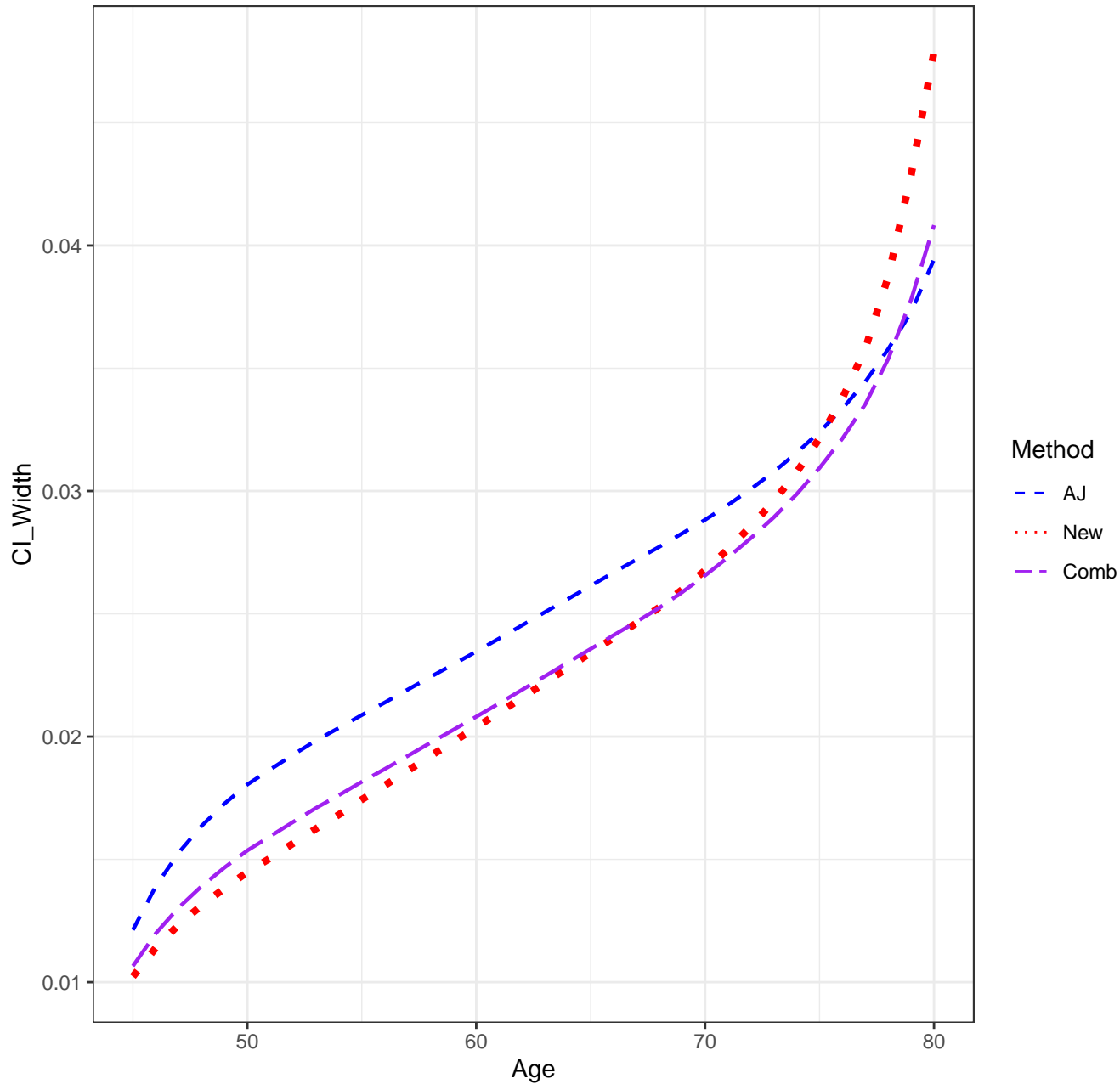




Scenario 1111, n=2500, CICR'S



Scenario 1111, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

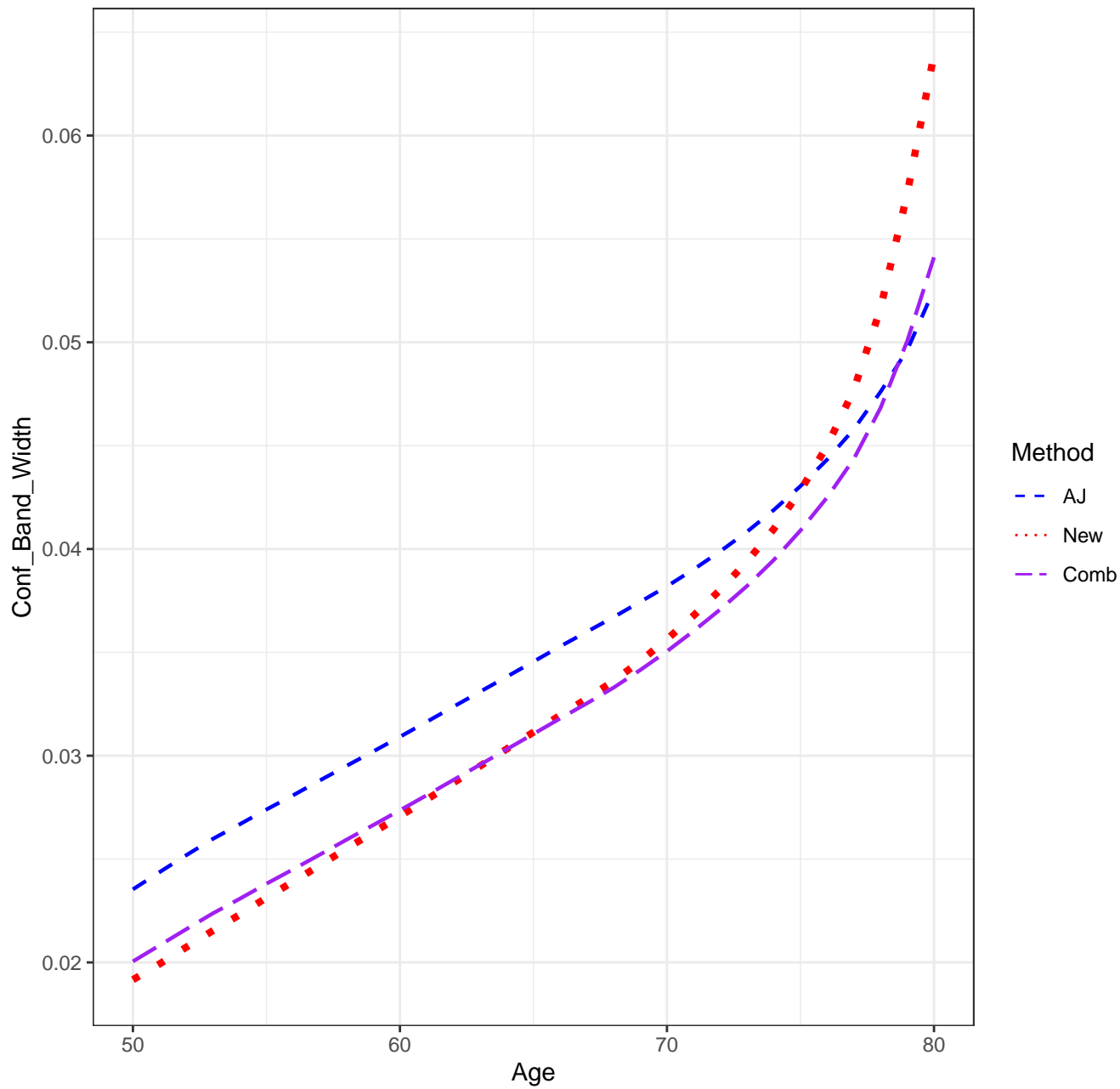
Scenario: 1111

AJ: 0.901

new: 0.912

Combo: 0.9

Scenario 1111, n=2500, Confidence Band Width



## SETTINGS

Scenario: 1112

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

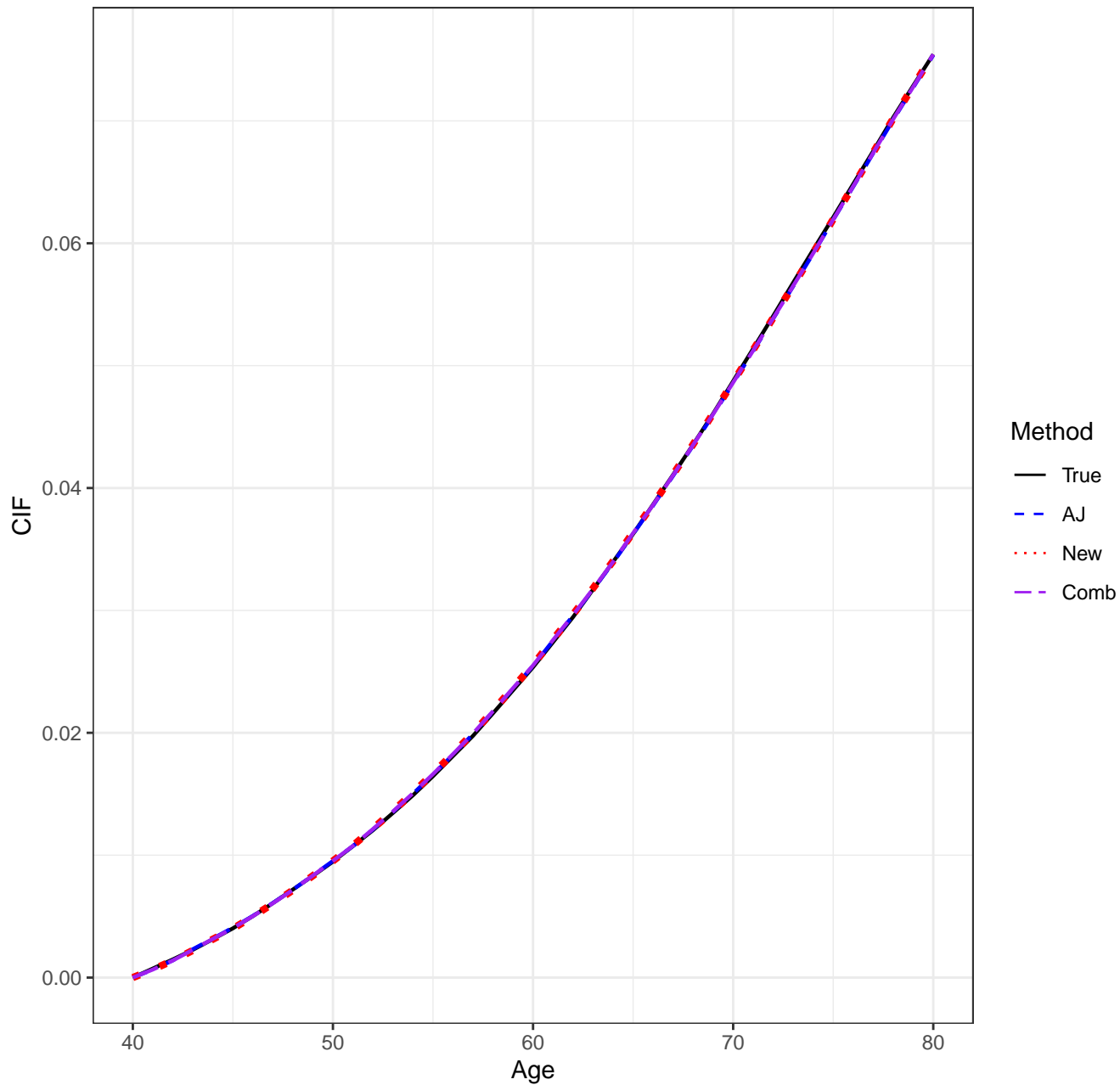
pointwise CI's done by: normal-theory

auxflg = FALSE

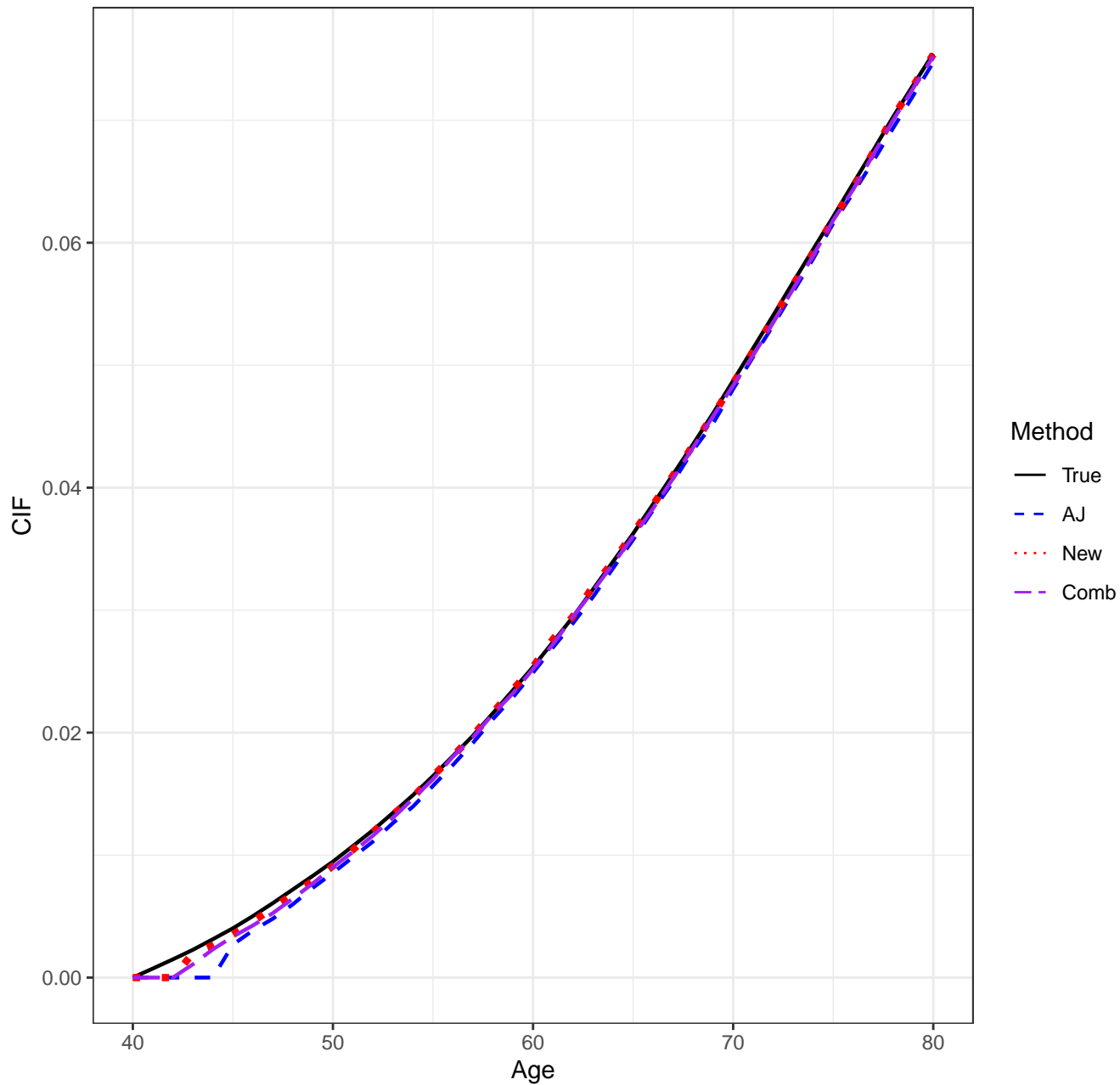
bootstrap weights: normal

Date/Time: 2024-01-12 12:13:51.782744

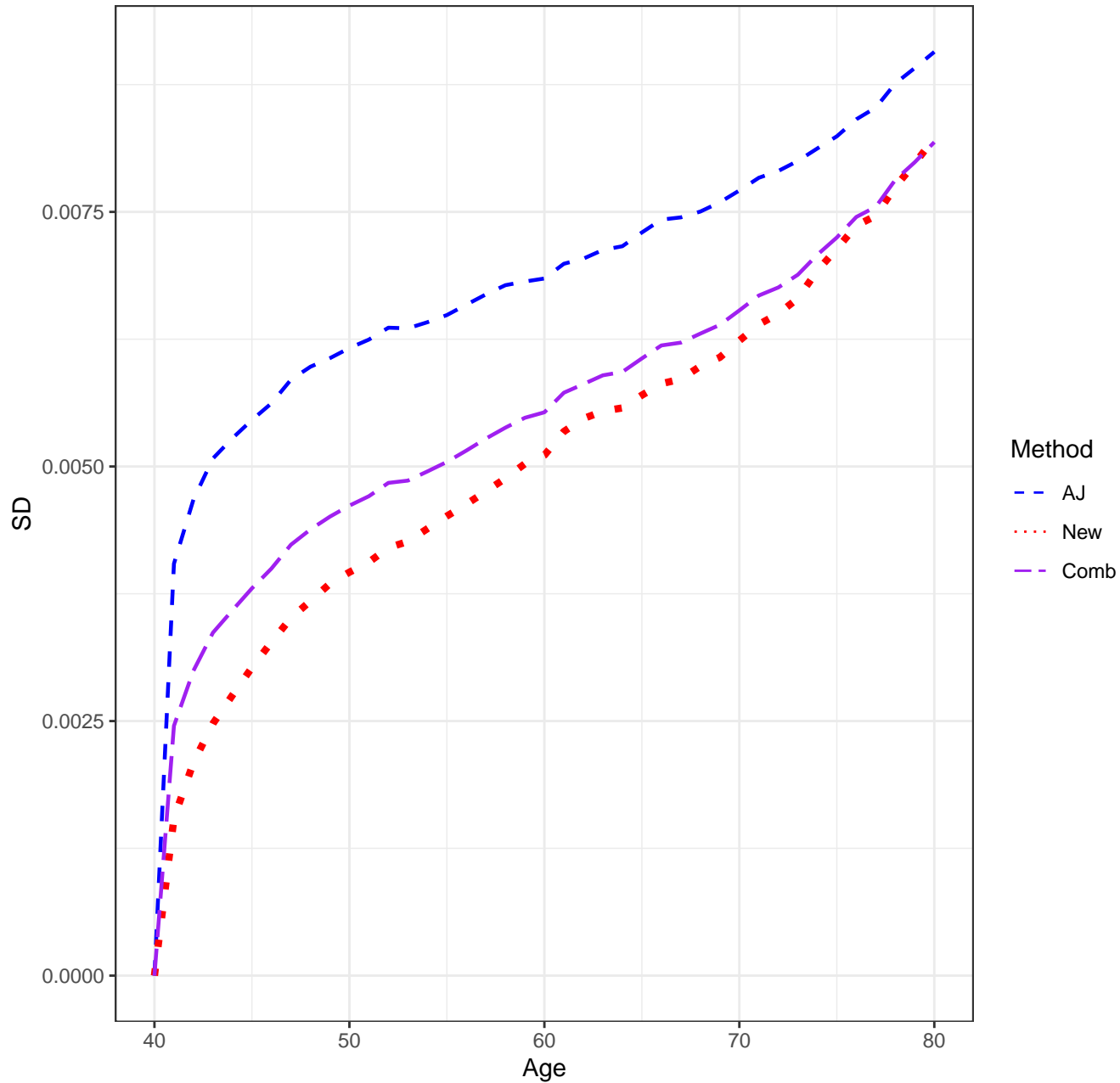
Scenario 1112, n=2500, Means



Scenario 1112, n=2500, Medians

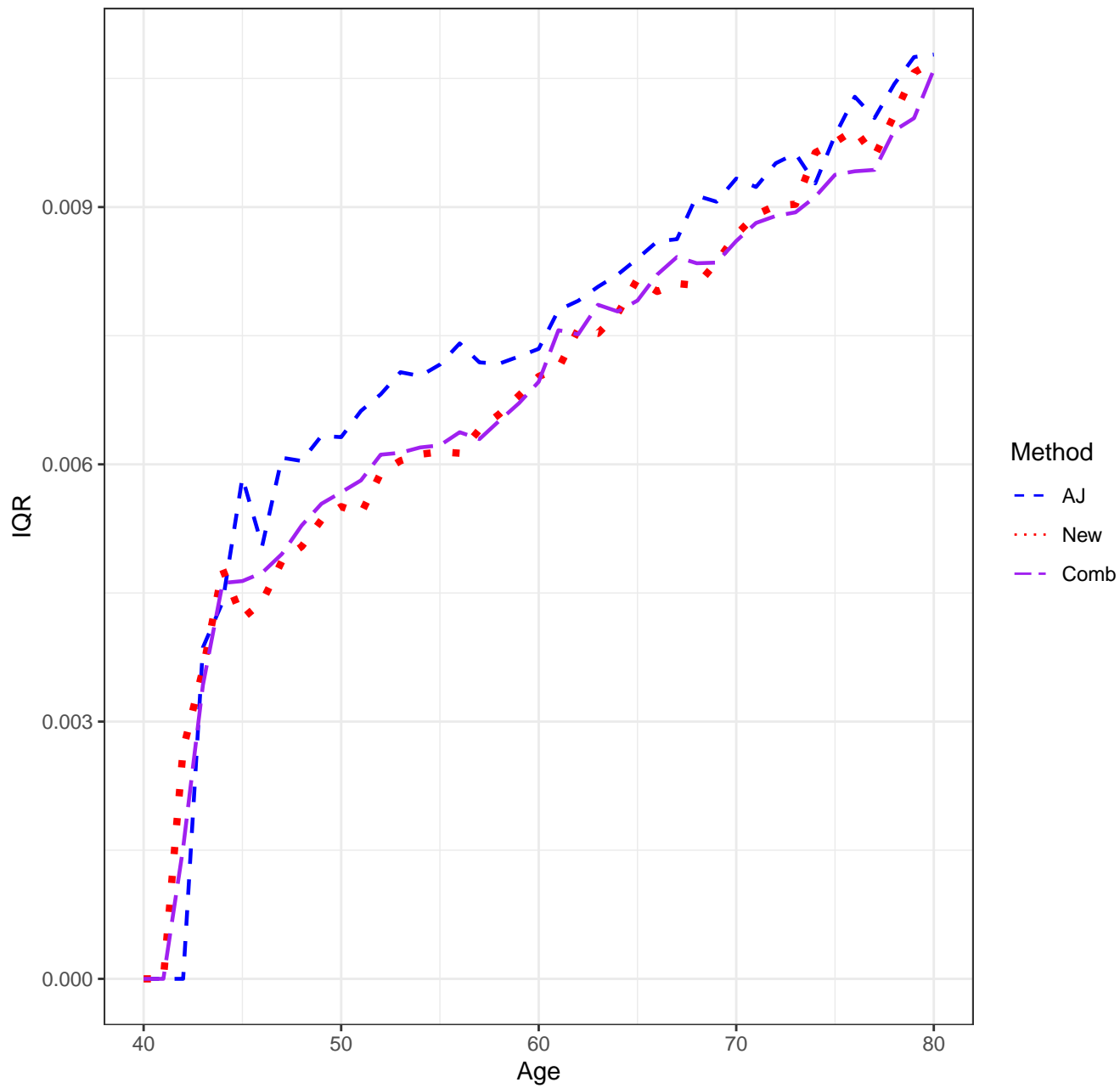


Scenario 1112, n=2500, SD'S

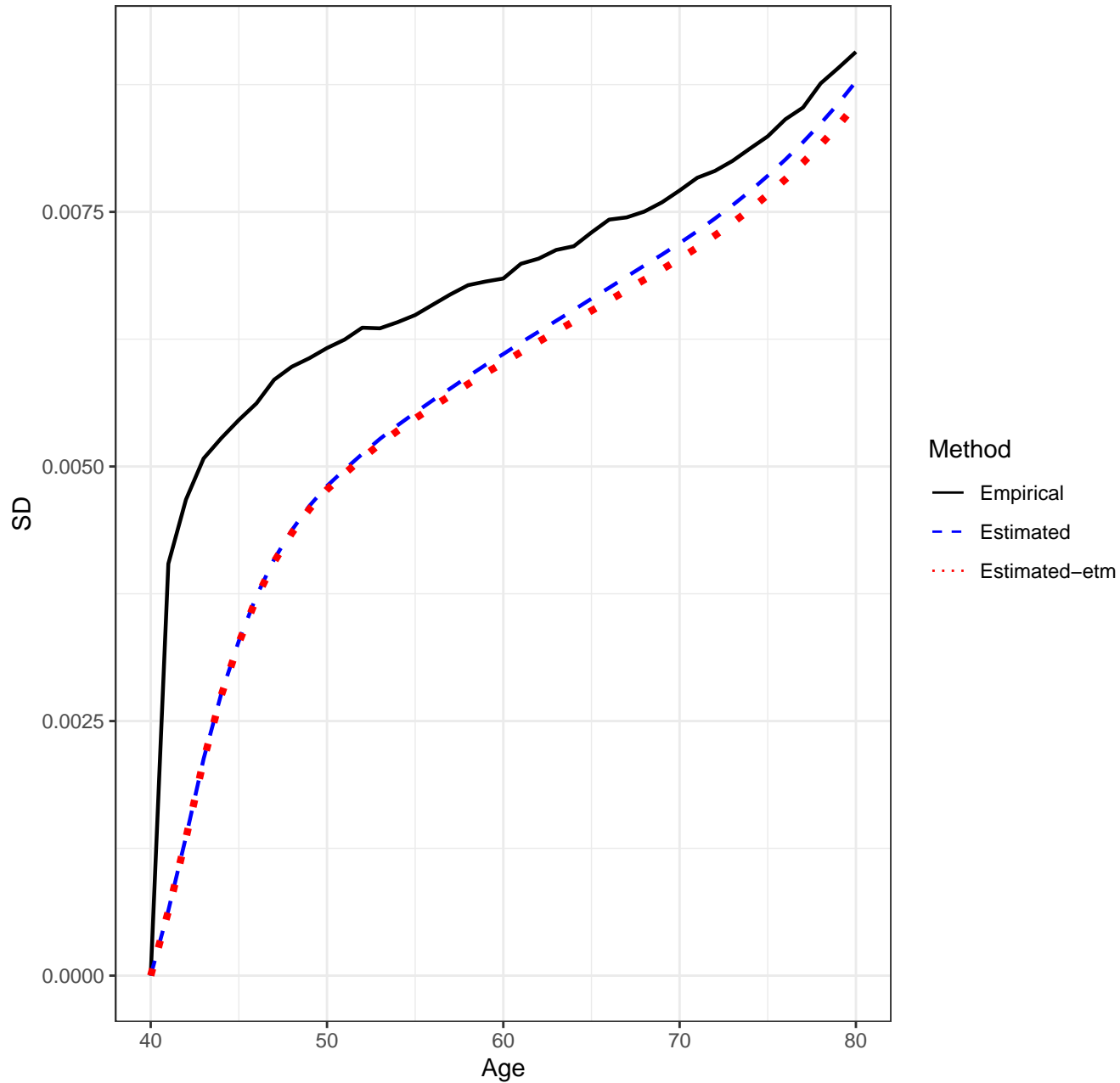




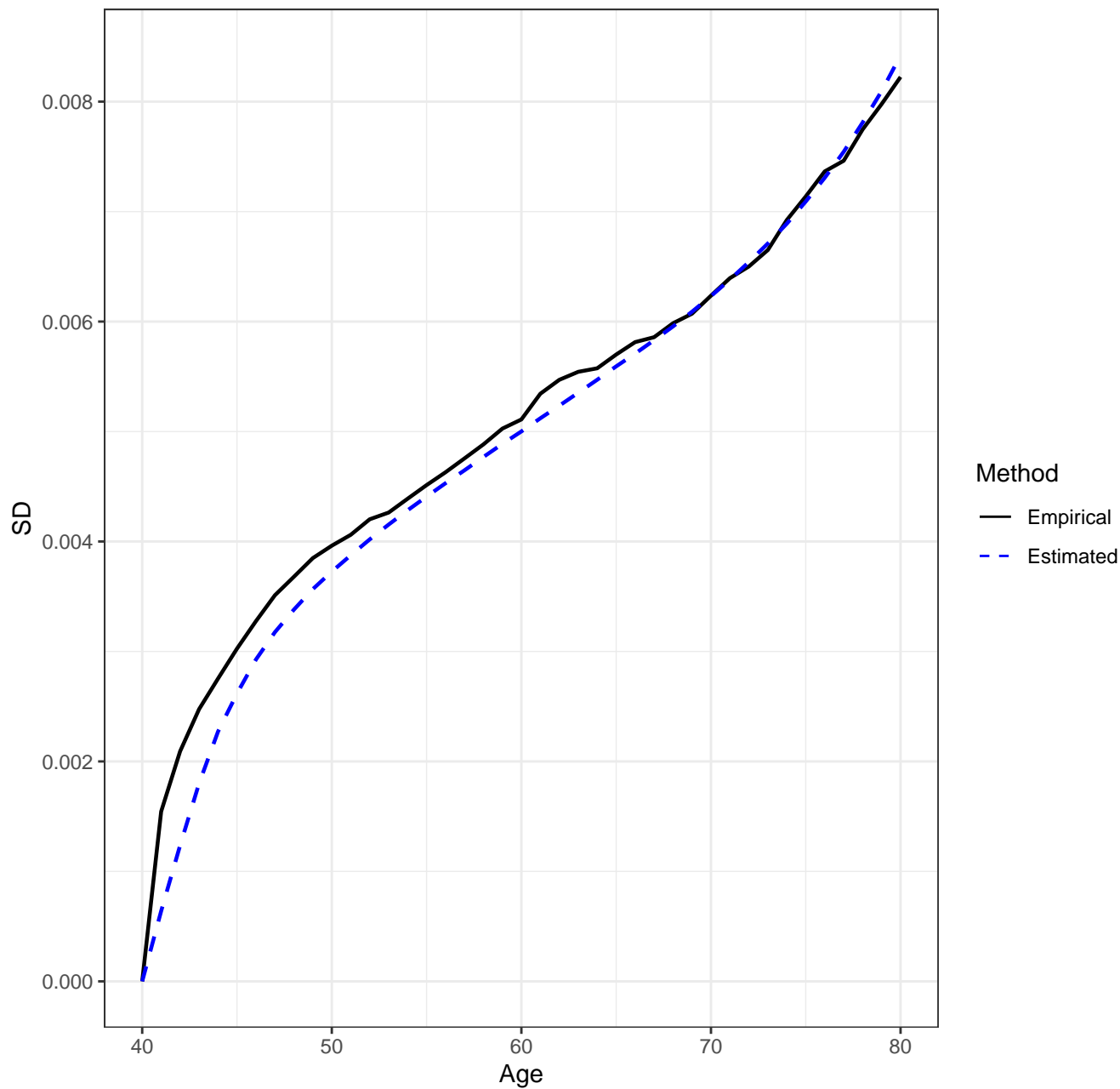
Scenario 1112, n=2500, IQR'S



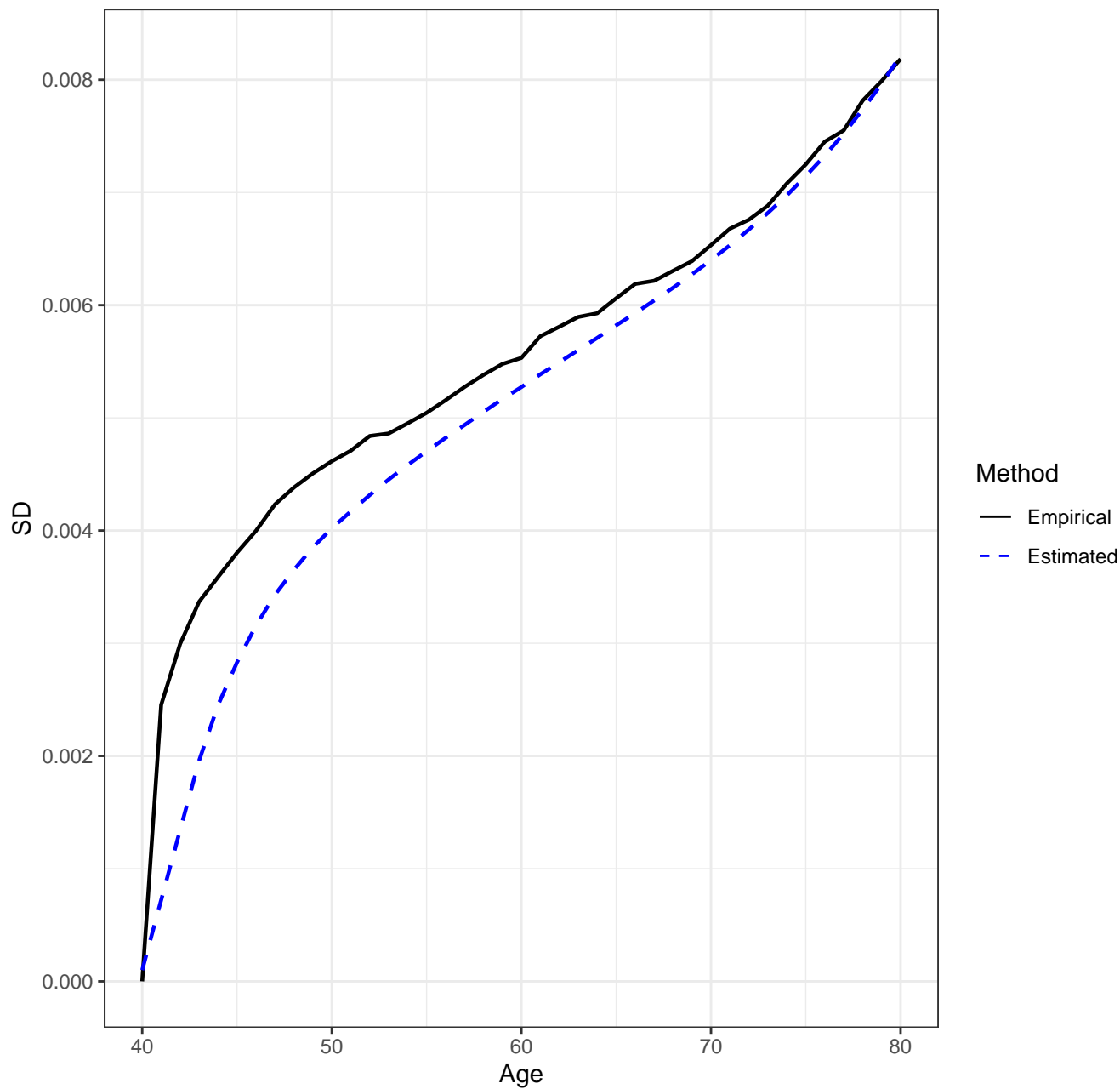
Scenario 1112, n=2500, AJ Estimator, Empirical vs. Estimated SD's



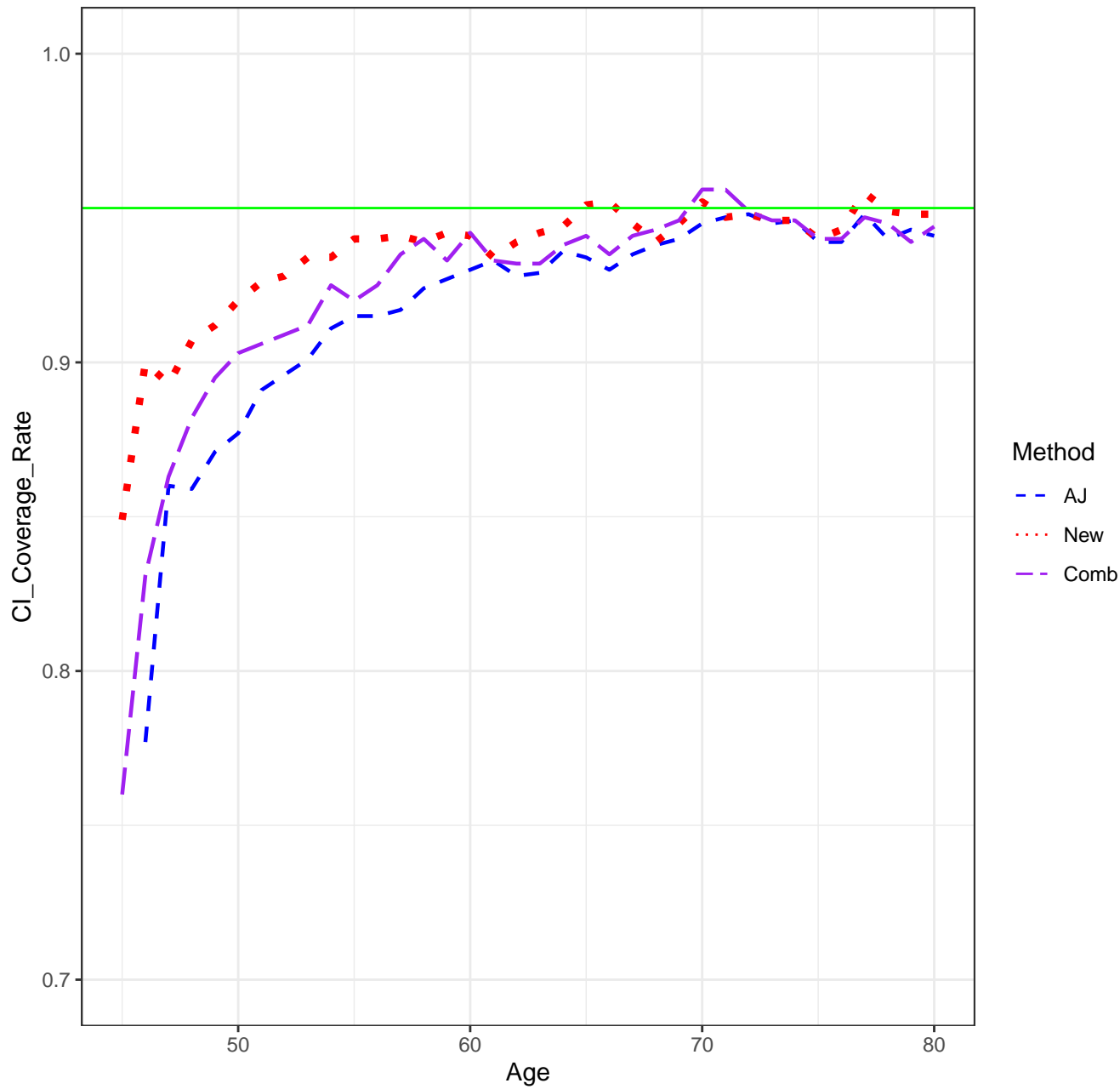
Scenario 1112, n=2500, New Estimator, Empirical vs. Estimated SD's



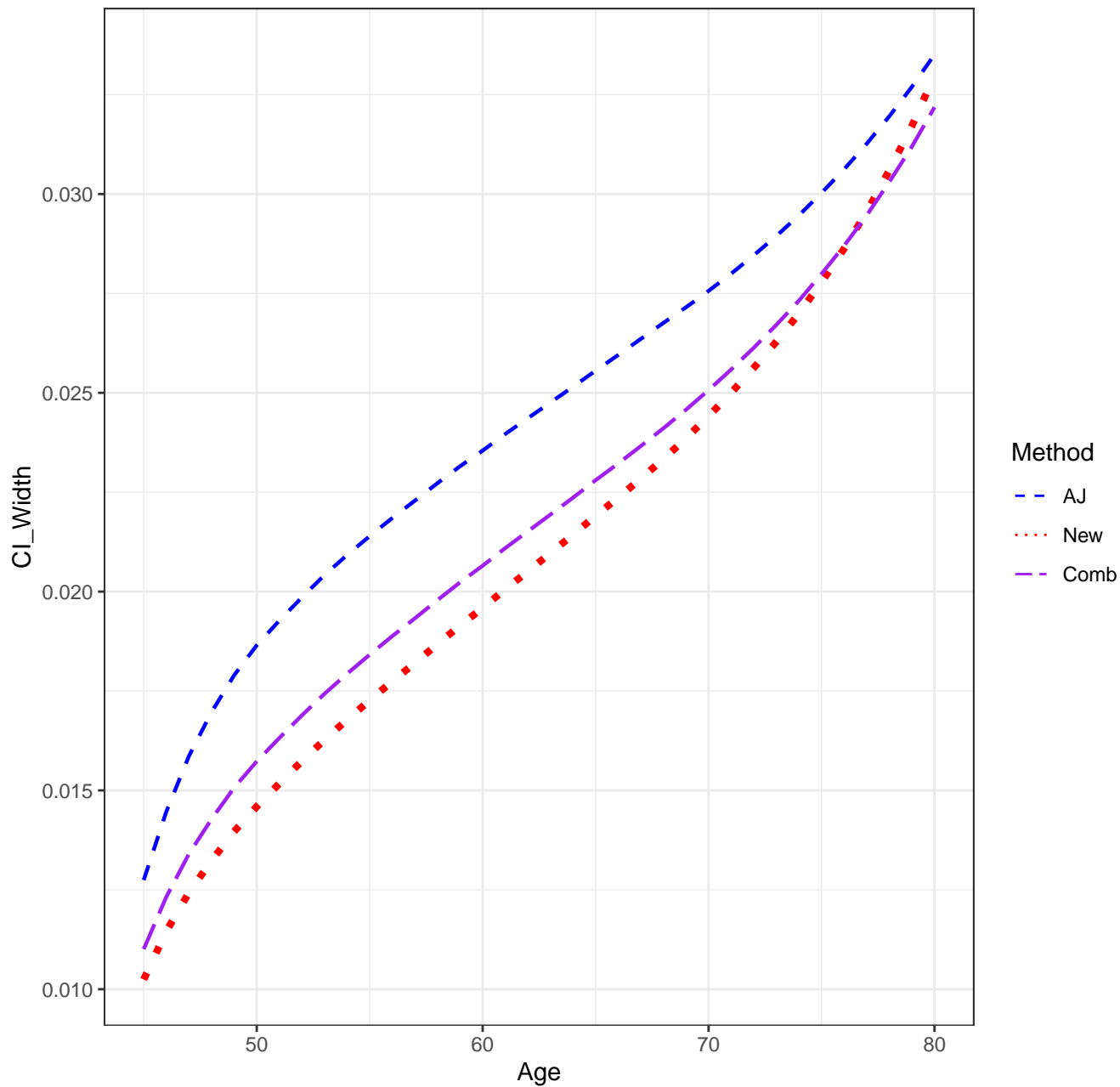
Scenario 1112, n=2500, Combined Estimator, Empirical vs. Estimated SD's



Scenario 1112, n=2500, CICR'S



Scenario 1112, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

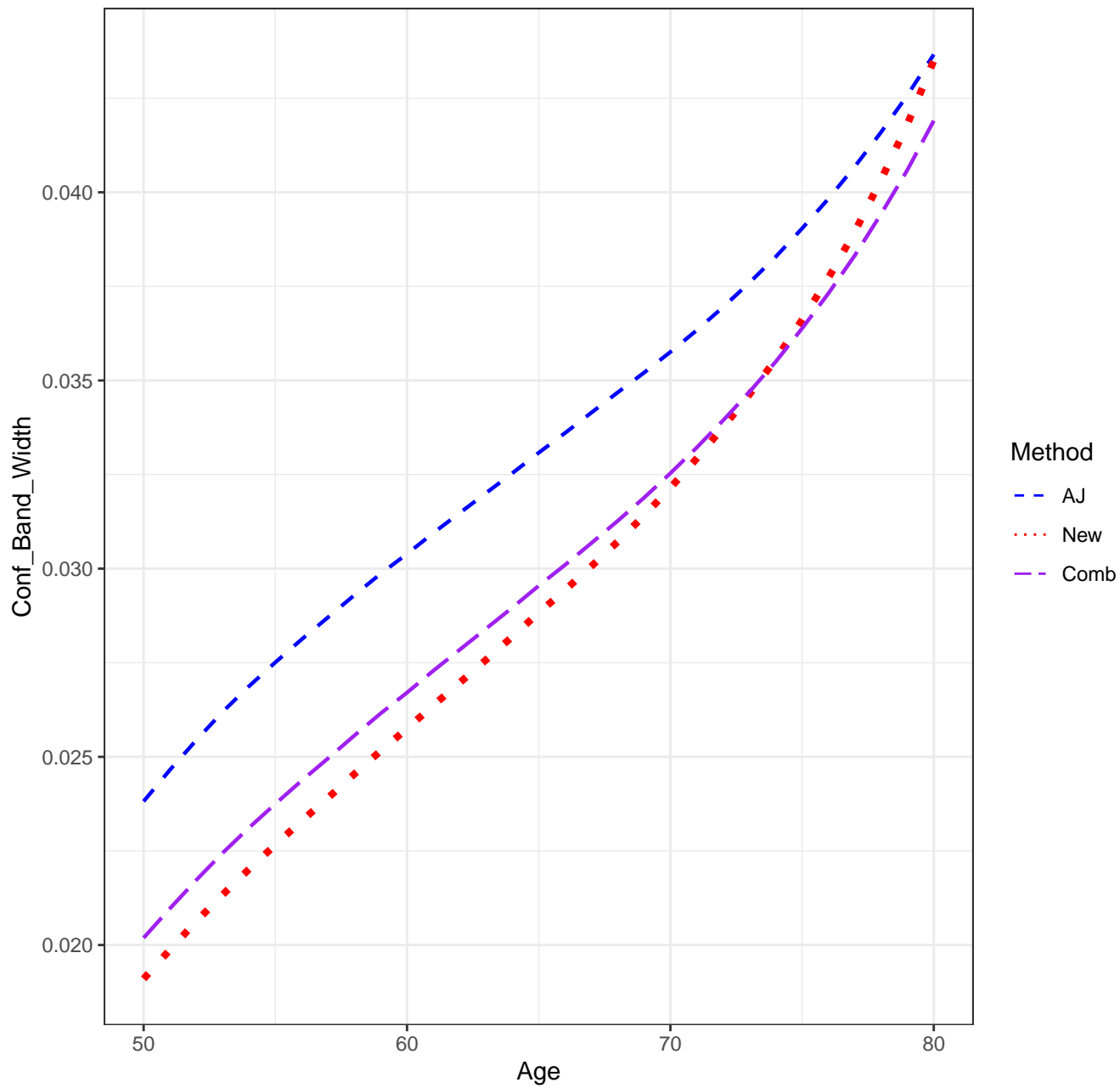
Scenario: 1112

AJ: 0.906

new: 0.939

Combo: 0.911

Scenario 1112, n=2500, Confidence Band Width





## SETTINGS

Scenario: 1121

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

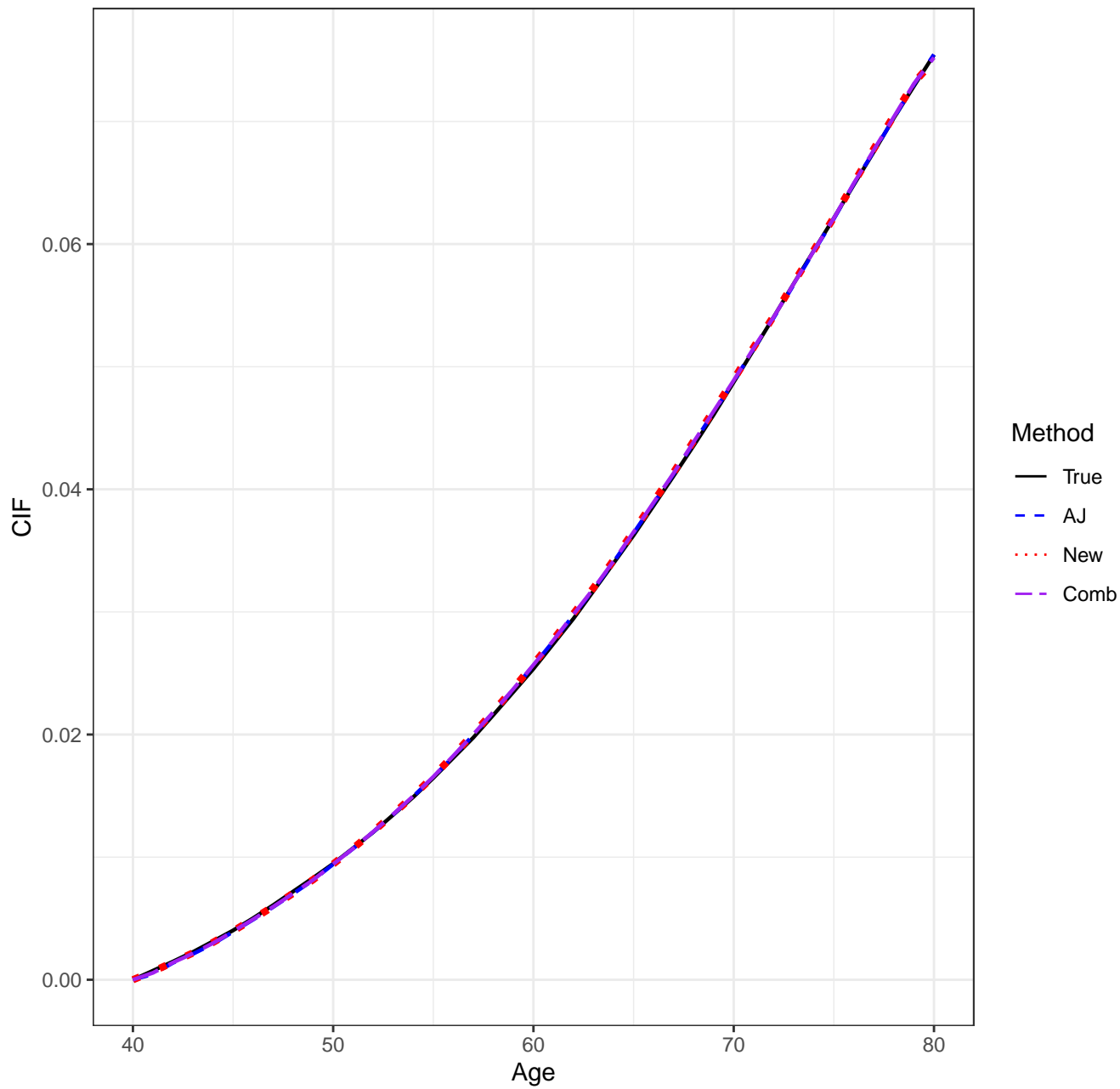
pointwise CI's done by: normal-theory

auxflg = FALSE

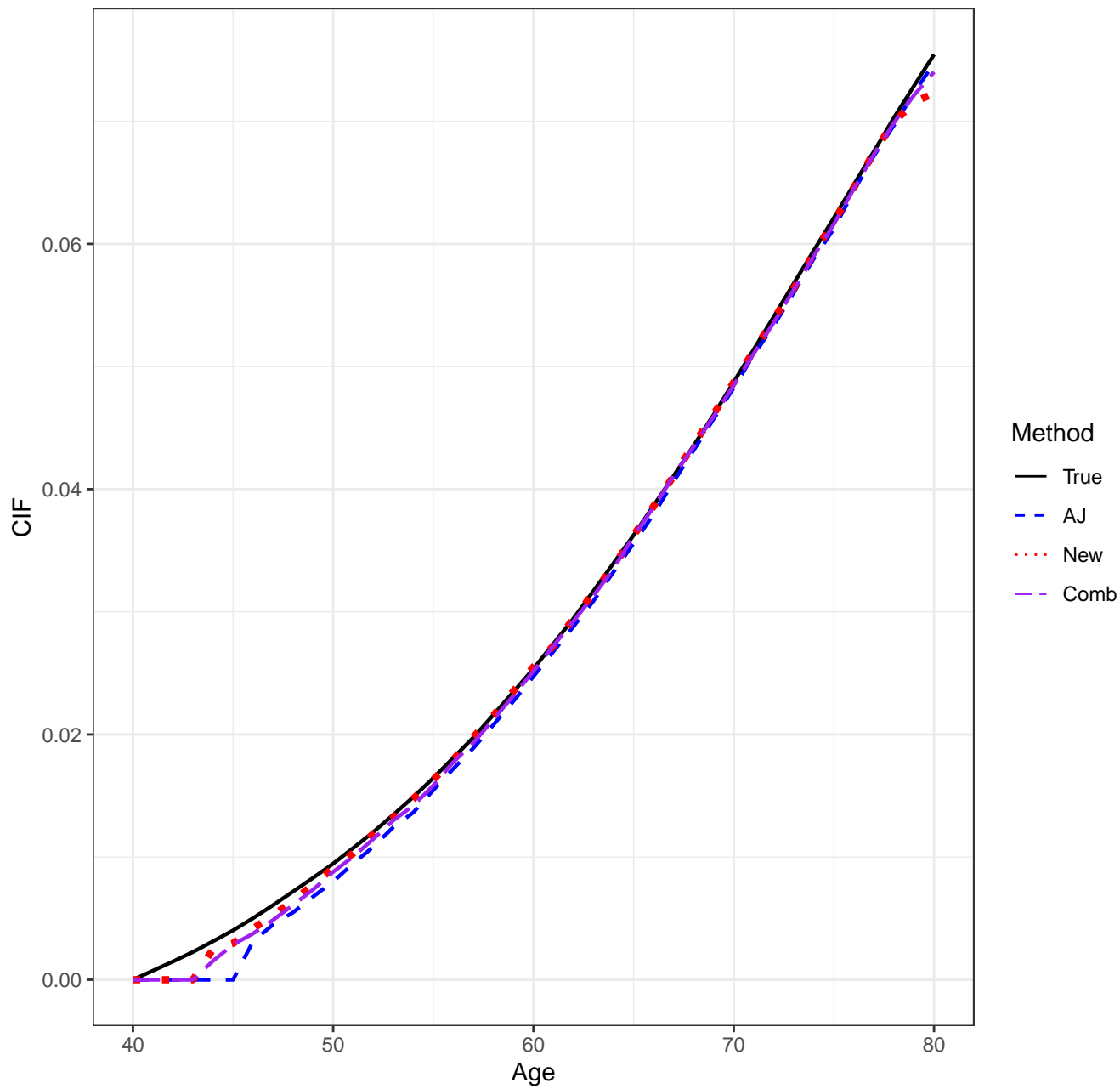
bootstrap weights: normal

Date/Time: 2024-01-12 12:41:25.606038

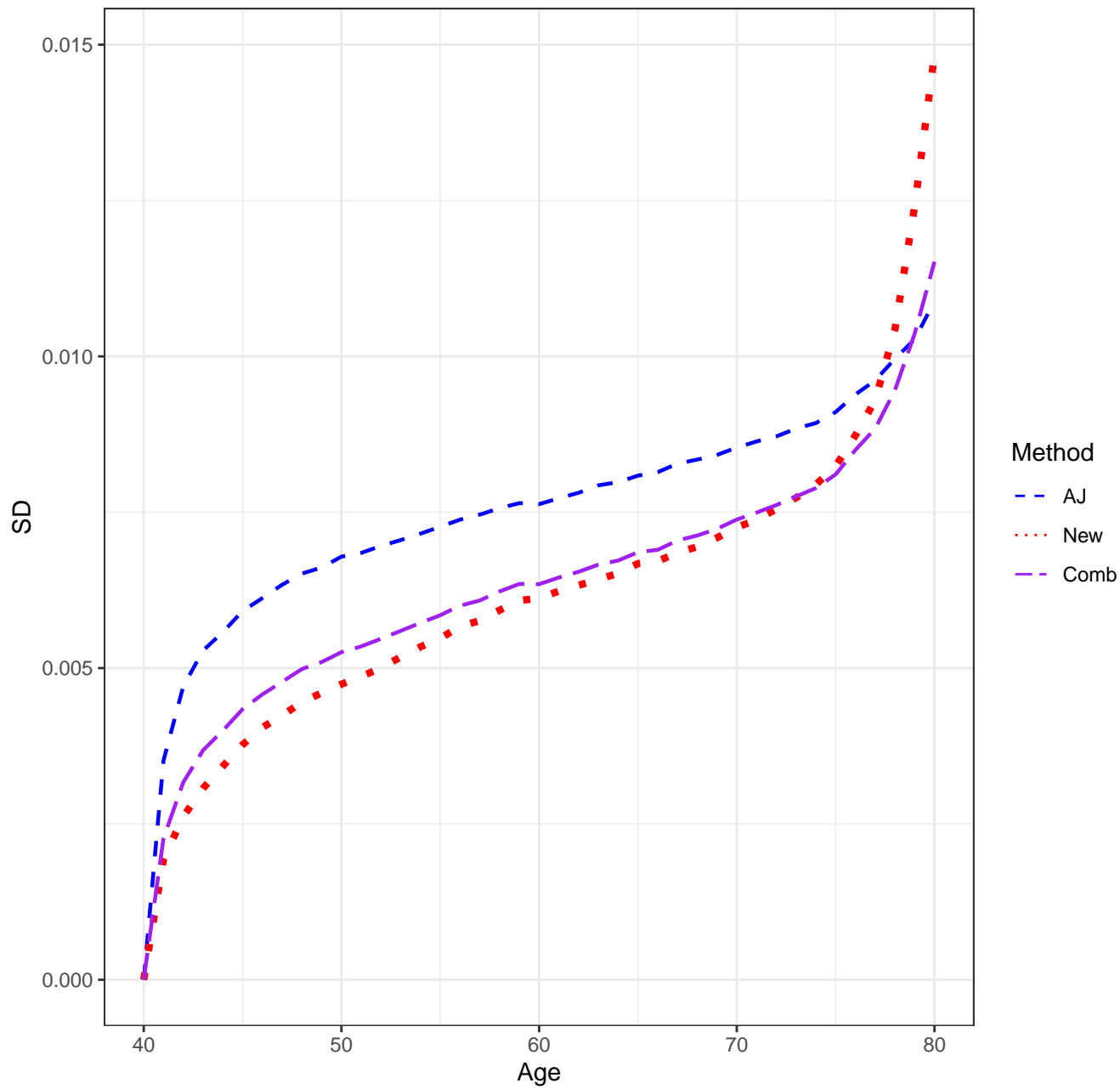
Scenario 1121, n=2500, Means



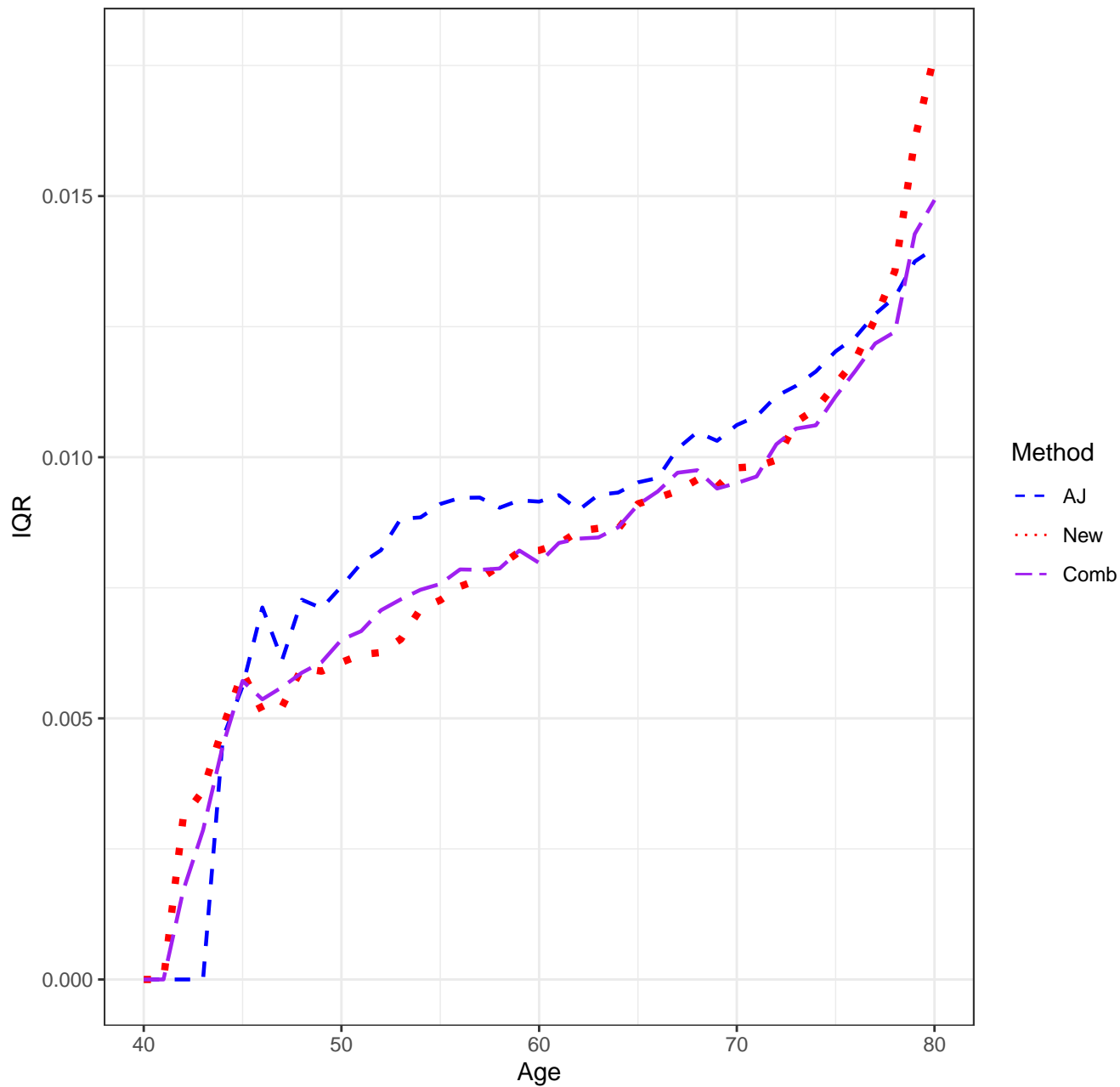
Scenario 1121, n=2500, Medians



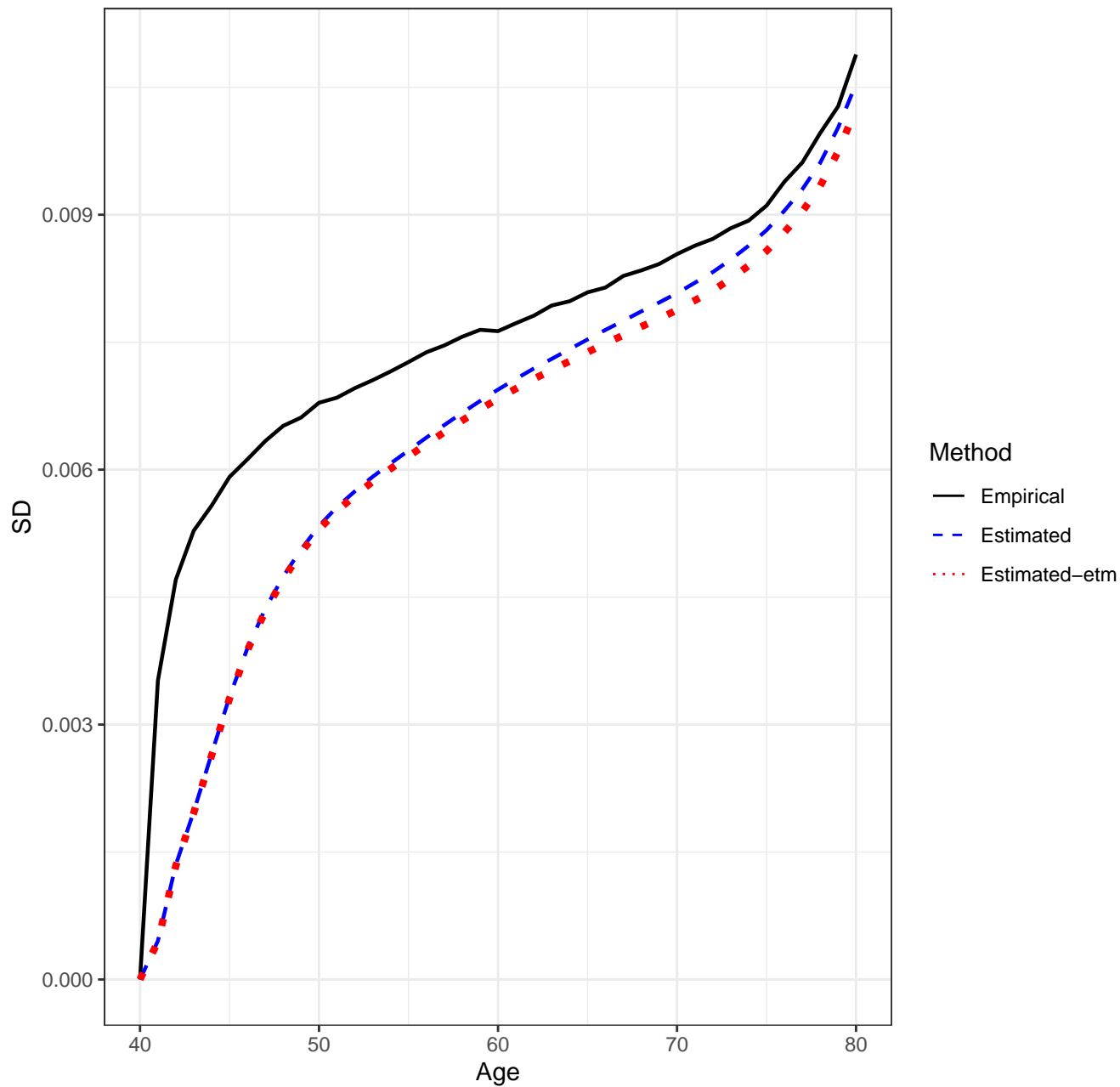
Scenario 1121, n=2500, SD'S



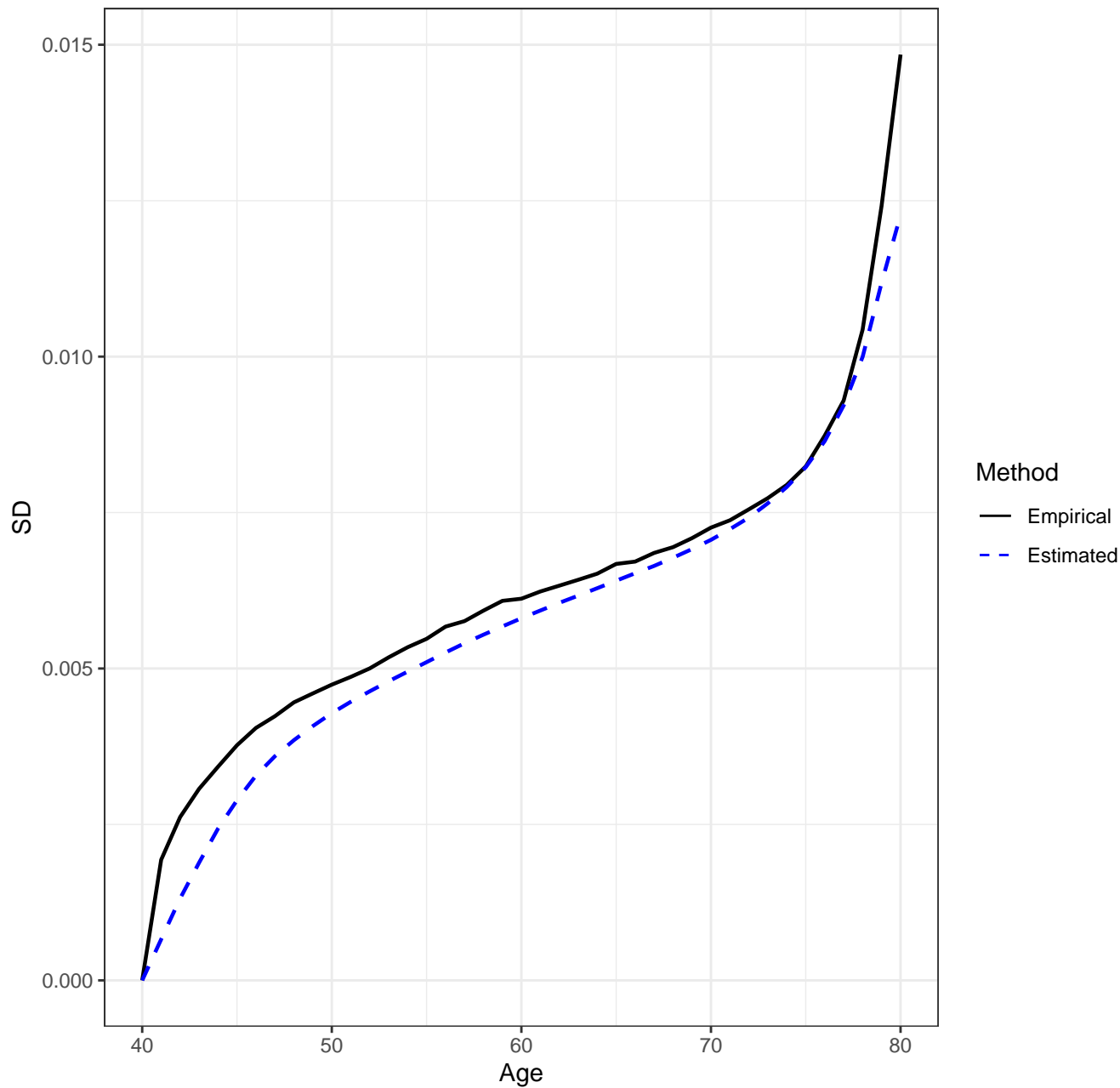
Scenario 1121, n=2500, IQR'S



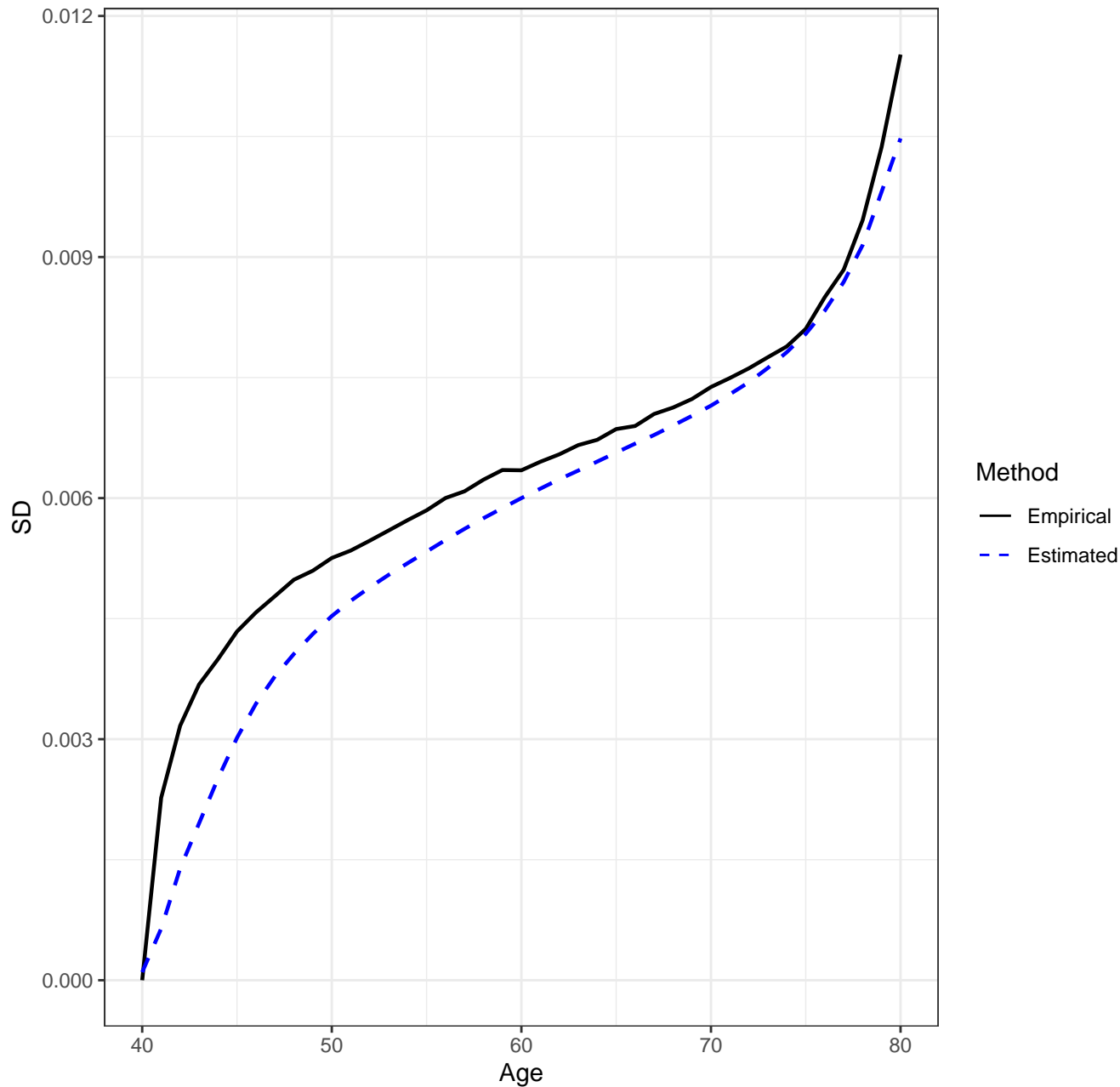
Scenario 1121, n=2500, AJ Estimator, Empirical vs. Estimated SD's



Scenario 1121, n=2500, New Estimator, Empirical vs. Estimated SD's

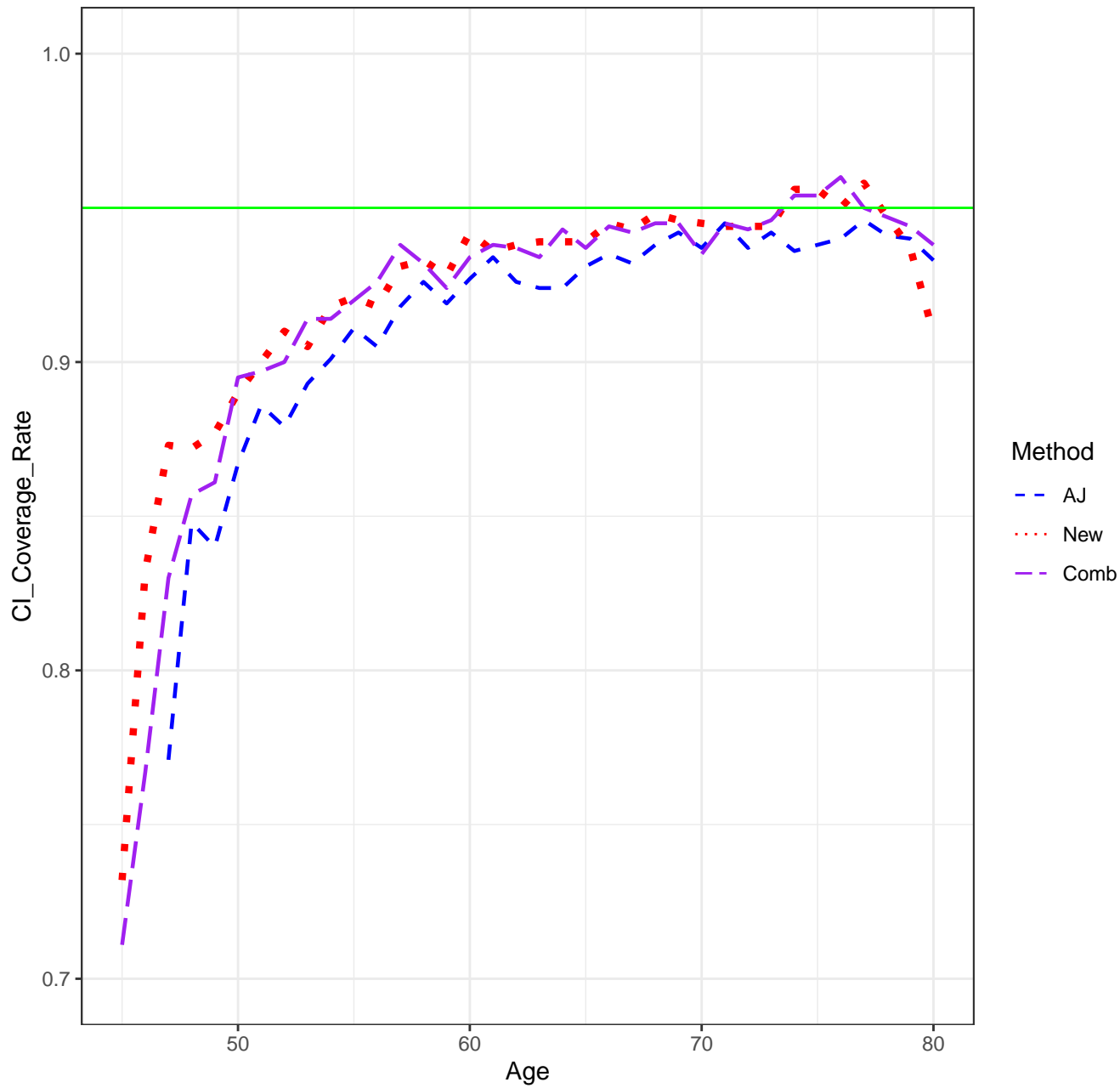


Scenario 1121, n=2500, Combined Estimator, Empirical vs. Estimated SD's

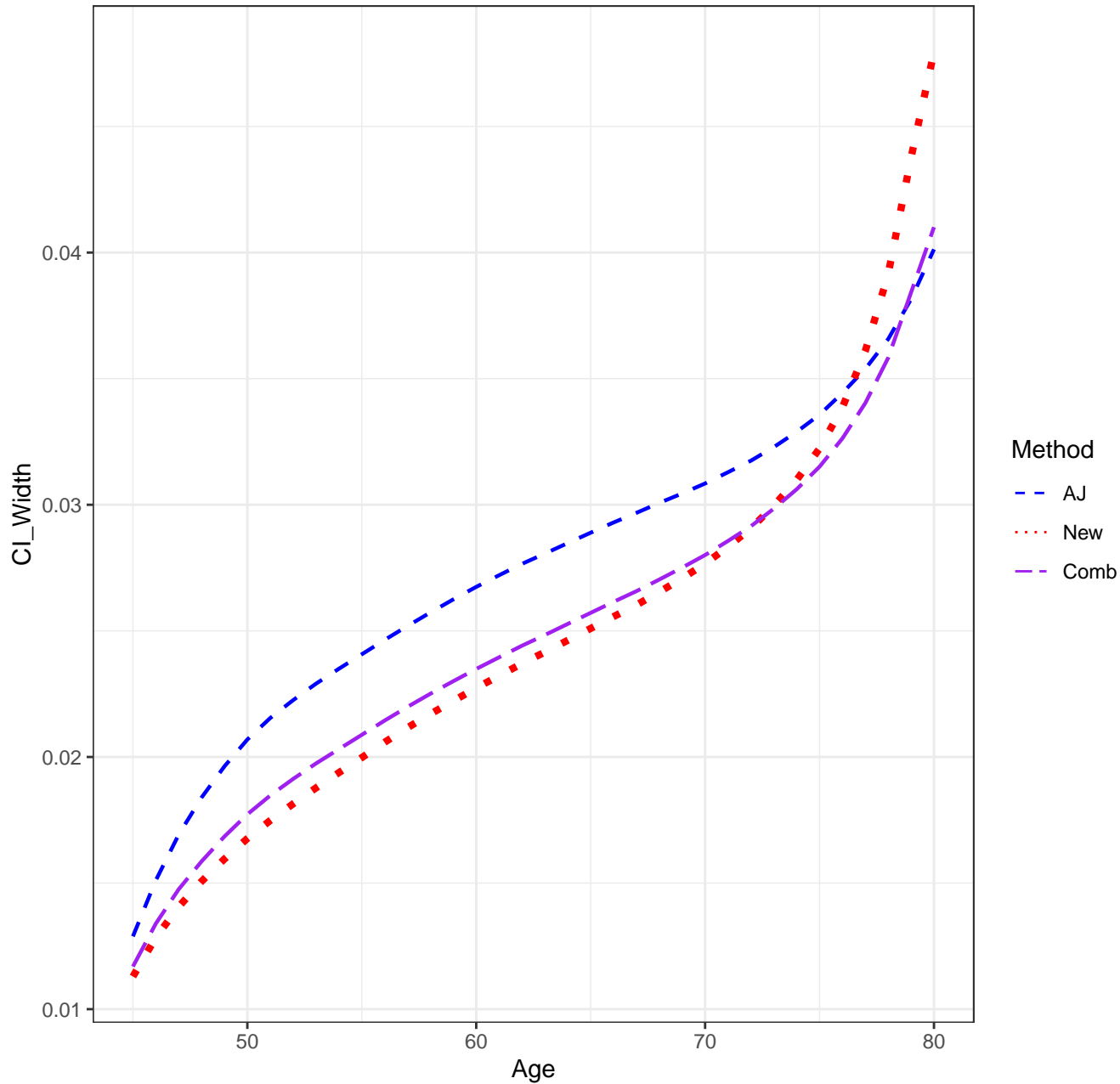




Scenario 1121, n=2500, CICR'S



Scenario 1121, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

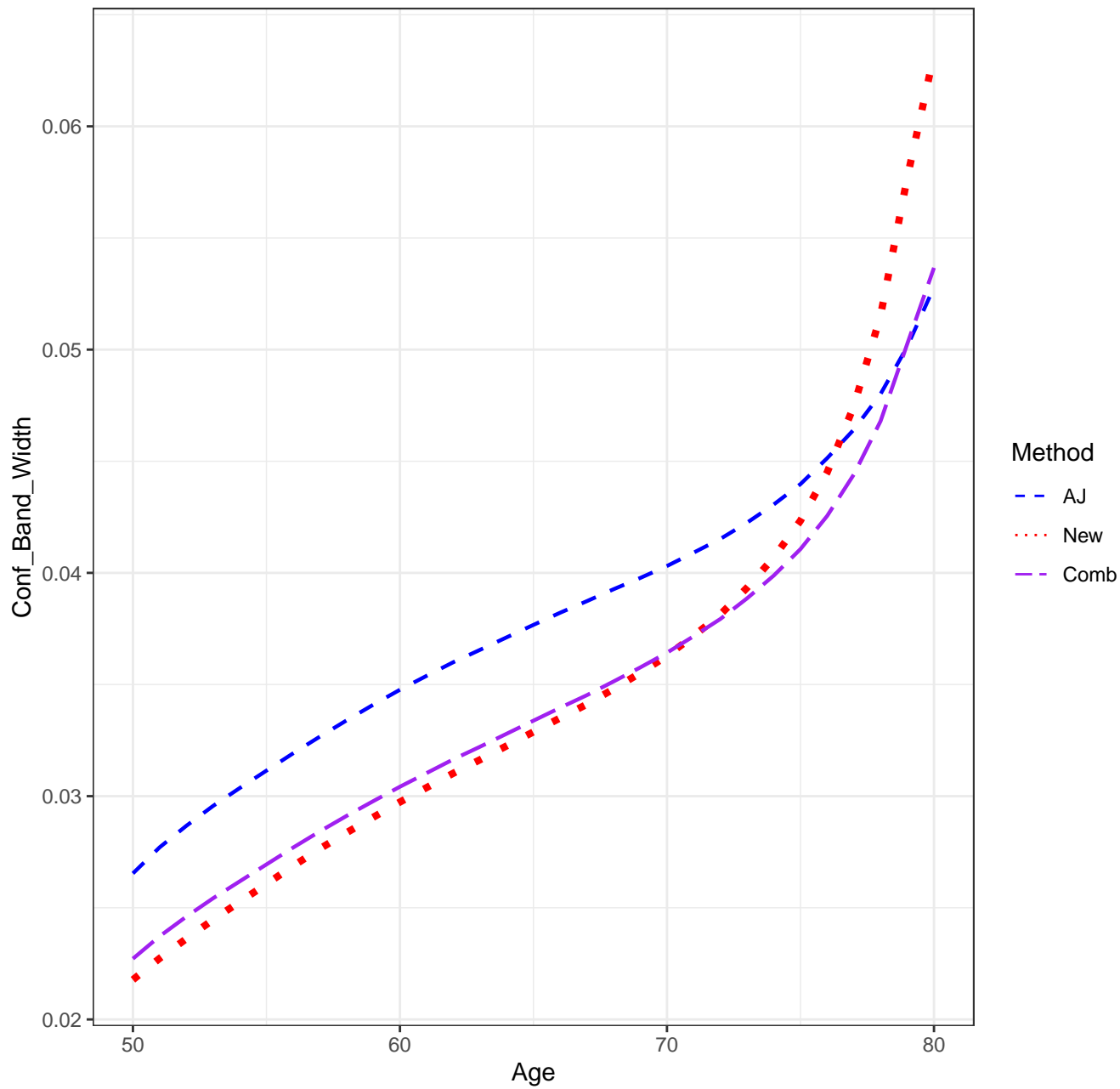
Scenario: 1121

AJ: 0.883

new: 0.9

Combo: 0.9

Scenario 1121, n=2500, Confidence Band Width



## SETTINGS

Scenario: 1122

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5\pi - \arcsin(\sqrt{1-u})$

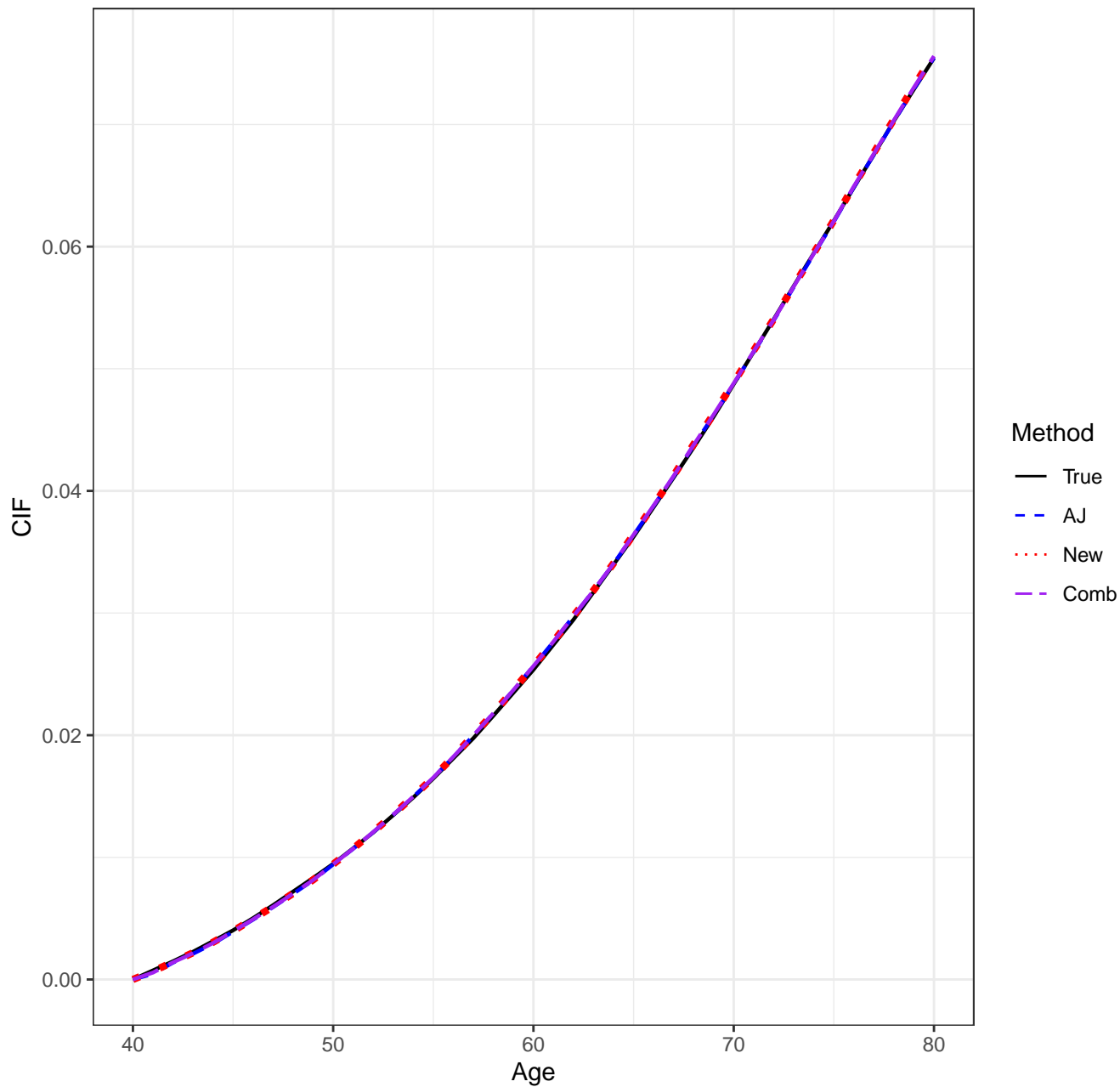
pointwise CI's done by: normal-theory

auxflg = FALSE

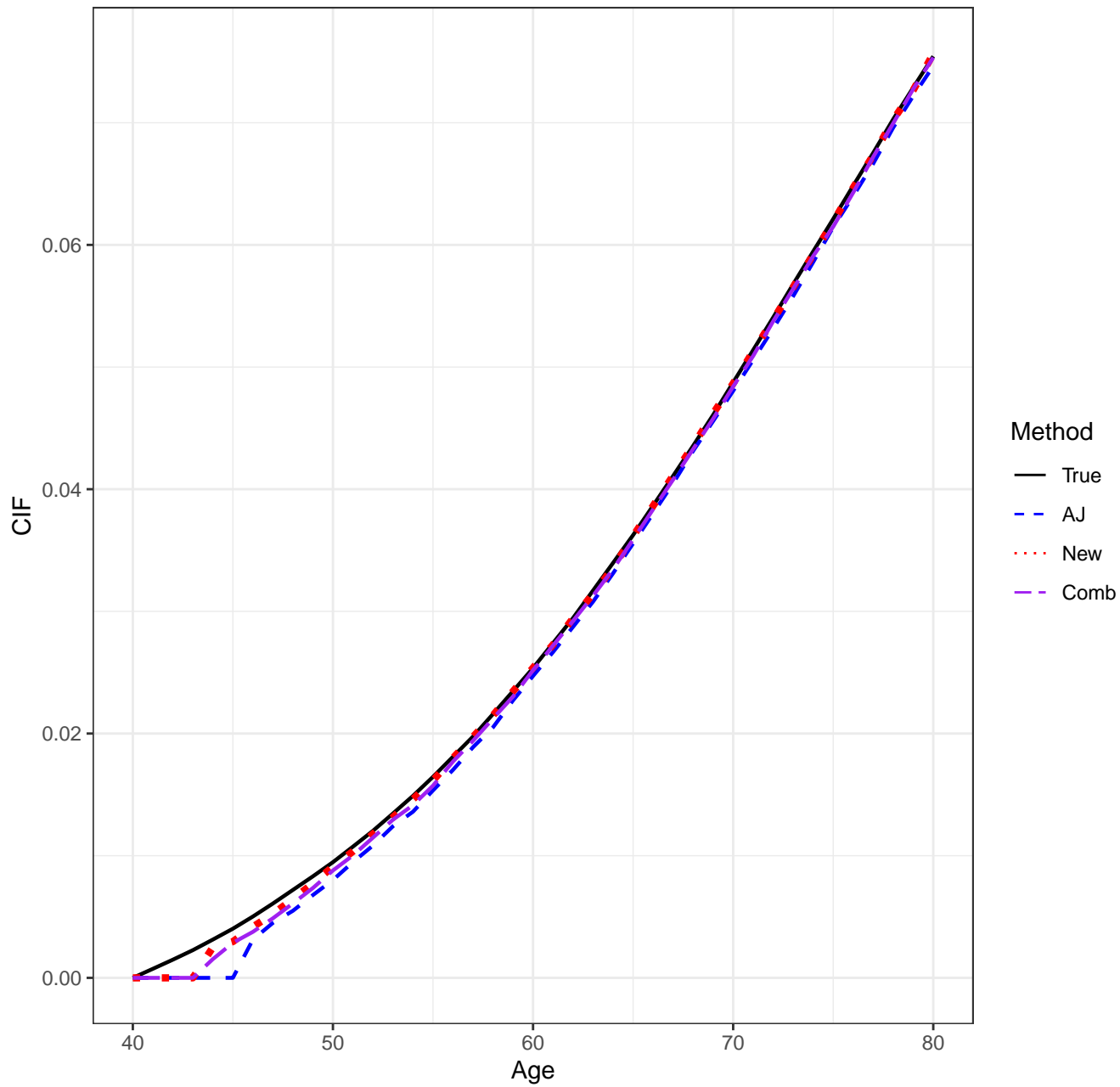
bootstrap weights: normal

Date/Time: 2024-01-12 13:21:37.015129

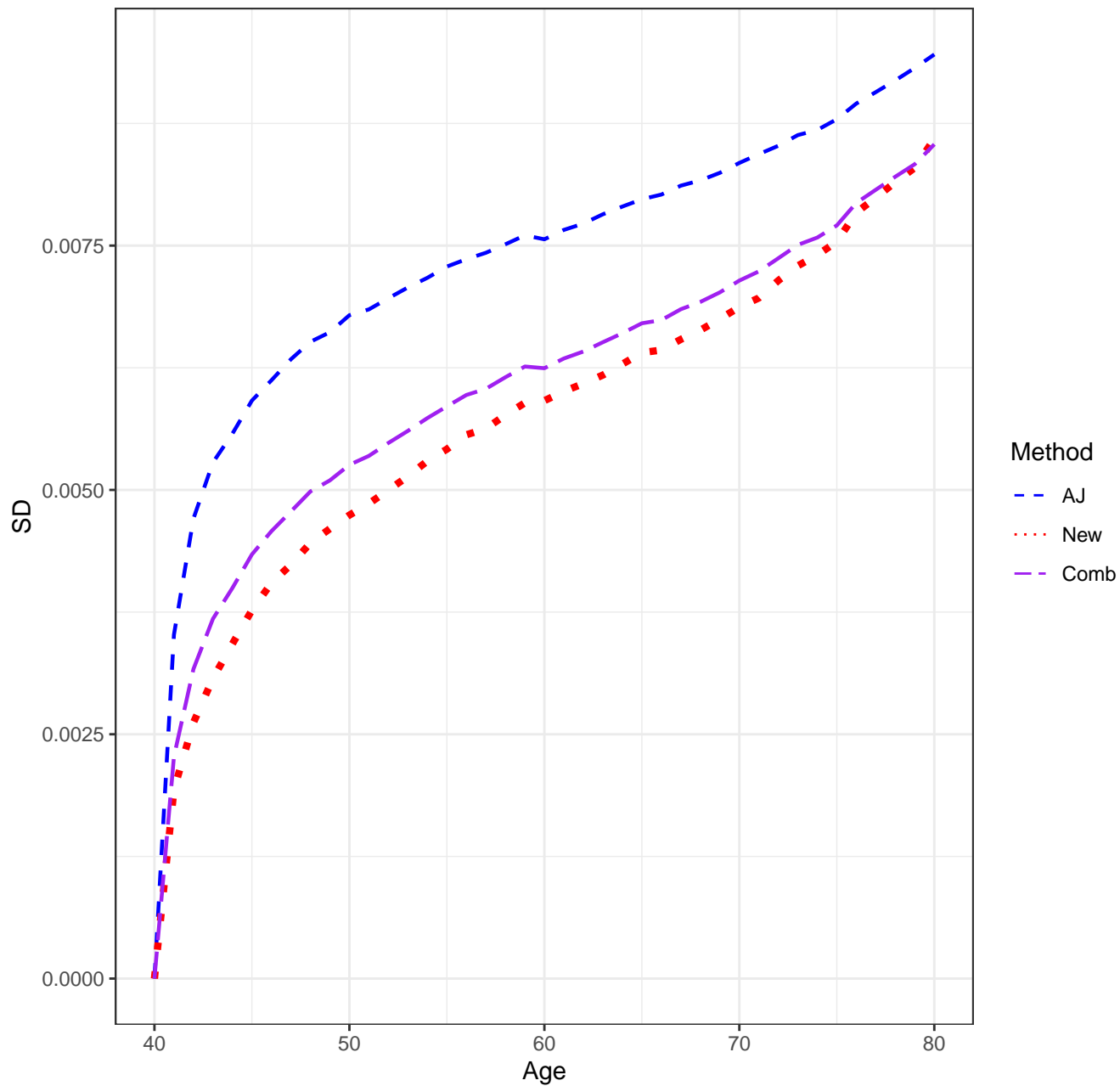
Scenario 1122, n=2500, Means



Scenario 1122, n=2500, Medians

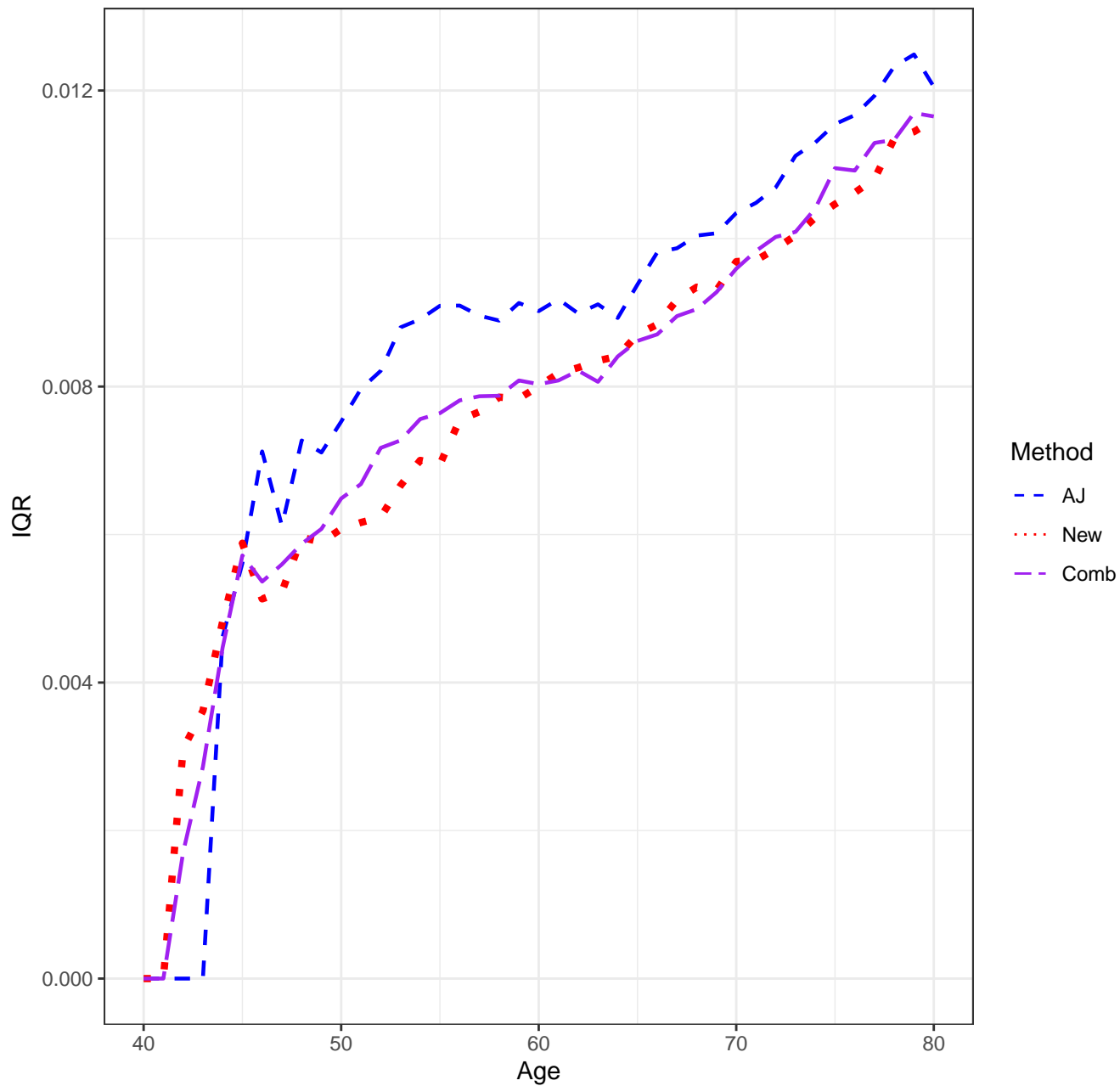


Scenario 1122, n=2500, SD'S

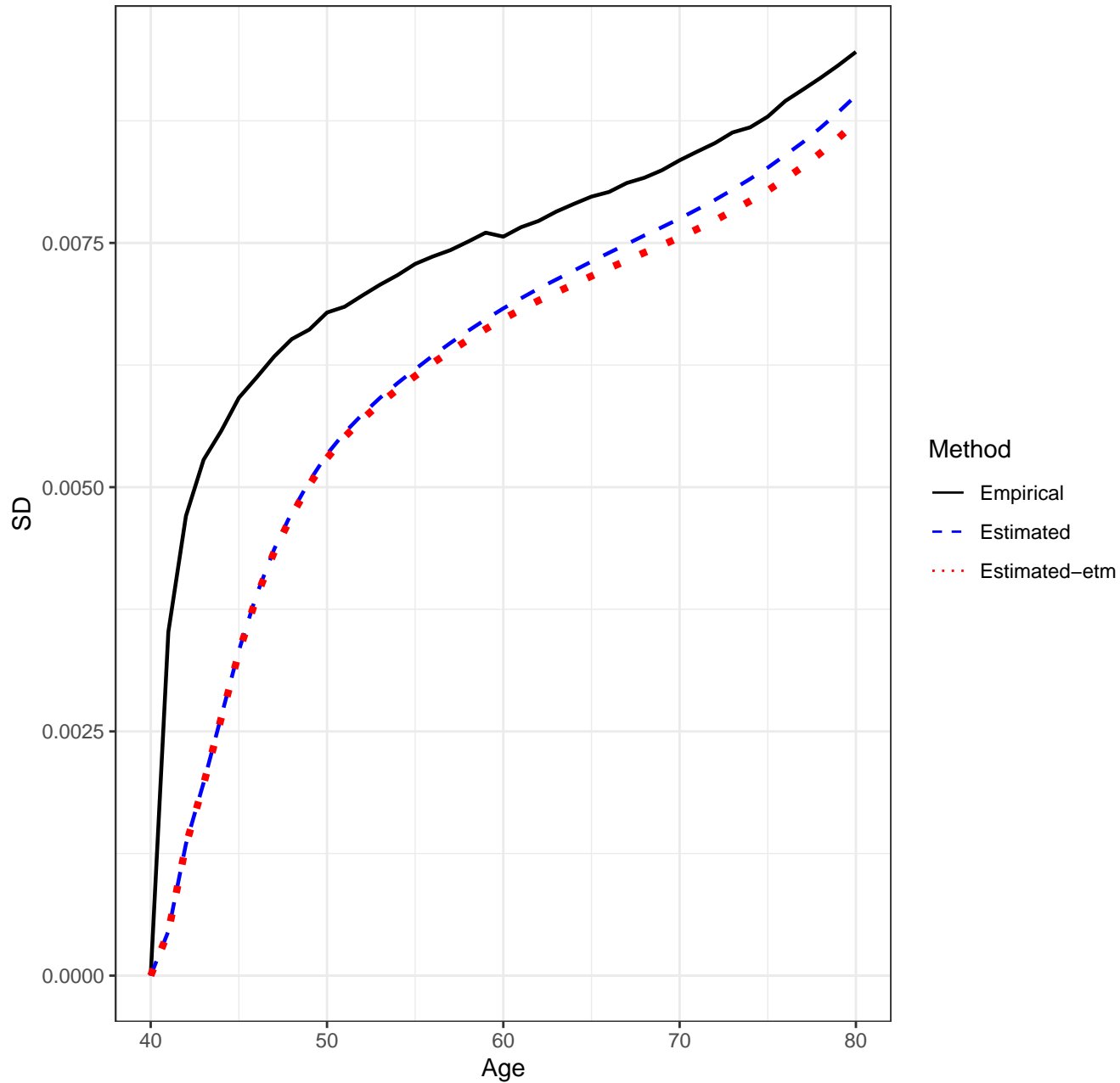




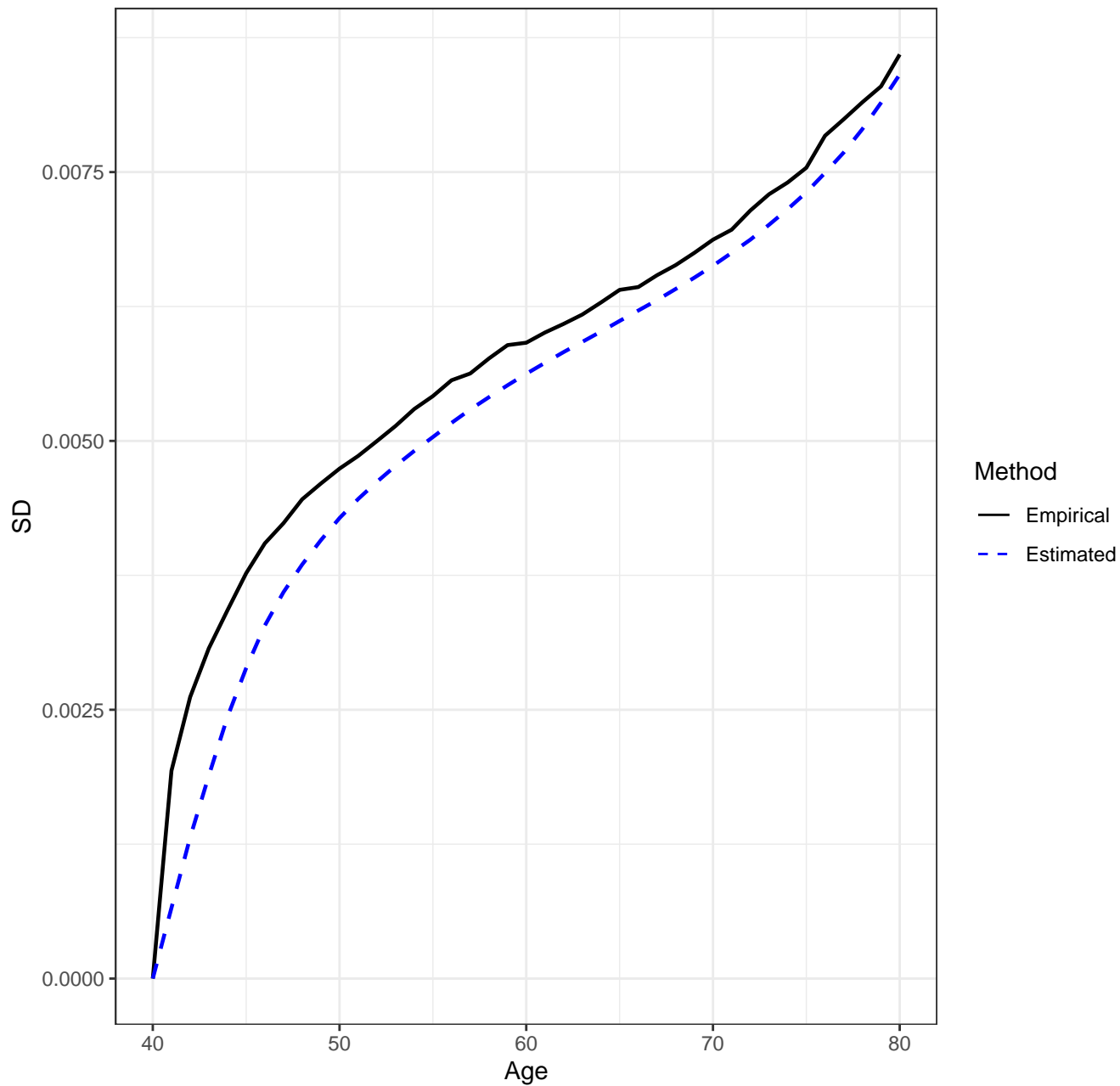
Scenario 1122, n=2500, IQR'S



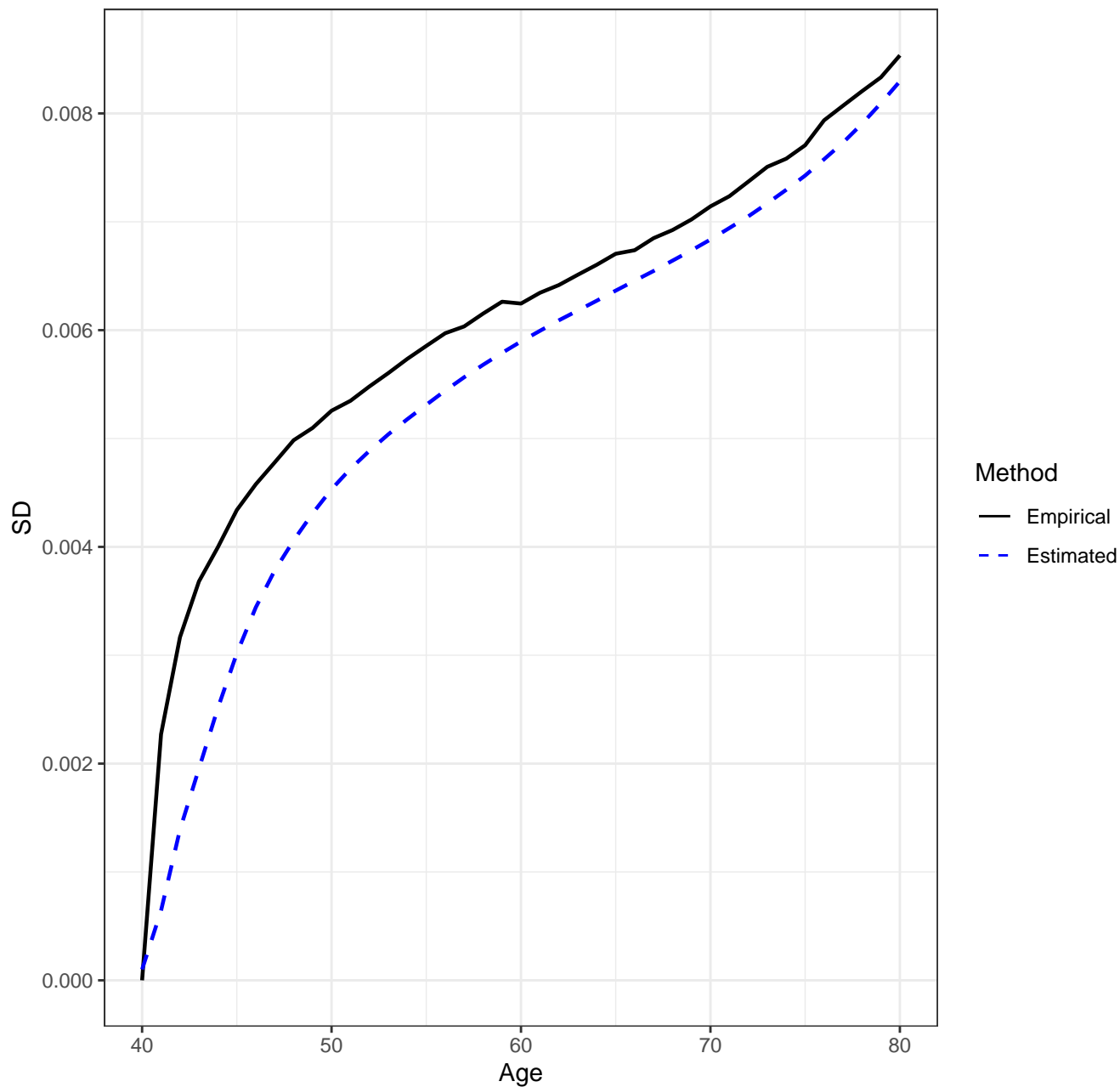
Scenario 1122, n=2500, AJ Estimator, Empirical vs. Estimated SD's



