

# Use charities to educate people about JBS3 lessons for CVD

By Dr Kosta Manis on the 4 August 2014

A new 'risk calculator' determining an individual's vulnerability to cardiovascular disease (CVD) over their lifetime offers a practical and powerful tool in the fight against the UK's biggest killer, writes Dr Kosta Manis, a member of Bexley CCG in south-east London



Dr Manis: 'It is time general practice acknowledges the potential solutions the third sector offers us.'

-The [JBS3 risk calculator](#) builds on the success of its predecessors which first introduced coronary heart disease risk prediction charts based on traditional risk factors in 1998.

This was followed by a 10-year risk assessment calculator in 2005 which included stroke and peripheral arterial disease, and advocated statin treatment if the risk of CVD was calculated at more than 20% over the period.

An obvious flaw of this model was that it was age specific and excluded the young, especially women. JBS3 has the additional benefit of being easily accessible online to younger adults who, while possibly not having a short-term risk of CVD, could be on the route to a stroke or heart attack due to unhealthy lifestyle choices.

**For communicating risk to patient, the GP can employ the calculator's biological heart age**

Evidence shows that early lifestyle interventions and, where necessary, drug treatment can decrease or slow down CVD and thereby the risk of future complications like heart attack or stroke.

JBS3 should be used in addition to the estimate of the 10-year risk and not as a primary guide to decide upon drug-based intervention although there will be cases where that is appropriate.

The calculator assesses established risk factors for cardiovascular disease such as BP, cholesterol levels, smoking status, family history, age and gender to calculate not only the risk of CVD within the next 10 years, but over a lifetime.

For communicating risk to patient, the GP can employ:

- the calculator's biological heart age in contrast to chronological age;
- the healthy years – a thermometer image showing how many years an individual can be expected to survive without having a heart attack or stroke;

and

- an outlook screen showing a graph with the chance of survival without a CVD event.

The architects of the calculator offer the example of a 35-year-old female smoker, with a systolic BP of 160 mm Hg, a high total cholesterol of 7mmol/l and a family history of premature CVD.

The calculator estimates that the woman would have a biological heart age of 47, 12 years older than her chronological age. She could expect to survive to the age of 71 without having a heart attack/stroke - her 10-year risk would be less than 2%.

The calculator estimates that if this woman stopped smoking, cut her total cholesterol to 4mmol/l and her systolic BP to 130 mm Hg, her heart age would fall to 30. She could expect to live to the age of 85 before having a heart attack/stroke and more than halve her 10-year risk to less than 0.25%.

Another increasingly relevant example of a high lifetime risk versus low 10- year risk is a young person with familial hypercholesterolaemia (FH) who would have slipped through the net of previous risk calculators.

FH is an anomaly in the DH's health prevention strategy and England remains the only country in the UK without a specific screening programme and beset by poor access to genetic diagnostics. There is still a long way to go with FH across the UK, with only some 15-20% cases diagnosed to date.

### **Potential addition of millions of patients has huge implications for beleaguered general practice**

The concept of lifetime risk is a welcome novel way of communicating risk to individuals in a GP surgery and it is expected that the JBS3 calculator will become an important component of the NHS Health Check Programme.

Nonetheless, the potential addition of millions of new patients has huge implications for a beleaguered general practice. GPs are already struggling to cope with the demands of a population growing in size and longevity and increasingly beset by long-term conditions.

So, how do we make the most of this opportunity when on the other side of the fence we are seeing the number of GPs and nurses entering the profession fall, while thousands of GPs, with morale at an all-time low, are on the brink of early retirement, or emigrating?

This isn't a burden that primary care needs to shoulder on its own and we have to make better use of charities and voluntary groups in educating and informing people about positively applying the lessons the JBS3 has to teach us. GPs need support to continue functioning effectively and, putting aside the parlous state of NHS's finances and NHS England's apparent disinterest in primary care, the third sector is a credible and practical partner.

Charities and voluntary groups play an important and often understated role in healthcare. The NHS has been vacantly staring this gift horse in the mouth for too long through a combination of unawareness and, in some cases, professional disdain.

These groups have enviable connections with communities that are often in the most need yet have a poor understanding of personal health and the services and support available to them.

The unemployed, those on low income and many migrant families are more vulnerable to poor lifestyle choices including alcohol, smoking, lack of exercise and poor diet which inevitably usher in a host of health-related problems, including CVD.

In contrast, their wealthier counterparts have a greater sense of entitlement and understanding of how and where to get treated when they are ill. The gap between the haves and have-nots is widening at an alarming rate and the third sector has an important role to play in helping tackle these health inequalities through sharing their data with CCGs.

### **So, how would the relationship between GPs and the third sector work in relation to the introduction of the JBS3 risk calculator?**

The third sector provides a perfect conduit to educate and inform people about health-related issues. The [British Heart Foundation](#) offers on its website a wealth of information on increasing awareness of risk factors for coronary heart disease and how to reduce them.

[Heart UK](#) has just published a new booklet, [Inherited Heart Conditions – Familial Hypercholesterolaemia](#), an essential read for FH sufferers. Six in ten adults have high cholesterol levels, while one-in-500 is born with FH and the charity's vision is for the majority of adults in the UK to know and understand about cholesterol levels and take the necessary actions to reduce them if too high.

These third sector organisations can help primary care since they develop and publish a number of materials for use by patients and healthcare professionals, designed to help improve patient literacy and understanding of cardiovascular risk.

The RCGP is already engaging healthcare charities in developing new resources for GPs, including a new online training programme in lipid management in conjunction with Heart UK, due for publication later this year. In turn, GPs can help those charities fulfil their vision by providing patients with the best information on cholesterol and CVD risk in a manner that is motivating and easily understood by patients. It is time general practice acknowledges the potential solutions the third sector offers us if we are bold and, in some cases, humble enough to engage with them.