

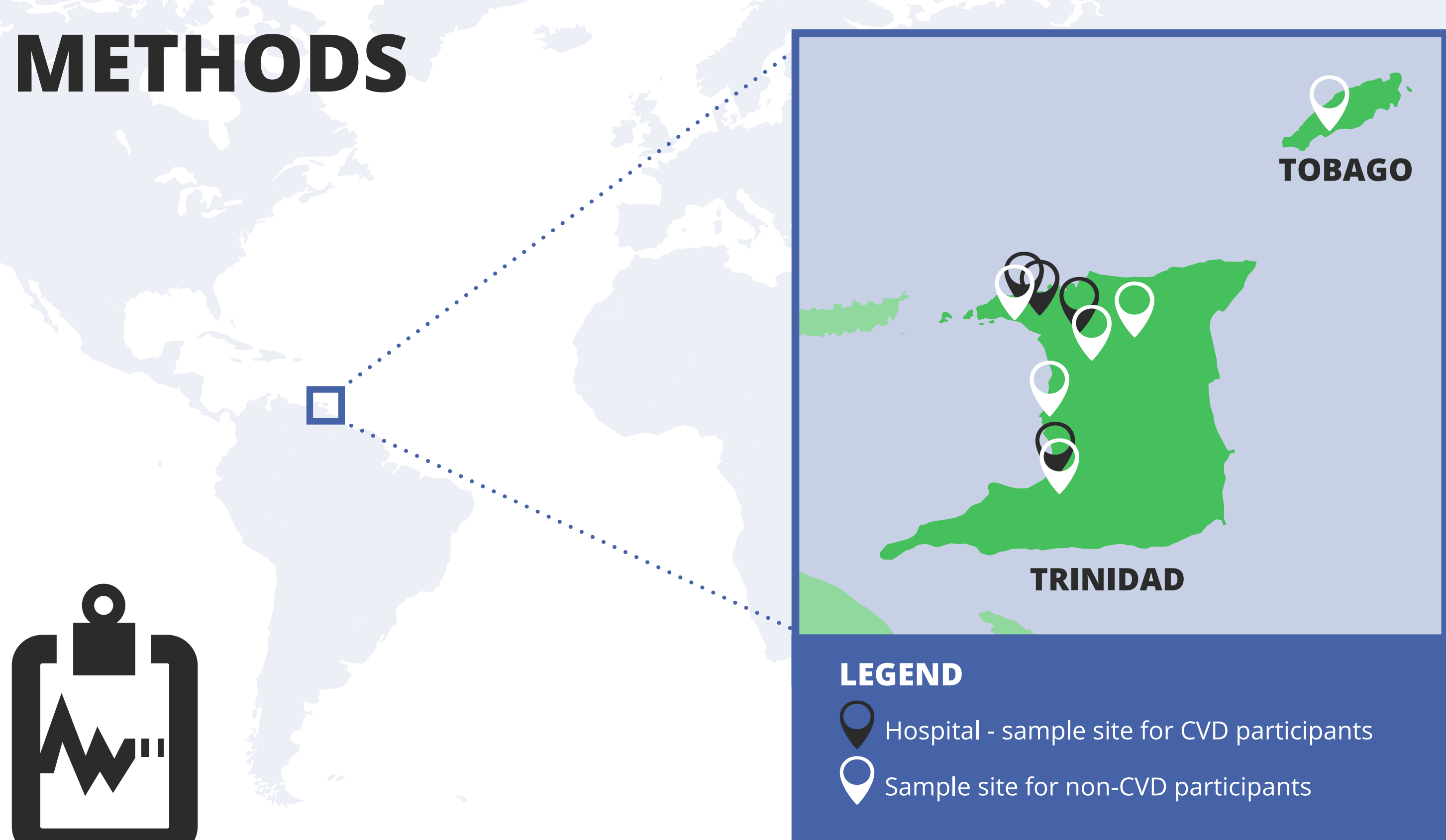
Evaluating Cardiovascular Disease (CVD) risk scores for participants with known CVD and non-CVD in a multiracial/ethnic Caribbean sample