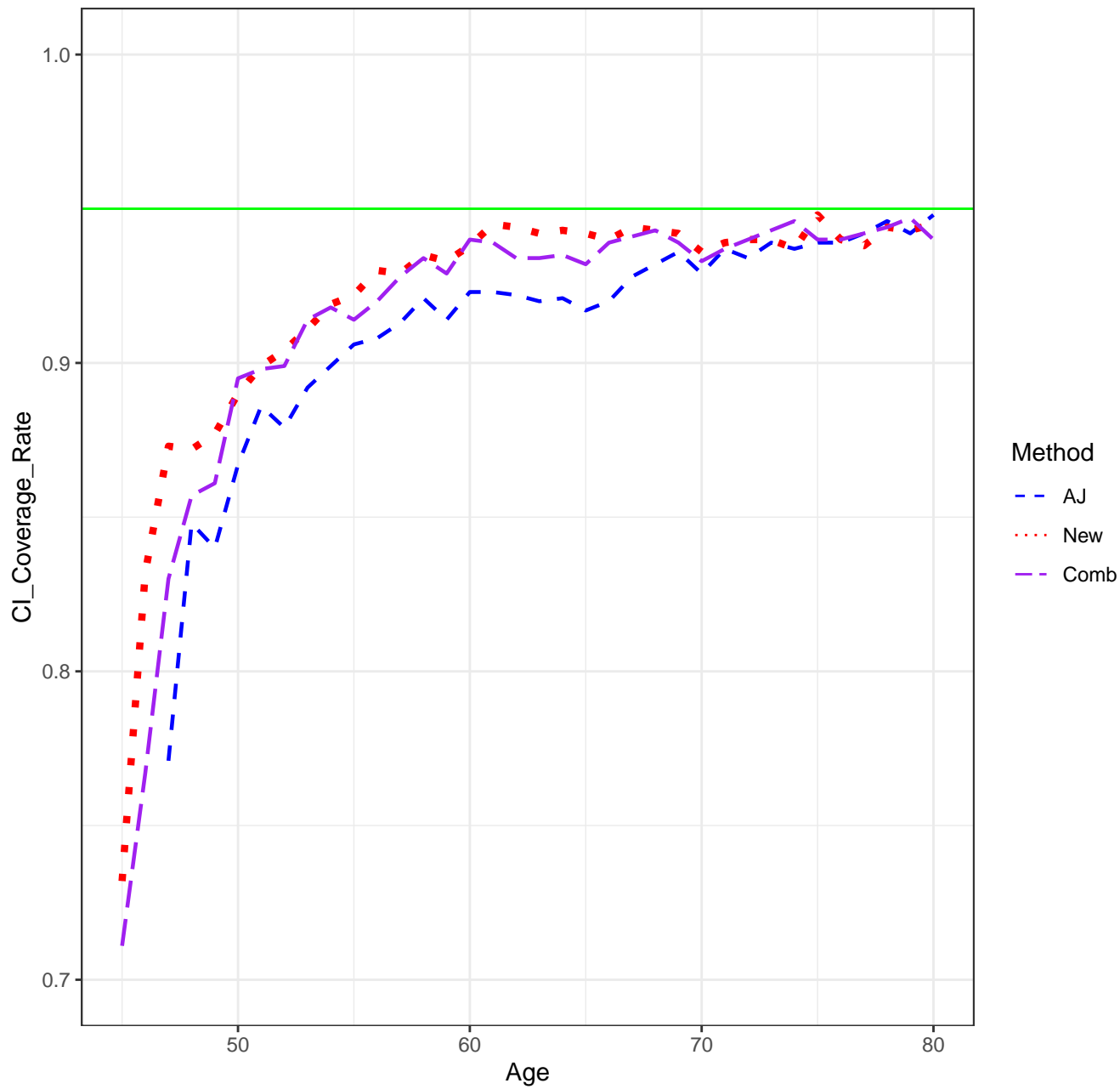
Scenario 1122, n=2500, New Estimator, Empirical vs. Estimated SD's



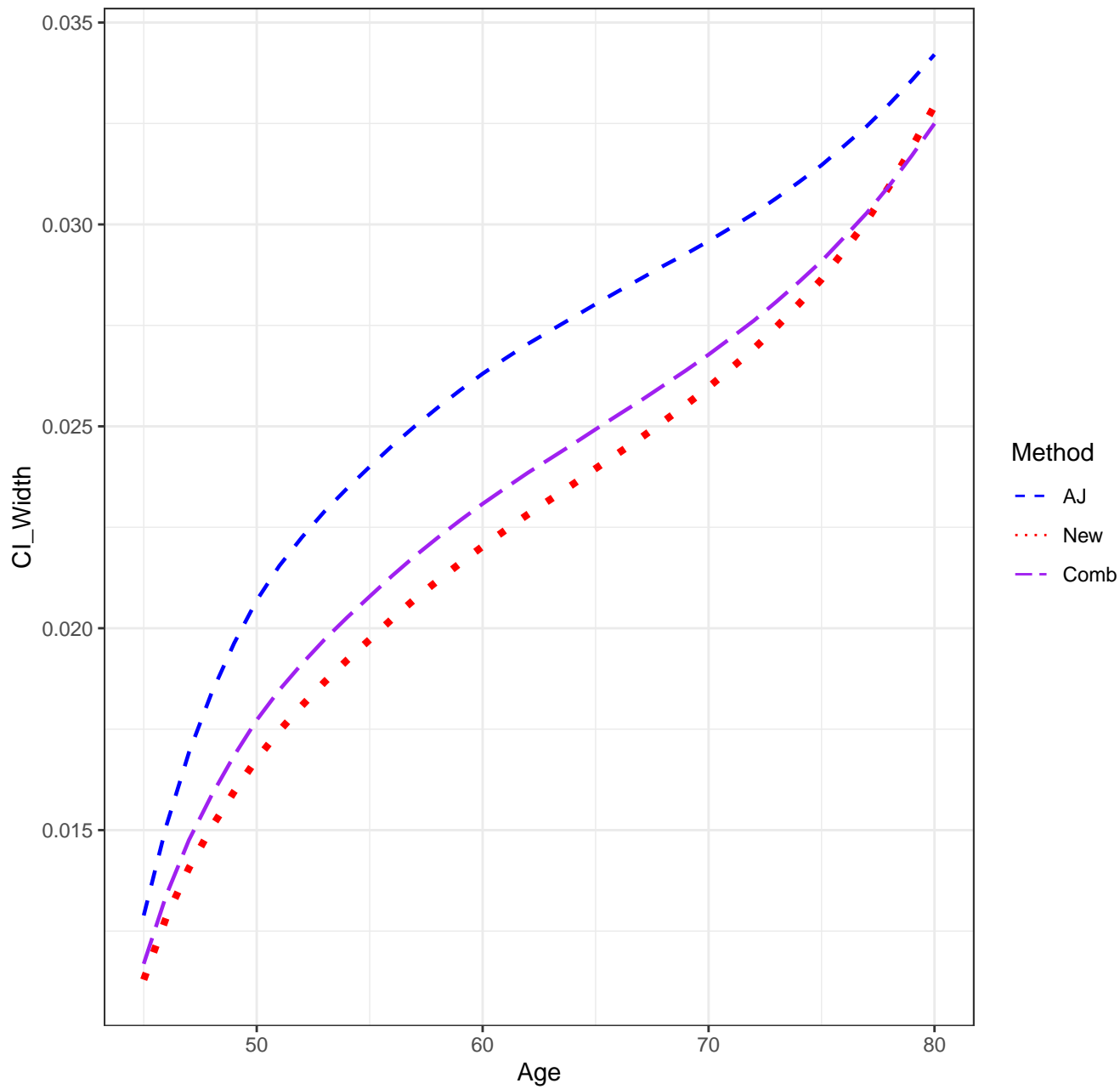
Scenario 1122, n=2500, Combined Estimator, Empirical vs. Estimated SD's



Scenario 1122, n=2500, CICR'S



Scenario 1122, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

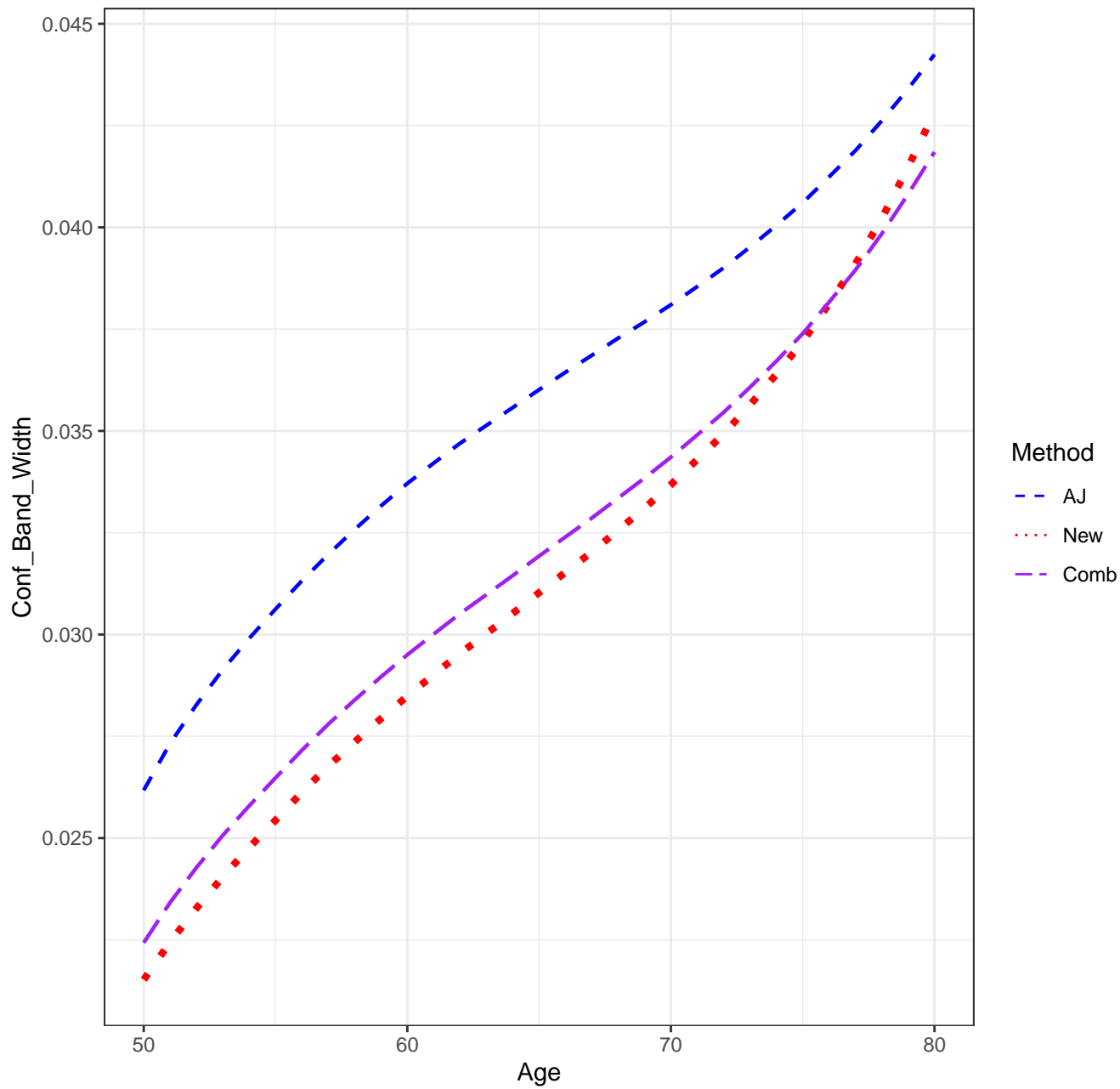
Scenario: 1122

AJ: 0.886

new: 0.911

Combo: 0.899

Scenario 1122, n=2500, Confidence Band Width





## SETTINGS

Scenario: 1211

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5\pi - \arcsin(\sqrt{1-u})$

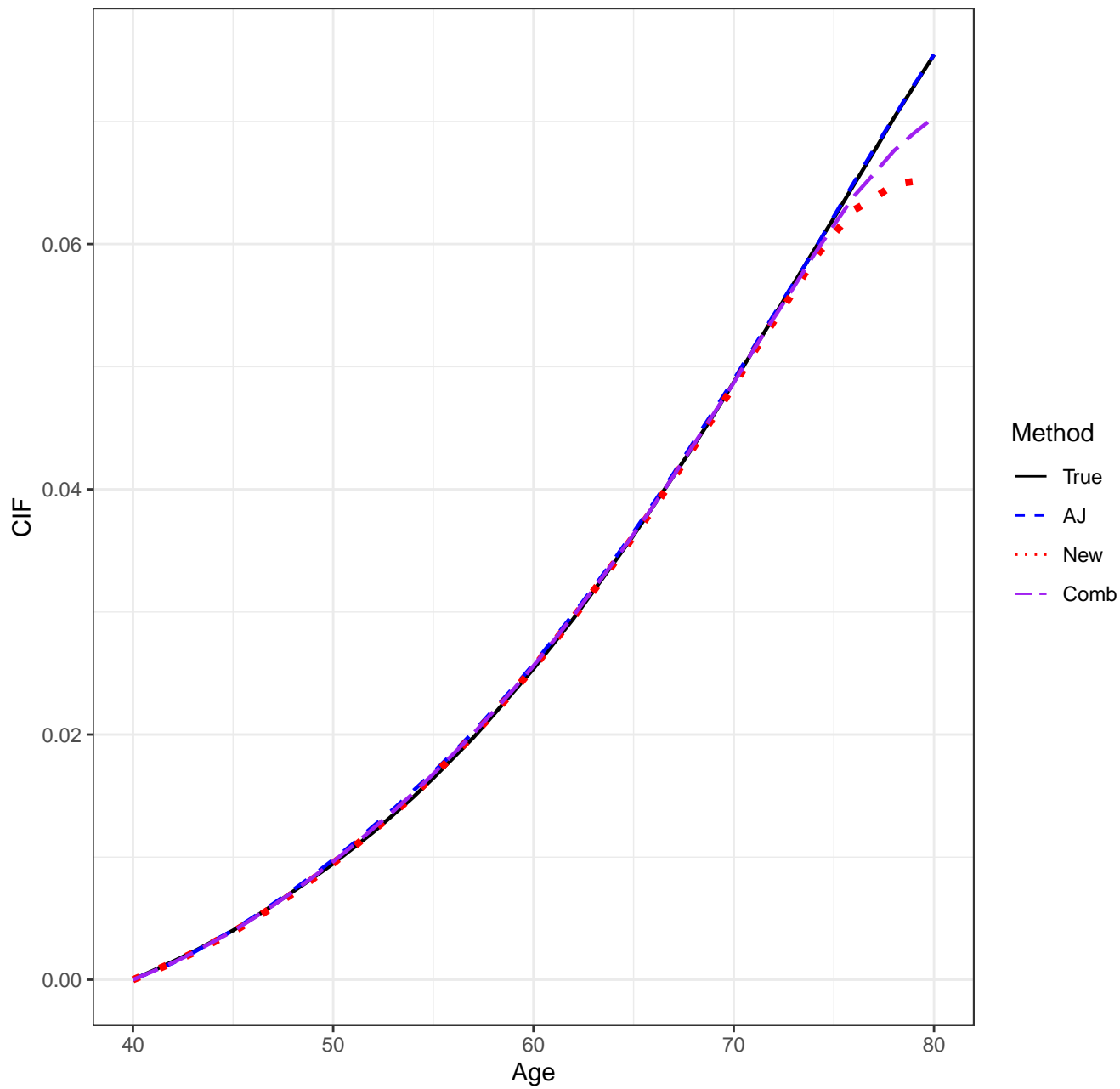
pointwise CI's done by: normal-theory

auxflg = FALSE

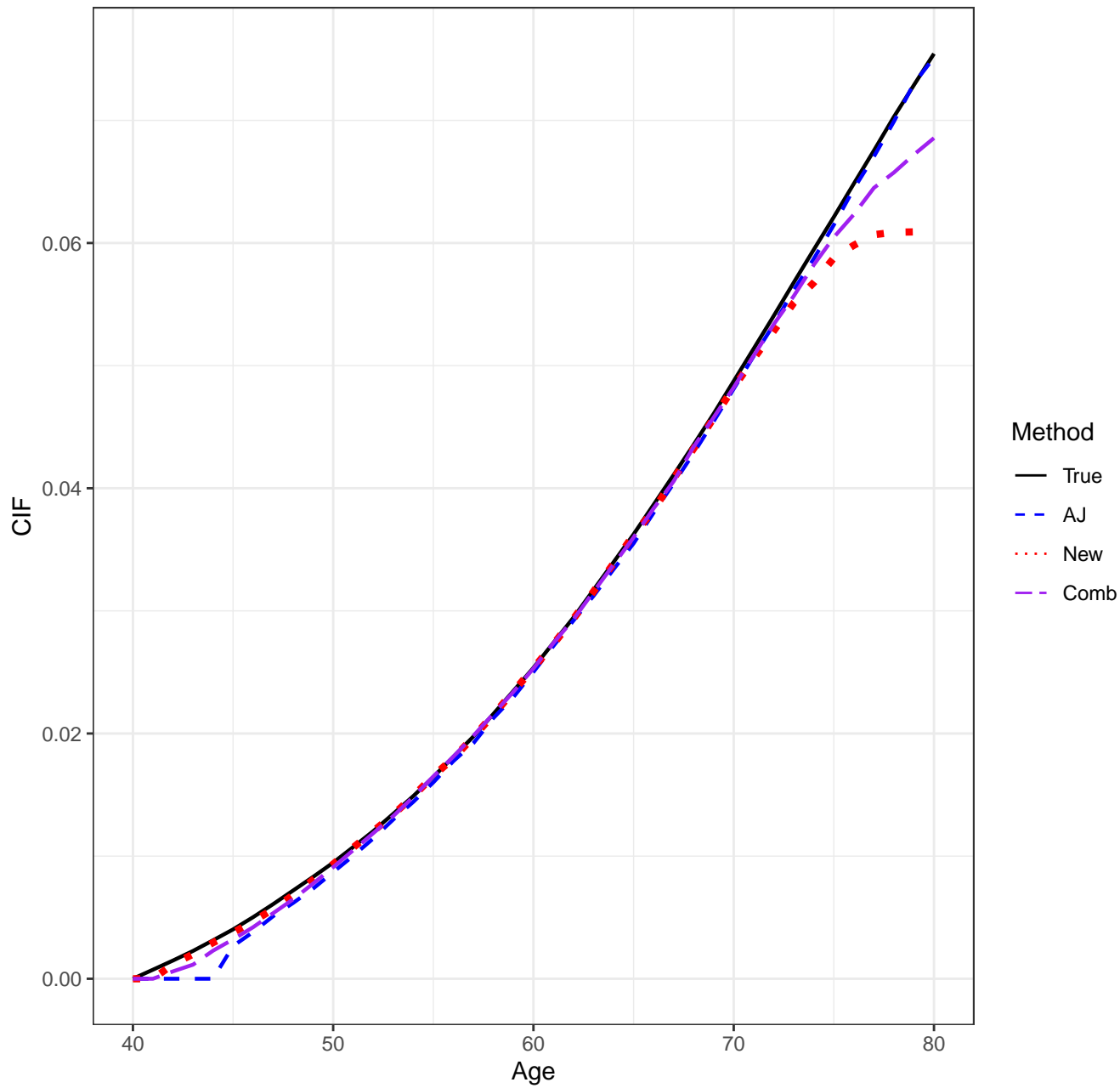
bootstrap weights: normal

Date/Time: 2024-01-12 14:01:20.378134

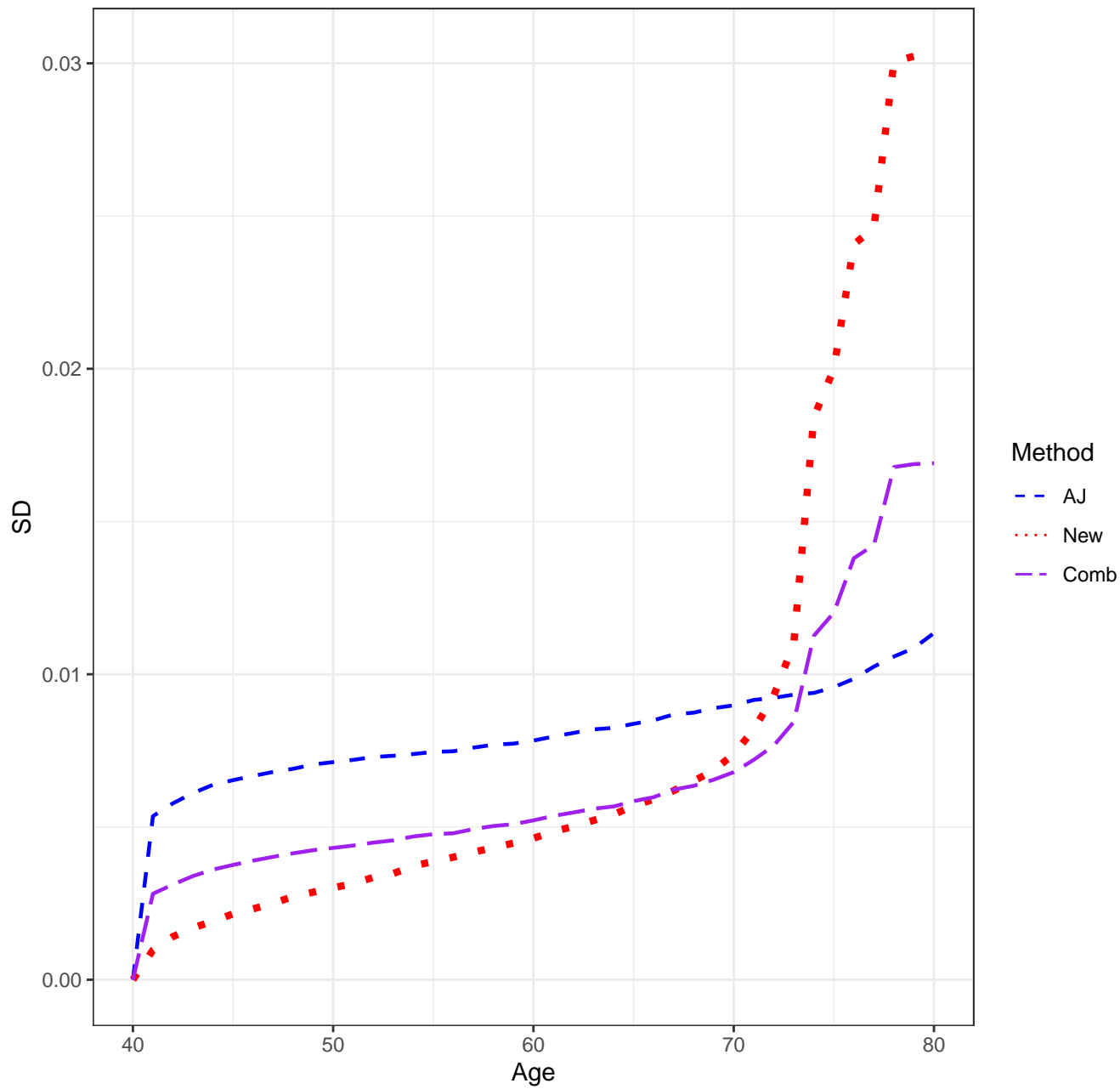
Scenario 1211, n=2500, Means



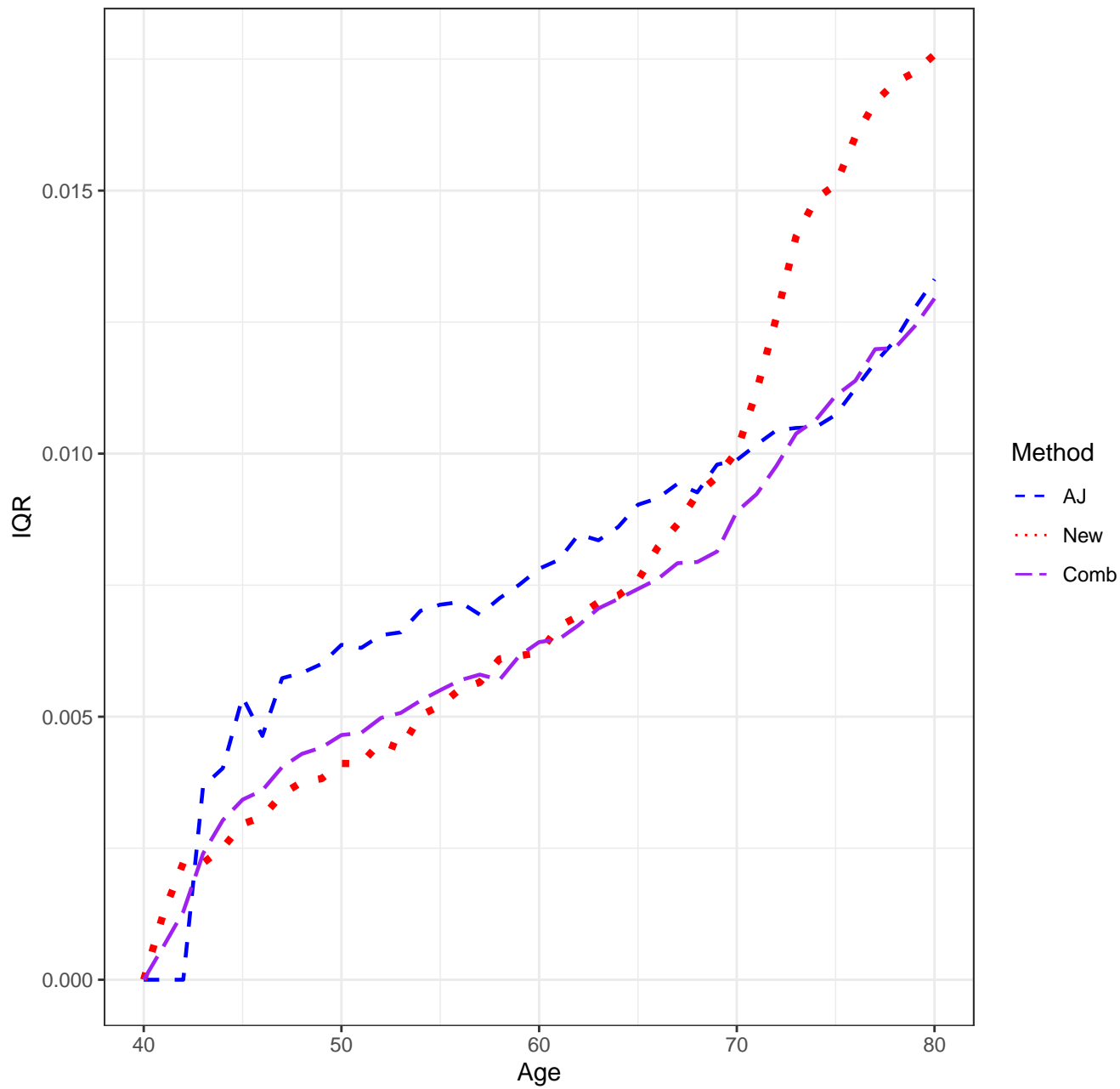
Scenario 1211, n=2500, Medians



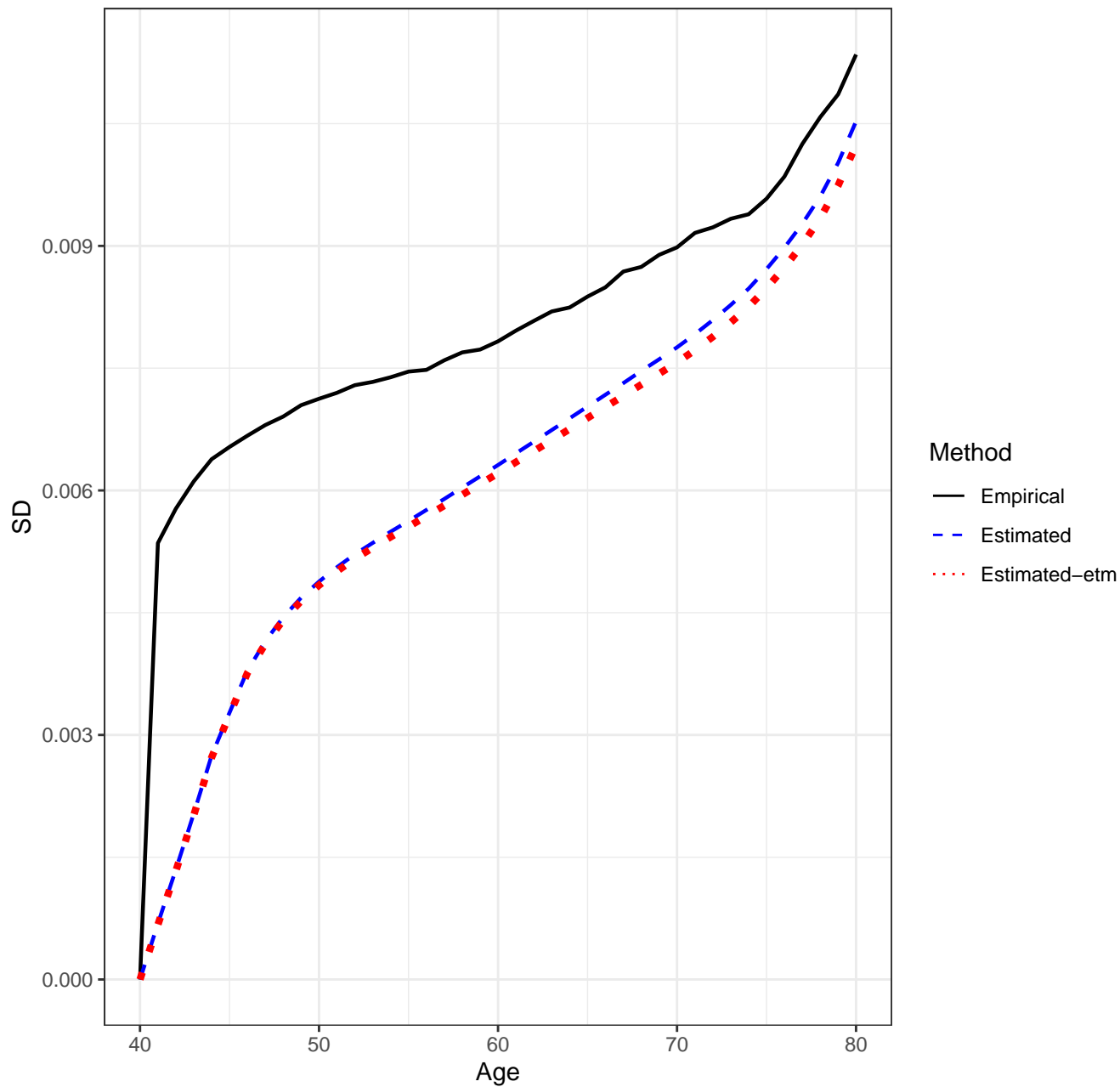
Scenario 1211, n=2500, SD'S



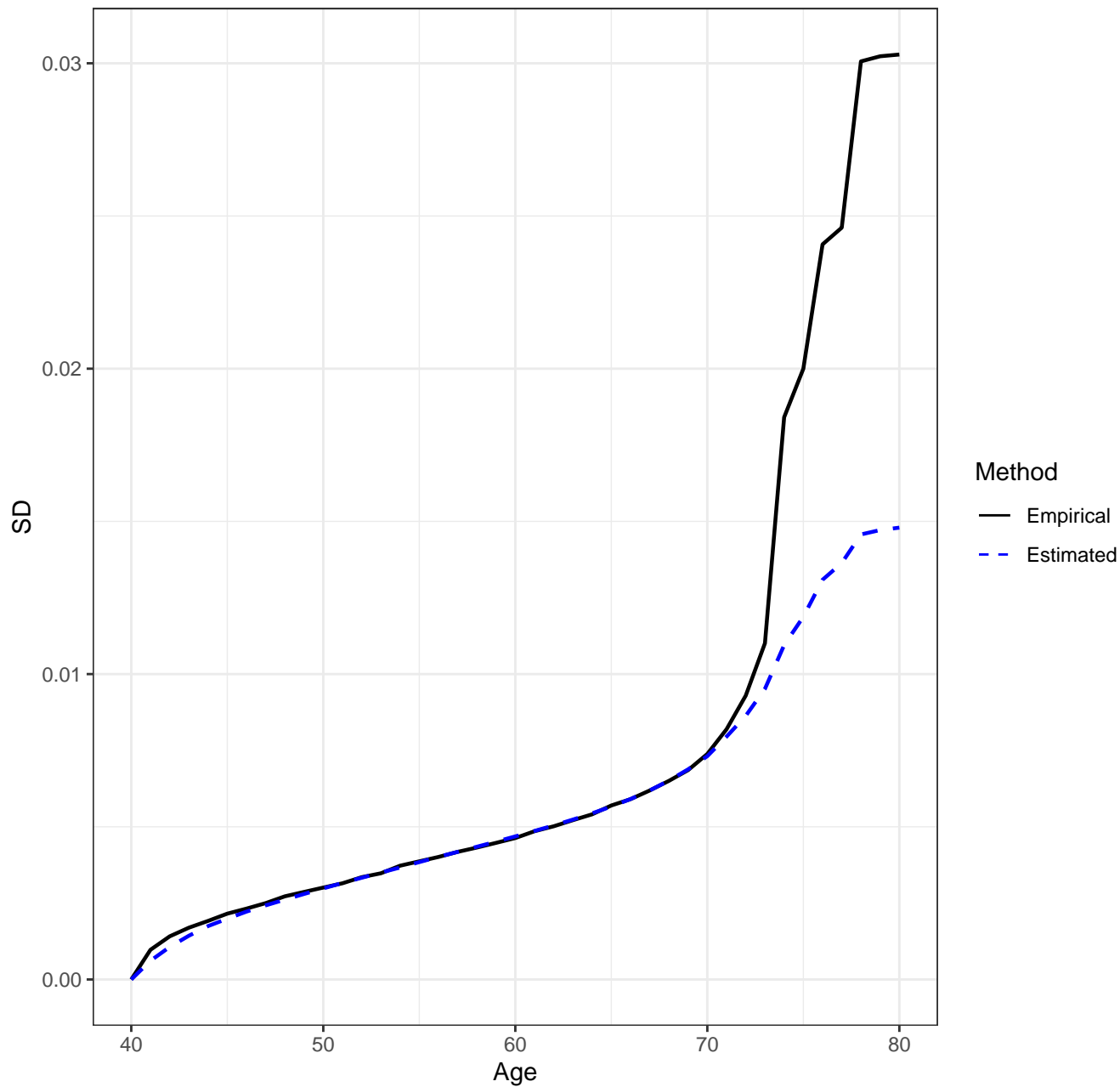
Scenario 1211, n=2500, IQR'S



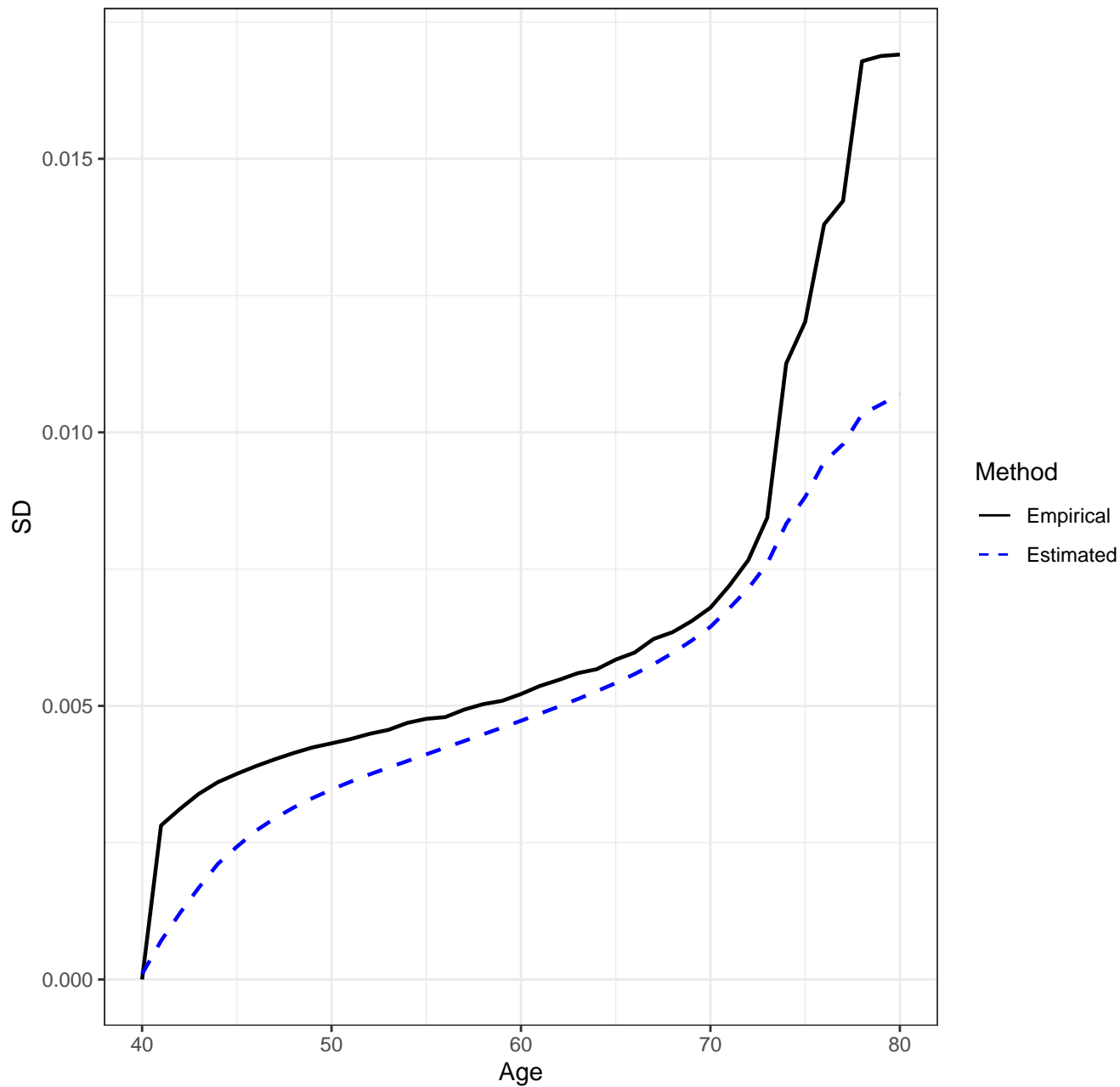
Scenario 1211, n=2500, AJ Estimator, Empirical vs. Estimated SD's



Scenario 1211, n=2500, New Estimator, Empirical vs. Estimated SD's

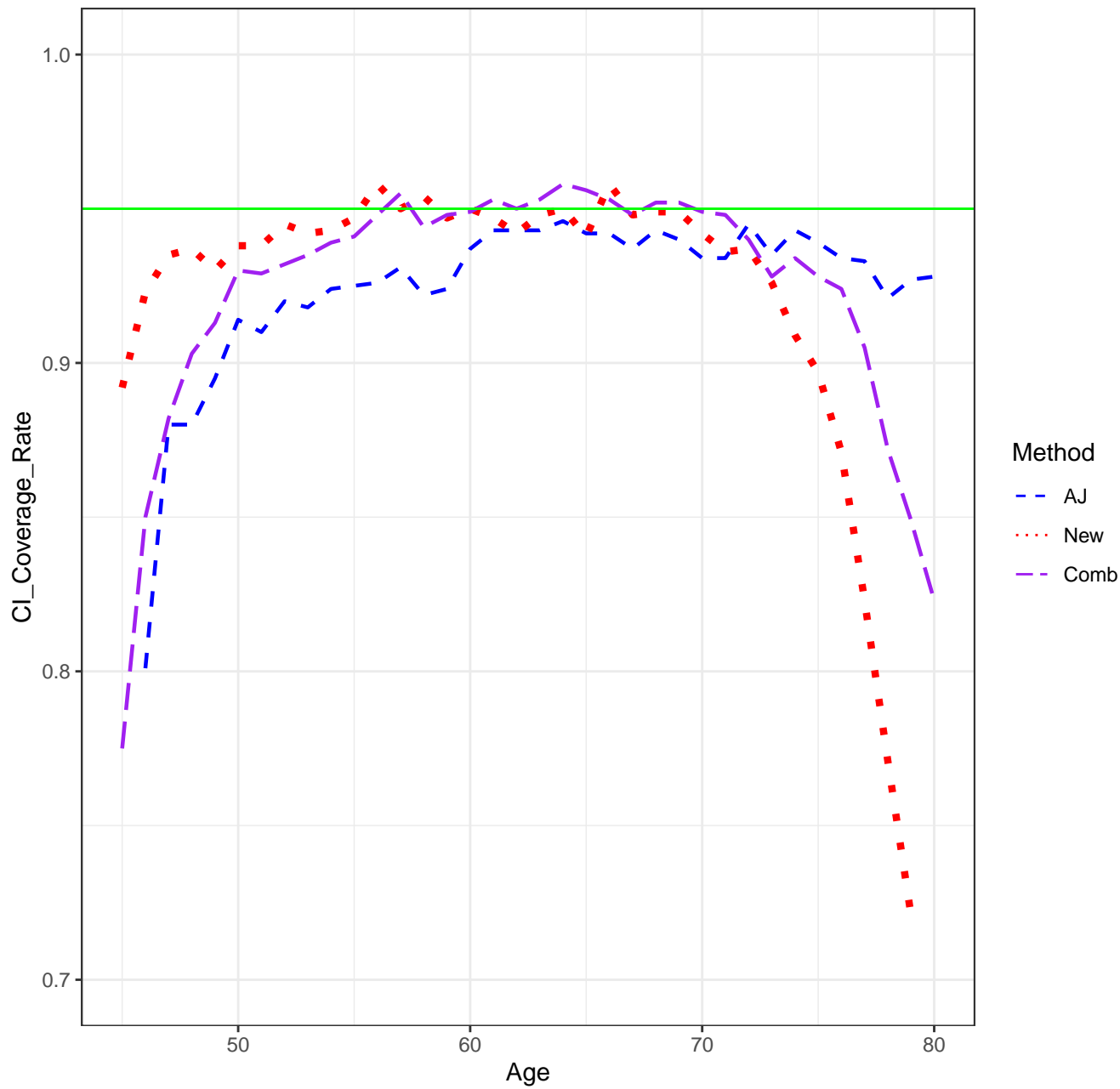


Scenario 1211, n=2500, Combined Estimator, Empirical vs. Estimated SD's

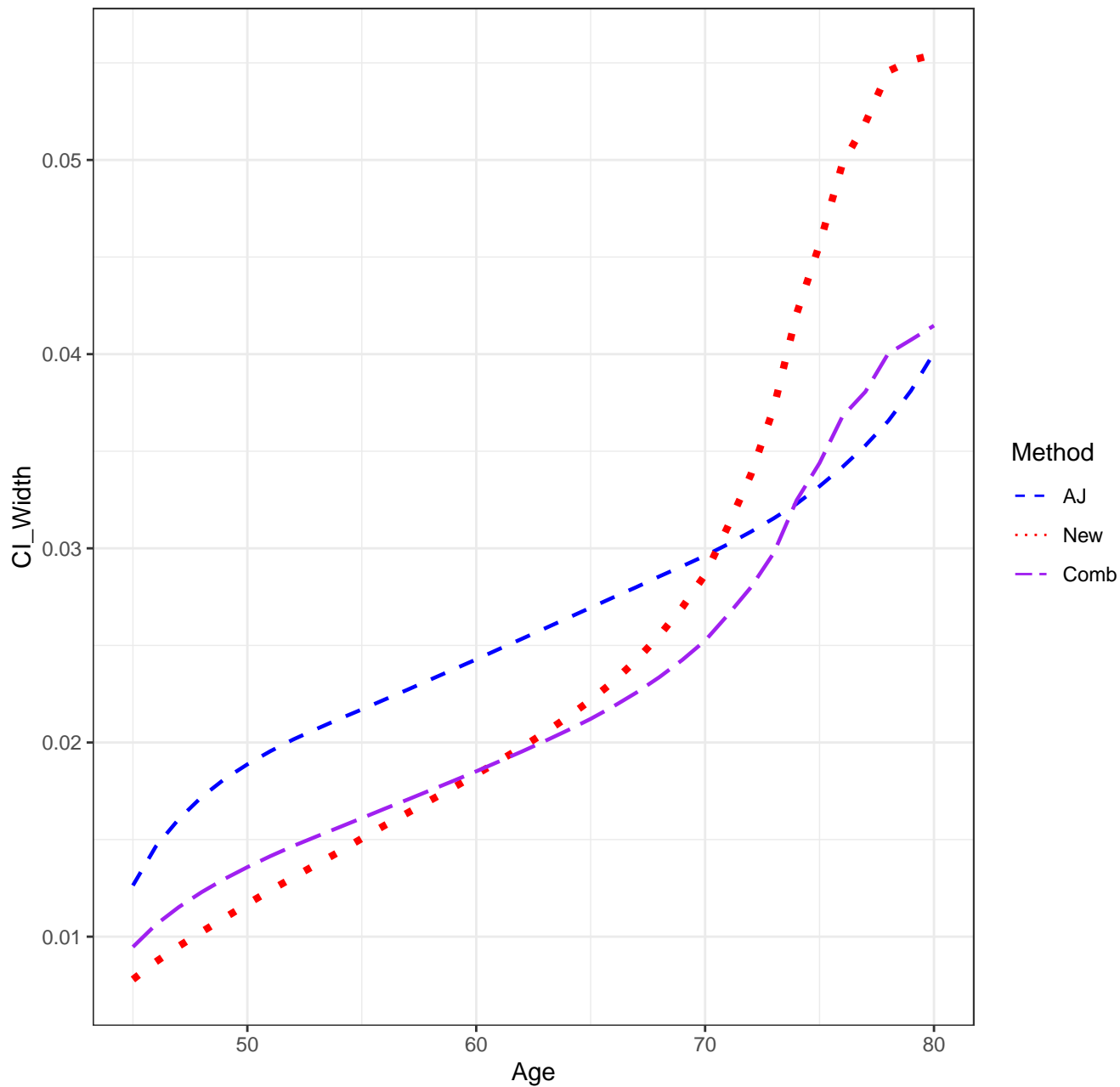




Scenario 1211, n=2500, CICR'S



Scenario 1211, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

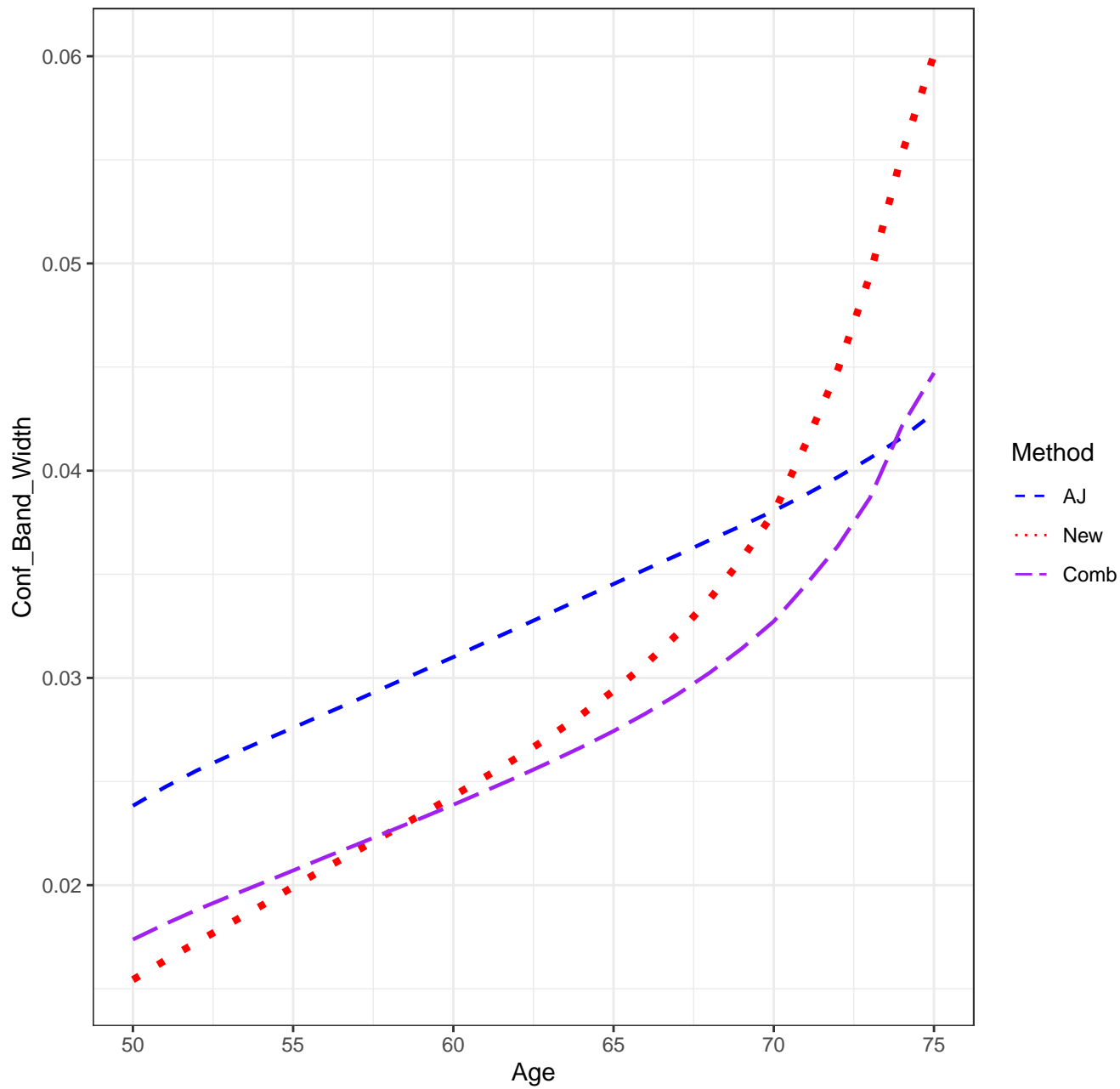
Scenario: 1211

AJ: 0.915

new: 0.901

Combo: 0.921

Scenario 1211, n=2500, Confidence Band Width



## SETTINGS

Scenario: 1212

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

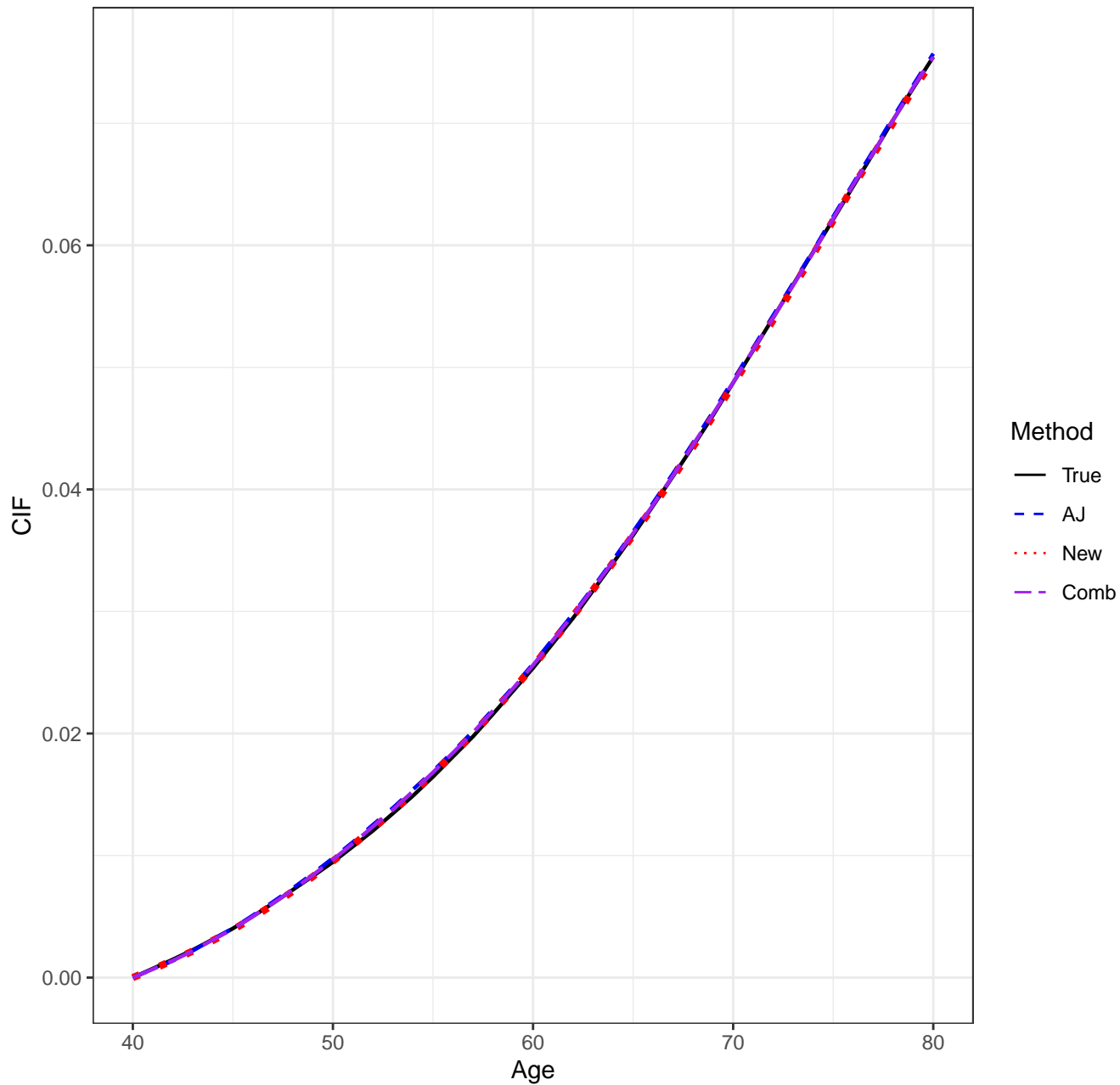
pointwise CI's done by: normal-theory

auxflg = FALSE

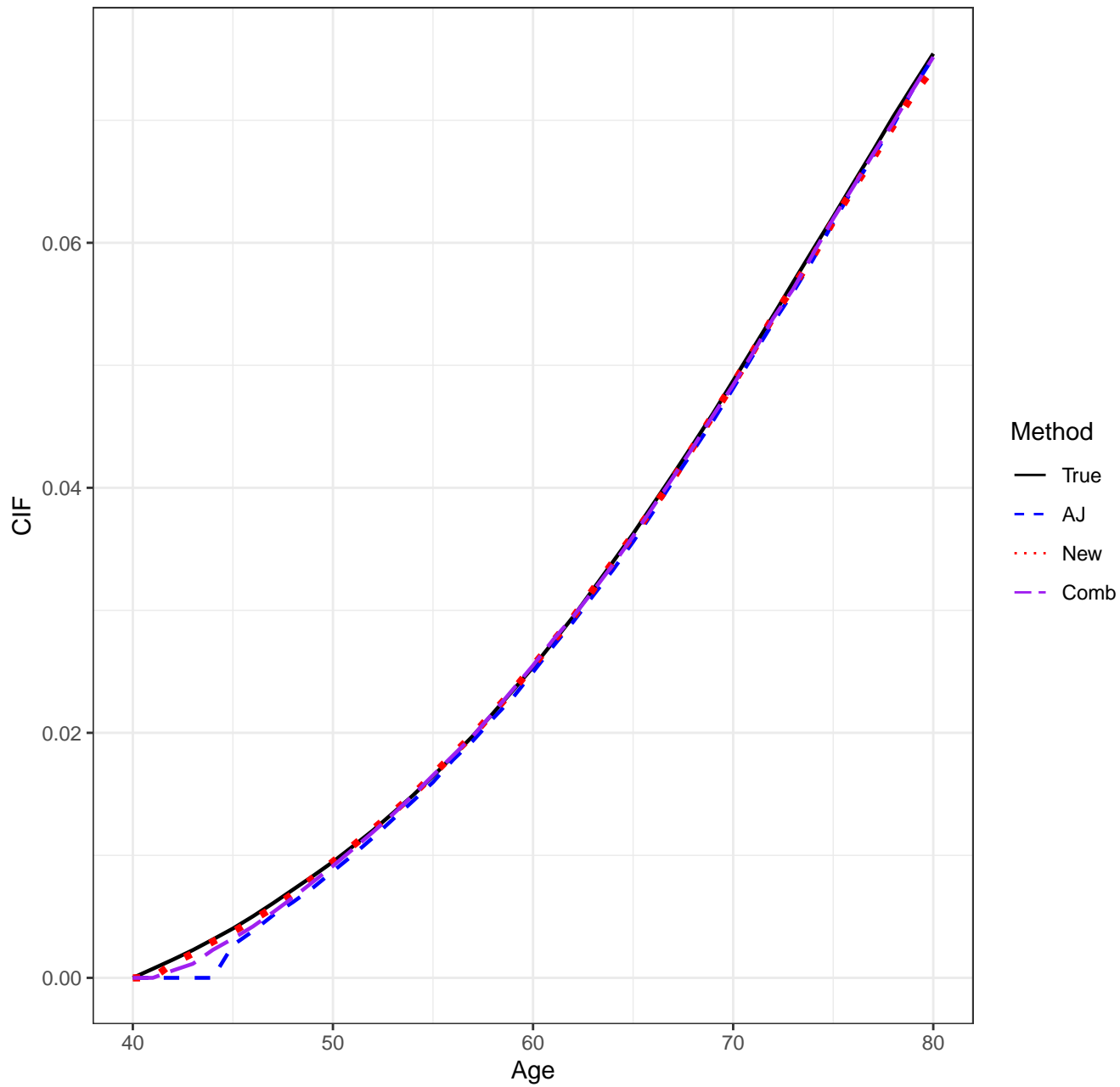
bootstrap weights: normal

Date/Time: 2024-01-12 14:29:03.987049

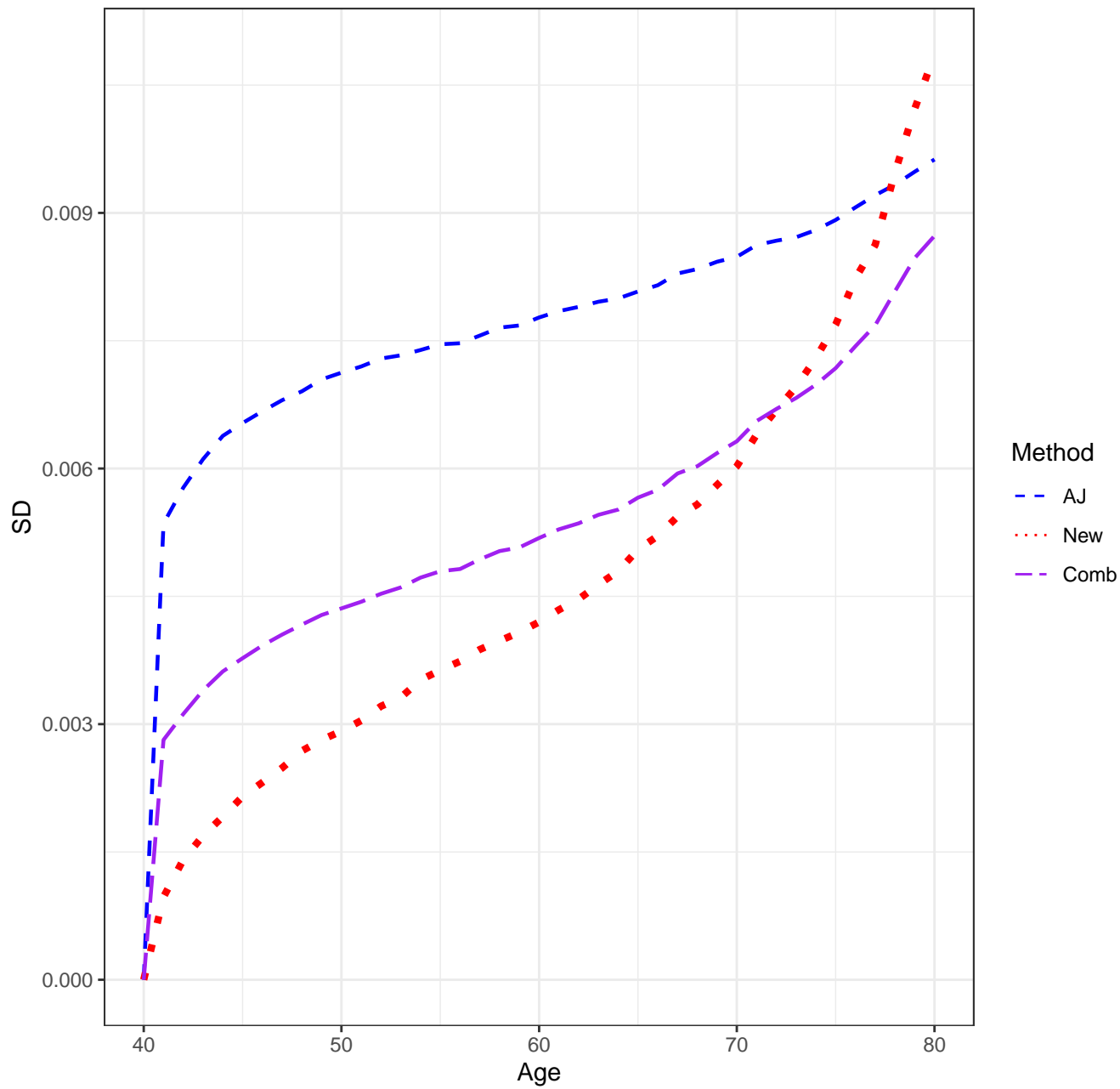
Scenario 1212, n=2500, Means



Scenario 1212, n=2500, Medians

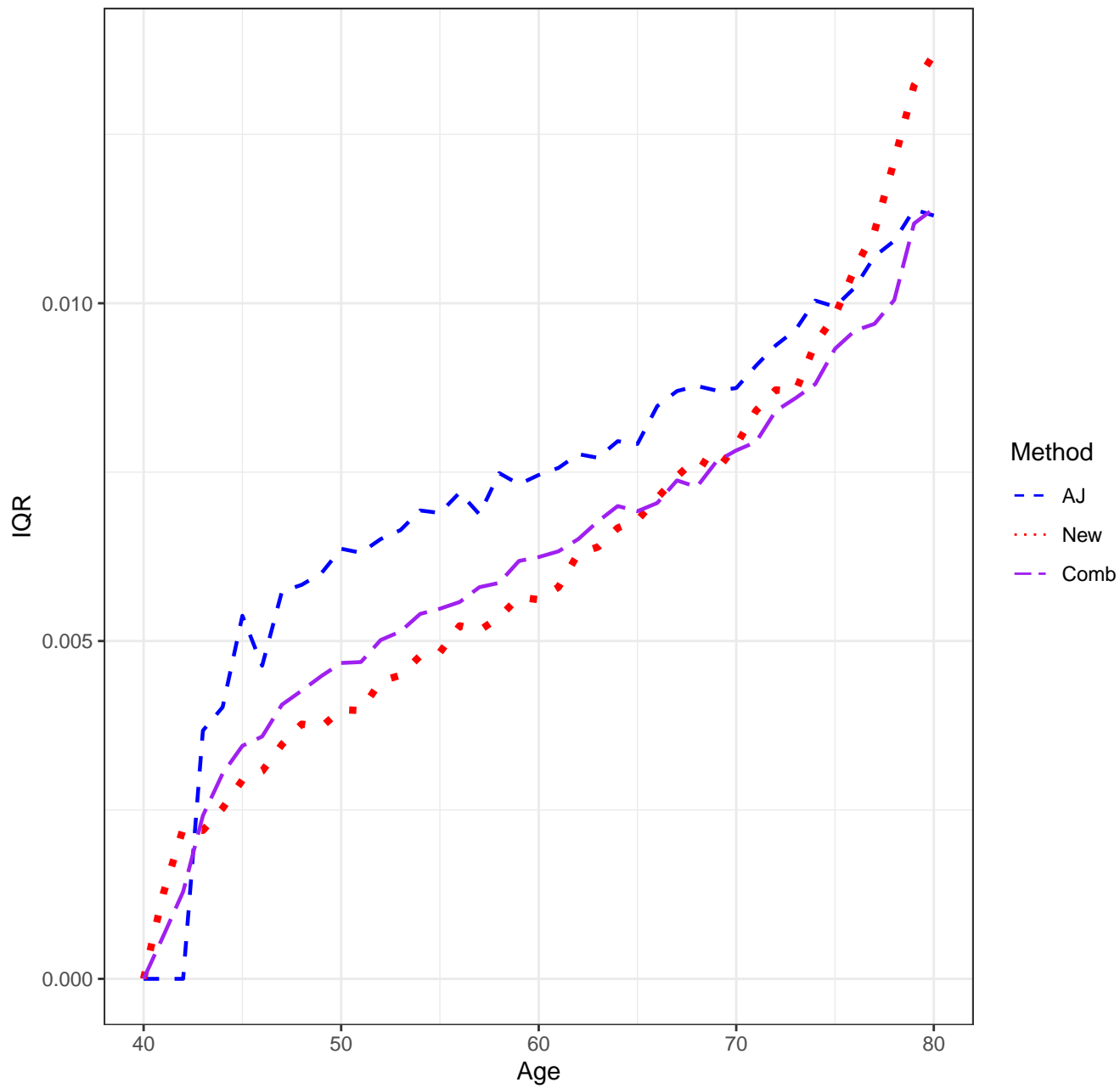


Scenario 1212, n=2500, SD'S

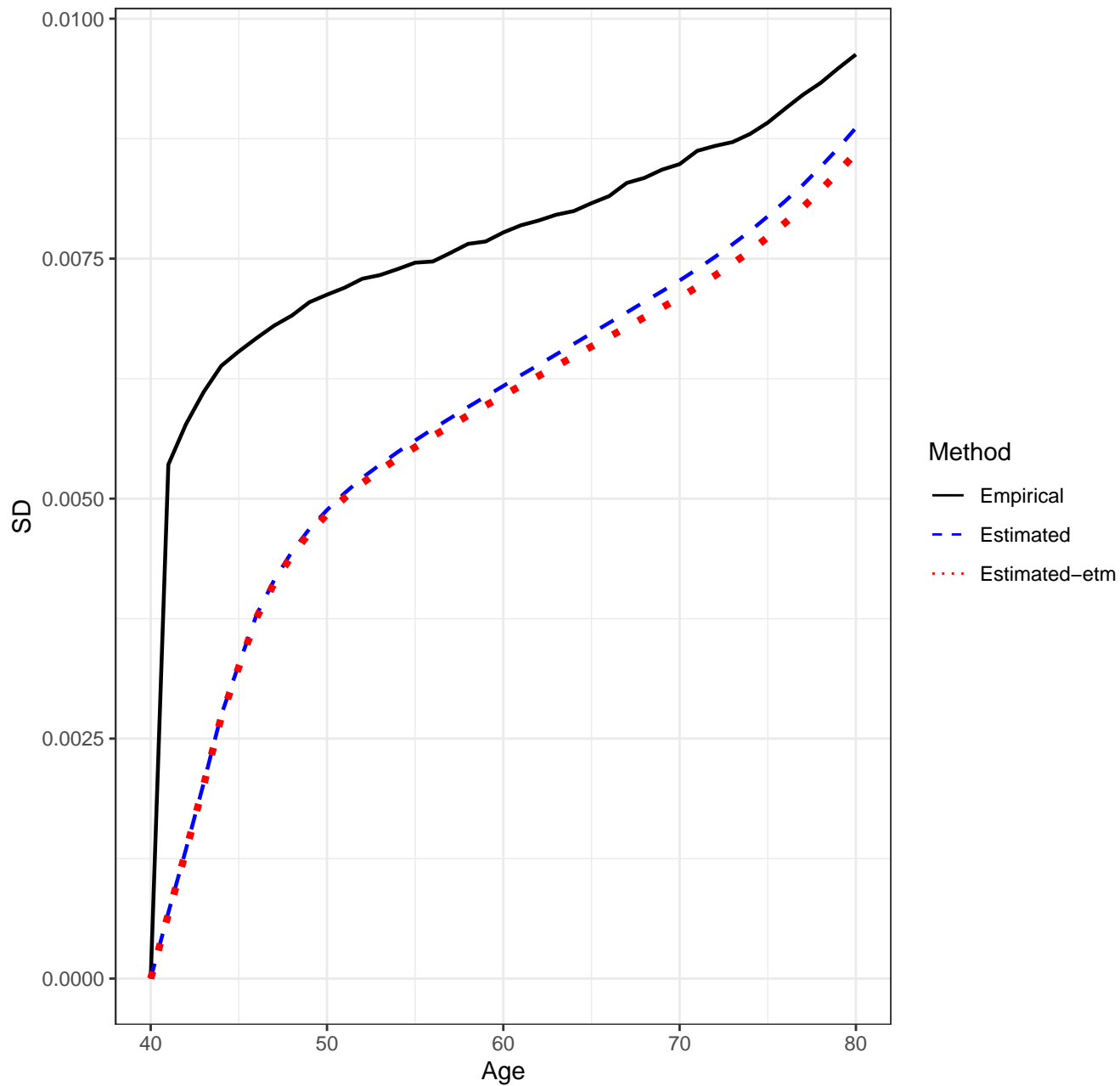




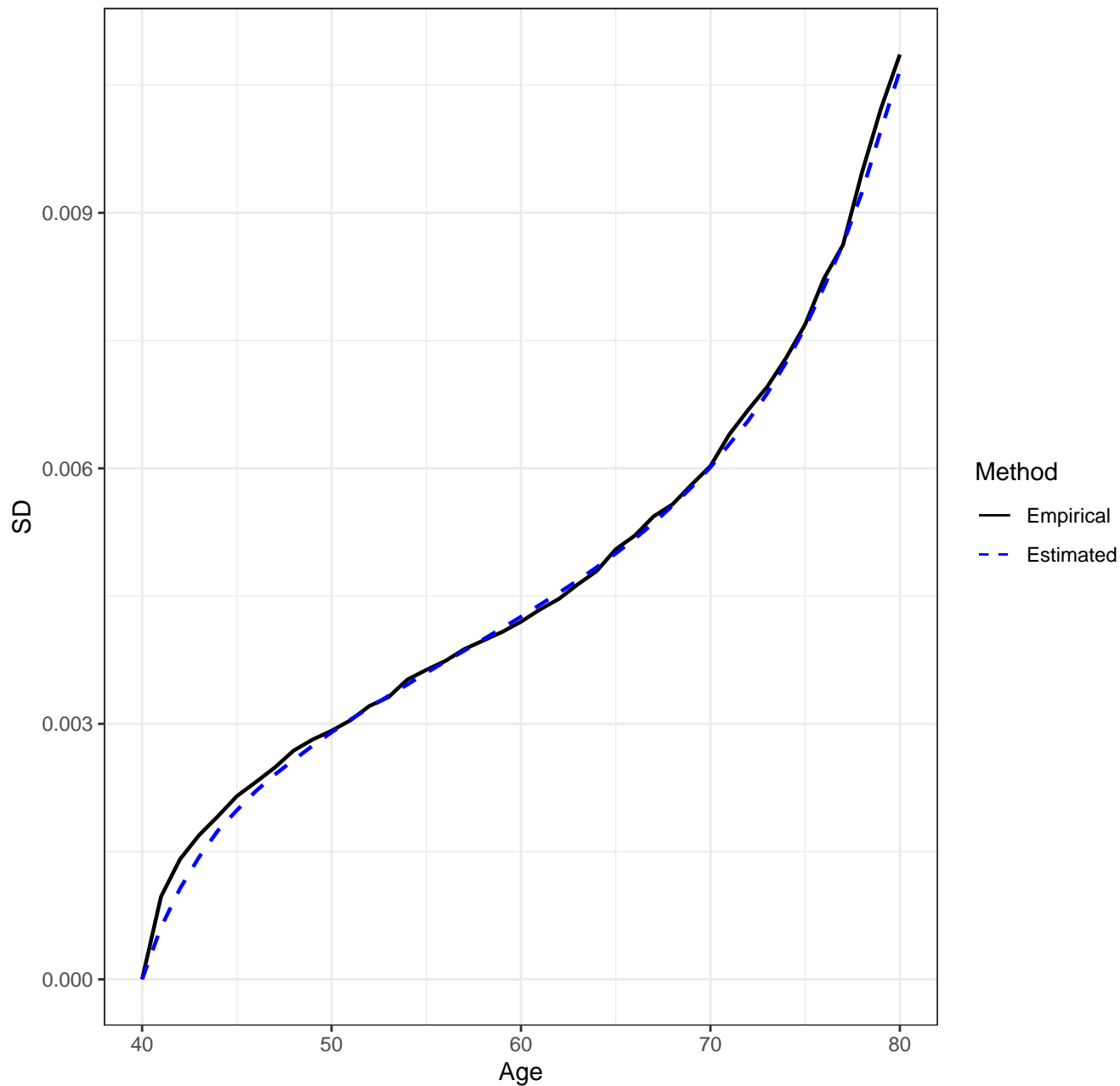
Scenario 1212, n=2500, IQR'S



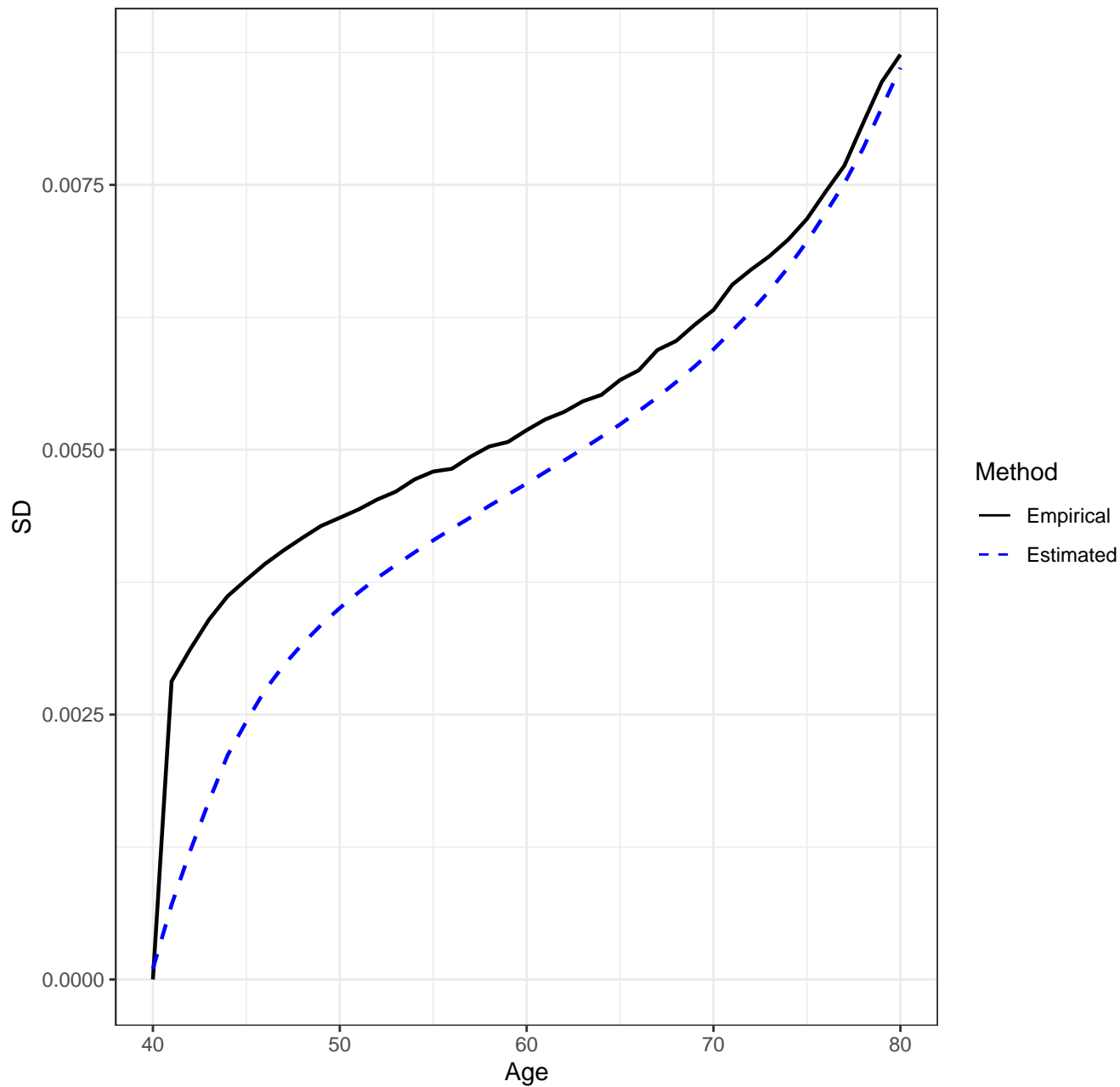
Scenario 1212, n=2500, AJ Estimator, Empirical vs. Estimated SD's



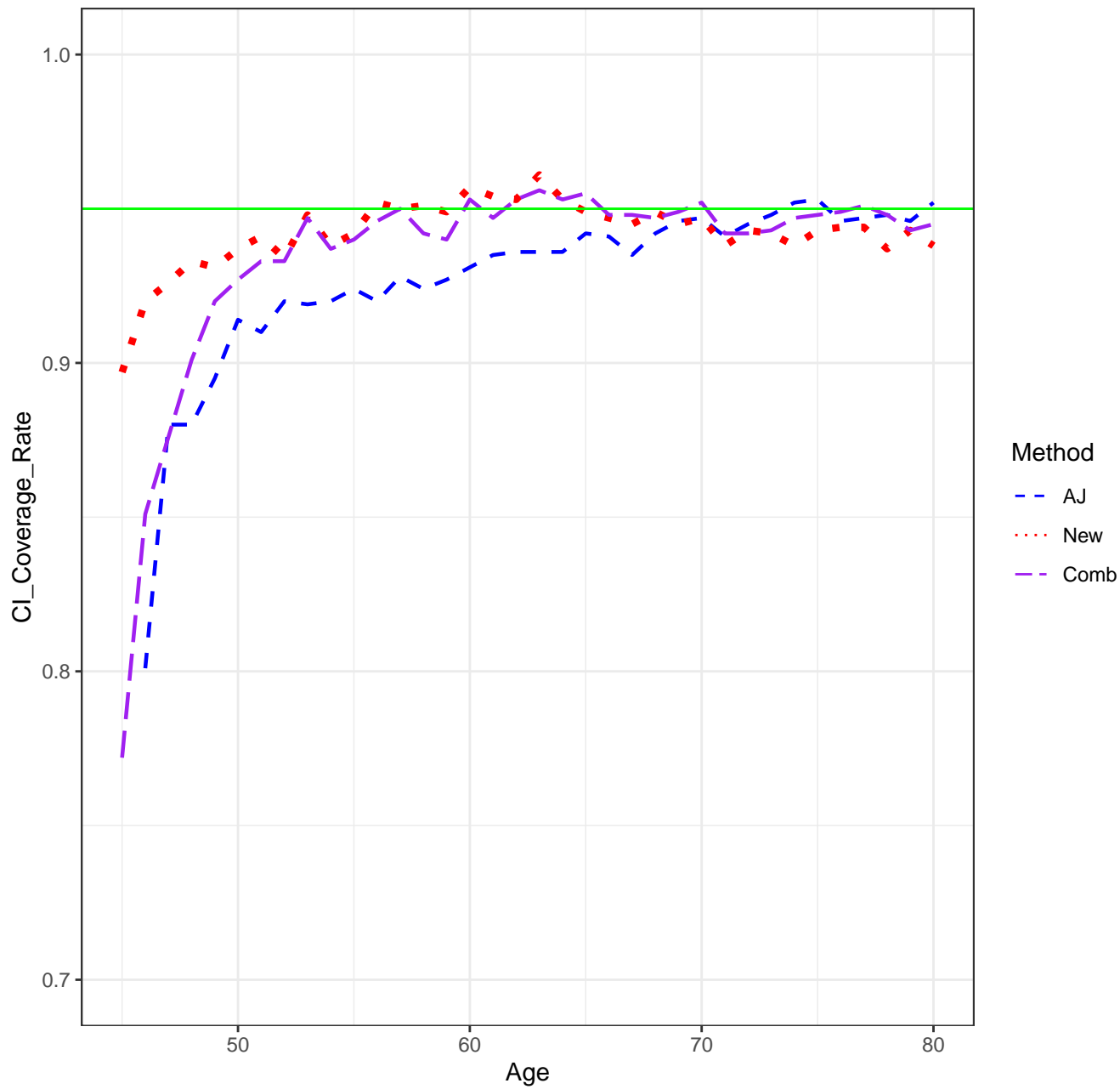
Scenario 1212, n=2500, New Estimator, Empirical vs. Estimated SD's



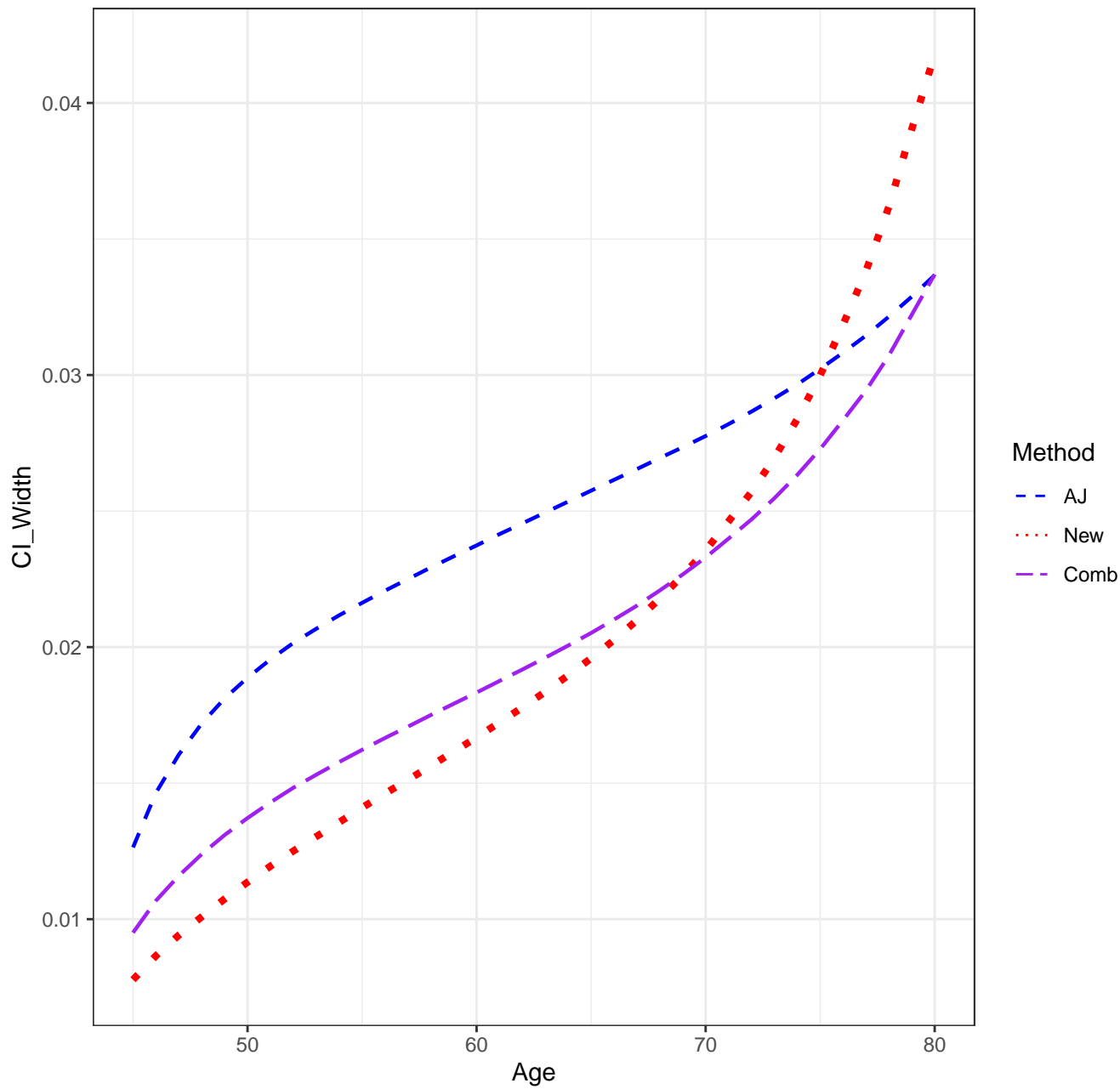
Scenario 1212, n=2500, Combined Estimator, Empirical vs. Estimated SD's



Scenario 1212, n=2500, CICR'S



Scenario 1212, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

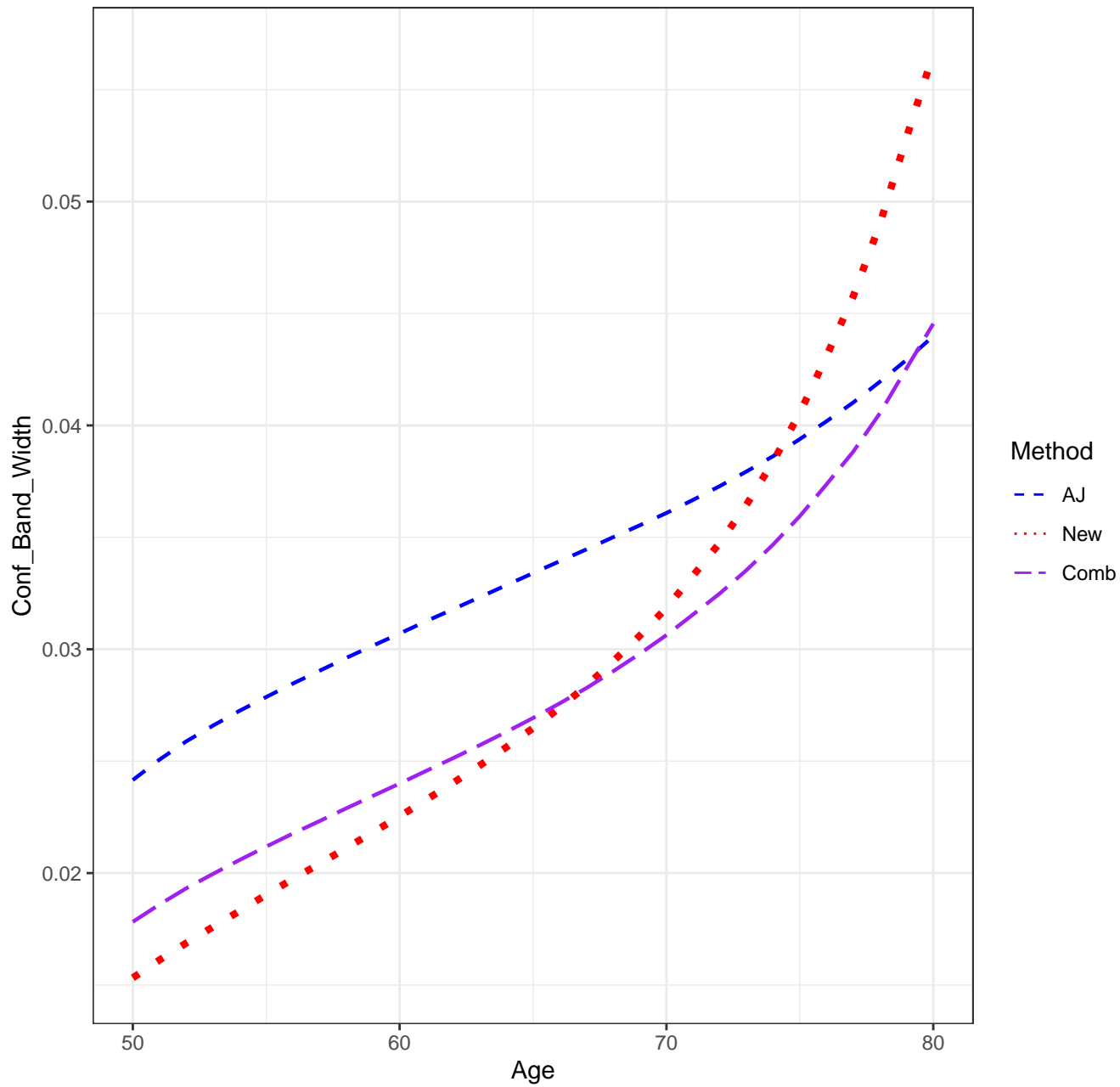
Scenario: 1212

AJ: 0.92

new: 0.923

Combo: 0.926

Scenario 1212, n=2500, Confidence Band Width





## SETTINGS

Scenario: 1221

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5\pi - \arcsin(\sqrt{1-u})$

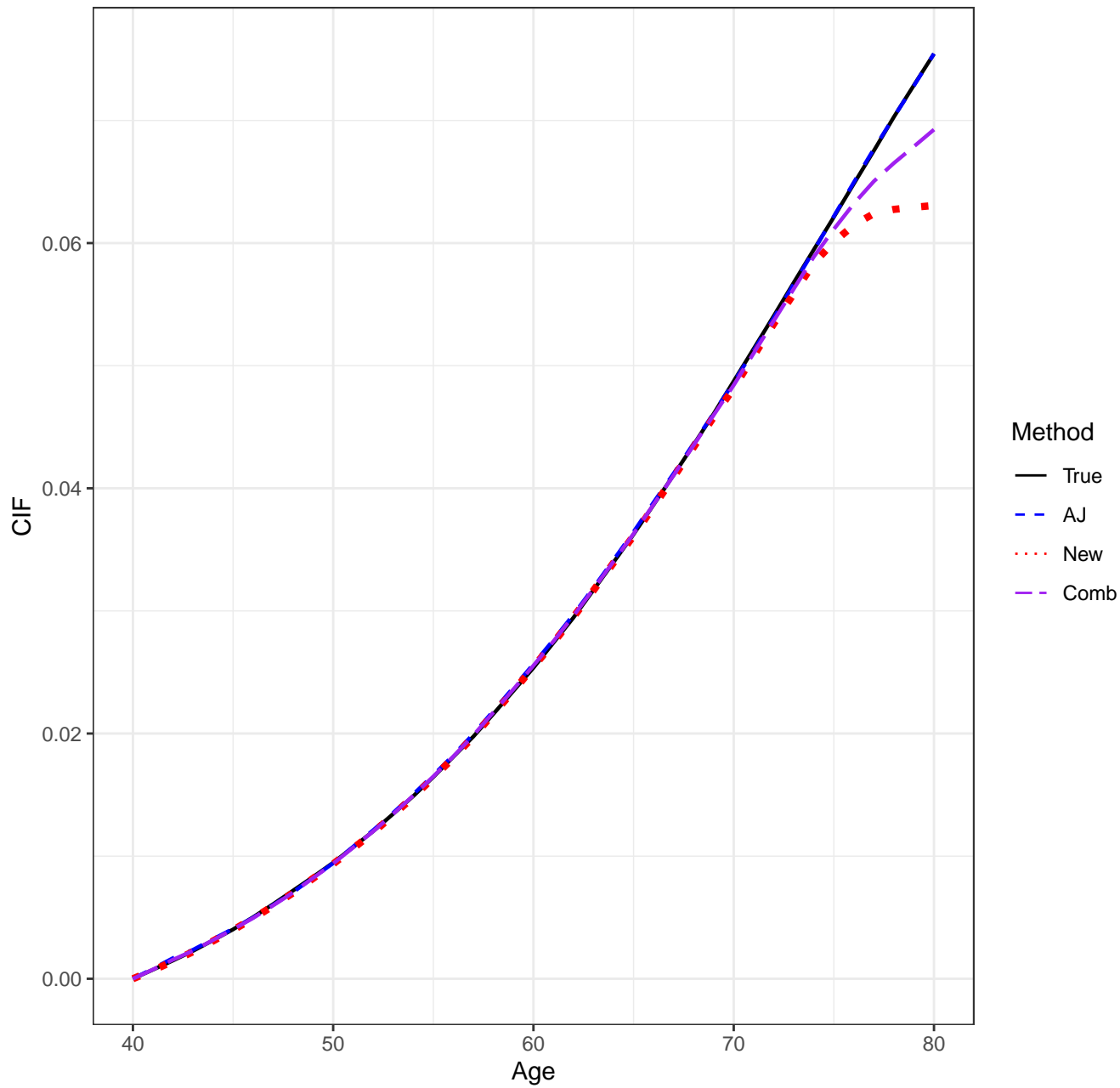
pointwise CI's done by: normal-theory

auxflg = FALSE

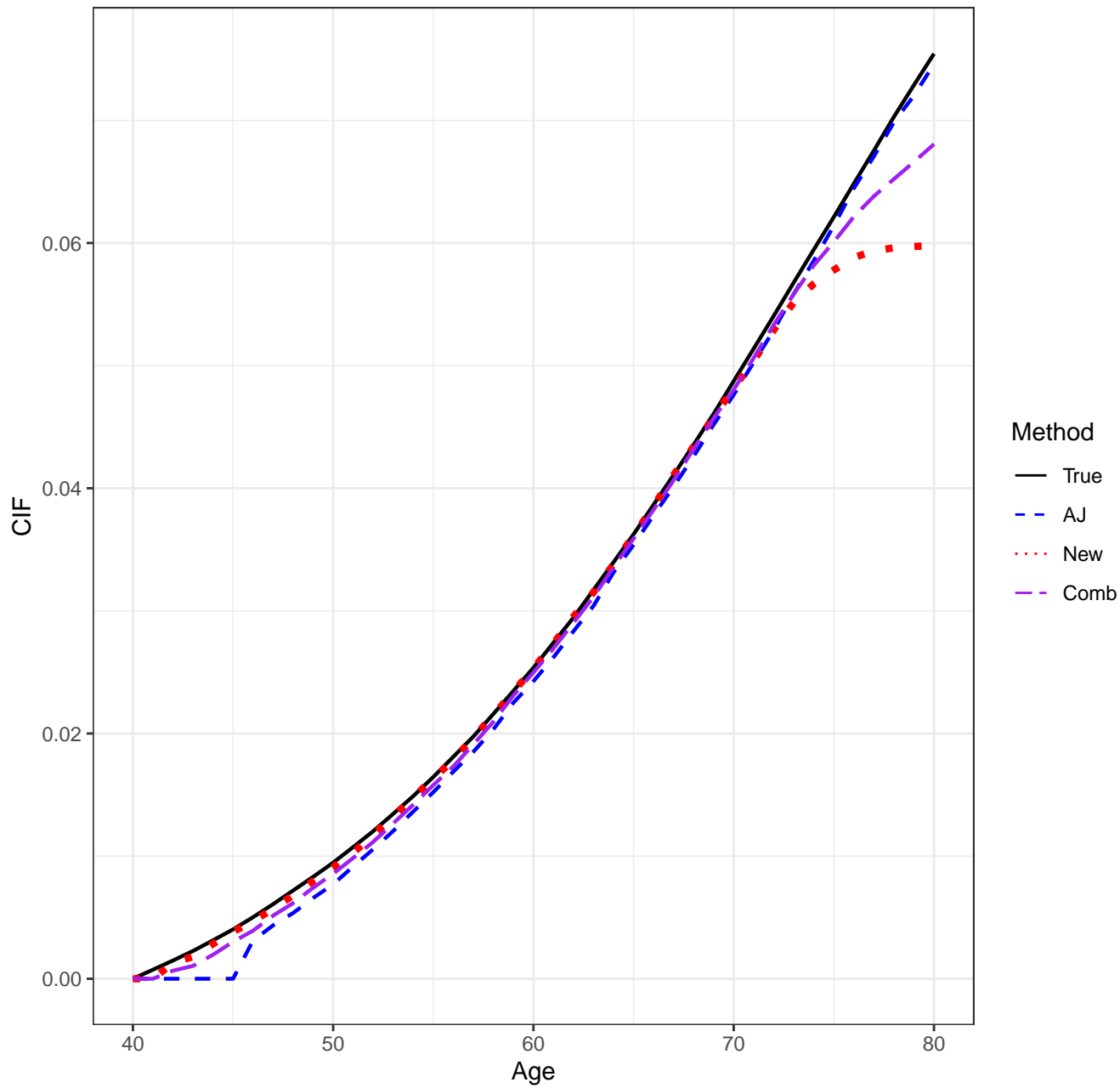
bootstrap weights: normal

Date/Time: 2024-01-12 15:01:22.470346

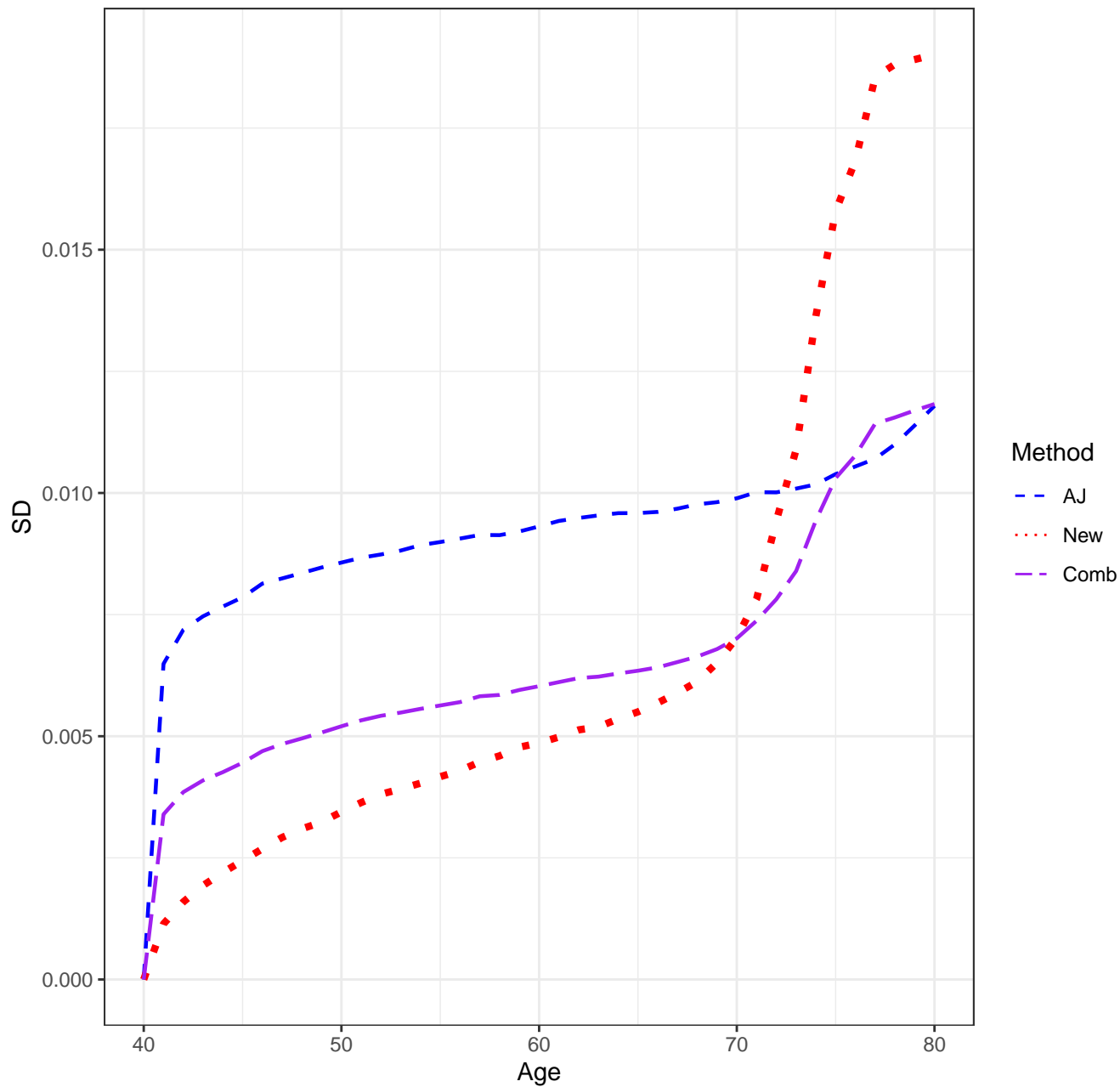
Scenario 1221, n=2500, Means



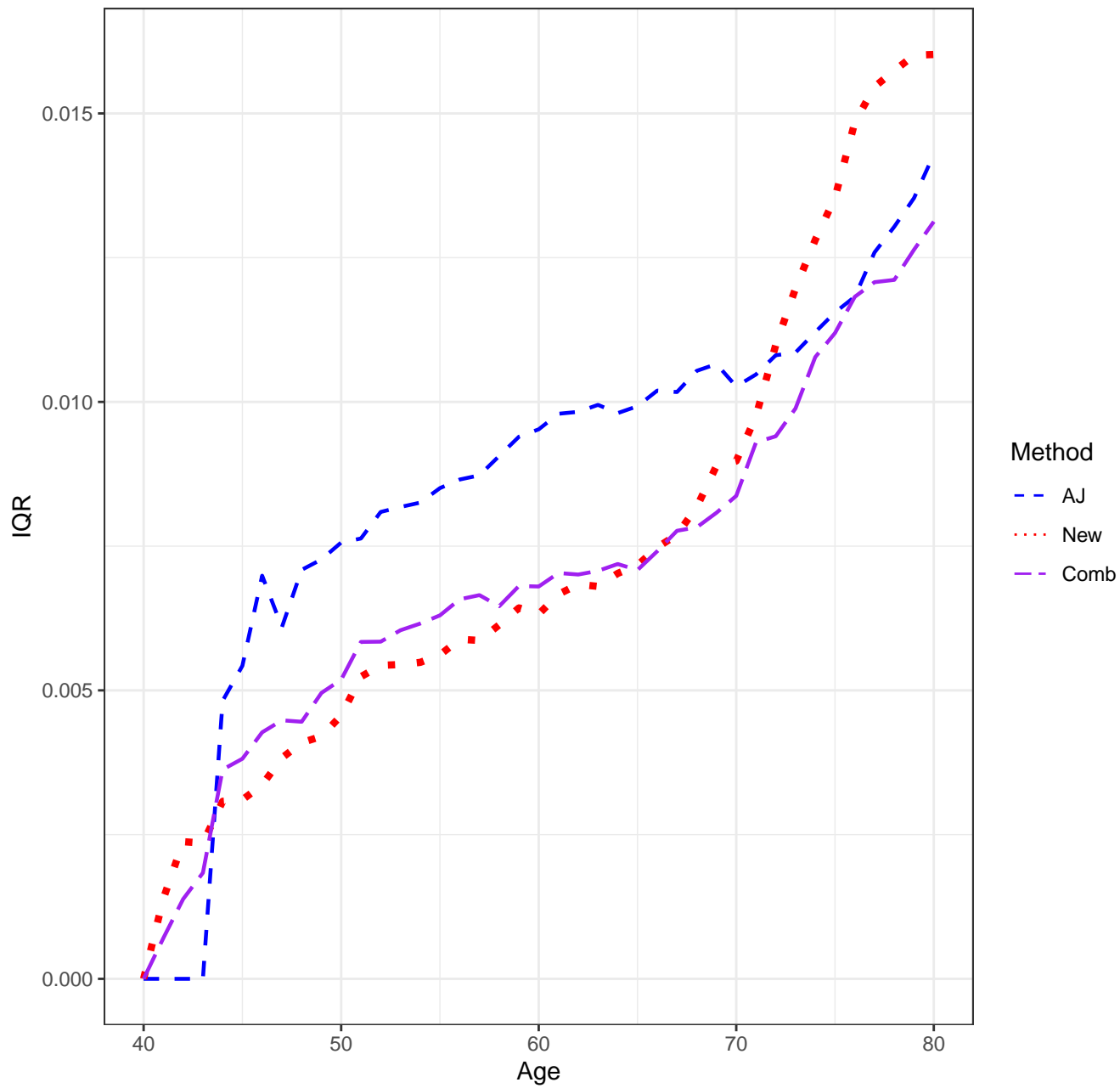
Scenario 1221, n=2500, Medians



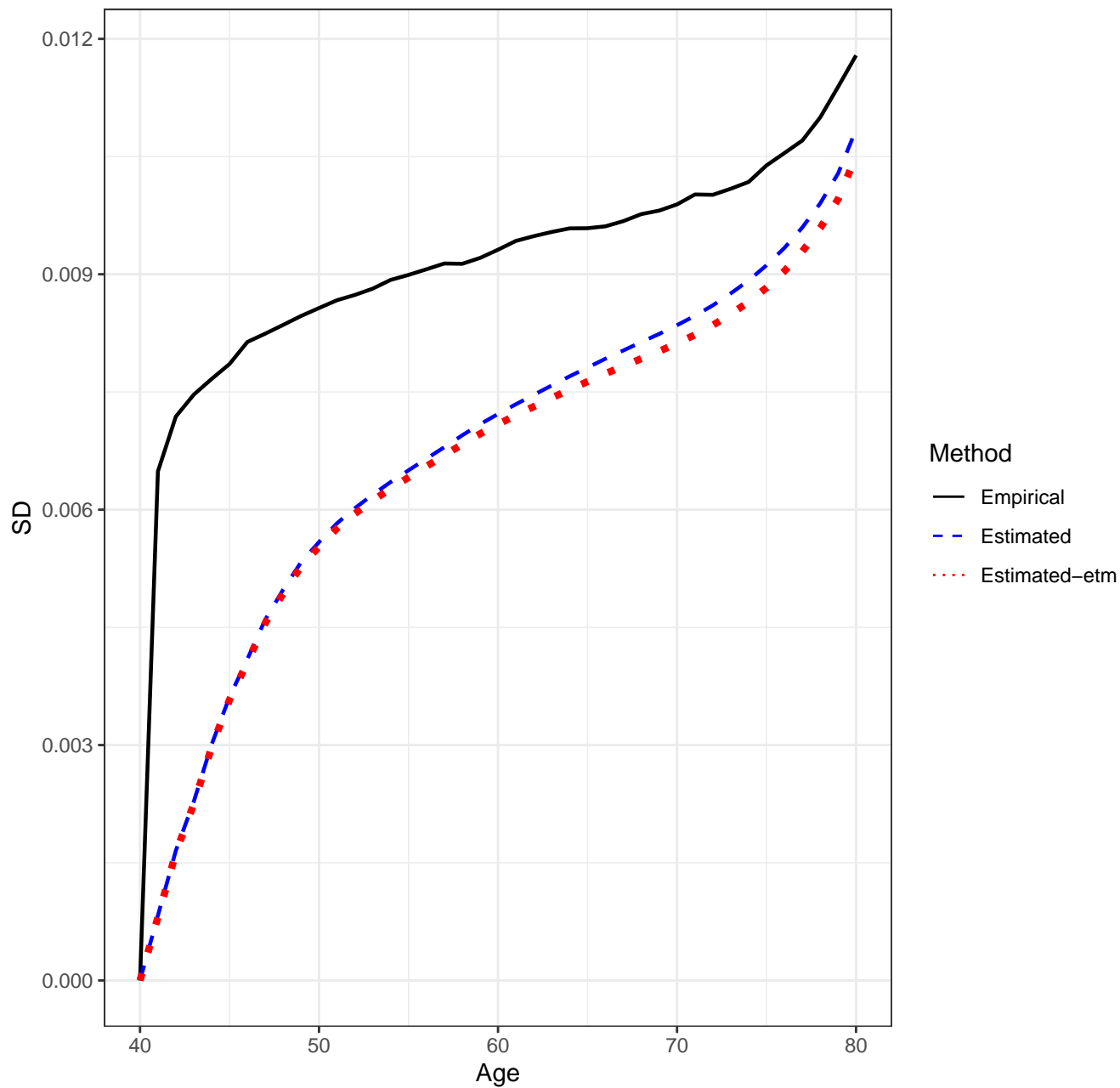
Scenario 1221, n=2500, SD'S



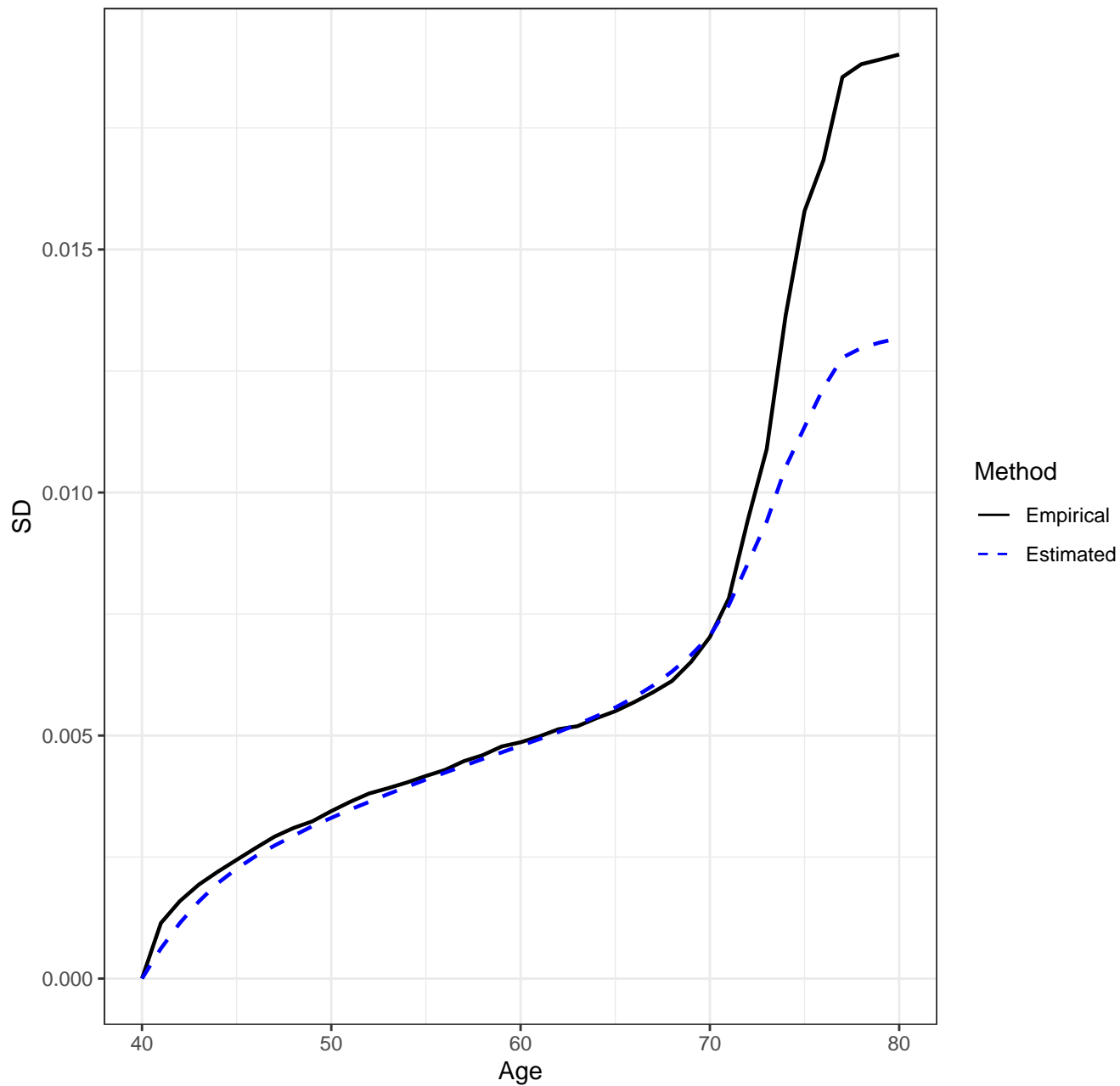
Scenario 1221, n=2500, IQR'S



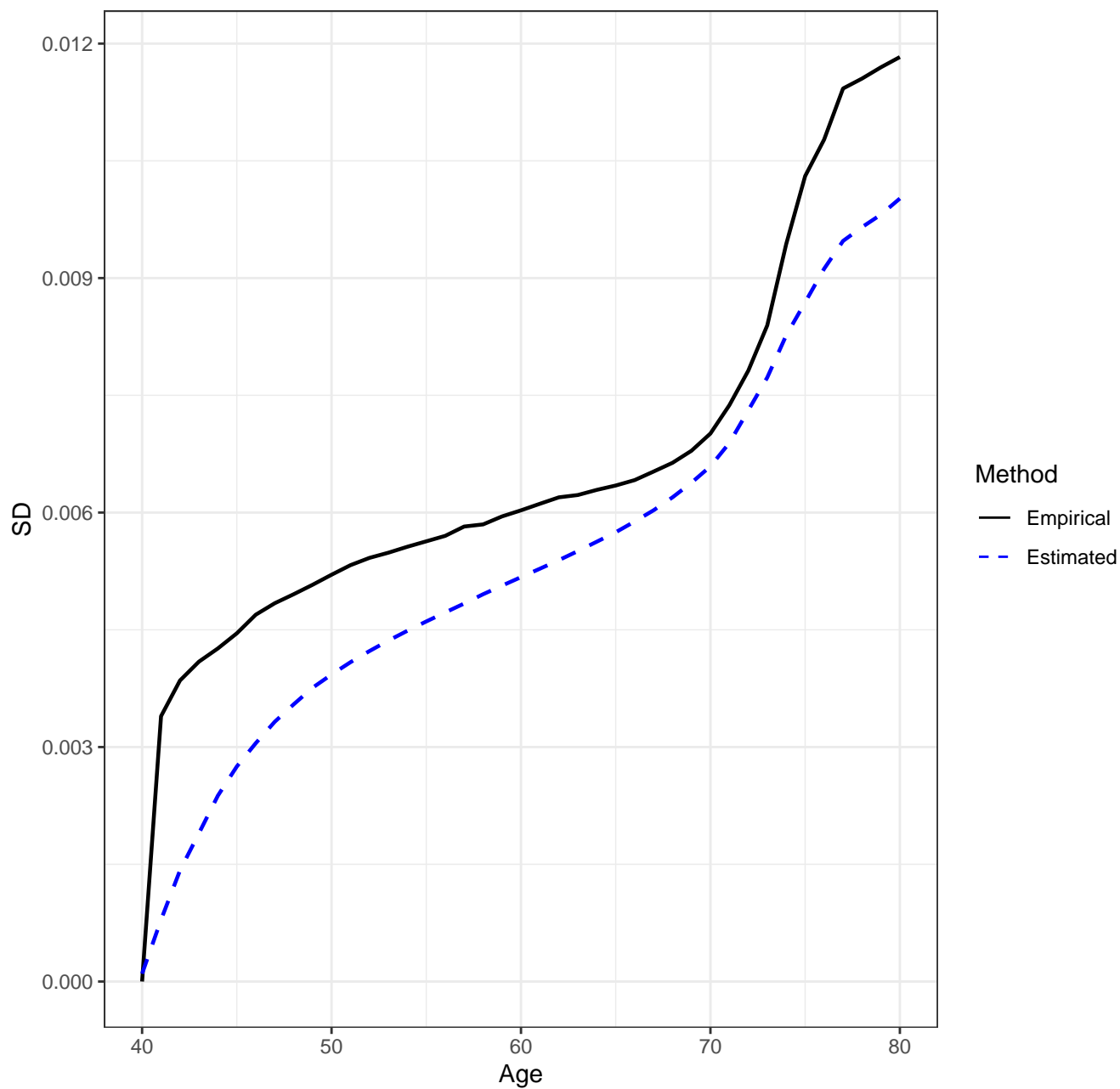
Scenario 1221, n=2500, AJ Estimator, Empirical vs. Estimated SD's



