

# Communicating cardiovascular risk

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## **GP lead Dr Kosta Manis offers a three-stage guide to strategies you can use to communicate cardiovascular risk effectively to patients**

Jane is a 41-year-old NHS administrator, a moderate smoker, who comes to the surgery for a health check after hearing at work about their potential value, especially for people who are overweight. She has already seen the nurse, who took her blood pressure (150/90mmHg), did some baseline biochemistry, including cholesterol (total cholesterol to HDL cholesterol ratio: 5.45), and suggested an appointment with you to discuss the results.

Jane's QRISK2 shows a 10-year risk of 5.8%, against 0.9% of a typical person with the same age, sex and ethnicity. In other words, in a crowd of 100 people with the same risk factors as her, six are likely to have a heart attack or a stroke within the next 10 years. Jane appreciates your use of number needed to treat (NNT) to discuss treatment. You also explain the situation in terms of her relative risk of 6.4% (her risk divided by a typical person's risk) and her heart age of 59, 18 years older than her chronological age.

She is concerned about the result and asks for more explanation, especially whether it is worth going to the trouble of changing her routine and social life for an abstract notion of risk that might happen in the future.

To clarify, you enter into the calculator how alterations to her lifestyle would reduce her risk, and what the chance would be of an untoward CVD event if Jane gave up smoking, lost some weight and if her blood pressure and total cholesterol to HDL cholesterol ratio were lower.

Jane finds this hypothetical scenario, which brings her heart age closer to her chronological age of 41, convincing.

The successful scenario detailed in the box (see below) is not necessarily the norm. There are, however, some empirical rules you can follow when inviting patients into complex decision-making on screening, prevention and disease management, and particularly when medication is necessary. These include:

- A rough assessment of the patient's numeracy skills and reading level at the start of the consultation.

- Presenting the patient with clear and reliable evidence-based statistics.
- Use of plain language and avoidance of medical terminology and statistical jargon.
- Presenting the pros and cons in a positive manner to avoid lack of conviction on the GP's part.
- Dealing with the patient's scepticism by offering strong recommendations to inspire confidence and dispel fear.
- Providing a summary of the main points, preferably in writing. This is extremely helpful if a long explanation has been necessary to cover all the risks and benefits.

## 1. Presenting risks and benefits

When benefits versus risks are presented to the patient, you have to decide whether your main agenda is to change patient behaviour or start medication. Giving benefits first and risks last makes the patient more anxious and more likely to reject medication, but more likely to view behaviour changes favourably.

Giving risks first and getting the 'bad news' out of the way early leaves the patient more likely to accept the notion that benefits from medication outweigh side-effects – though possibly less likely to take behaviour change seriously. Ways to present risk include:

- Absolute and relative risk reduction

Absolute risk is the numerical probability of an event occurring within a specified period, expressed as a percentage. For example, if your patient's absolute risk is 8%, there is an 8% probability that they will experience a cardiovascular event within 10 years.

A recent study from Denmark introduced two slight variations, the absolute risk reduction and prolongation of life, to assess the willingness of patients to accept statins as a preventive therapy. It found that explaining the data using absolute risk reduction was more effective in persuading patients to take statins prophylactically.<sup>1</sup>

Relative risk is used to compare the risk in two groups of people, one devoid of risk factors against a group with one or more risk factors, and can be expressed as the ratio of the incidence in the at-risk population divided by the incidence in the risk-free population.

So, when you feel that the patient needs a statin, you could use relative risk and tell them that their risk of a heart attack would be reduced by 50% if they took the drug. Or you could use the absolute risk and tell the patient that their 10-year risk of a heart attack could be reduced from 16% to 8%.

- Number needed to treat (NNT)

Alternatively, you could use an NNT format, and tell the patient the number of patients who would need to take a statin to prevent one heart attack.

The NNT is an epidemiological measure used in assessing the effectiveness of a healthcare intervention, typically treatment with a statin. The NNT format is more effectively delivered in combination with pictographs.

Pictographs are more quickly and better understood than other graphical formats, as they visually represent the risk as a frequency rather than a probability, while simultaneously conveying both those affected and those not affected. Most studies conclude that pictographs

are the most patient-friendly, as people prefer to receive information presented in frequency formats over receiving data using percentages. Bar graphs are less effective than pie charts or pictographs.

- Heart age

The QRISK heart age is the age at which a typical person of that patient's sex and ethnicity has their 10-year QRISK score. Ideally, this should be as close to the person's chronological age as possible. An 'older' heart age indicates the 'ageing' effect of CV risk factors, and the patient may find it easier to relate to if their risk is explained with a phrase such as 'with your risk factors, in effect you have the heart of a 65-year-old'.

- Prolongation of life

Prolongation of life leads the patient to believe that, if they do as they are told or if they take their tablets, they will live longer than their natural life. This is obviously not true, and it is better to say that if they adopt the wrong lifestyle, or don't take medication for their illness, their lifespan will be shortened.

Regaining life expectancy by changing lifestyle and taking medication is the best you can promise your patient, not that you will add years to their natural life span.

When it comes to initiating medication, GPs seek counsel from cardiologists. The Heart Outcomes Prevention Evaluation (HOPE) showed that ramipril reduced mortality in patients with atheroma or diabetes, but did not 'prolong life'.

It is difficult to talk people into taking drugs, often for life, because they feel fine and do not see an immediate and direct effect on their life. Survival benefits are difficult to measure and even more difficult to explain.

To answer your patient's standard question: 'How much longer will I live if I change my lifestyle and take my pills?' you employ the absolute risk reduction to measure the magnitude of the survival benefit tied to a particular time point.

## 2. Strategies to use

Although most CVD prevention guidelines encourage assessment of absolute CVD risk – the probability of a CVD event within a fixed time period – a considerable number of GPs do not use absolute CVD risk consistently. To overcome such reluctance, Australian GPs used absolute CVD risk in three different communication strategies: 'positive', 'scare tactic', and 'indirect'.<sup>2</sup>

A 'positive' strategy, which aimed to reassure and motivate, was used for patients with low risk, a determination to change lifestyle and some concern about CVD risk.

A 'scare tactic' strategy was used for patients with high risk, a lack of motivation, and a dismissive attitude.

An 'indirect' strategy, where CVD risk was not the main focus, was used for patients with low risk, but some lifestyle risk factors, high anxiety, high resistance to change, or difficulty understanding probabilities.

Their conclusion was that GPs tailored their communication approach based on their perception of each individual patient's risk, motivation and anxiety, resulting in the three distinct CVD risk communication strategies. They recommended that GPs be provided with

different ways to explain absolute risk to their patients.

A Swiss study further confirmed GPs' individual approaches to sharing information with their patients by demonstrating a gap between guideline recommendations and clinical reality in communicating CVD risk. It also found that gender is significantly associated with the choice of exchanging information, with a tendency for female GPs and female patients to communicate almost exclusively in a verbal format.<sup>3</sup>

### **3. Using other professionals**

The biggest barrier to liaising meaningfully with patients is the limited time available to GPs. GPs need help if they are to be seriously involved in preventive medicine.

Nurses can have a pivotal role in dealing with CVD, and in many practices, health checks are carried out by nurses. Nurses can lead on prevention and long-term conditions, can keep up to speed with guidelines and speak in terms that patients can understand. They are ideally placed to influence patient behaviour.

Another useful recourse is the community pharmacist, who plays an increasing part in supporting people to self-care and improve their lifestyle by promoting health and wellbeing, and providing access to smoking cessation, weight reduction and alcohol-support services.

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#### References

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