BACKGROUND

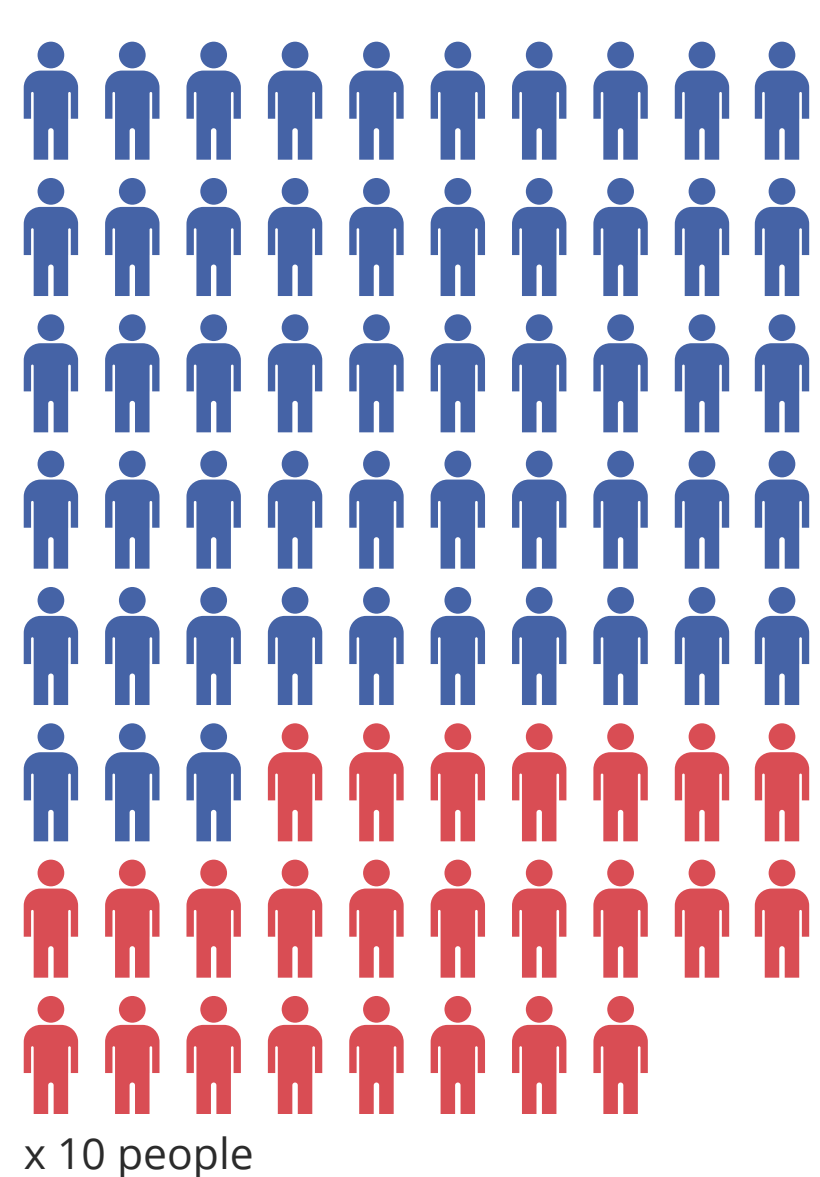
Cardiovascular Disease (CVD) risk prediction models have been useful in estimating whether individuals are at low, intermediate, or high risk of experiencing a CVD event within an established time frame (usually 10 years). However, there are concerns about using pre-existing CVD risk prediction methods, which are based on populations in the developed world (e.g. **ASSIGN**, **Framingham** and **QRISK@2**), to estimate risk for a multiracial/ethnic Caribbean population.

The aim of this study was to determine which pre-existing CVD risk method is best suited for predicting CVD in a multiracial/ethnic Caribbean population.