Scenario 1221, n=2500, New Estimator, Empirical vs. Estimated SD's

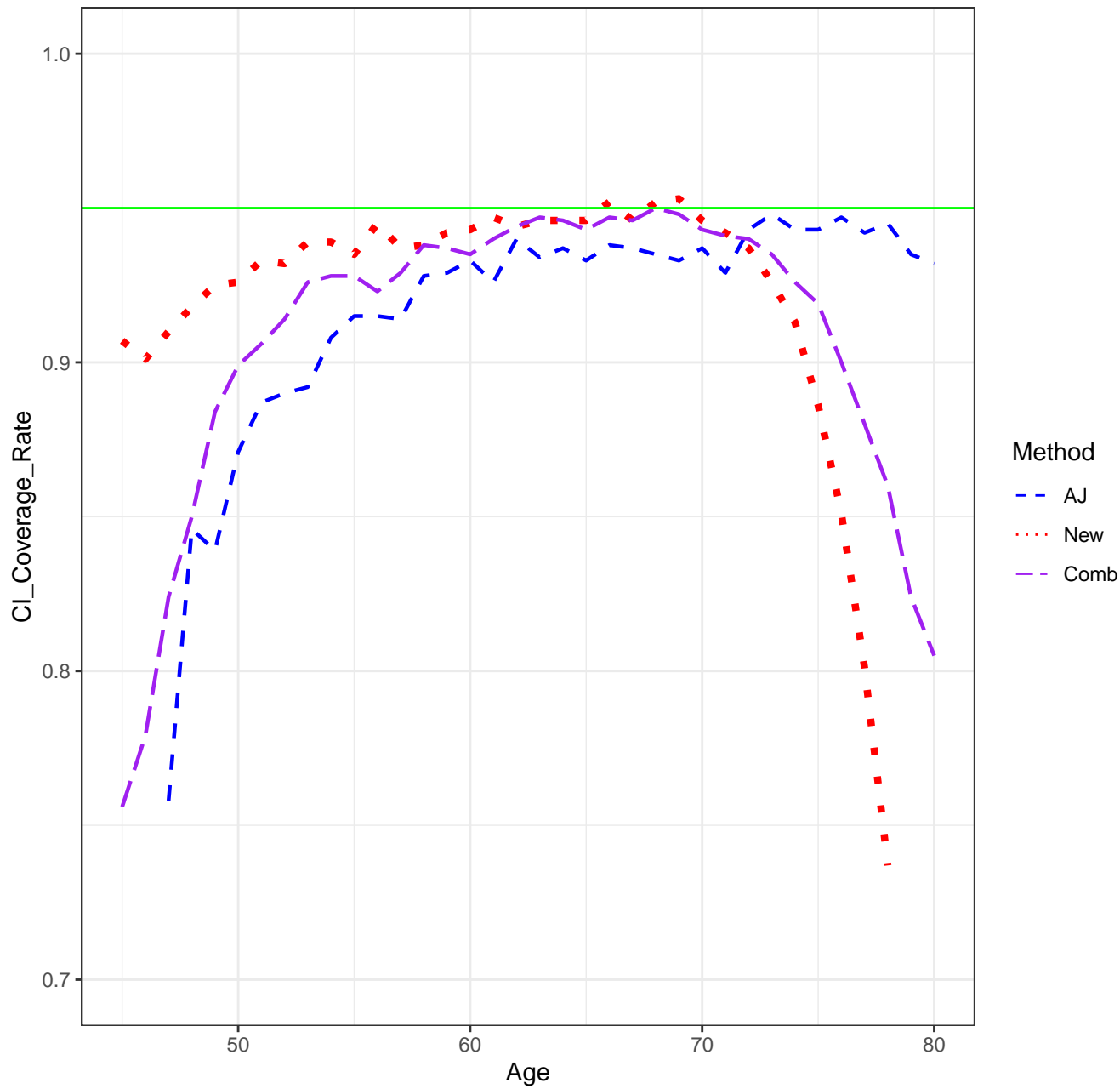


Scenario 1221, n=2500, Combined Estimator, Empirical vs. Estimated SD's

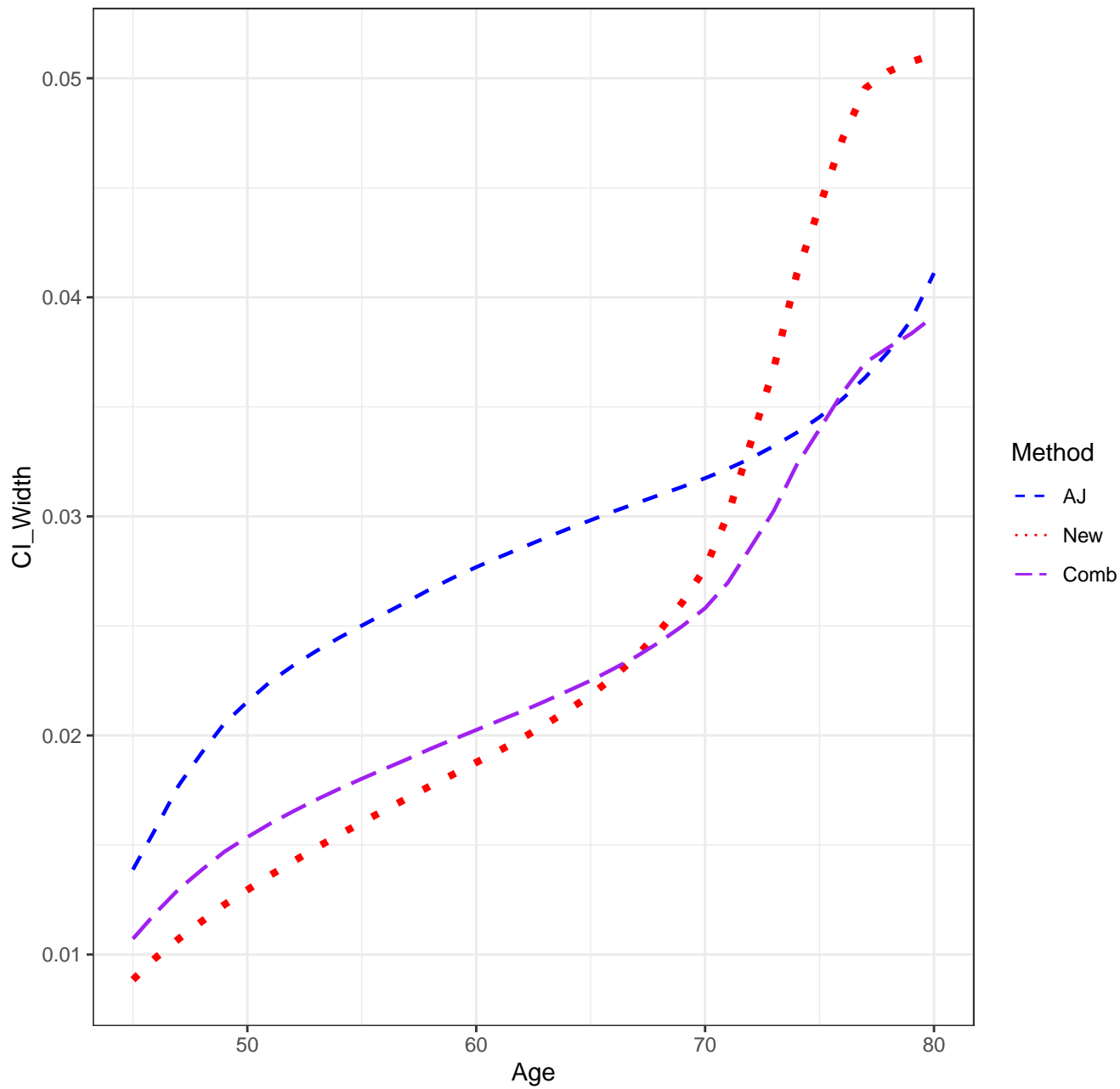




Scenario 1221, n=2500, CICR'S



Scenario 1221, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

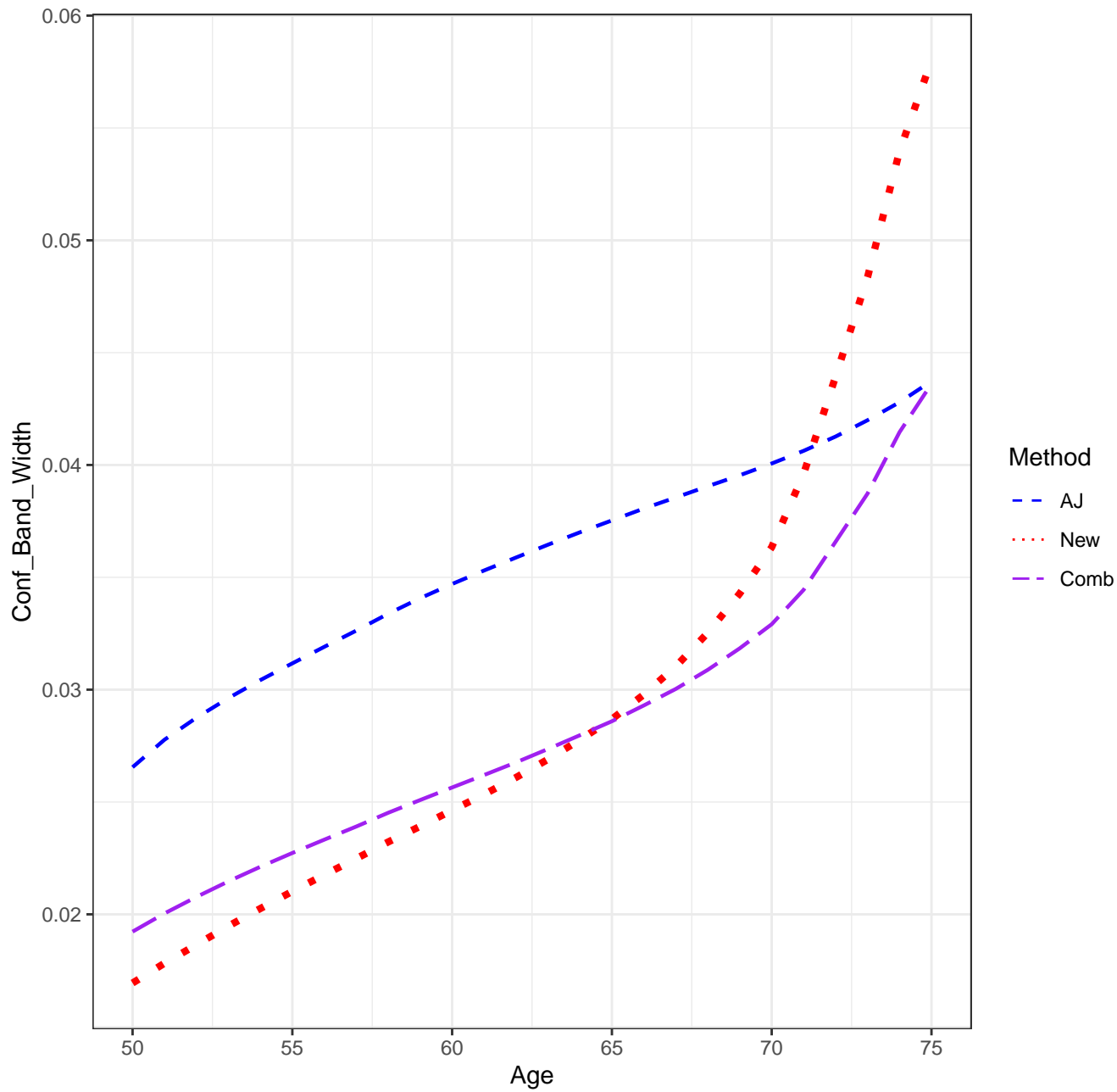
Scenario: 1221

AJ: 0.895

new: 0.897

Combo: 0.88

Scenario 1221, n=2500, Confidence Band Width



## SETTINGS

Scenario: 1222

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

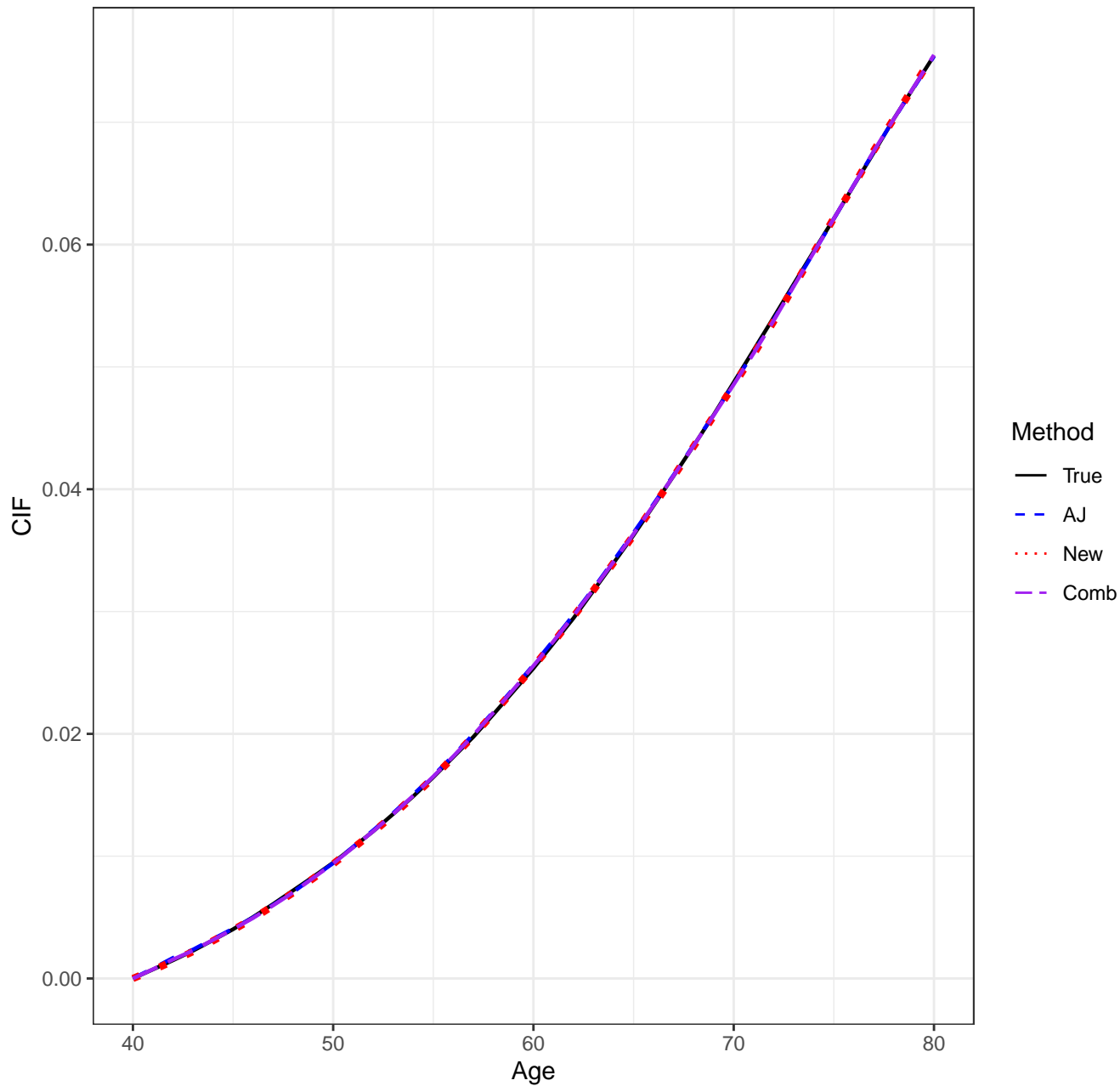
pointwise CI's done by: normal-theory

auxflg = FALSE

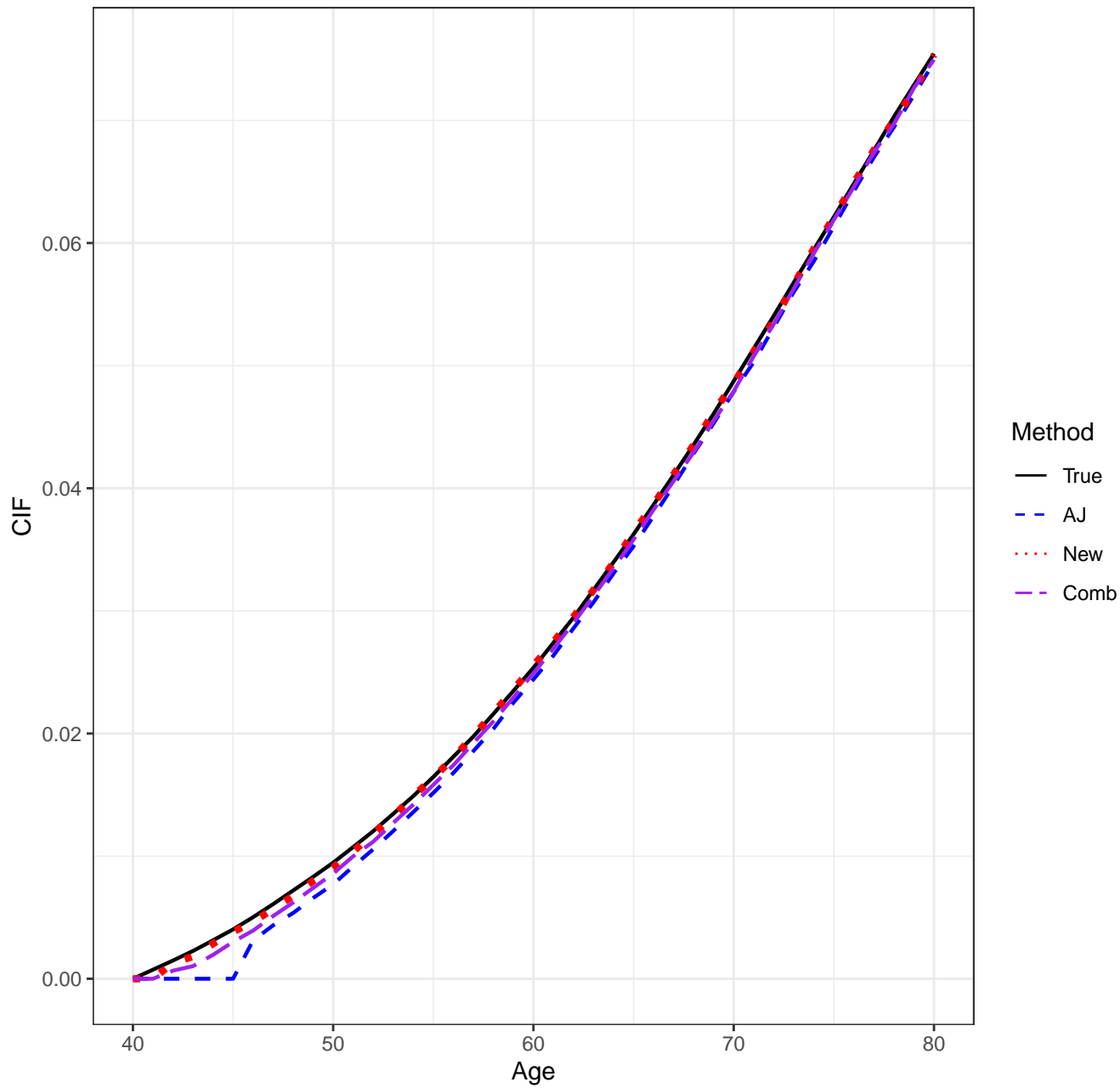
bootstrap weights: normal

Date/Time: 2024-01-12 15:43:08.572576

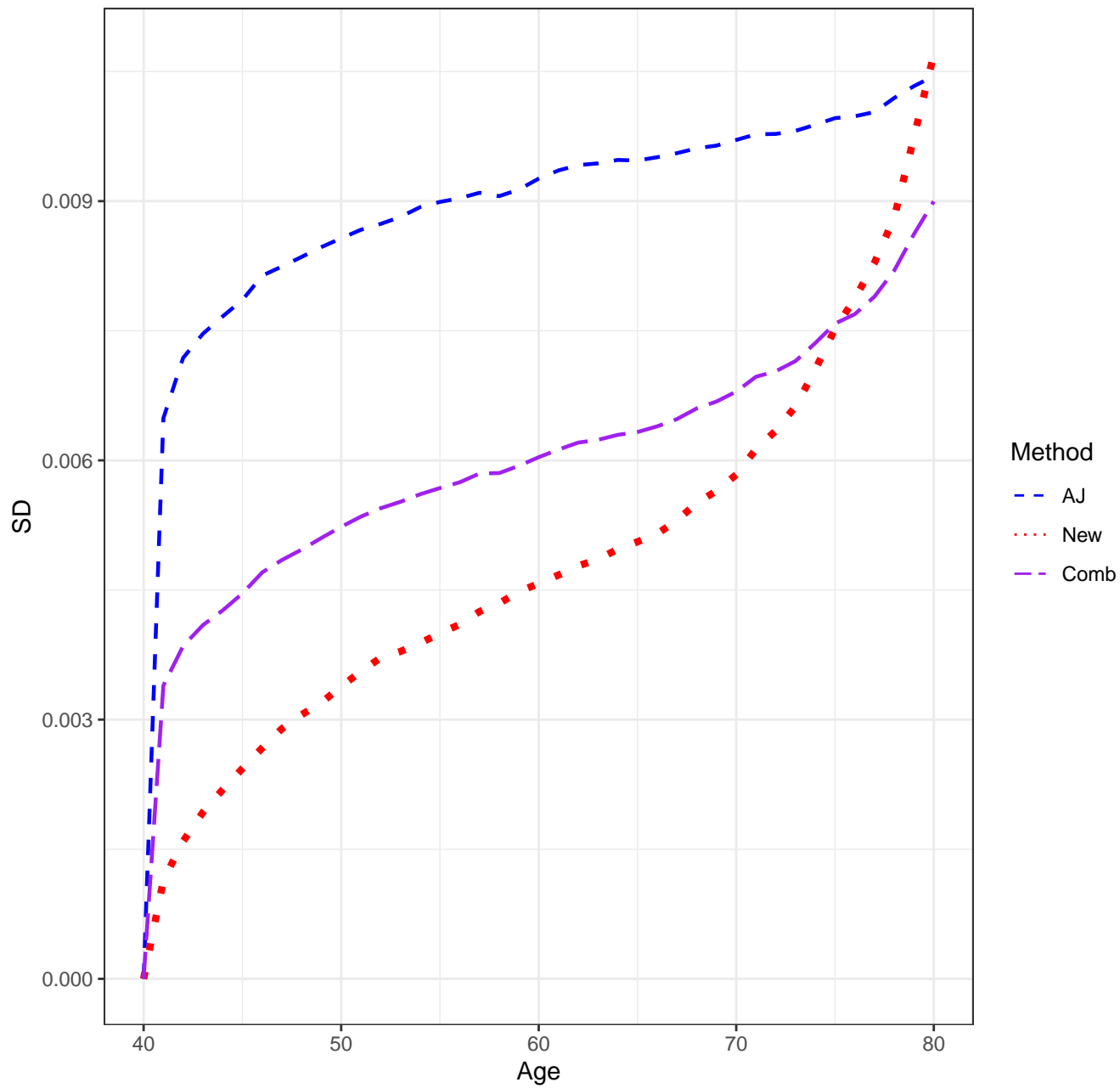
Scenario 1222, n=2500, Means



Scenario 1222, n=2500, Medians

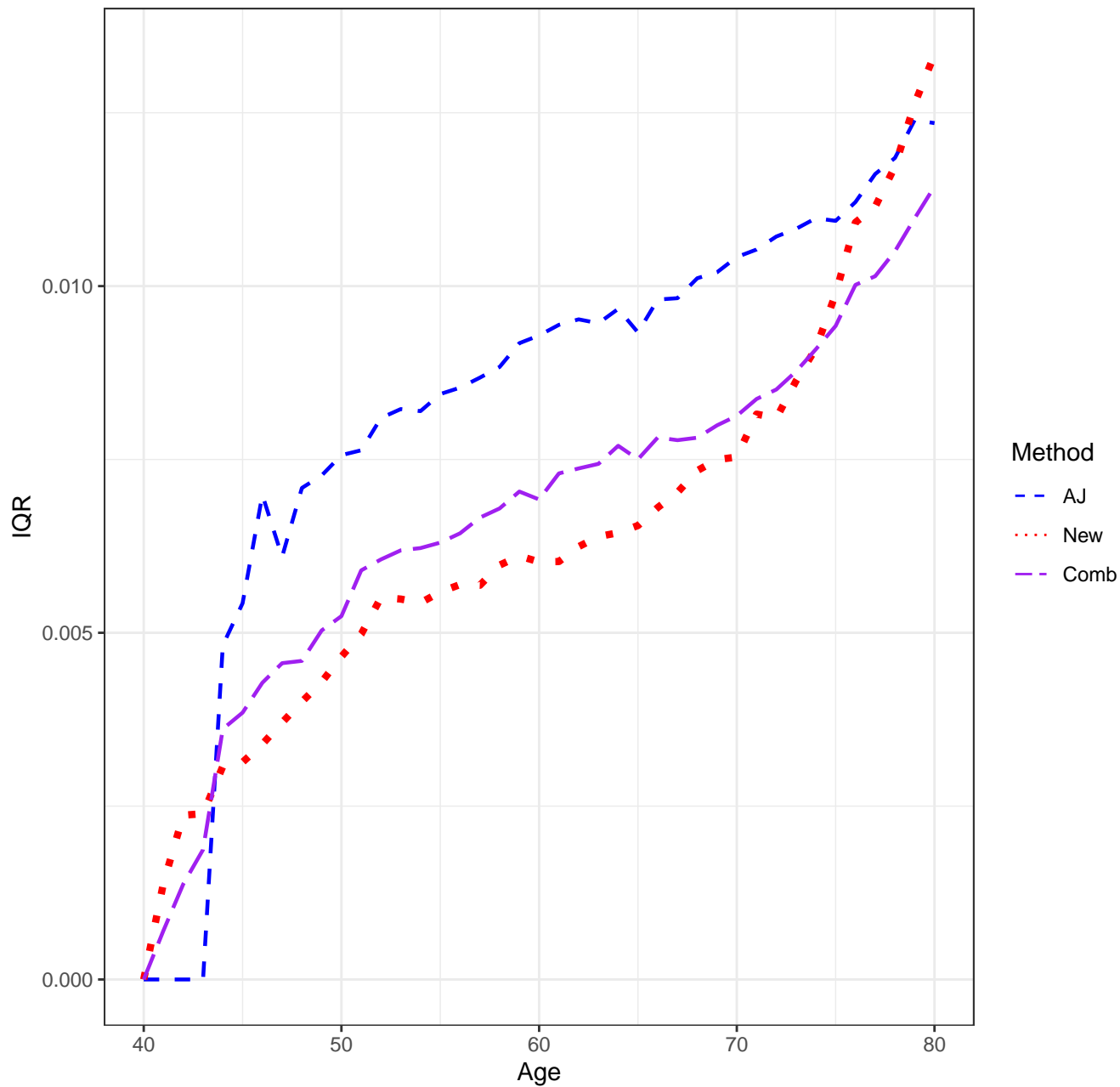


Scenario 1222, n=2500, SD'S

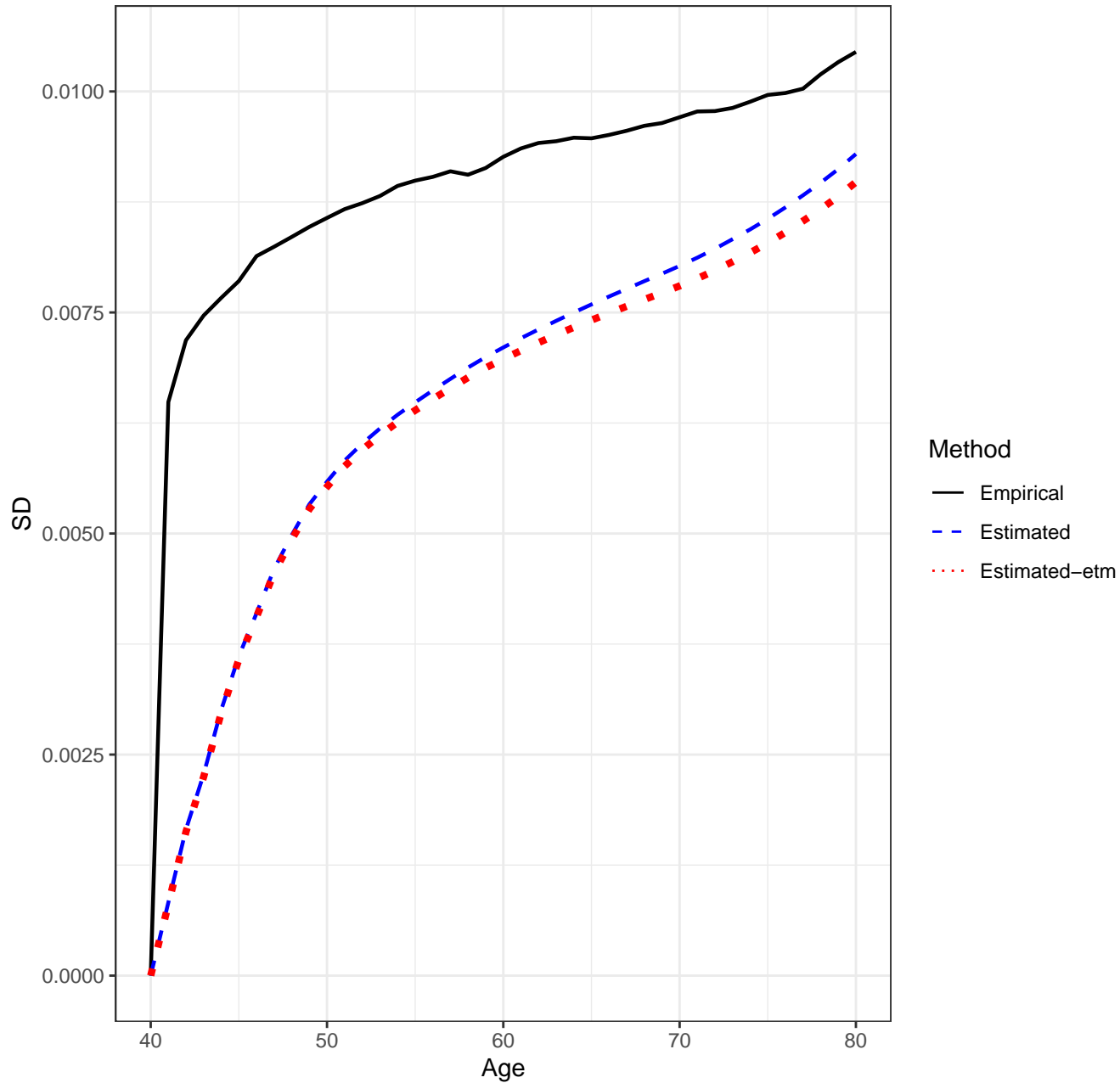




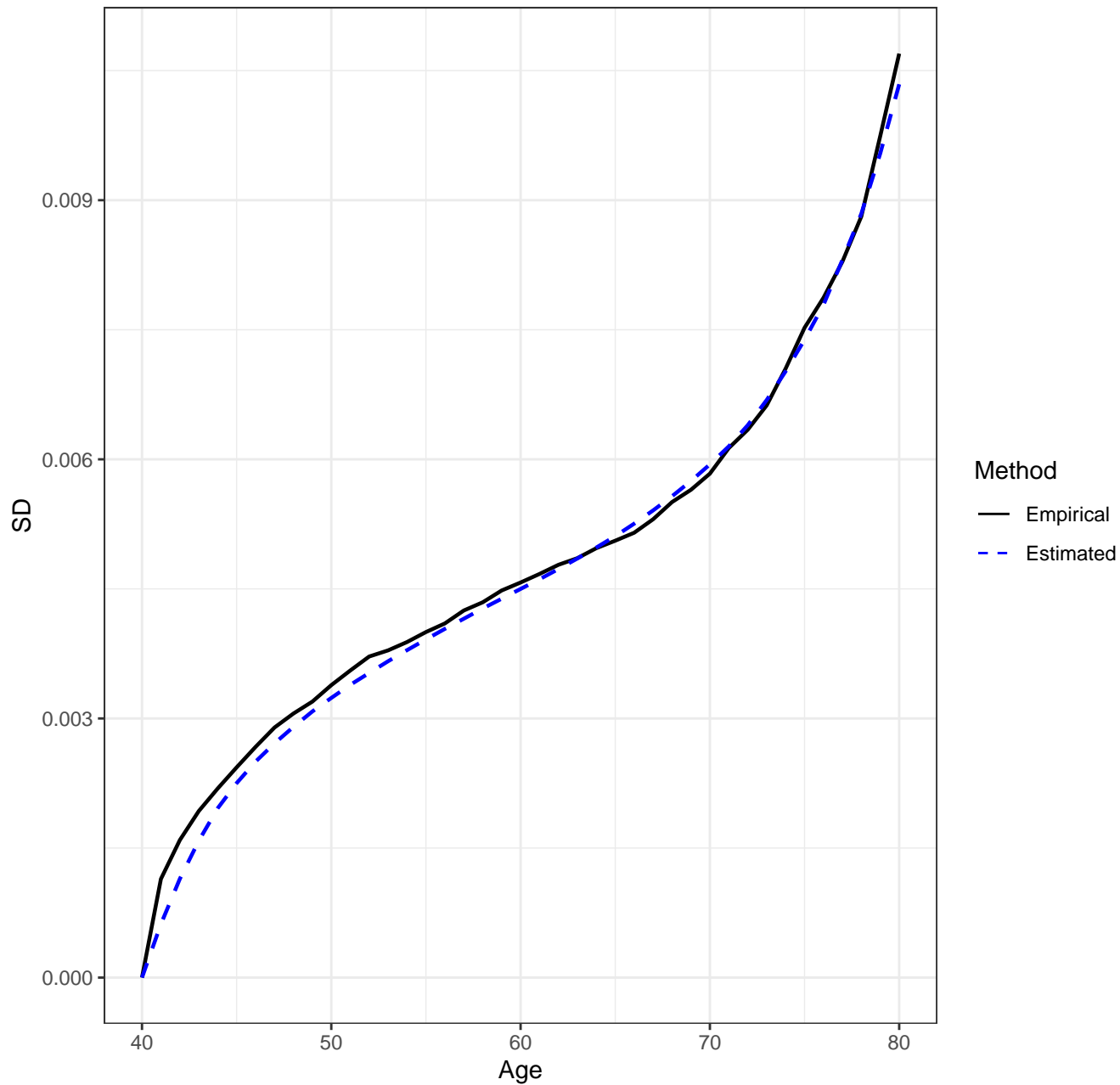
Scenario 1222, n=2500, IQR'S



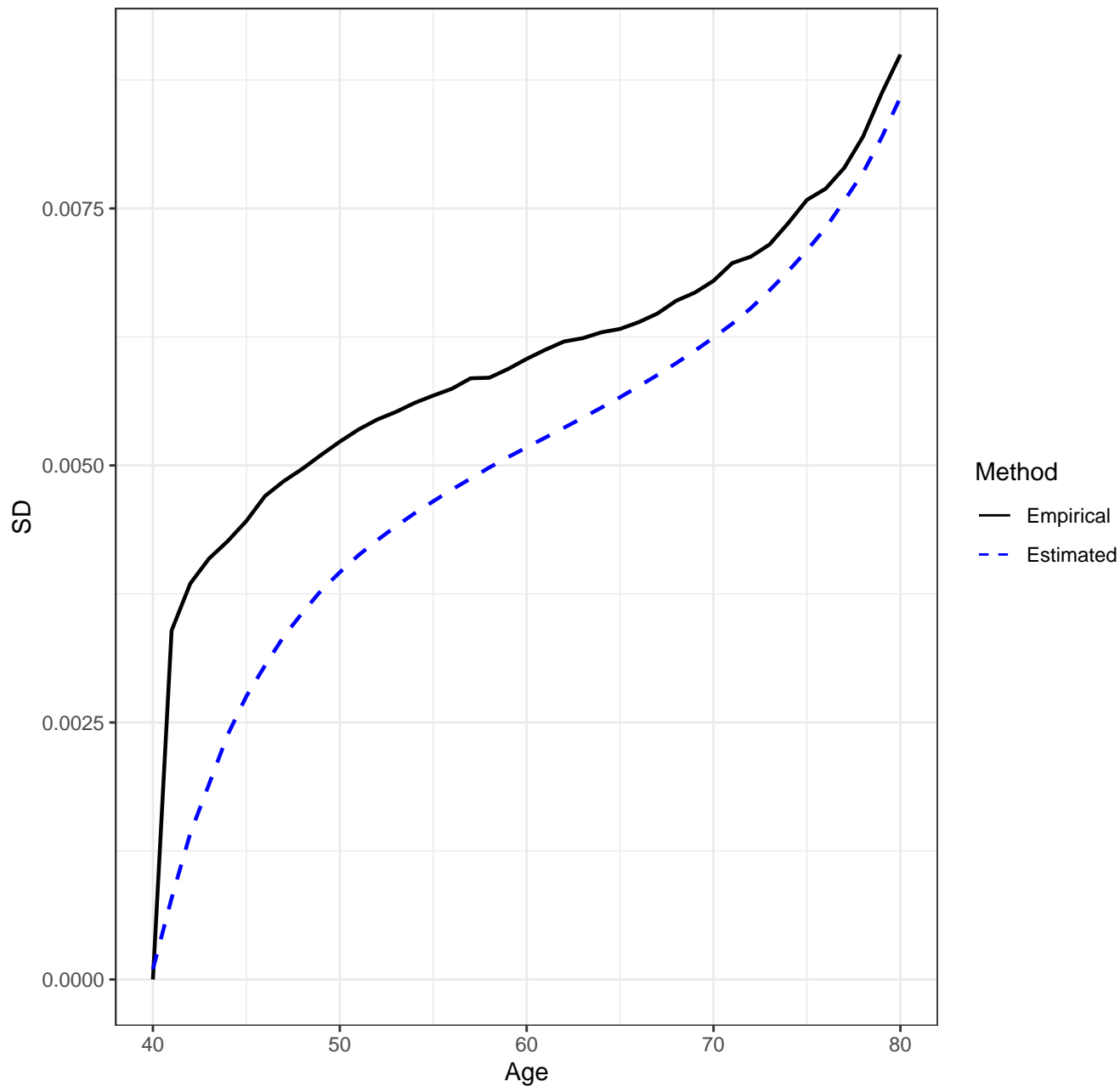
Scenario 1222, n=2500, AJ Estimator, Empirical vs. Estimated SD's



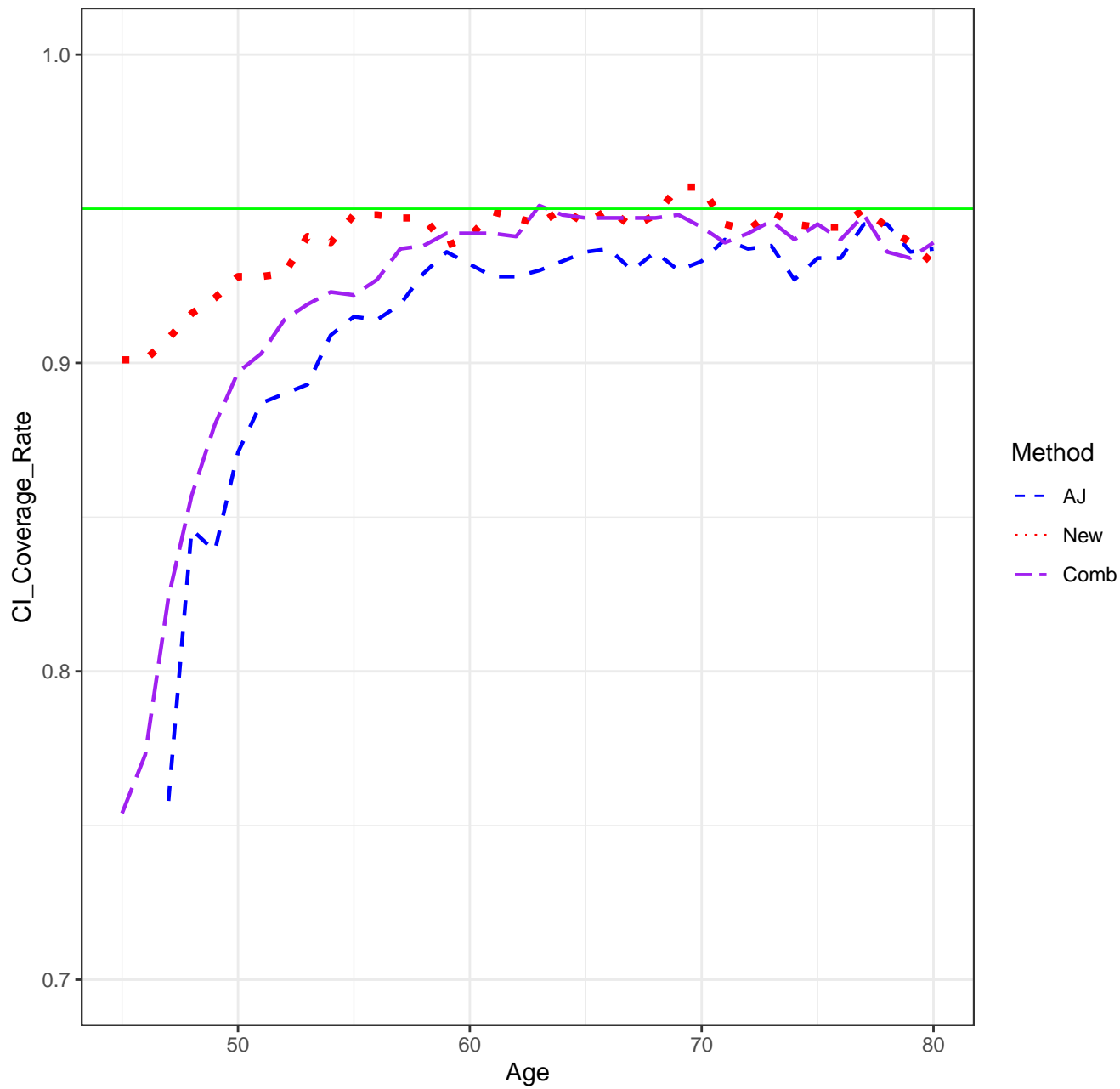
Scenario 1222, n=2500, New Estimator, Empirical vs. Estimated SD's



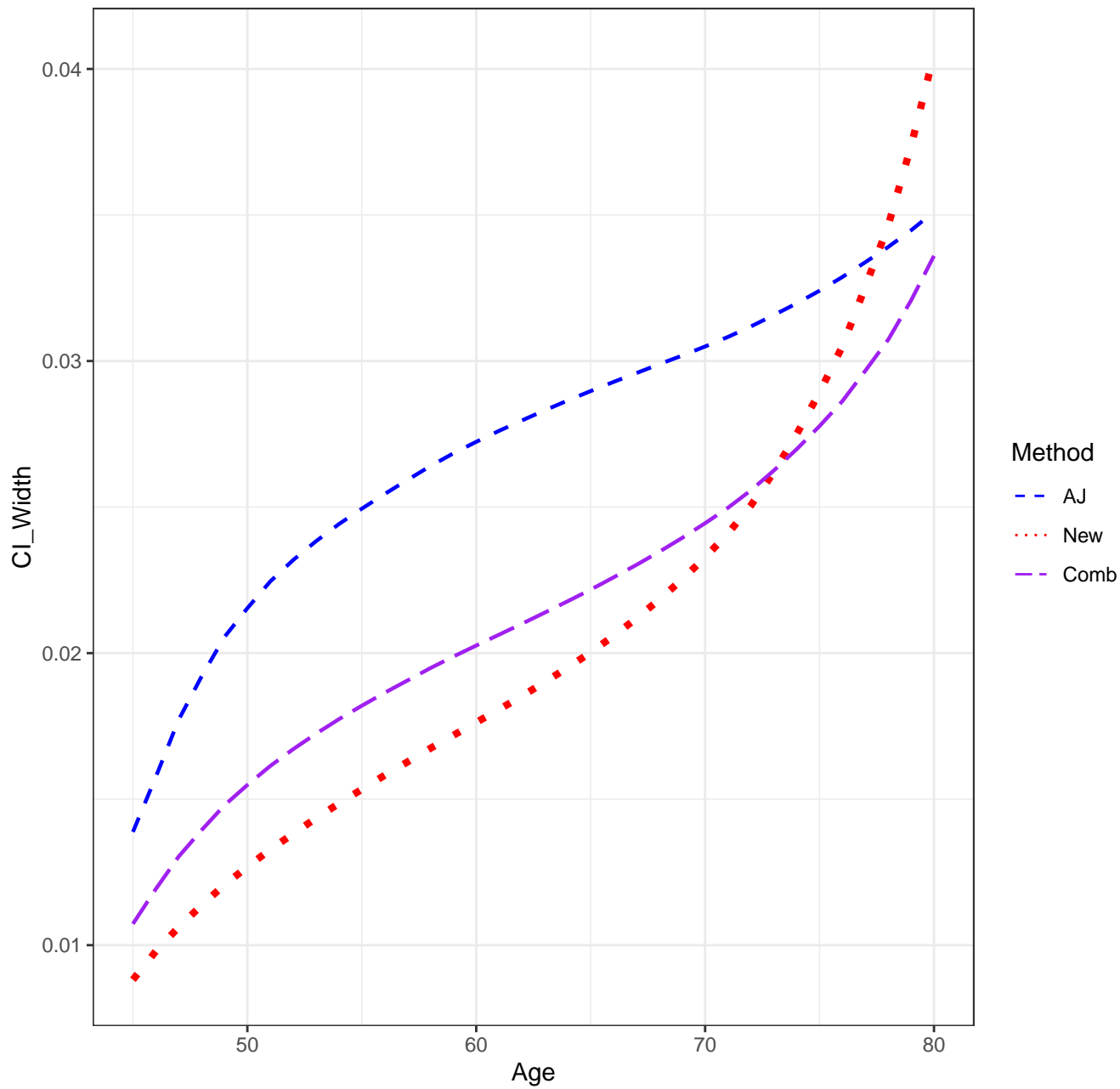
Scenario 1222, n=2500, Combined Estimator, Empirical vs. Estimated SD's



Scenario 1222, n=2500, CICR'S



Scenario 1222, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

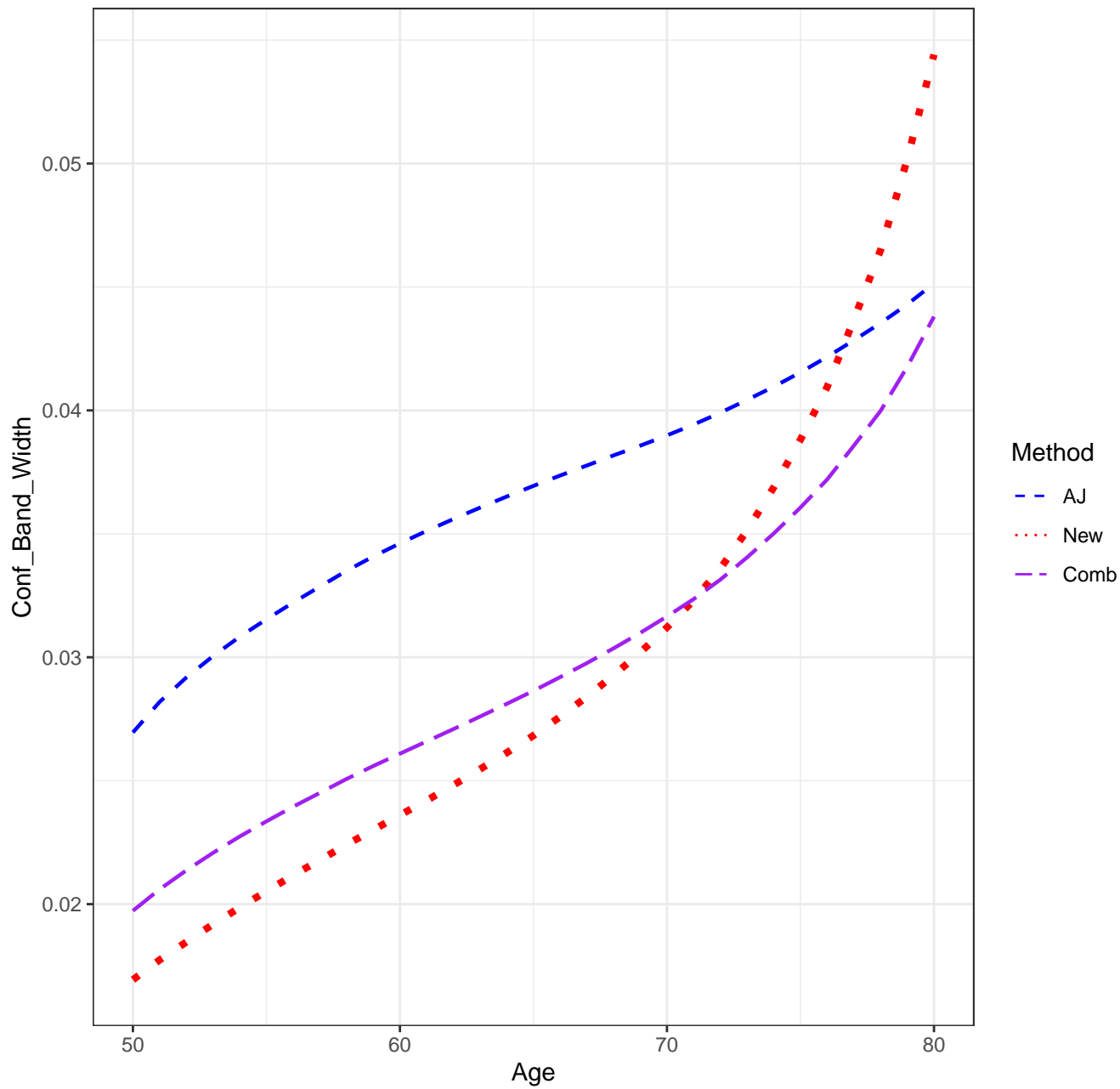
Scenario: 1222

AJ: 0.894

new: 0.921

Combo: 0.899

Scenario 1222, n=2500, Confidence Band Width





## SETTINGS

Scenario: 2111

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

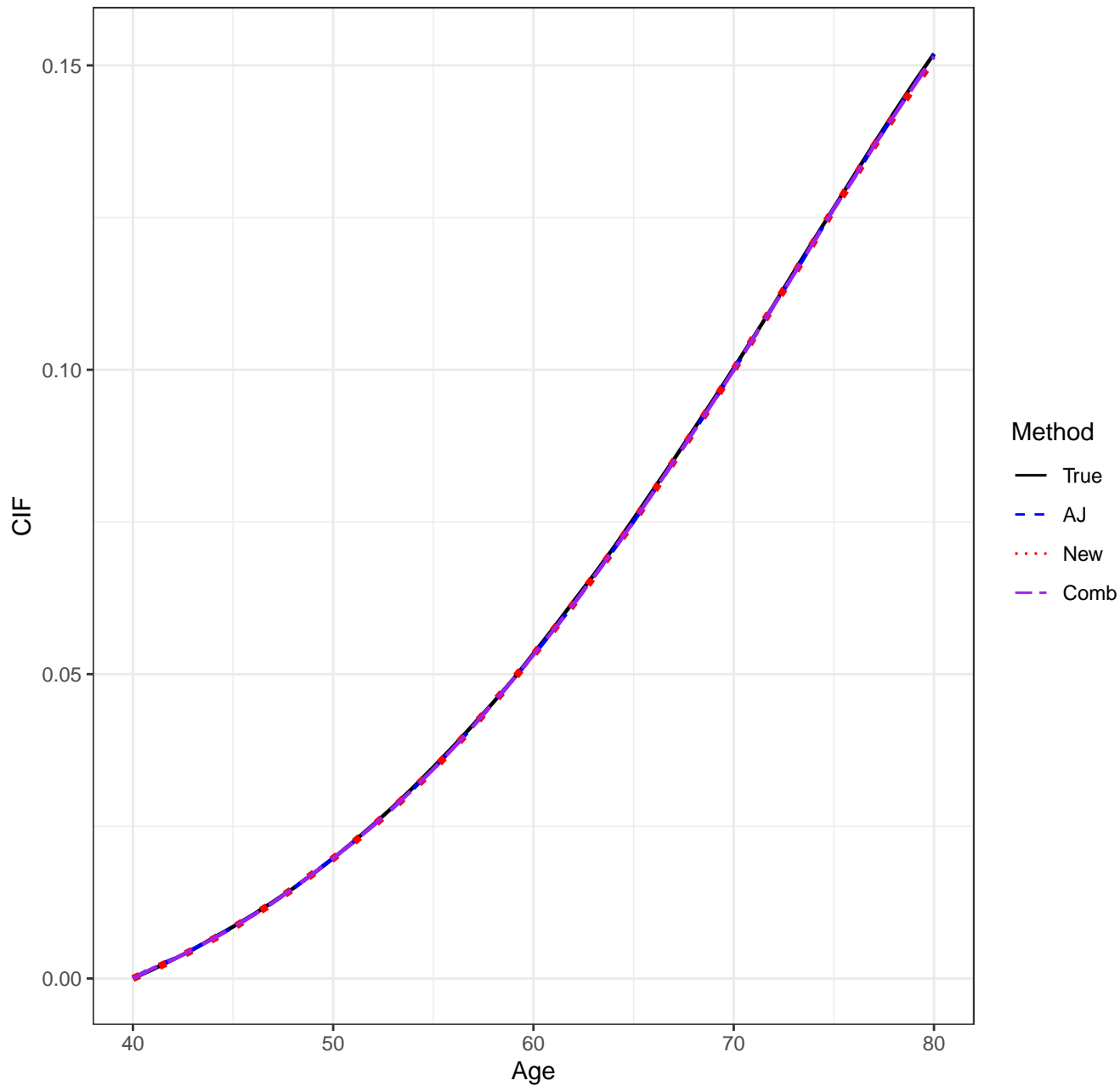
pointwise CI's done by: normal-theory

auxflg = FALSE

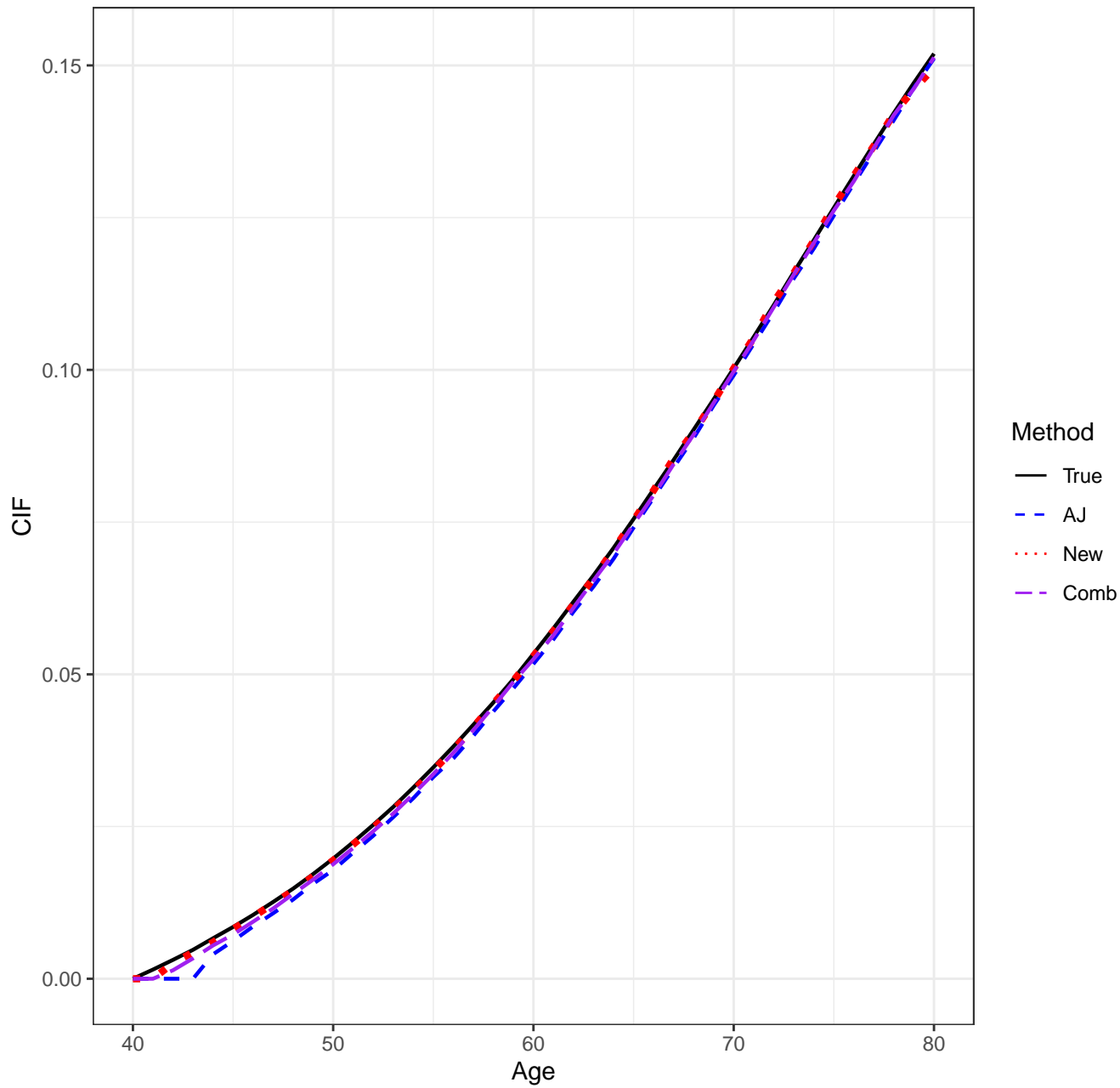
bootstrap weights: normal

Date/Time: 2024-01-12 10:28:01.131425

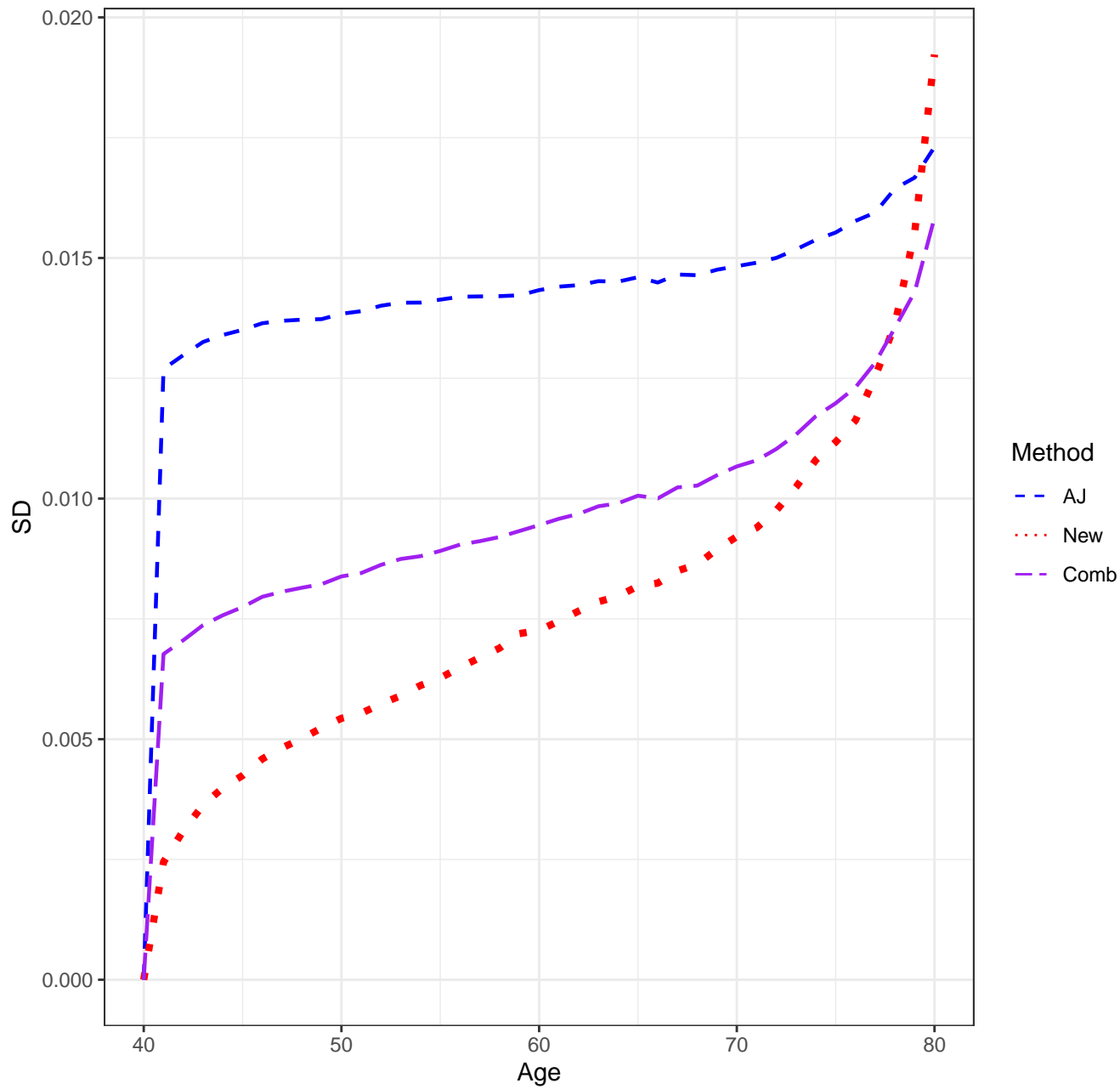
Scenario 2111, n=2500, Means



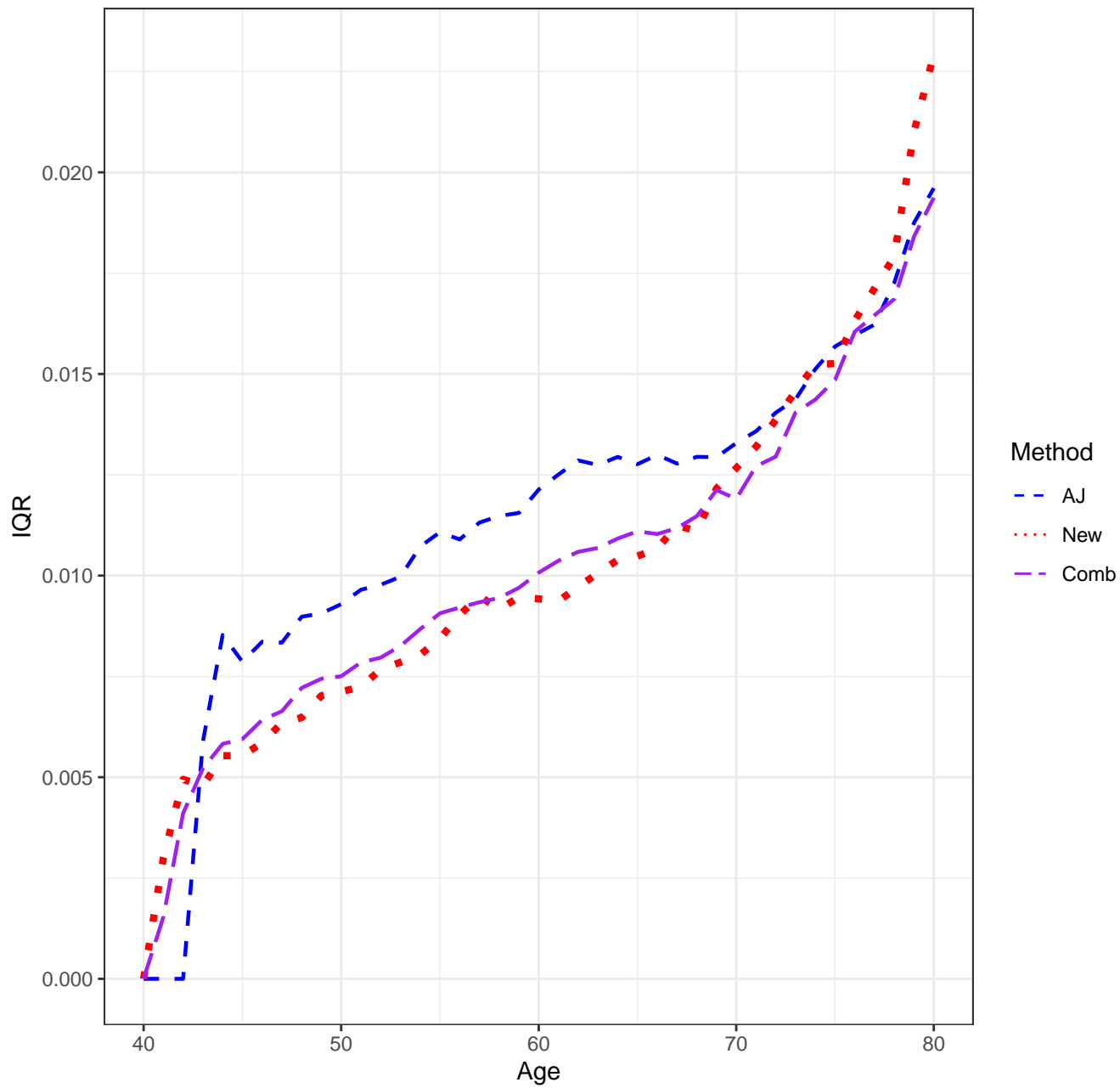
Scenario 2111, n=2500, Medians



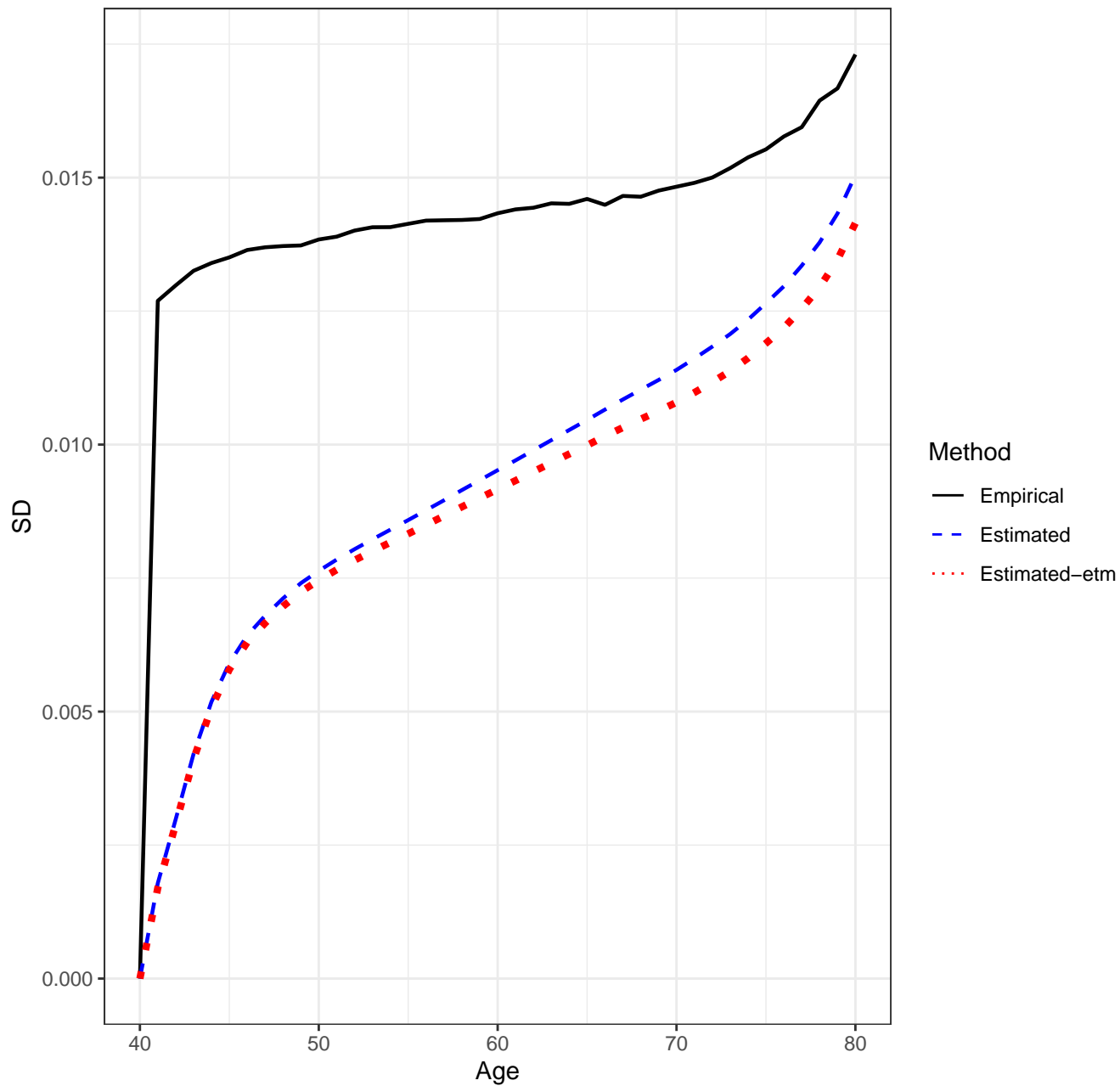
Scenario 2111, n=2500, SD'S



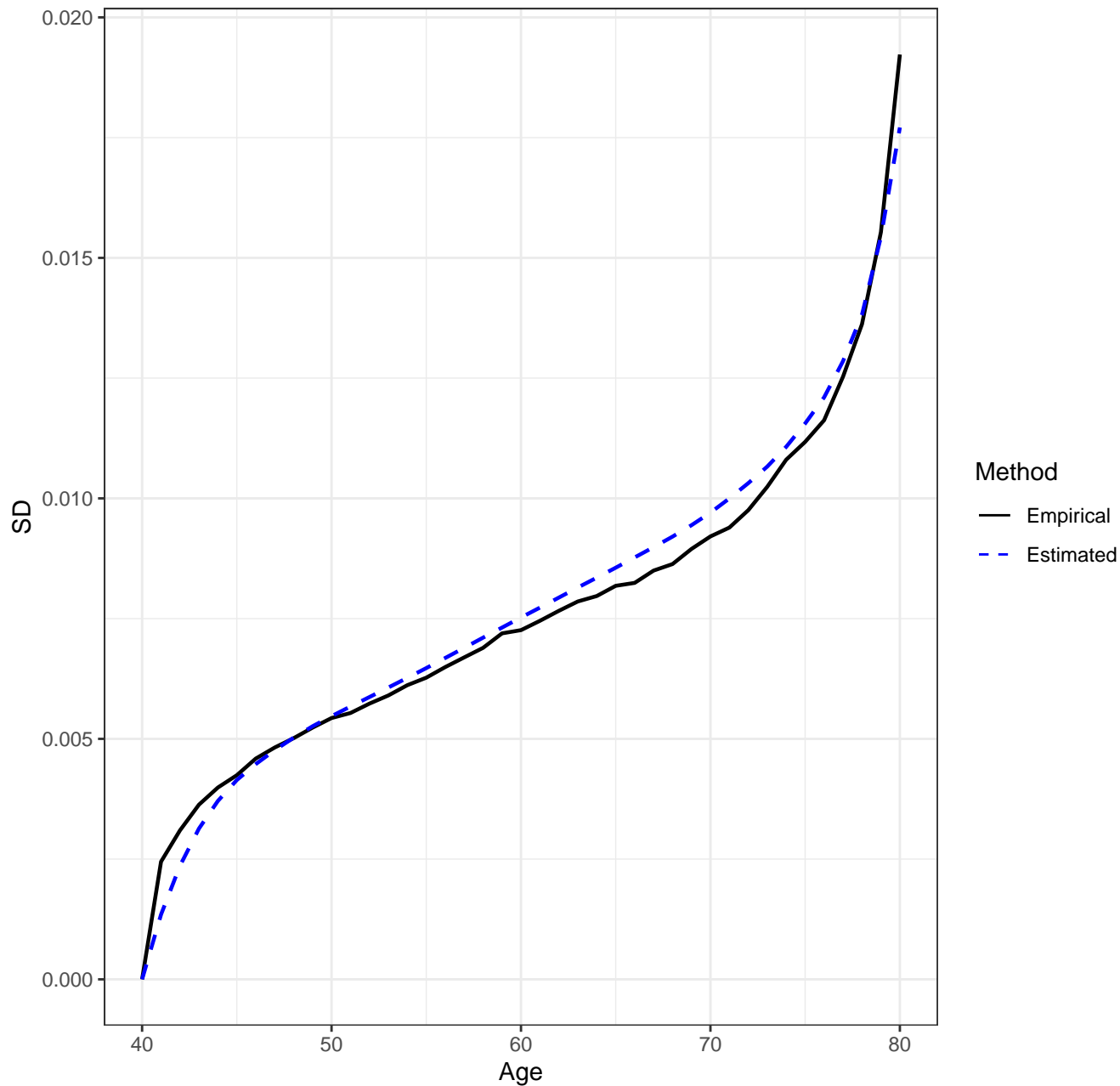
Scenario 2111, n=2500, IQR'S



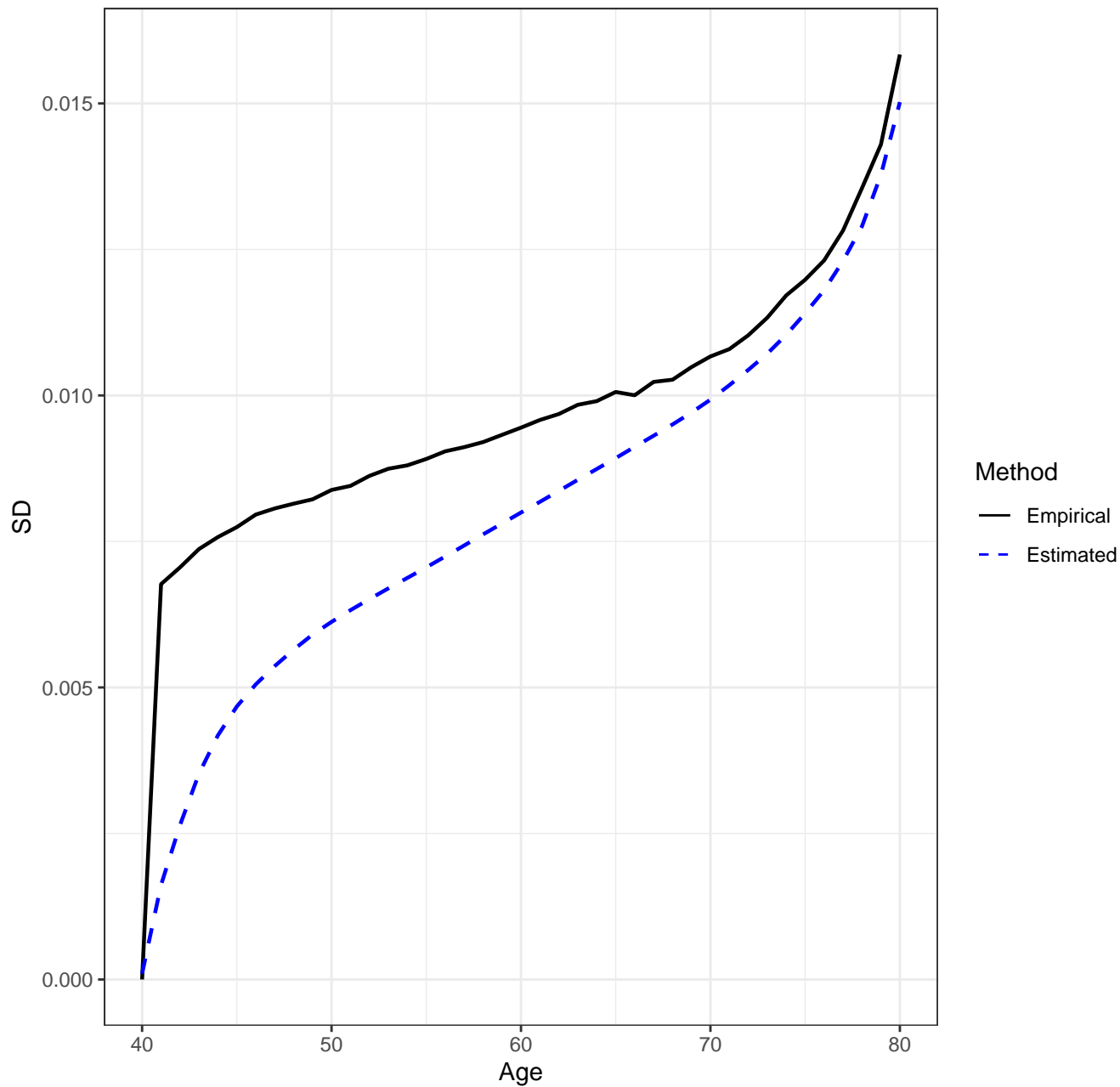
Scenario 2111, n=2500, AJ Estimator, Empirical vs. Estimated SD's



