

Supplementary Material

Improvement in Cardiovascular Risk Prediction with Electronic Health Records

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Short Title: Comparison of QRISKII, FRS, and ASCVD

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Supplementary Table 1 Comparison of the Framingham Risk Score and QRISKII in A) Women and B) Men using the HOUSES Index

| <u>A) Women</u> | | <u>Framingham Risk Score</u> | | | |
|-----------------|----------------------------|------------------------------|-----------------------|------------------------|-----------|
| | Risk Category ^a | Low Risk | Intermediate Low Risk | Intermediate High Risk | High Risk |
| QRISKII | Low risk | 1447 (53) | 98 (4) | 2 (< 1) | 0 (0) |
| | Intermediate low risk | 347 (13) | 181 (7) | 14 (1) | 1 (< 1) |
| | Intermediate high risk | 232 (8) | 181 (7) | 73 (3) | 3 (< 1) |
| | High risk | 33 (1) | 63 (2) | 50 (2) | 12 (< 1) |
| <u>B) Men</u> | | <u>Framingham Risk Score</u> | | | |
| | Risk Category ^a | Low Risk | Intermediate Low Risk | Intermediate High Risk | High Risk |
| QRISKII | Low risk | 255 (20) | 49 (4) | 1 (< 1) | 0 (0) |
| | Intermediate low risk | 115 (9) | 172 (14) | 12 (1) | 0 (0) |
| | Intermediate high risk | 61 (5) | 232 (18) | 107 (8) | 1 (< 1) |
| | High risk | 11 (1) | 74 (6) | 137 (11) | 35 (3) |

Values are n (%)

^aLow risk \leq 5%; Intermediate Low Risk 5% - \leq 10%; Intermediate High Risk 10% - \leq 20%; High Risk $>$ 20%

Supplementary Table 2 Comparison of the ASCVD and QRISKII in A) Women and

B) Men using the HOUSES Index^{a,b}

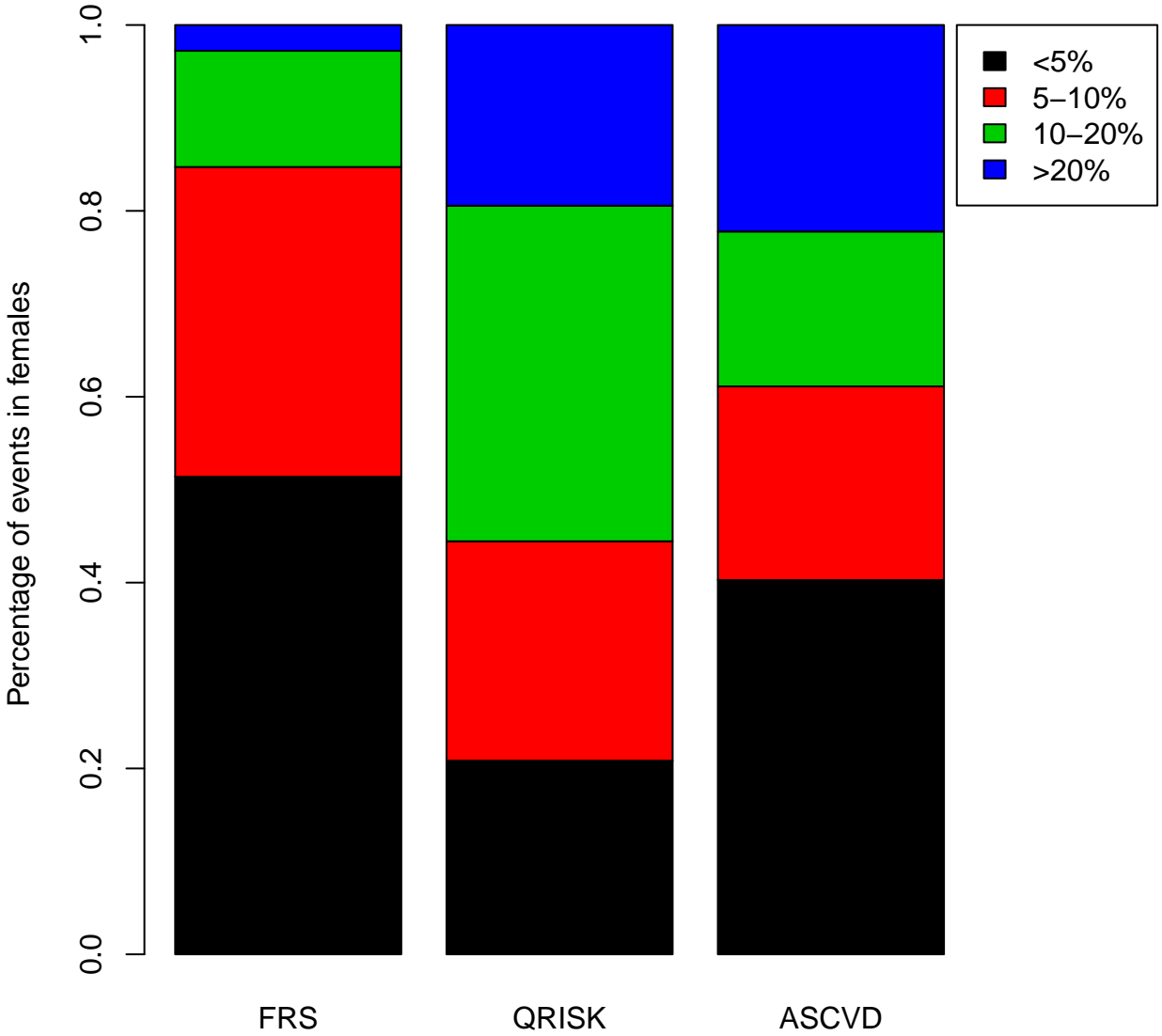
| <u>A) Women</u> | | <u>ASCVD</u> | | | |
|-----------------|----------------------------|--------------|-----------------------|------------------------|-----------|
| | Risk Category ^c | Low Risk | Intermediate Low Risk | Intermediate High Risk | High Risk |
| QRISKII | Low risk | 1505 (55) | 41 (2) | 1 (< 1) | 0 (0) |
| | Intermediate low risk | 262 (10) | 201 (7) | 76 (3) | 4 (< 1) |
| | Intermediate high risk | 34 (1) | 152 (6) | 194 (7) | 109 (4) |
| | High risk | 1 (< 1) | 8 (<1) | 54 (2) | 95 (3) |
| <u>B) Men</u> | | <u>ASCVD</u> | | | |
| | Risk Category ^c | Low Risk | Intermediate Low Risk | Intermediate High Risk | High Risk |
| QRISKII | Low risk | 284 (23) | 20 (2) | 1 (< 1) | 0 (0) |
| | Intermediate low risk | 84 (7) | 171 (14) | 43 (3) | 1 (< 1) |
| | Intermediate high risk | 5 (< 1) | 106 (8) | 158 (13) | 132 (10) |
| | High risk | 1 (< 1) | 7 (<1) | 43 (3) | 206 (16) |

^aASCVD atherosclerotic cardiovascular disease

^b Values are n (%)

^c Low risk ≤ 5%; Intermediate Low Risk 5% - ≤ 10%; Intermediate High Risk 10% - ≤ 20%; High Risk >20%

Supplementary Figure 1 HOUSES Females



Supplementary Figure 2 HOUSES Males

