EDITOR'S CHOICE

Randomised controlled trial

A 3-year lifestyle intervention for adults at moderate to high risk of cardiovascular disease is cost effective when added to standard care and improves physical health-related quality of life

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Context

Life style including dietary habits and physical activity is an important determinate for health of individuals and populations. Healthcare systems concerned about improving health should thus consider measures to change the present situation. But resources are scarce and such measures will compete with other potential activities for prevention and treatments that also improve health. Cost-utility analysis is a method that can be used to compare different interventions in terms of costs and outcome. This method, usually included in a comprehensive Health Technology Assessment (HTA), is standard in many countries to inform decisions to allocate resources for drugs and other medical technologies. Promoters of patented and chargeable technologies have incentives and resources to supply such evidence.

The paper by Eriksson and colleagues is admirable in the respect that it makes the argument for increased resources for prevention in primary care through life style changes, using the methods of outcomes research and economic evaluation. But will their study convince the decision makers?

Methods

The impact on quality of life (QOL) and costs is studied in a randomised study, where a life style intervention program is added to standard care. QOL is measured with two standard instruments that are validated and widely used, and a social perspective for costs is attempted; cost effectiveness is calculated as cost per quality-adjusted life-year (QALY) gained. The study, thus, has both a relevant comparator and a relevant outcome/effectiveness measure. This indicates high internal and external validity of the results. However, the generalisation from the experiment is hampered by the small number (151) randomised individuals followed up during 3 years in a small northern Swedish community. In the end, only 58 and 62 subjects in the intervention and control group, respectively, have follow-up data for the whole period.

Findings

QOL was improved with both instruments, but significant only for EQ-VAS. The incremental cost for the program was $337 per patient, of which the participants paid $140. Cost savings of $384 was observed, and the main source for this was fewer GP visits at the healthcare centre. If the cost per QALY is calculated using direct intervention costs, the cost per QALY is between $1700 and $4800. If cost savings are included, the intervention is cost saving.

Commentary

There is no doubt that if we accept the findings the intervention is highly cost-effective. But will this mean that we now will see resources in primary care being shifted from other activities and interventions over to programs for life style interventions. Why do I not believe that this will happen?

One problem is that there is no one who will do the necessary investment to market this technology. This would involve providing information about how such a program can be set up and executed in environments where the health professionals are not as enthusiastic as those behind the Swedish experiment. That would involve costs which are not included in the calculated program costs. Another cost item that is excluded is the participants' time costs. It may very well be that the participants in this program enjoy participating in the program as much as alternative uses of their time. But extending the program to wider groups may involve cost of marketing and perhaps also economic incentives. It may well be that this is motivated from a social cost-effectiveness perspective, since there may be greater benefits from the intervention in the long run. You may argue that the estimated QALY gains during the program do not capture long-term health effects, or other indirect benefits from improved health, for example, less sickness absence.

A healthcare payer investing in such a program may also like to have reassurances that the potential benefits are materialised in practice. It is thus necessary to incorporate costs for continuous follow-up of the intervention in terms of costs and outcome, and do necessary adjustment to maintain cost effectiveness.

But perhaps the decisive factor is not the evidence about outcome and cost effectiveness. Payers of healthcare have been reluctant to fund technologies for life style interventions. Where is the dividing line between the individual responsibility and the responsibility of a public healthcare system? If this is such a good investment, why do not individuals themselves pay for it? Looking at the willingness to pay for hair care and spa treatments it appears to be a matter of priorities.

If public programs could reach those with the lowest level of health, so that they could contribute also to a more equitable distribution of health in the population, you may be able to convince public payers. But the evidence so far is that those who need the intervention most are those most difficult to convince to participate. Cost effectiveness may be a necessary condition for a public payer to adapt a specific program for life style changes, but it is not sufficient to release the funds.

Competing interests None.