Scenario 2111, n=2500, New Estimator, Empirical vs. Estimated SD's

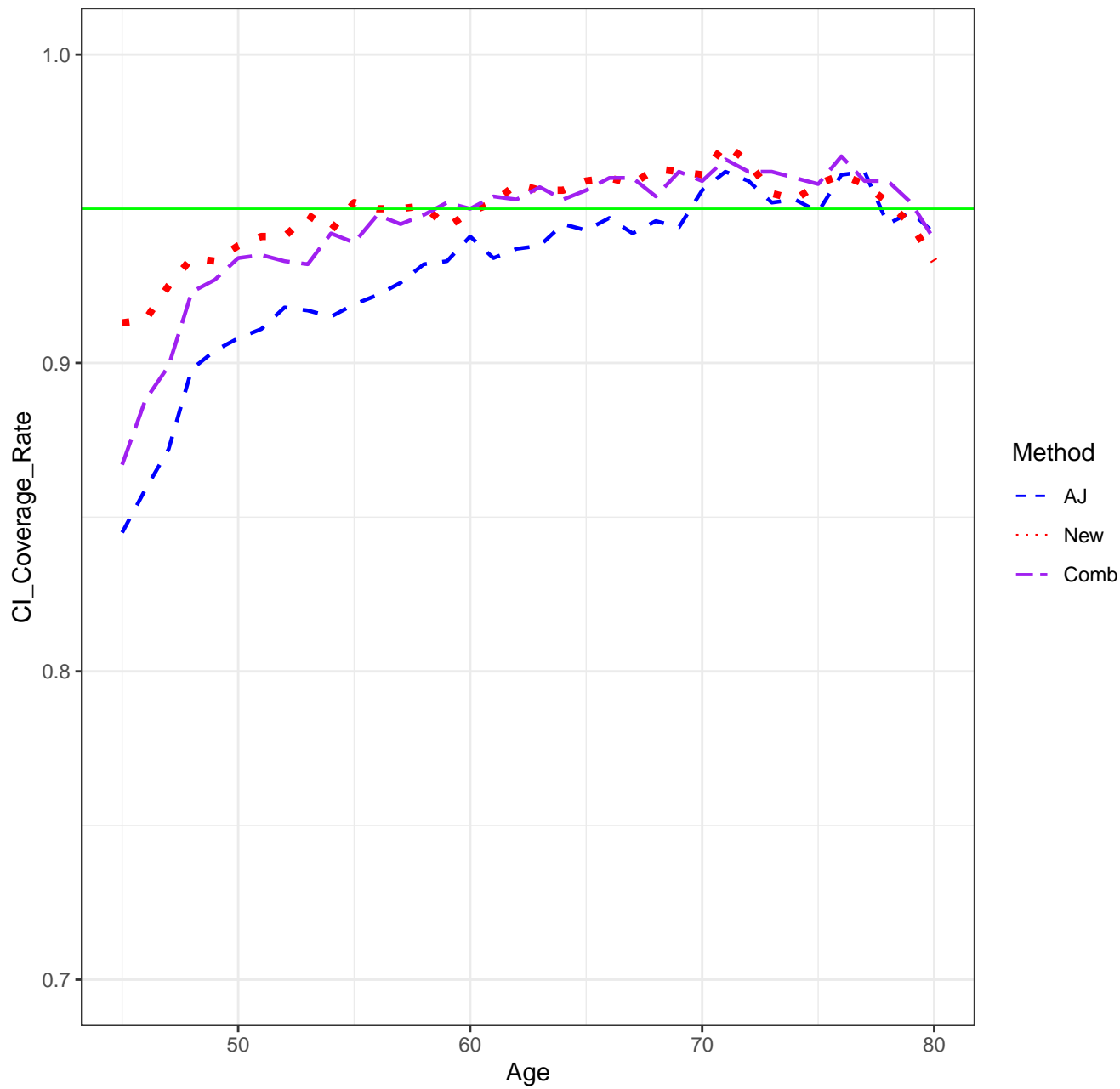


Scenario 2111, n=2500, Combined Estimator, Empirical vs. Estimated SD's

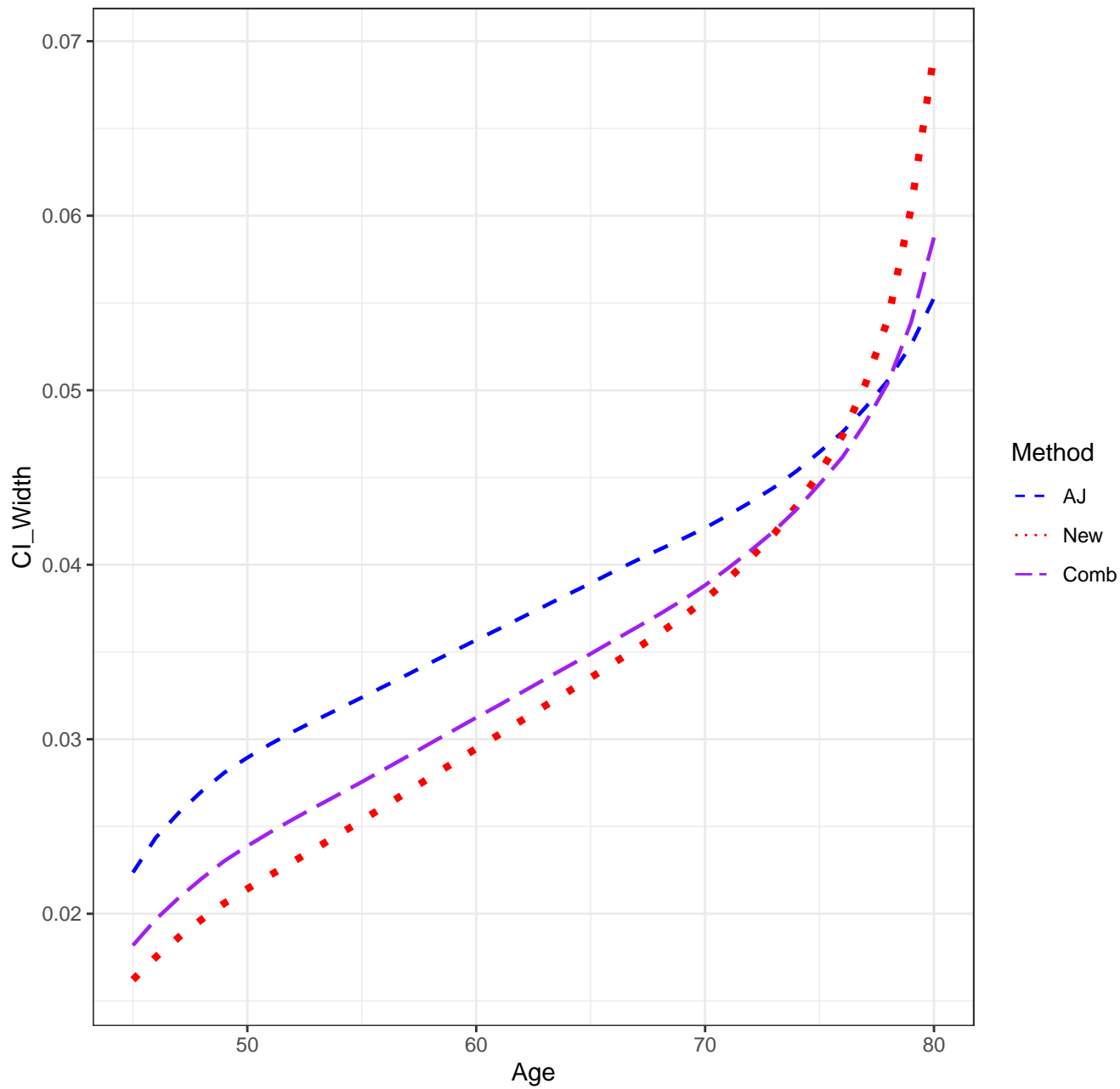




Scenario 2111, n=2500, CICR'S



Scenario 2111, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

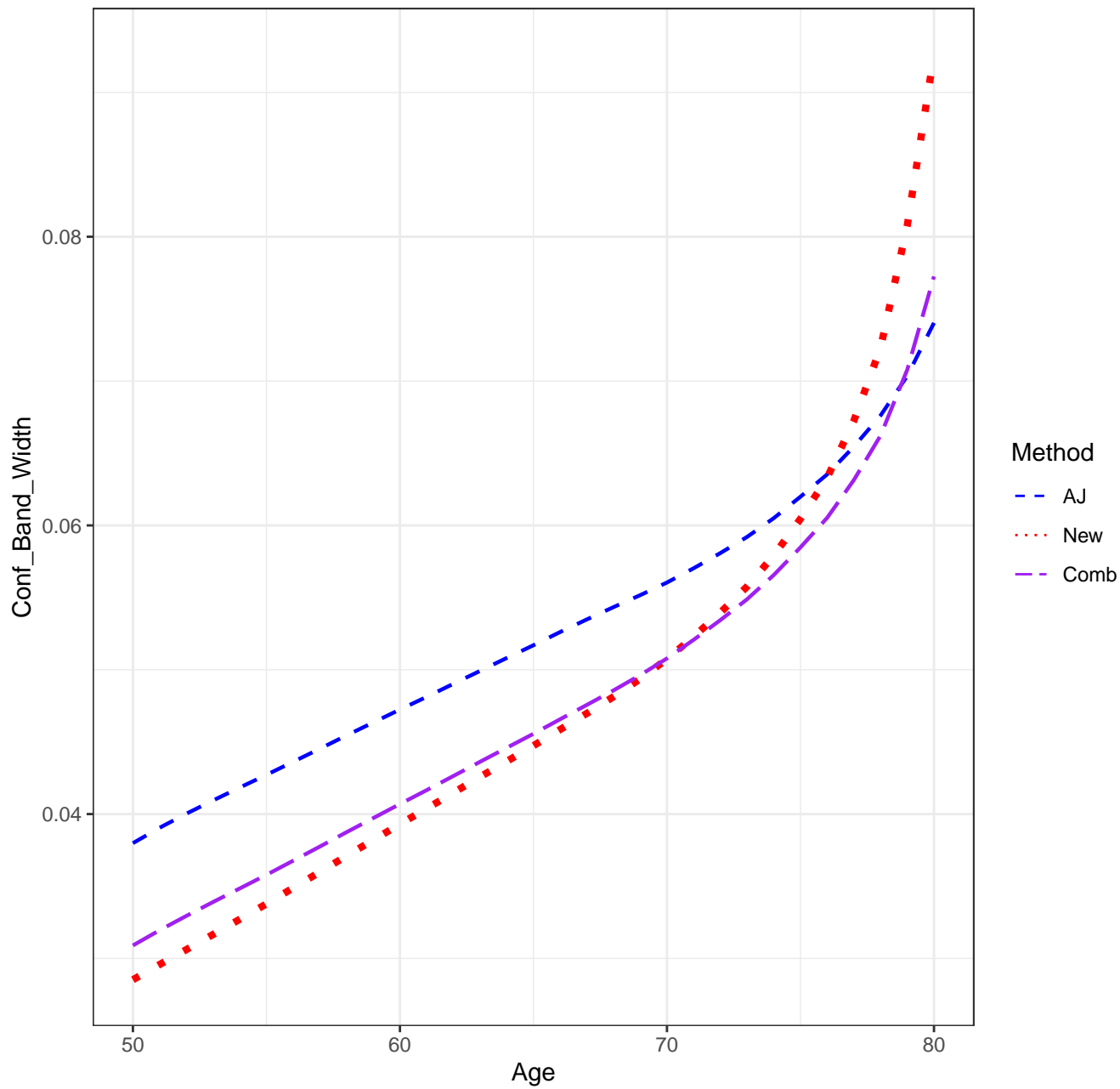
Scenario: 2111

AJ: 0.919

new: 0.921

Combo: 0.926

Scenario 2111, n=2500, Confidence Band Width



## SETTINGS

Scenario: 2112

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

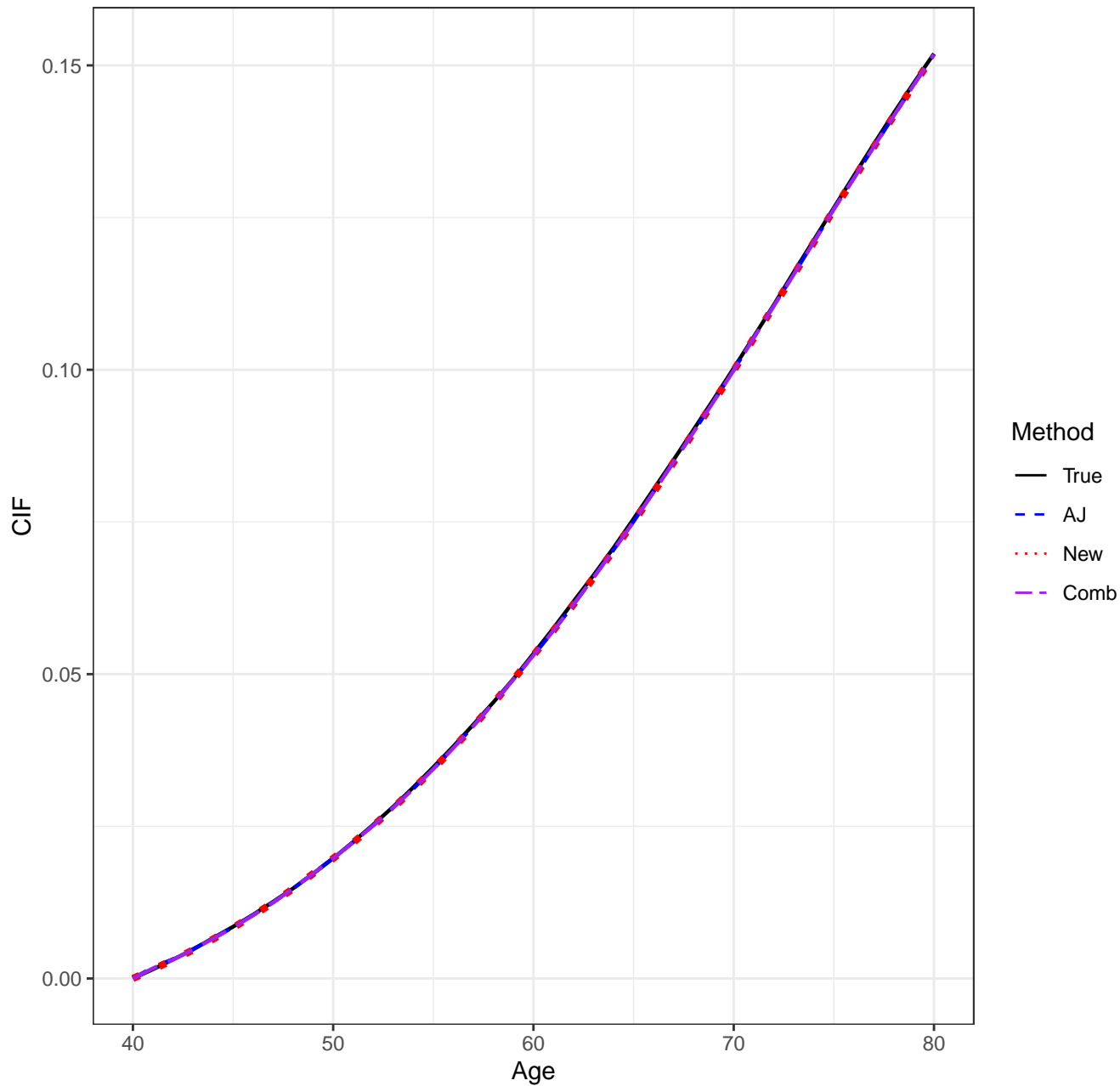
pointwise CI's done by: normal-theory

auxflg = FALSE

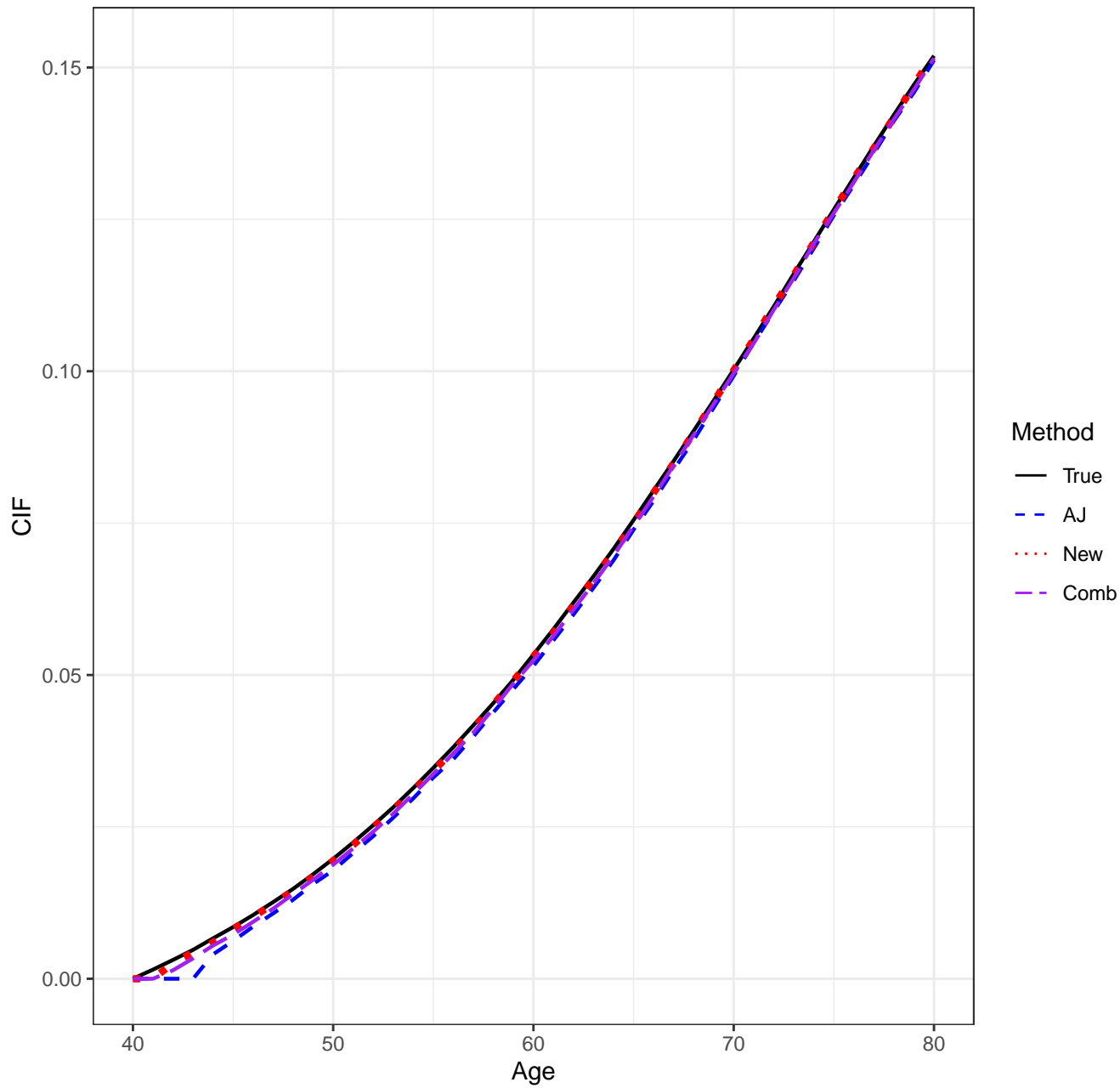
bootstrap weights: normal

Date/Time: 2024-01-13 22:41:35.072619

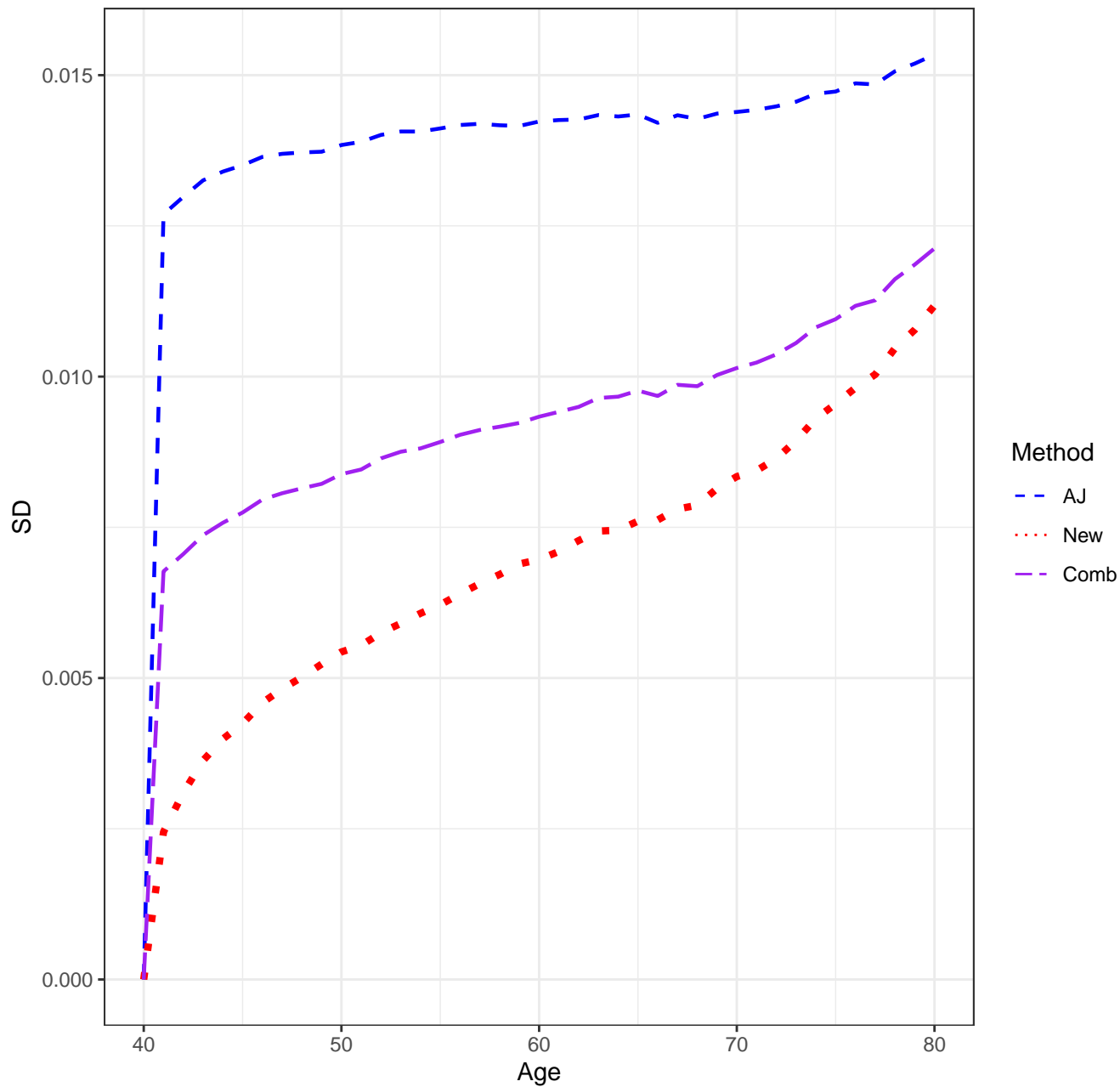
Scenario 2112, n=2500, Means



Scenario 2112, n=2500, Medians

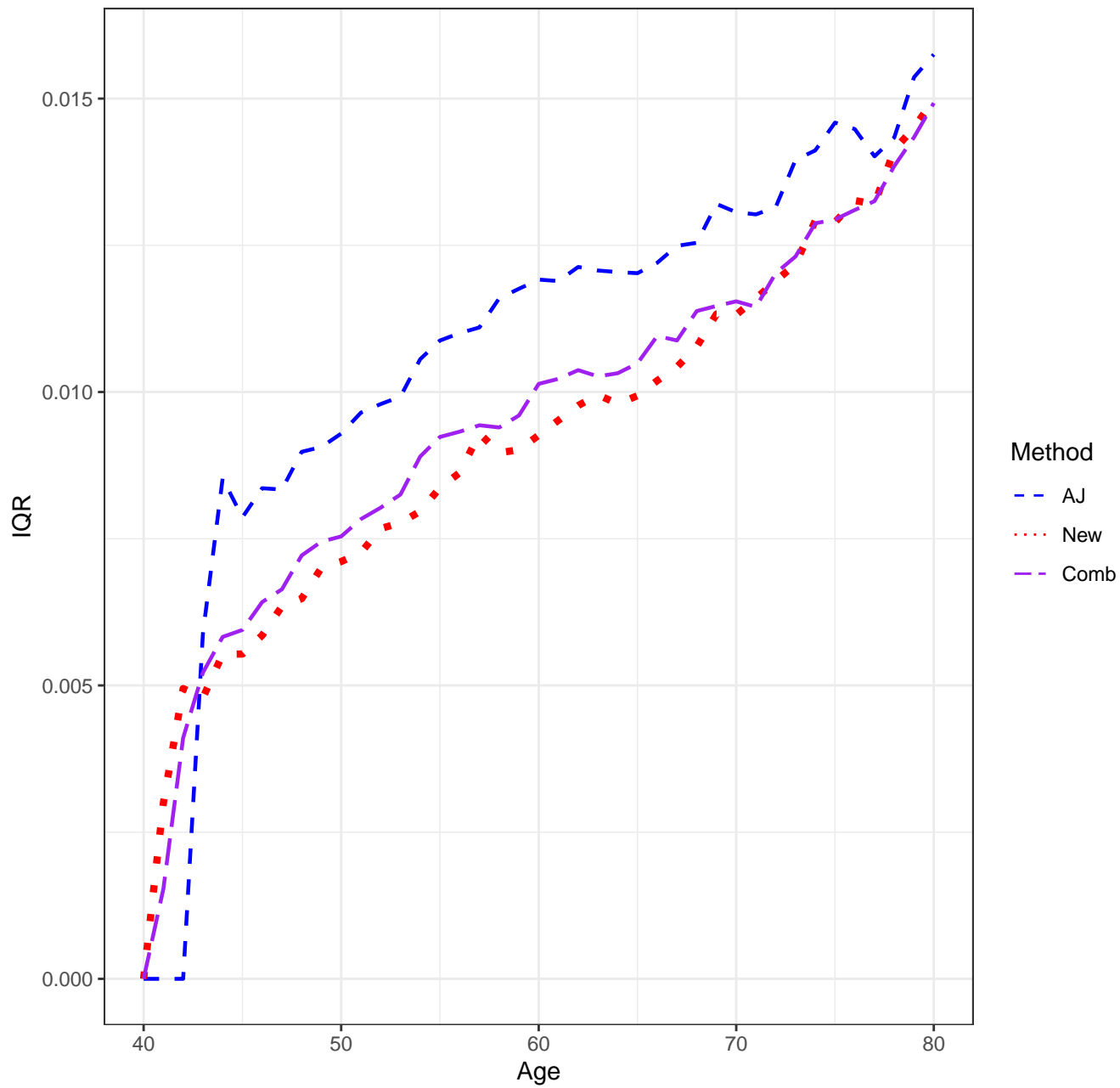


Scenario 2112, n=2500, SD'S

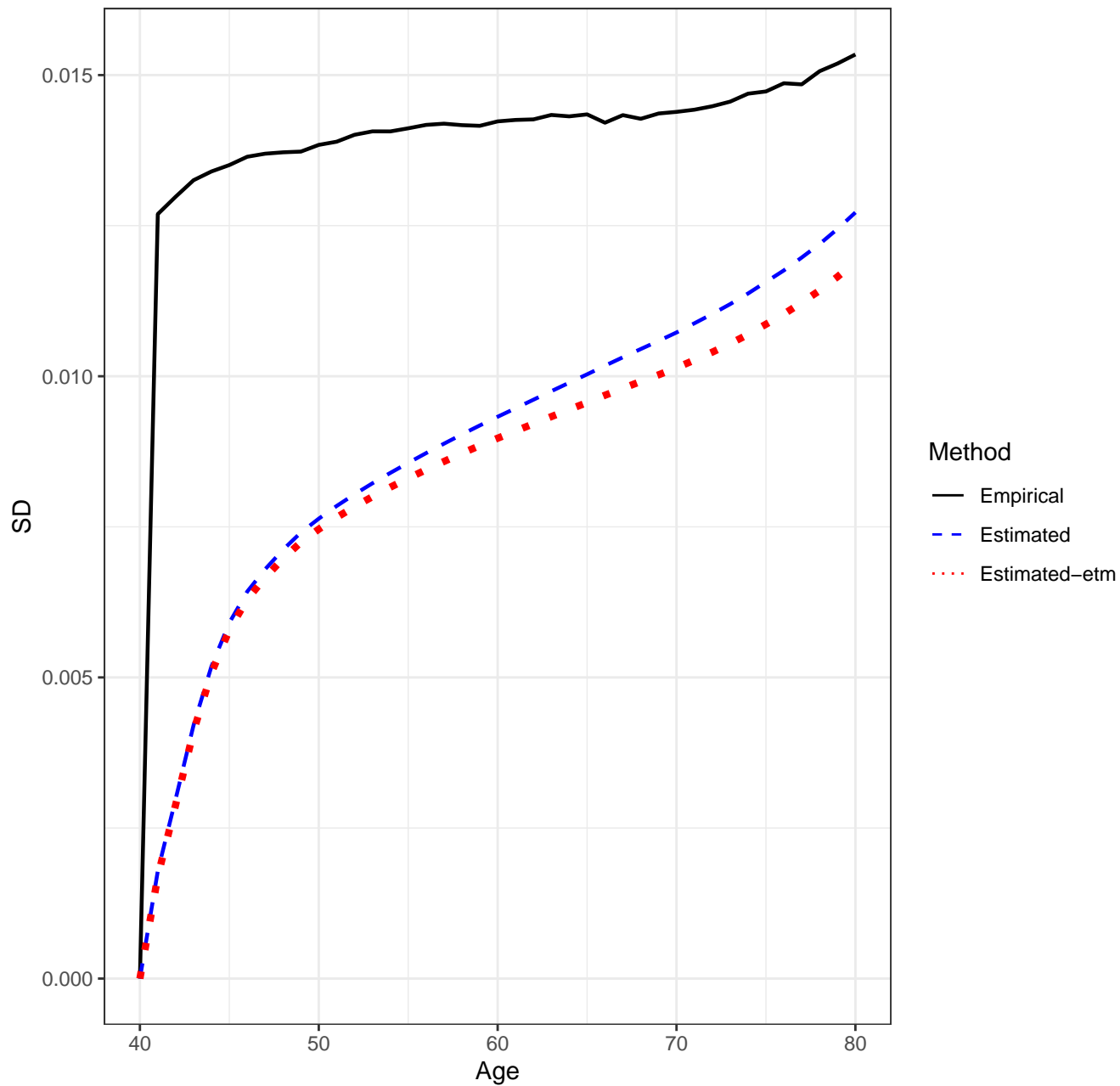




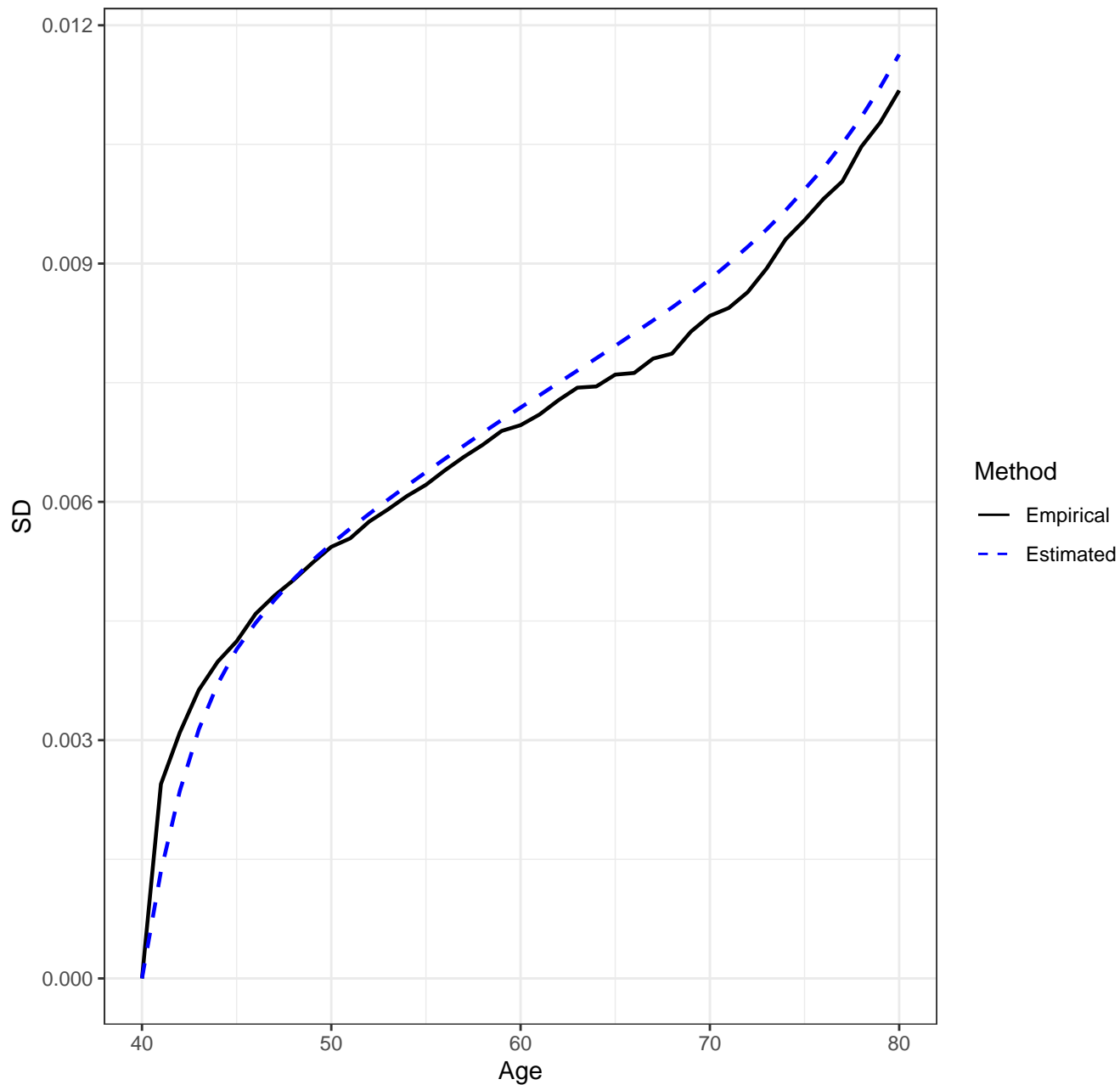
Scenario 2112, n=2500, IQR'S



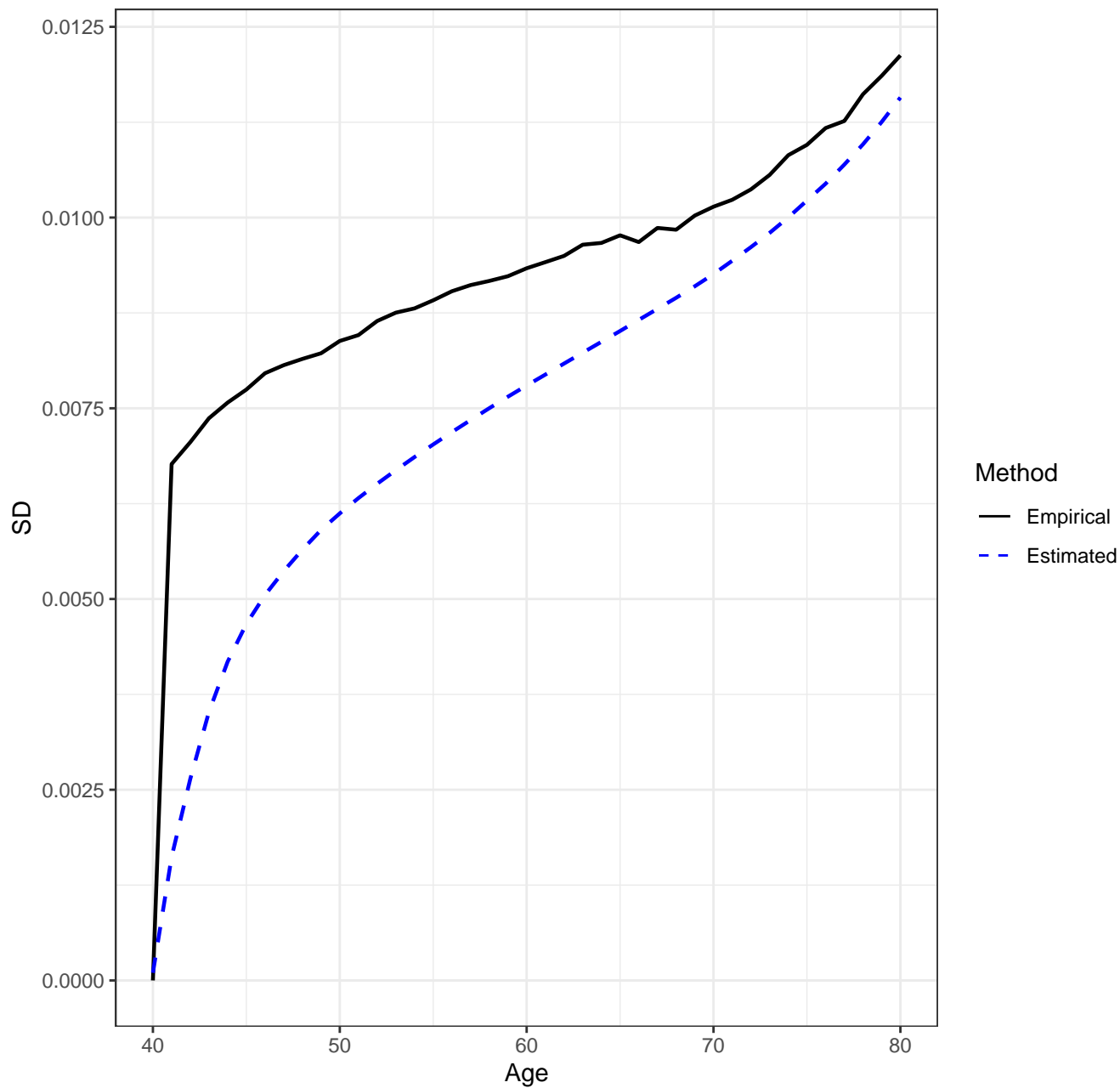
Scenario 2112, n=2500, AJ Estimator, Empirical vs. Estimated SD's



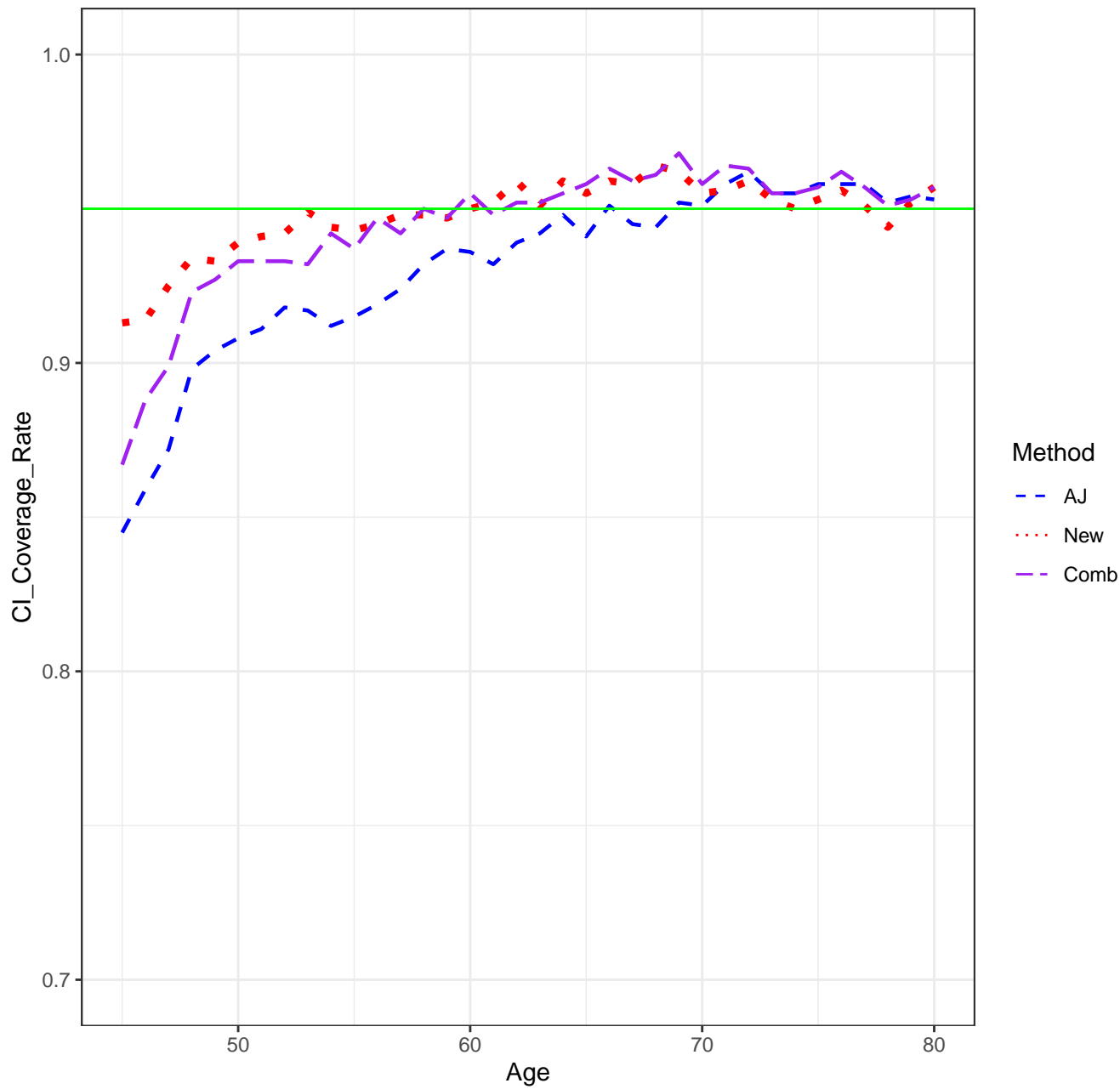
Scenario 2112, n=2500, New Estimator, Empirical vs. Estimated SD's



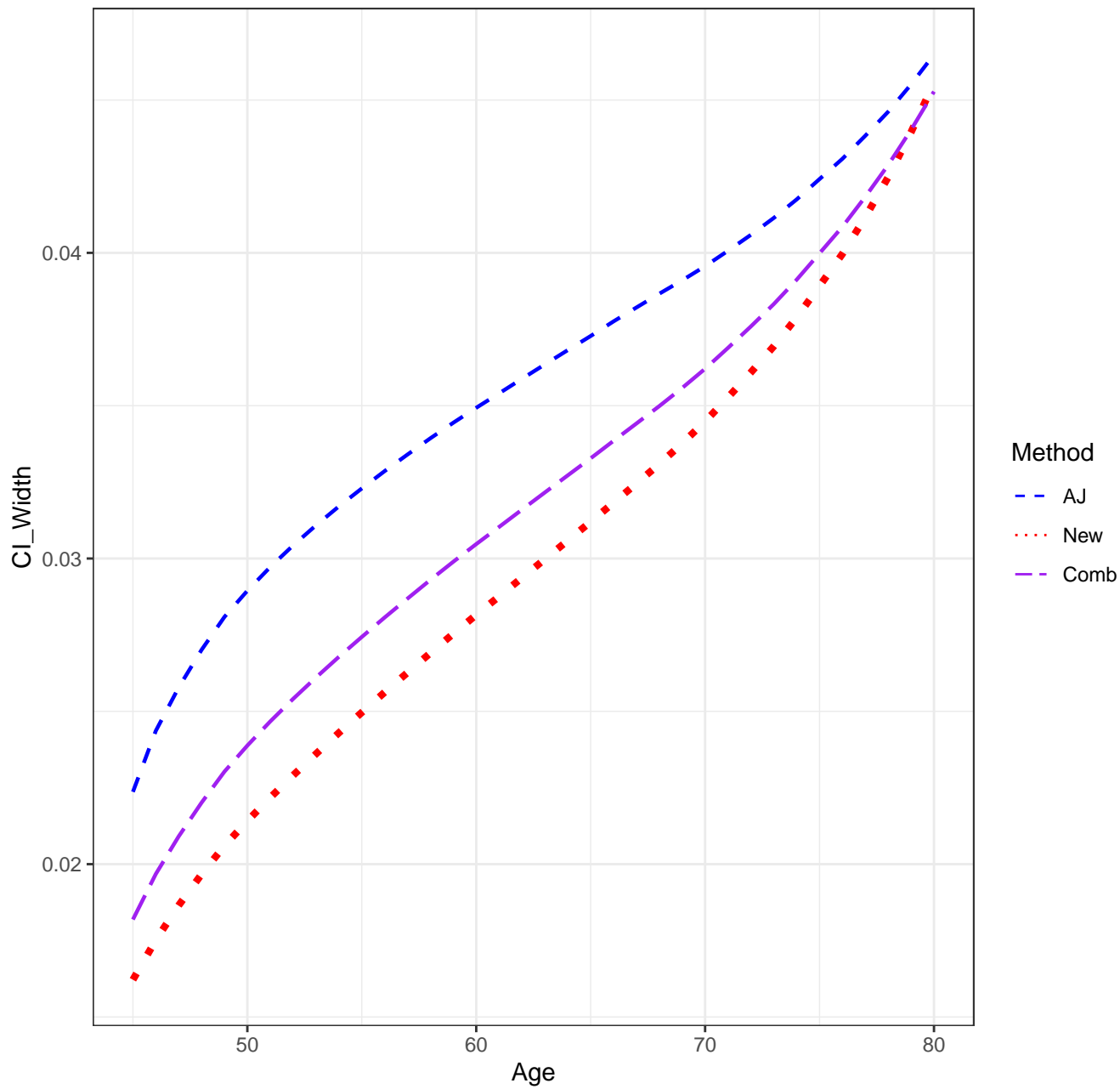
Scenario 2112, n=2500, Combined Estimator, Empirical vs. Estimated SD's



Scenario 2112, n=2500, CICR'S



Scenario 2112, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

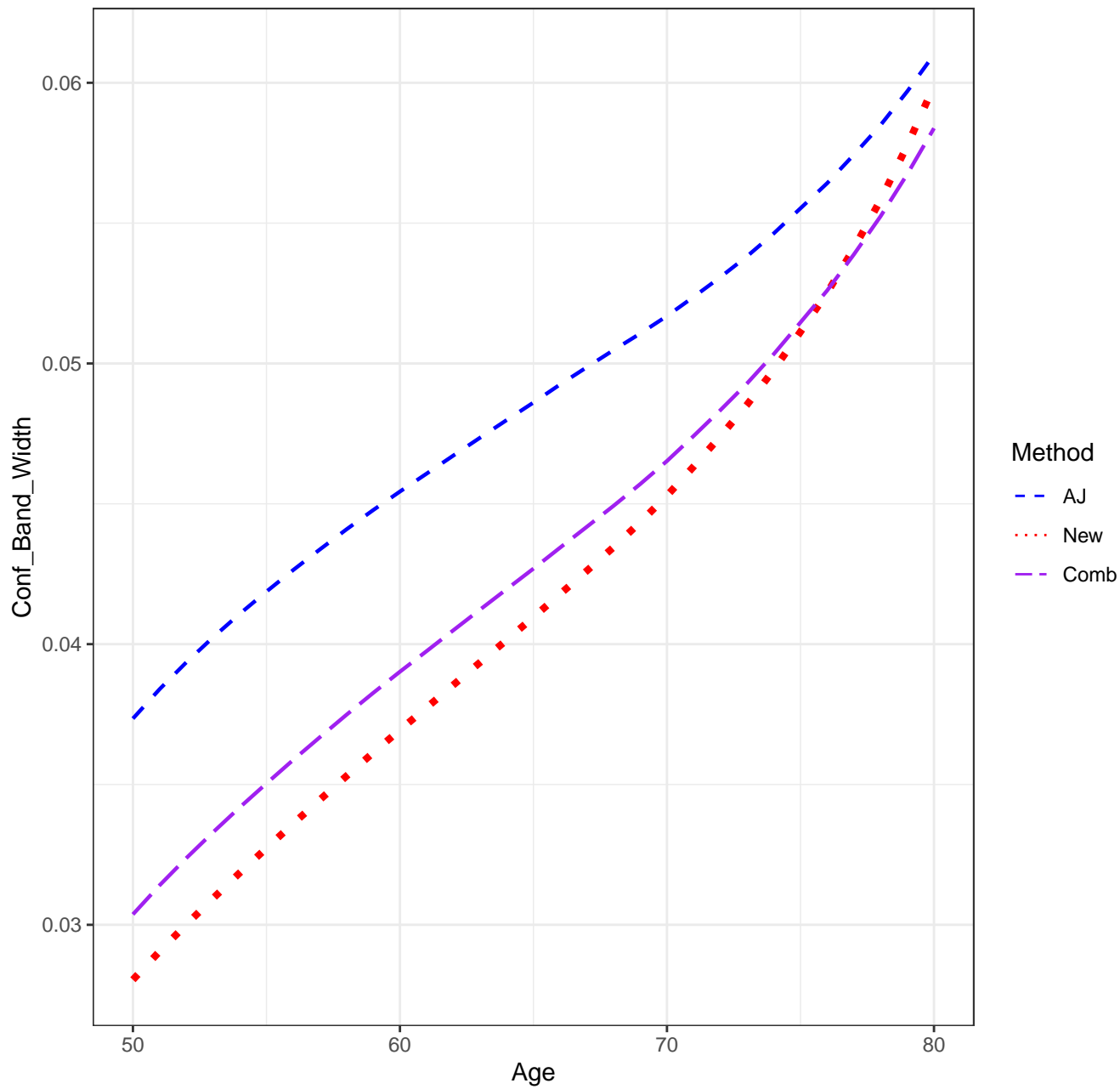
Scenario: 2112

AJ: 0.923

new: 0.94

Combo: 0.934

Scenario 2112, n=2500, Confidence Band Width





## SETTINGS

Scenario: 2121

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

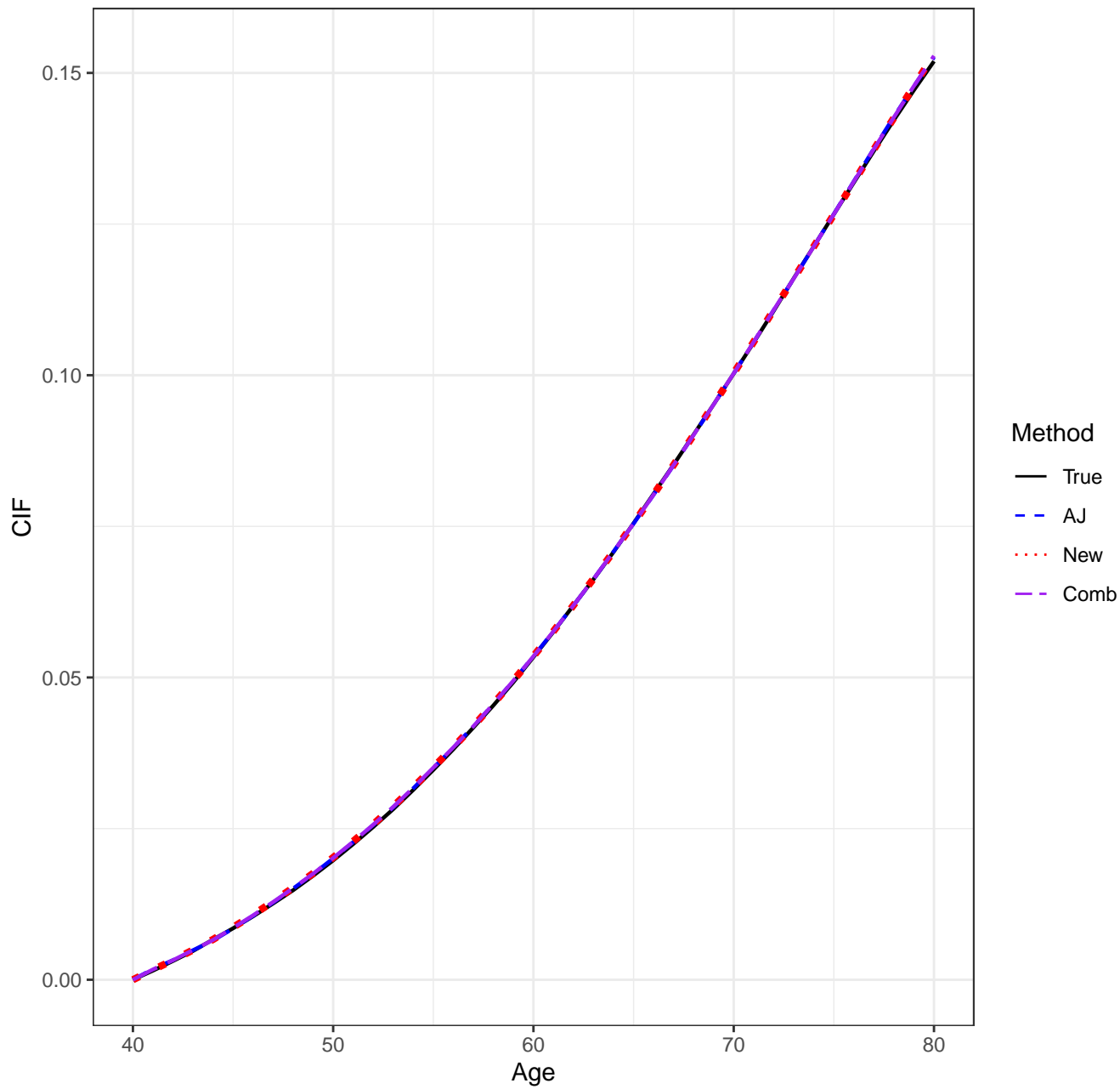
pointwise CI's done by: normal-theory

auxflg = FALSE

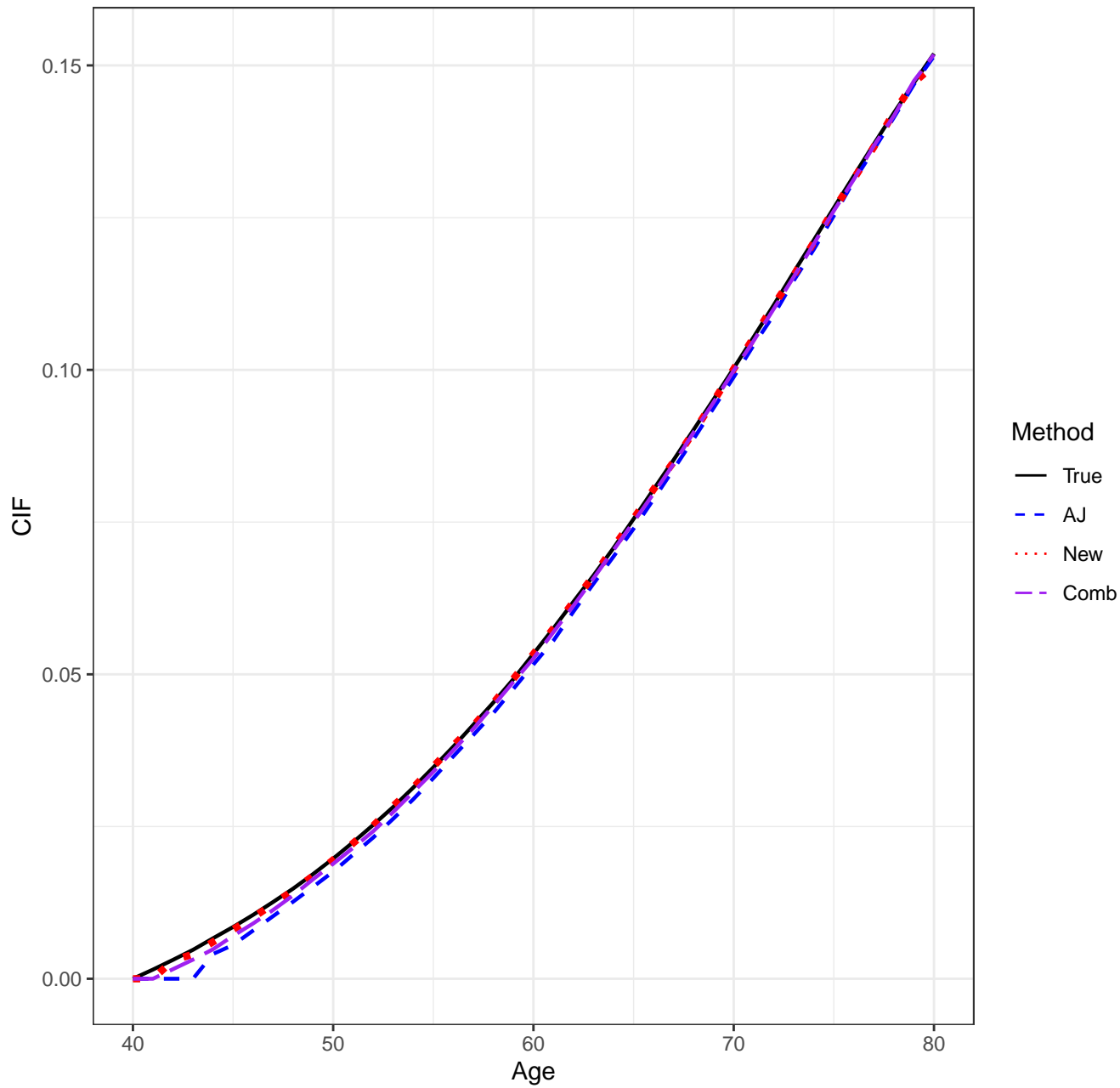
bootstrap weights: normal

Date/Time: 2024-01-13 23:25:35.860464

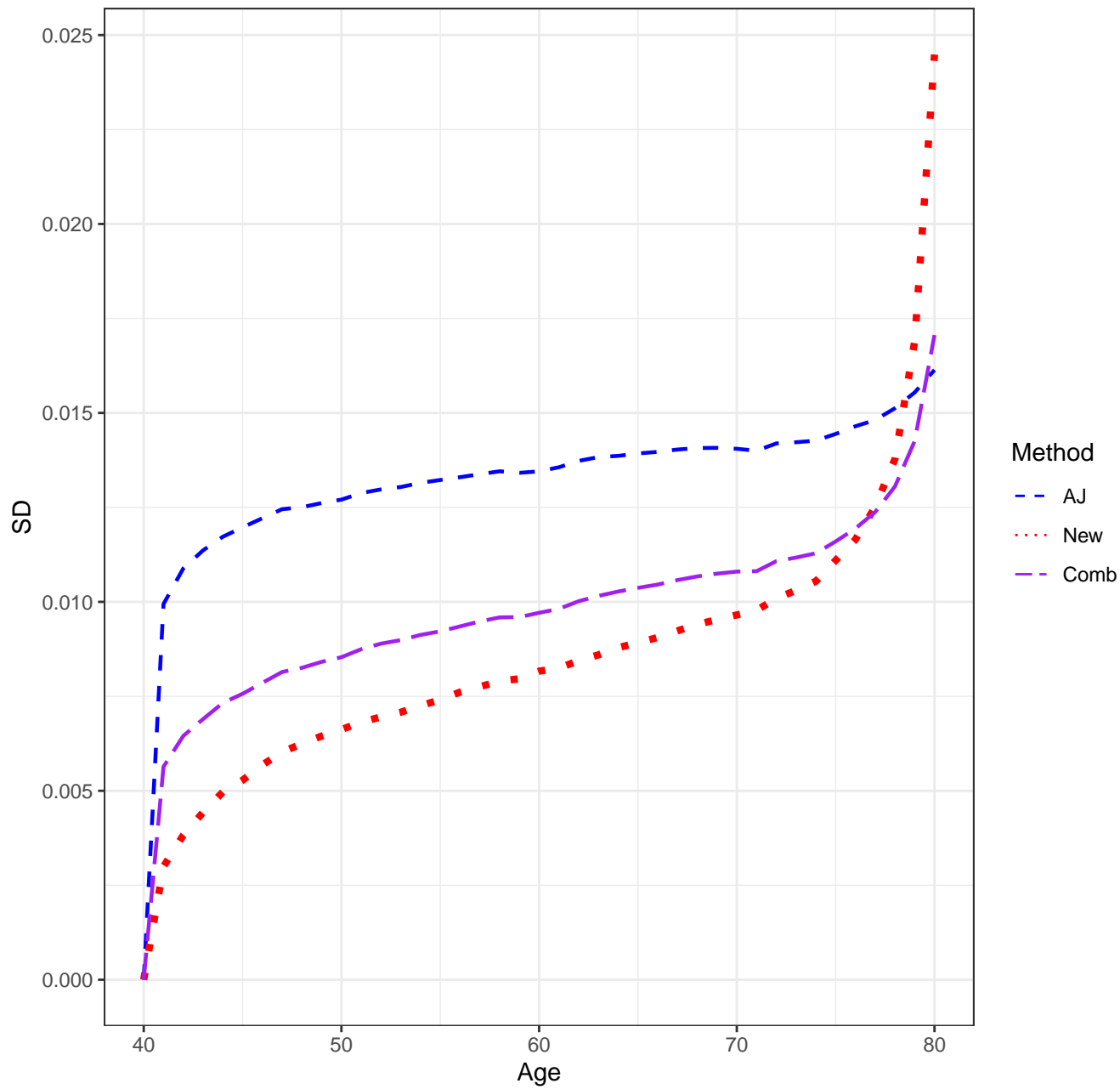
Scenario 2121, n=2500, Means



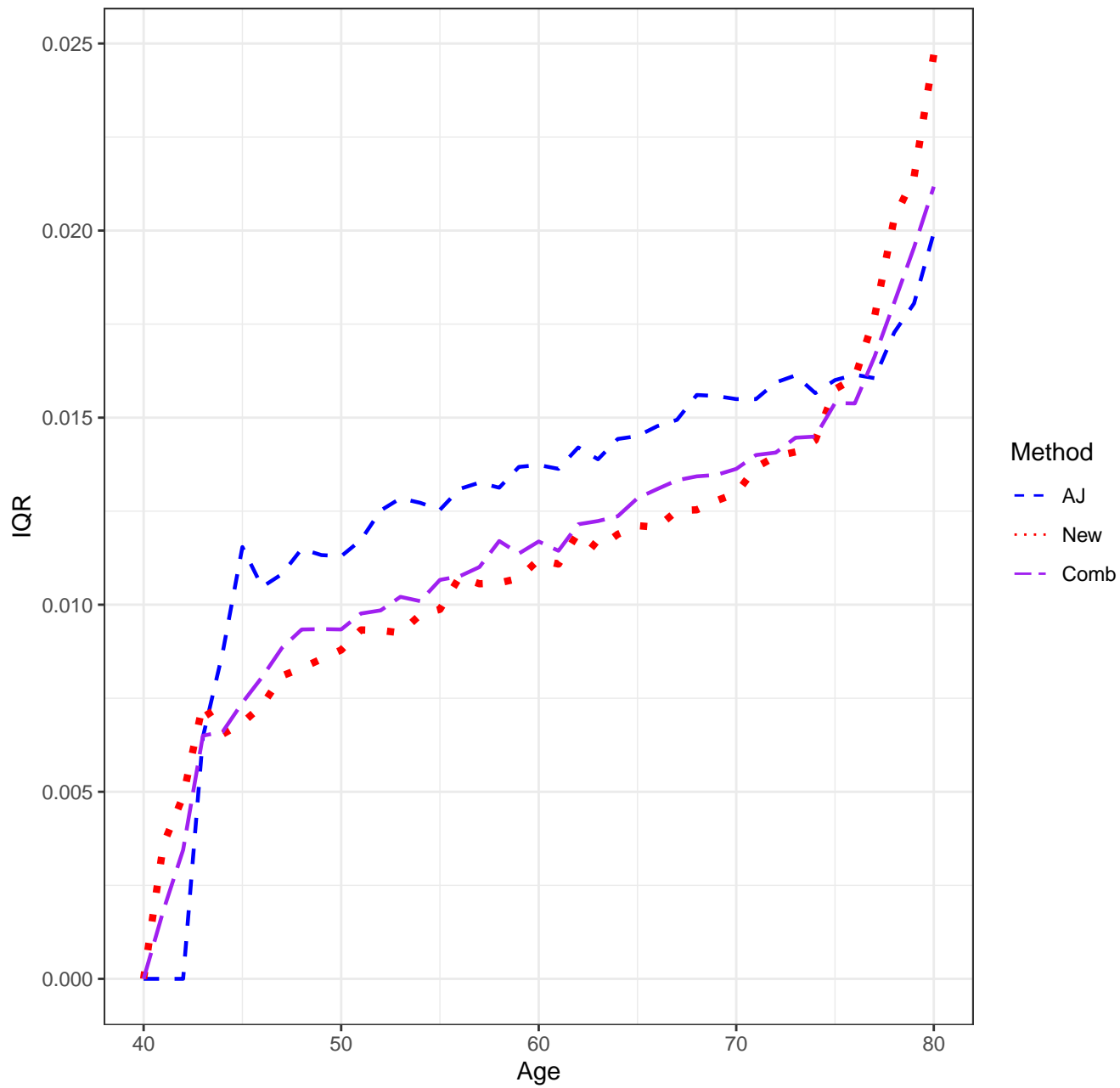
Scenario 2121, n=2500, Medians



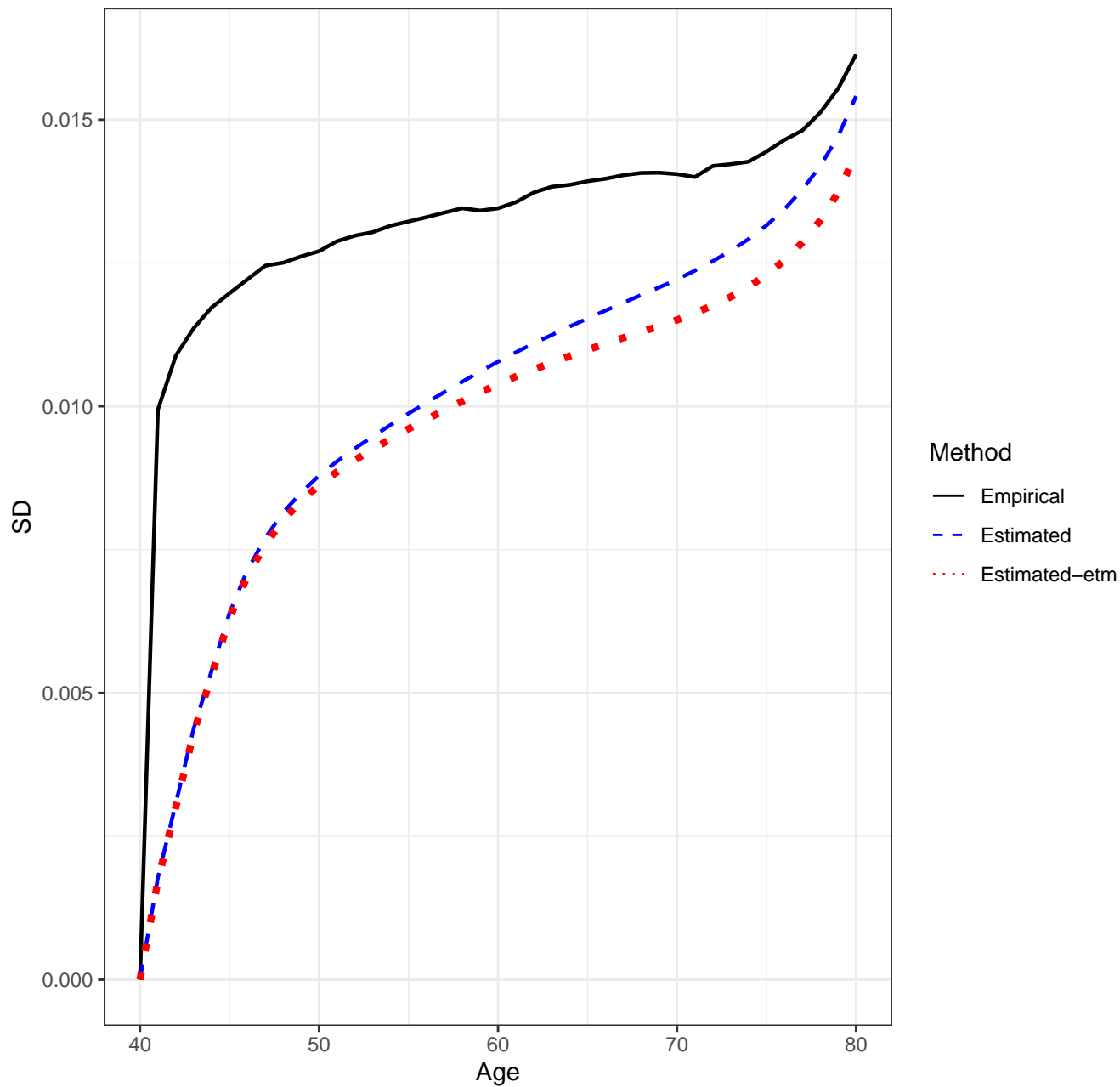
Scenario 2121, n=2500, SD'S



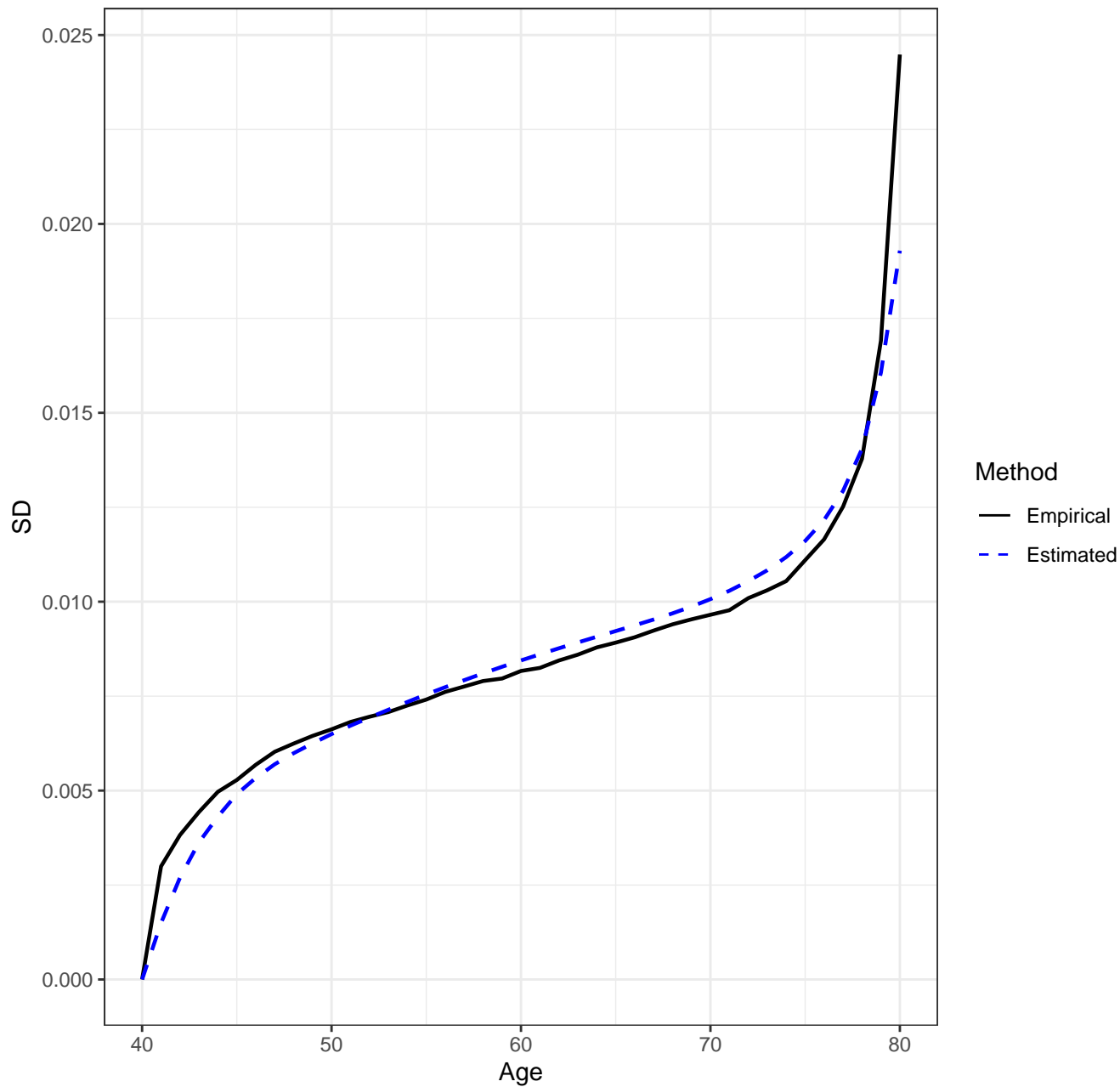
Scenario 2121, n=2500, IQR'S



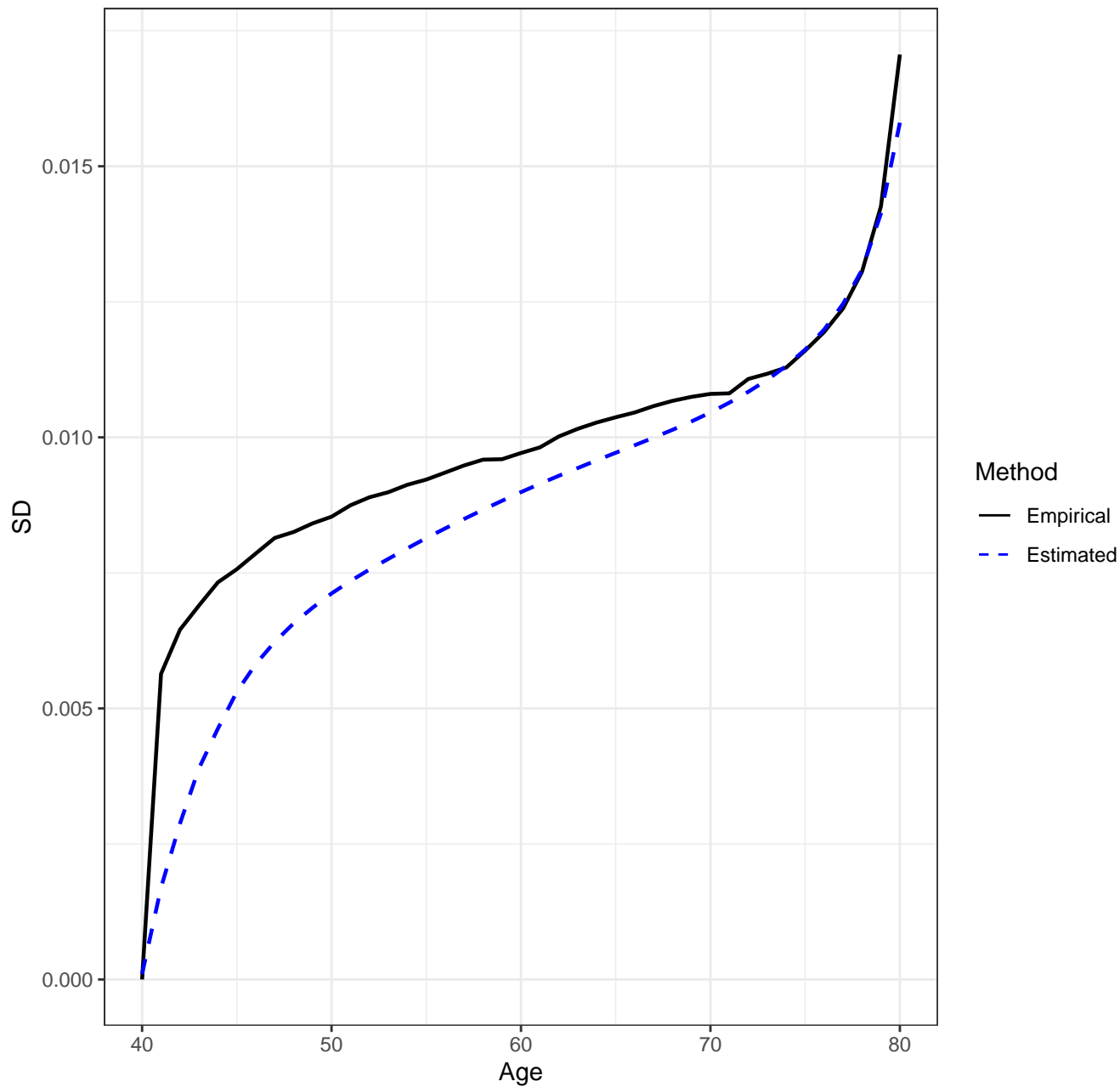
Scenario 2121, n=2500, AJ Estimator, Empirical vs. Estimated SD's



Scenario 2121, n=2500, New Estimator, Empirical vs. Estimated SD's

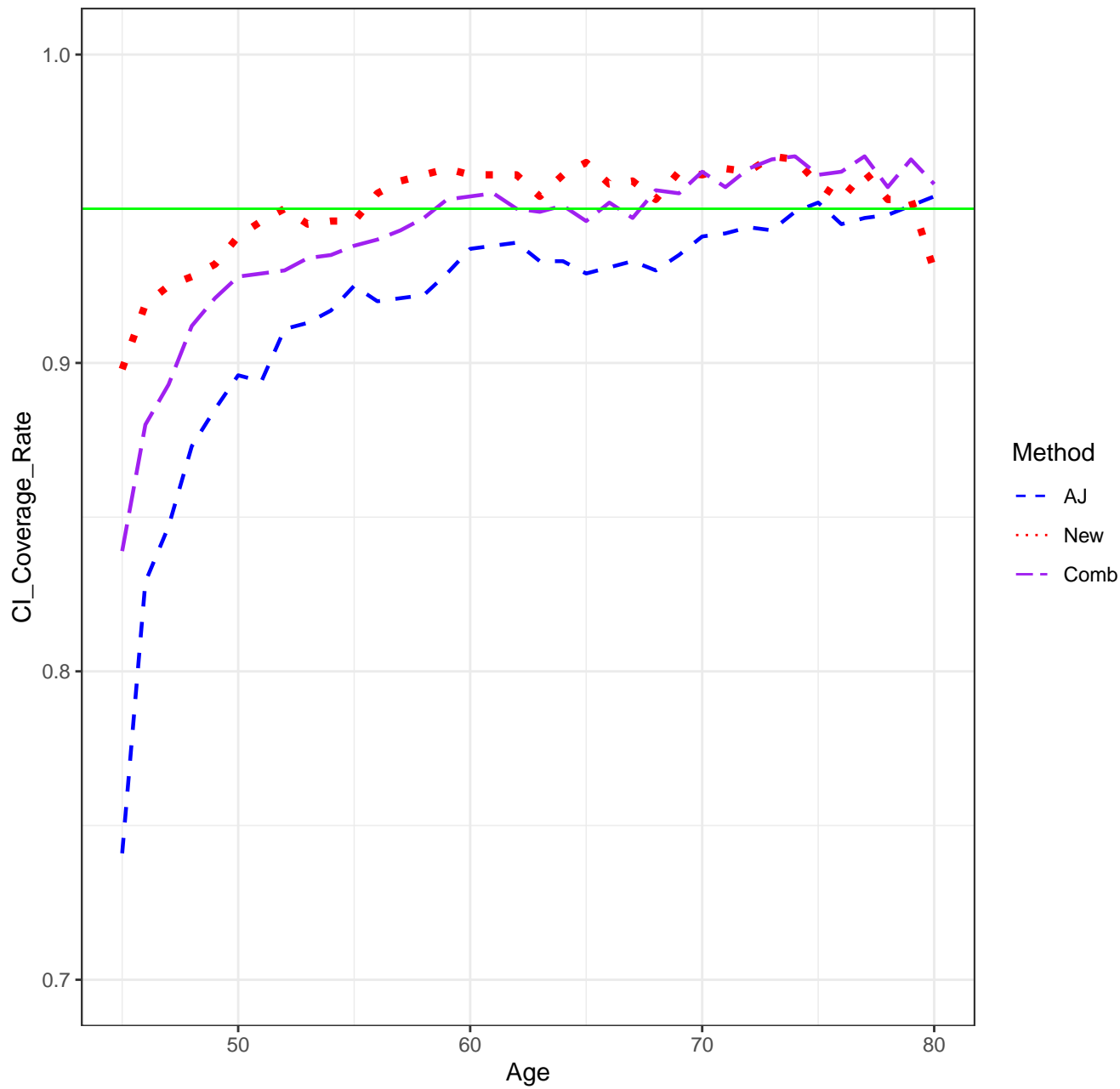


Scenario 2121, n=2500, Combined Estimator, Empirical vs. Estimated SD's

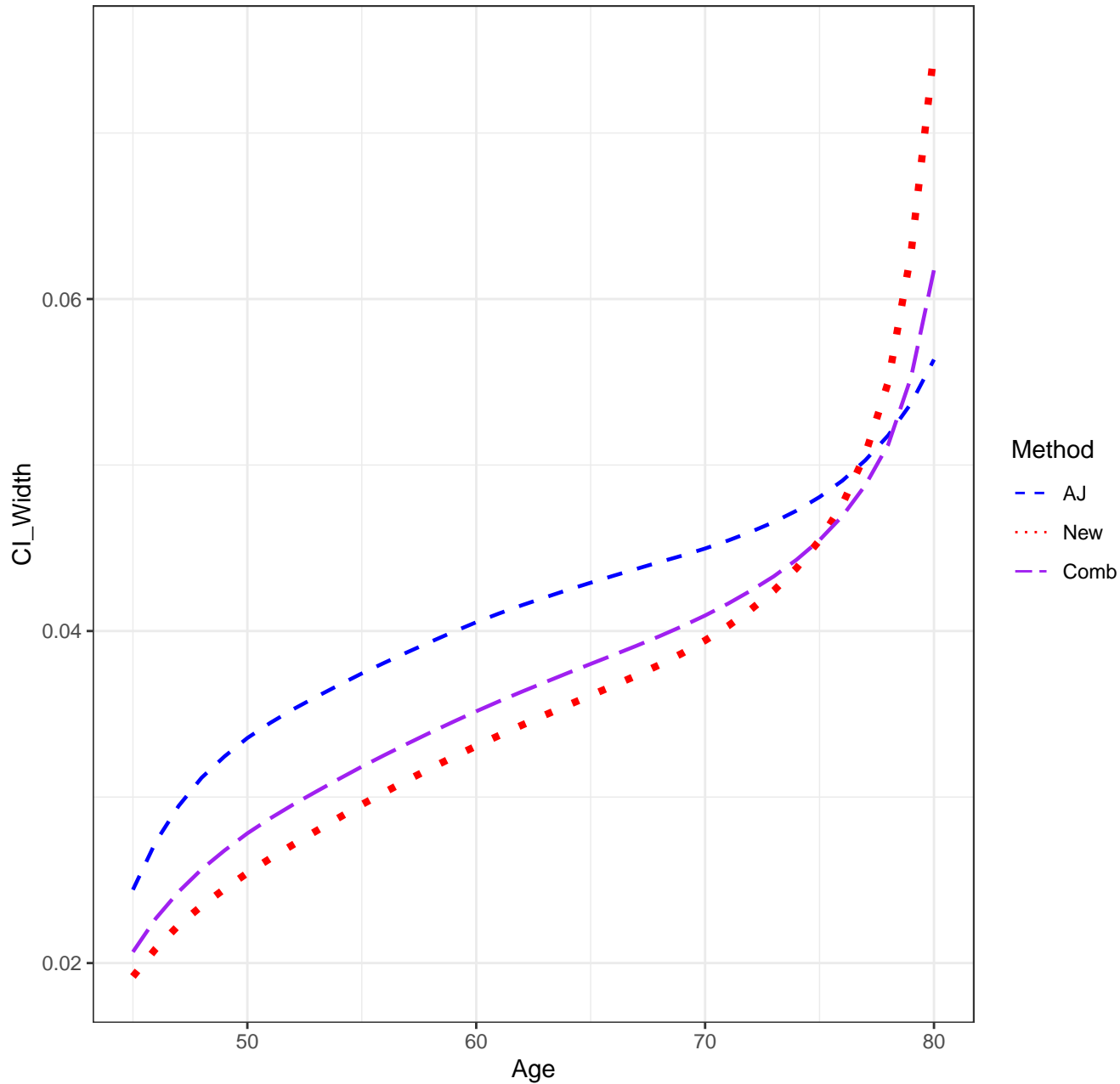




Scenario 2121, n=2500, CICR'S



Scenario 2121, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

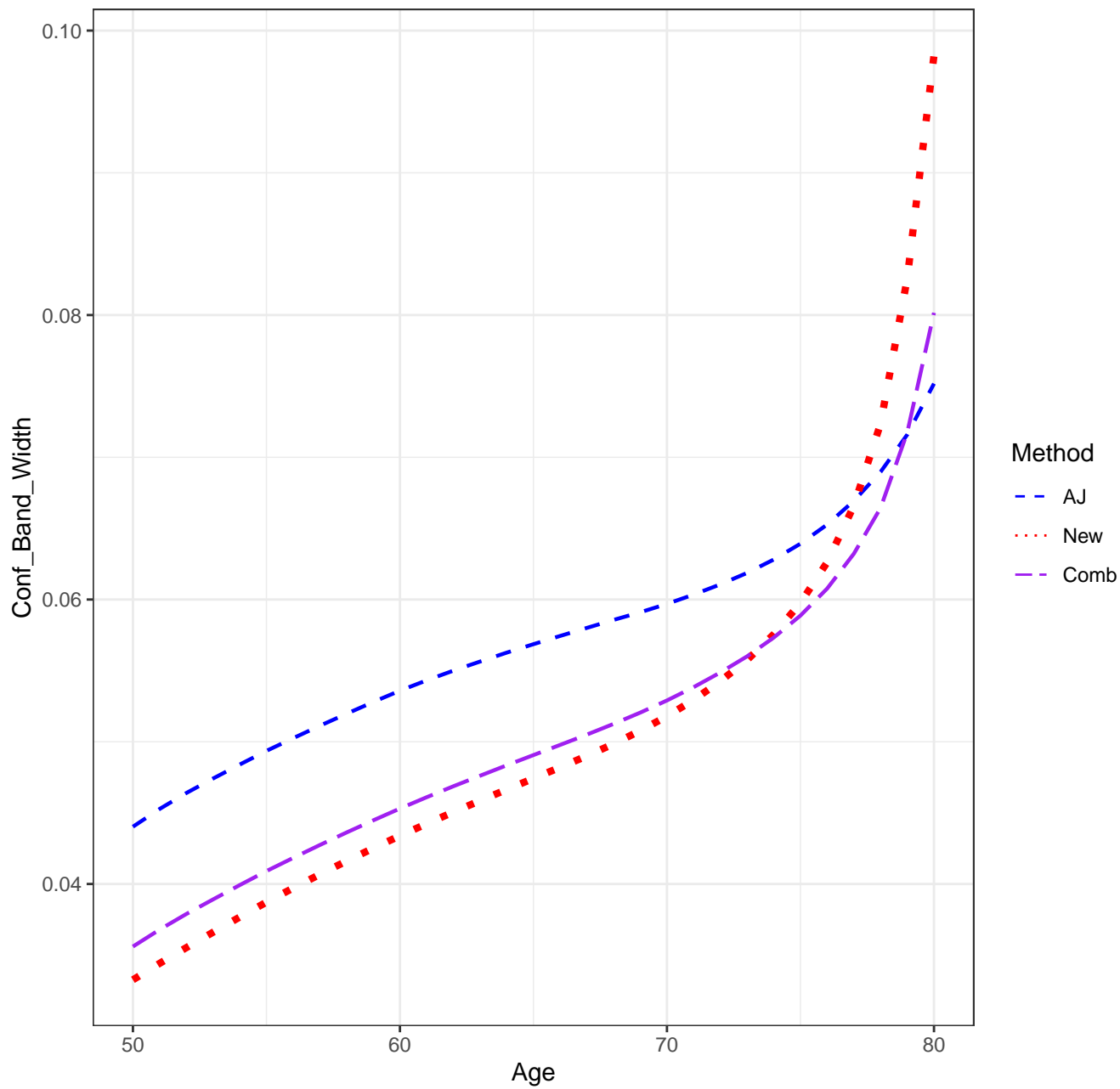
Scenario: 2121

AJ: 0.919

new: 0.924

Combo: 0.926

Scenario 2121, n=2500, Confidence Band Width



## SETTINGS

Scenario: 2122

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

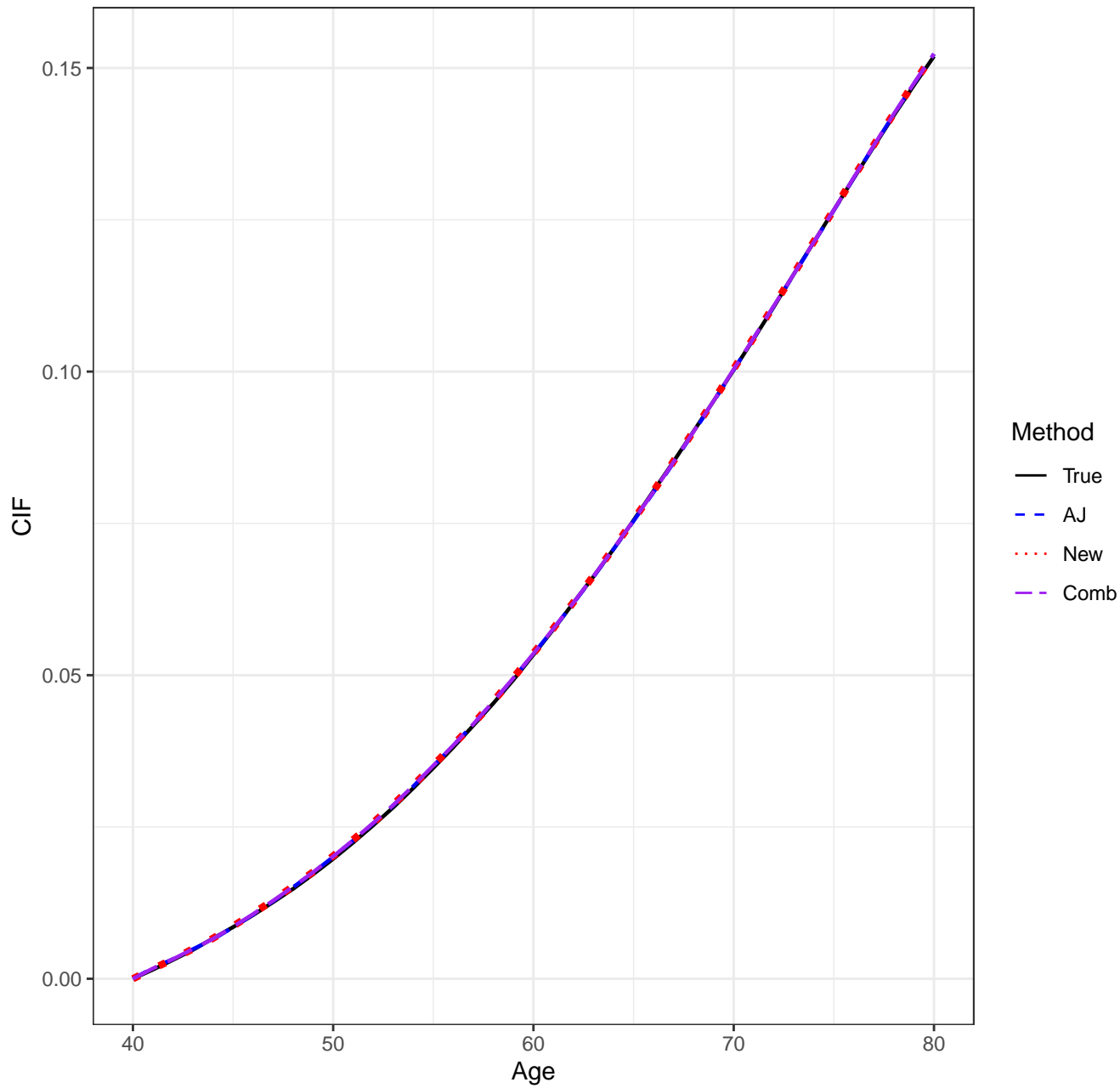
pointwise CI's done by: normal-theory

auxflg = FALSE

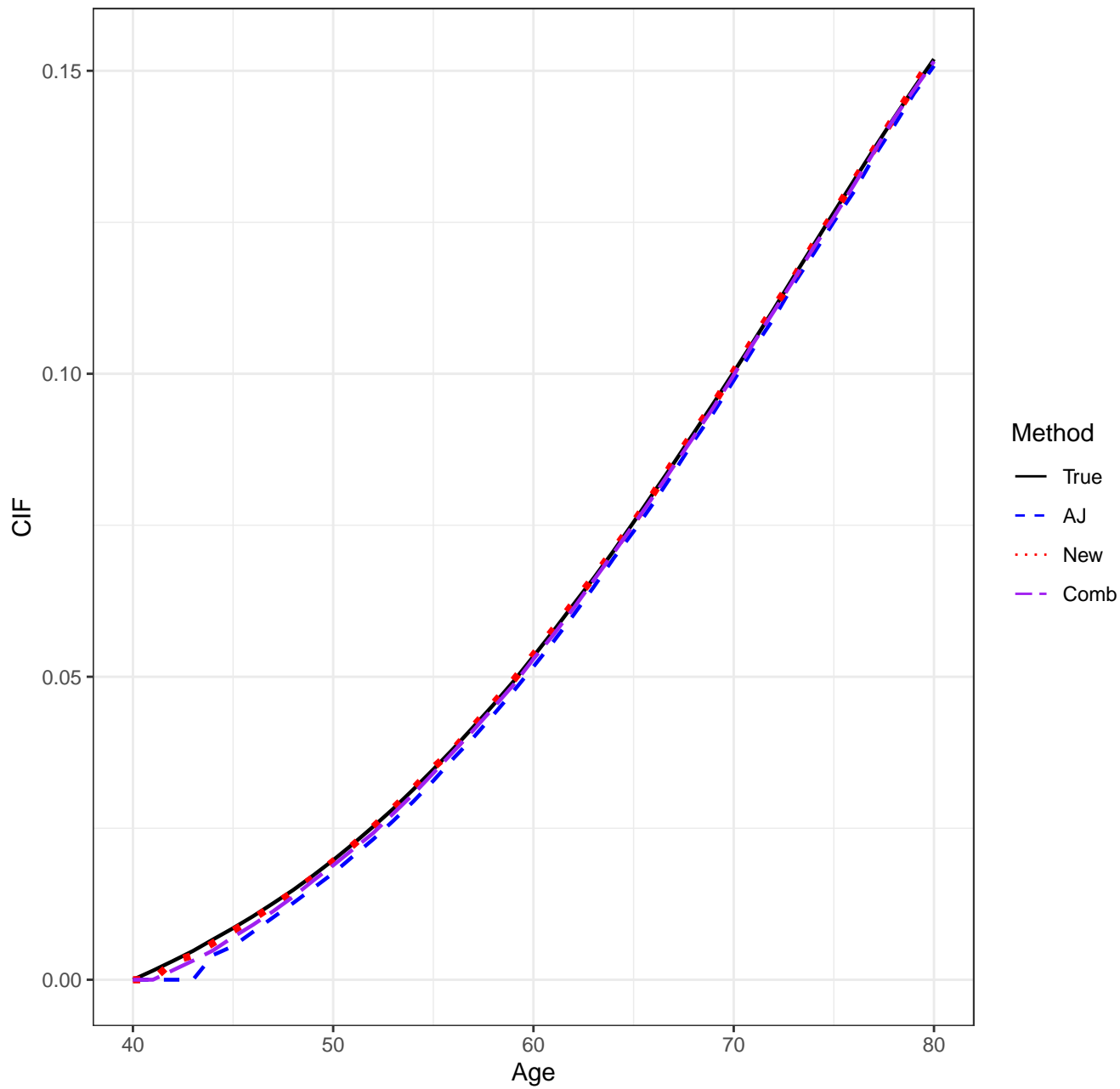
bootstrap weights: normal

Date/Time: 2024-01-14 00:11:30.757461

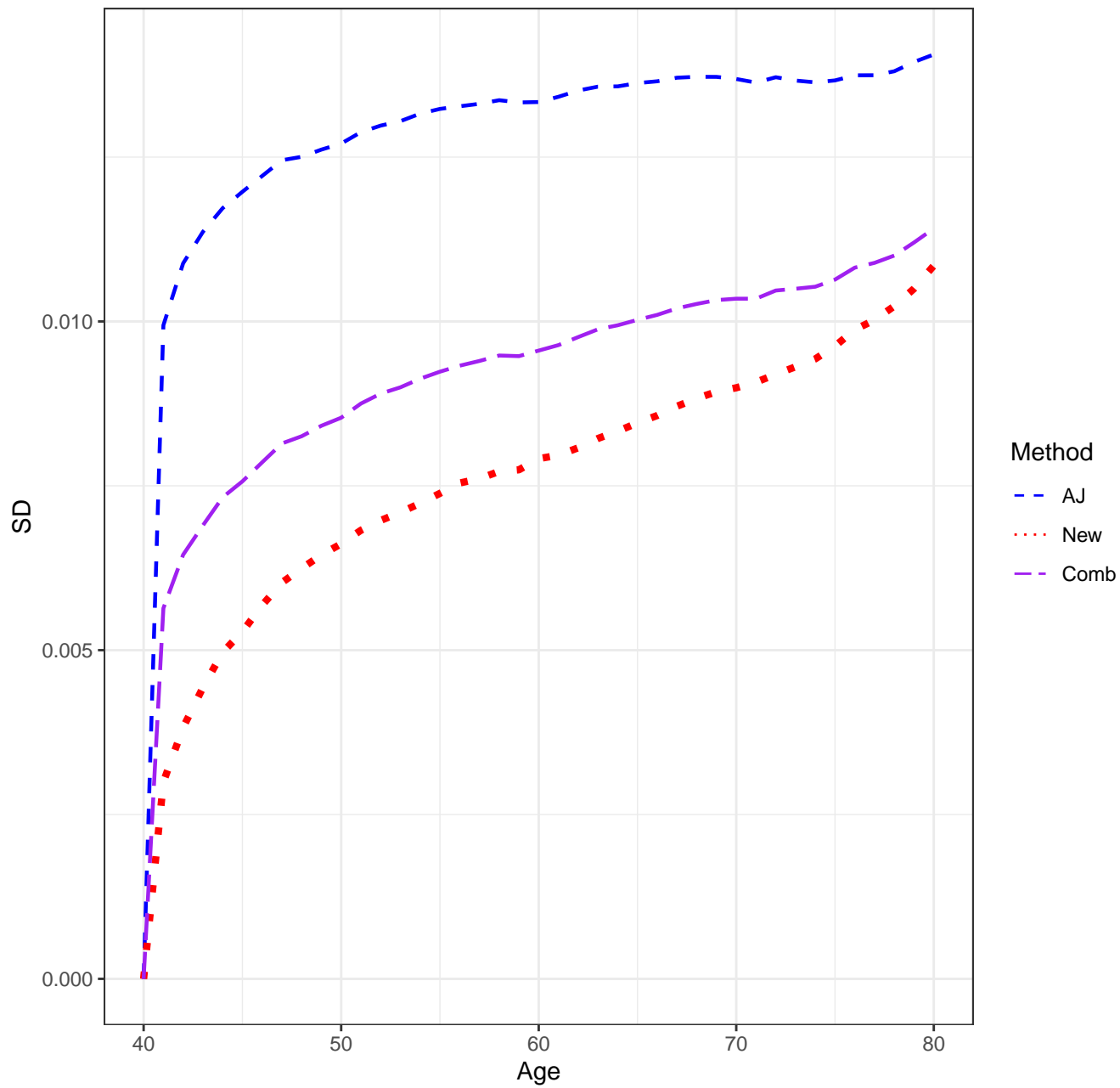
Scenario 2122, n=2500, Means



Scenario 2122, n=2500, Medians

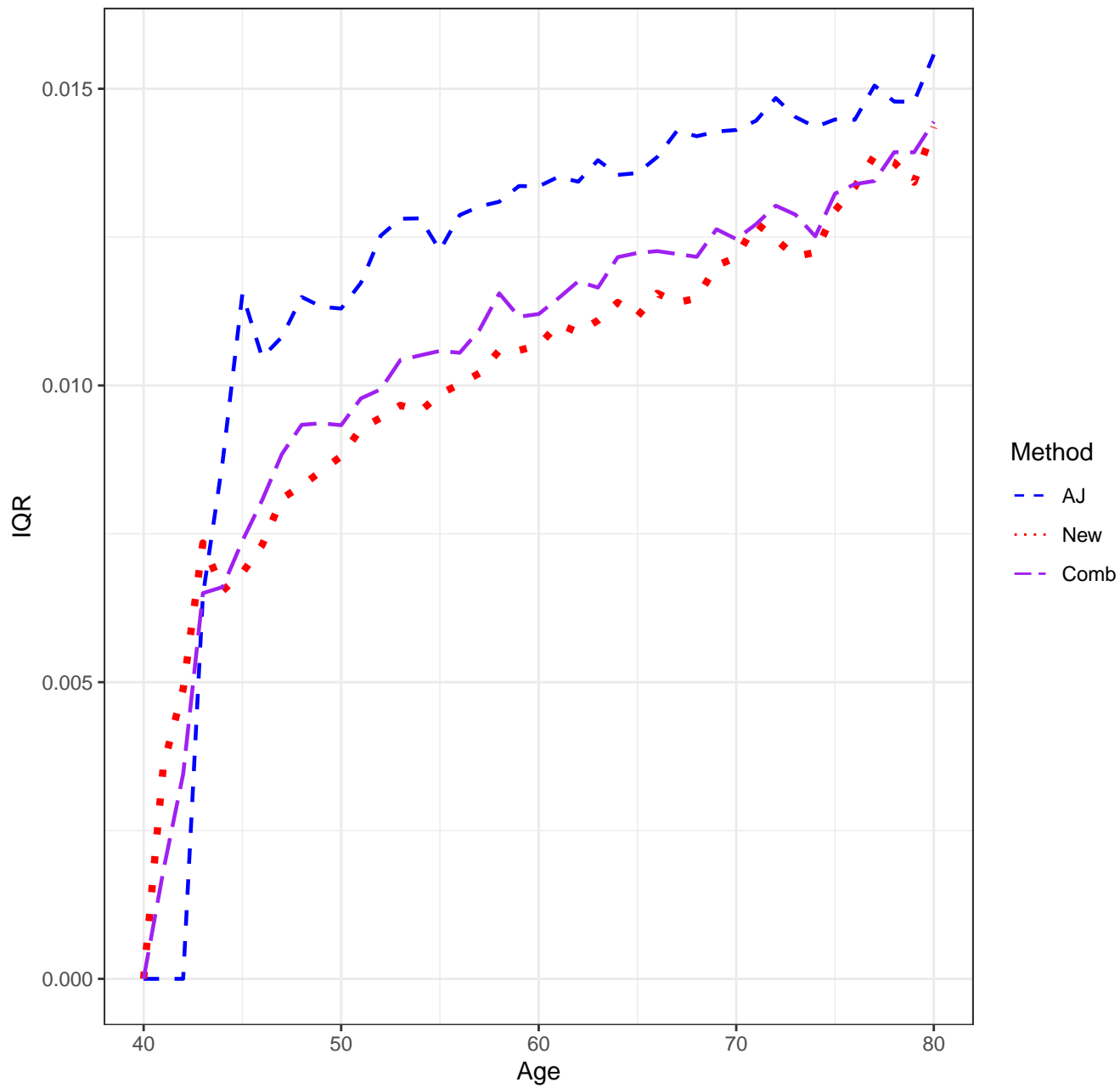


Scenario 2122, n=2500, SD'S

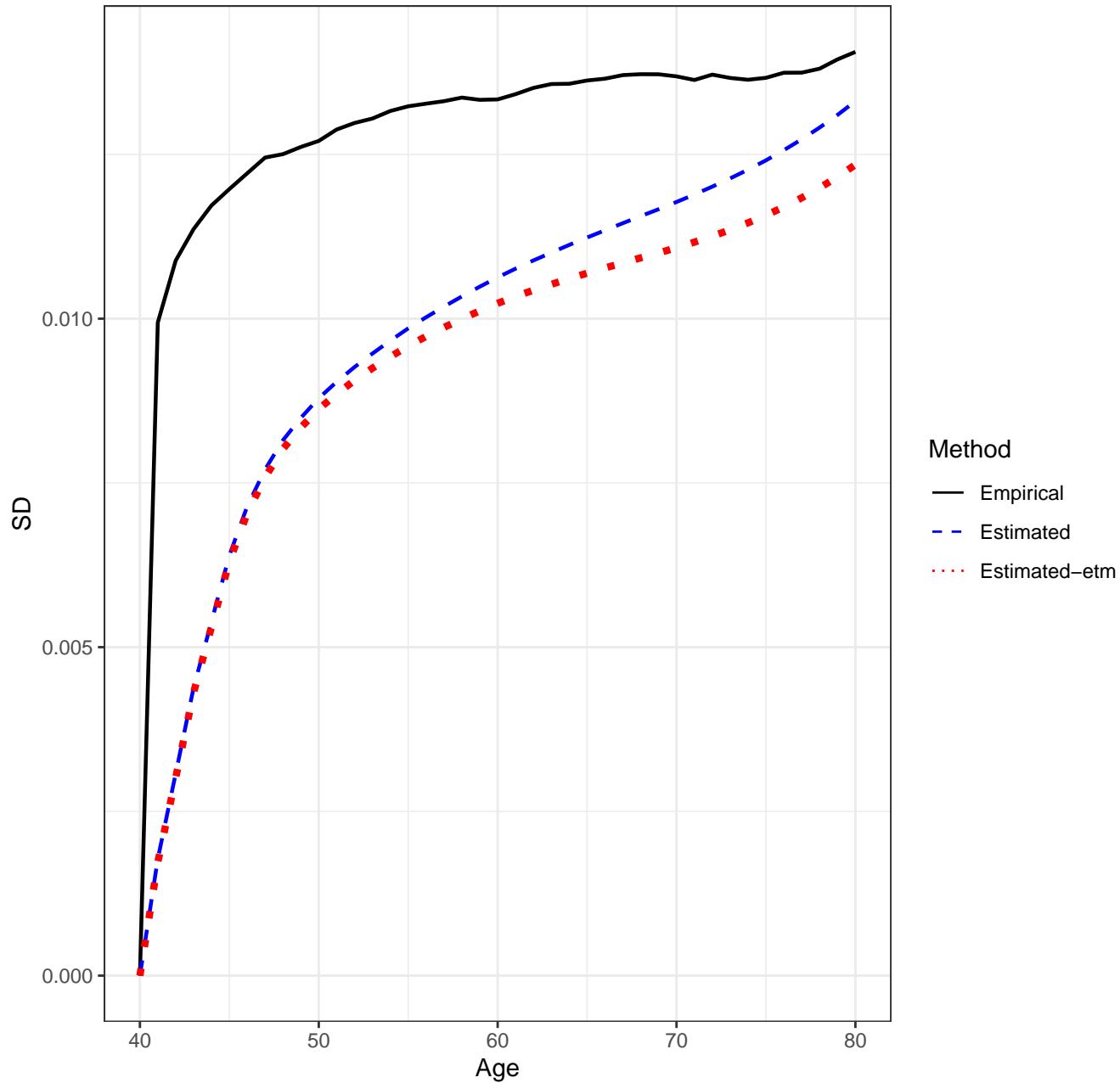




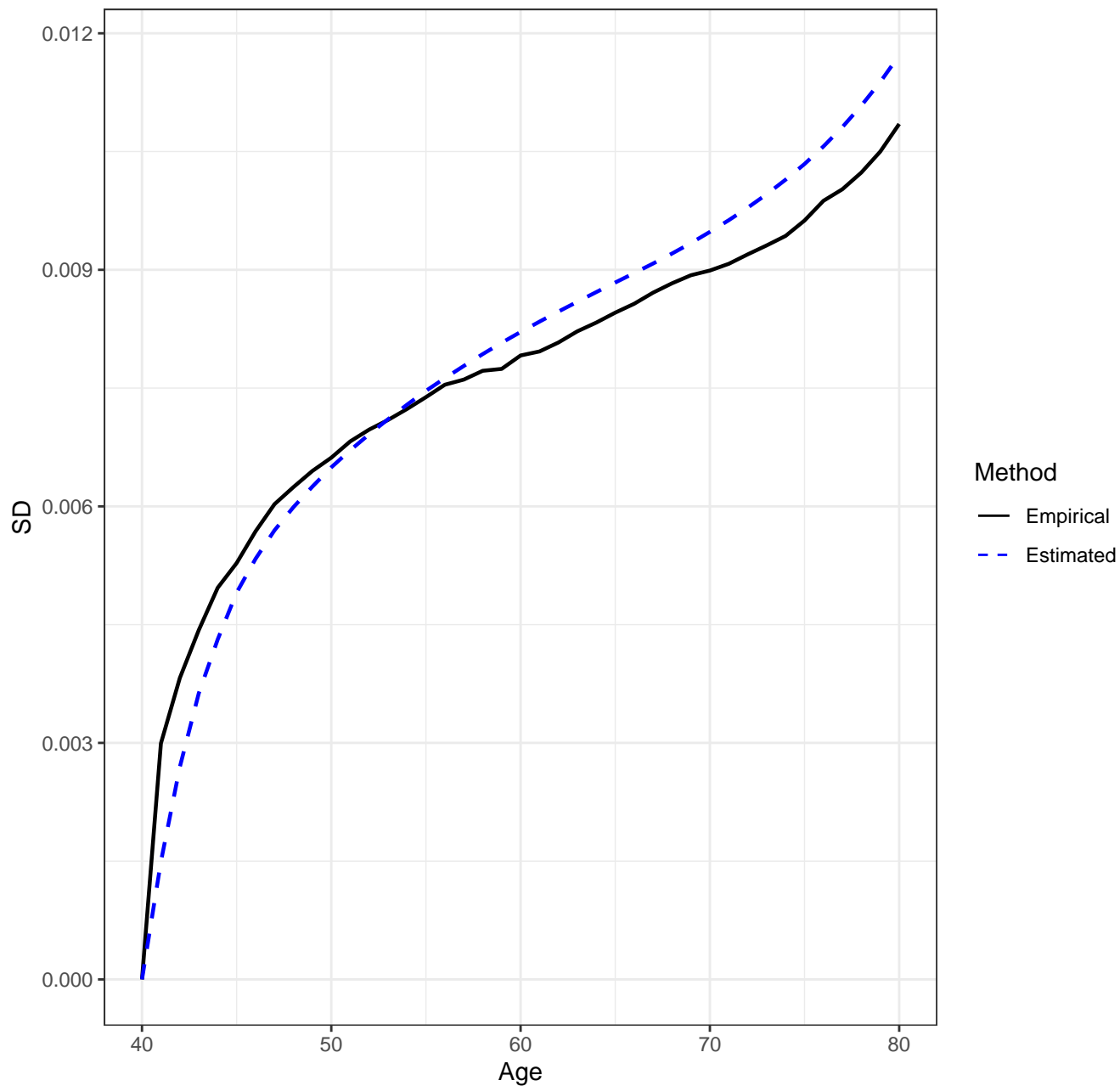
Scenario 2122, n=2500, IQR'S



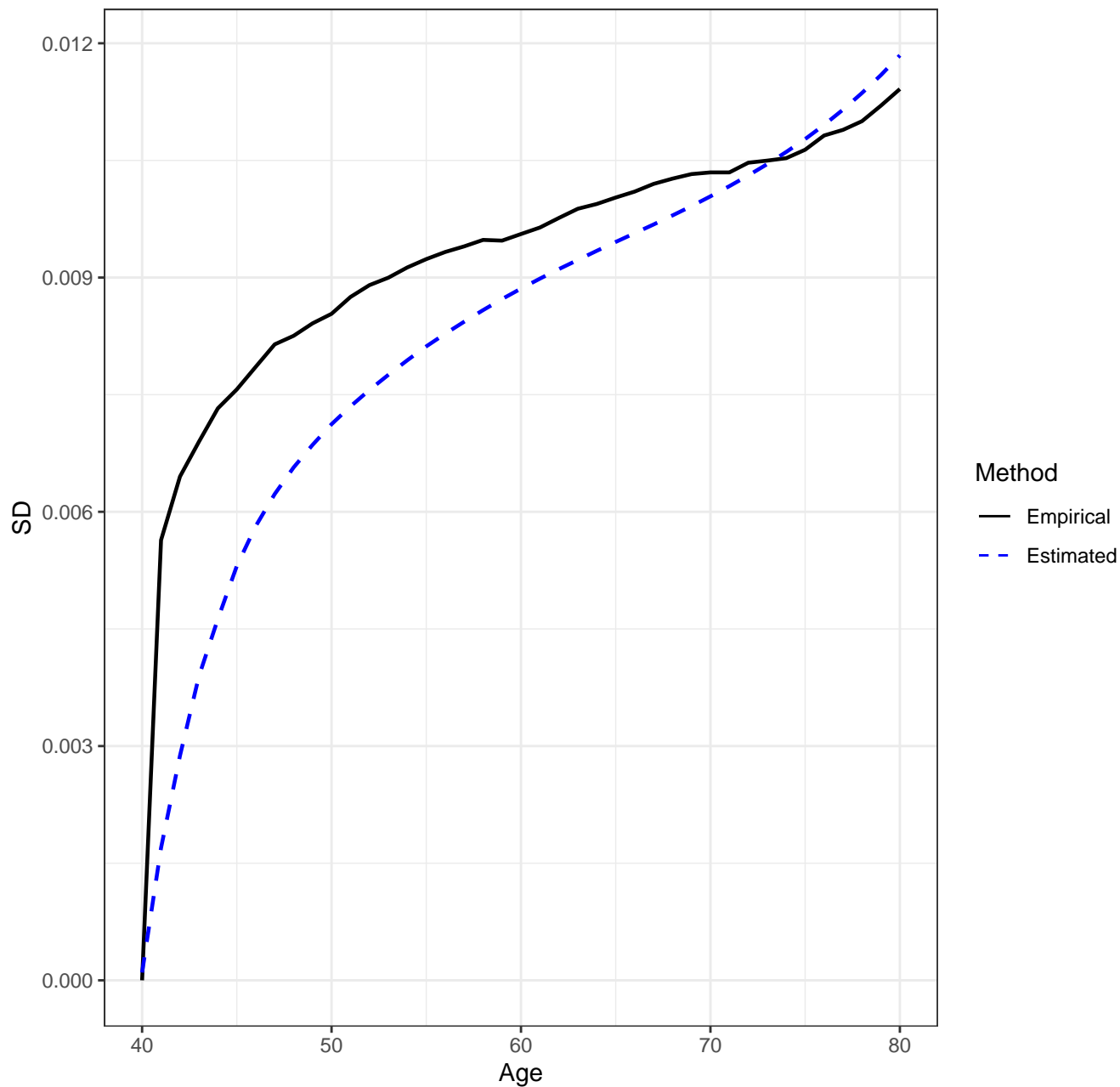
Scenario 2122, n=2500, AJ Estimator, Empirical vs. Estimated SD's



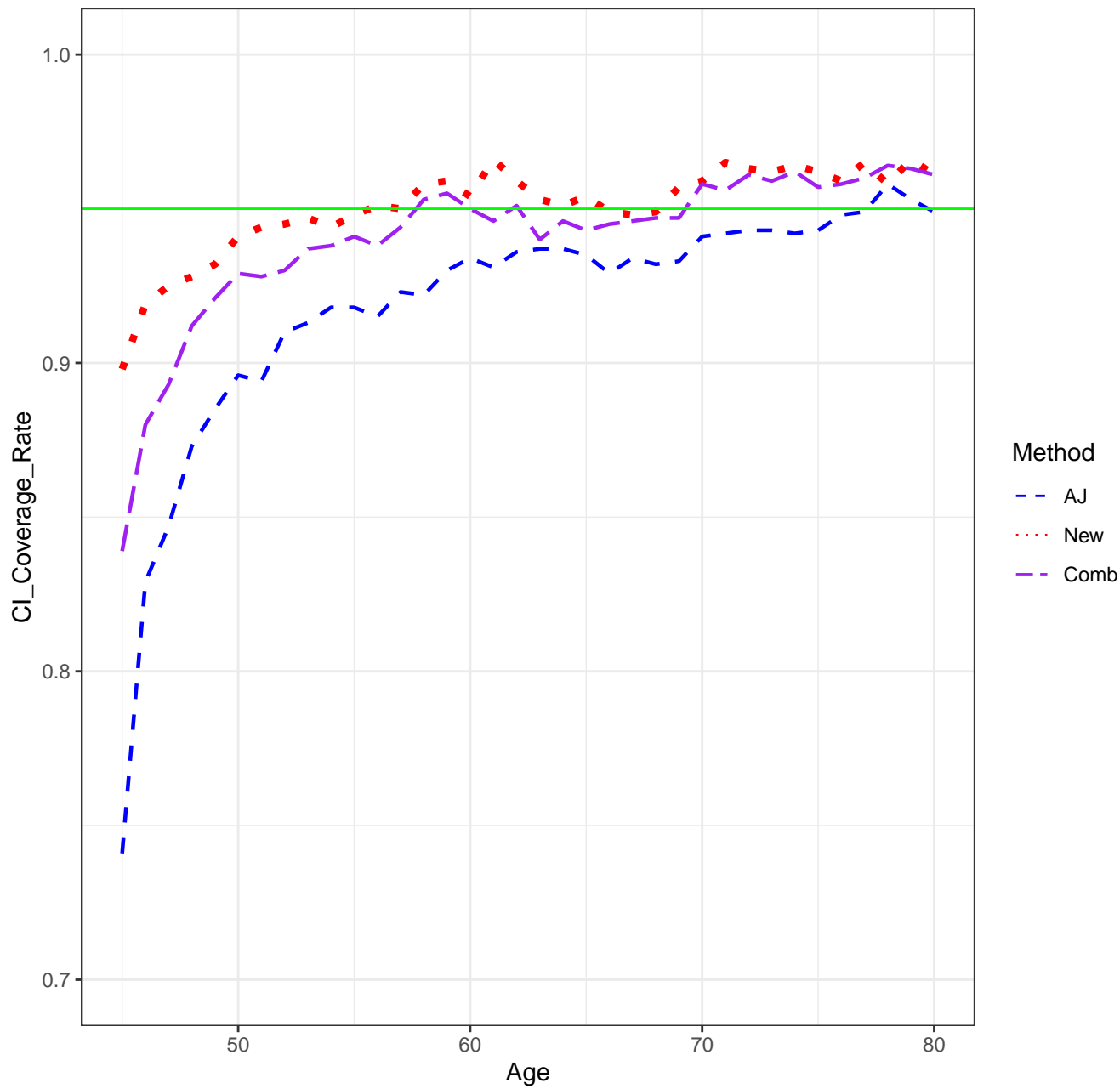
Scenario 2122, n=2500, New Estimator, Empirical vs. Estimated SD's



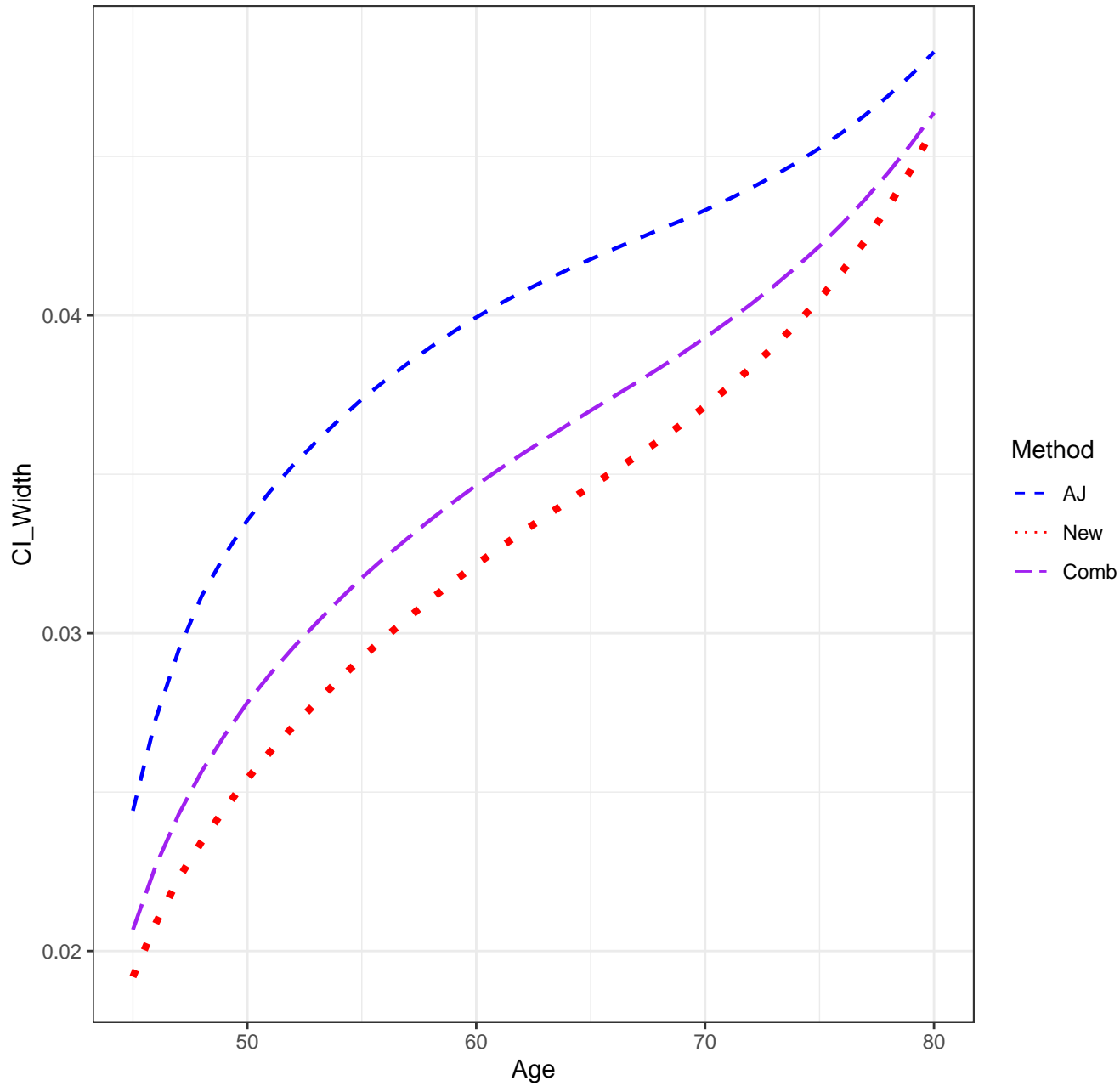
Scenario 2122, n=2500, Combined Estimator, Empirical vs. Estimated SD's