METHODS



A survey of



778 participants

526 persons with no prior CVD
Lifestyle and biometric data was collected



252 who reported prior CVD
Medical records were used to collect data on the first CVD

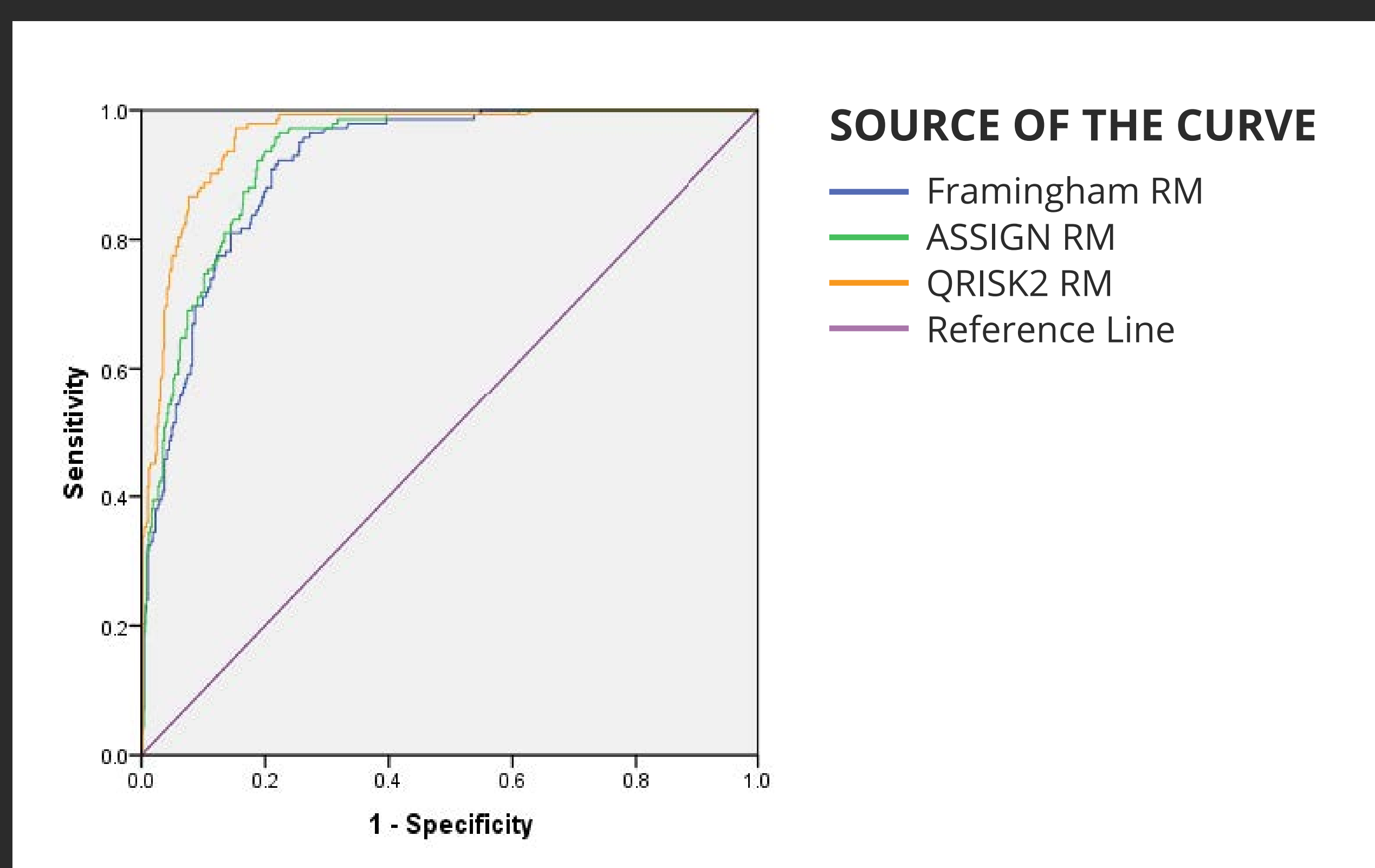


x 10 people



RESULTS

Positive predictabilities ranging from 78% (ASSIGN and Framingham) to 87% (QRISK@2) suggest that all three models had a high proportion of false-positive predictions to true predictions since none of the models actually identified as much as 62% of cases (CVD participants). Additionally, the non-differentiating ranges for the ASSIGN, Framingham, and QRISK@2 models were each 2 or greater times more likely to include CVD rather than non-CVD participants.



CONCLUSION

The ASSIGN, Framingham and QRISK@2 models should be utilized with caution on a Trinidad and Tobago population of intermediate and high risk since they underestimated the risk score for individuals with CVD up to 2.5 times more often than they overestimated the risk for healthy persons.