Background The JBS3 risk calculator offers a novel approach to cardiovascular risk communication by estimating a “heart age”. A modified version of this tool was introduced online to broaden access to personalized risk assessment to the general population and encourage participation in the NHS Health Check programme. This study reports on its early uptake and the profiles of those who used it.

Methods The JBS3 tool estimates a “heart age”, through multivariable modelling which is referenced to someone of the same age, gender and ethnicity with optimal risk factors. Between February and July 2015, user data collected from the NHS Choices website (https://www.nhs.uk/tools/pages/heartage.aspx), where the tool was hosted, were analyzed anonymously using standard analytic packages.

Results The online tool was accessed 1.4 million times in the first 5 months, with increased activity following limited media coverage. Of the 575,782 users completing the data journey with a valid “heart age” result, their demographic and risk factor profiles broadly resembled the population of England, although both younger users and males (60%) were over represented. Almost 50% and 79% did not know or enter their blood pressure or cholesterol values, respectively (Figure 1). Estimated “heart age” was higher than chronological age for 79% of all users, but also for 69% of younger users under 40 years who are at low 10-year risk and not invited for NHS Health Checks (Figure 2).

Conclusions/Interpretation These data suggest a high level of public interest in self-assessment of cardiovascular risk when an easily understood metric is used, although a large number...
of users lack awareness of their own risk factors. The Heart Age tool was accessed by a group not easily reached by conventional approaches yet is at high cardiovascular risk and would benefit most from early and sustained risk reduction. These are both important opportunities for interventions to educate and empower the public to manage better their cardiovascular risk and promote population level prevention.