Scenario 2122, n=2500, CICR'S



Scenario 2122, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

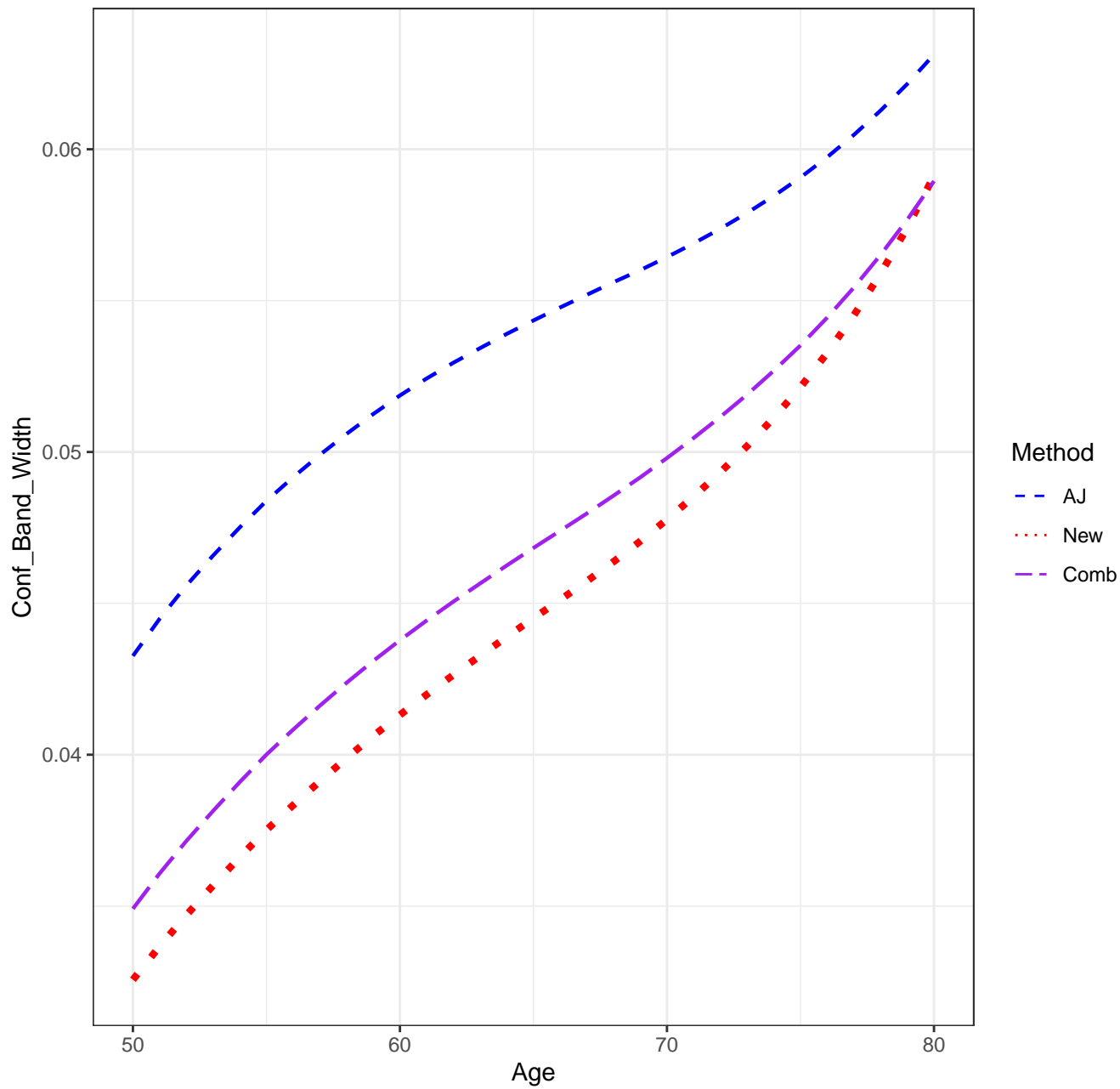
Scenario: 2122

AJ: 0.924

new: 0.94

Combo: 0.93

Scenario 2122, n=2500, Confidence Band Width





## SETTINGS

Scenario: 2211

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5\pi - \arcsin(\sqrt{1-u})$

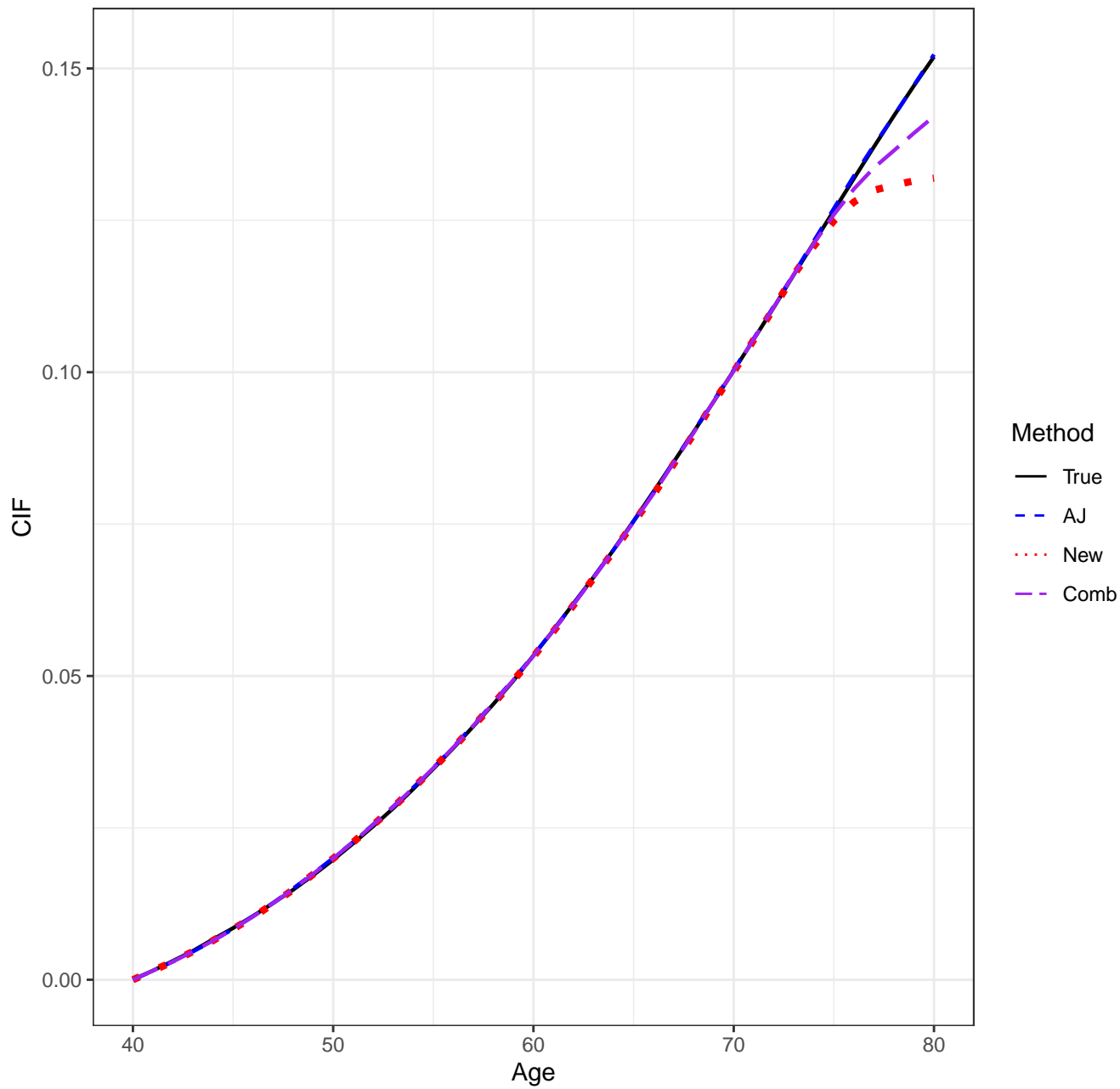
pointwise CI's done by: normal-theory

auxflg = FALSE

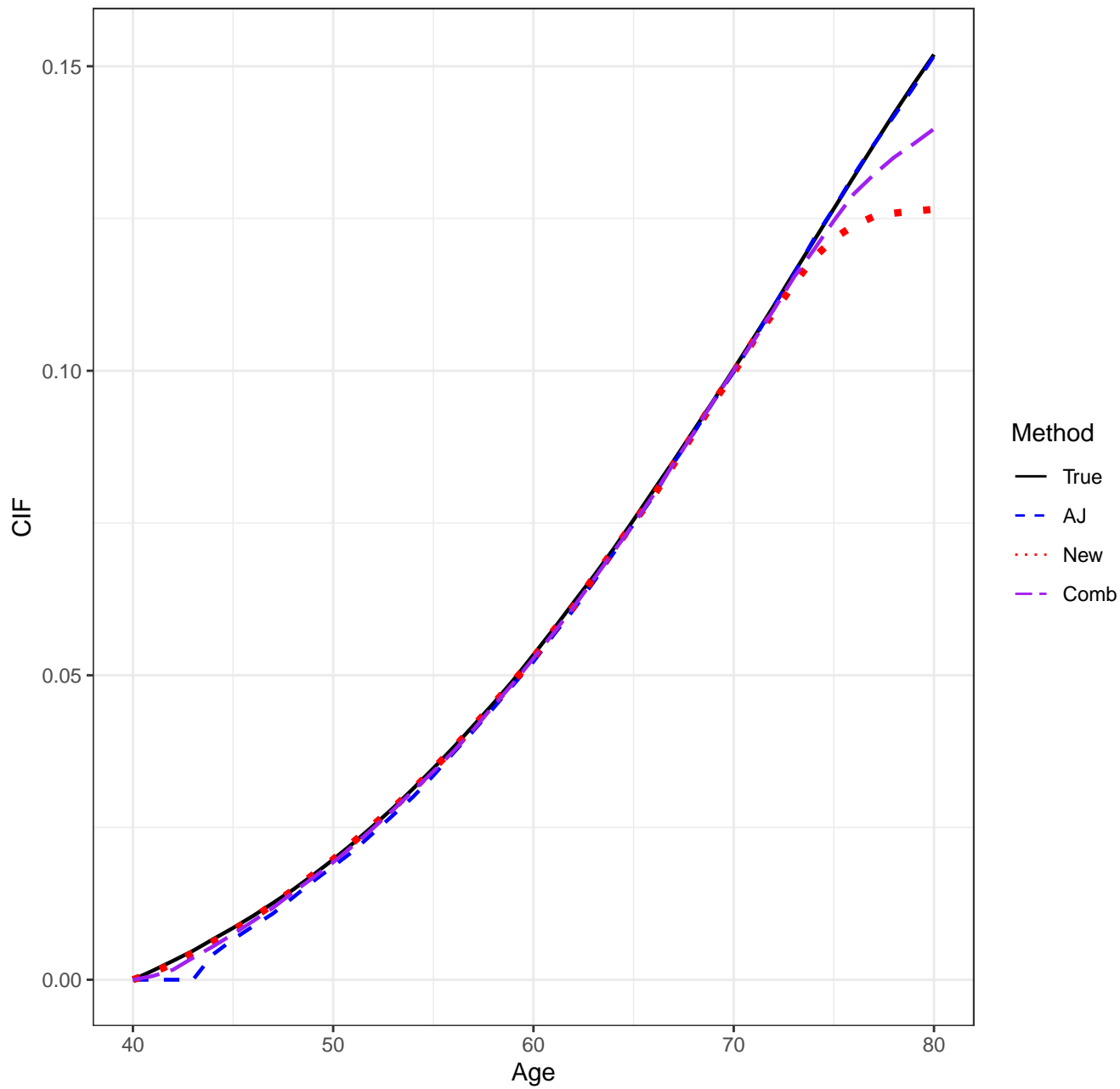
bootstrap weights: normal

Date/Time: 2024-01-14 12:26:24.277736

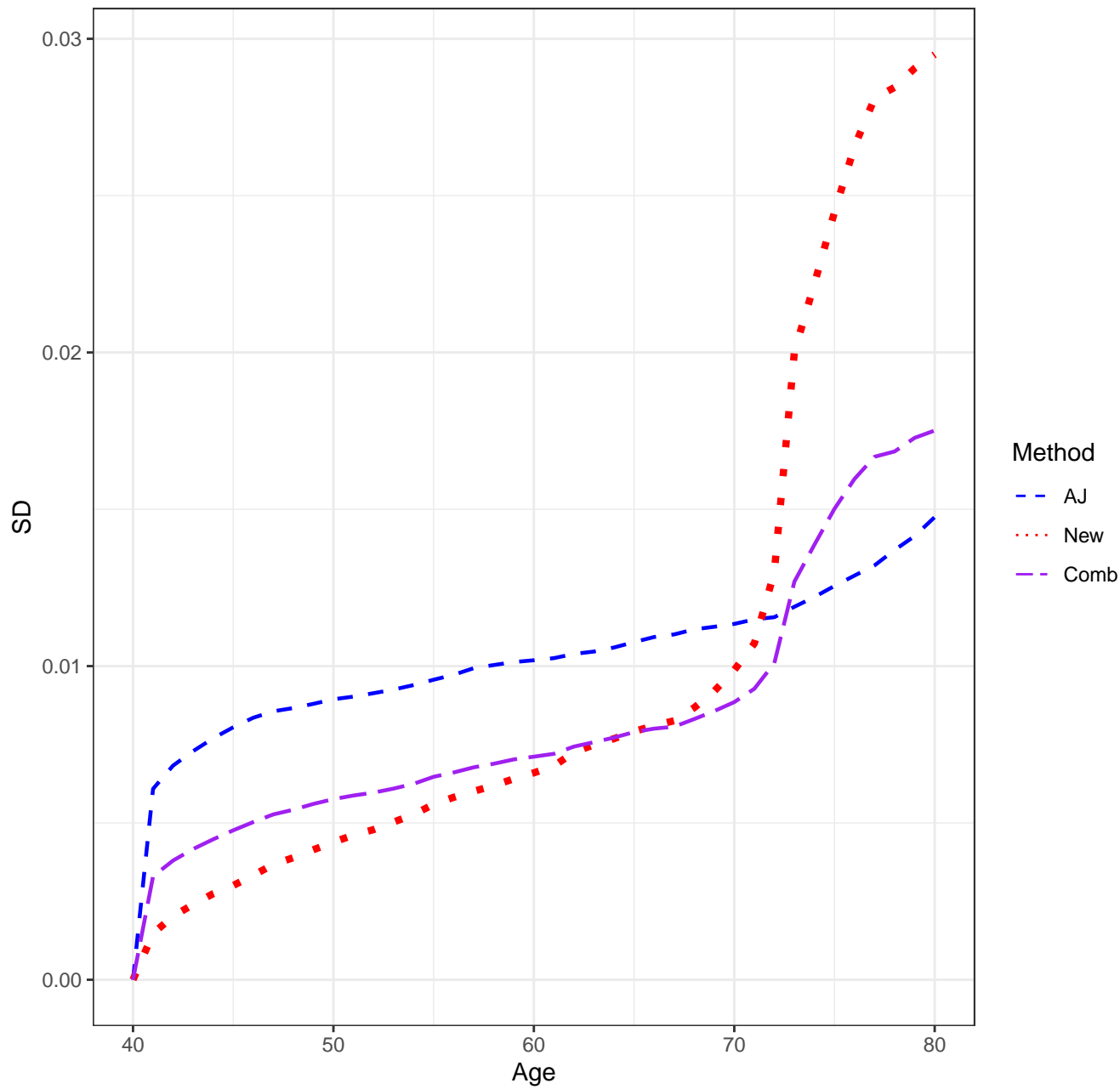
Scenario 2211, n=2500, Means



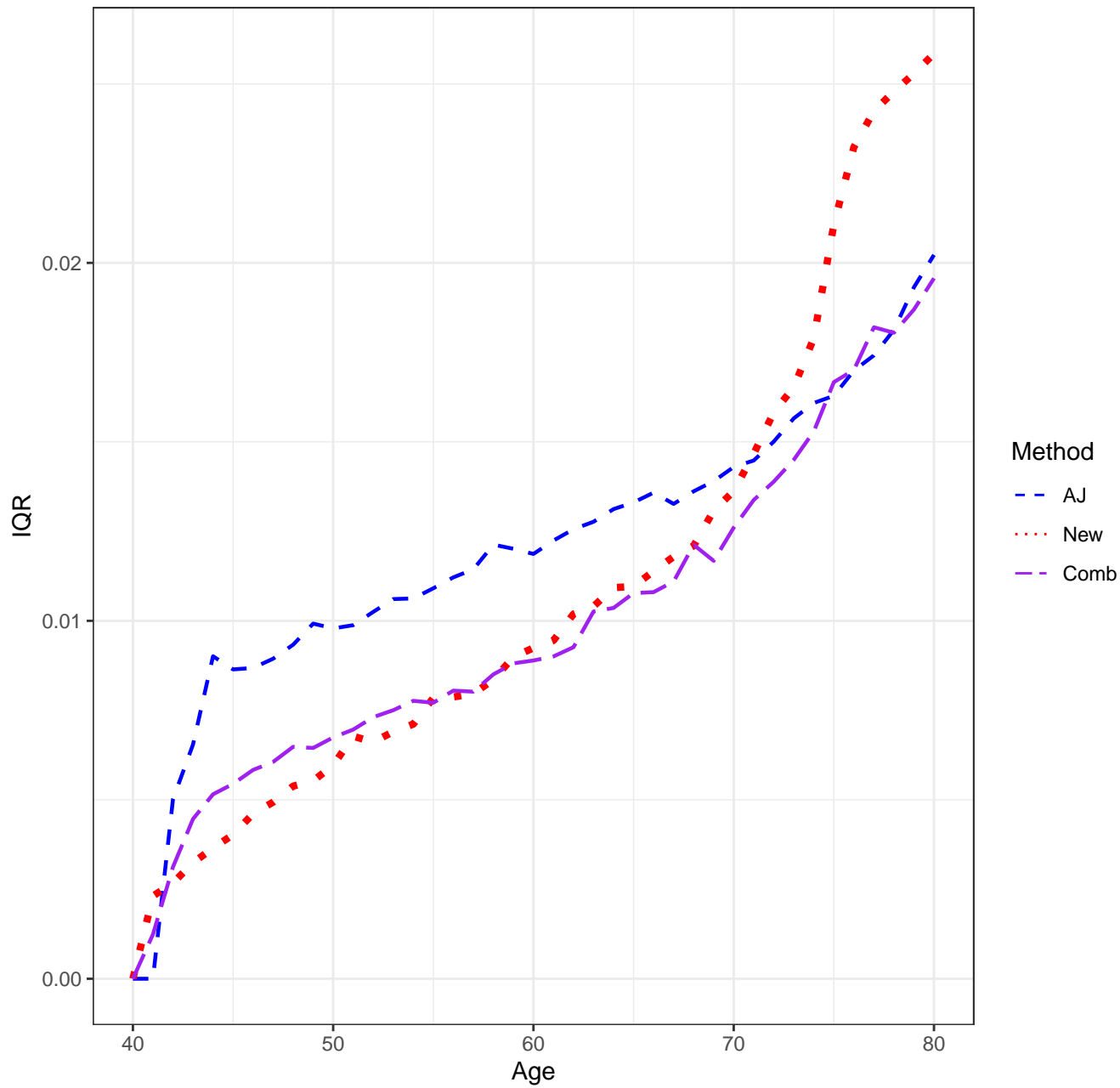
Scenario 2211, n=2500, Medians



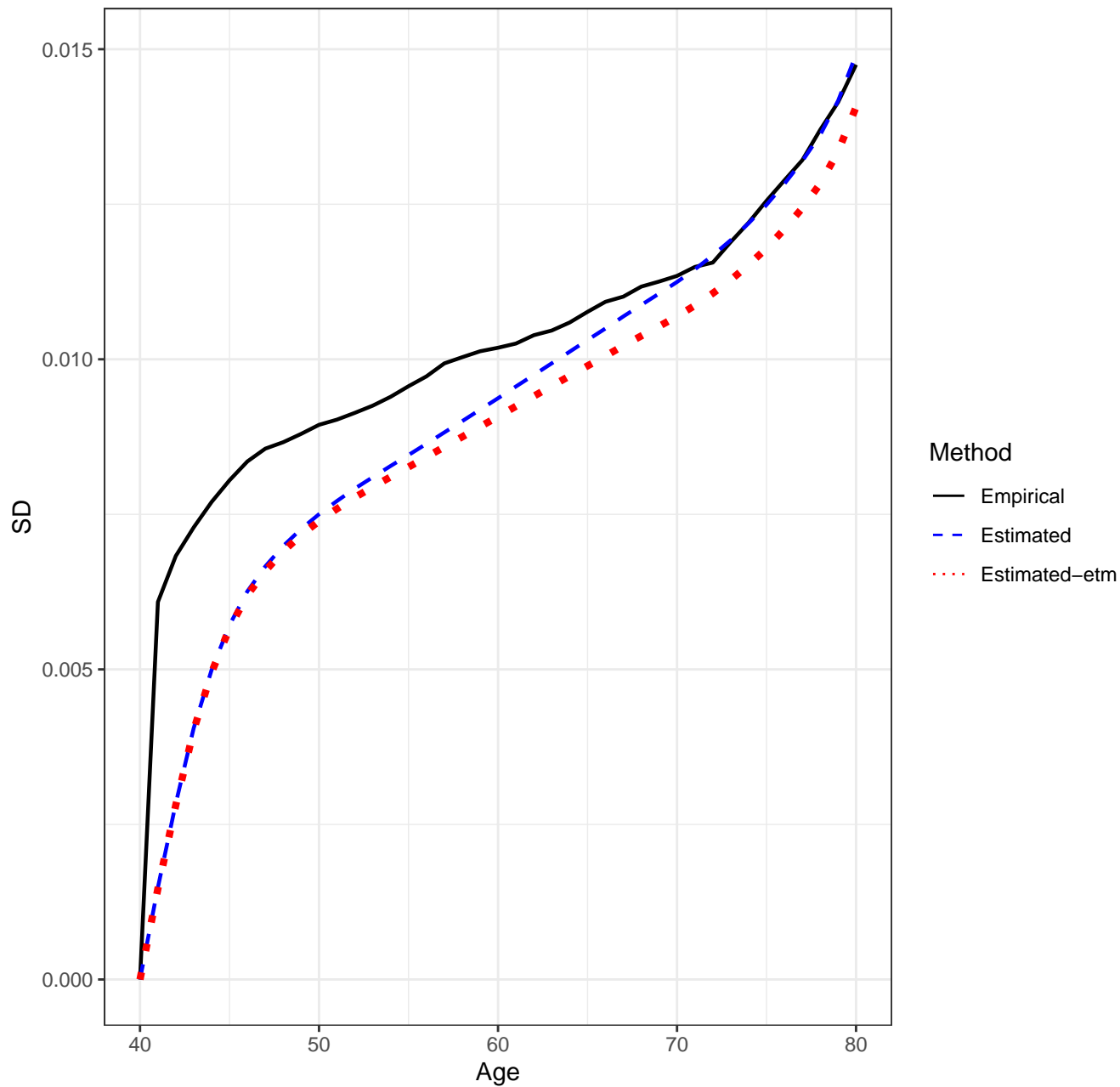
Scenario 2211, n=2500, SD'S



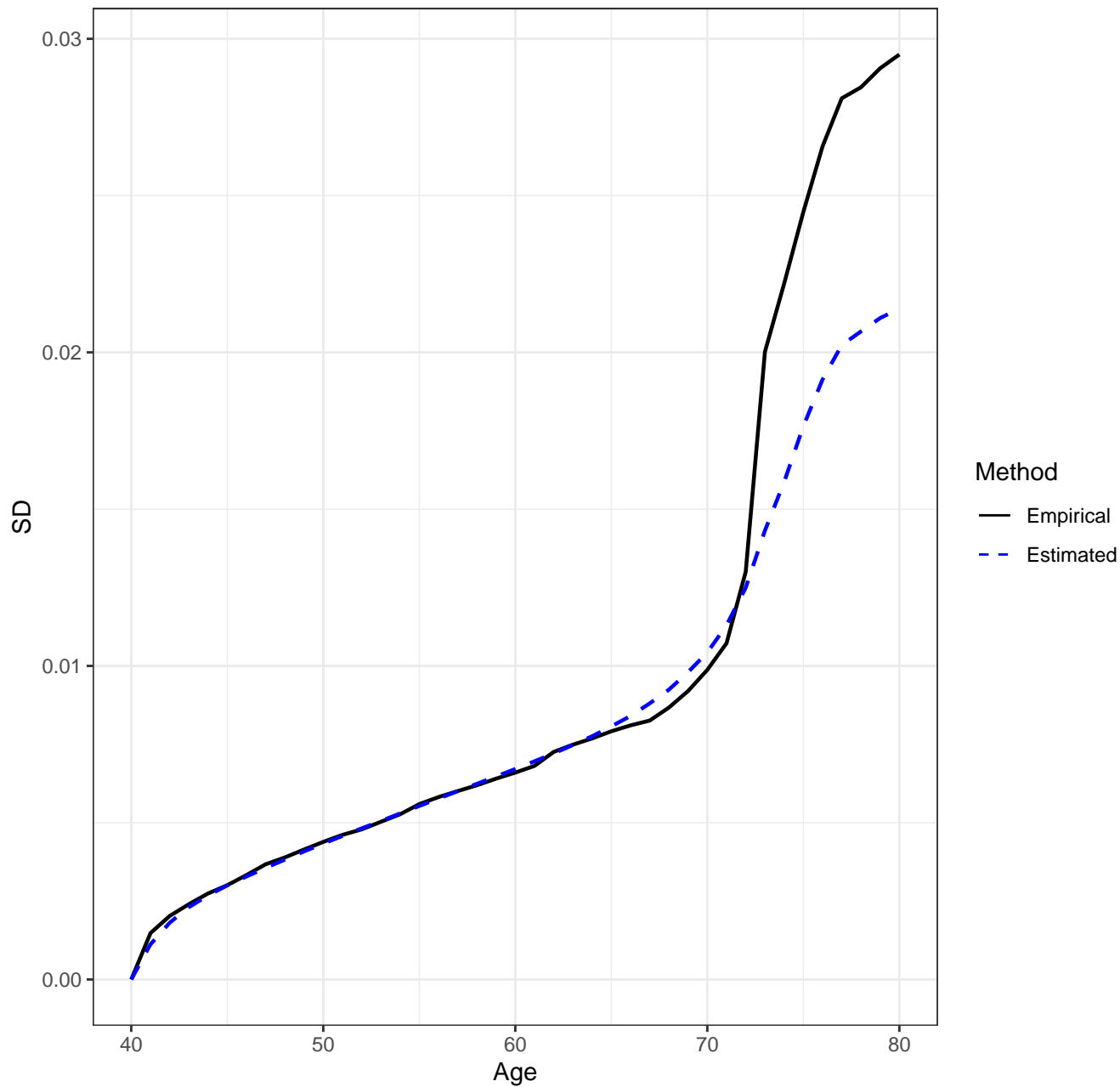
Scenario 2211, n=2500, IQR'S



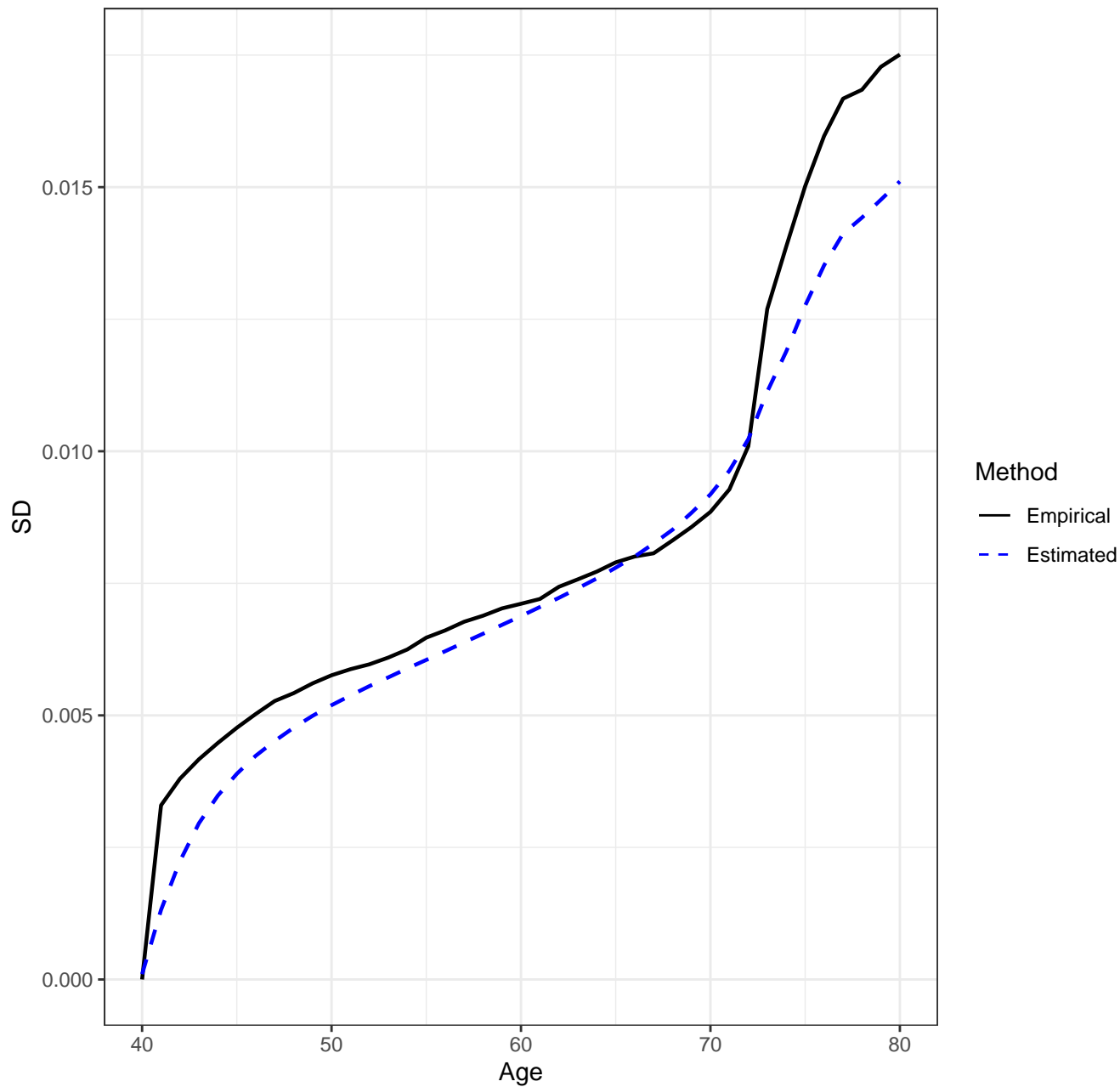
Scenario 2211, n=2500, AJ Estimator, Empirical vs. Estimated SD's



Scenario 2211, n=2500, New Estimator, Empirical vs. Estimated SD's

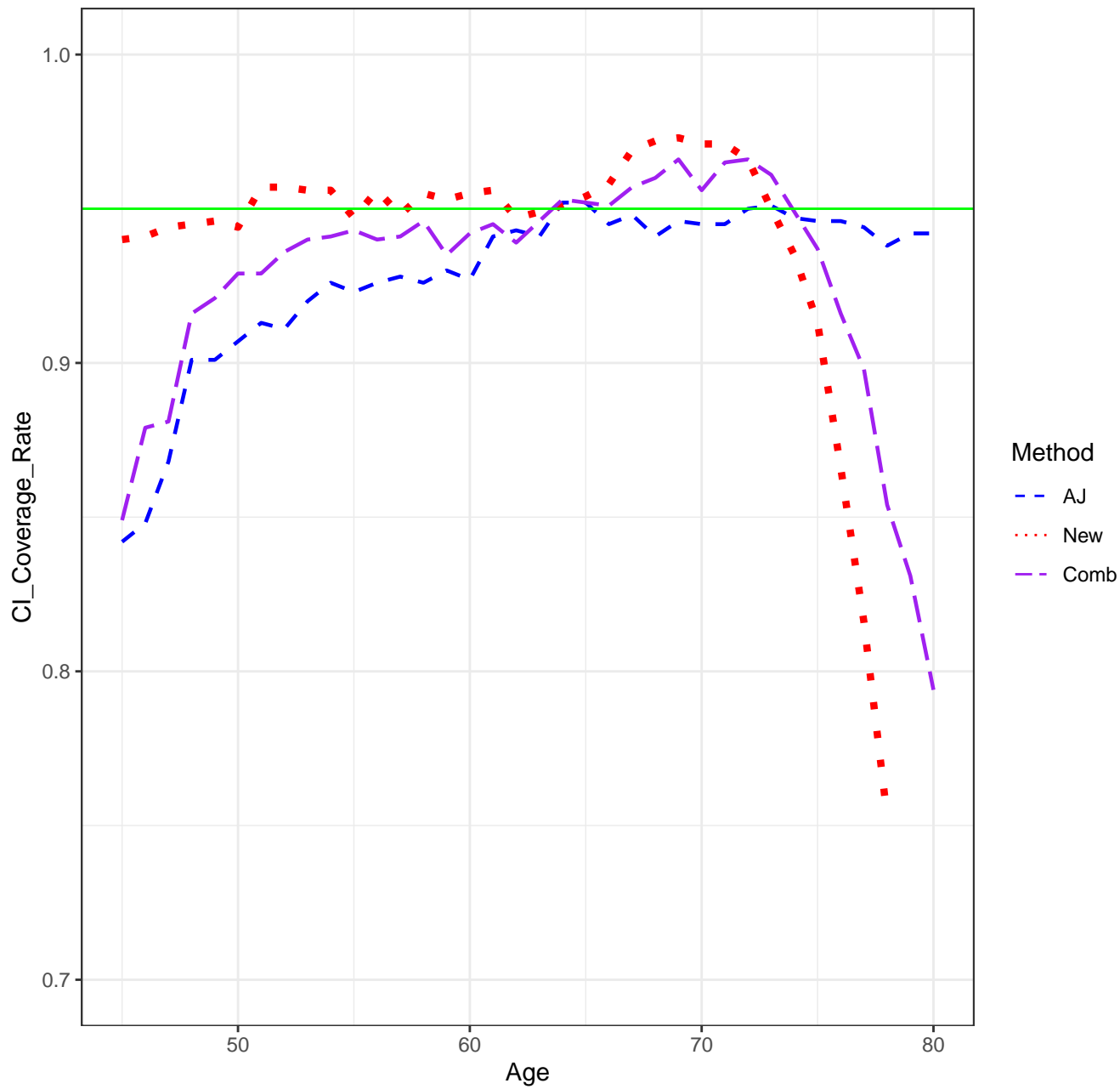


Scenario 2211, n=2500, Combined Estimator, Empirical vs. Estimated SD's

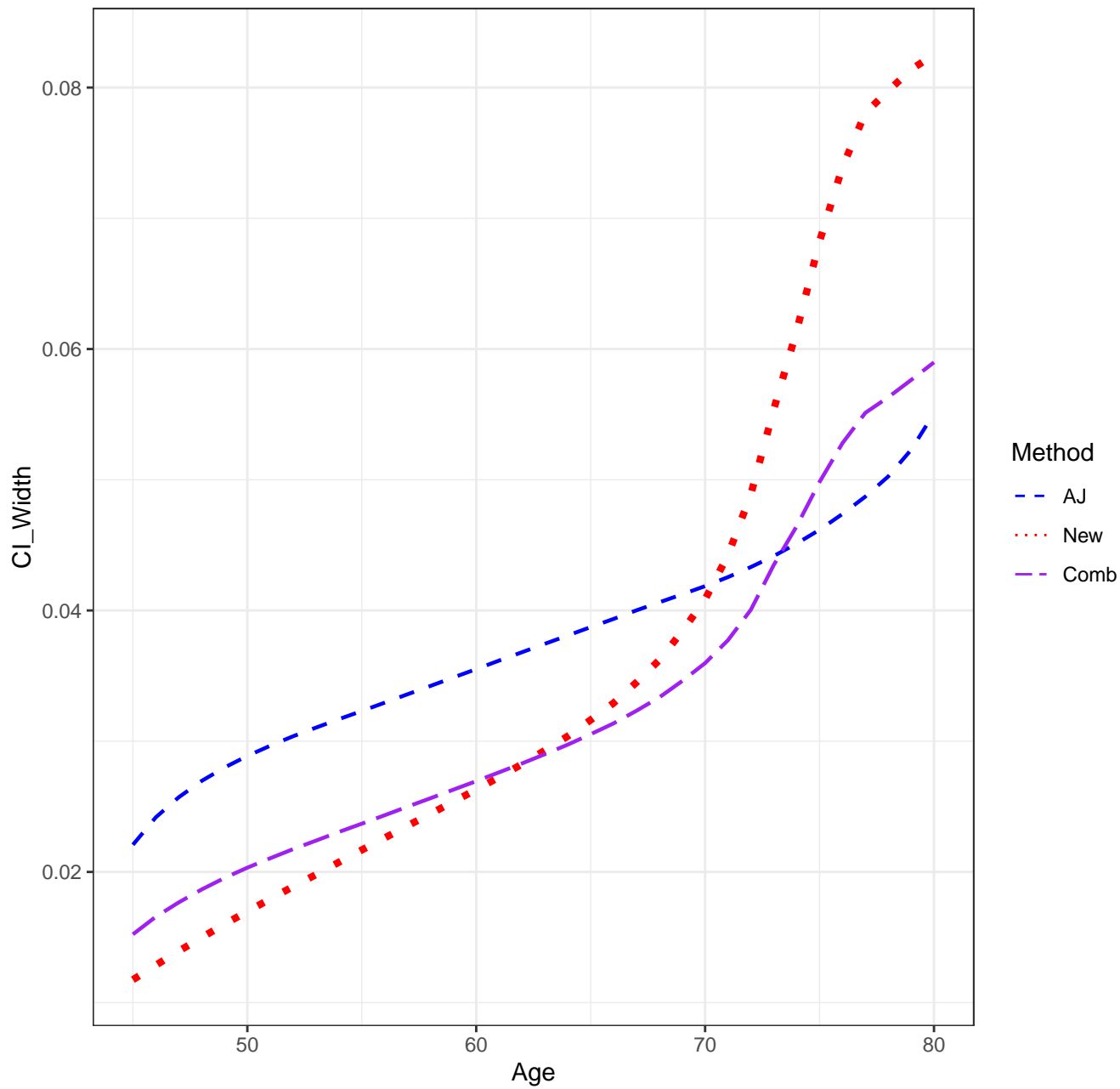




Scenario 2211, n=2500, CICR'S



Scenario 2211, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

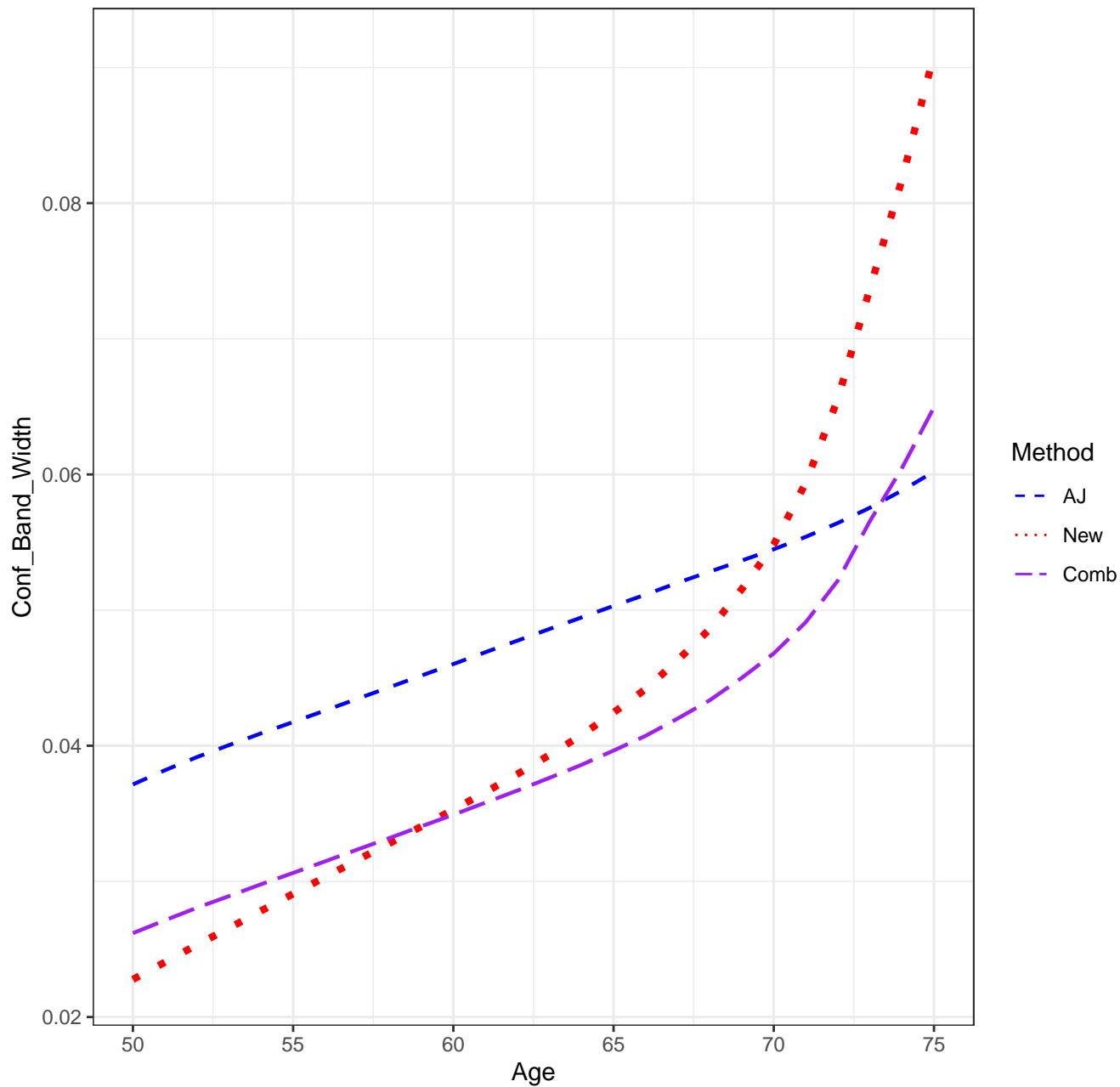
Scenario: 2211

AJ: 0.931

new: 0.92

Combo: 0.924

Scenario 2211, n=2500, Confidence Band Width



## SETTINGS

Scenario: 2212

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

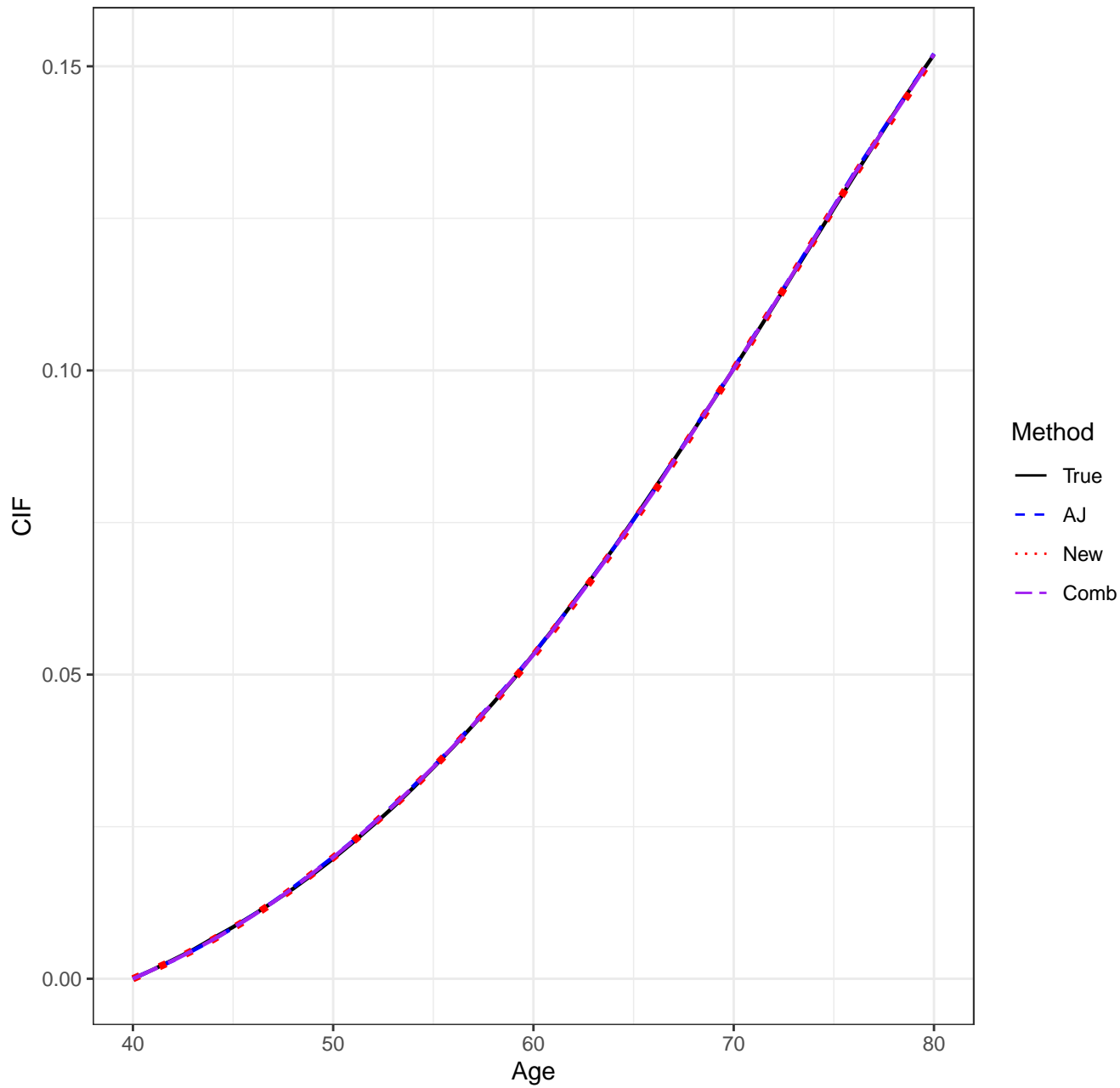
pointwise CI's done by: normal-theory

auxflg = FALSE

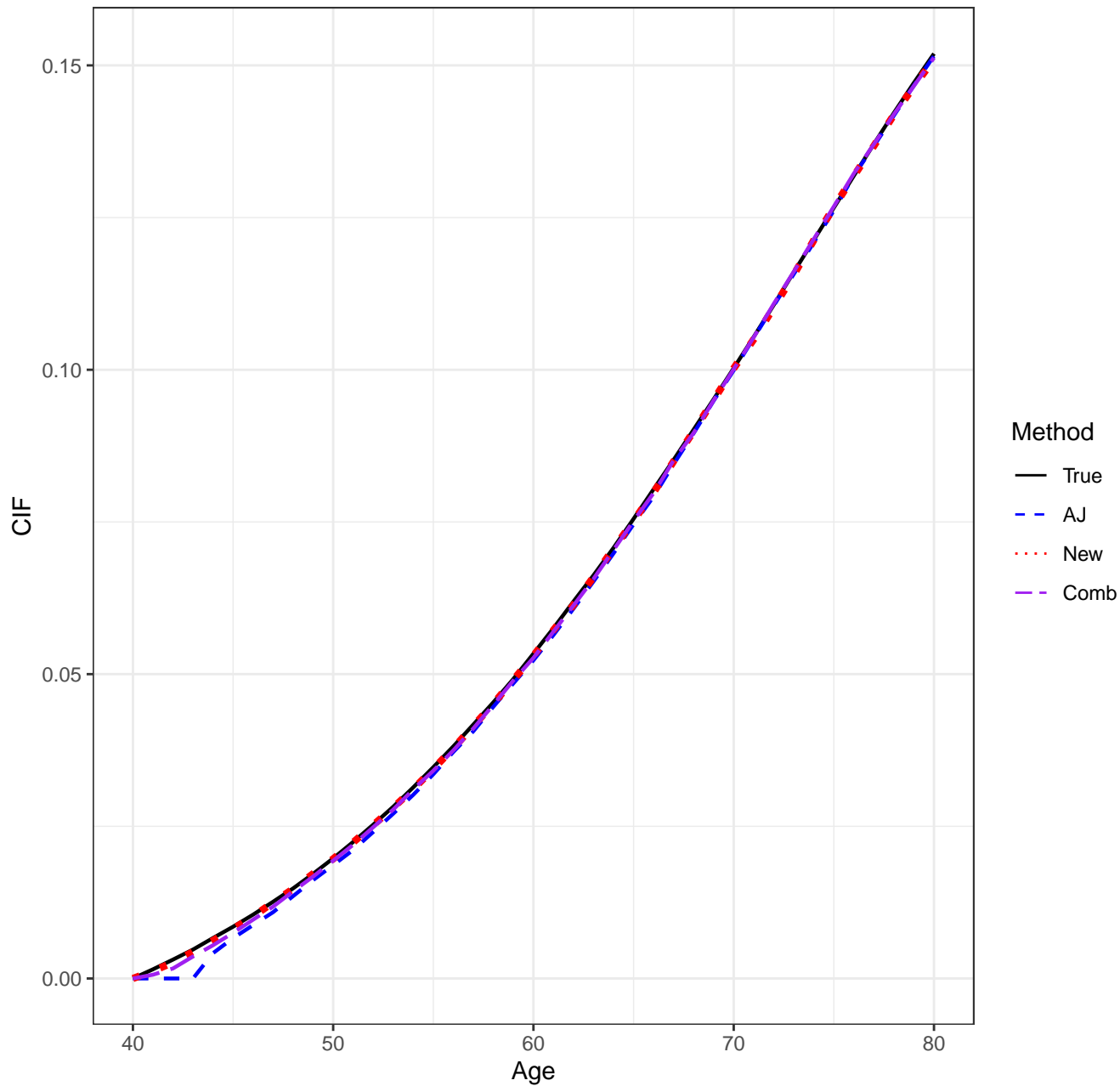
bootstrap weights: normal

Date/Time: 2024-01-14 13:00:31.084647

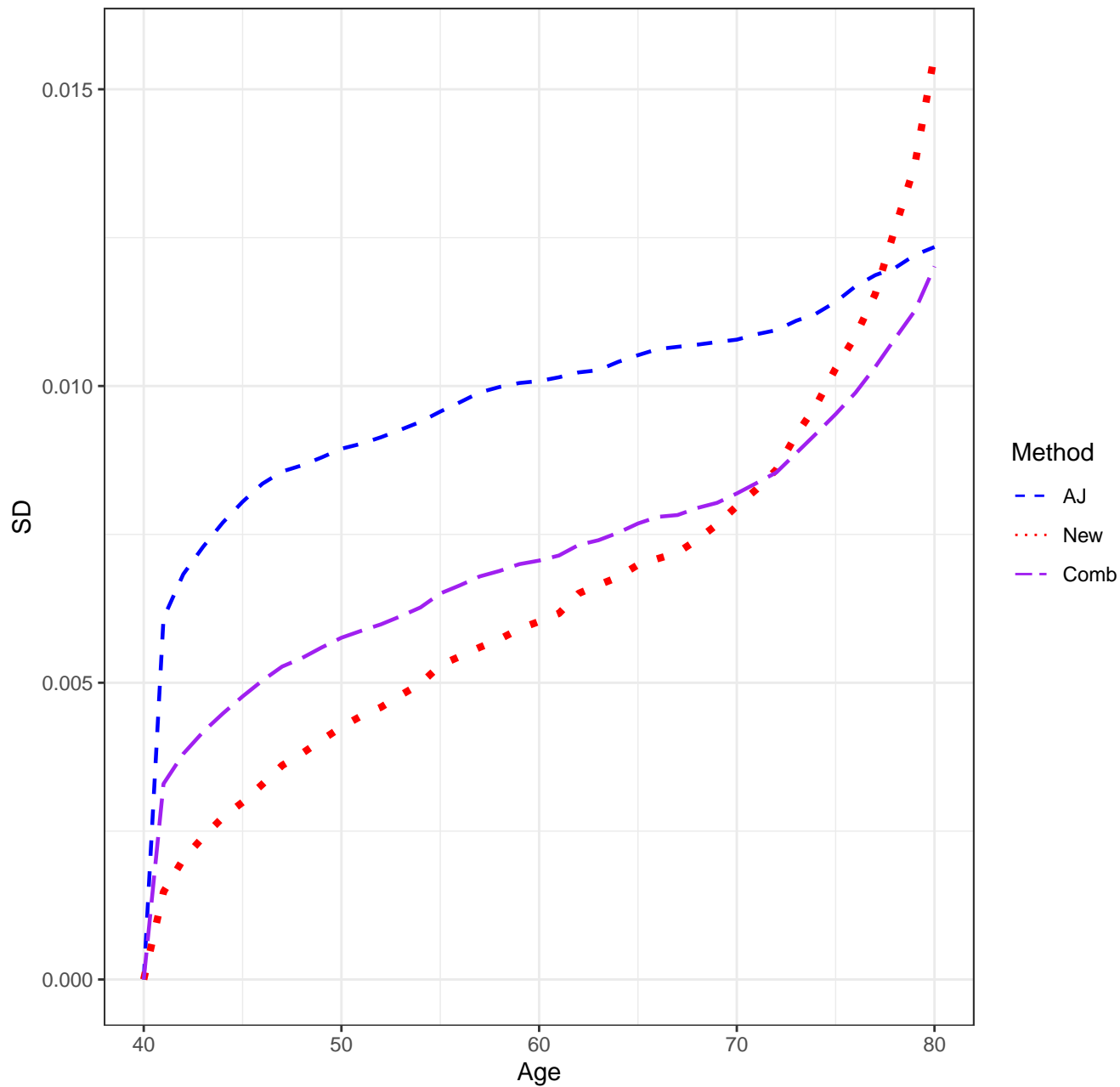
Scenario 2212, n=2500, Means



Scenario 2212, n=2500, Medians

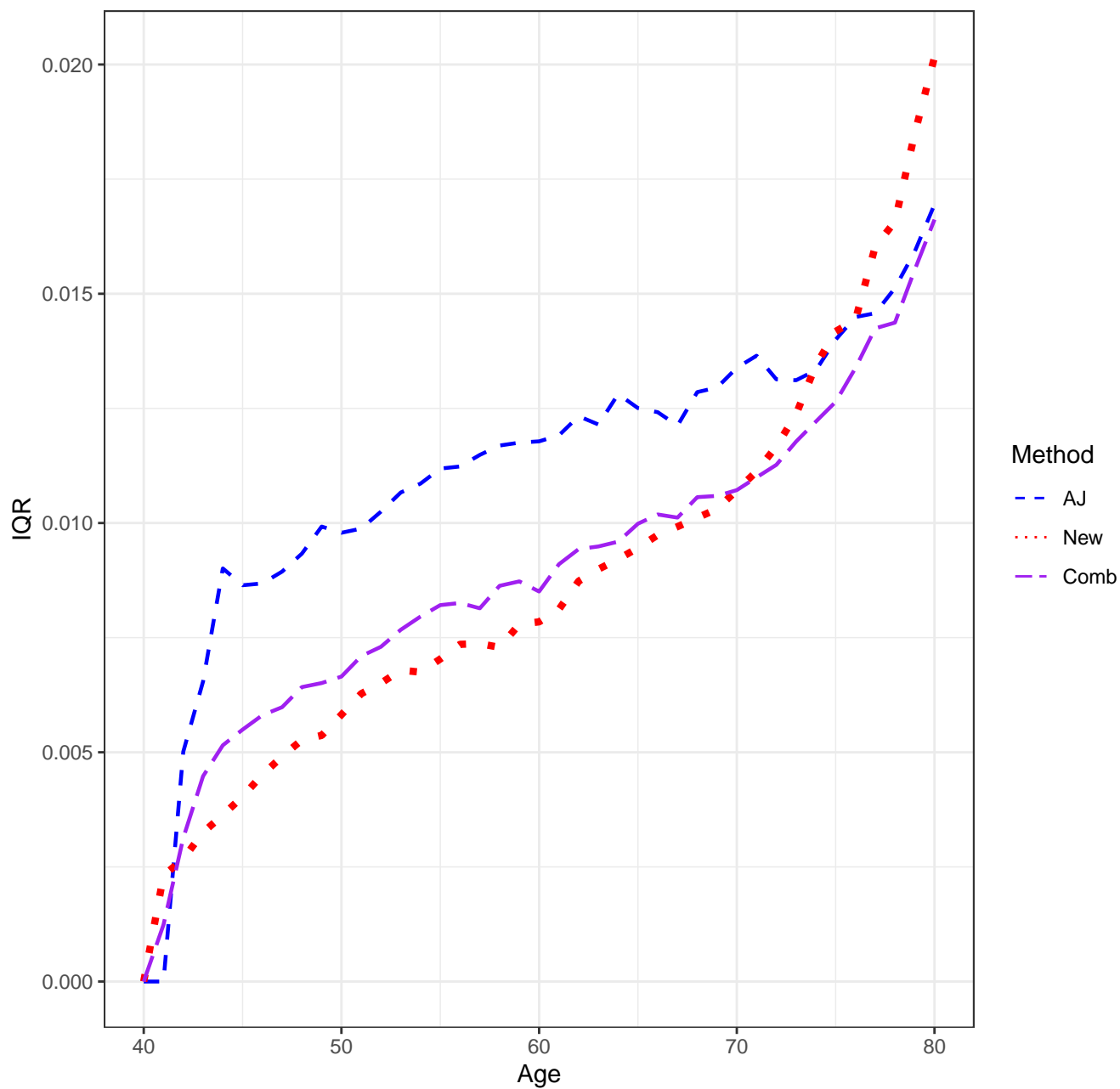


Scenario 2212, n=2500, SD'S

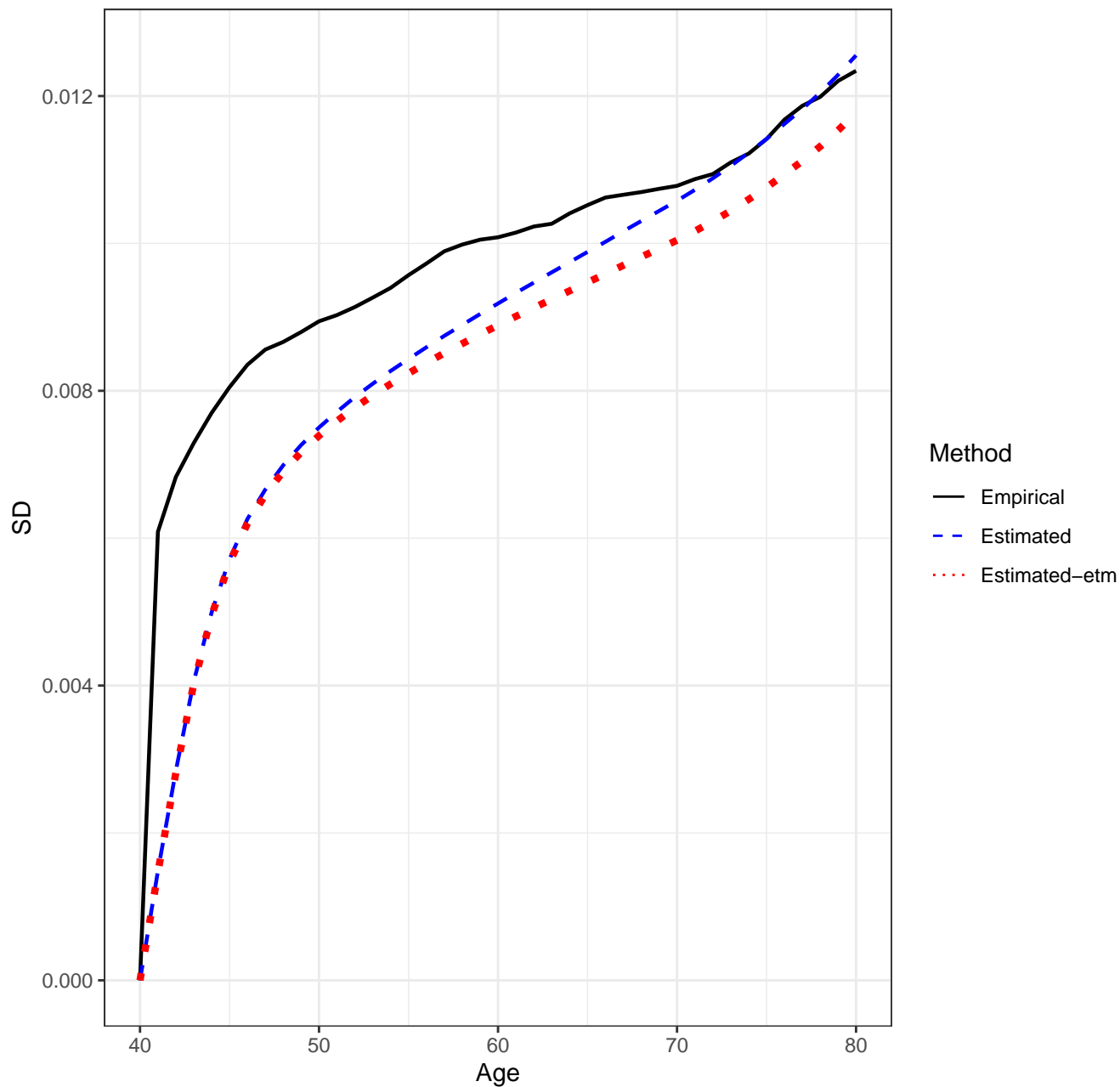




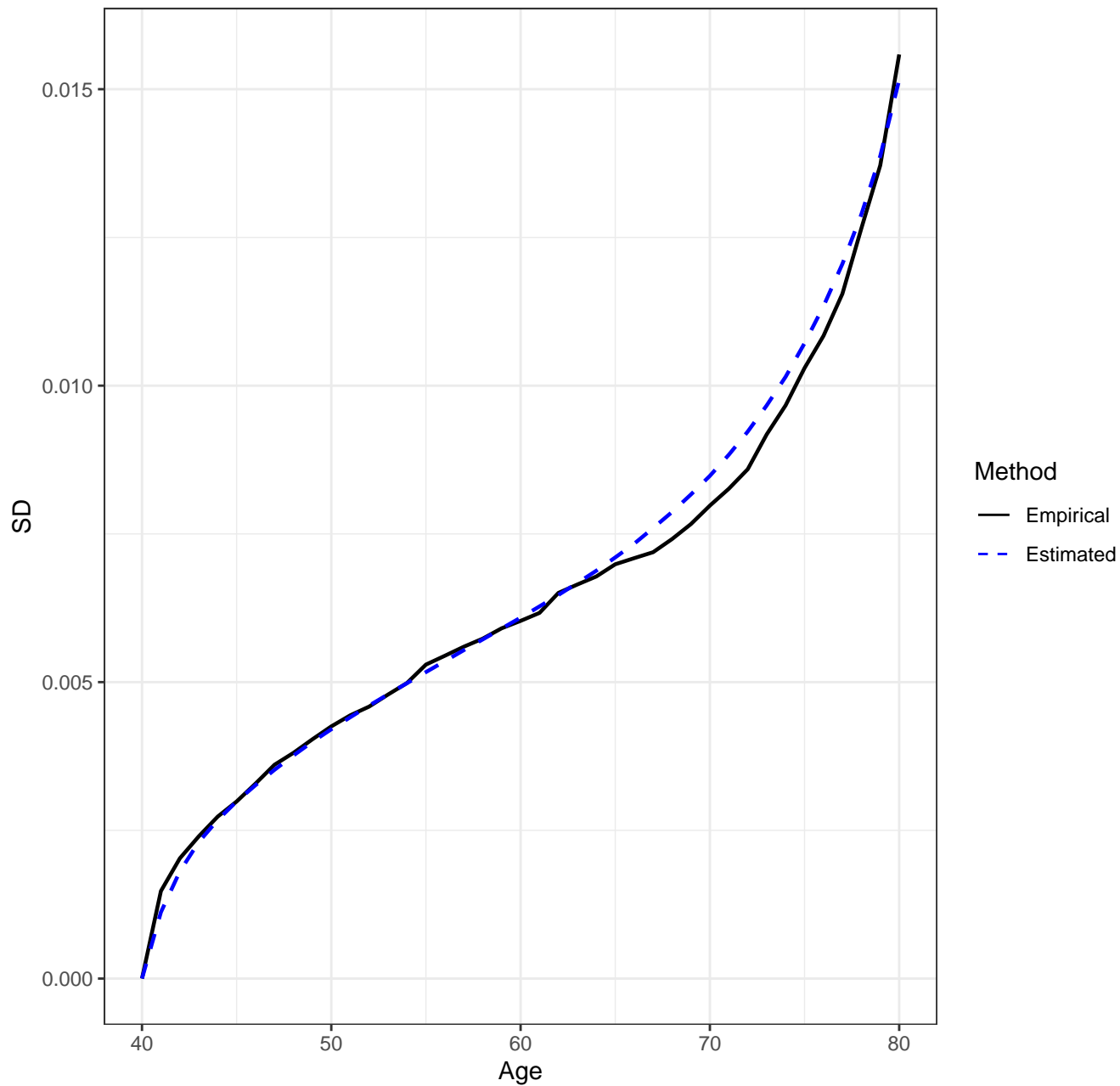
Scenario 2212, n=2500, IQR'S



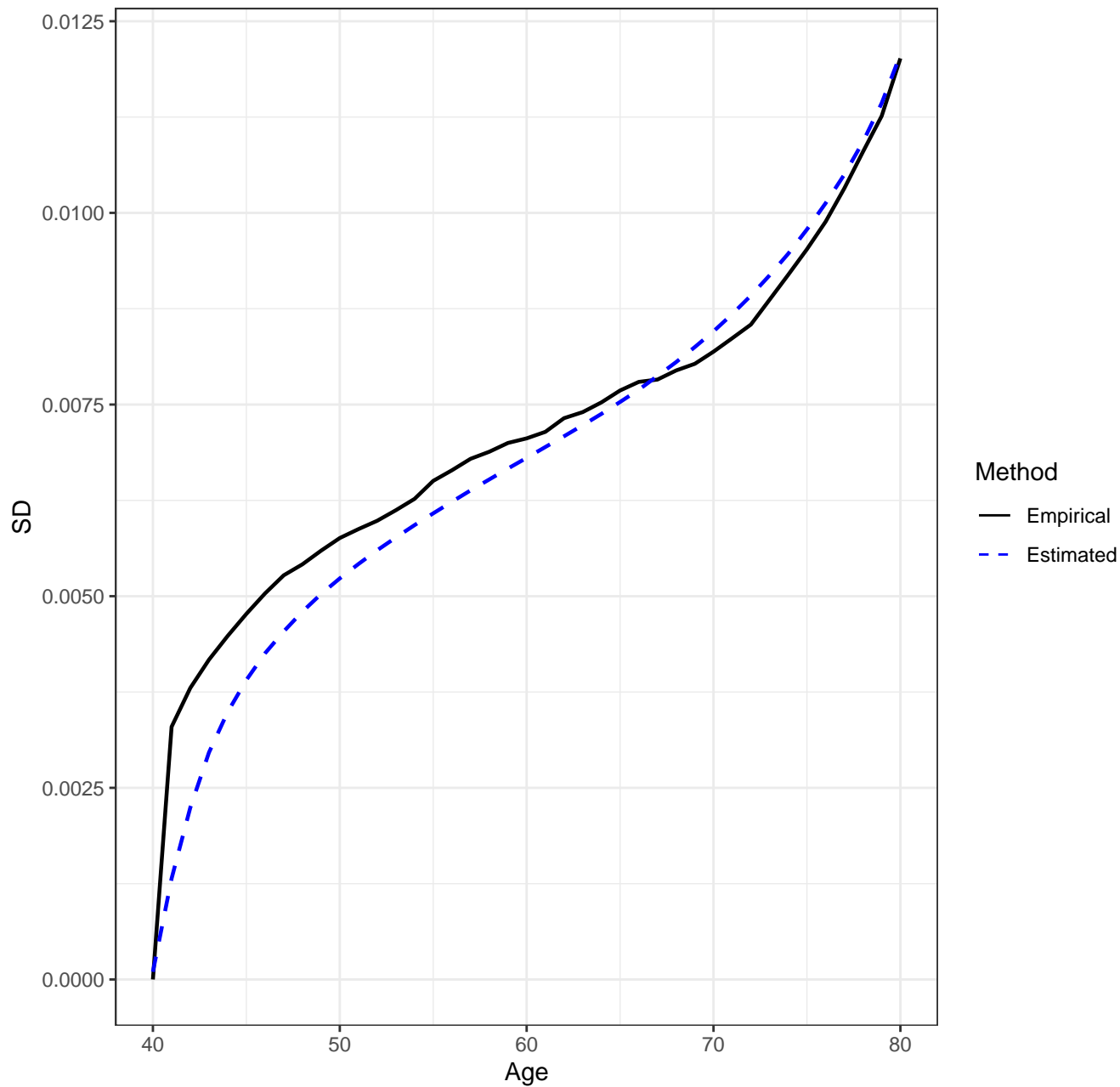
Scenario 2212, n=2500, AJ Estimator, Empirical vs. Estimated SD's



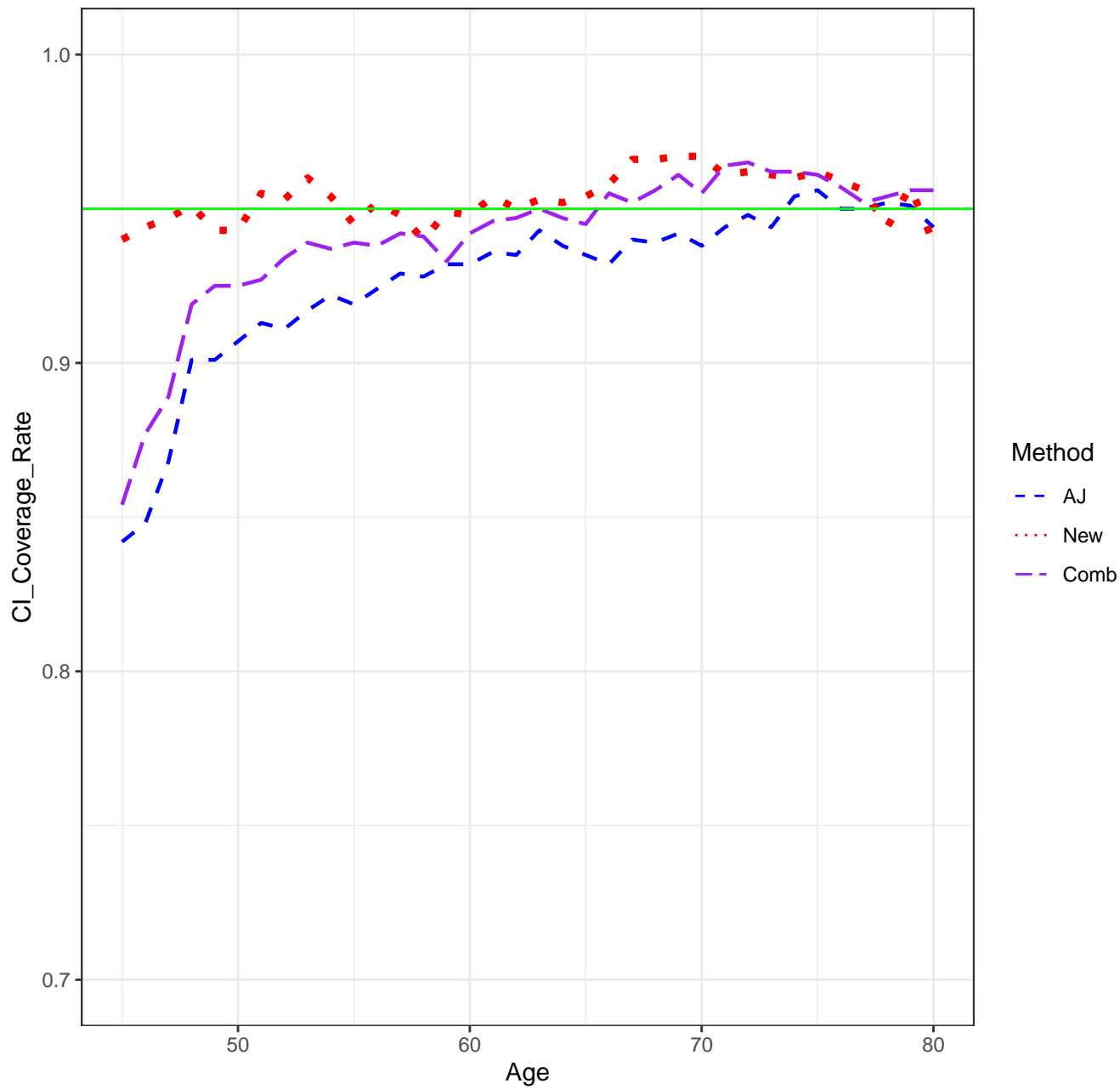
Scenario 2212, n=2500, New Estimator, Empirical vs. Estimated SD's



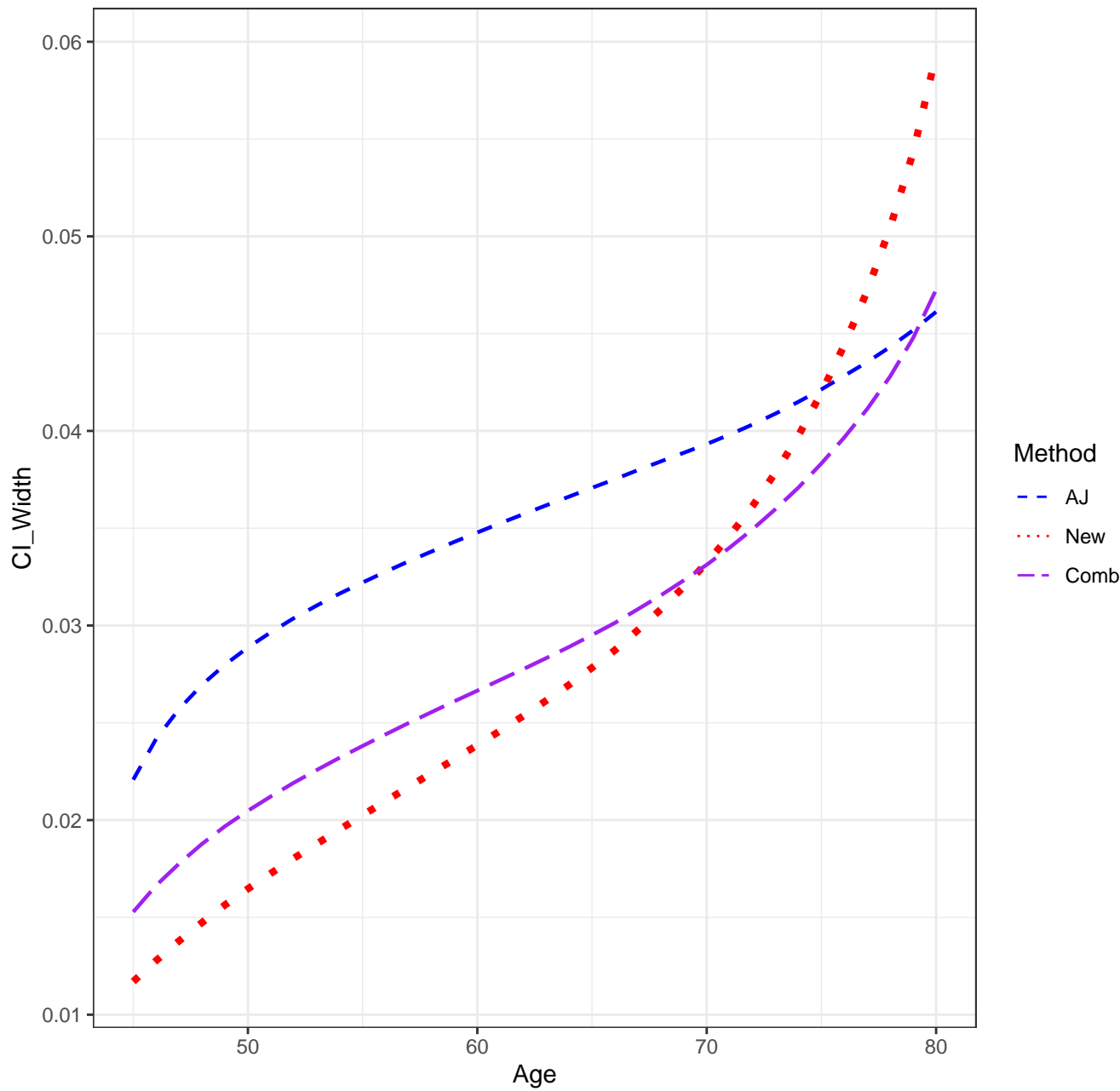
Scenario 2212, n=2500, Combined Estimator, Empirical vs. Estimated SD's



Scenario 2212, n=2500, CICR'S



Scenario 2212, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

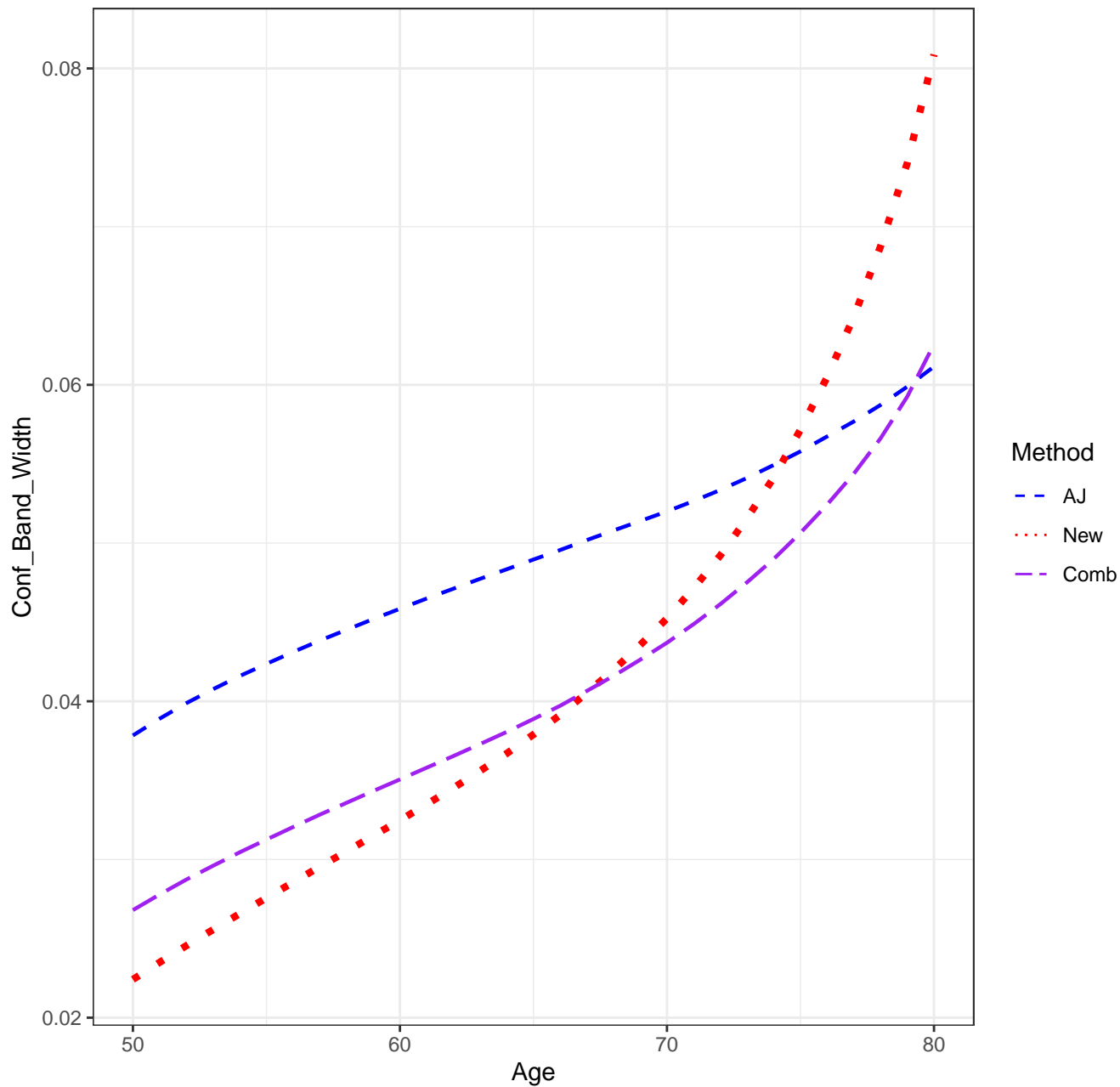
Scenario: 2212

AJ: 0.929

new: 0.941

Combo: 0.931

Scenario 2212, n=2500, Confidence Band Width





## SETTINGS

Scenario: 2221

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

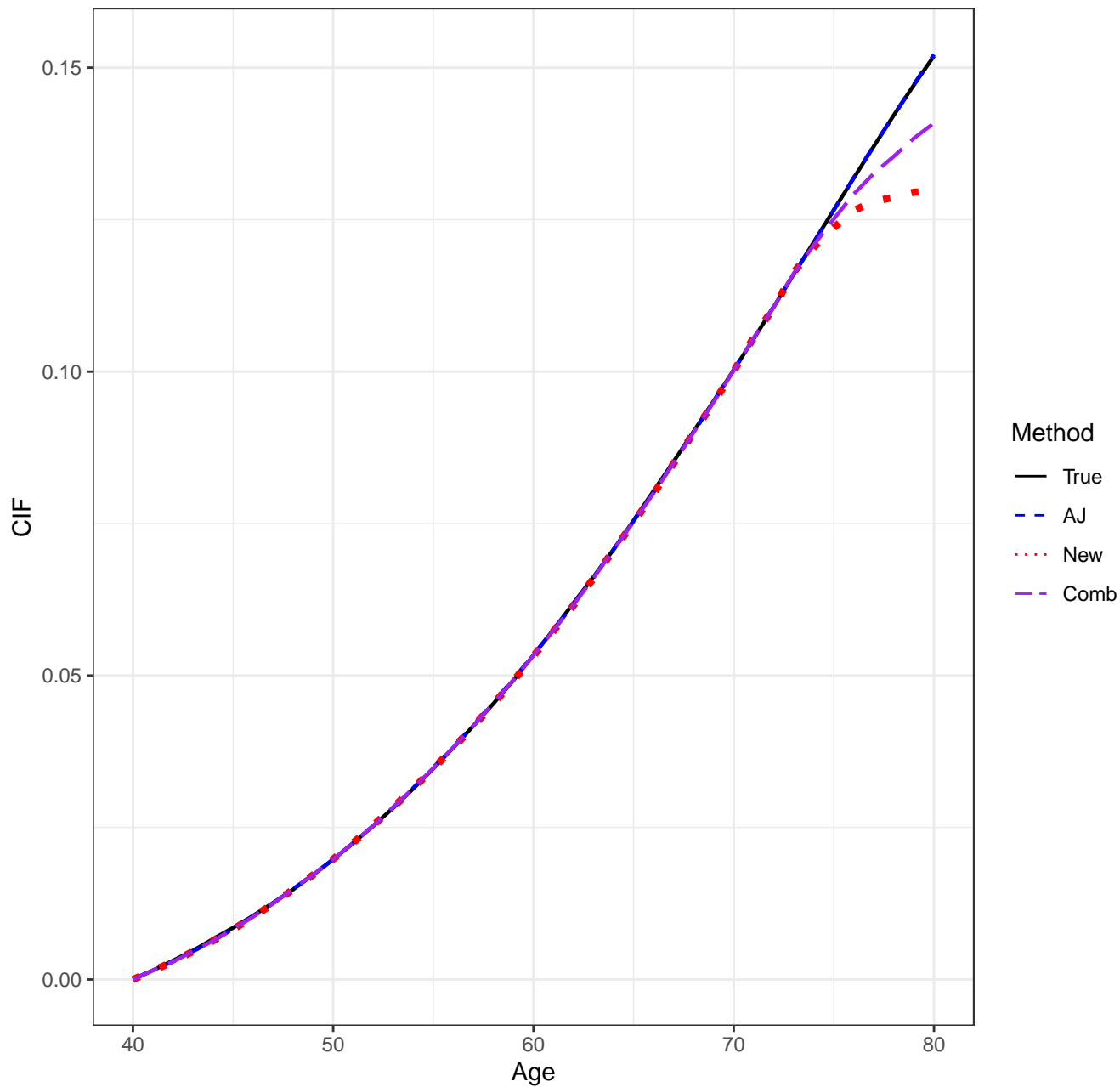
pointwise CI's done by: normal-theory

auxflg = FALSE

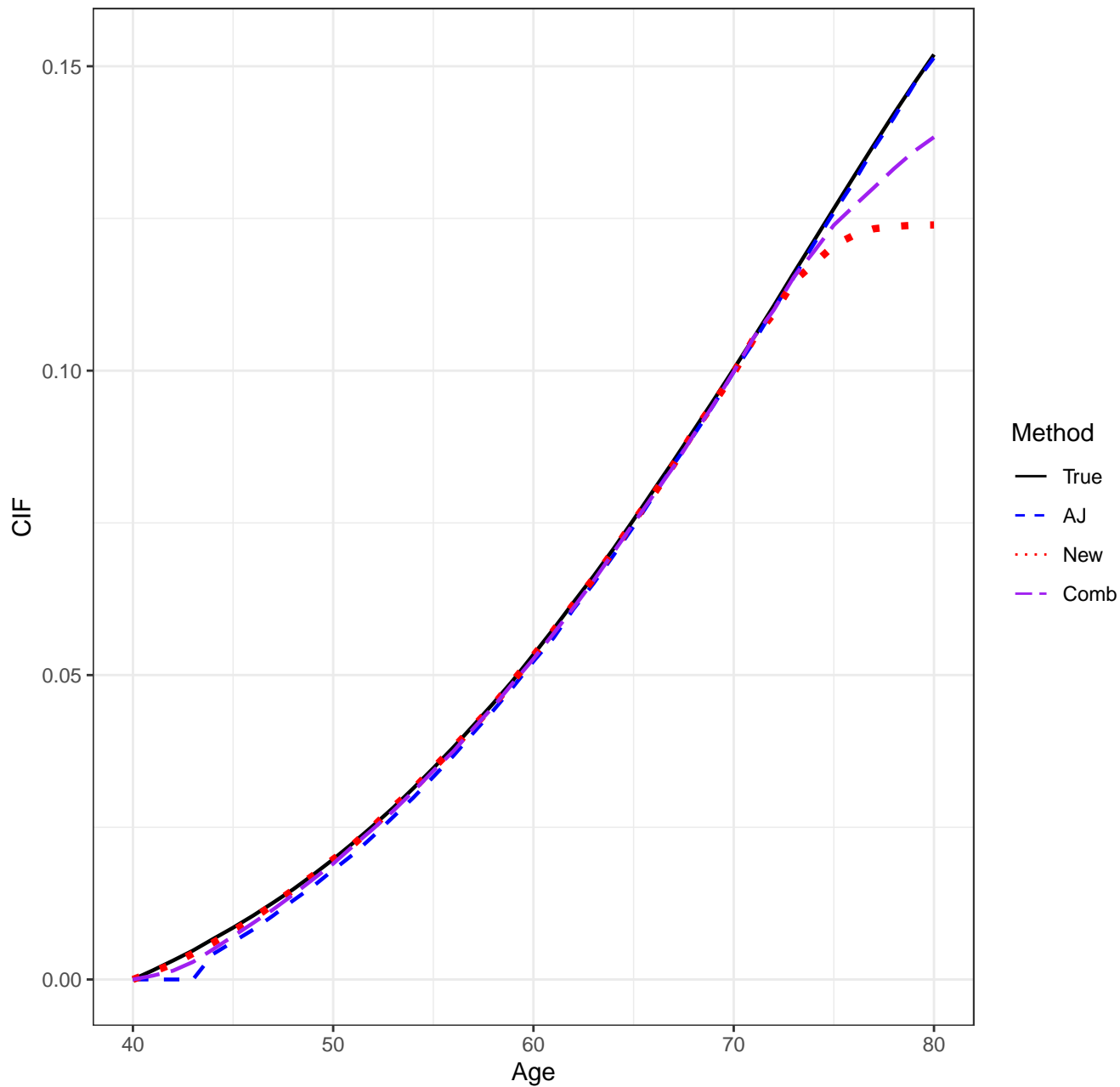
bootstrap weights: normal

Date/Time: 2024-01-14 13:44:51.377077

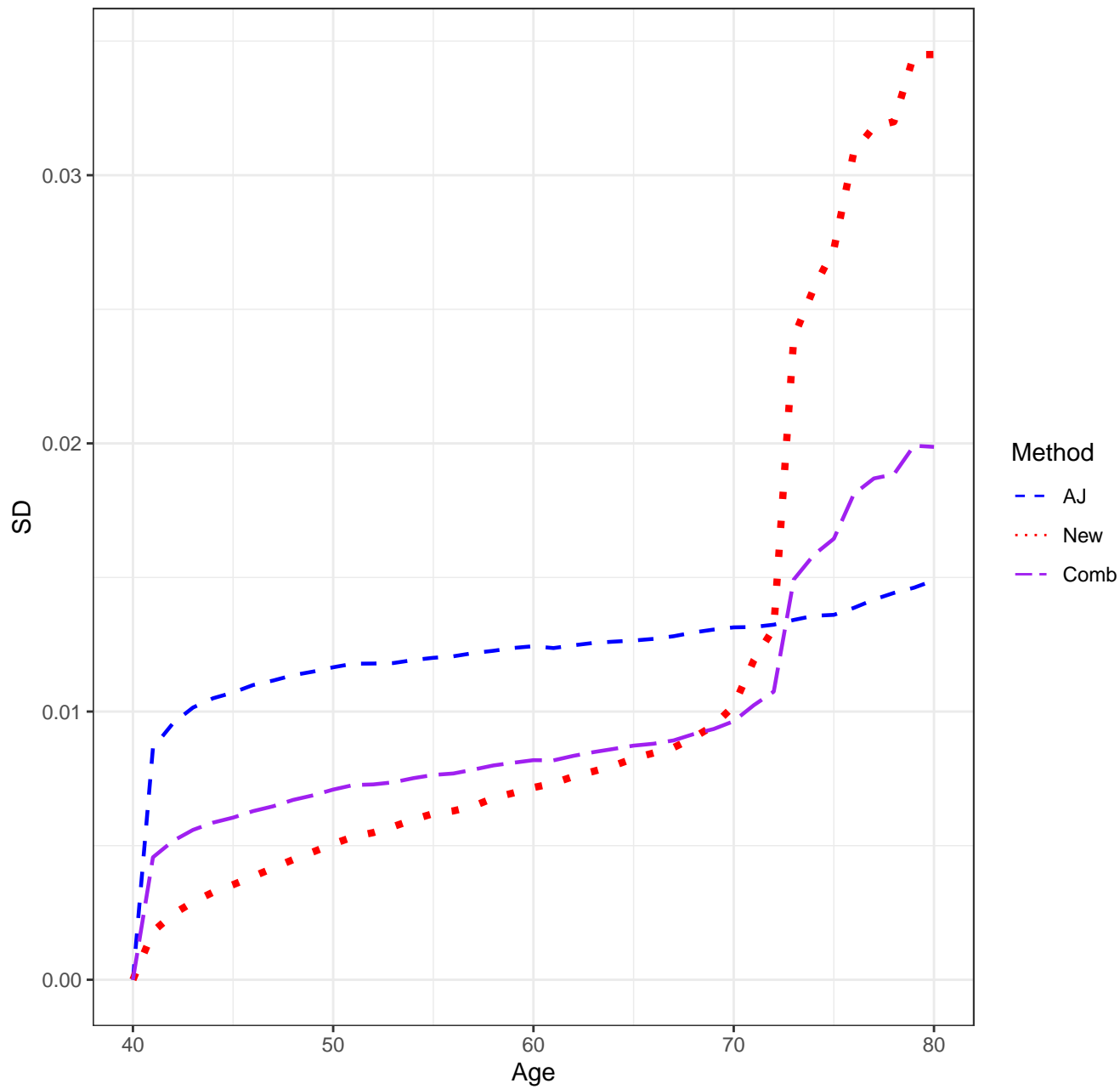
Scenario 2221, n=2500, Means



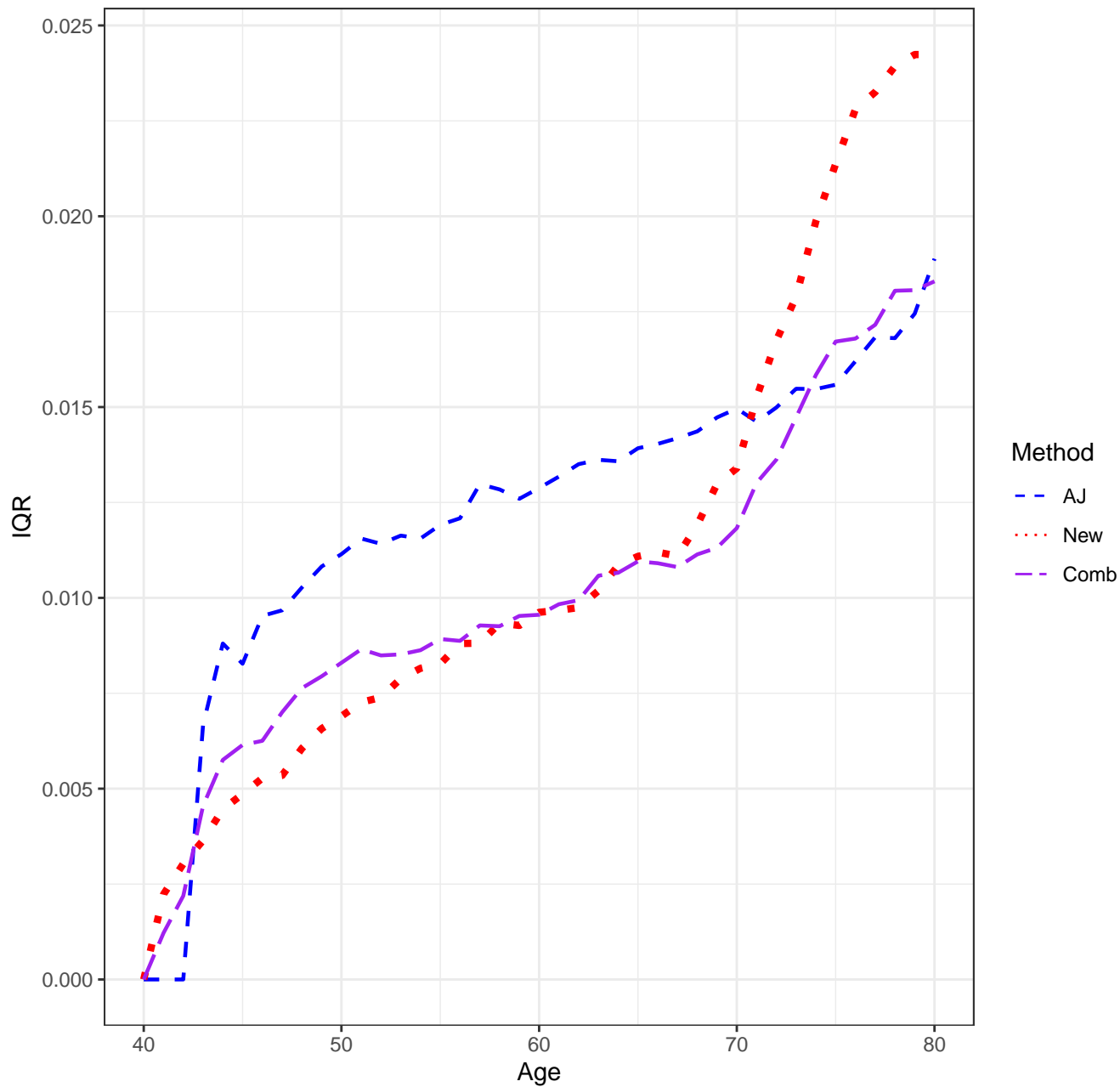
Scenario 2221, n=2500, Medians



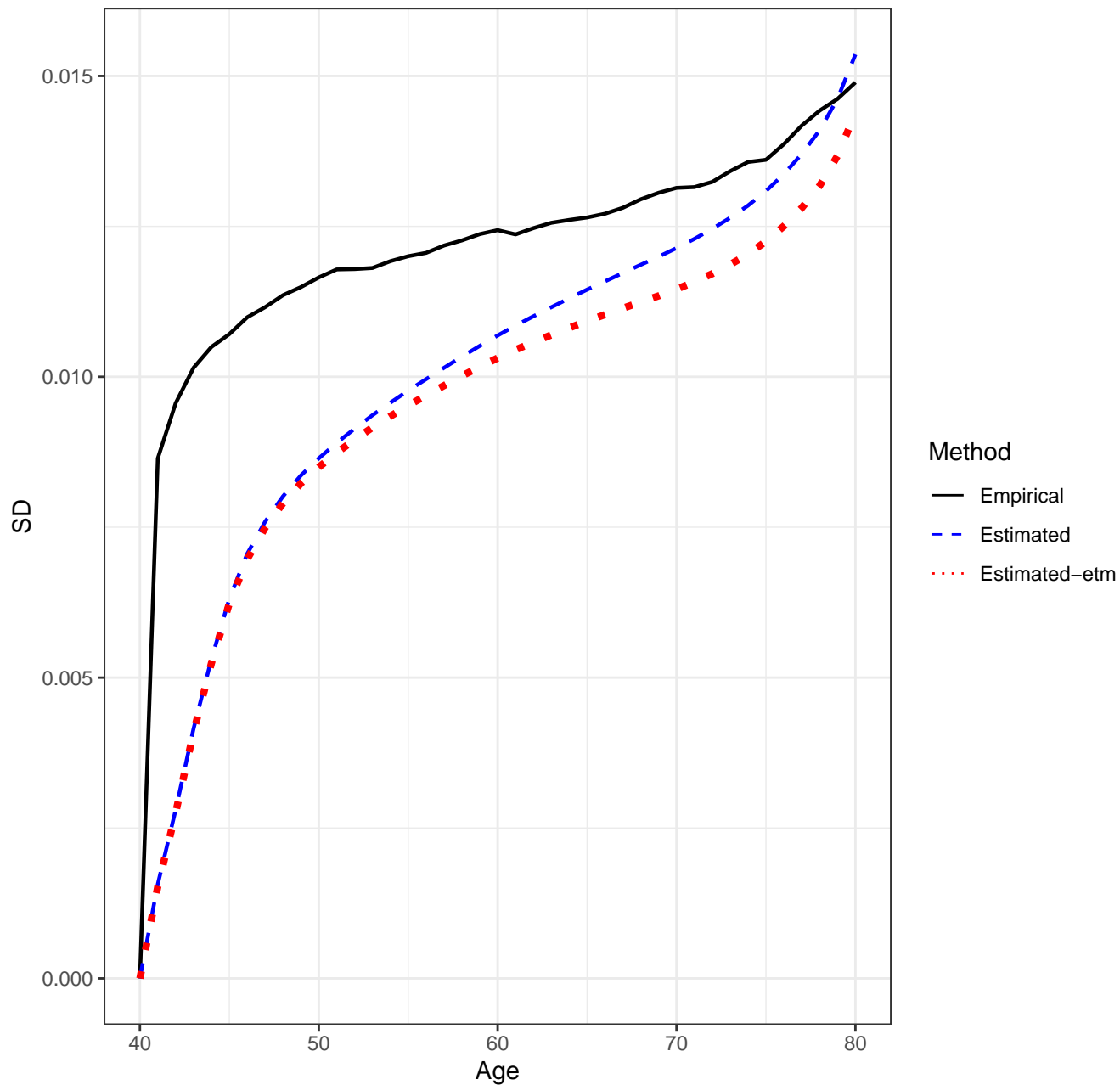
Scenario 2221, n=2500, SD'S



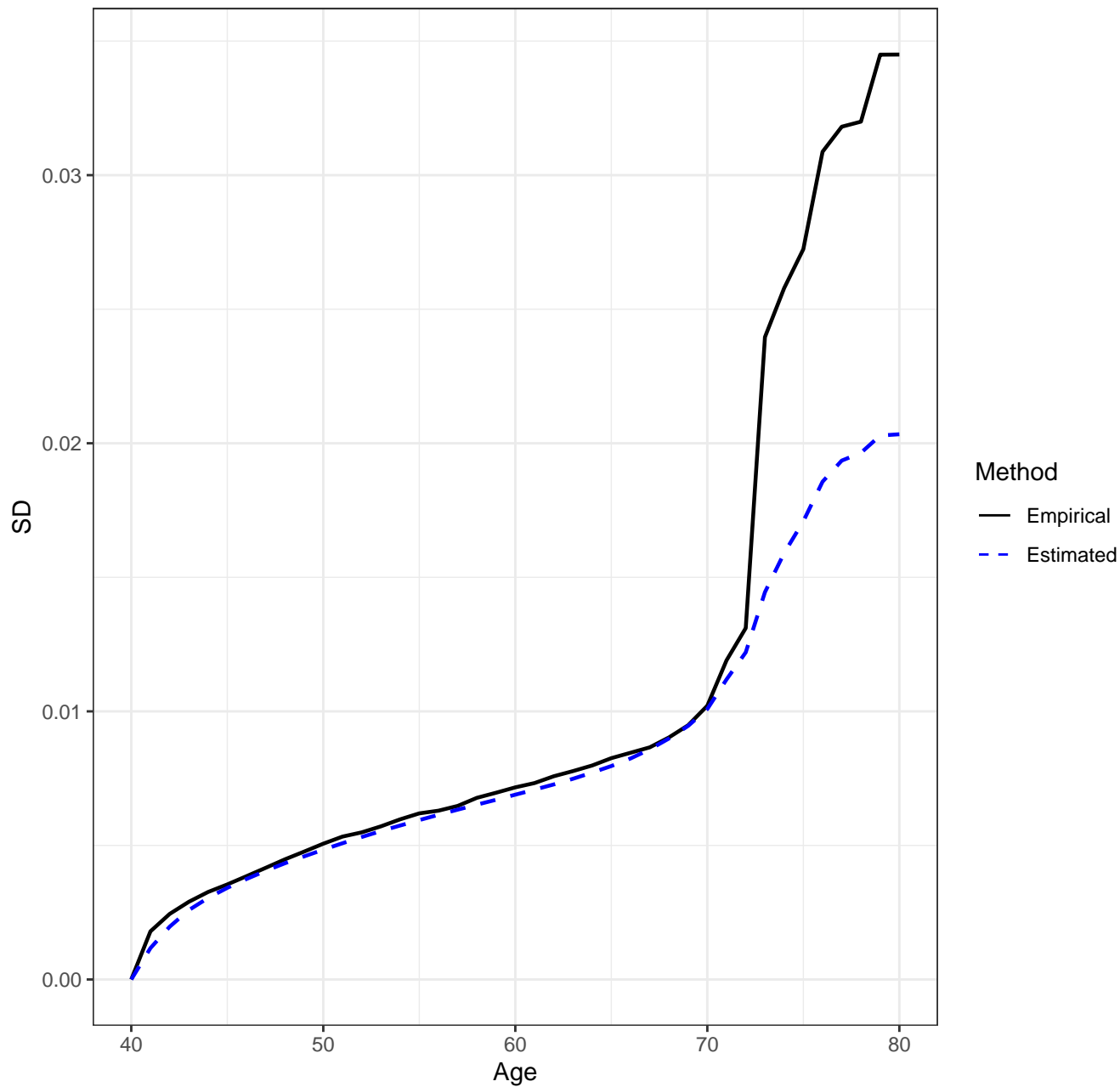
Scenario 2221, n=2500, IQR'S



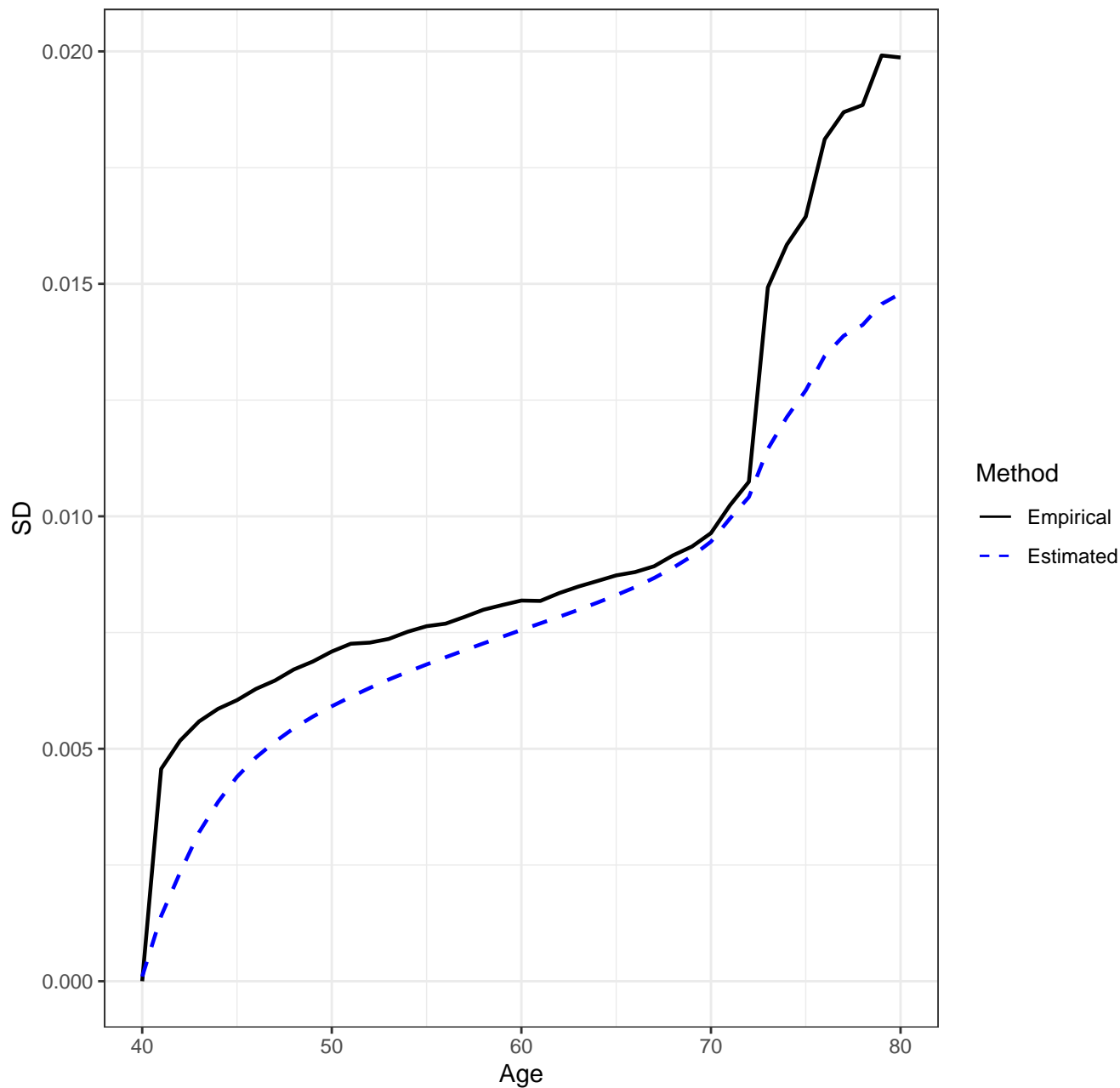
Scenario 2221, n=2500, AJ Estimator, Empirical vs. Estimated SD's



Scenario 2221, n=2500, New Estimator, Empirical vs. Estimated SD's

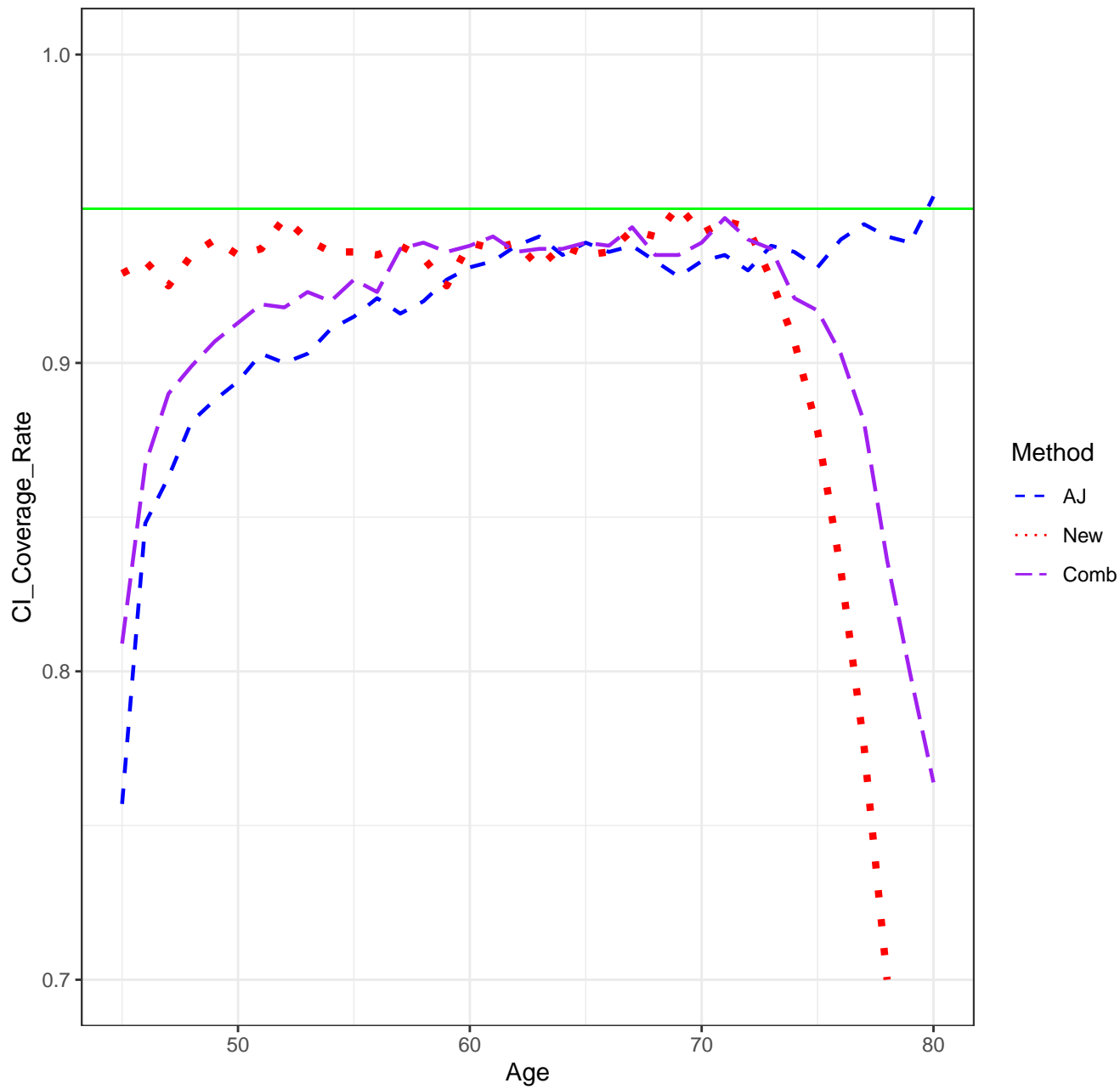


Scenario 2221, n=2500, Combined Estimator, Empirical vs. Estimated SD's

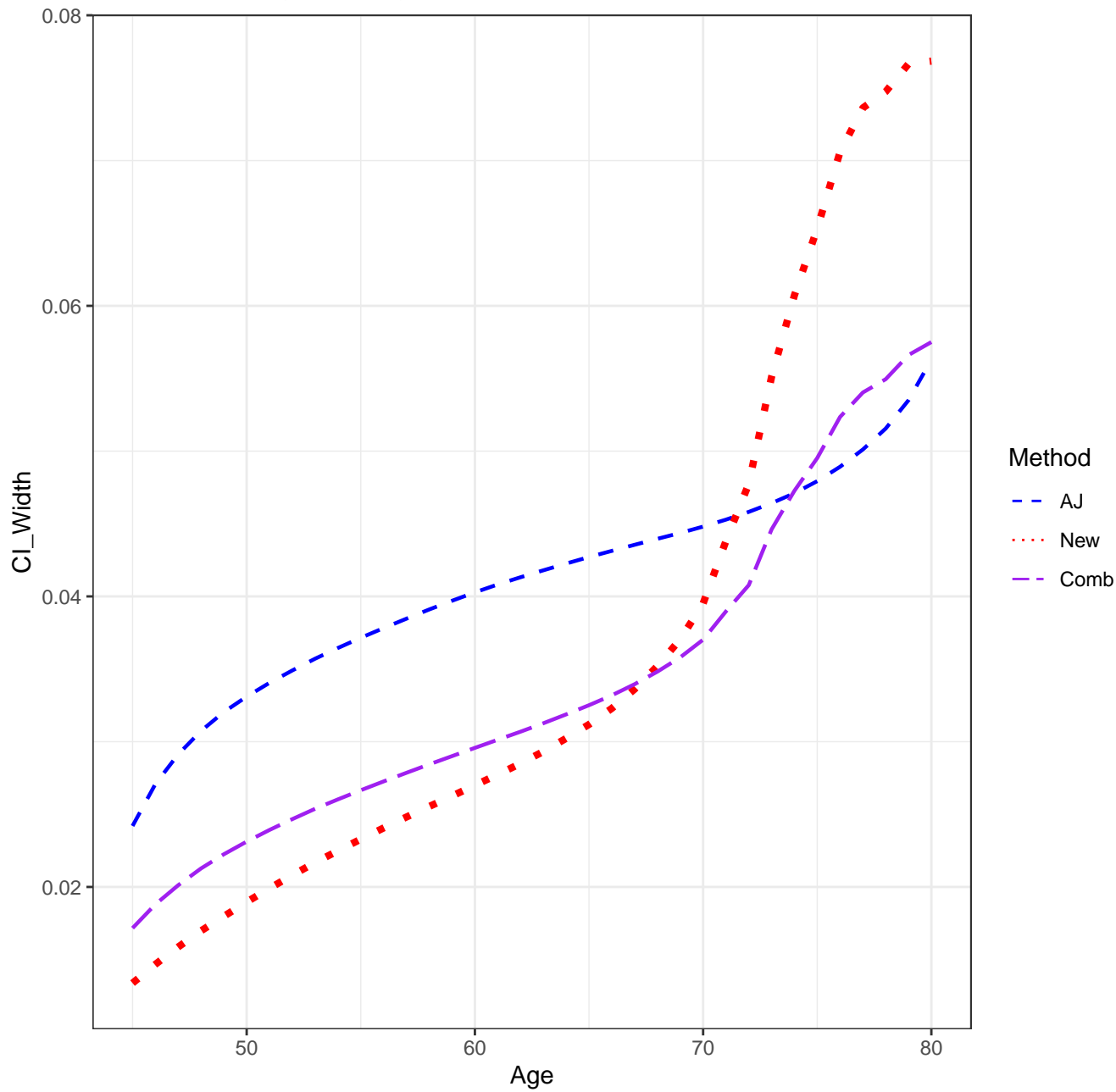




Scenario 2221, n=2500, CICR'S



Scenario 2221, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

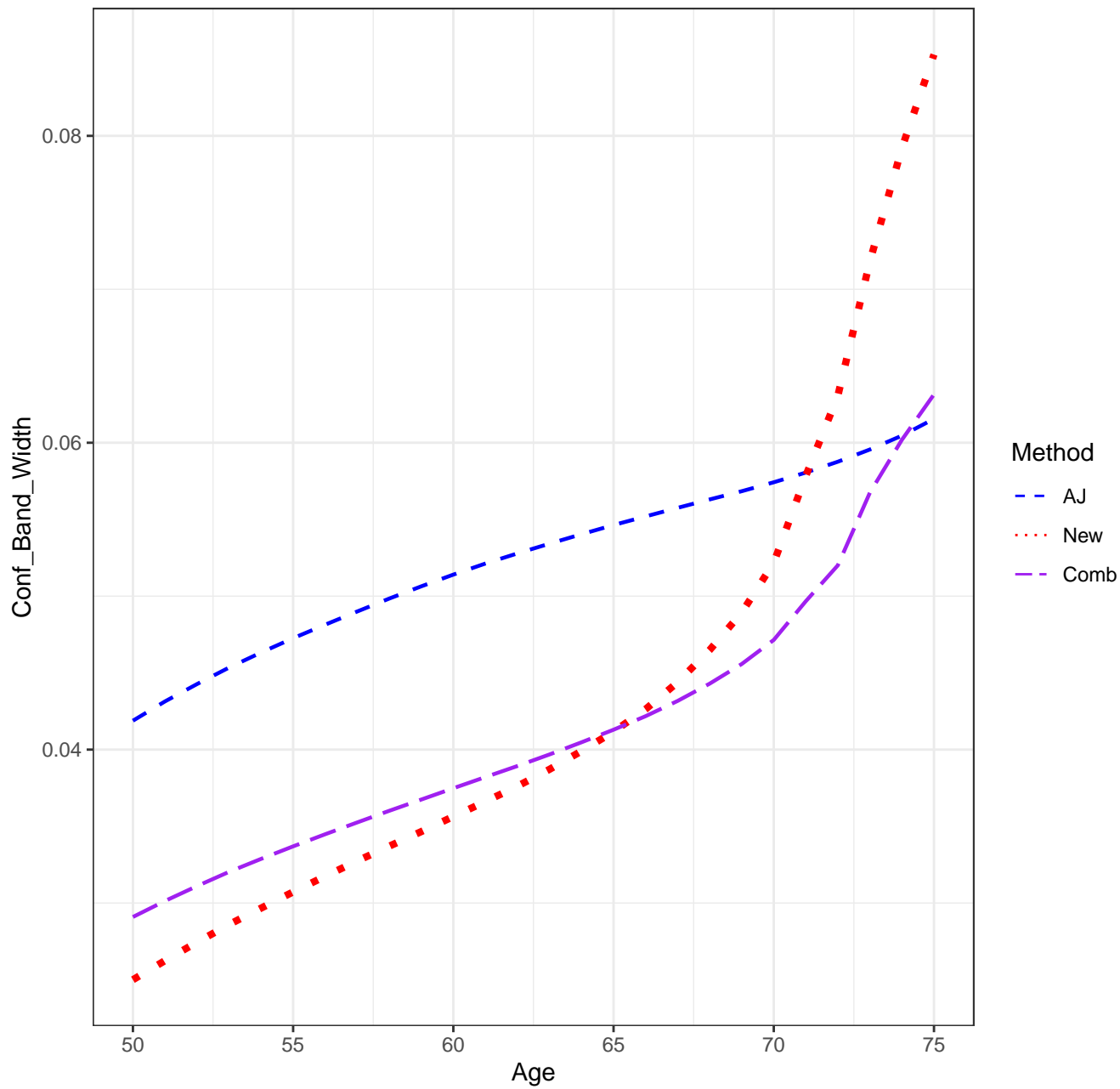
Scenario: 2221

AJ: 0.909

new: 0.898

Combo: 0.906

Scenario 2221, n=2500, Confidence Band Width



## SETTINGS

Scenario: 2222

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

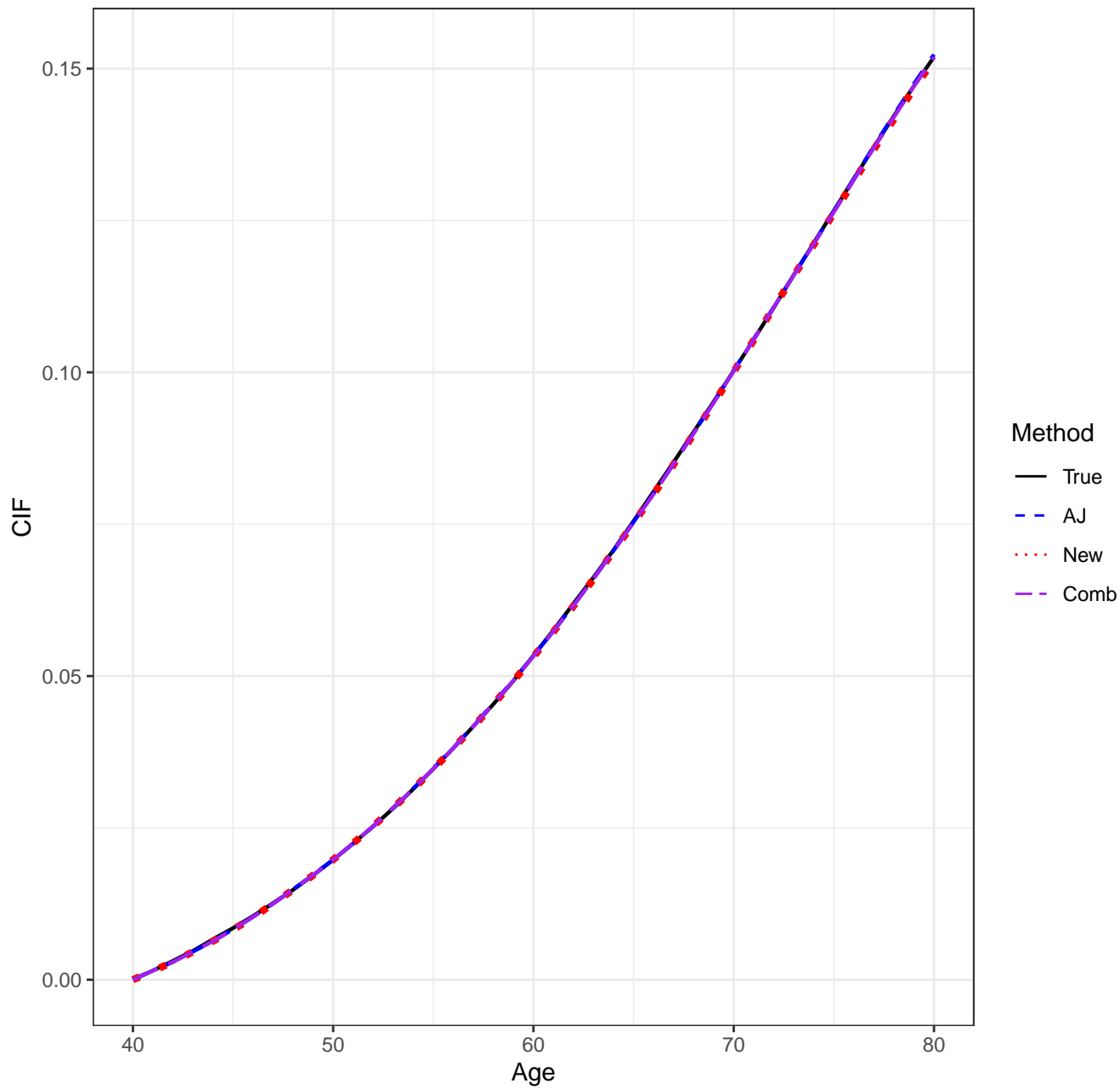
pointwise CI's done by: normal-theory

auxflg = FALSE

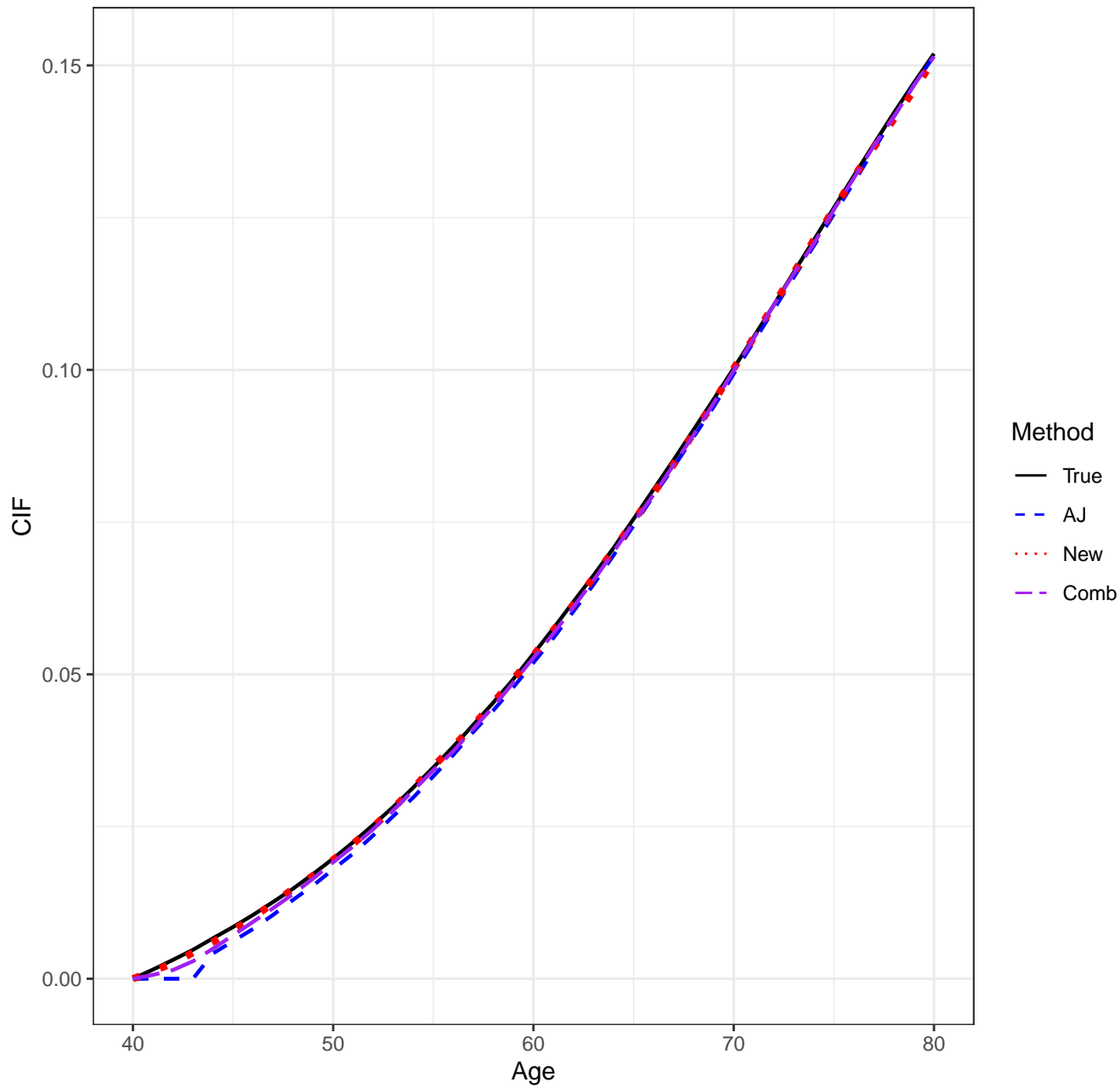
bootstrap weights: normal

Date/Time: 2024-01-14 14:17:54.552159

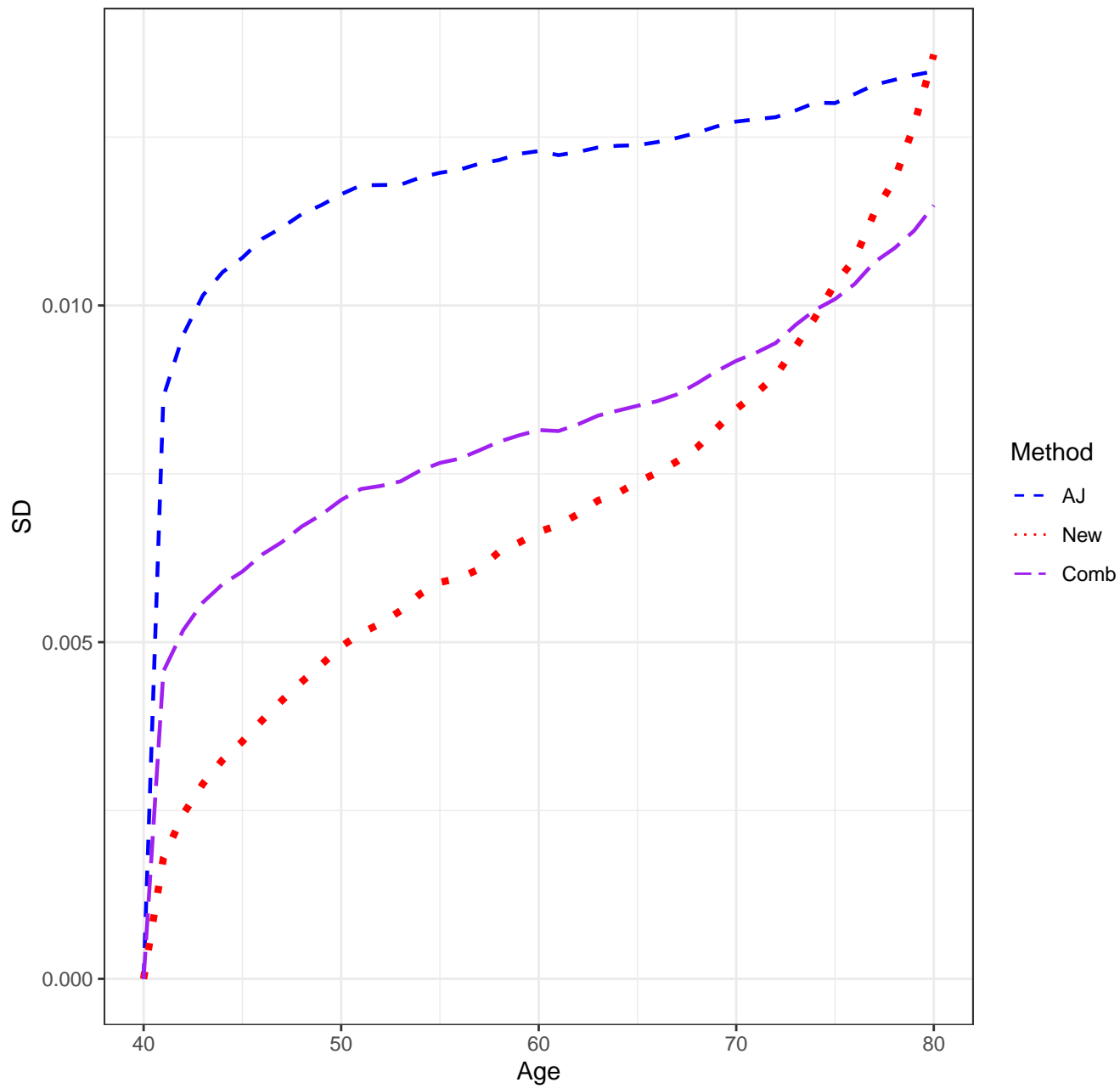
Scenario 2222, n=2500, Means



Scenario 2222, n=2500, Medians

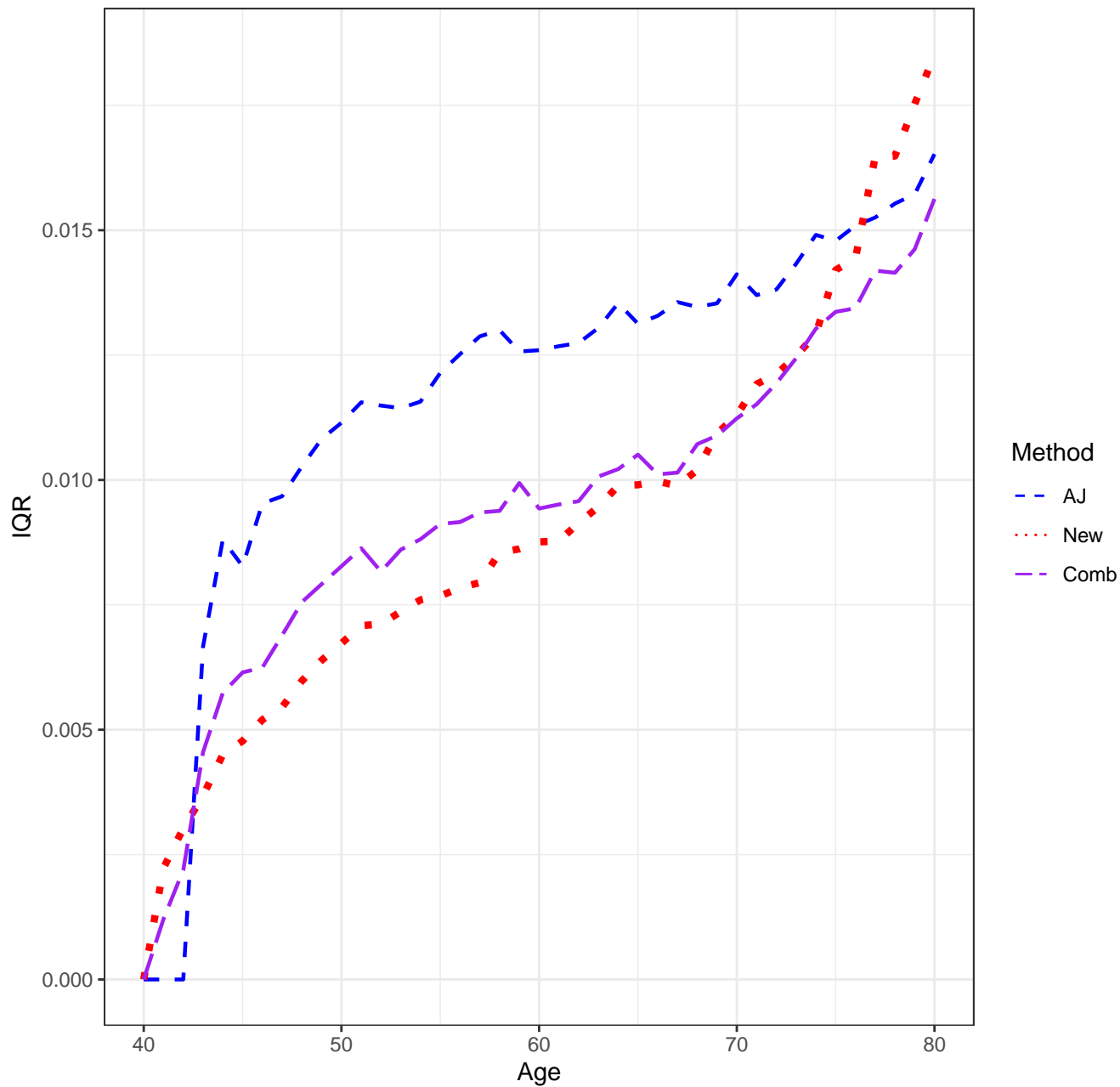


Scenario 2222, n=2500, SD'S

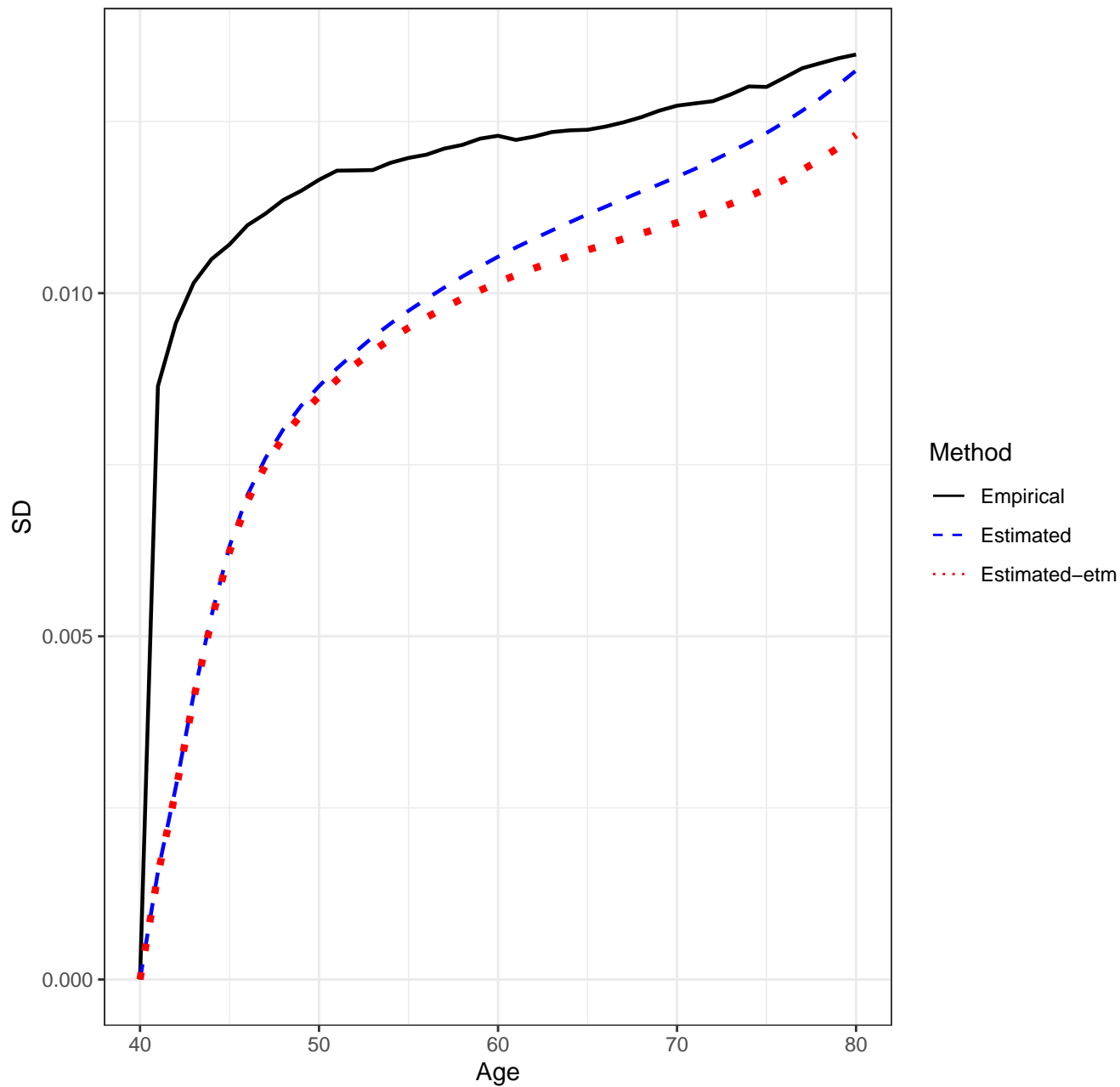




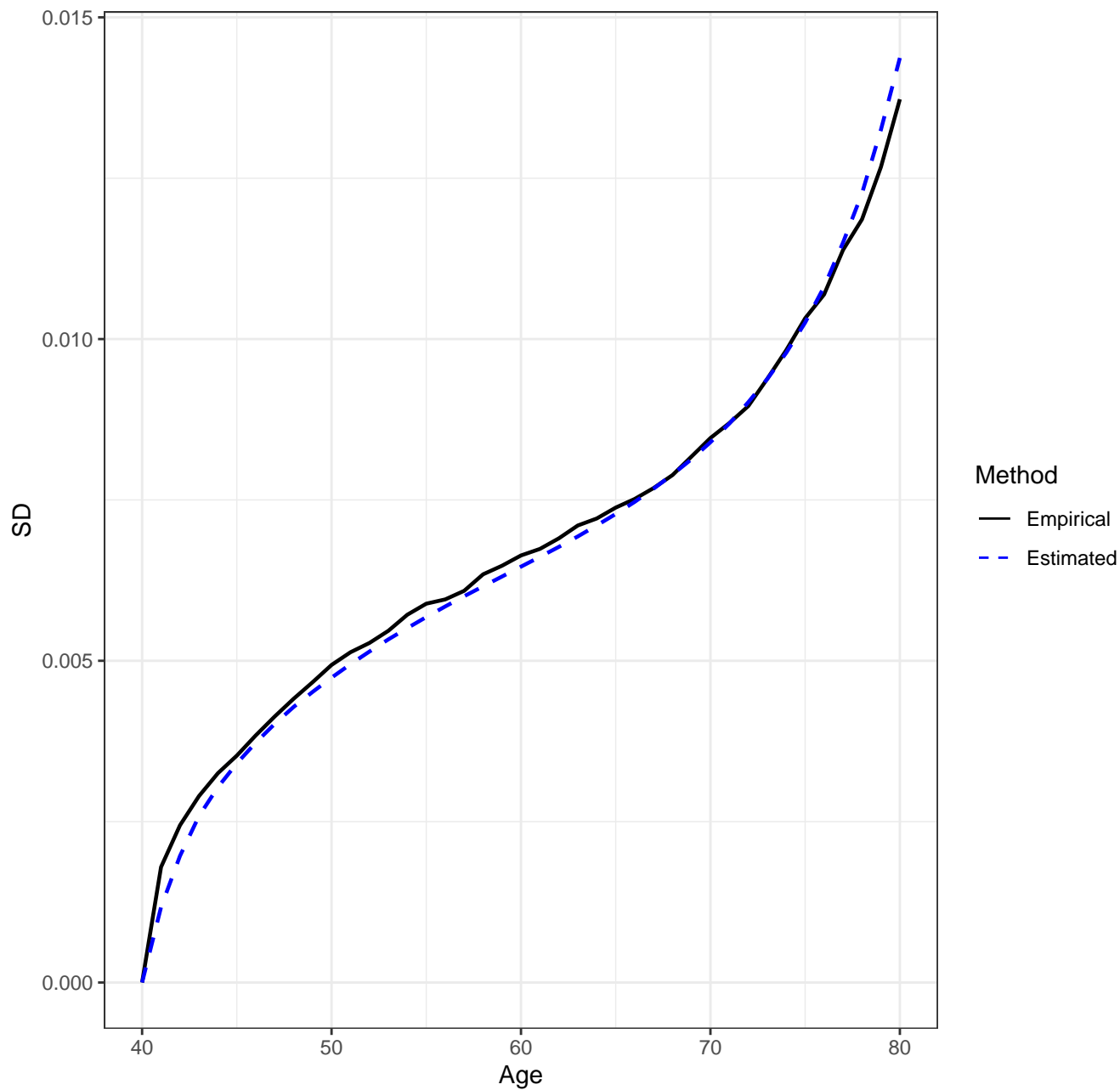
Scenario 2222, n=2500, IQR'S



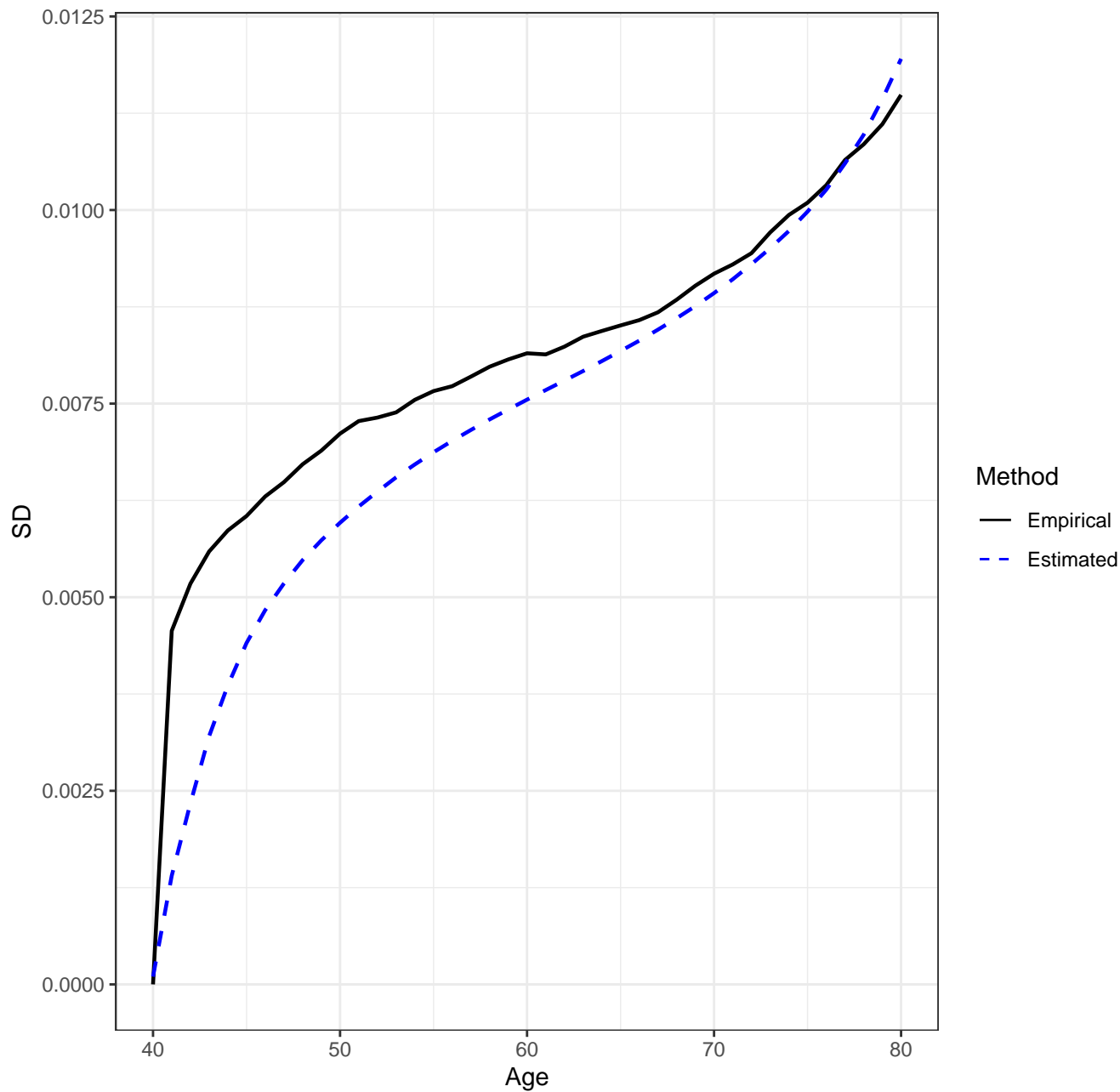
Scenario 2222, n=2500, AJ Estimator, Empirical vs. Estimated SD's



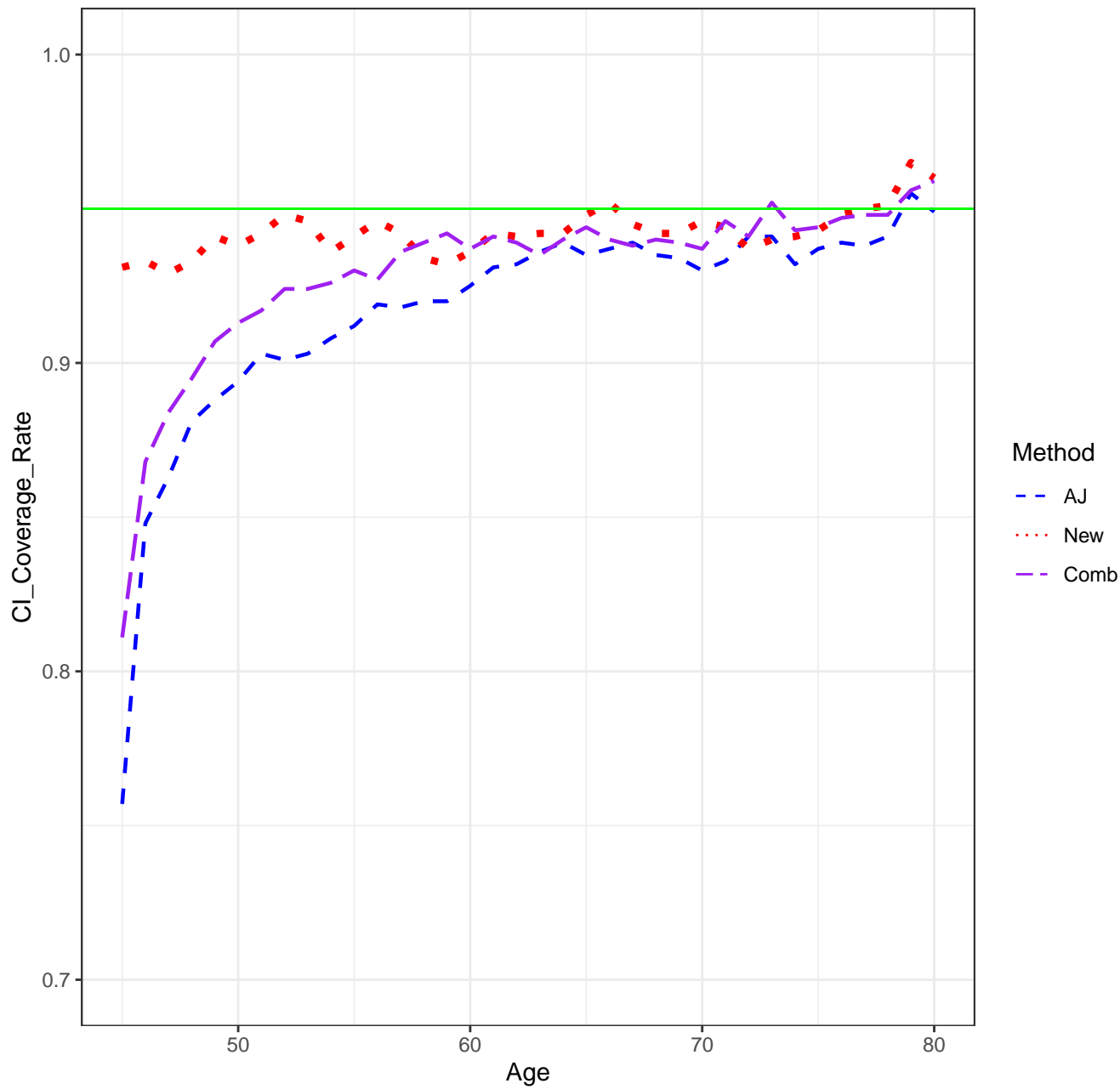
Scenario 2222, n=2500, New Estimator, Empirical vs. Estimated SD's



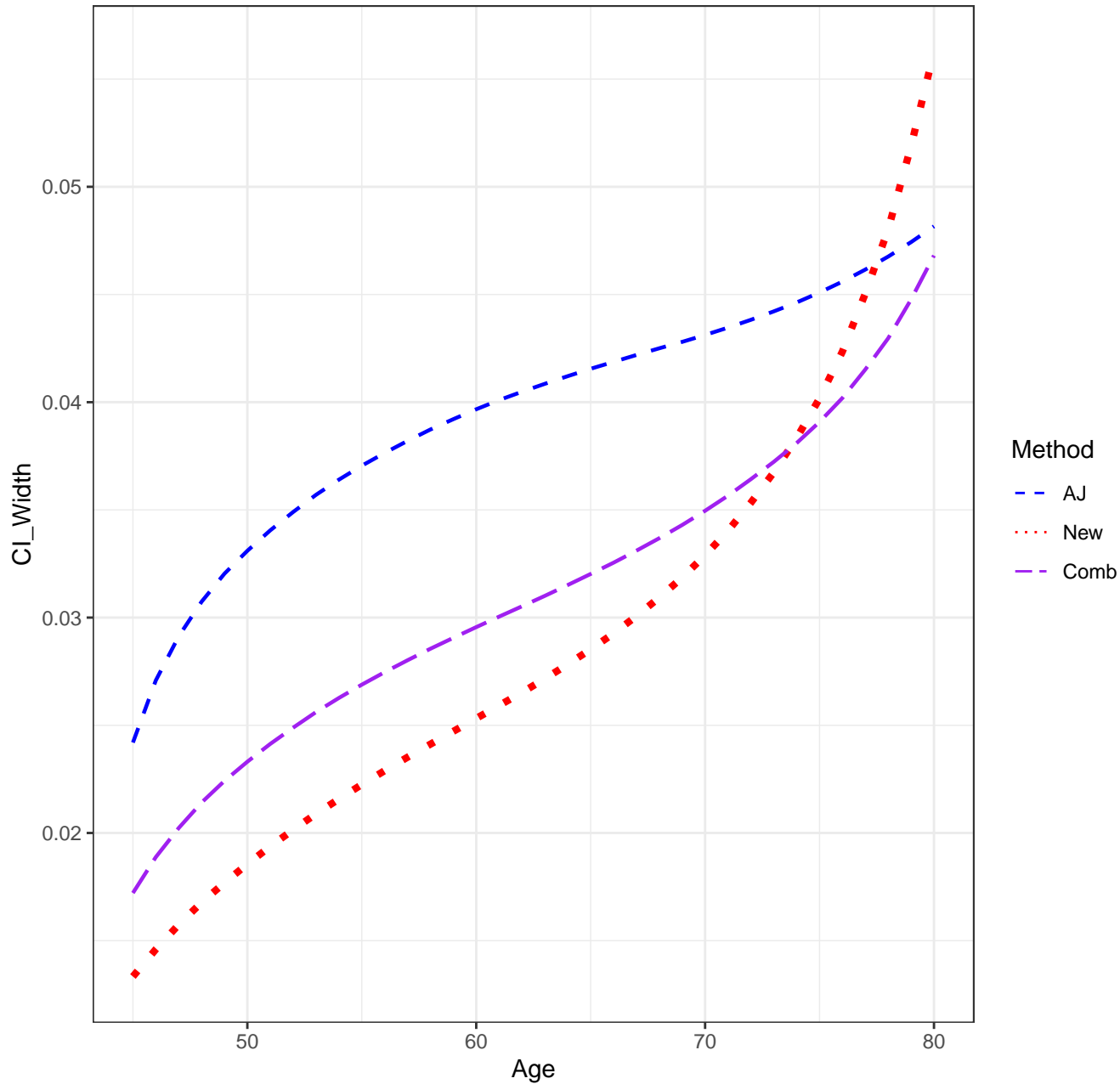
Scenario 2222, n=2500, Combined Estimator, Empirical vs. Estimated SD's



Scenario 2222, n=2500, CICR'S



Scenario 2222, n=2500, CI Width



## CONFIDENCE BAND COVERAGE RATES

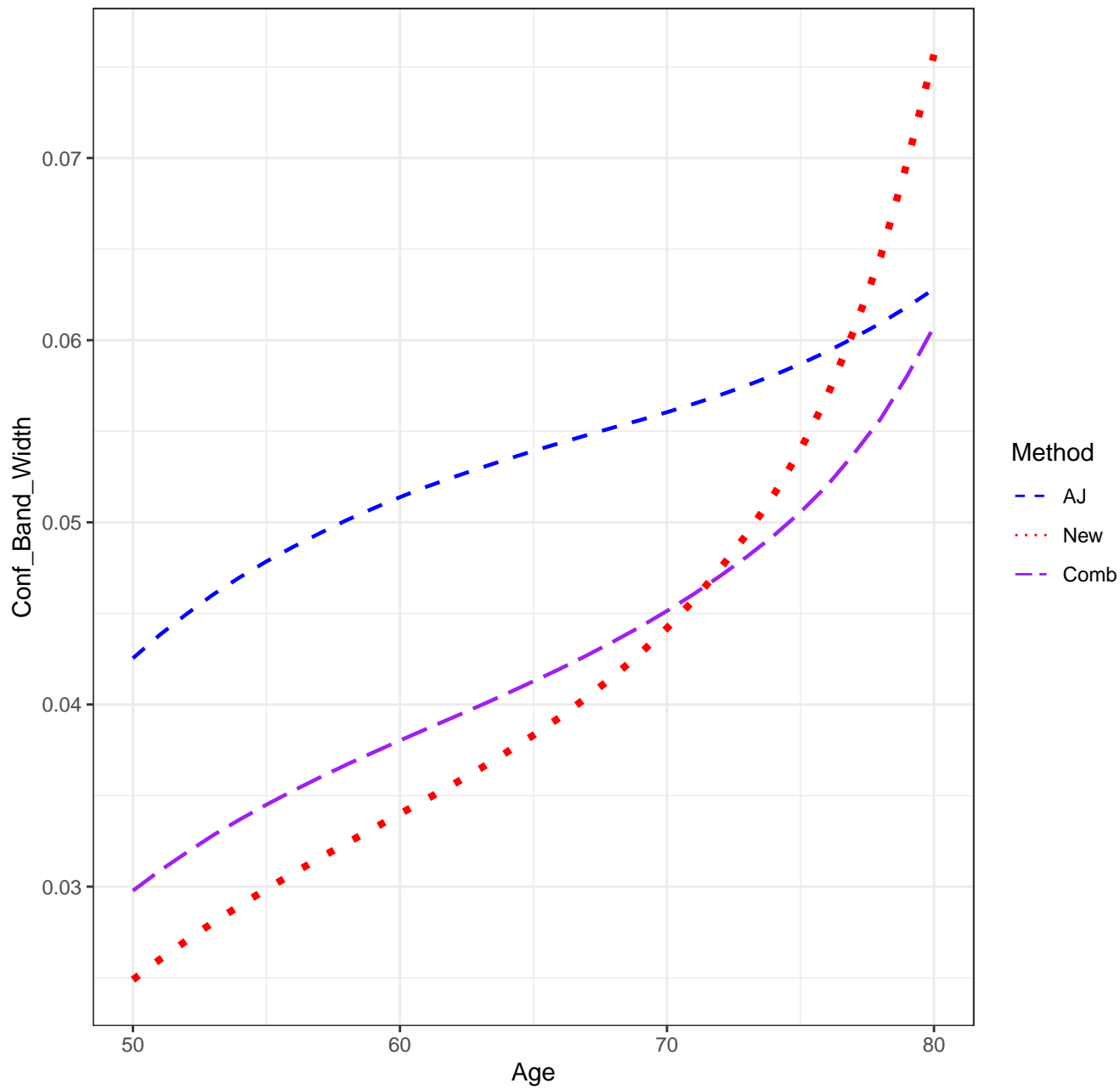
Scenario: 2222

AJ: 0.907

new: 0.934

Combo: 0.919

Scenario 2222, n=2500, Confidence Band Width





## SETTINGS

Scenario: 3111

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

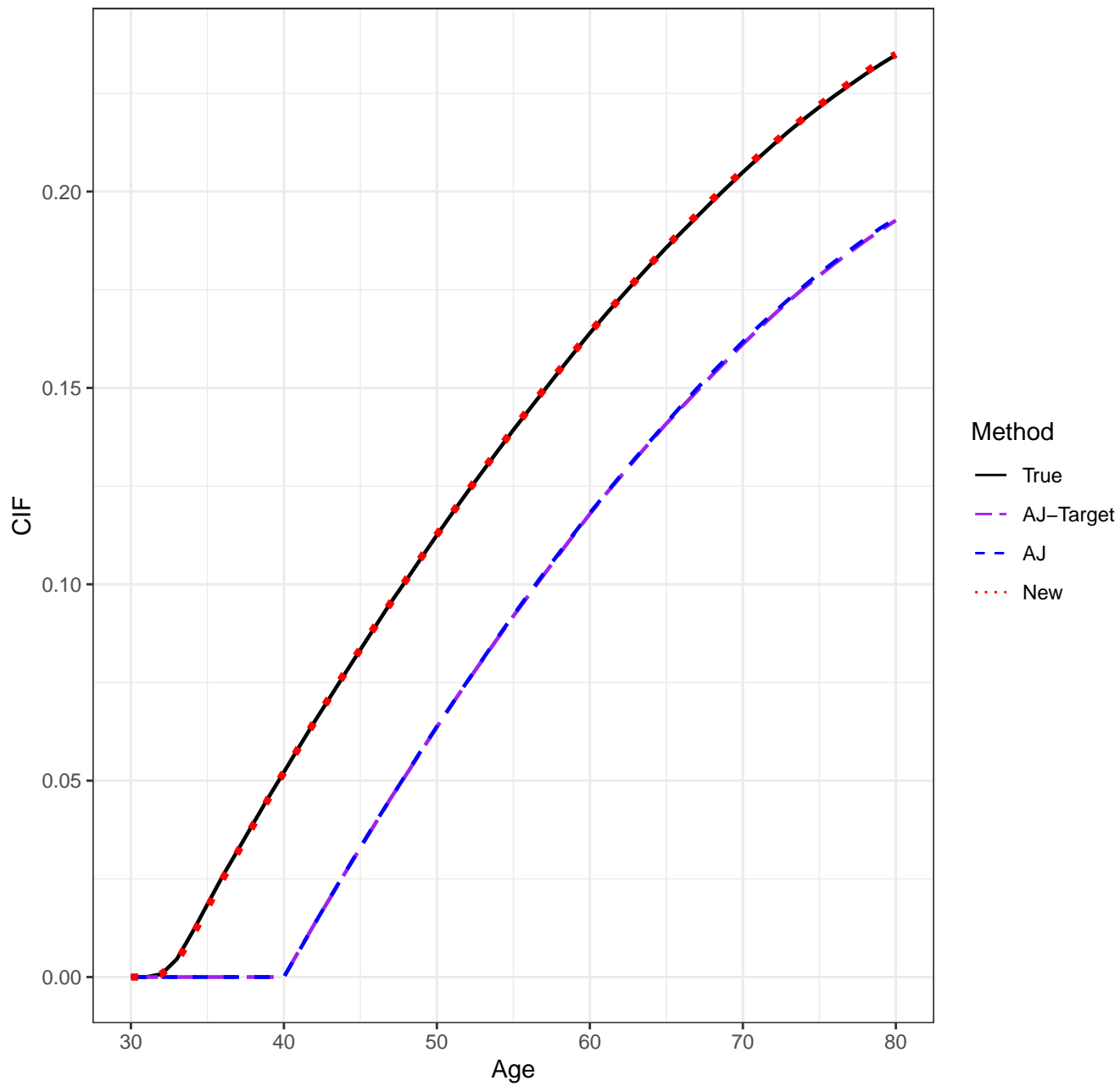
pointwise CI's done by: normal-theory

auxflg = FALSE

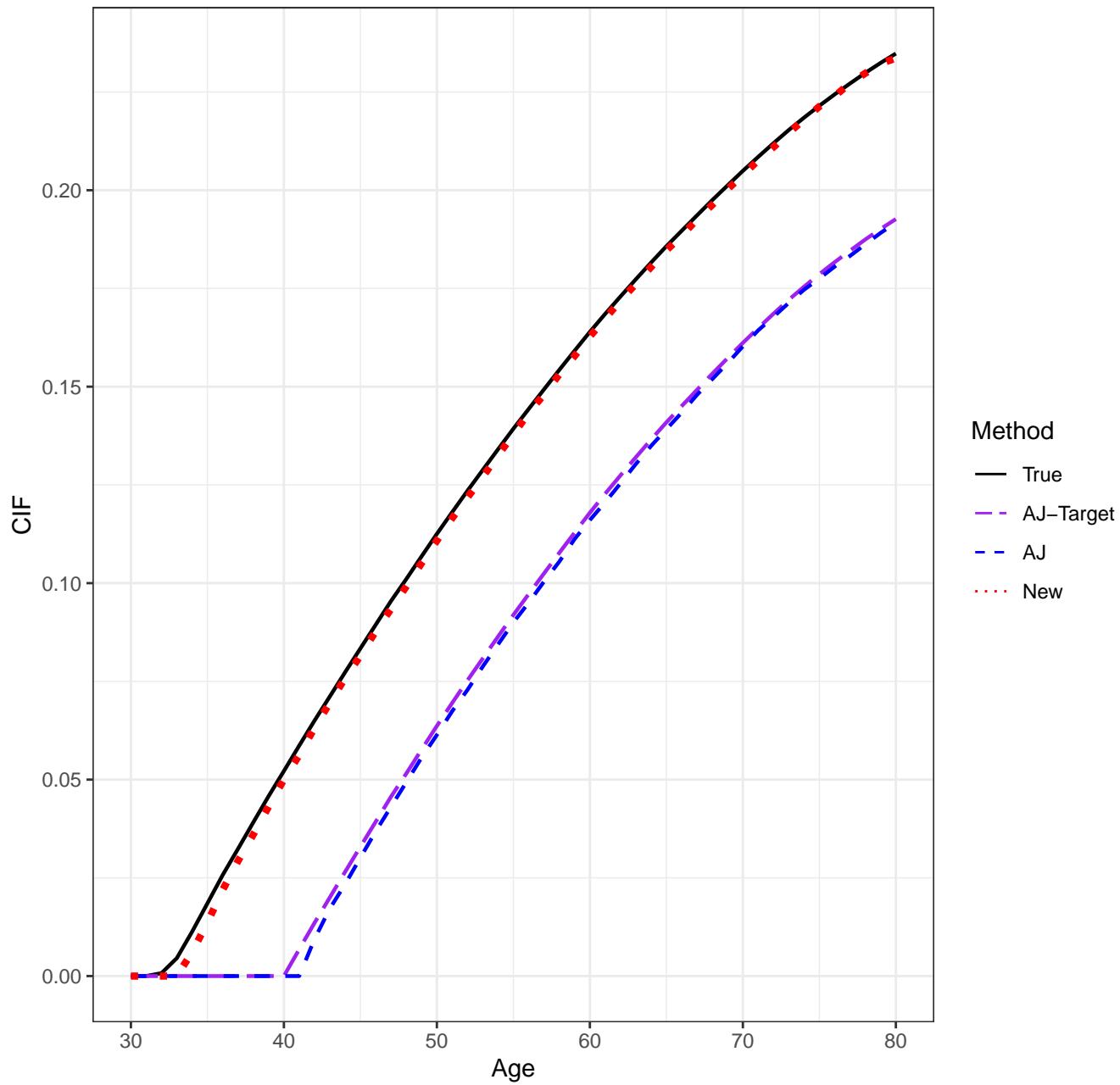
bootstrap weights: normal

Date/Time: 2024-01-12 11:20:52.038446

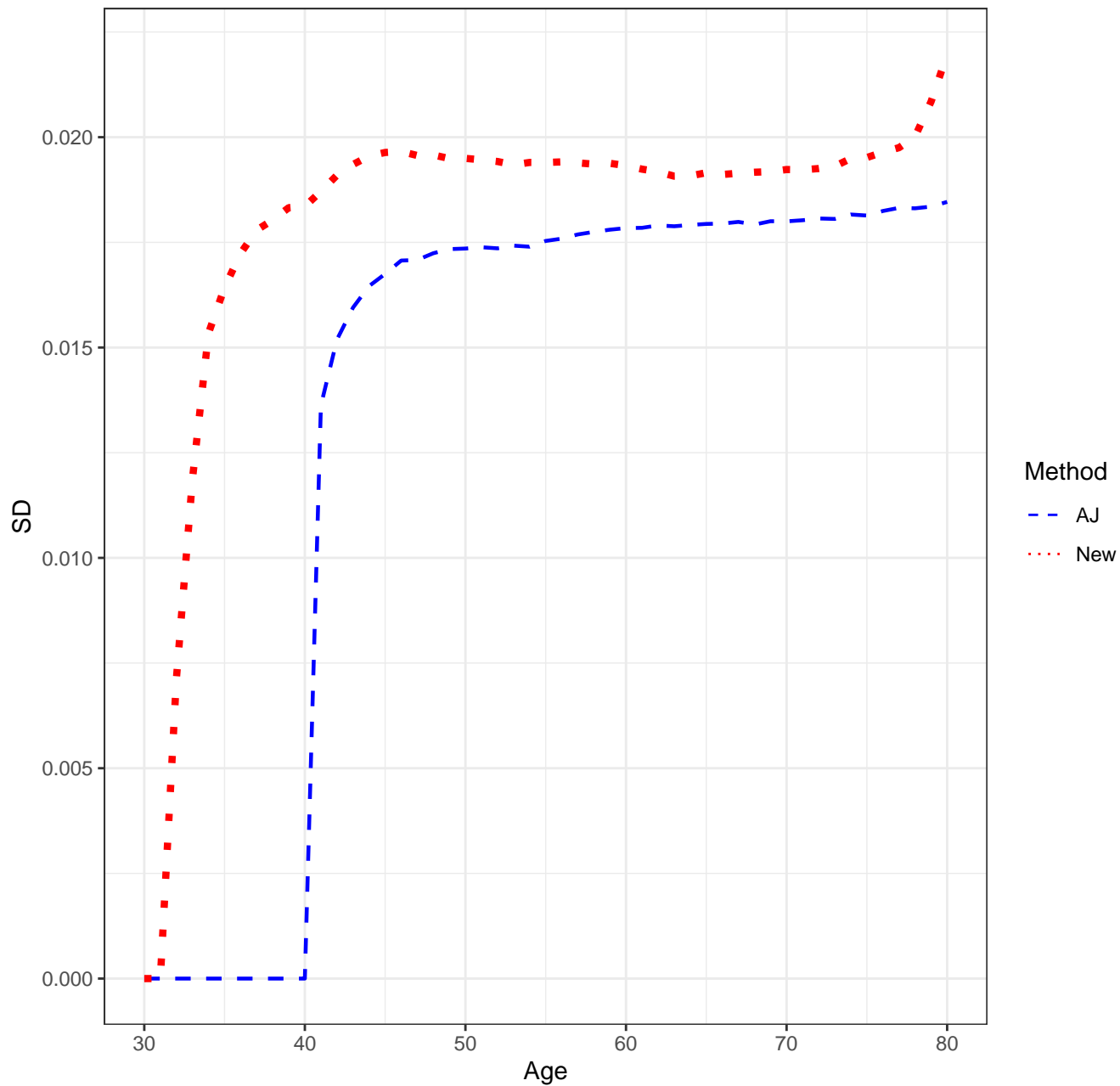
Scenario 3111, n=2500, Means



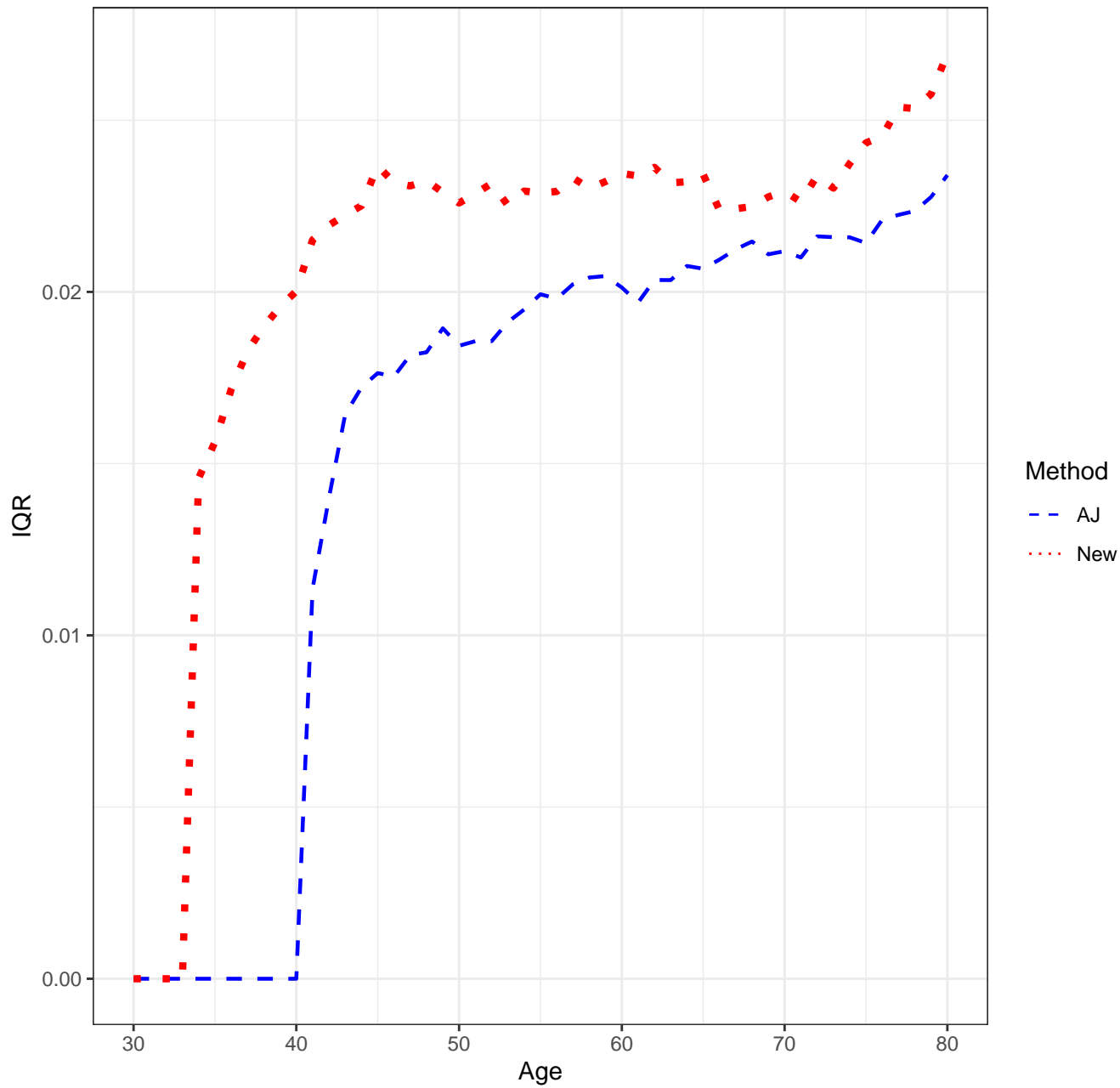
Scenario 3111, n=2500, Medians



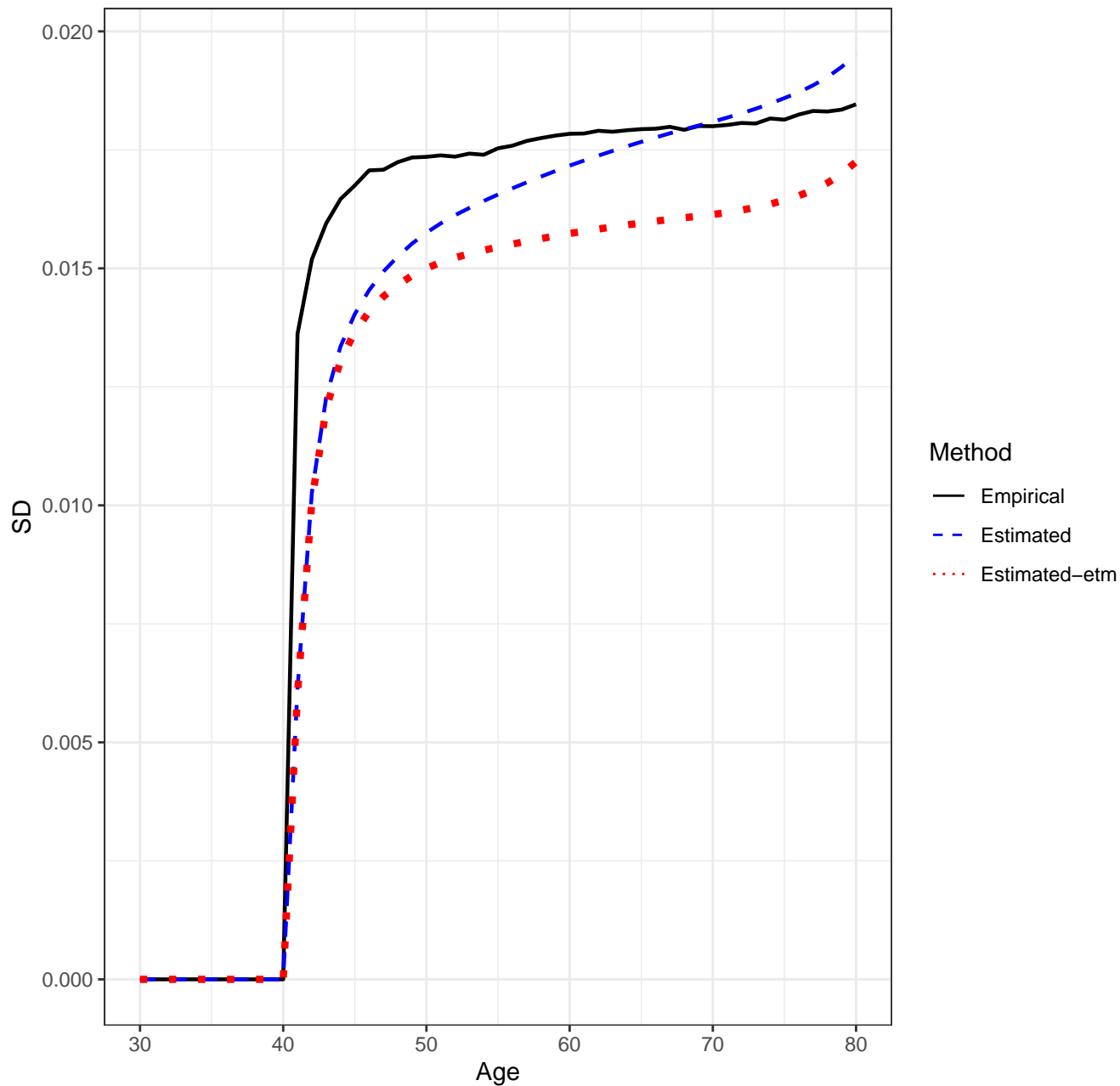
Scenario 3111, n=2500, SD'S



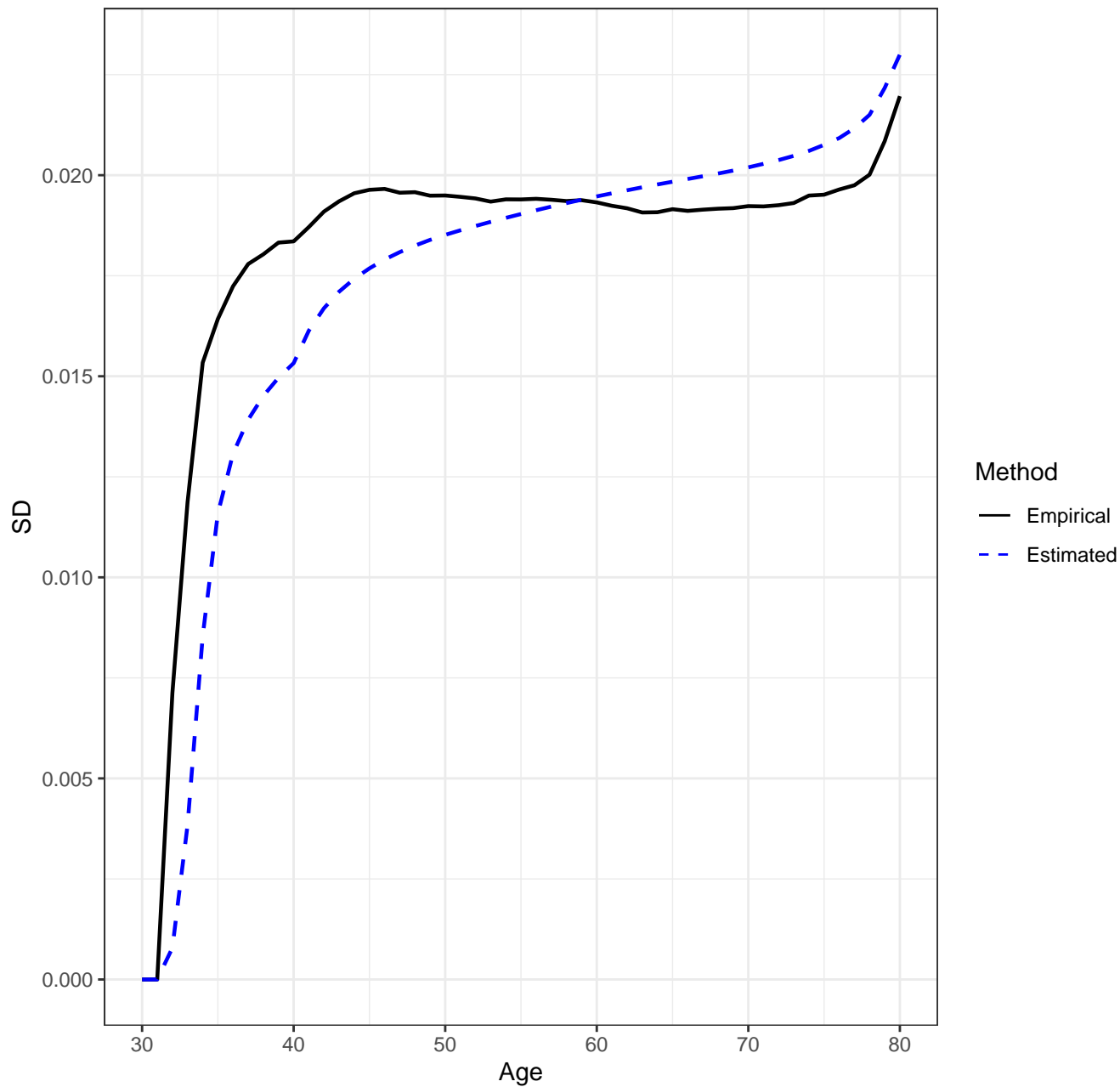
Scenario 3111, n=2500, IQR'S



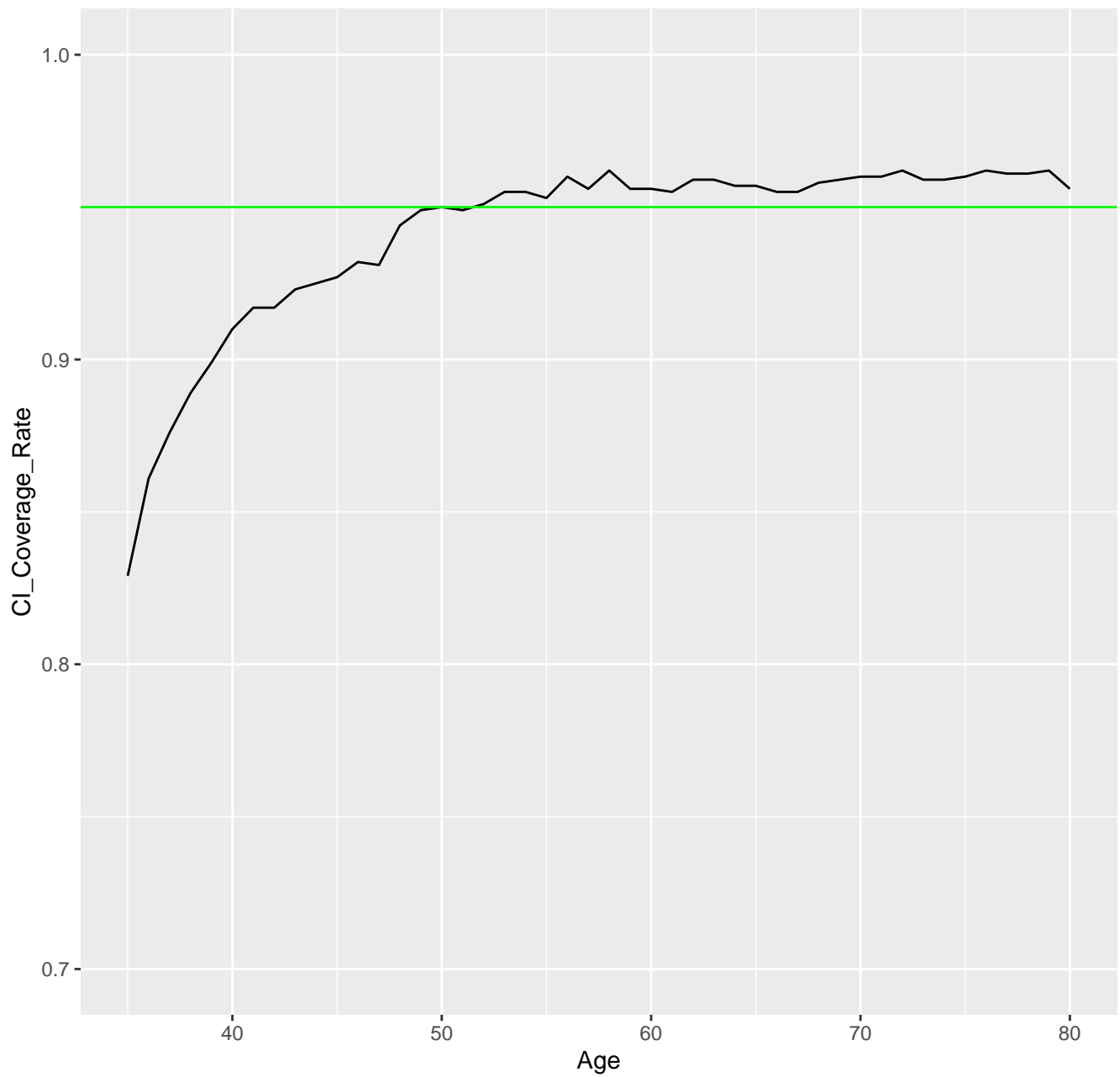
Scenario 3111, n=2500, AJ Estimator, Empirical vs. Estimated SD's



Scenario 3111, n=2500, New Estimator, Empirical vs. Estimated SD's

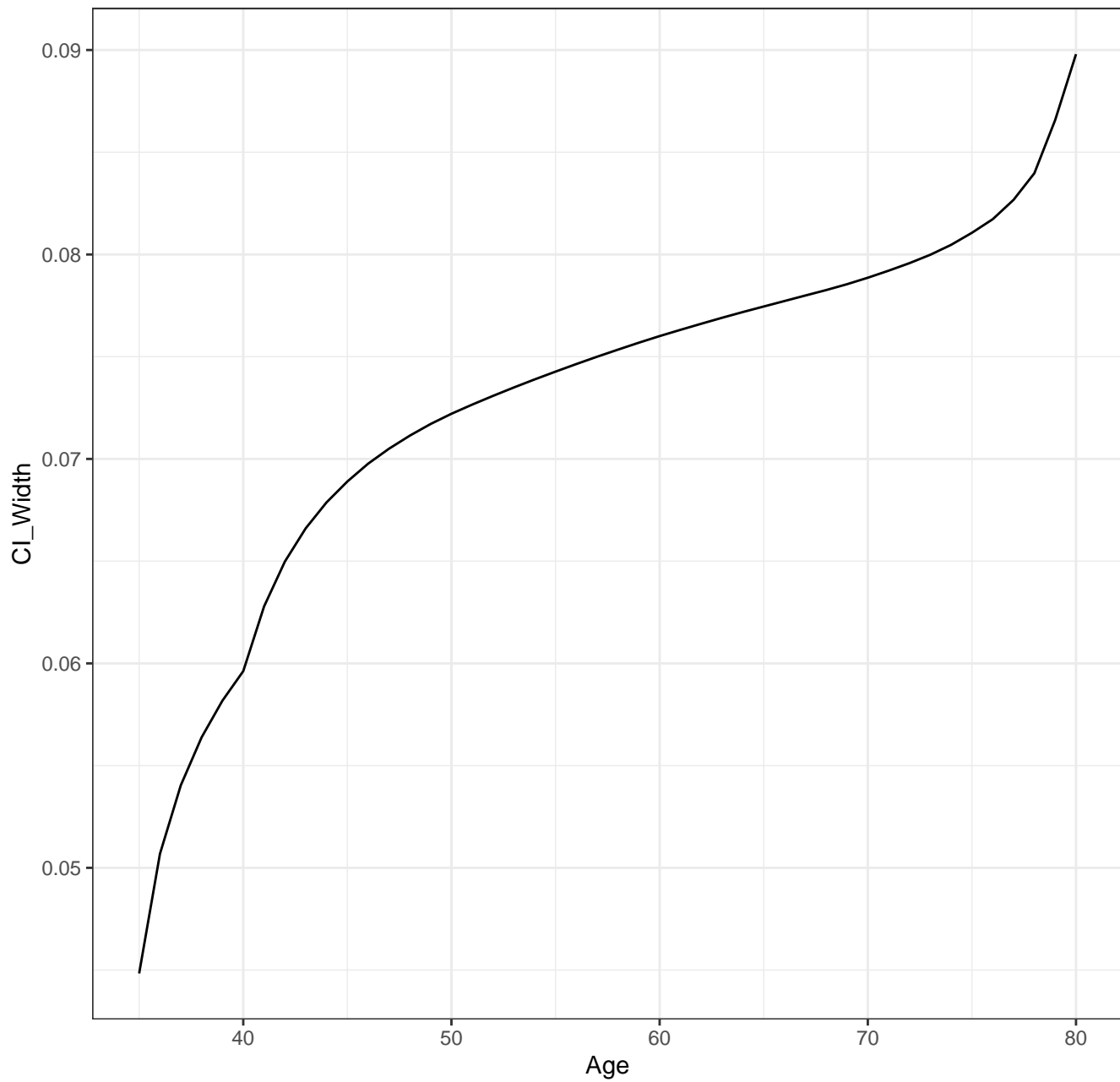


Scenario 3111, n=2500, CI Coverage Rate for New Method





Scenario 3111, n=2500, CI Width for New Estimator



## CONFIDENCE BAND COVERAGE RATES

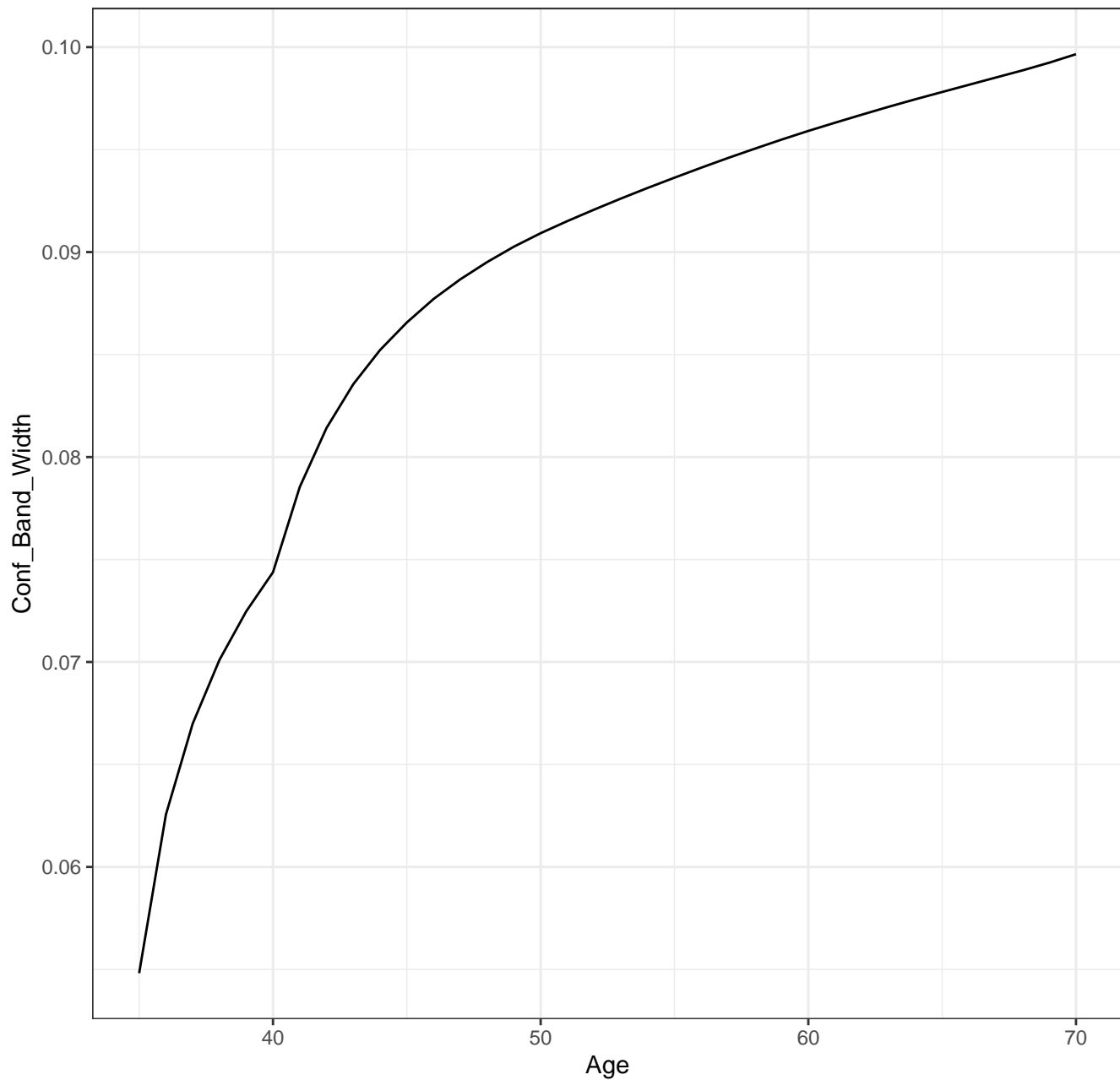
Scenario: 3111

AJ0: 0

AJ: 0.305

New: 0.864

Scenario 3111, n=2500, Confidence Band Width for New Method



## SETTINGS

Scenario: 3112

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

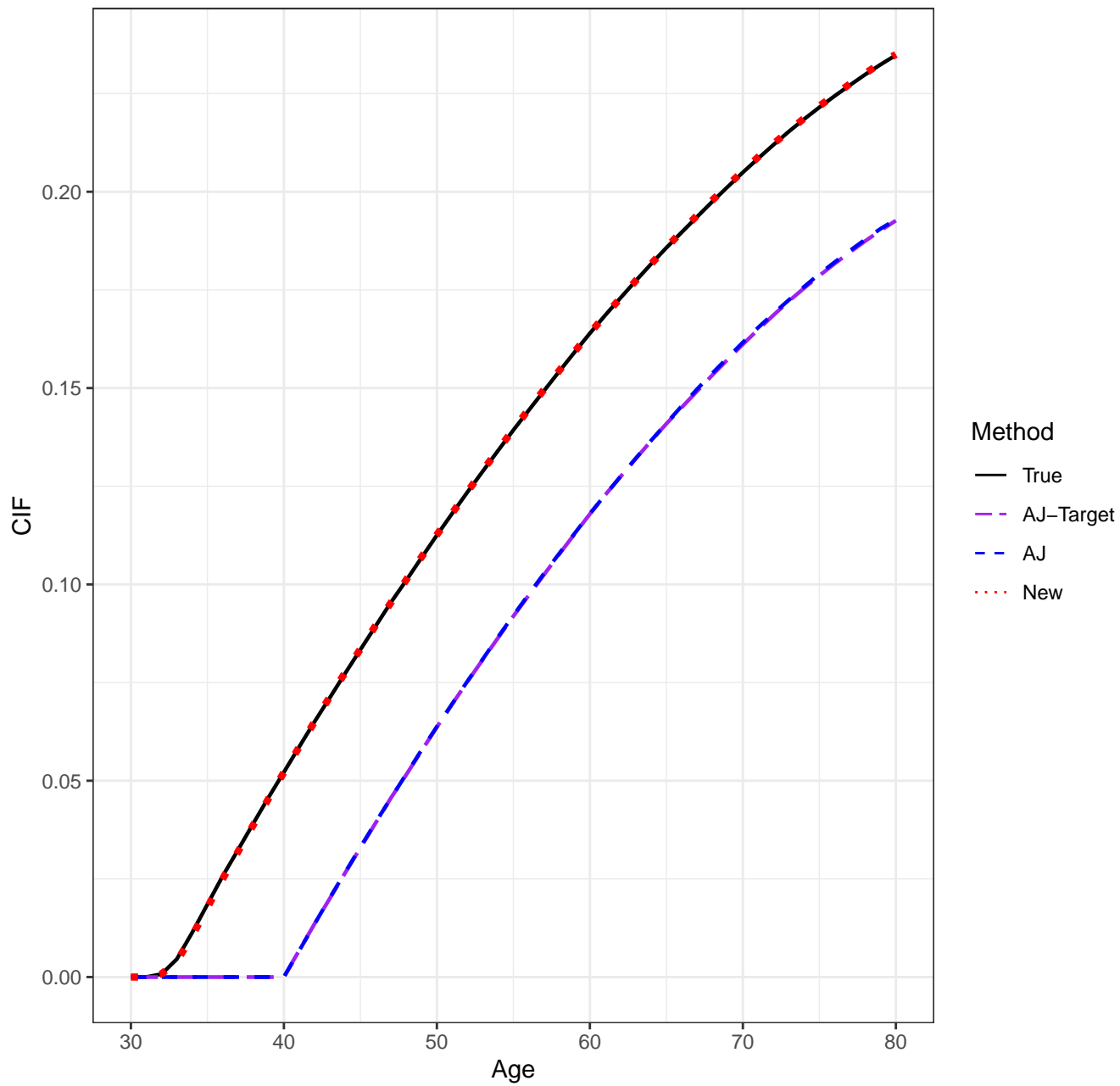
pointwise CI's done by: normal-theory

auxflg = FALSE

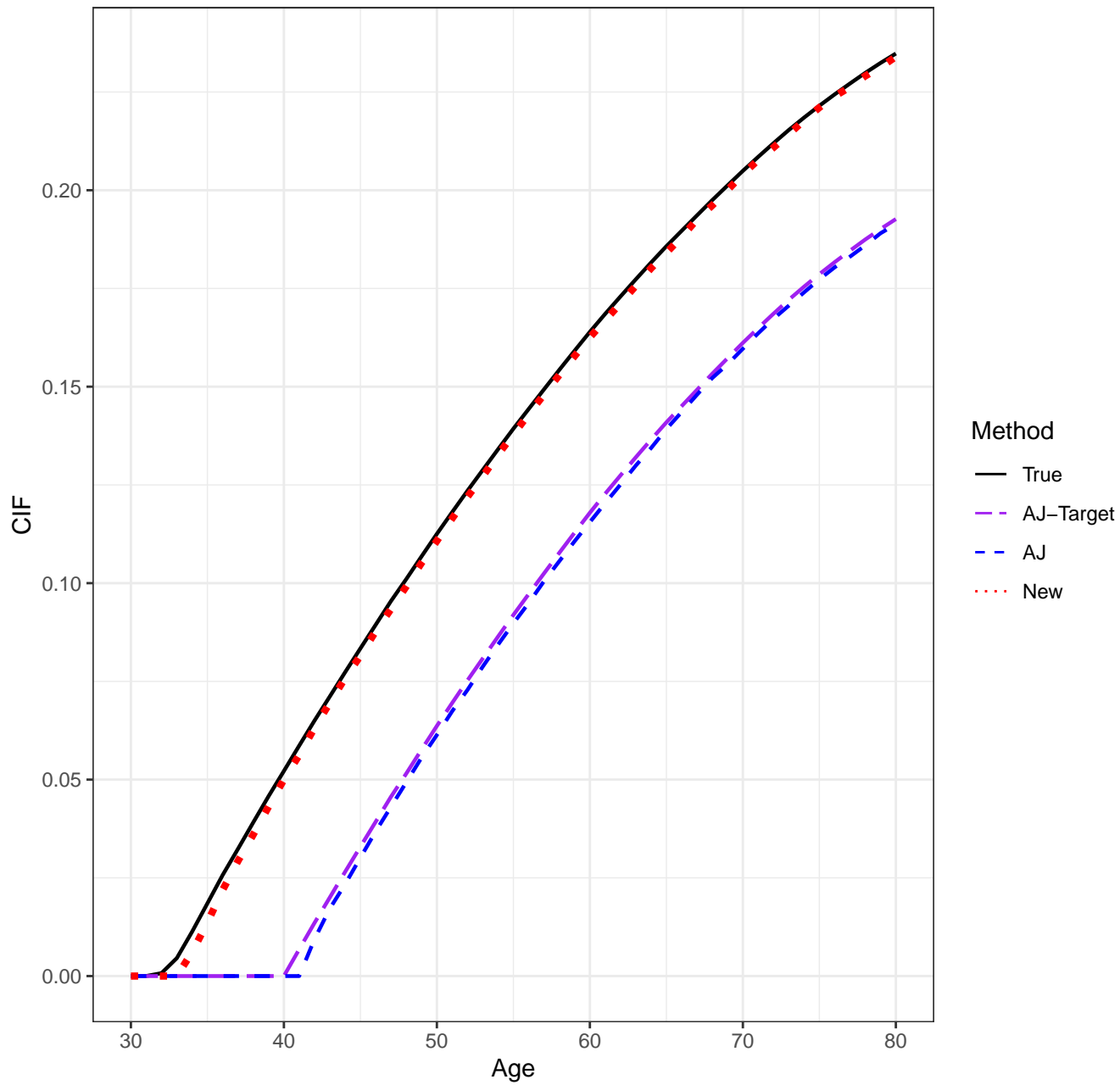
bootstrap weights: normal

Date/Time: 2024-01-14 16:50:12.780265

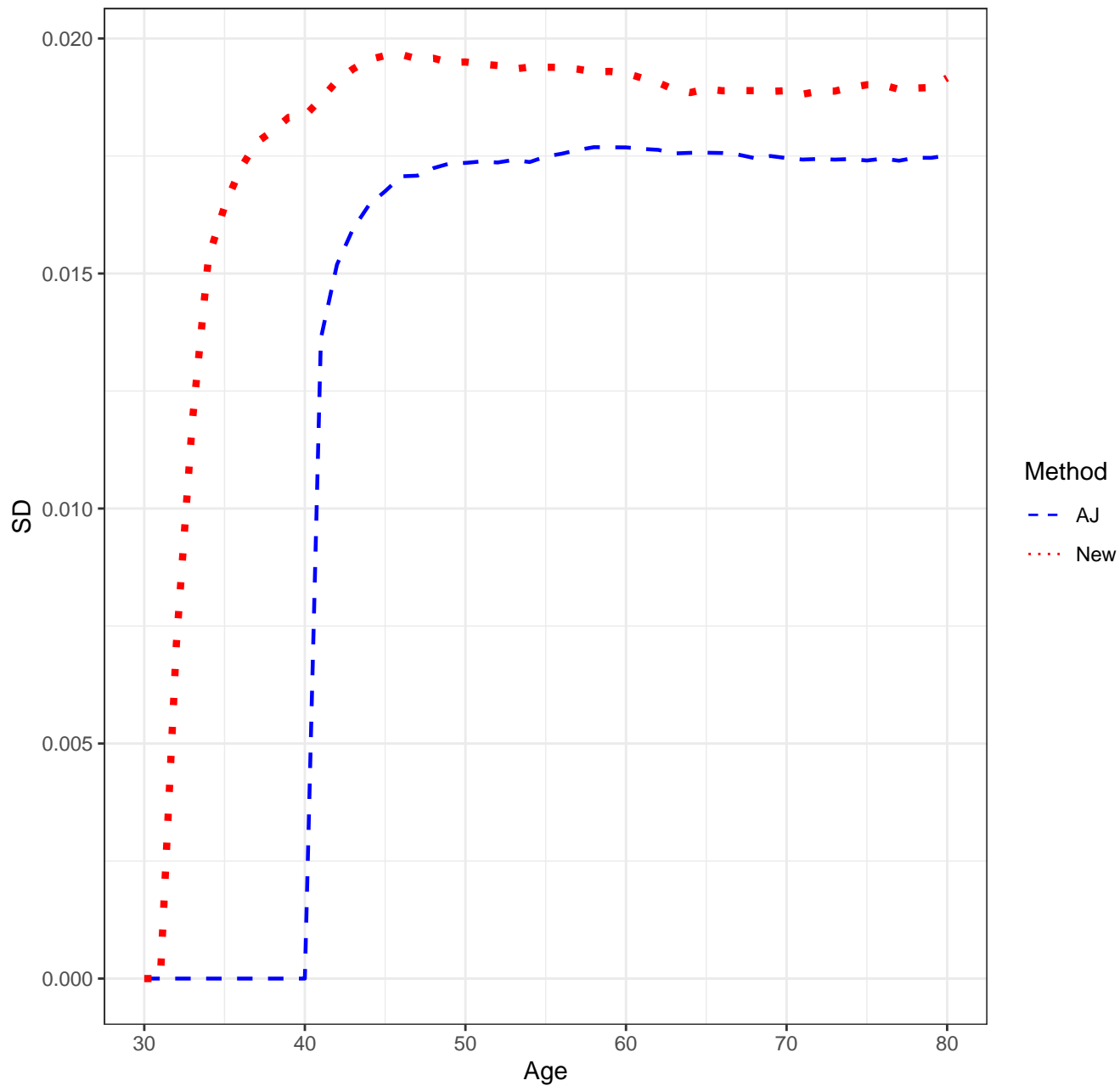
Scenario 3112, n=2500, Means



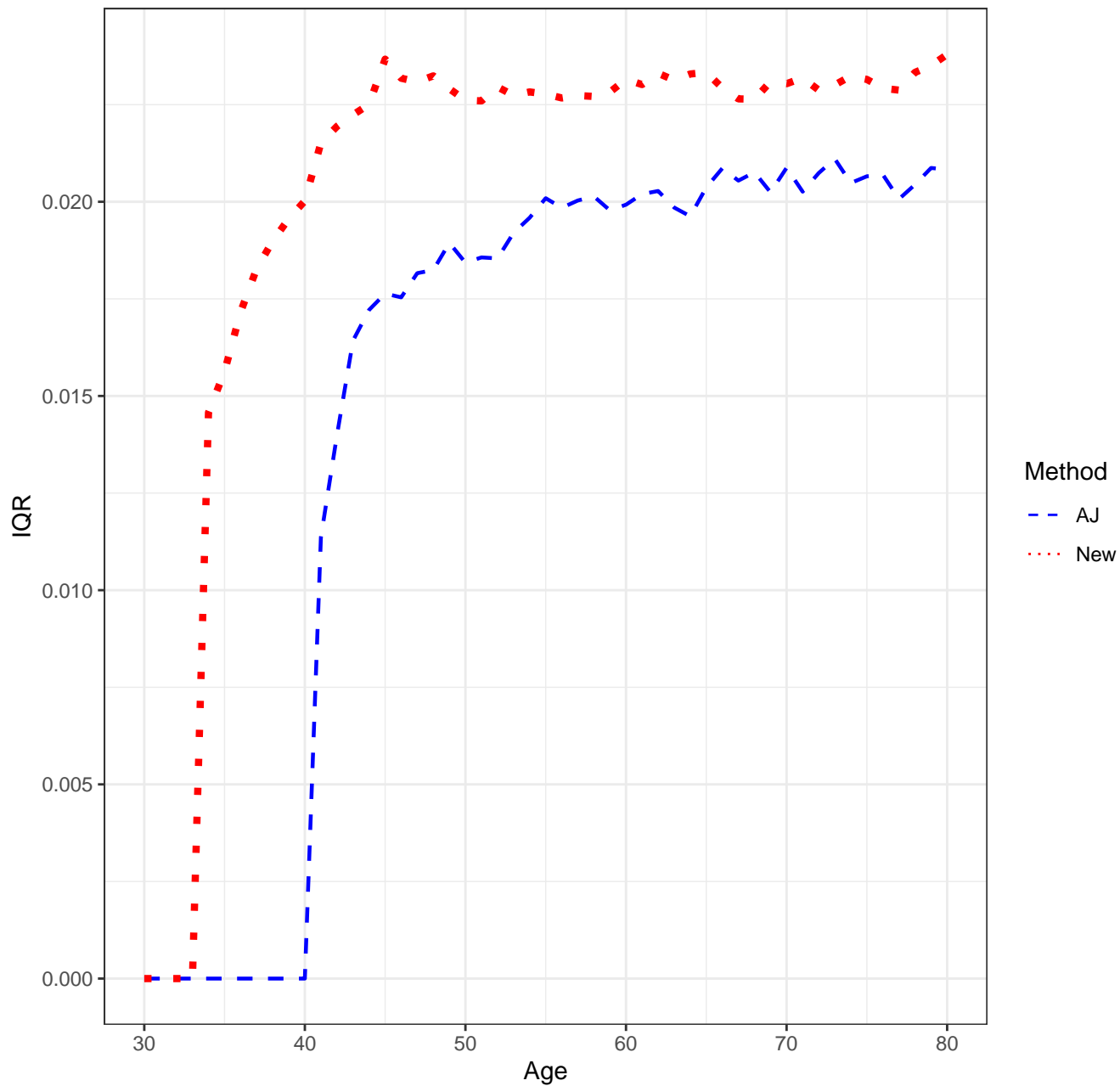
Scenario 3112, n=2500, Medians



Scenario 3112, n=2500, SD'S

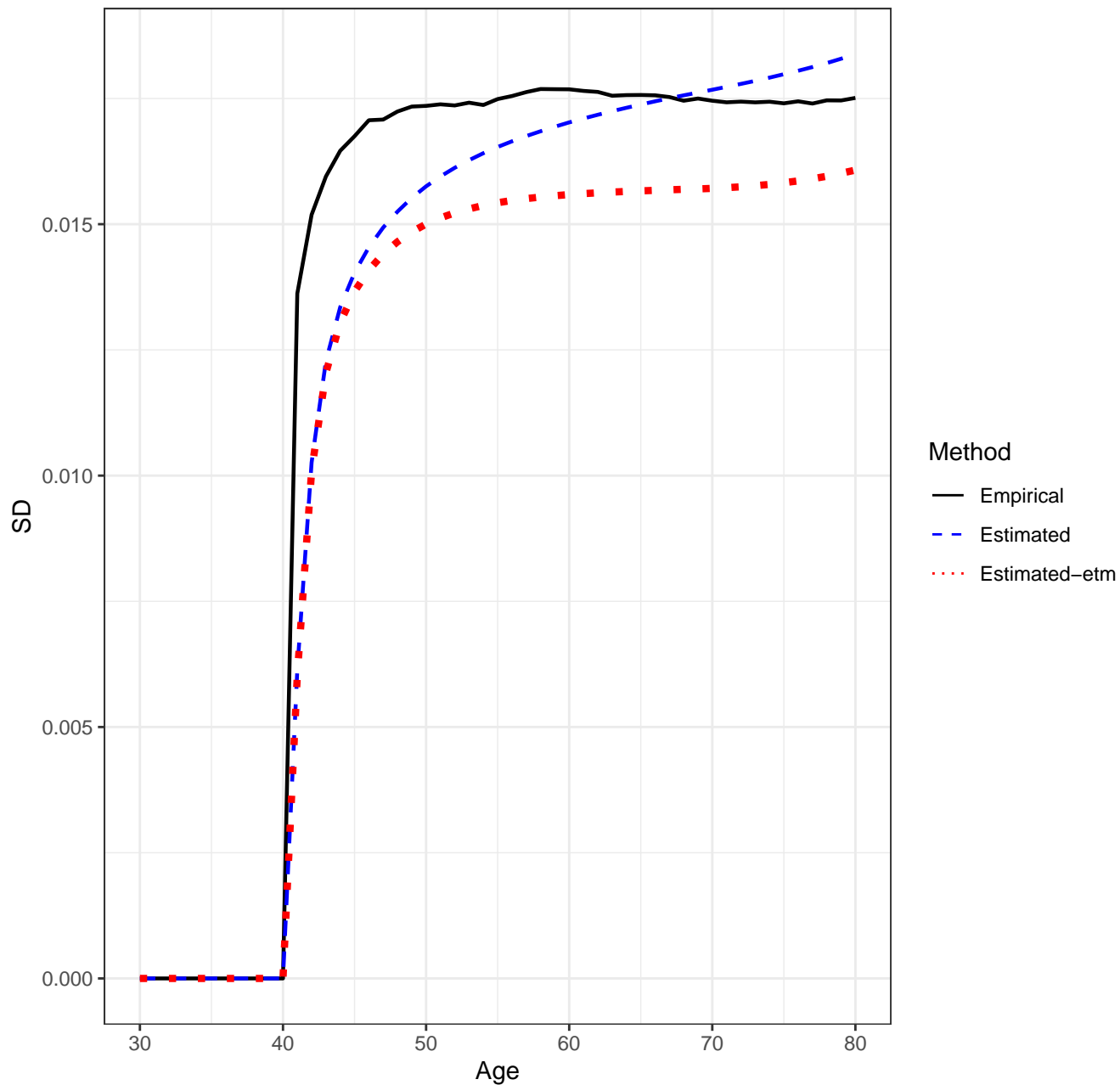


Scenario 3112, n=2500, IQR'S

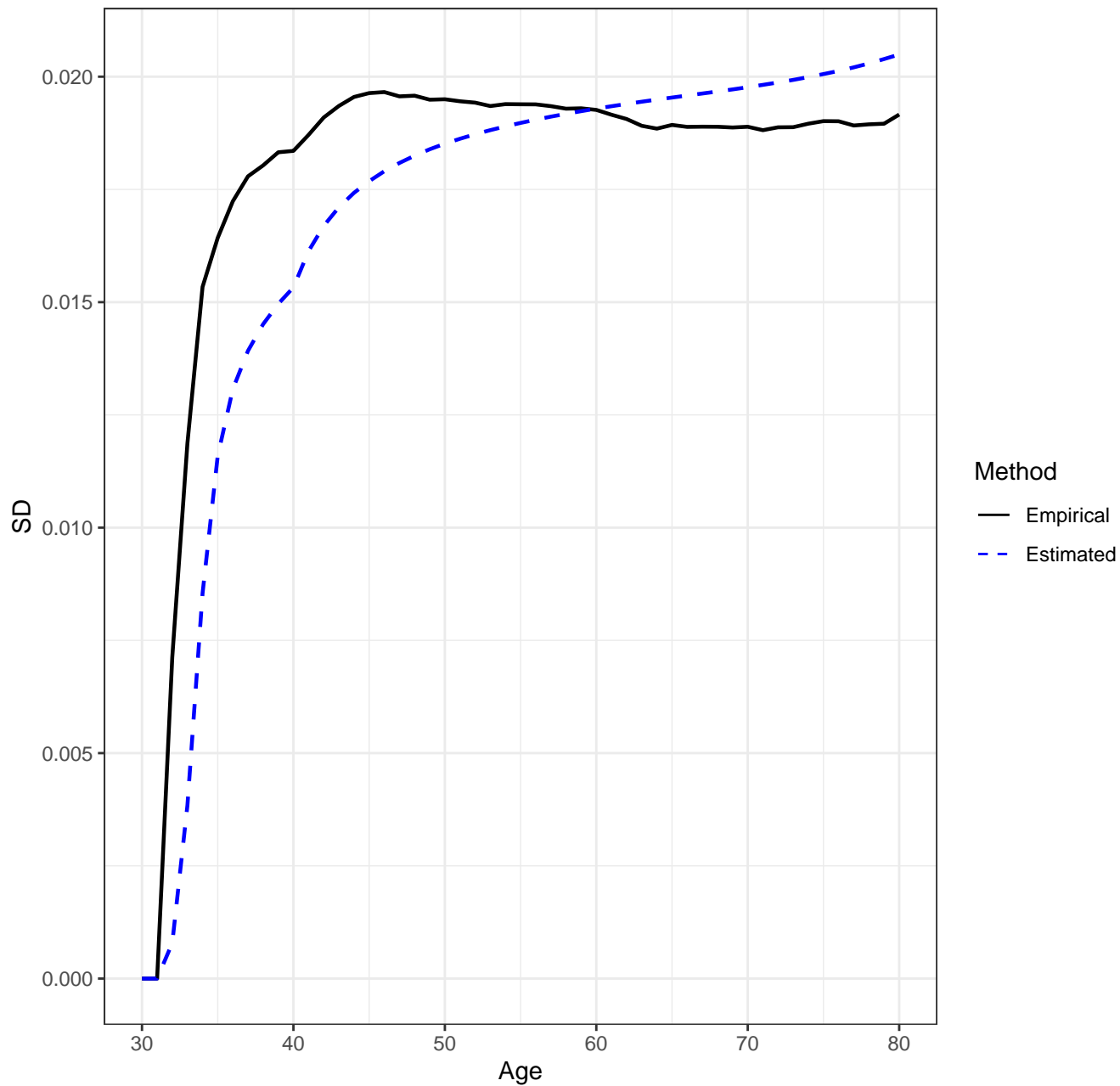




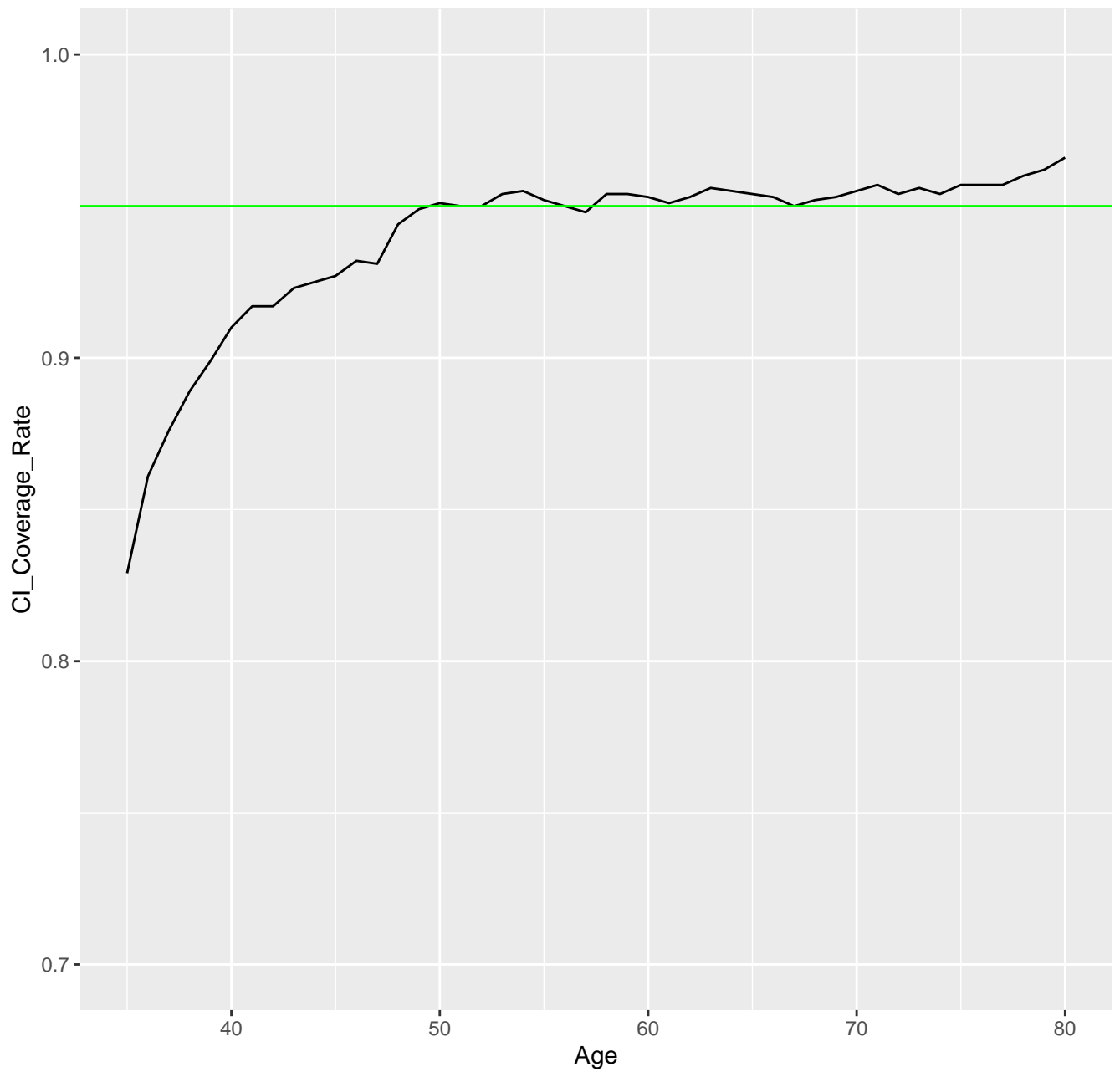
Scenario 3112, n=2500, AJ Estimator, Empirical vs. Estimated SD's



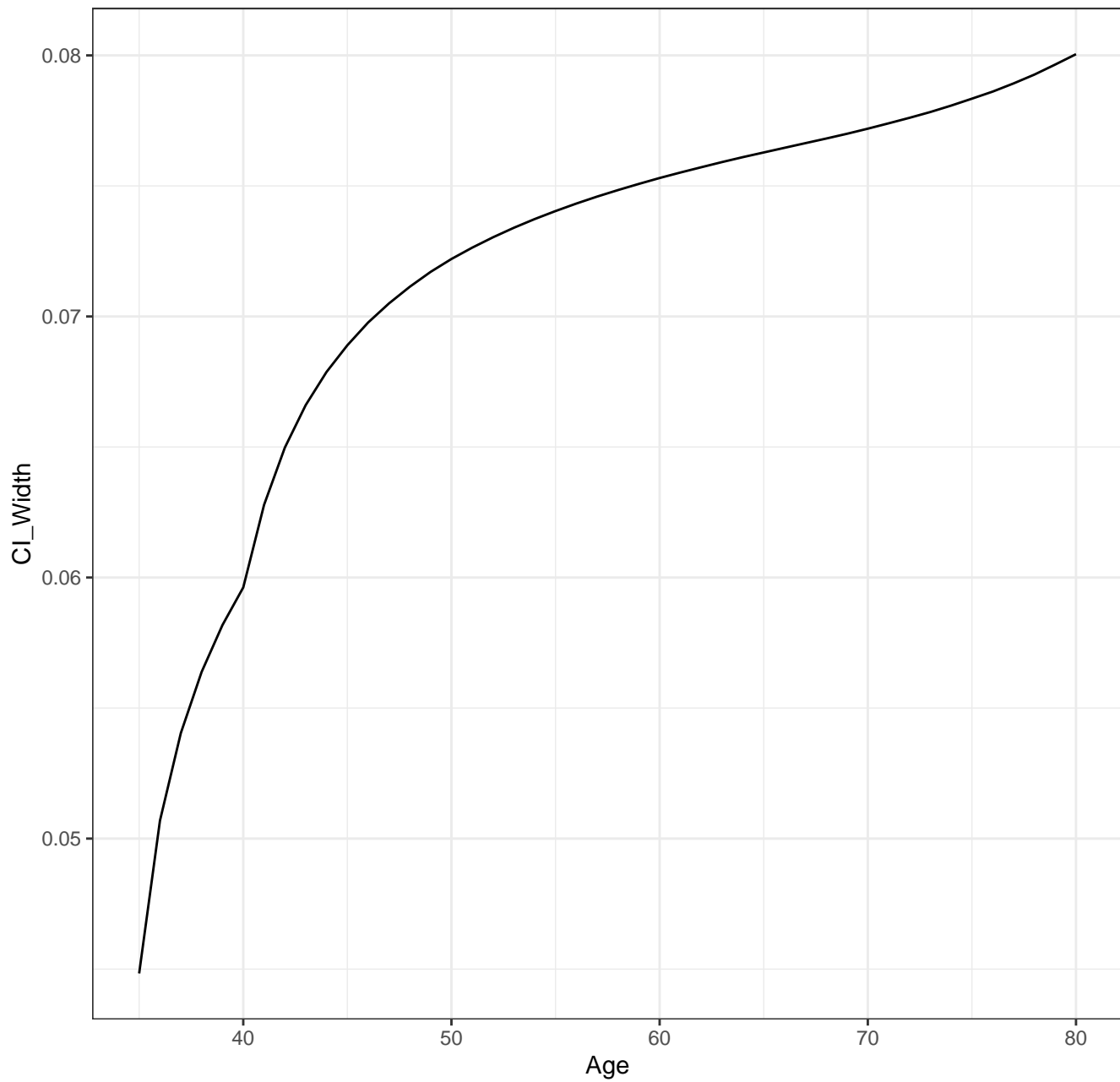
Scenario 3112, n=2500, New Estimator, Empirical vs. Estimated SD's



Scenario 3112, n=2500, CI Coverage Rate for New Method



Scenario 3112, n=2500, CI Width for New Estimator



## CONFIDENCE BAND COVERAGE RATES

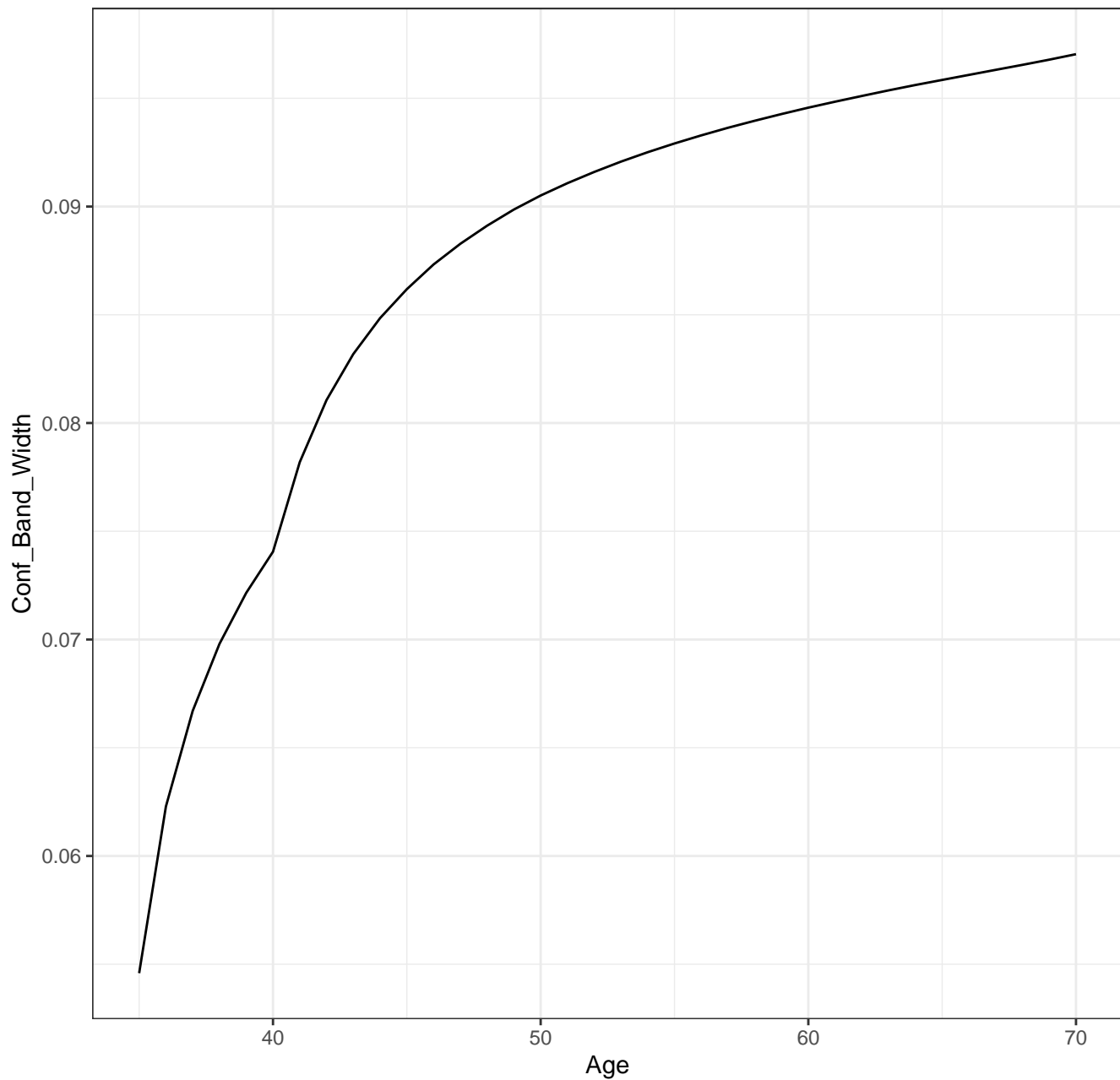
Scenario: 3112

AJ0: 0

AJ: 0.304

New: 0.861

Scenario 3112, n=2500, Confidence Band Width for New Method



## SETTINGS

Scenario: 3121

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

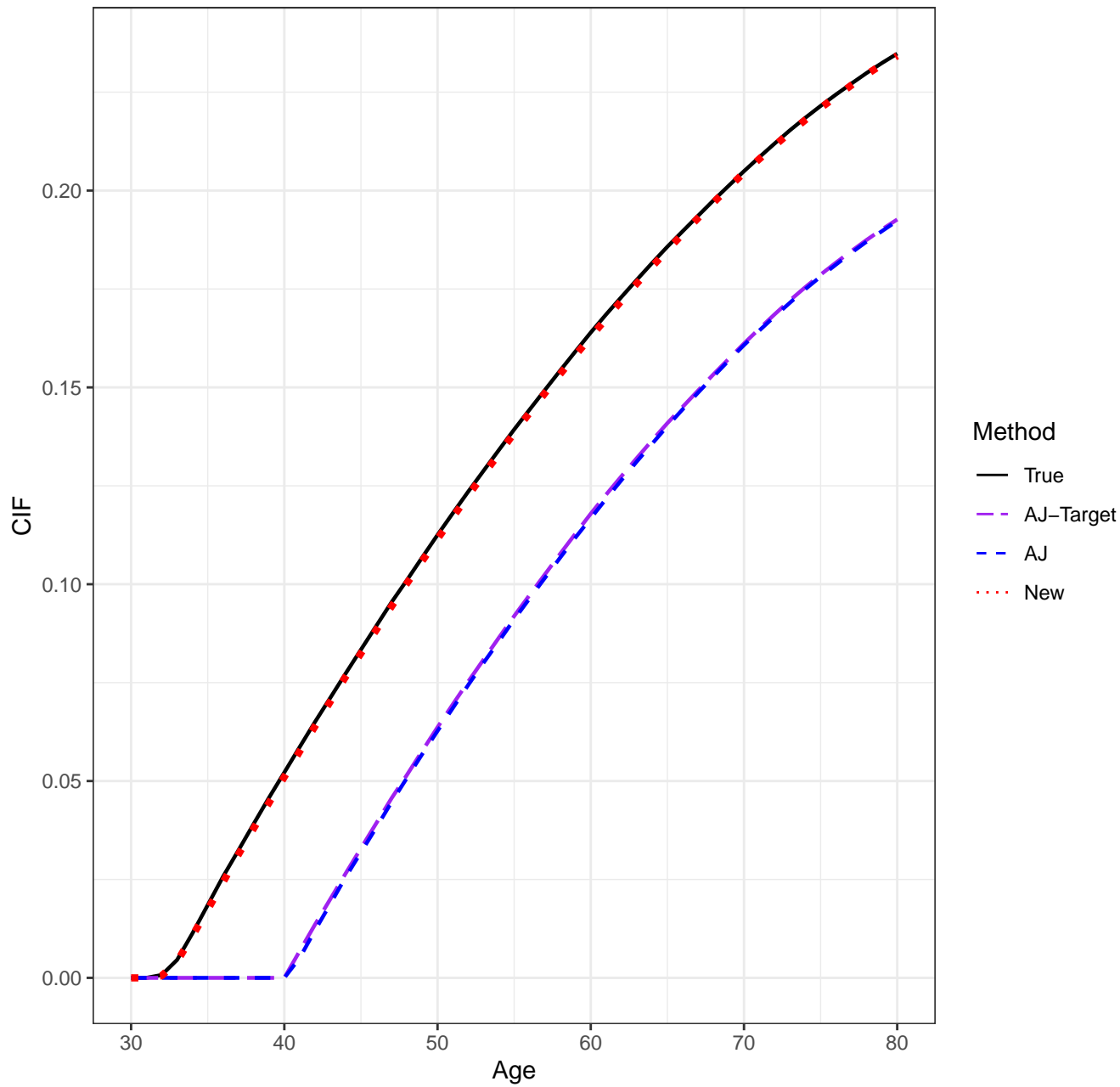
pointwise CI's done by: normal-theory

auxflg = FALSE

bootstrap weights: normal

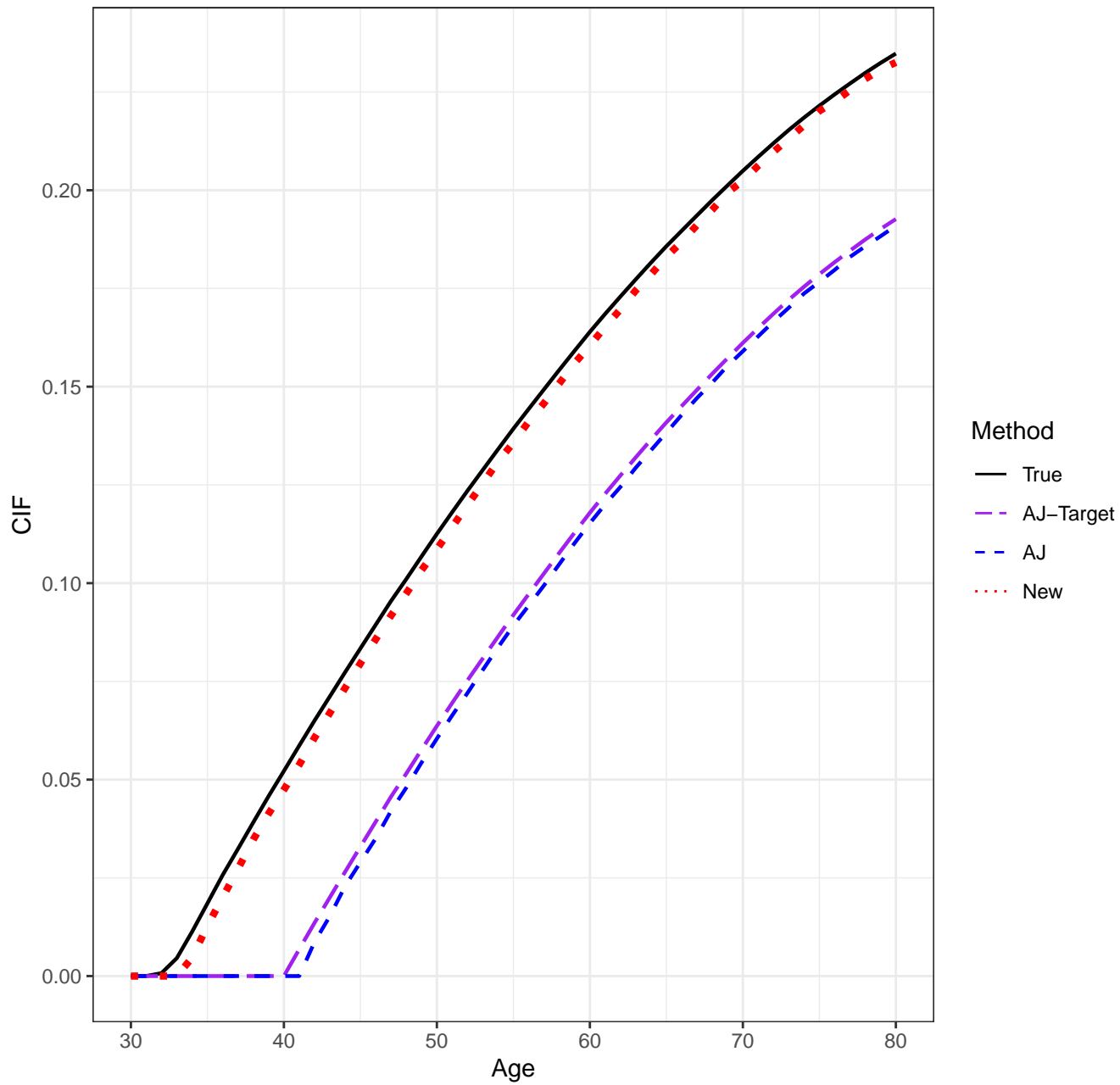
Date/Time: 2024-01-14 19:04:37.539653

Scenario 3121, n=2500, Means

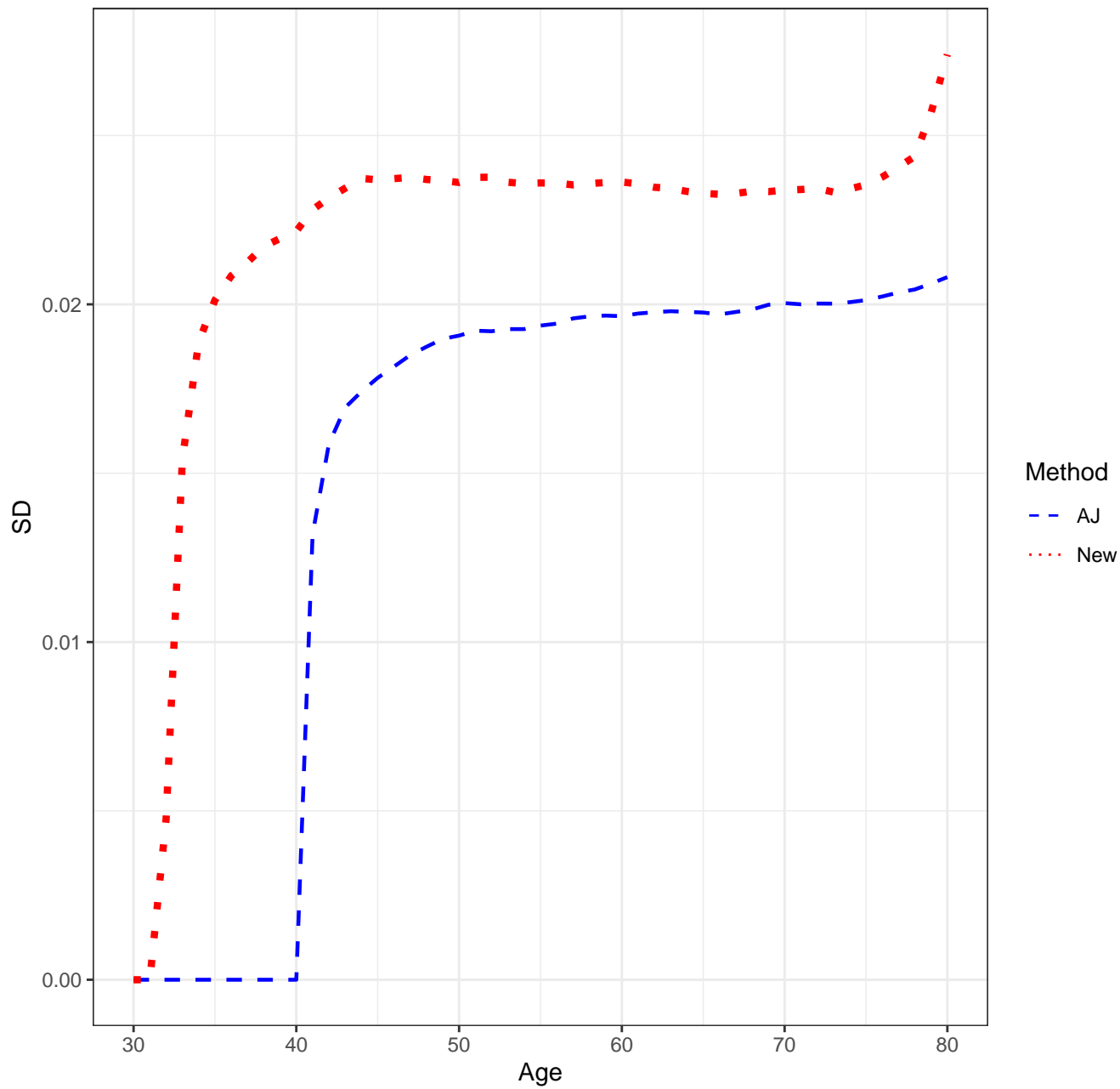




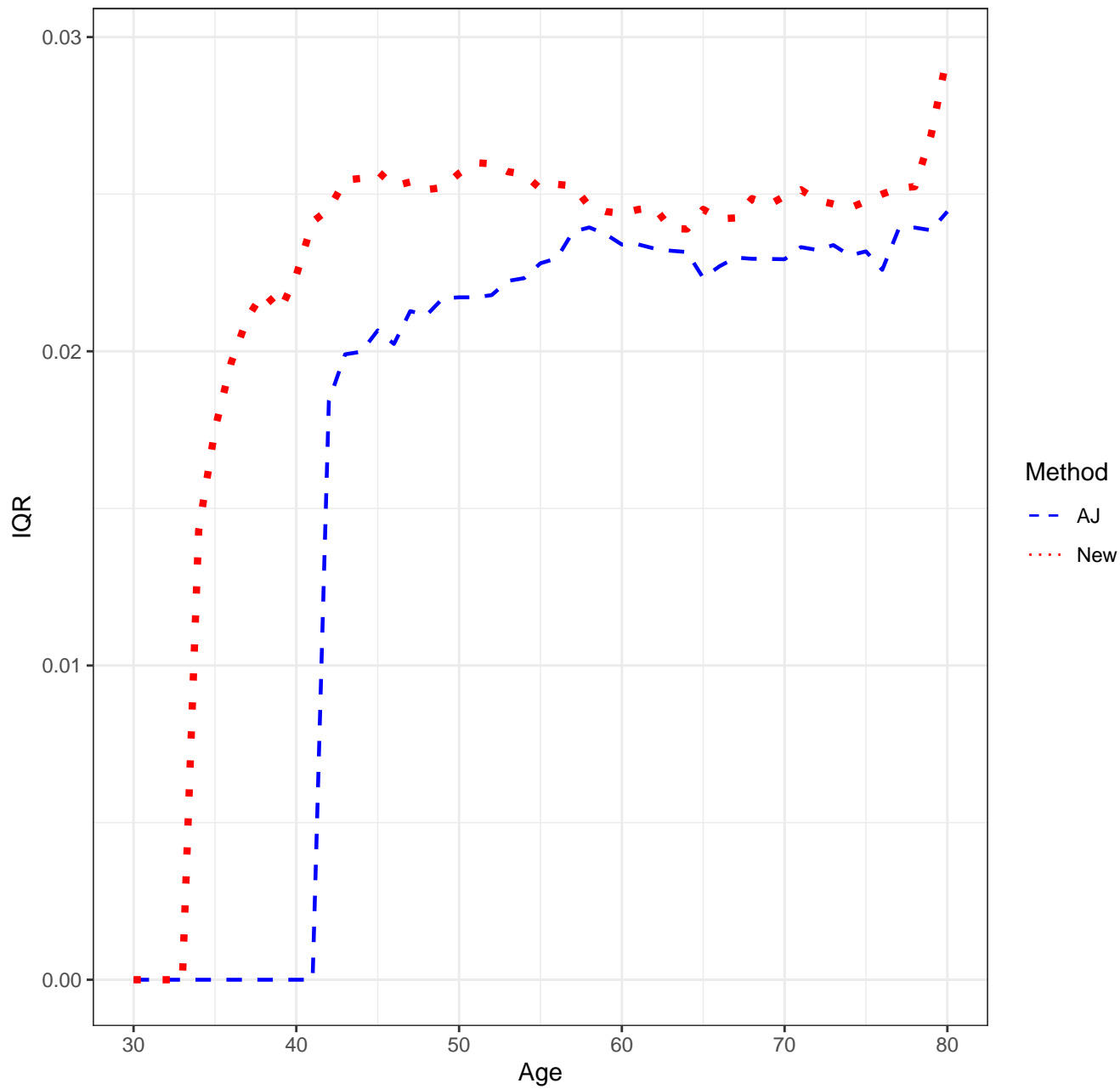
Scenario 3121, n=2500, Medians



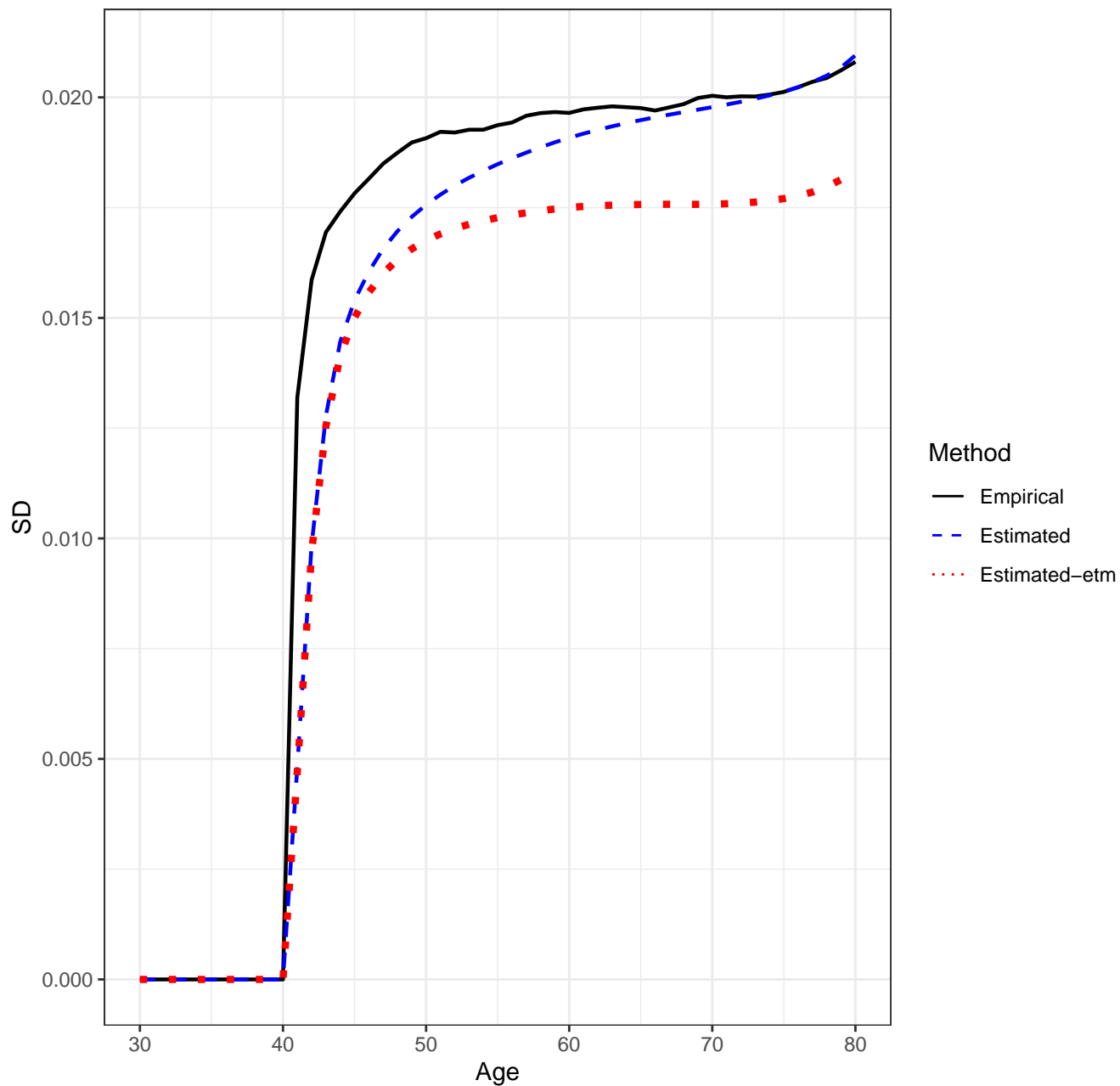
Scenario 3121, n=2500, SD'S



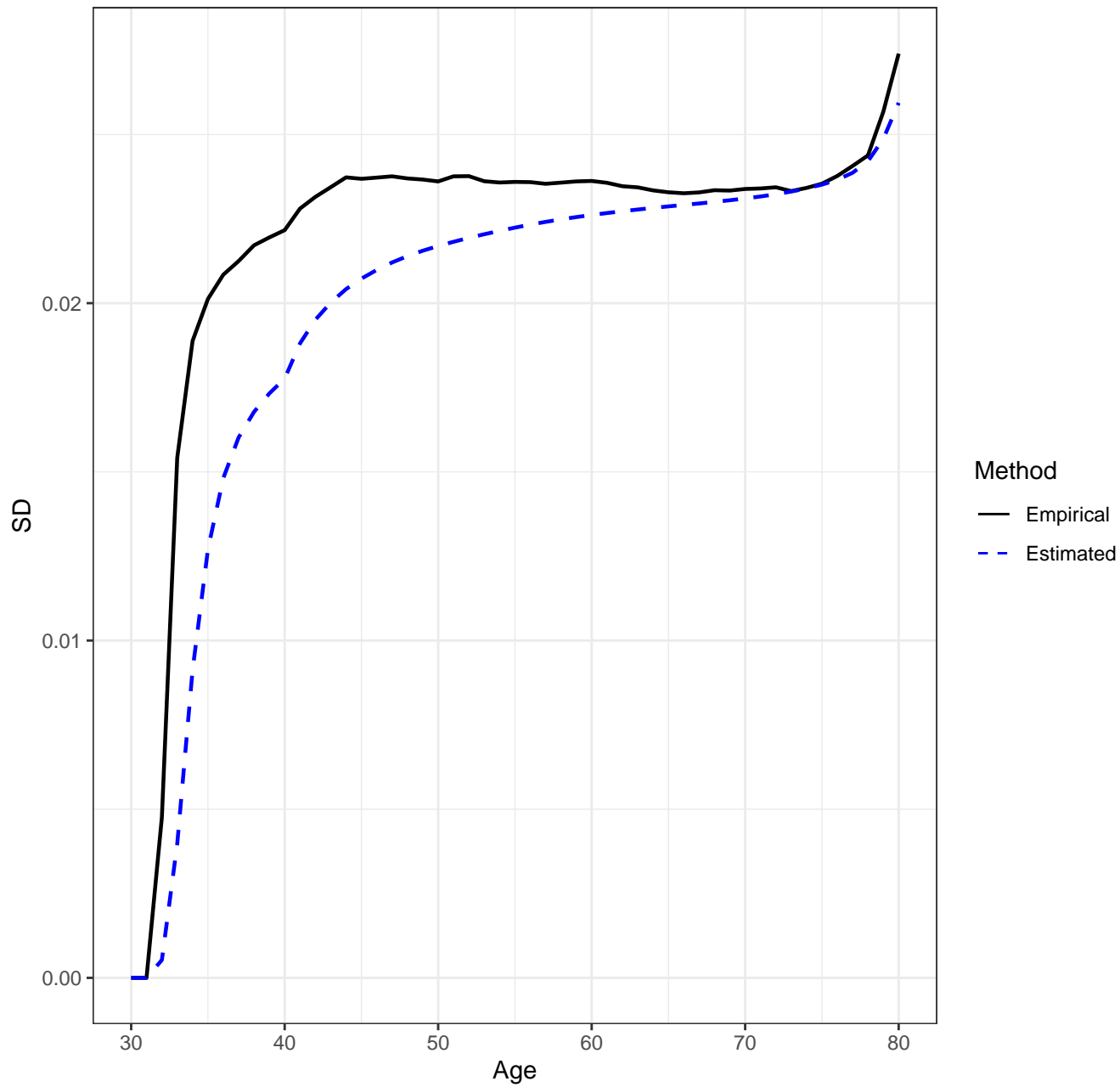
Scenario 3121, n=2500, IQR'S



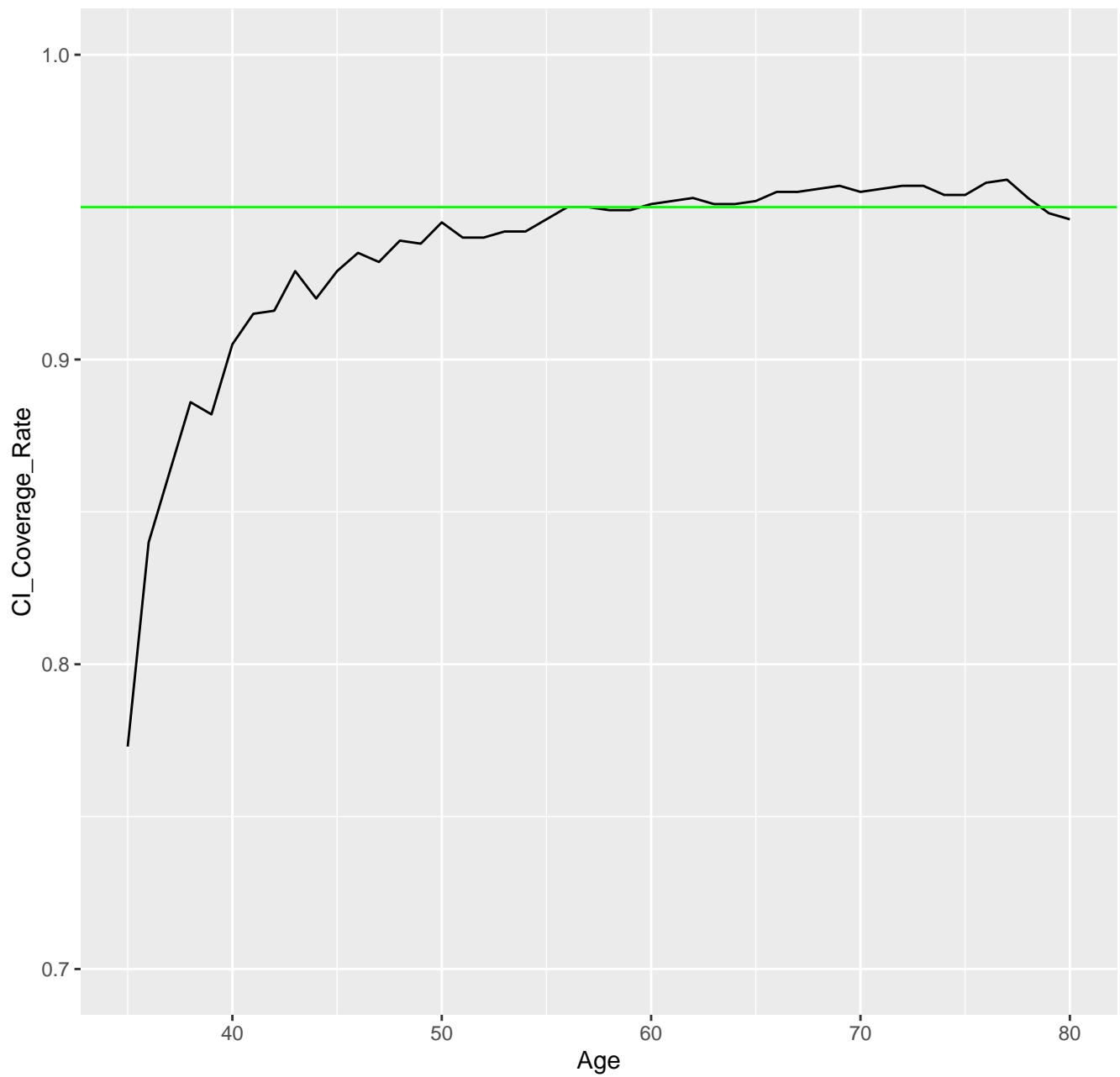
Scenario 3121, n=2500, AJ Estimator, Empirical vs. Estimated SD's



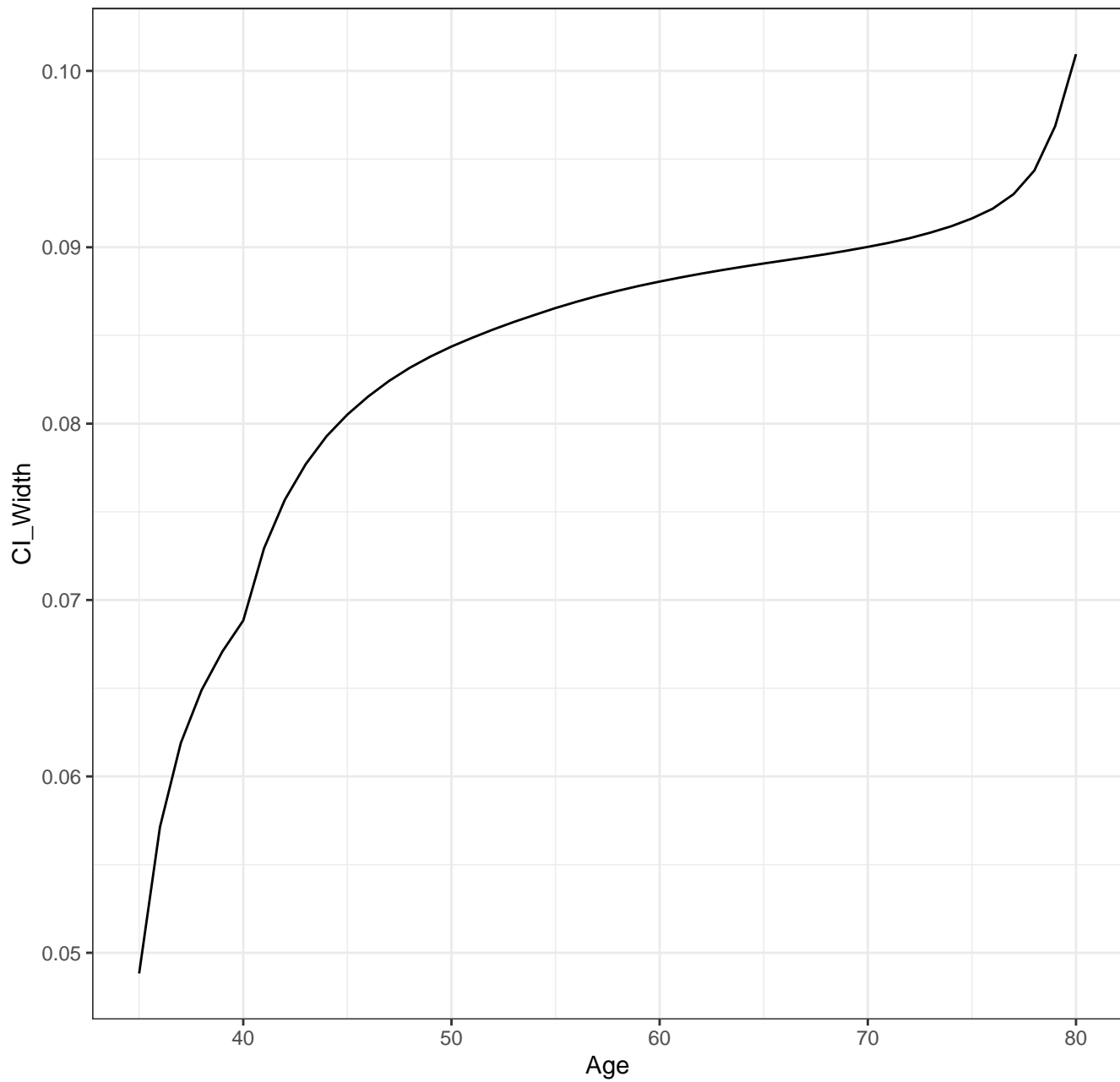
Scenario 3121, n=2500, New Estimator, Empirical vs. Estimated SD's



Scenario 3121, n=2500, CI Coverage Rate for New Method



Scenario 3121, n=2500, CI Width for New Estimator



## CONFIDENCE BAND COVERAGE RATES

Scenario: 3121

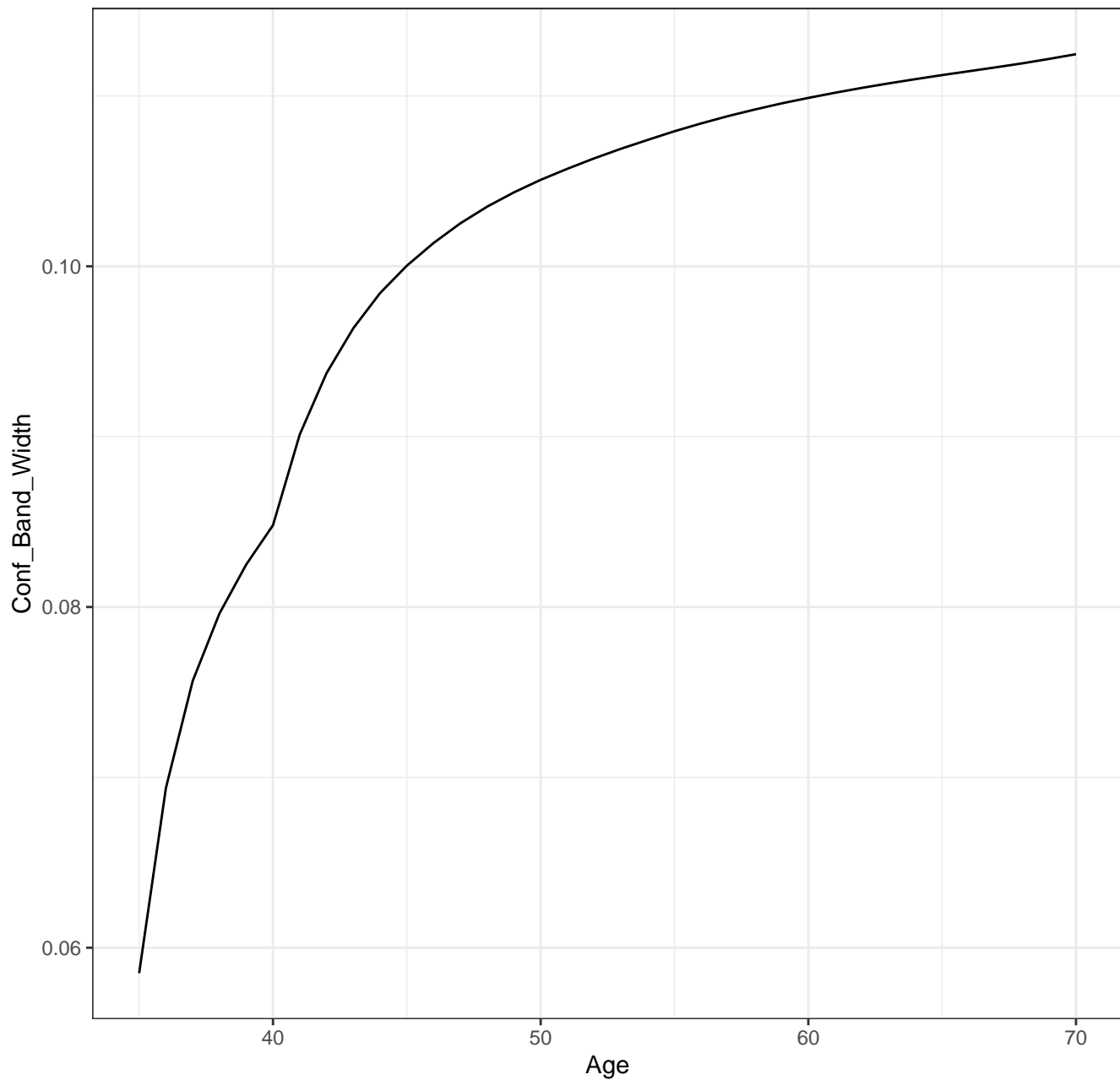
AJ0: 0

AJ: 0.173

New: 0.77



Scenario 3121, n=2500, Confidence Band Width for New Method



## SETTINGS

Scenario: 3122

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

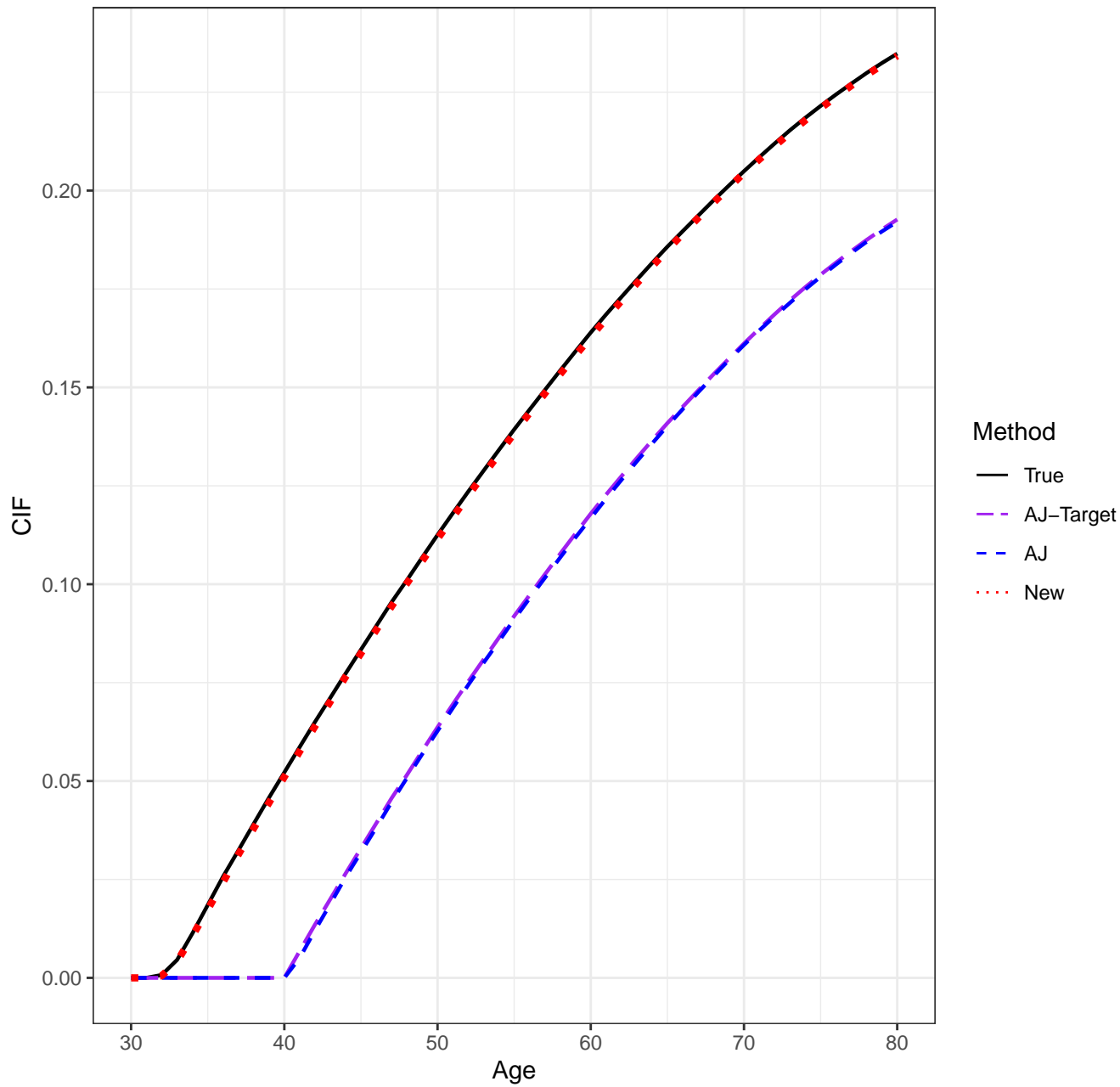
pointwise CI's done by: normal-theory

auxflg = FALSE

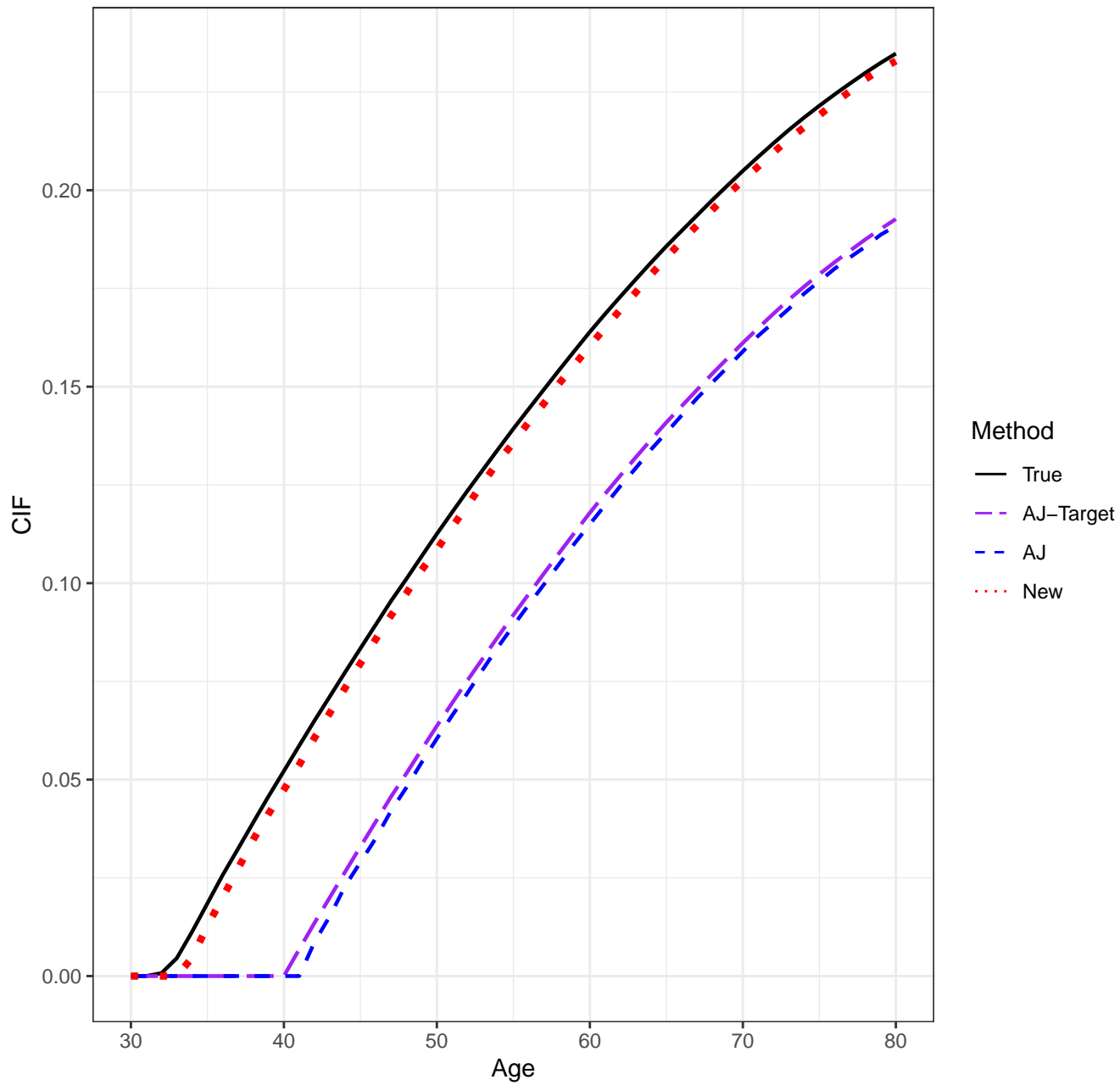
bootstrap weights: normal

Date/Time: 2024-01-14 19:35:28.445116

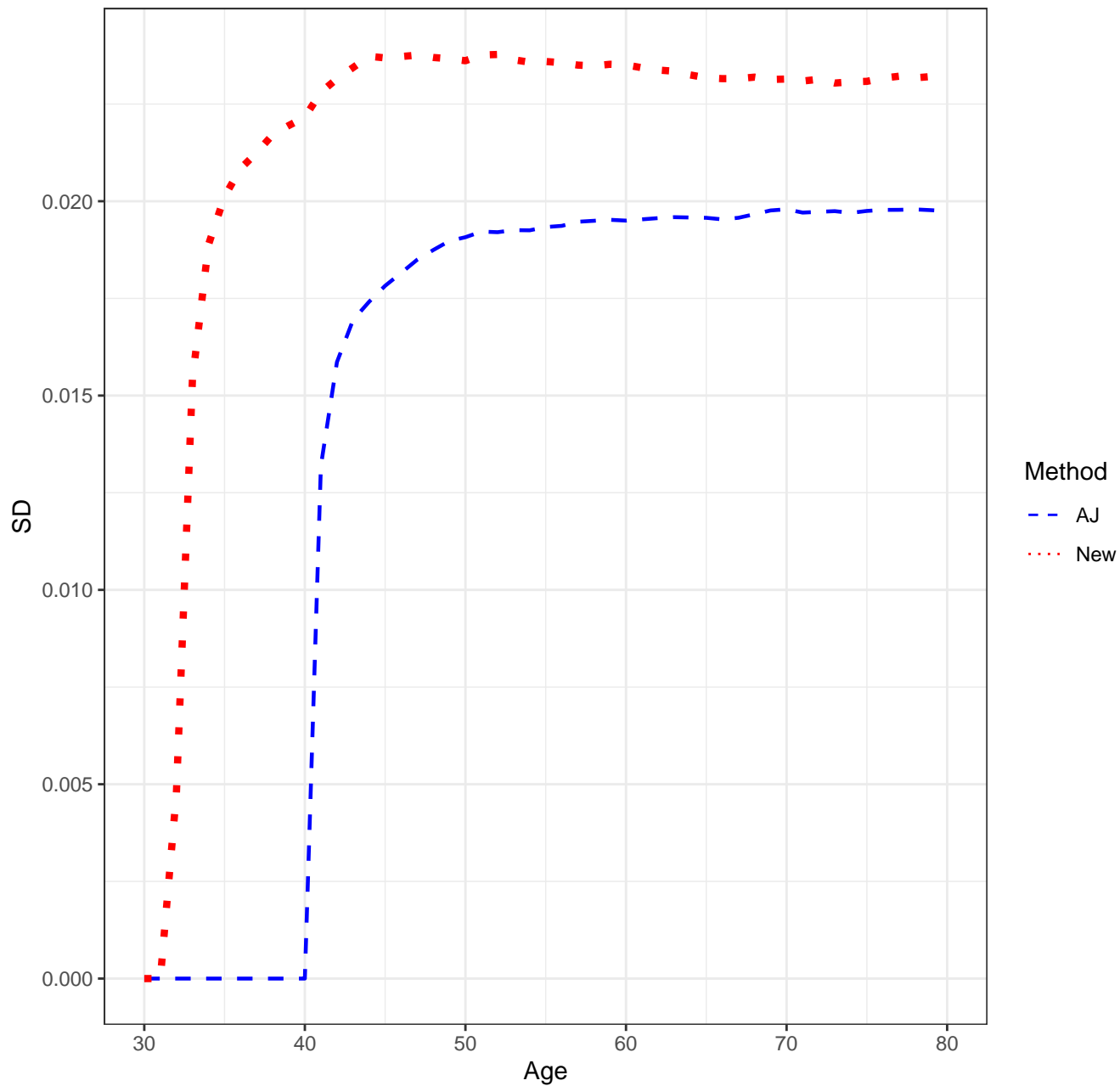
Scenario 3122, n=2500, Means



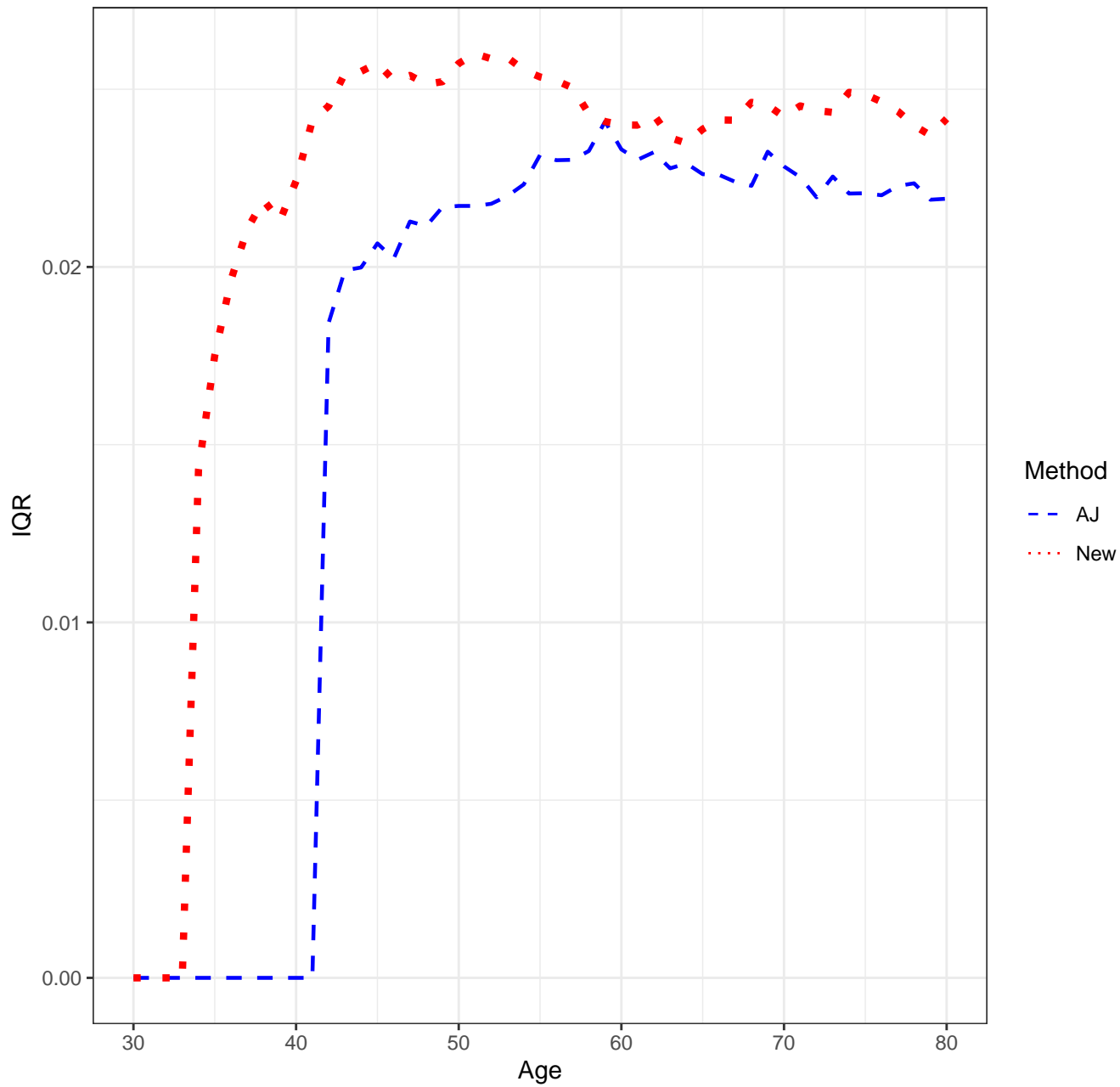
Scenario 3122, n=2500, Medians



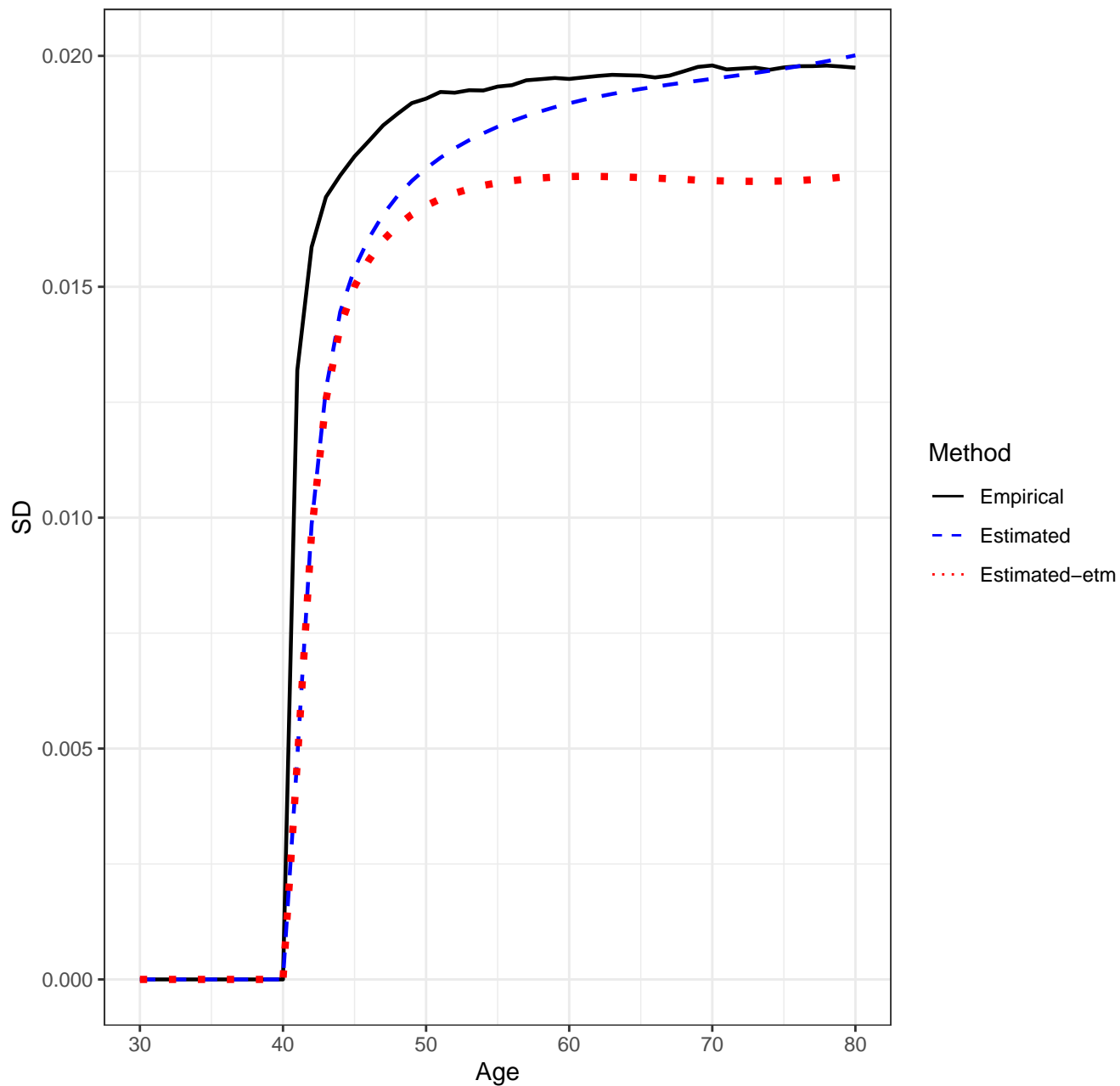
Scenario 3122, n=2500, SD'S



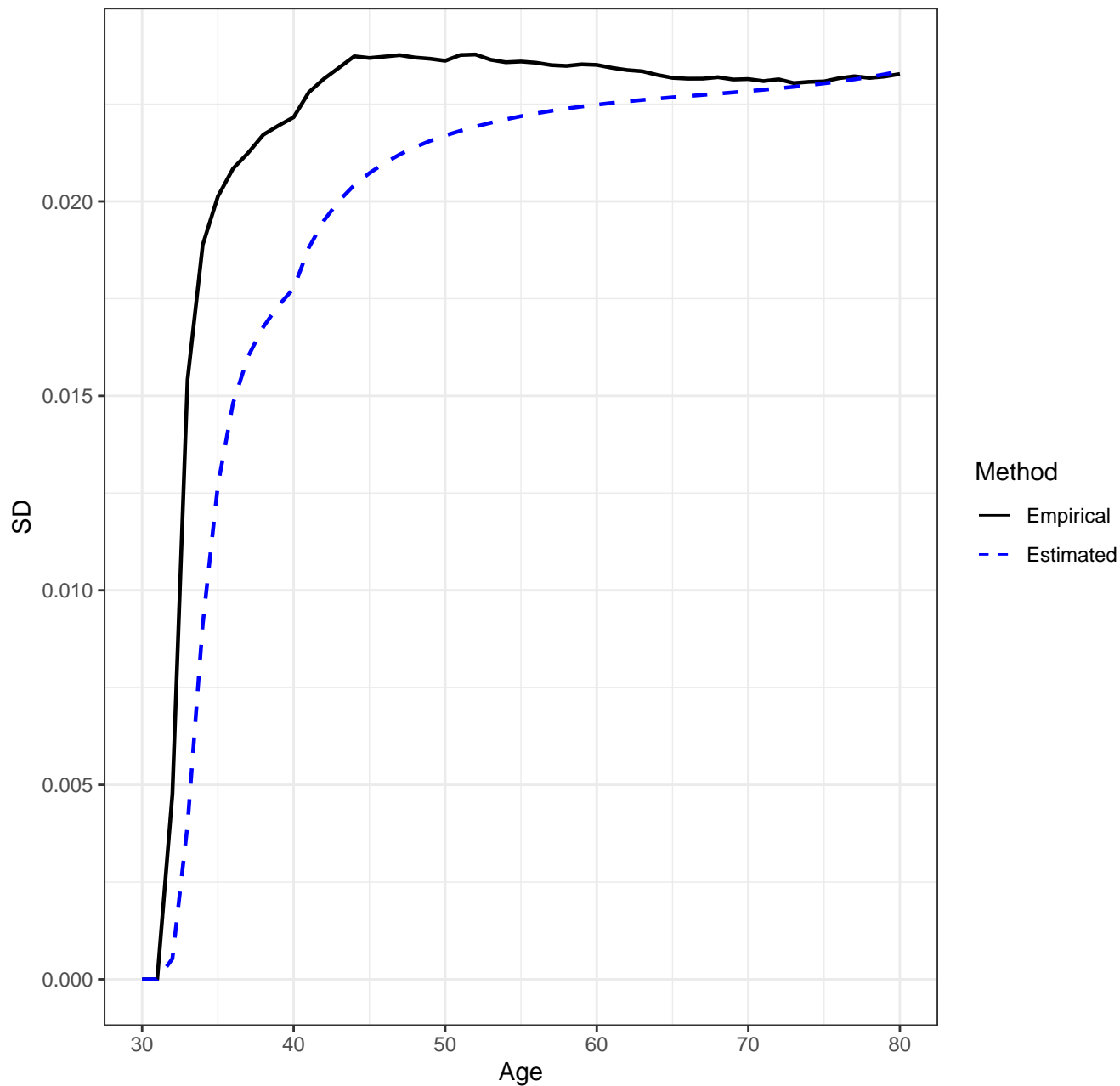
Scenario 3122, n=2500, IQR'S



Scenario 3122, n=2500, AJ Estimator, Empirical vs. Estimated SD's

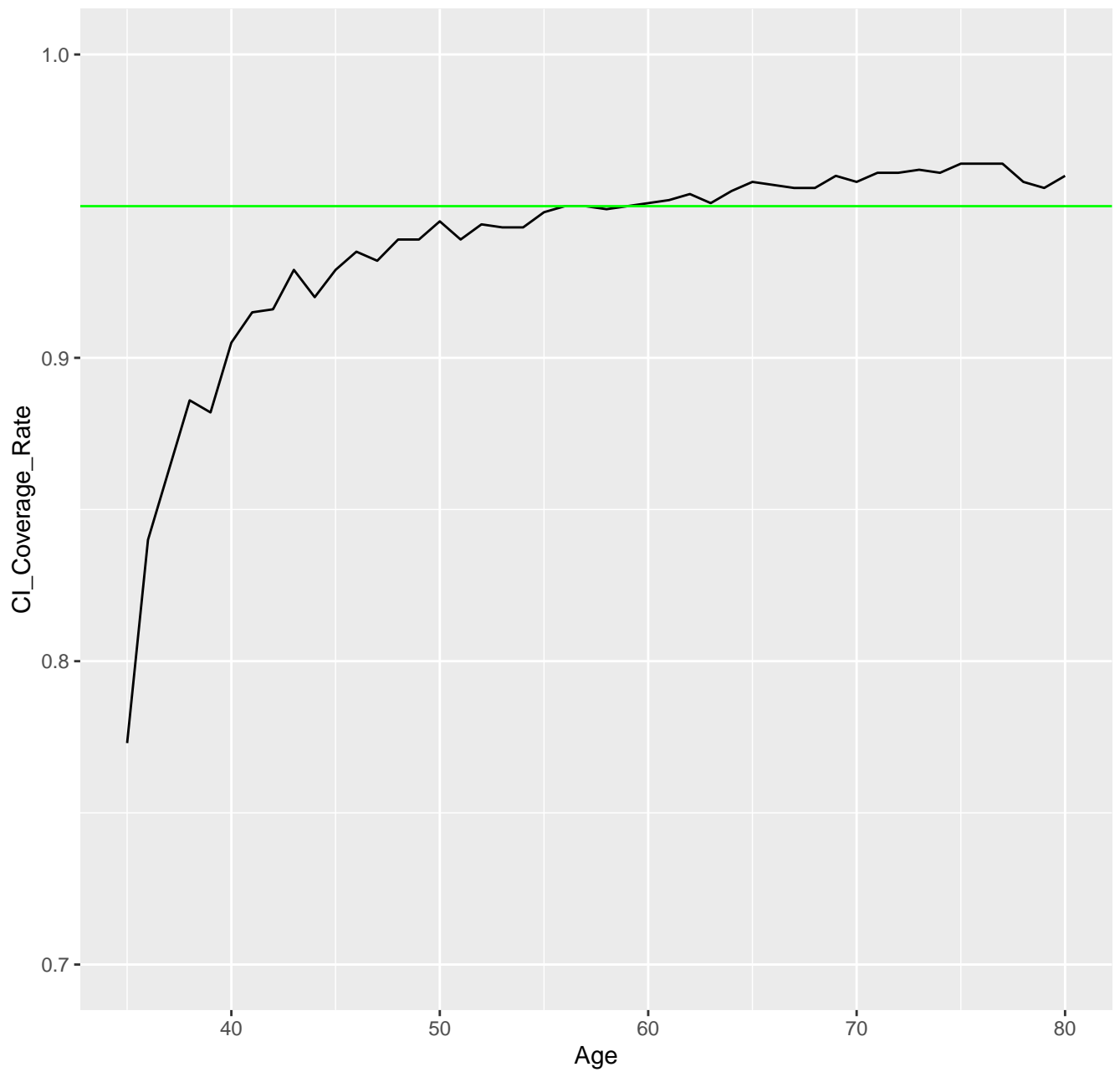


Scenario 3122, n=2500, New Estimator, Empirical vs. Estimated SD's

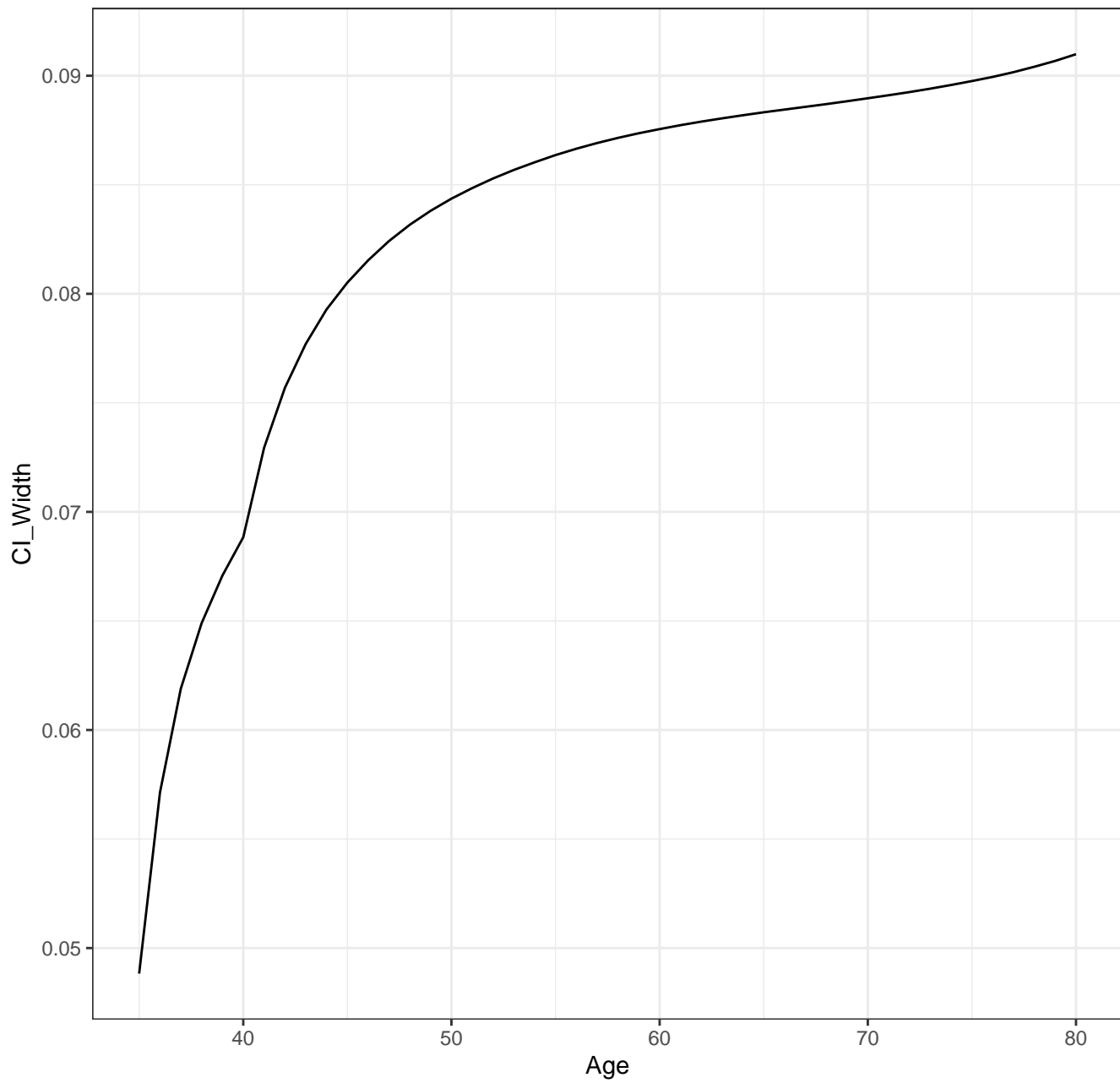




Scenario 3122, n=2500, CI Coverage Rate for New Method



Scenario 3122, n=2500, CI Width for New Estimator



## CONFIDENCE BAND COVERAGE RATES

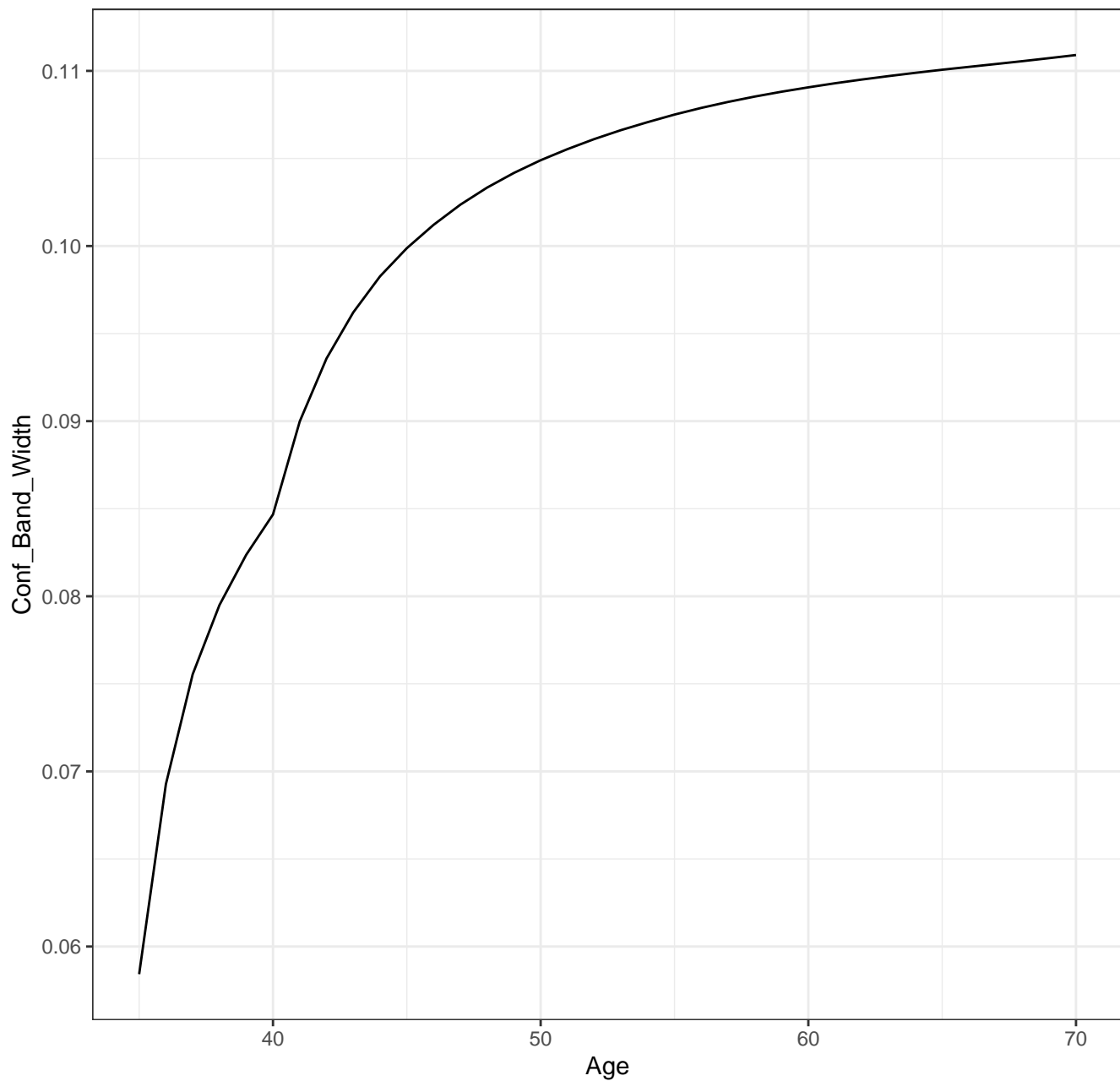
Scenario: 3122

AJ0: 0

AJ: 0.172

New: 0.769

Scenario 3122, n=2500, Confidence Band Width for New Method



## SETTINGS

Scenario: 3211

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5\pi - \arcsin(\sqrt{1-u})$

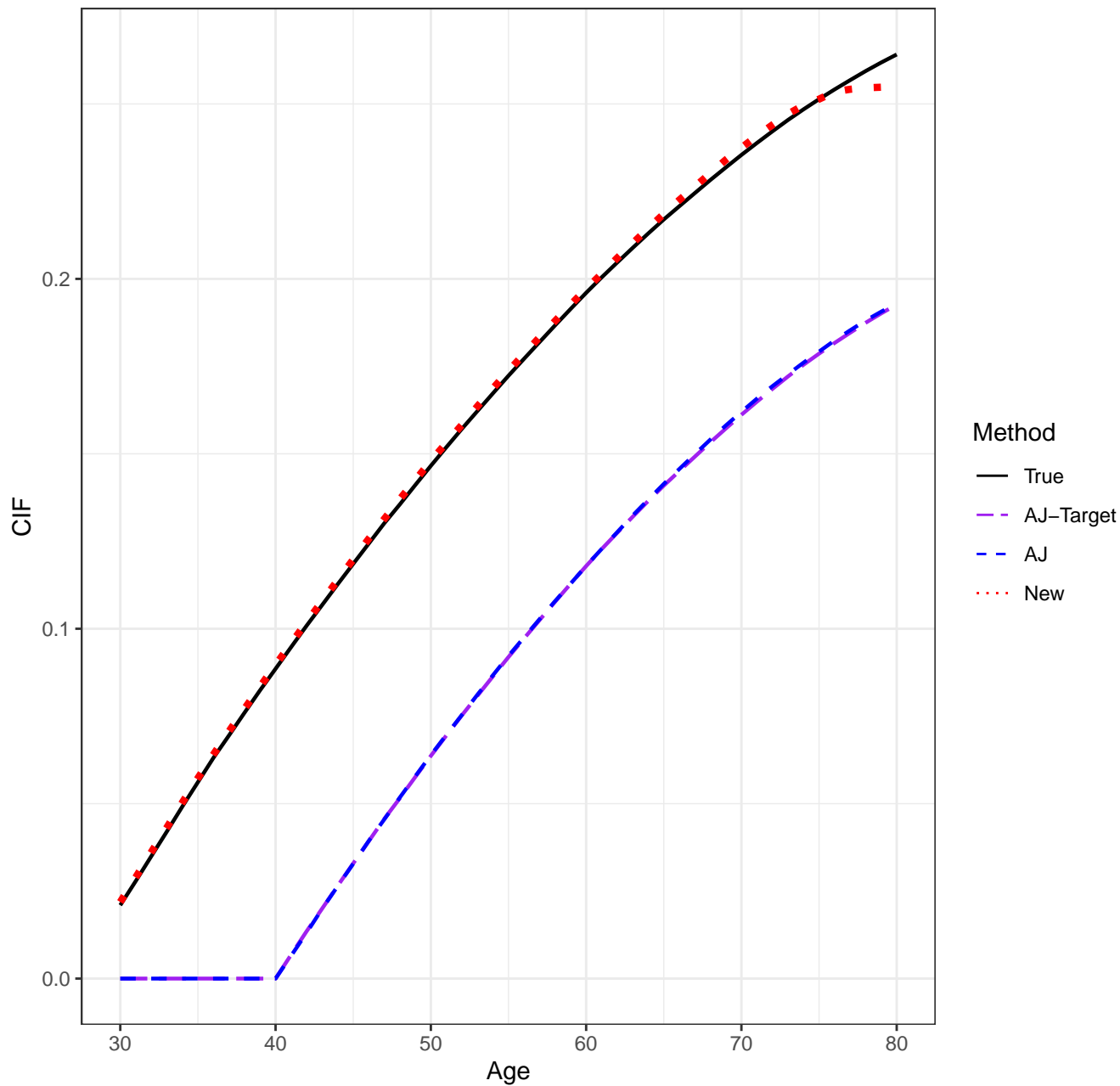
pointwise CI's done by: normal-theory

auxflg = FALSE

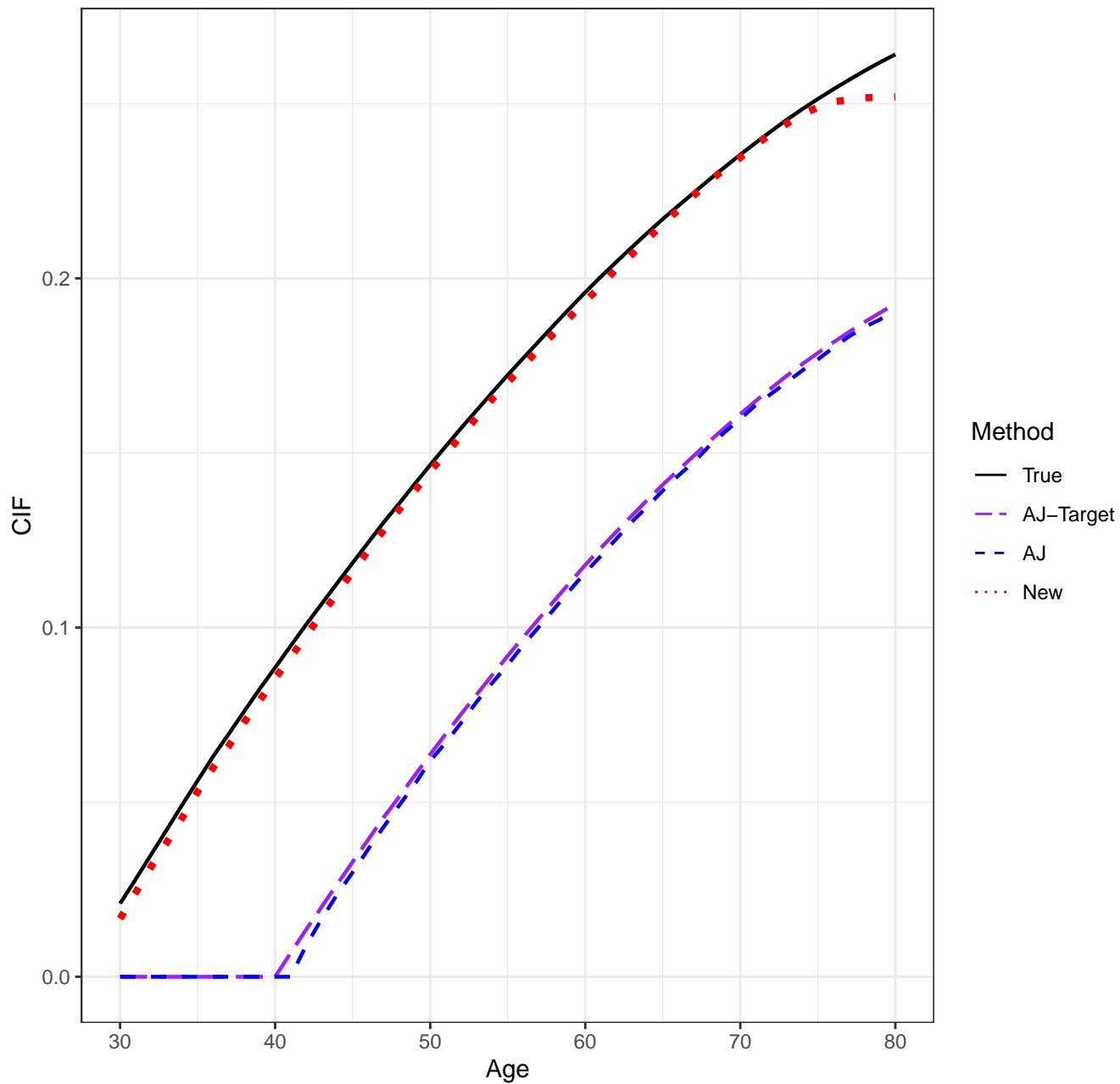
bootstrap weights: normal

Date/Time: 2024-01-14 20:05:26.317508

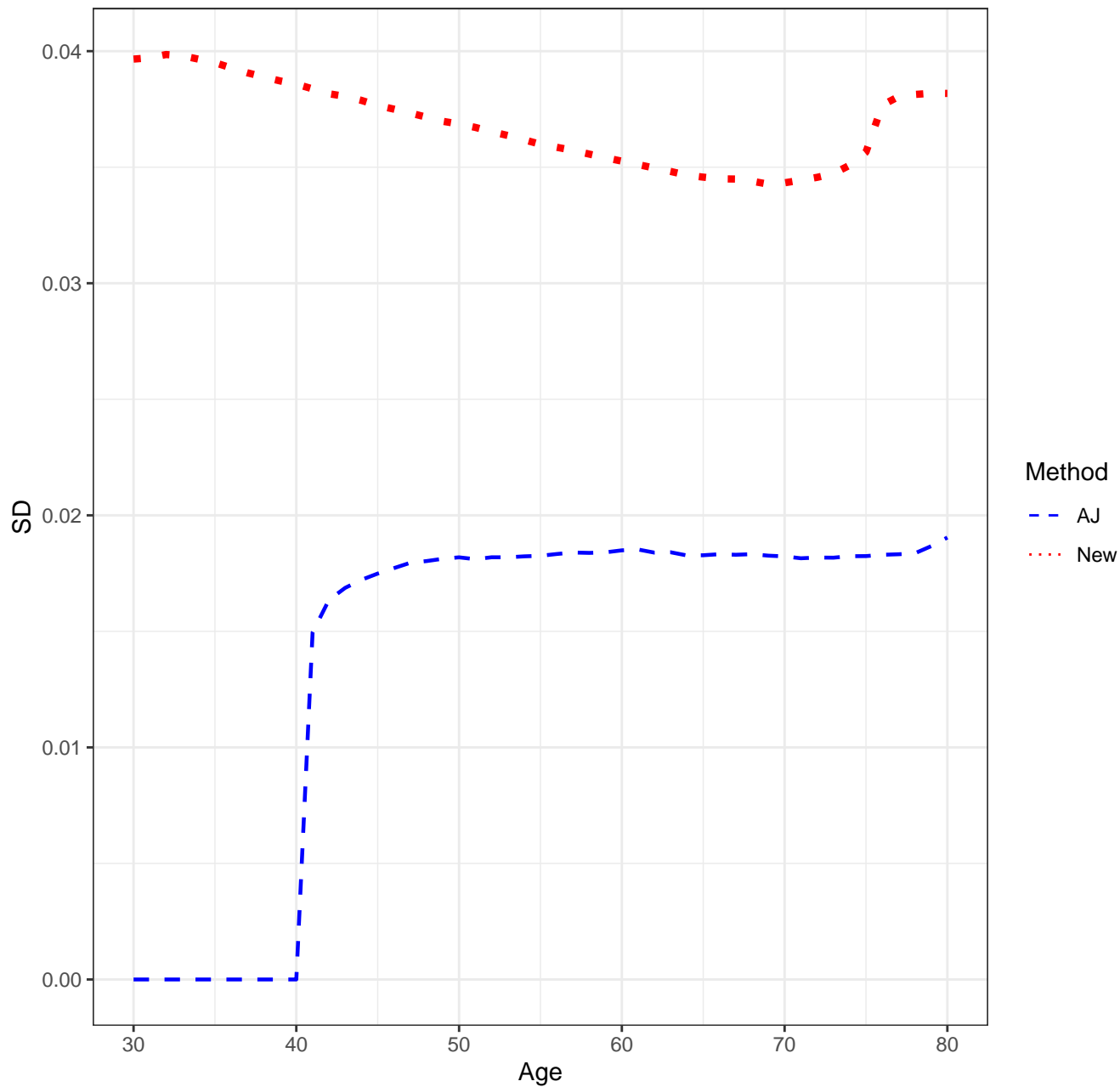
Scenario 3211, n=2500, Means



Scenario 3211, n=2500, Medians

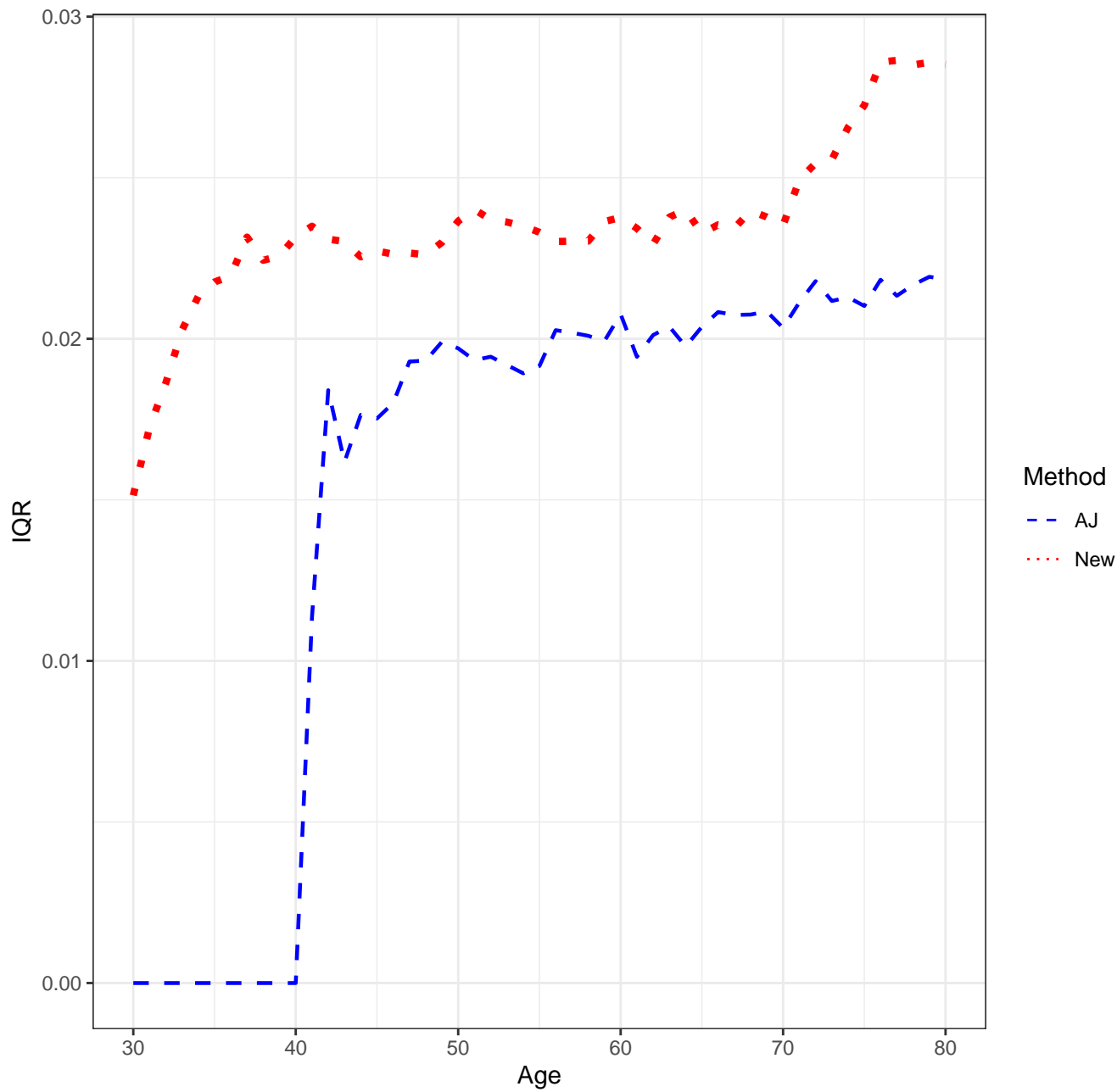


Scenario 3211, n=2500, SD'S

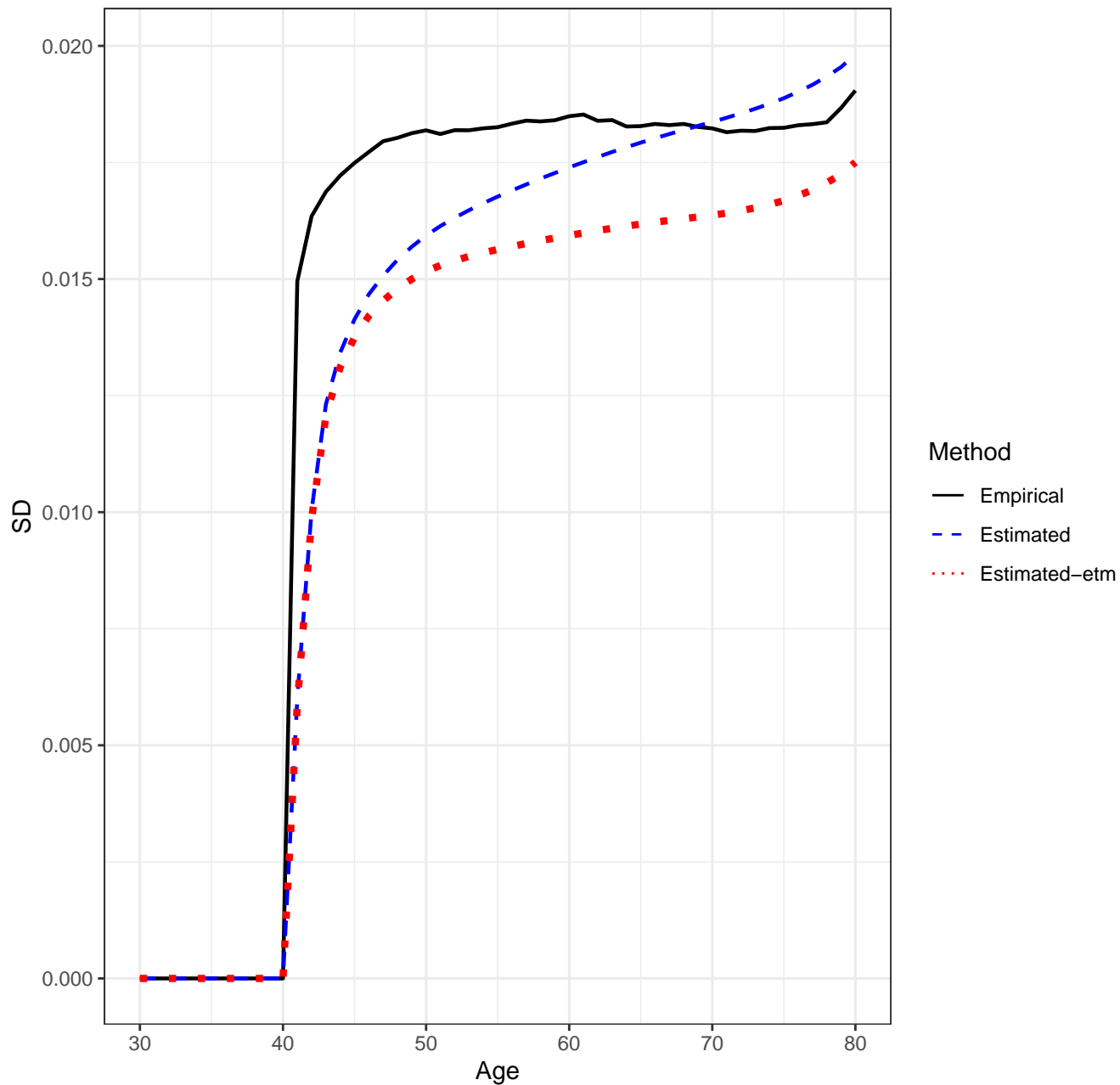




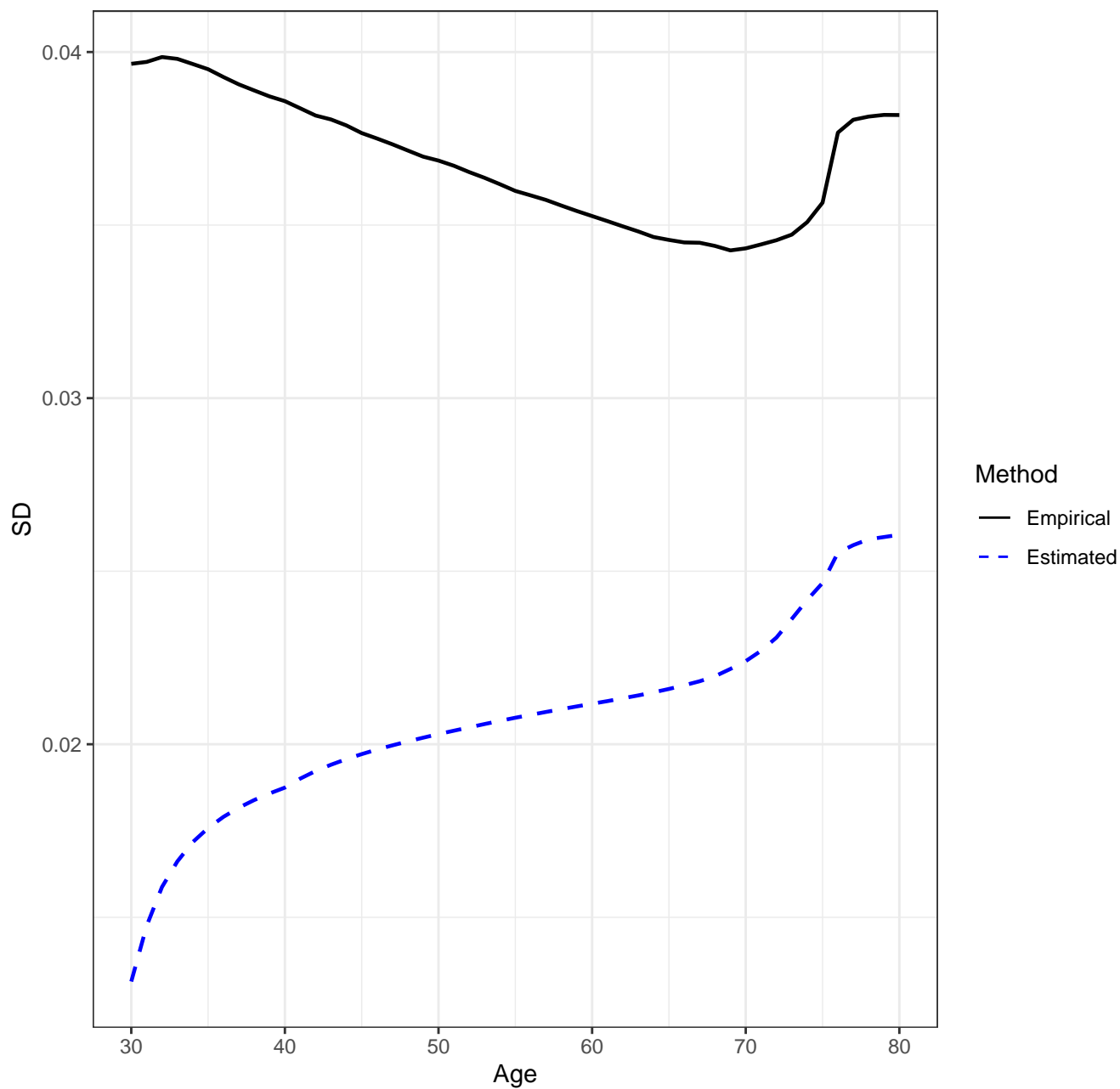
Scenario 3211, n=2500, IQR'S



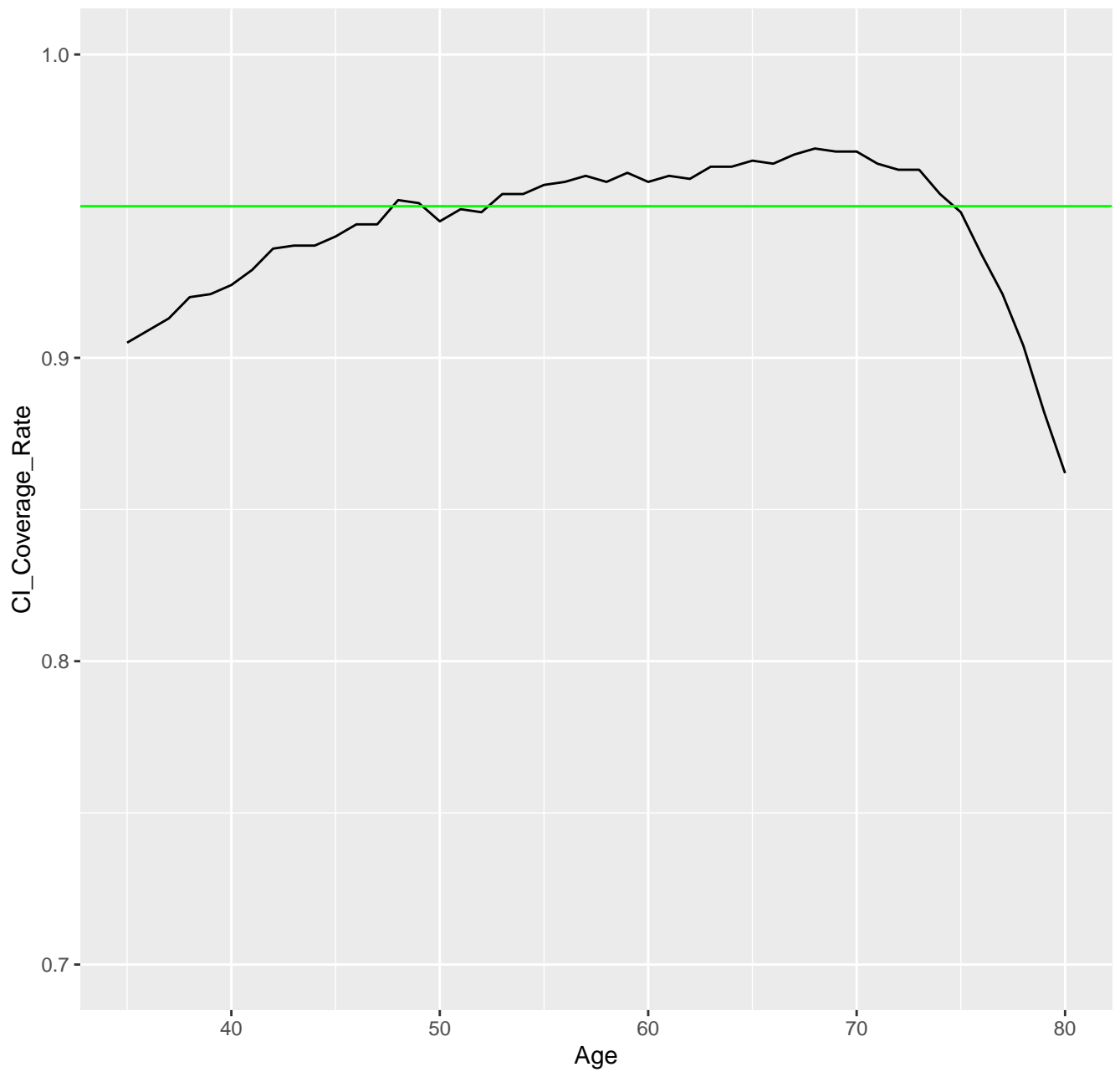
Scenario 3211, n=2500, AJ Estimator, Empirical vs. Estimated SD's



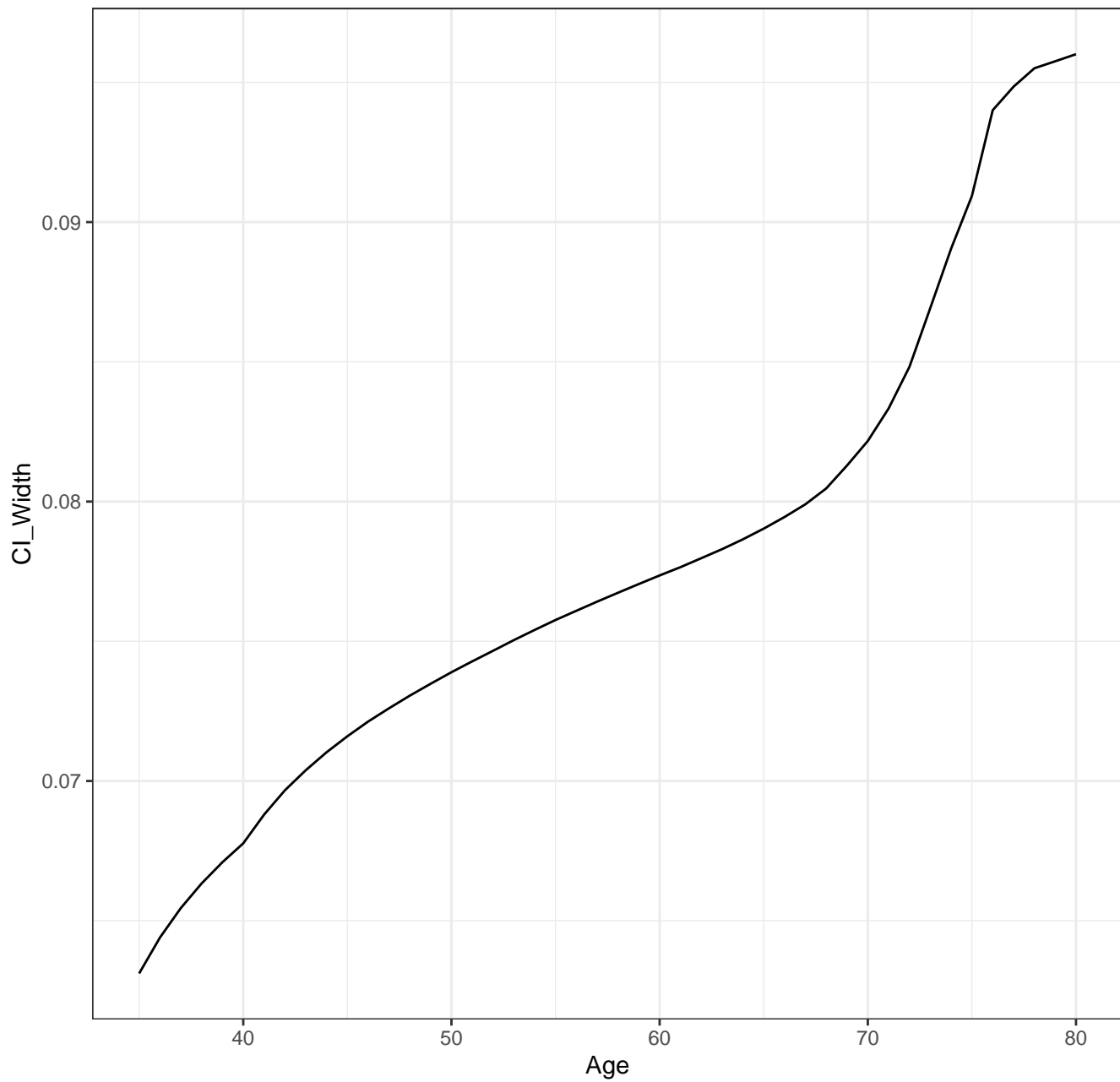
Scenario 3211, n=2500, New Estimator, Empirical vs. Estimated SD's



Scenario 3211, n=2500, CI Coverage Rate for New Method



Scenario 3211, n=2500, CI Width for New Estimator



## CONFIDENCE BAND COVERAGE RATES

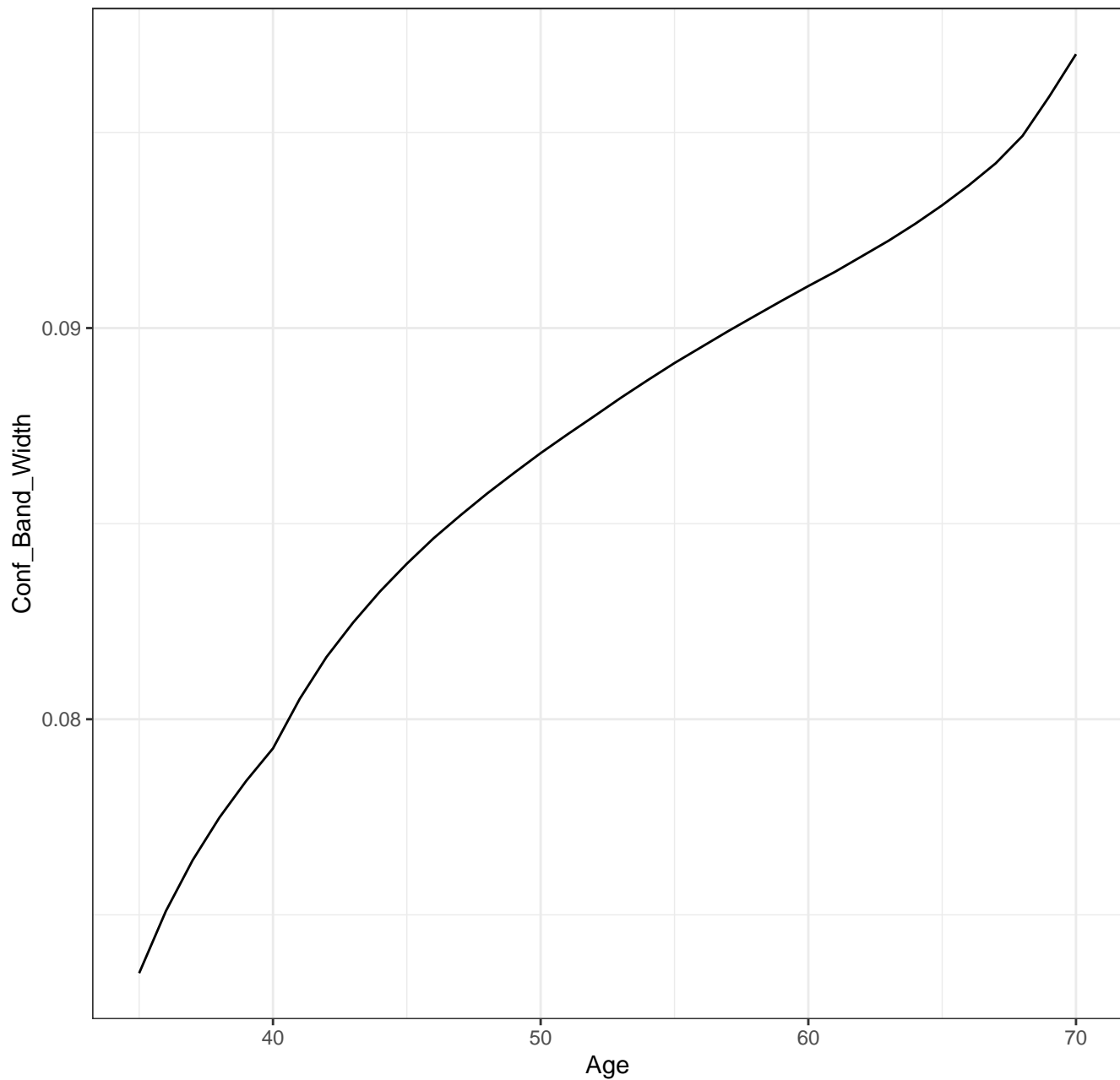
Scenario: 3211

AJ0: 0

AJ: 0.289

New: 0.923

Scenario 3211, n=2500, Confidence Band Width for New Method



## SETTINGS

Scenario: 3212

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

pointwise CI's done by: normal-theory

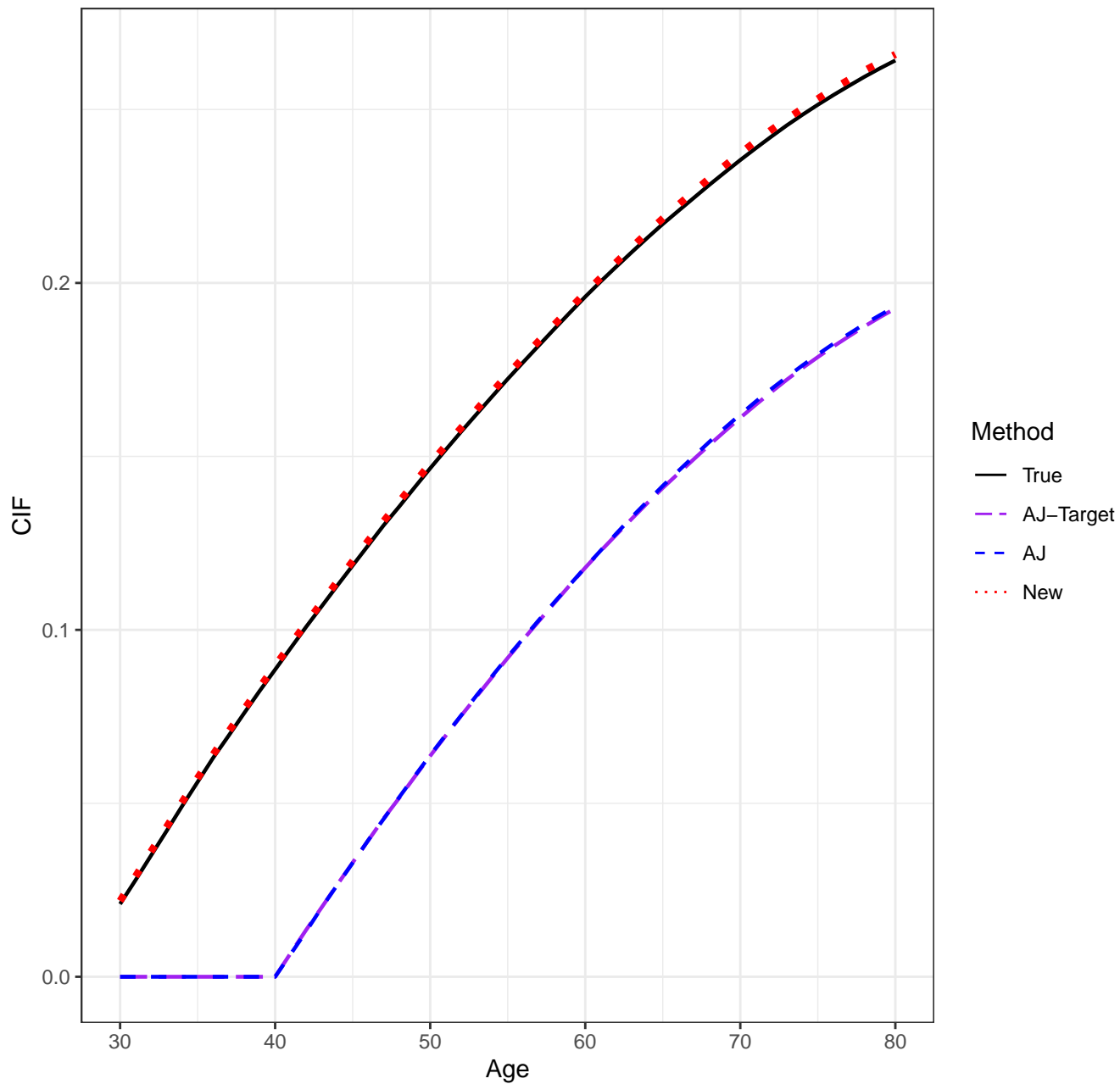
auxflg = FALSE

bootstrap weights: normal

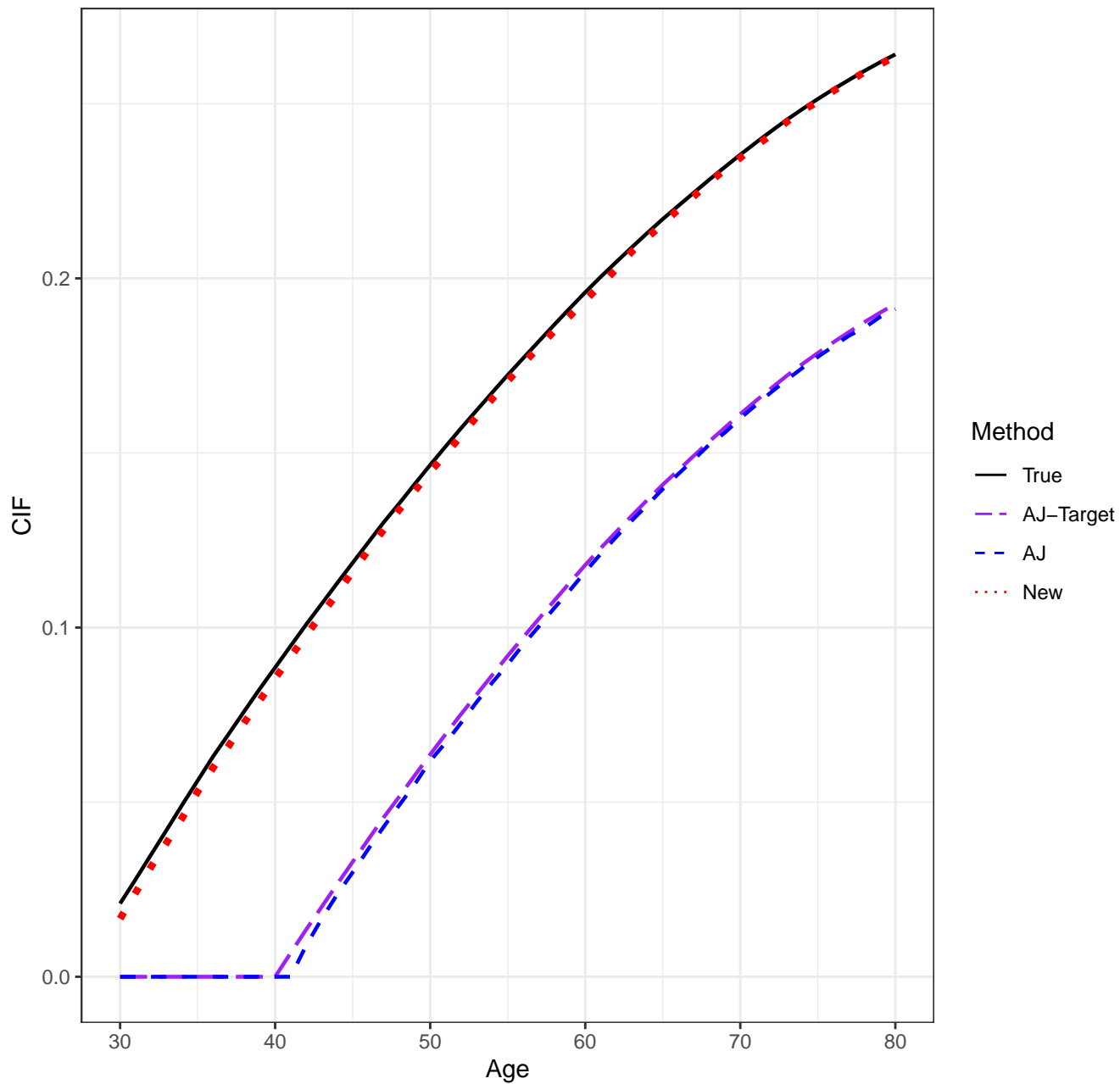
Date/Time: 2024-01-14 20:38:02.060127



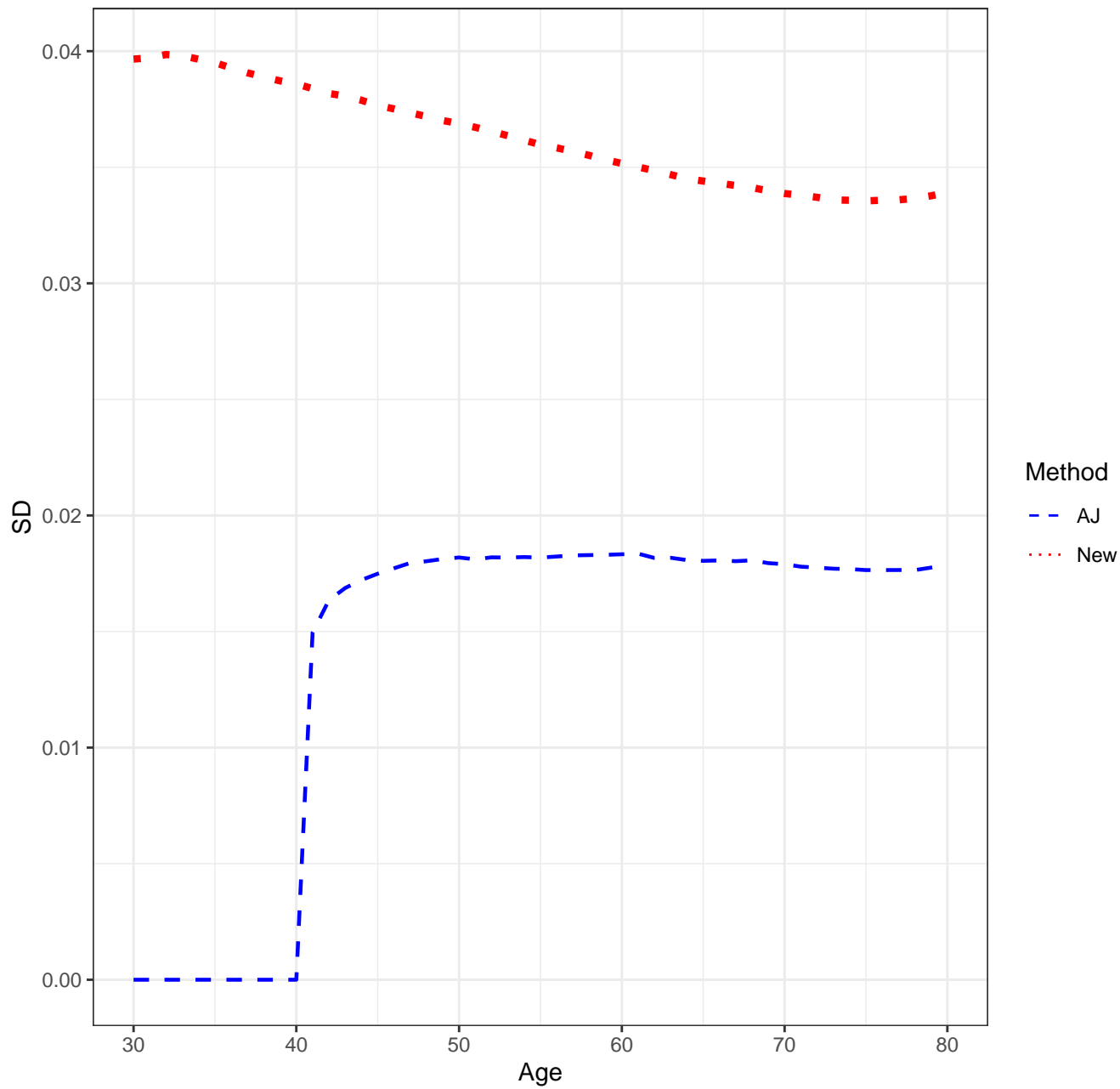
Scenario 3212, n=2500, Means



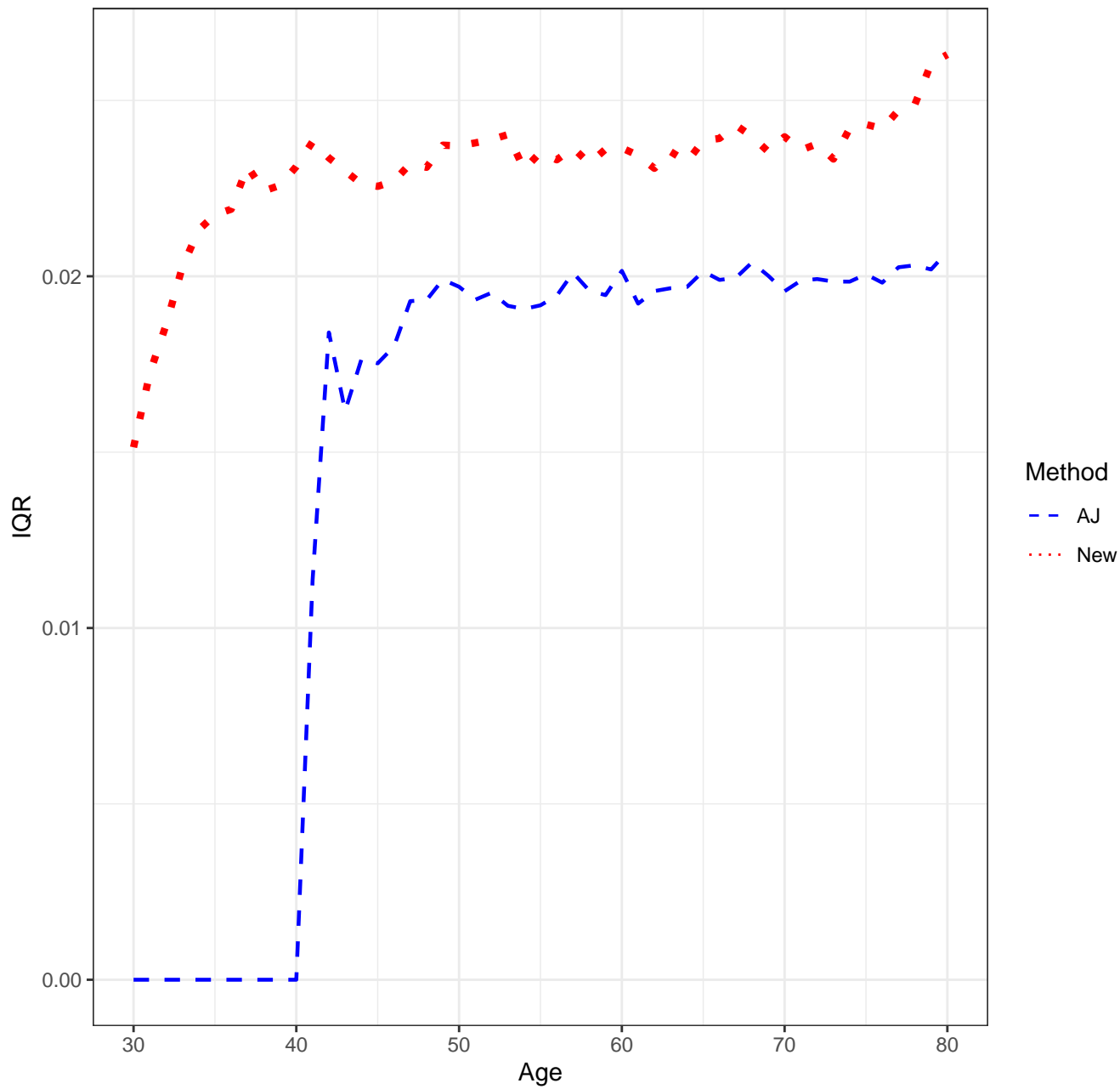
Scenario 3212, n=2500, Medians



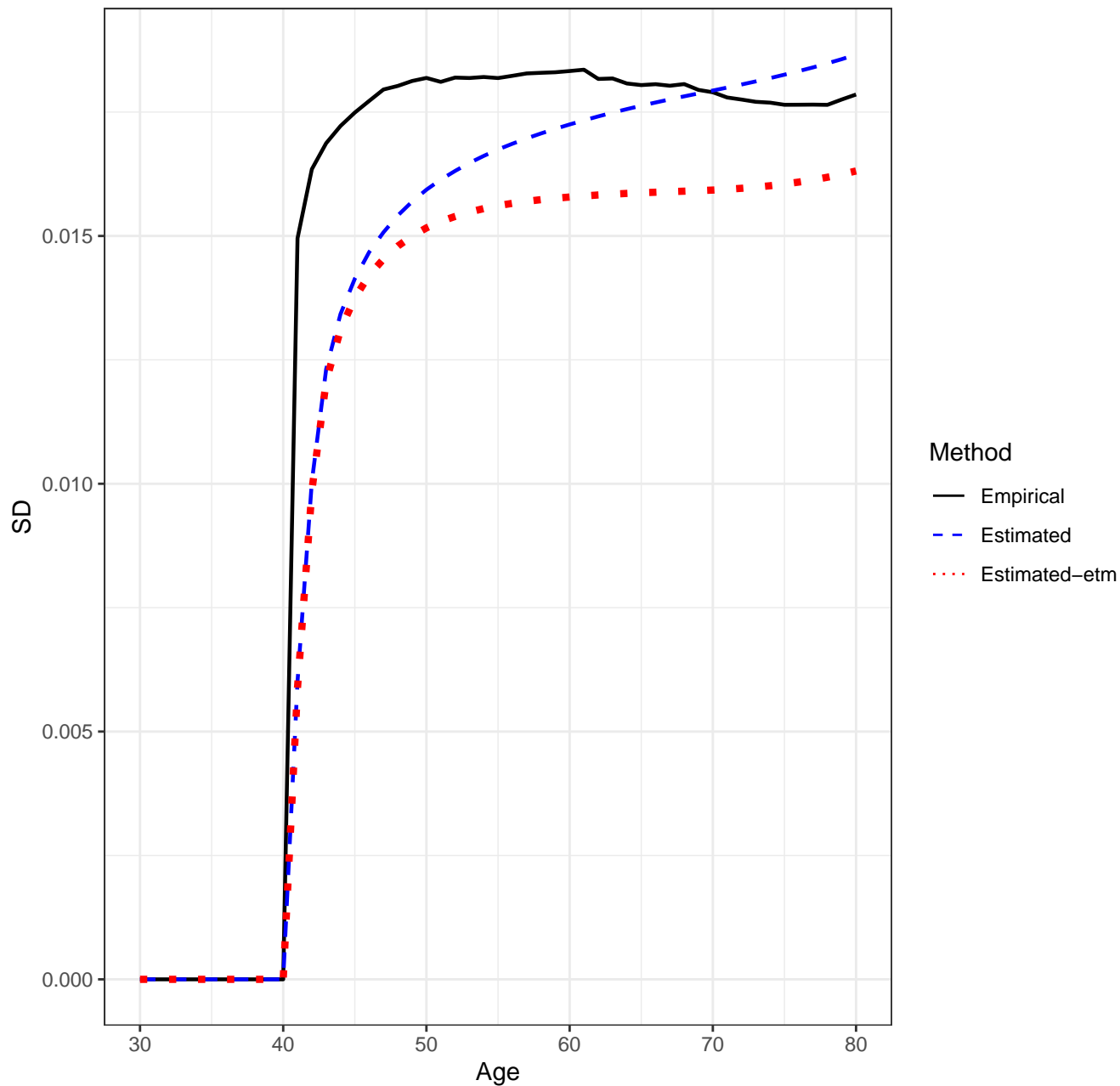
Scenario 3212, n=2500, SD'S



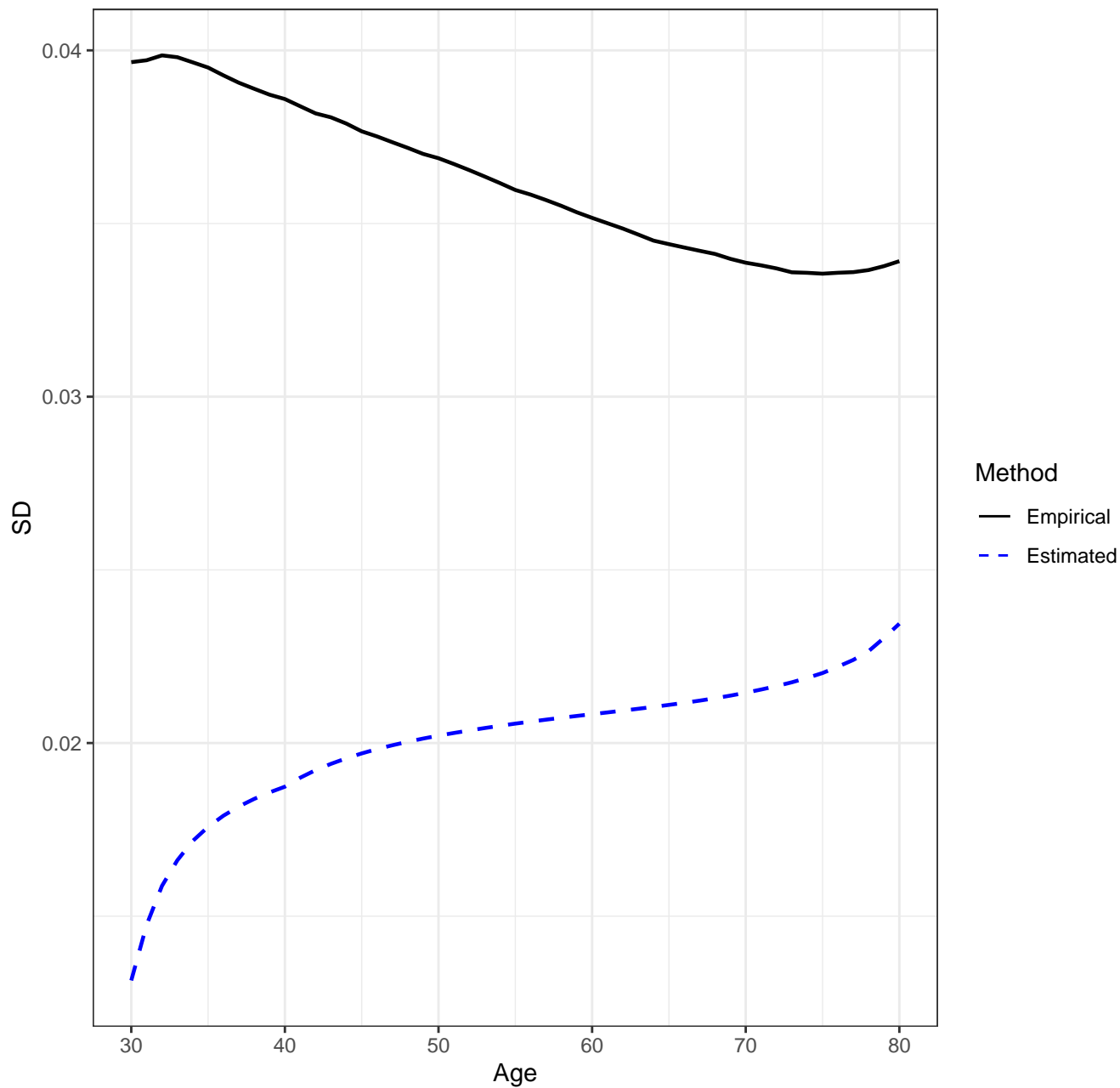
Scenario 3212, n=2500, IQR'S



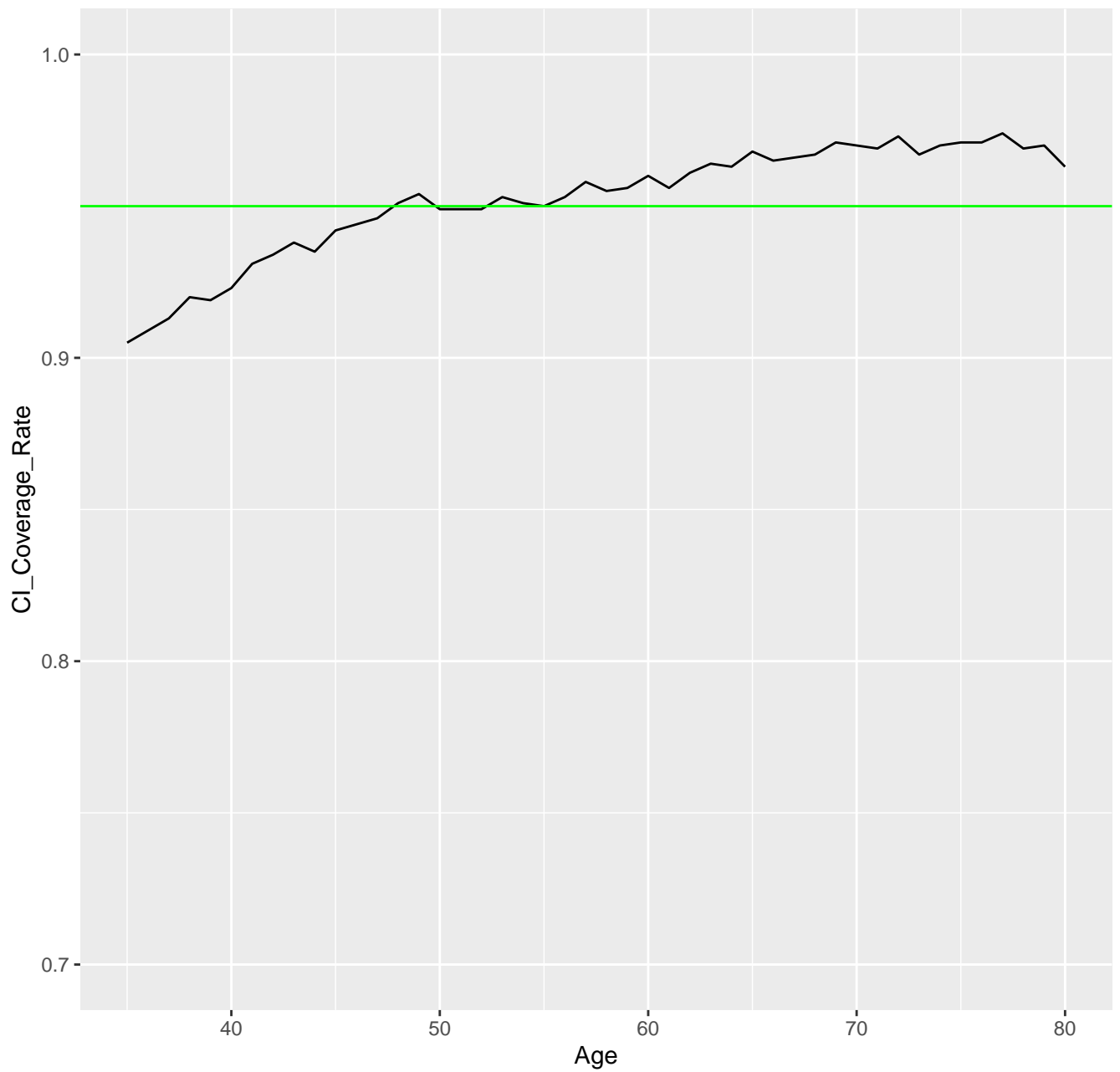
Scenario 3212, n=2500, AJ Estimator, Empirical vs. Estimated SD's



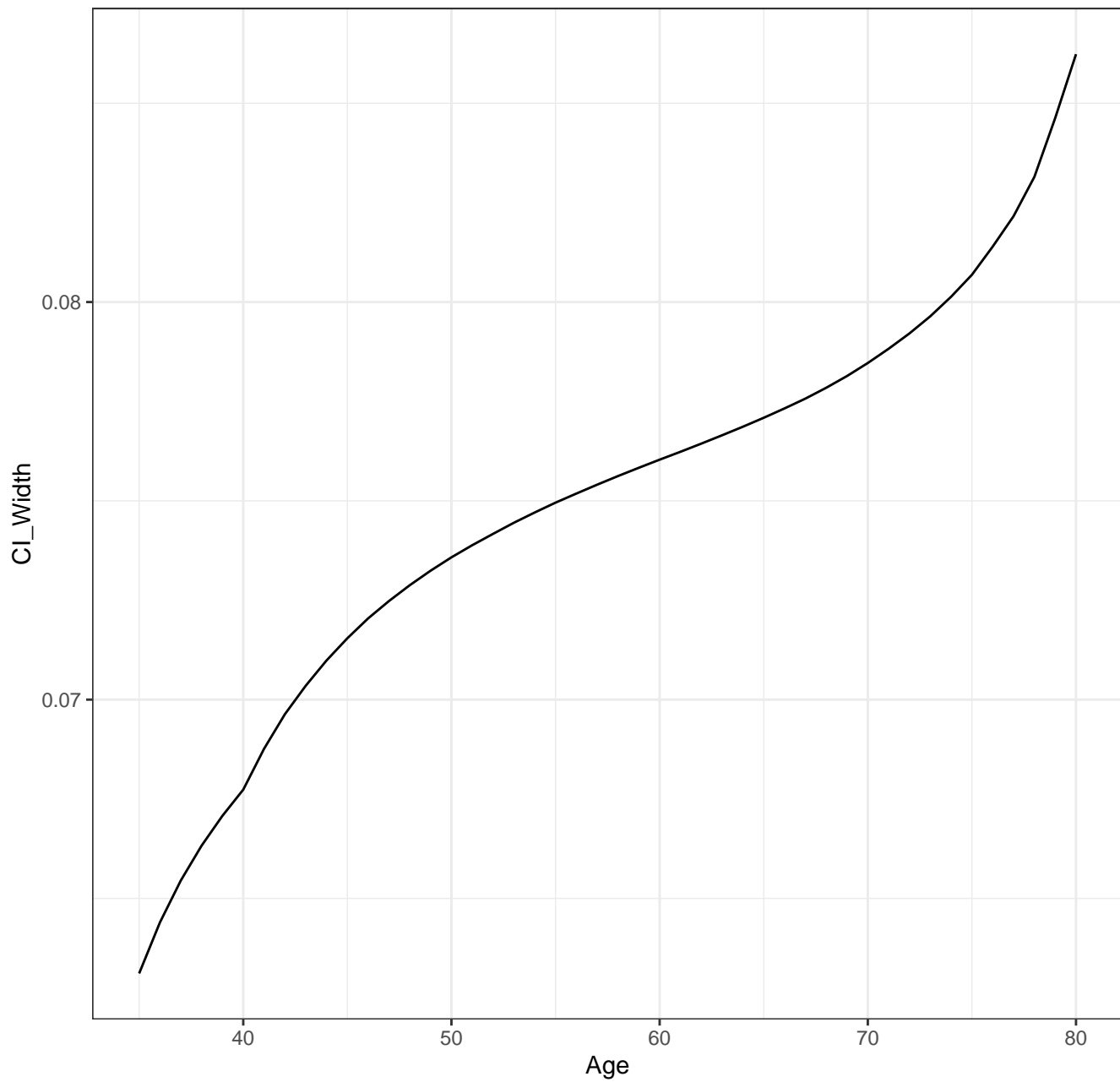
Scenario 3212, n=2500, New Estimator, Empirical vs. Estimated SD's



Scenario 3212, n=2500, CI Coverage Rate for New Method



Scenario 3212, n=2500, CI Width for New Estimator





## CONFIDENCE BAND COVERAGE RATES

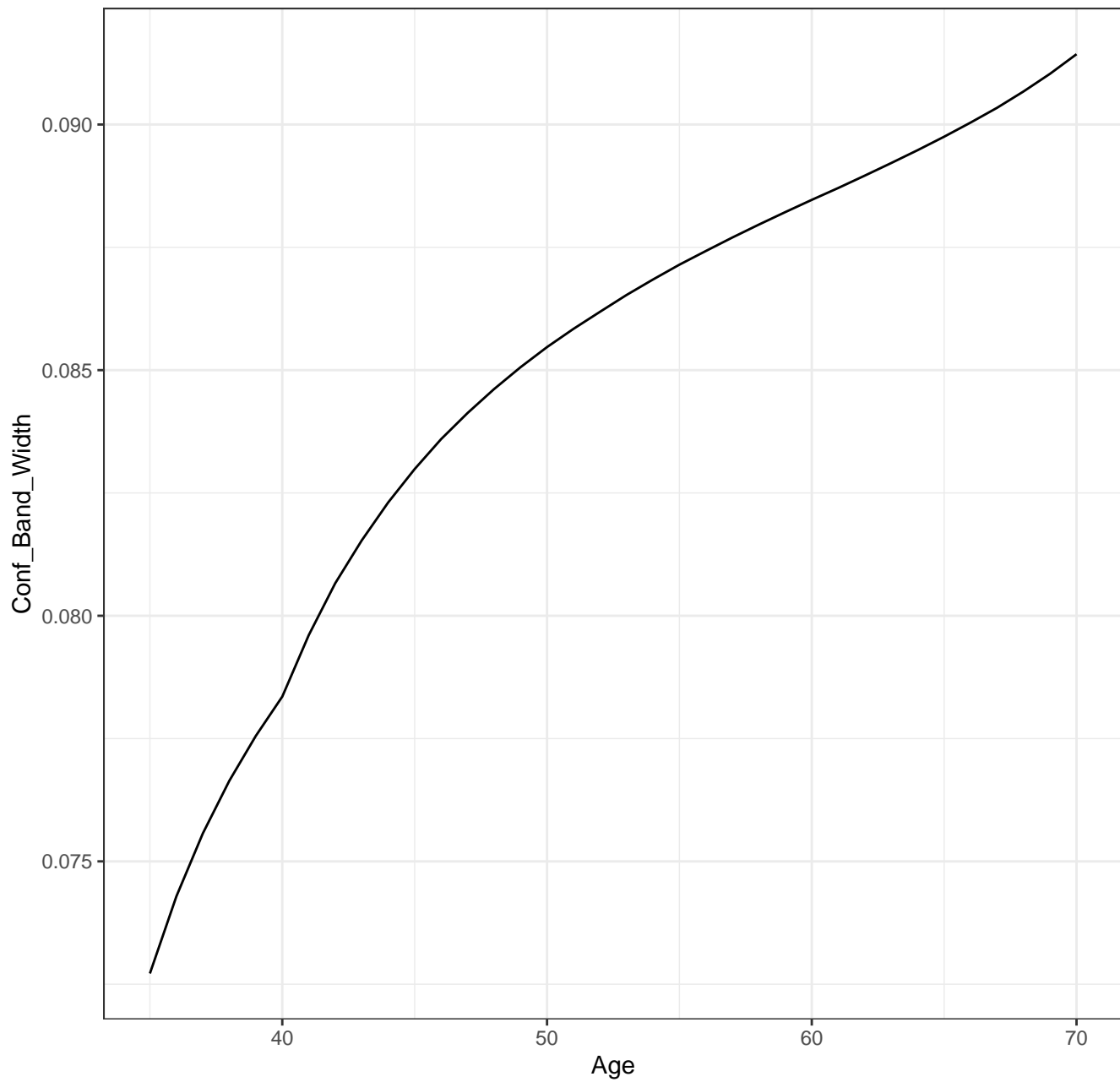
Scenario: 3212

AJ0: 0

AJ: 0.288

New: 0.921

Scenario 3212, n=2500, Confidence Band Width for New Method



## SETTINGS

Scenario: 3221

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

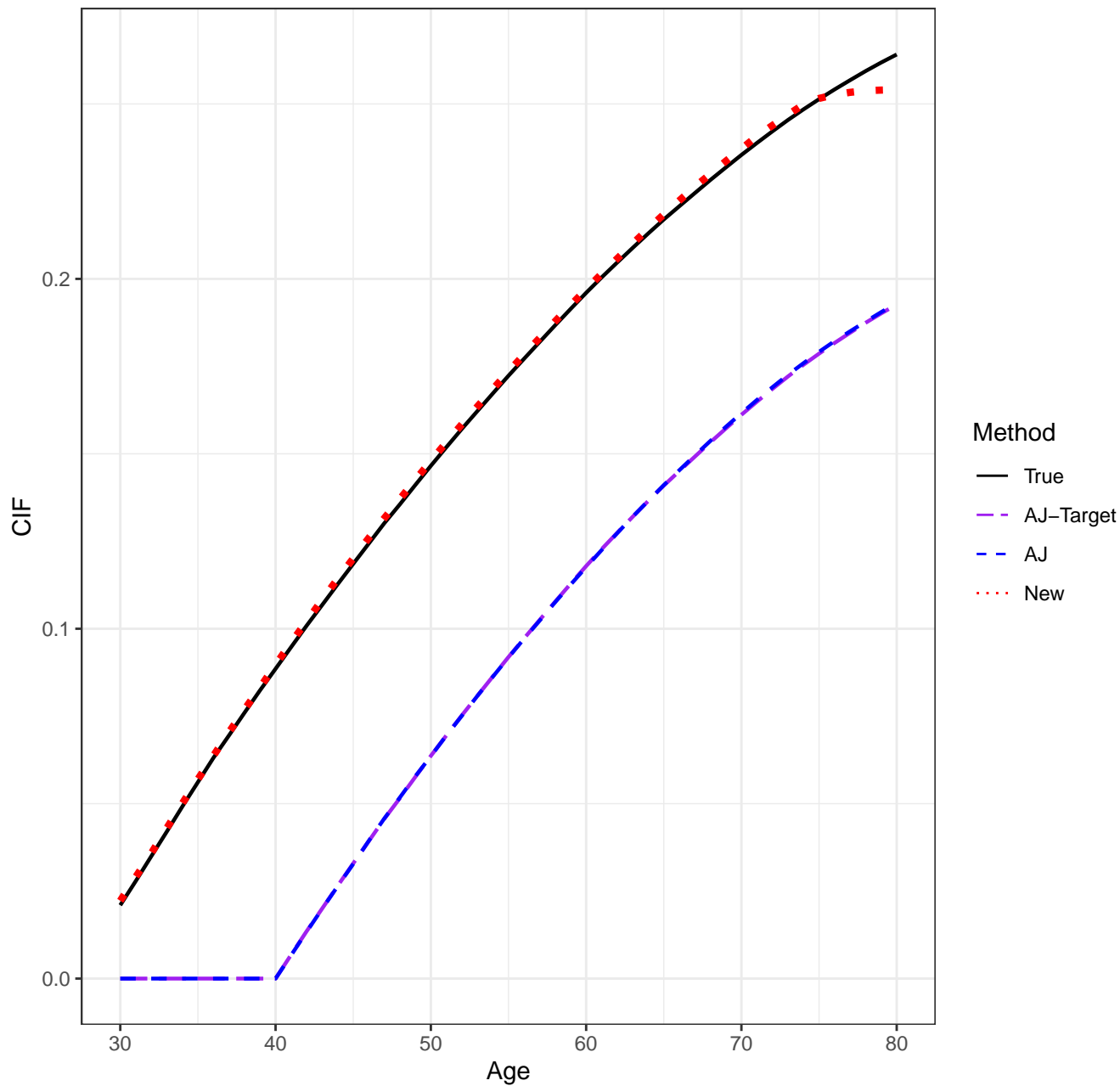
pointwise CI's done by: normal-theory

auxflg = FALSE

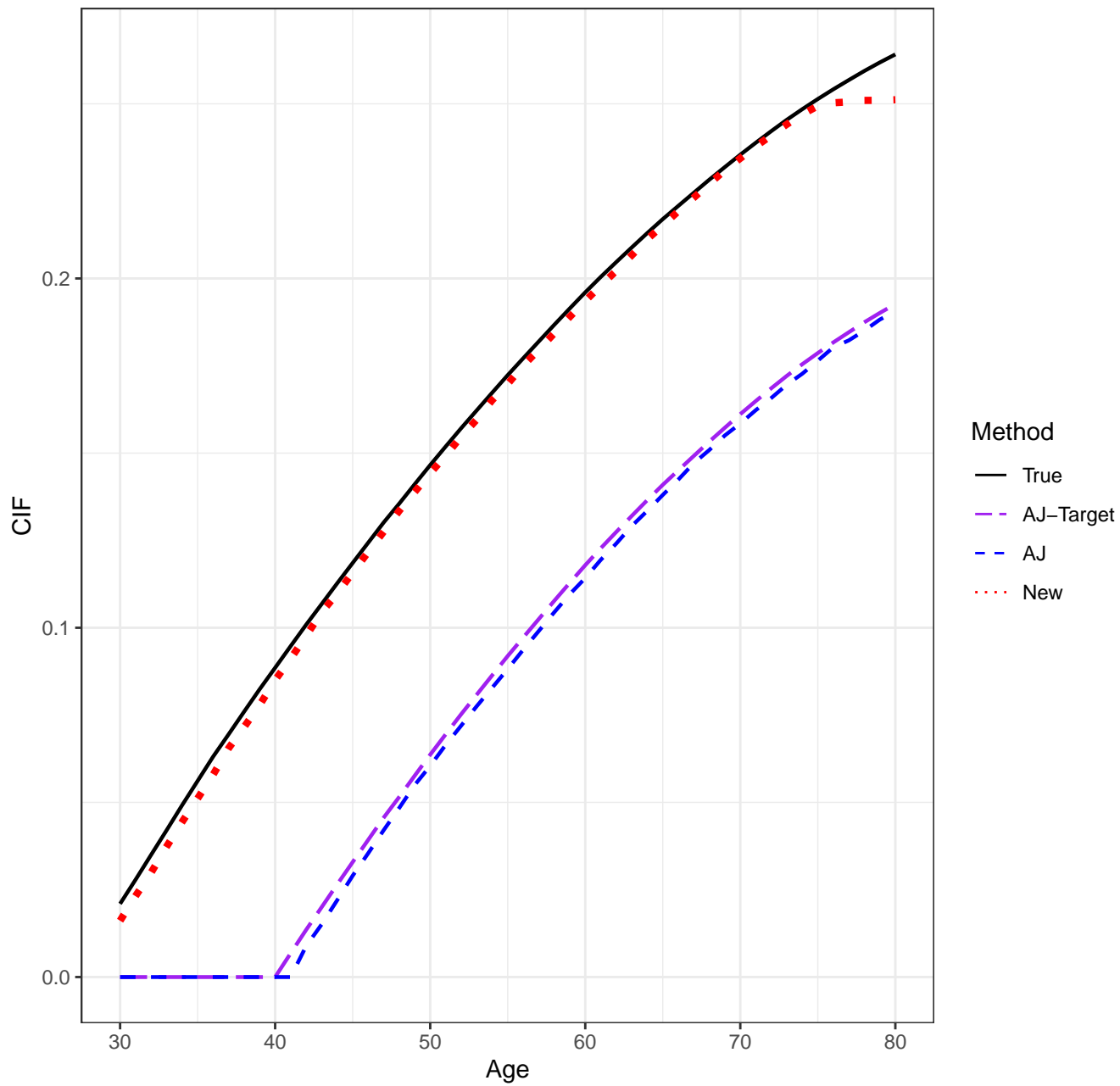
bootstrap weights: normal

Date/Time: 2024-01-14 22:32:04.301019

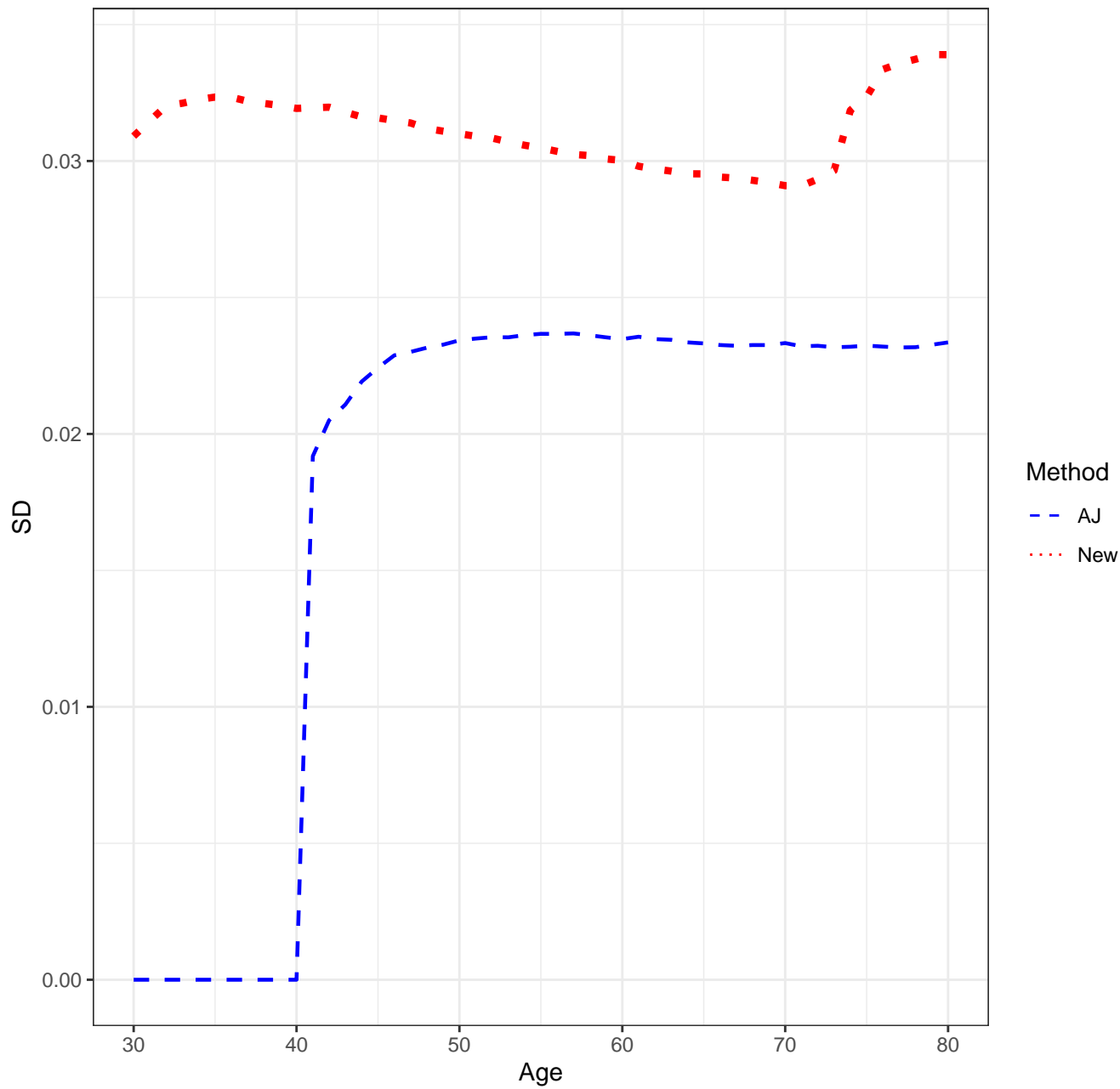
Scenario 3221, n=2500, Means



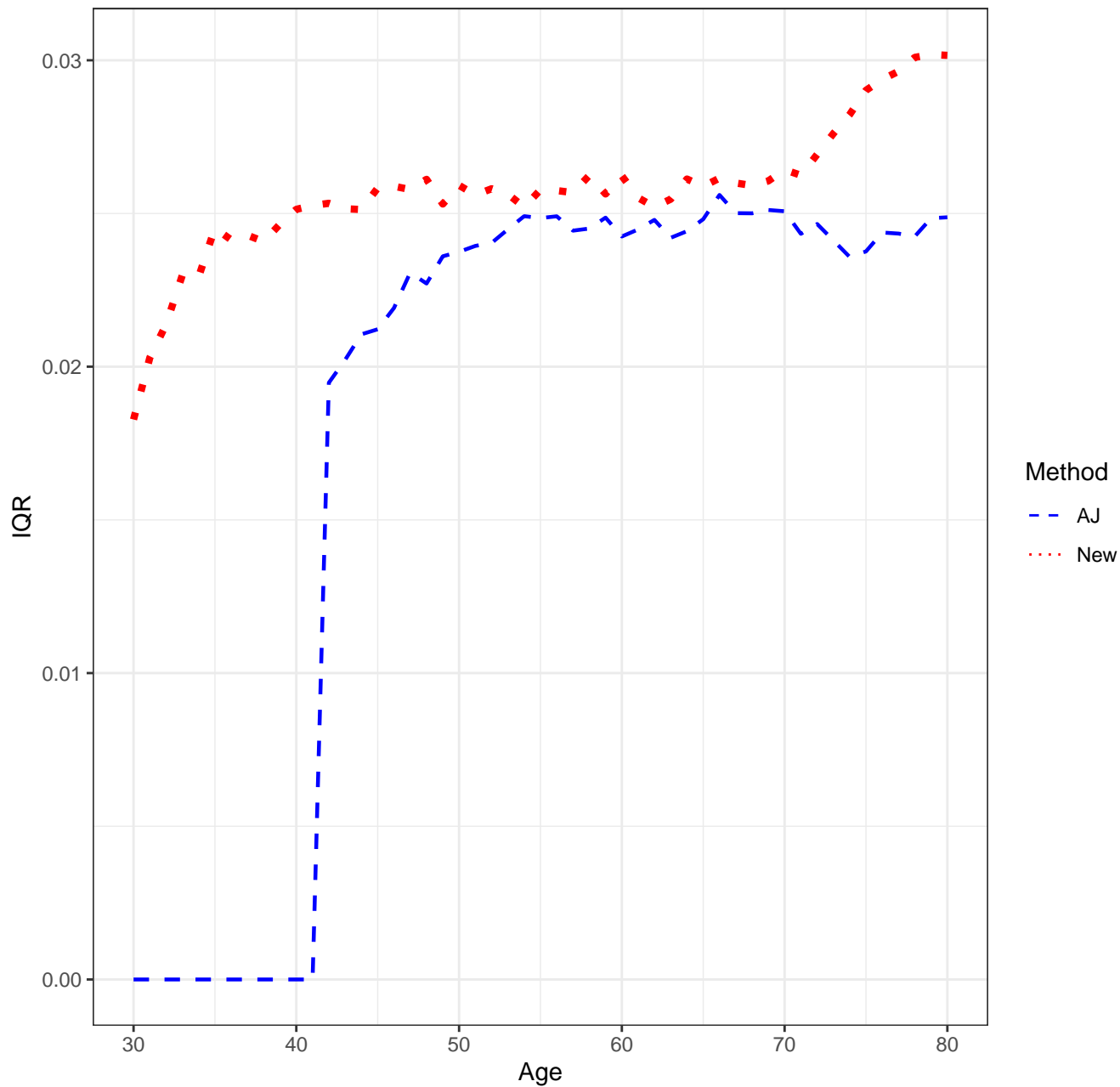
Scenario 3221, n=2500, Medians



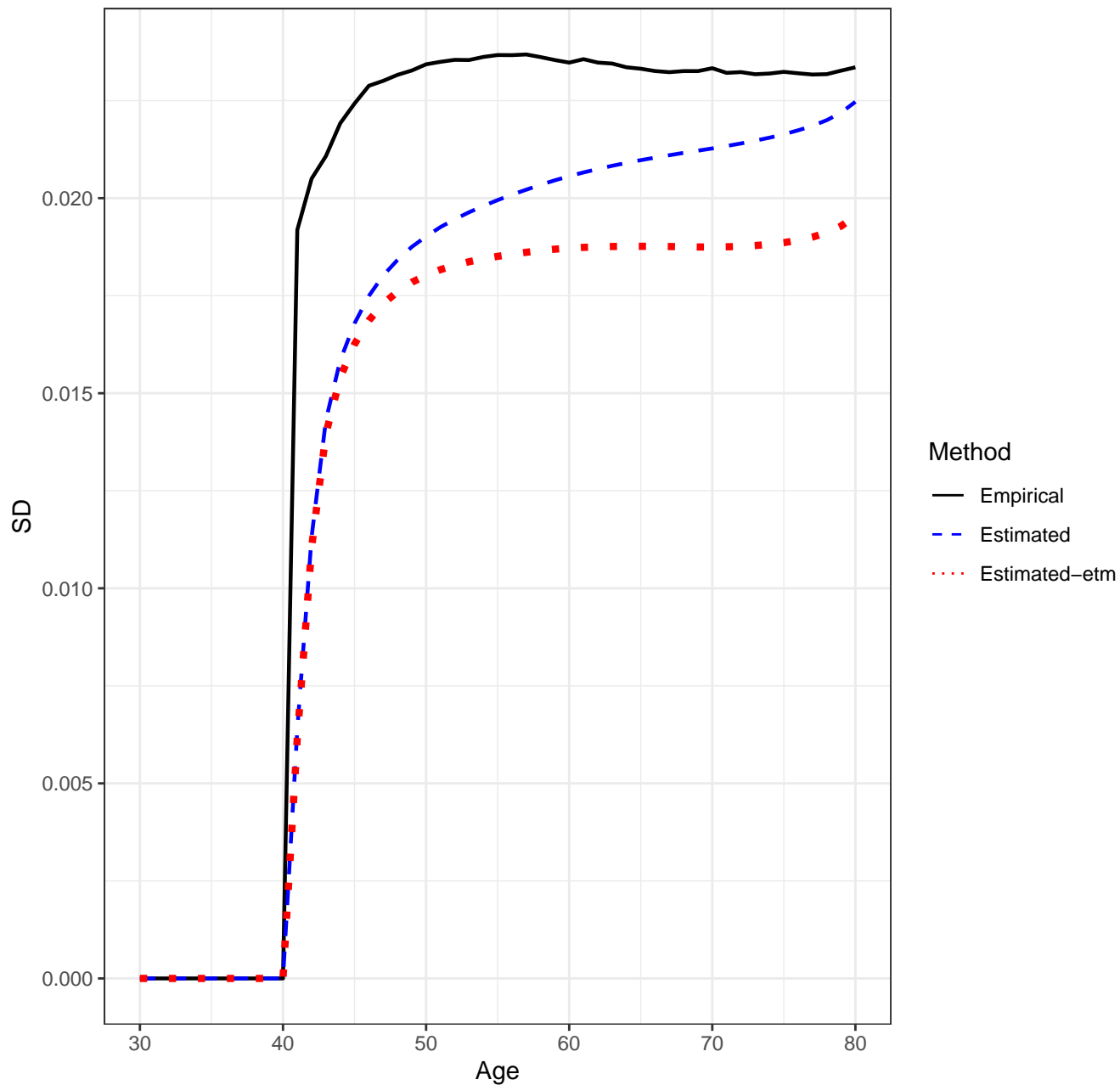
Scenario 3221, n=2500, SD'S



Scenario 3221, n=2500, IQR'S

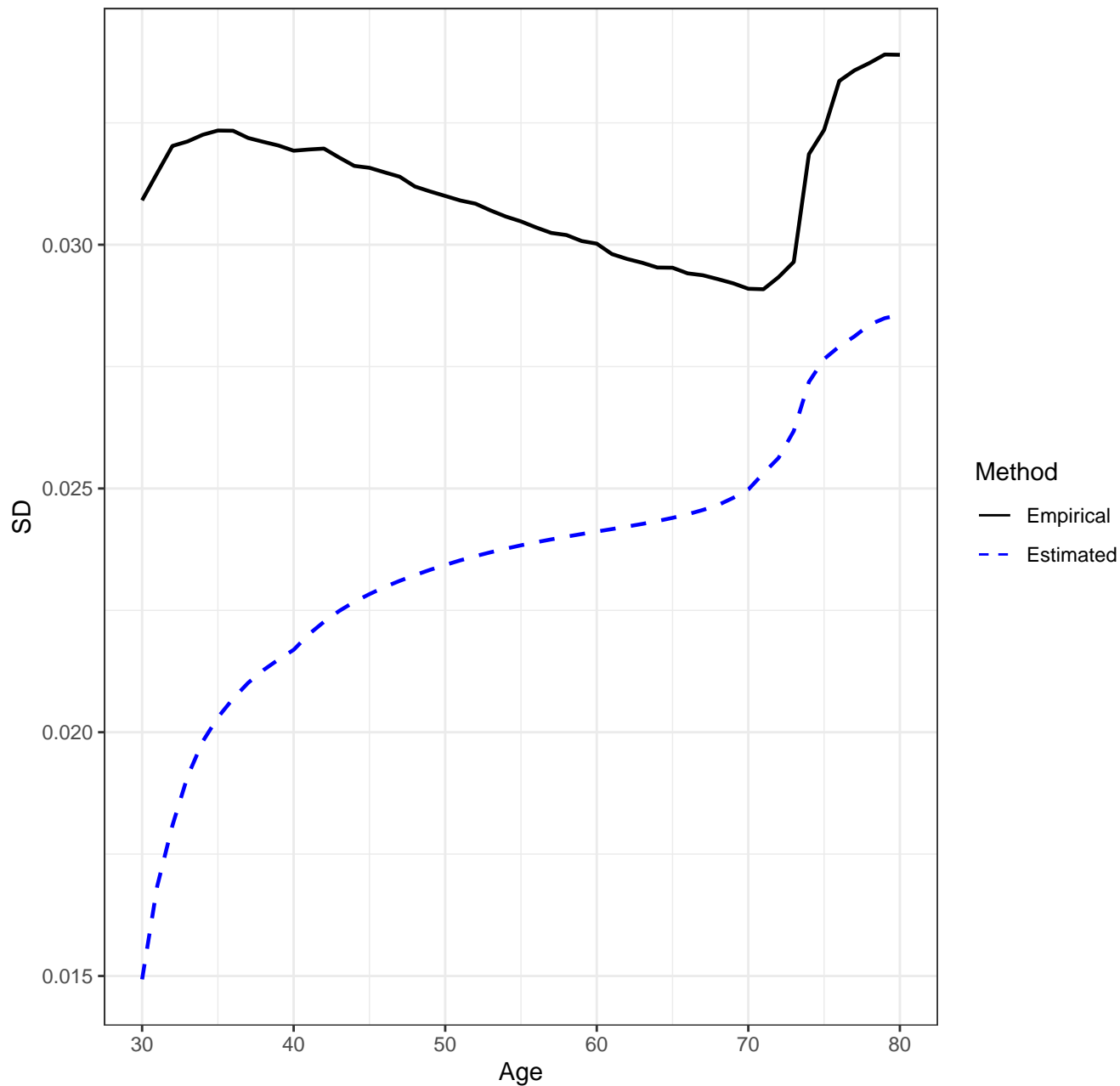


Scenario 3221, n=2500, AJ Estimator, Empirical vs. Estimated SD's

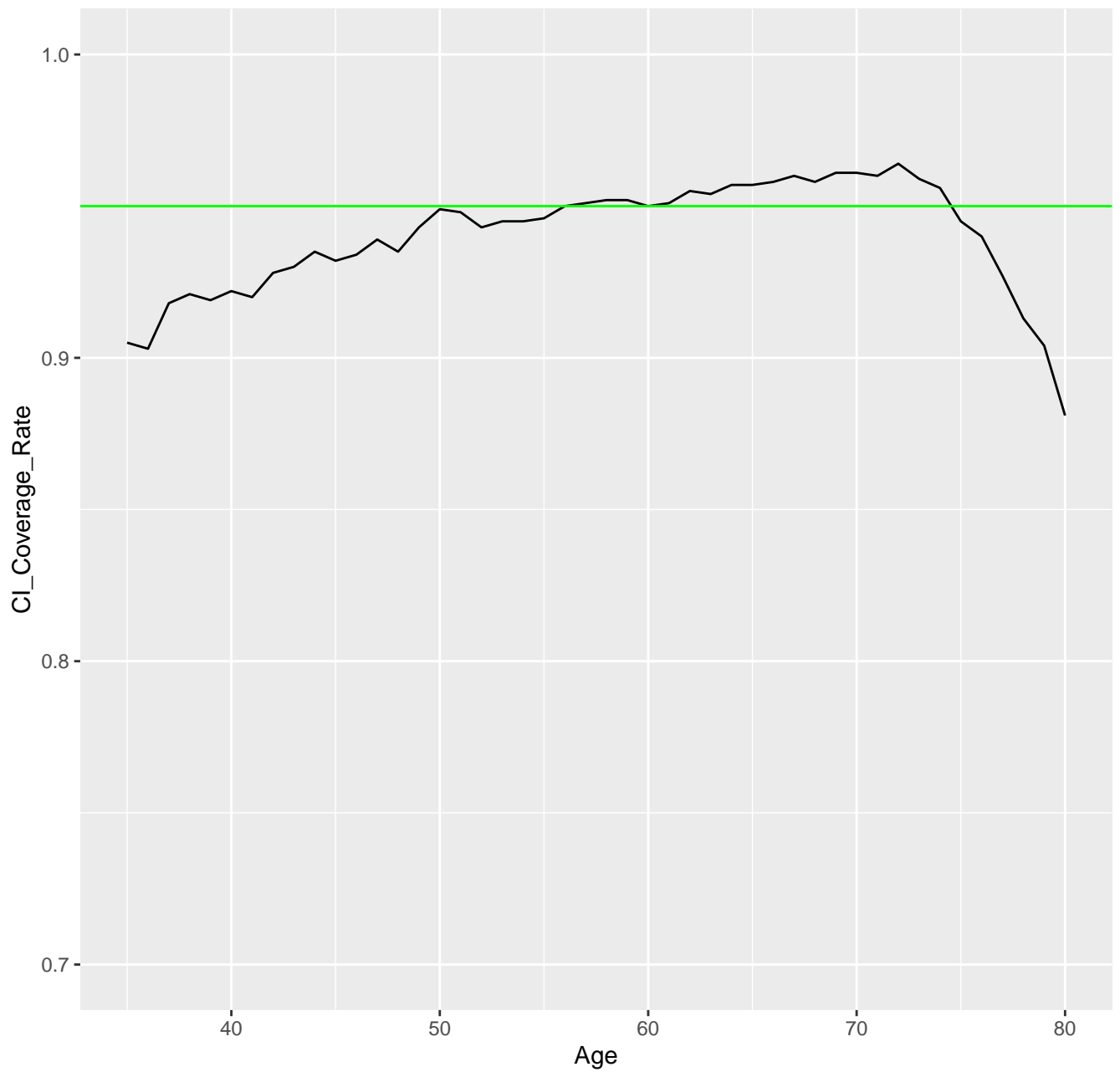




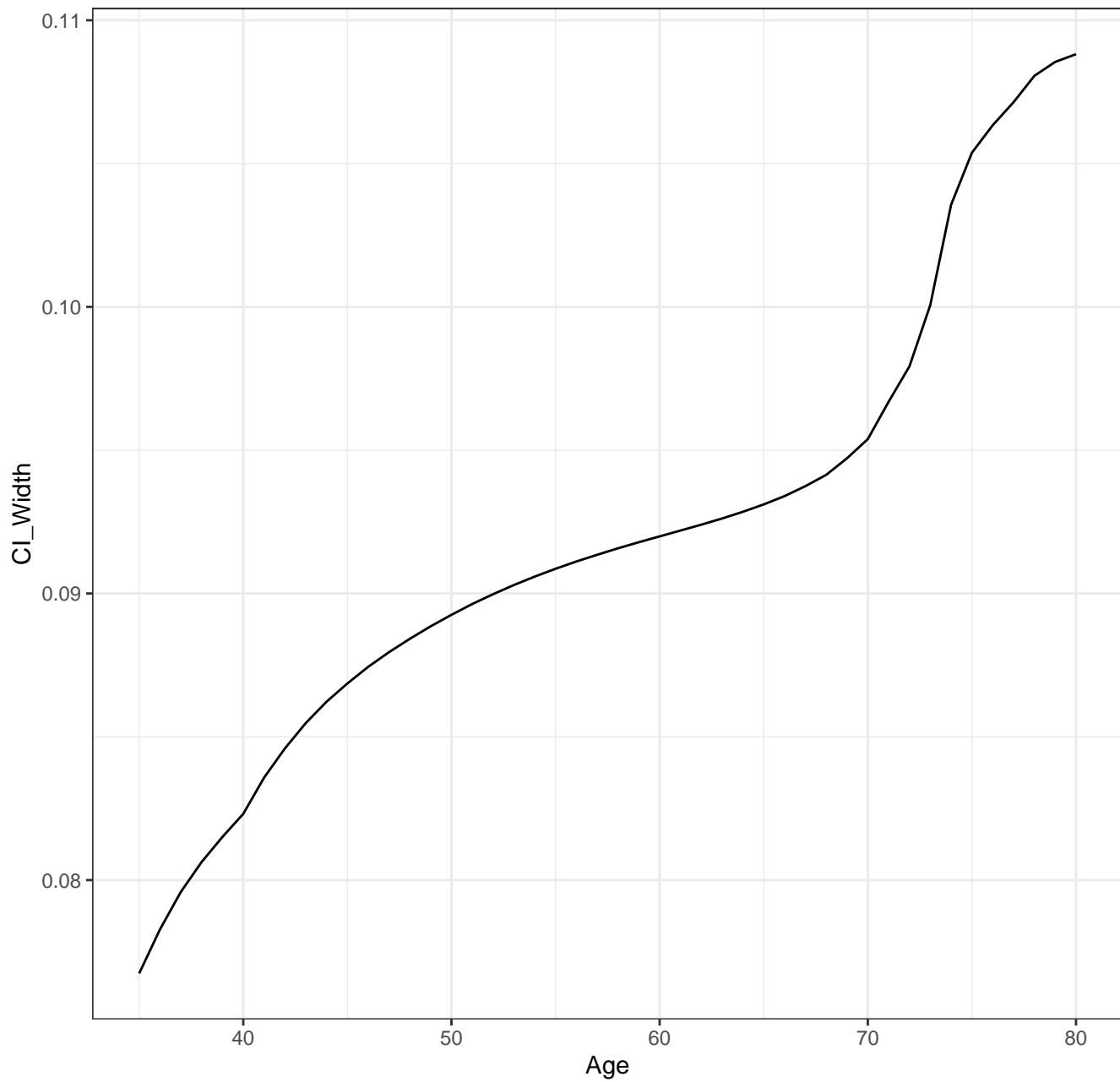
Scenario 3221, n=2500, New Estimator, Empirical vs. Estimated SD's



Scenario 3221, n=2500, CI Coverage Rate for New Method



Scenario 3221, n=2500, CI Width for New Estimator



## CONFIDENCE BAND COVERAGE RATES

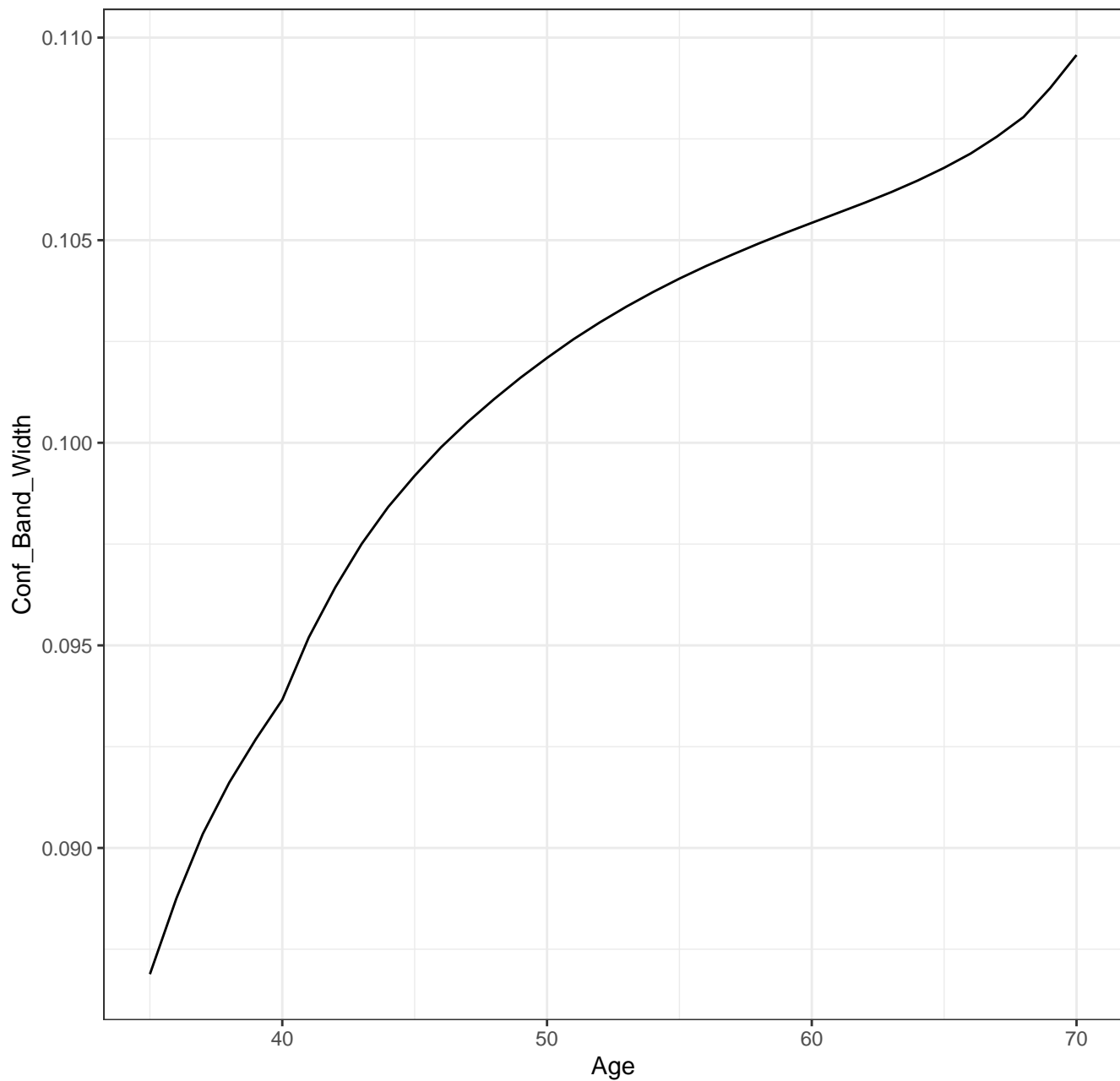
Scenario: 3221

AJ0: 0

AJ: 0.19

New: 0.91

Scenario 3221, n=2500, Confidence Band Width for New Method



## SETTINGS

Scenario: 3222

sample size = 2500

number of simulation replications = 1000

number of bootstrap replications = 250

transformation:  $0.5 \cdot \pi - \arcsin(\sqrt{1-u})$

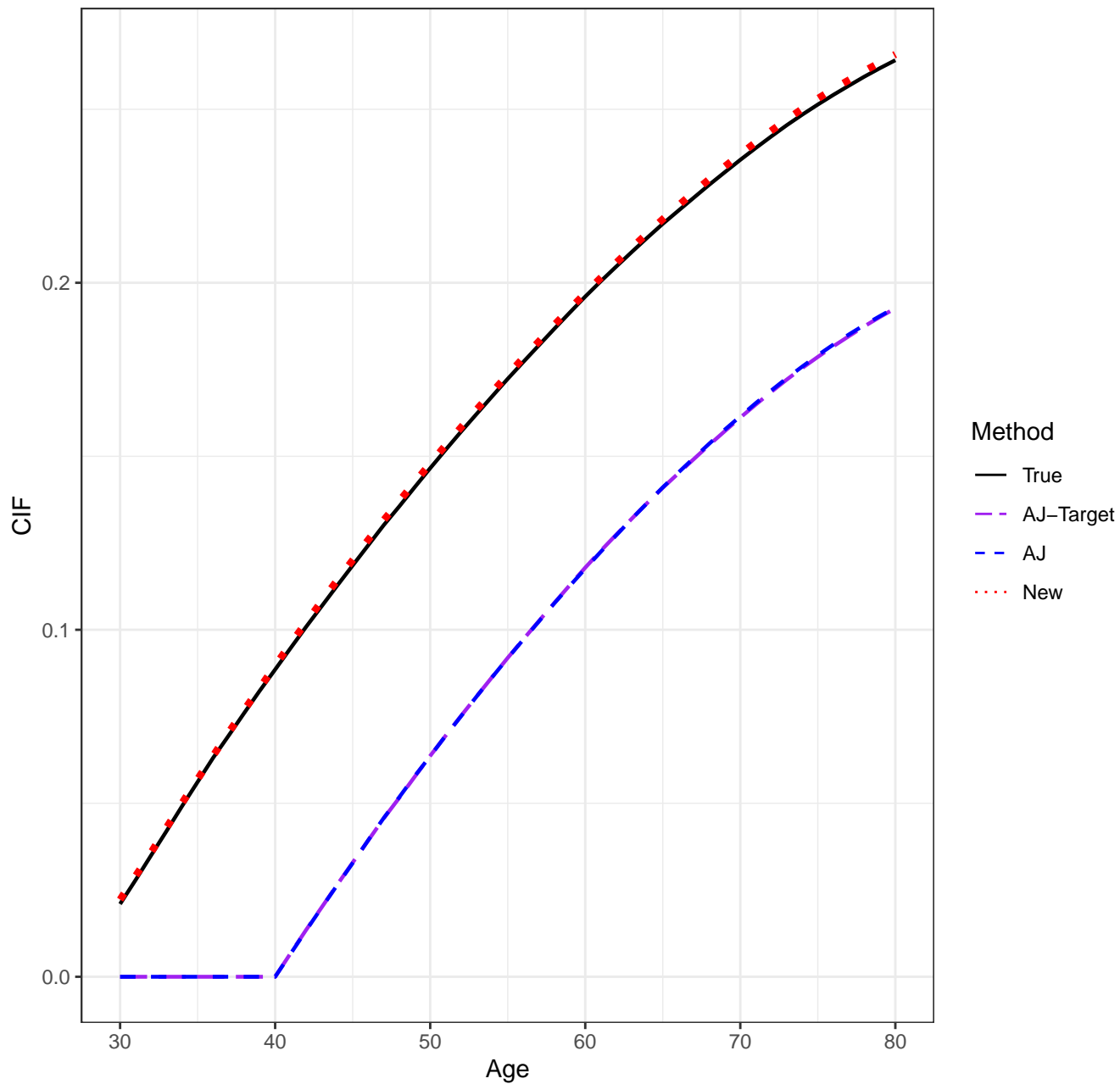
pointwise CI's done by: normal-theory

auxflg = FALSE

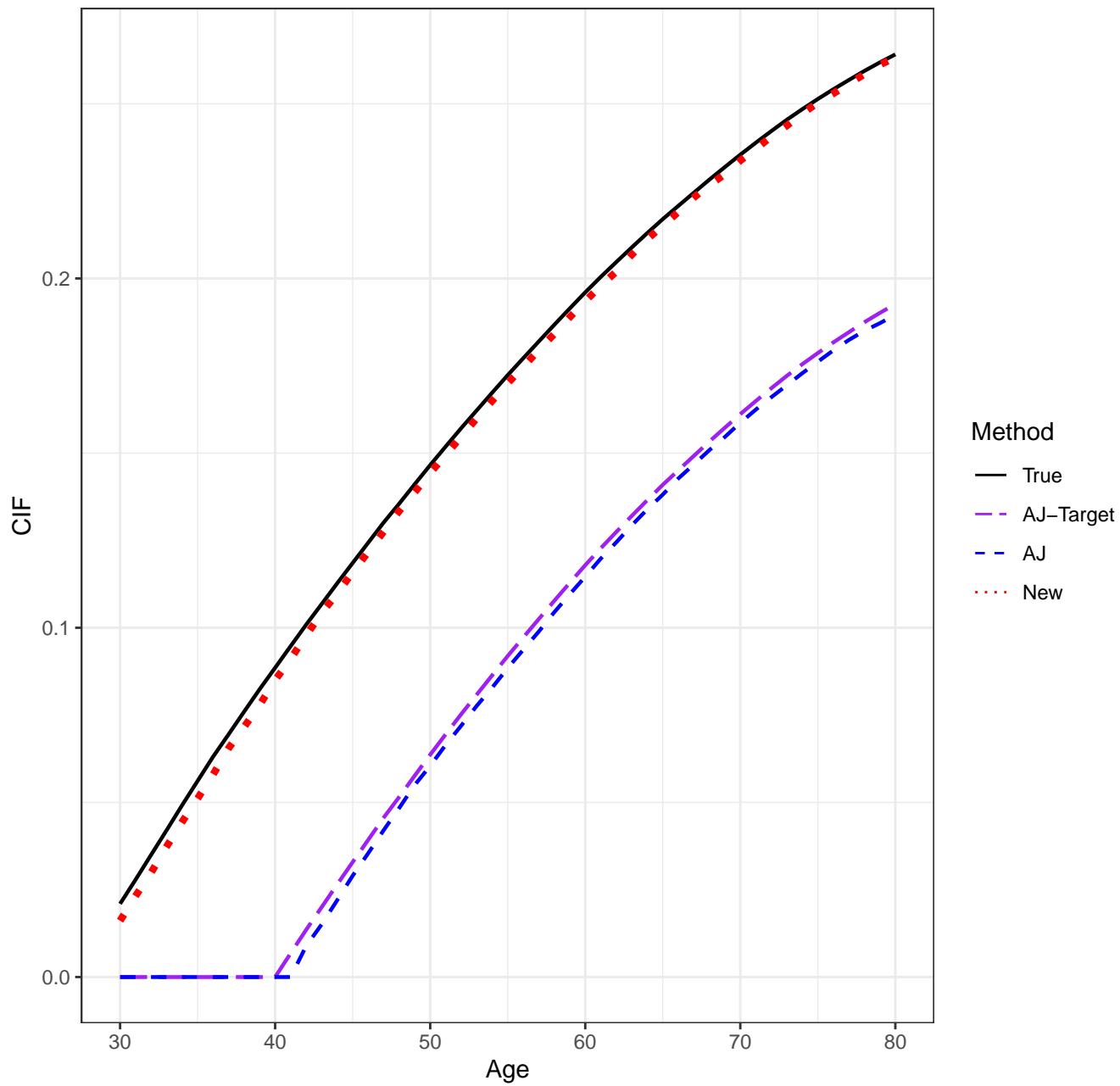
bootstrap weights: normal

Date/Time: 2024-01-14 23:04:47.685193

Scenario 3222, n=2500, Means

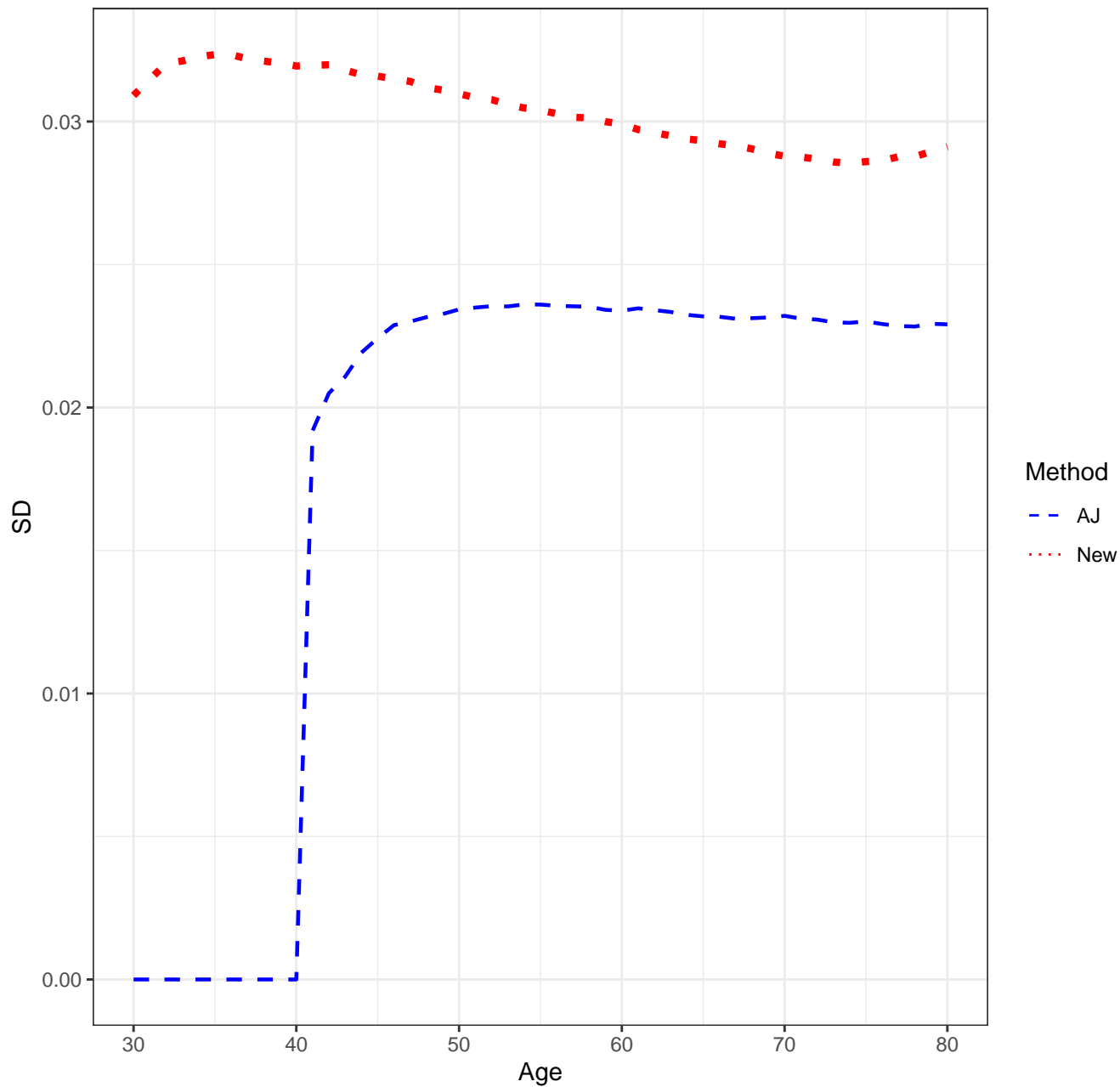


Scenario 3222, n=2500, Medians

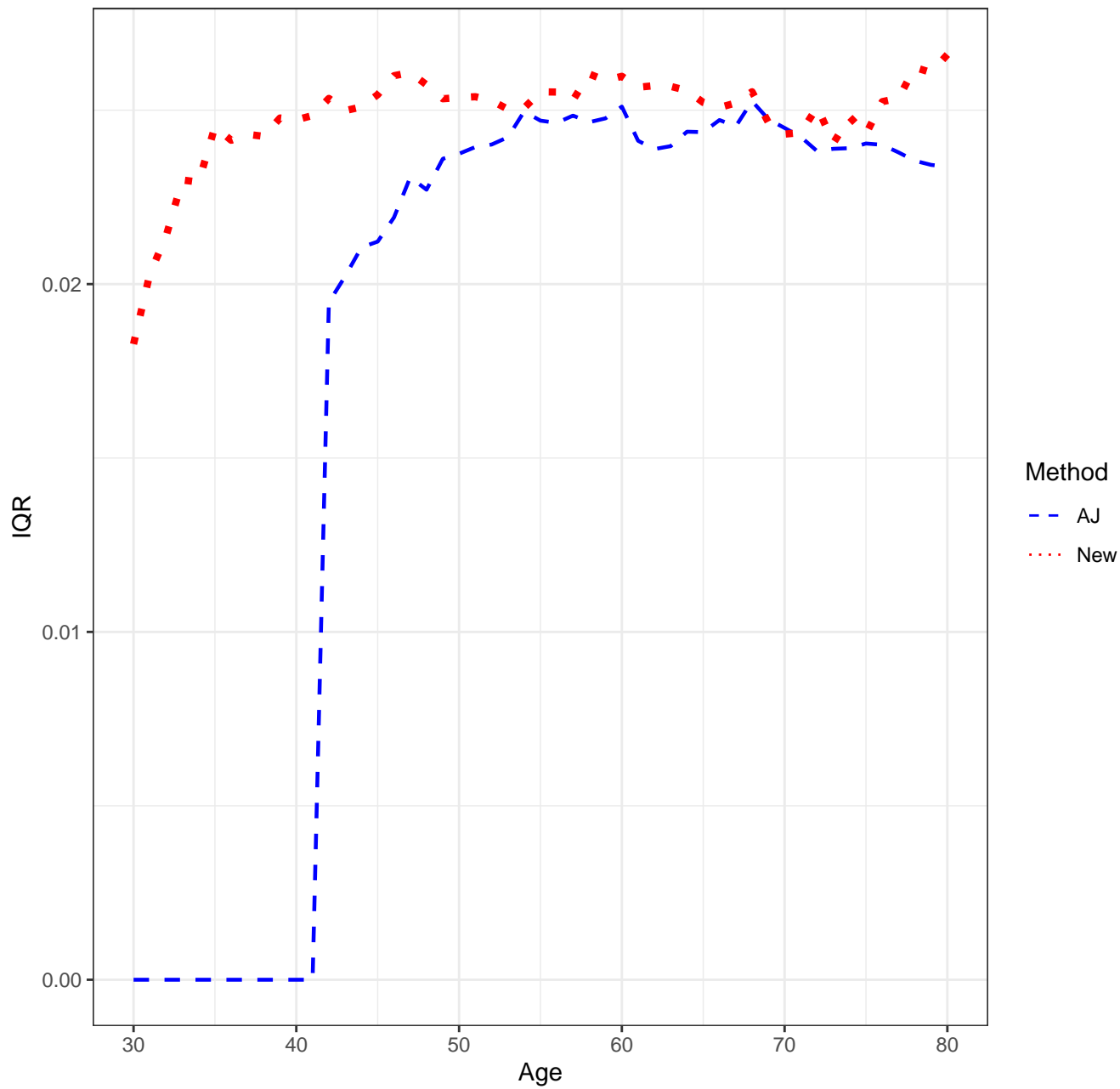




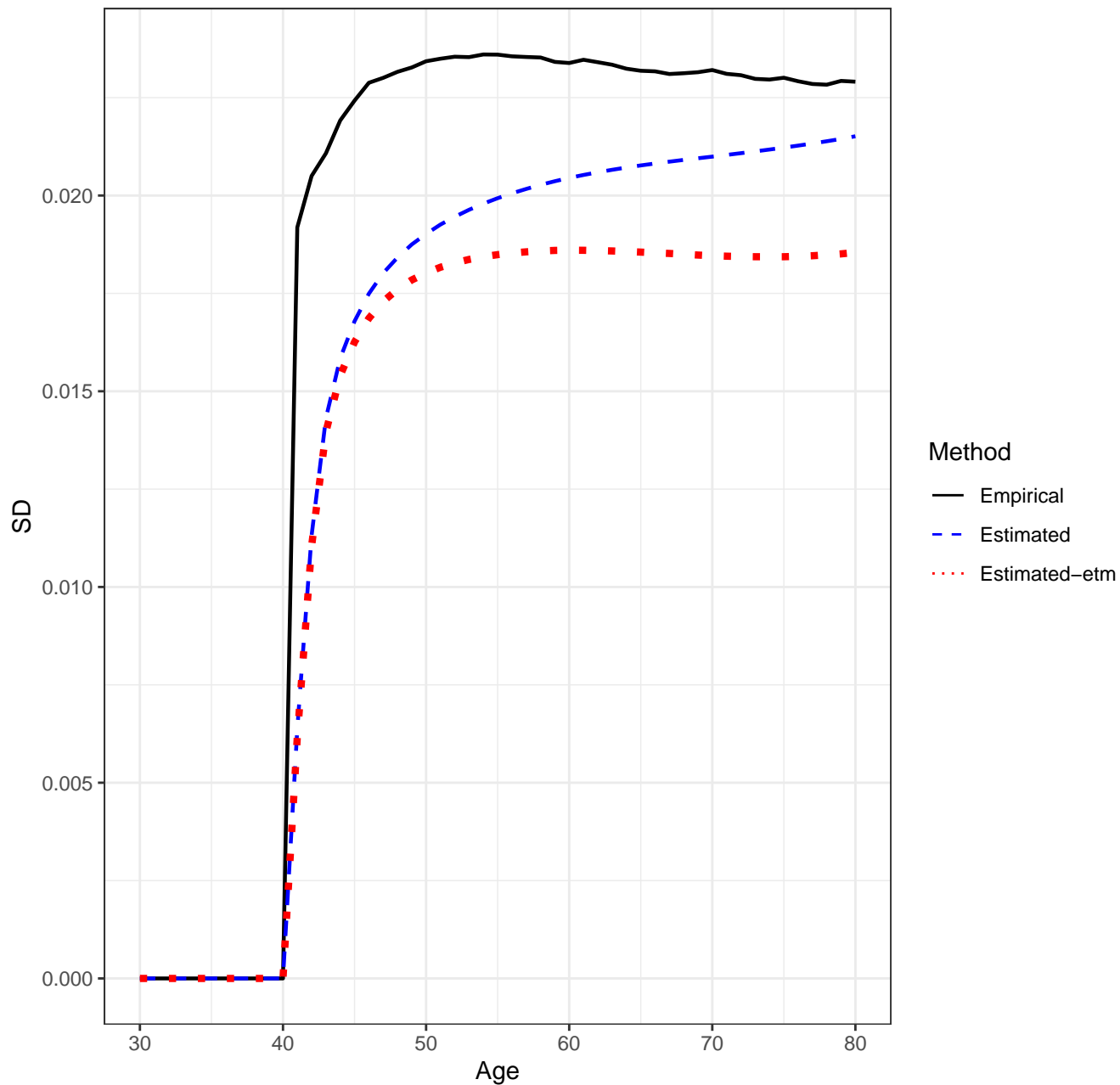
Scenario 3222, n=2500, SD'S



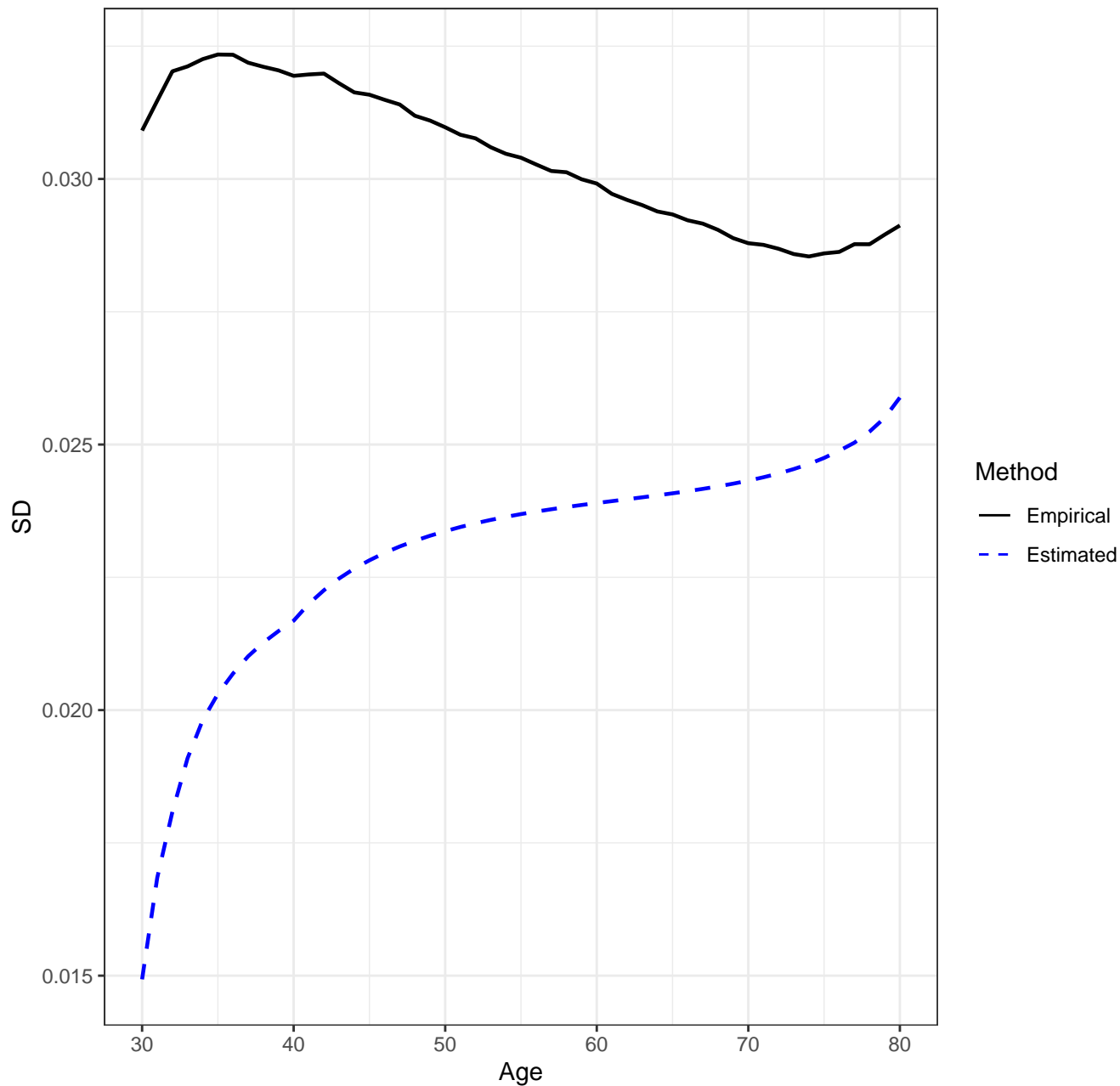
Scenario 3222, n=2500, IQR'S



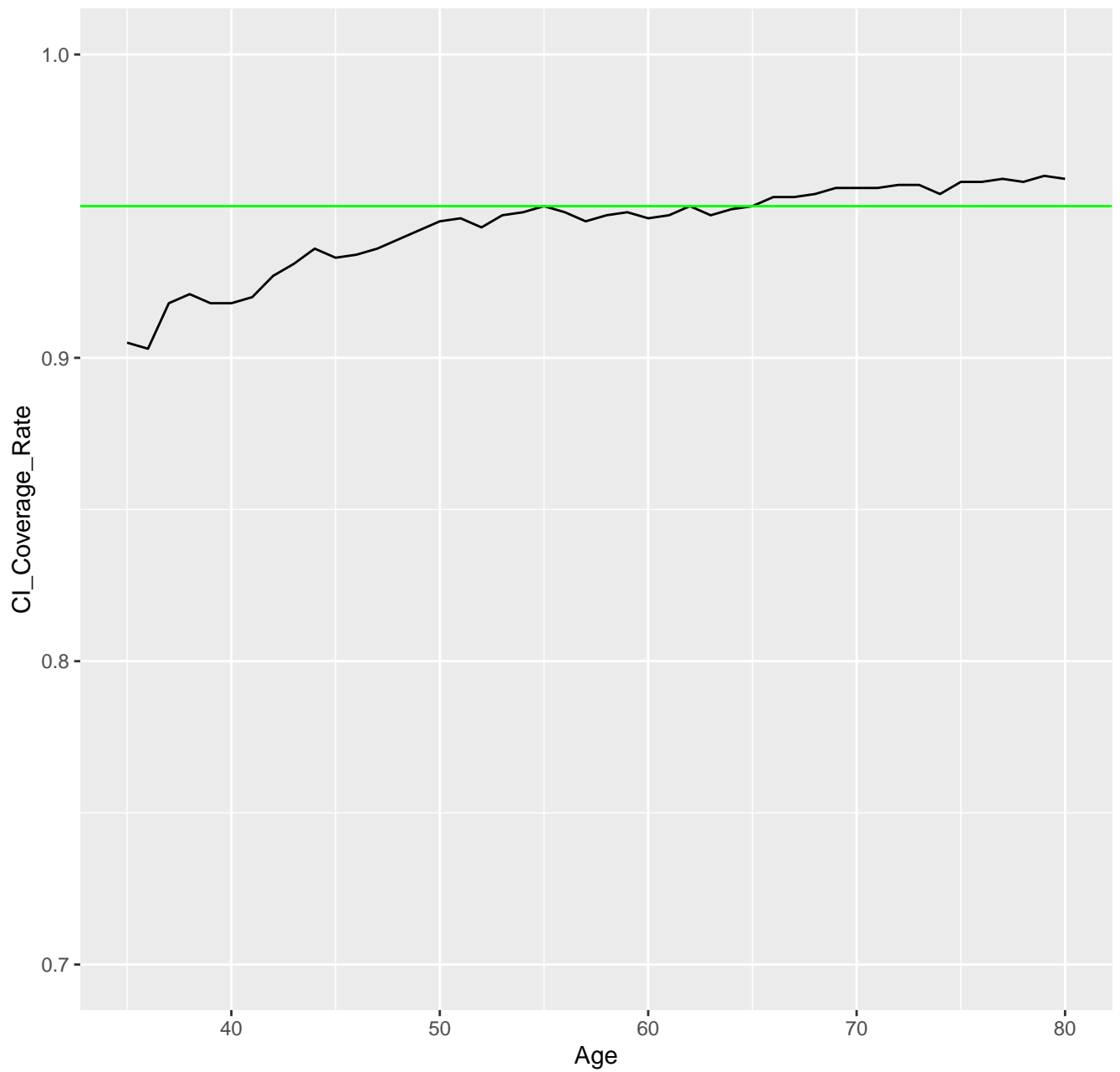
Scenario 3222, n=2500, AJ Estimator, Empirical vs. Estimated SD's



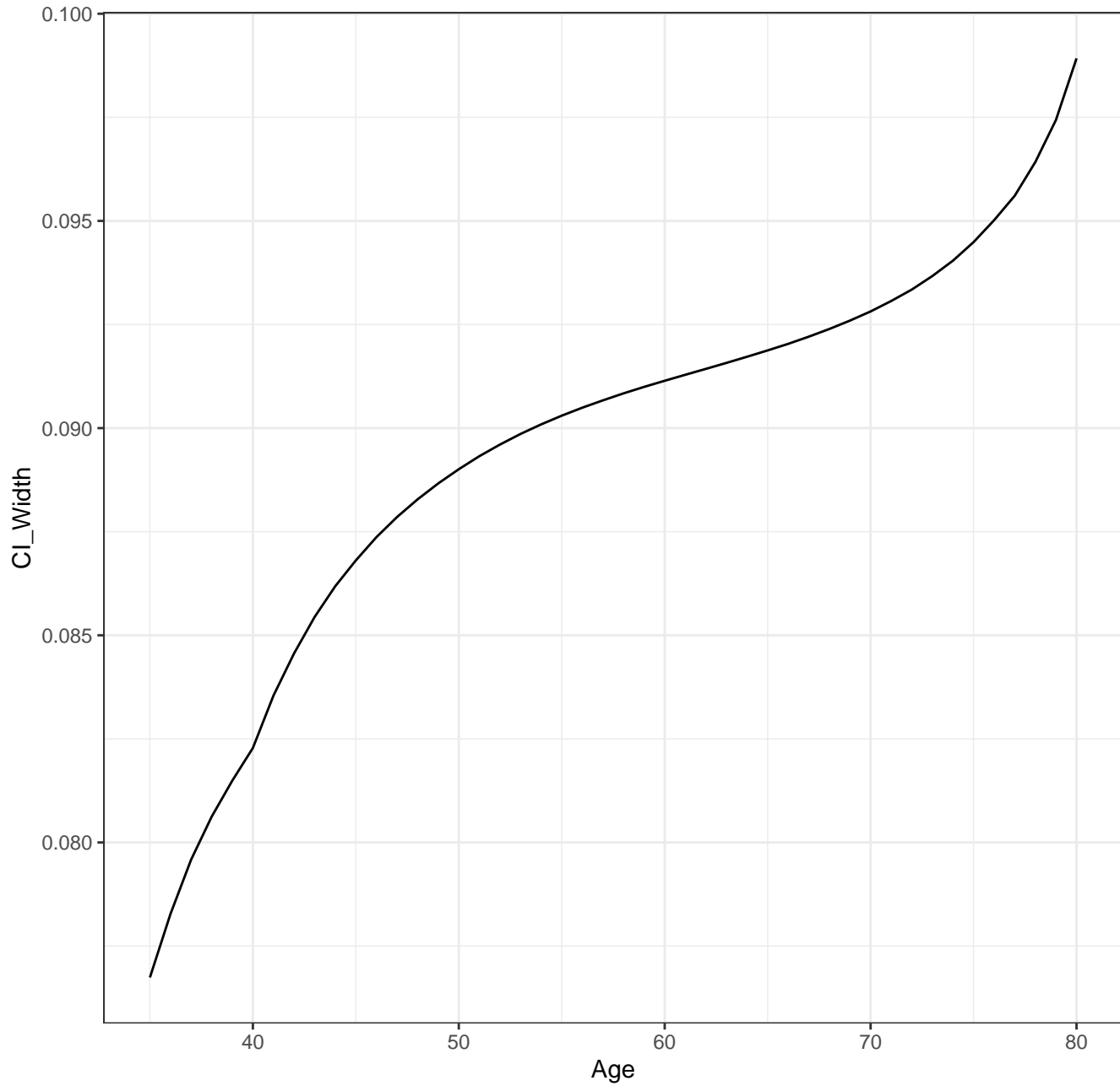
Scenario 3222, n=2500, New Estimator, Empirical vs. Estimated SD's



Scenario 3222, n=2500, CI Coverage Rate for New Method



Scenario 3222, n=2500, CI Width for New Estimator



## CONFIDENCE BAND COVERAGE RATES

Scenario: 3222

AJ0: 0

AJ: 0.19

New: 0.911

Scenario 3222, n=2500, Confidence Band Width for New Method

