## **Editorial**

## Promoting economic value in public health

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n the pharmaceutical field, the term 'fourth hurdle' has become common currency in many health systems. It means that only products that can show their cost-effectiveness will gain unrestricted access to patients. The preceding hurdles of safety, efficacy and quality have existed for several decades and have been harmonized within the European Union years ago. In the early 1990s, Australia and Canada pioneered the integration of cost-effectiveness into the regulation of drug reimbursement; by 2005, a survey identified 10 more European countries to consider this aspect in drug regulation. Adding France and Germany leads to at least a dozen European countries going this way today.

The emphasis of the 'fourth hurdle' is on individual clinical care. 'Concentrating on drugs and clinical procedures does not really have a great influence on population health'2 Holland criticized after having reviewed the first experience of health technology assessment in Europe. Banta and de Wit<sup>3</sup> in a recent review also emphasize that economic evidence plays a minor role outside pharmaceutical care. To improve decision making, they suggest that researchers should economically study portfolios of curative and preventive interventions. Holland<sup>2</sup> had argued that public-health interventions often are too complex to be assessed adequately. Indeed the evaluation of public-health intervention may be more difficult than that of drugs as experimental designs may not be possible, and as long-term time frames and reference to heterogeneous target populations may require more comprehensive evaluation approaches. The population investigated may furthermore feature medical and economic characteristics that are both relevant and specific to the decision context at stake. In consequence, assessments have to be tailor-made, and good transferability of economic results from other study contexts is less likely than it is for clinical studies. On an international scale, more efforts and resources may thus be needed to show the cost-effectiveness of public-health intervention as compared with clinical care strategies.

This does certainly not mean that basing decisions on effectiveness and cost-effectiveness should be restricted to individual clinical care. The benefits of systematically integrating the economic aspects into evidence-based decision making apply to public-health interventions as well: more cost-effectiveness will produce more health with a given budget, or given health benefits may be reached by less-resource input. Acknowledging this, UK health policy has extended the responsibility of the much respected National Institute of Health and Clinical Excellence (NICE) to also develop cost-effective guidance for public health. Such guidance might move the benefits of public-health intervention more into the focus of the public. However, the adequate use of such economic evidence also poses significant challenges.

The responsibility for public-health action is typically attributed to a number of institutions at the national, regional and local level. In order to increase efficiency in public health intervention, more decision makers have to be provided with advanced knowledge of how to best make use of the economic evidence. In practice, the role and use of economics in publichealth decision making may significantly differ by sector, as Grosse *et al.*<sup>5</sup> found in their review on the situation in the United States. They had included such diverse areas as environmental regulation, injury prevention and screening issues from newborns up to cancer.

Behavioural prevention is a key topic for public-health research. Life style may substantially influence the large-scale health problems such as smoking, obesity, heart disease and diabetes. The knowledge on genetic risks is quickly expanding. Humphries *et al.*<sup>6</sup> suggest that the combination of genetics with conventional risk factors, including life style, may improve the understanding of disease. If future screening approaches shall include early recognition of individual disease risk, public health and clinical medicine will move closer together. Intervention strategies may then integrate individual and population aspects in disease management—provided they are effective and cost-effective.

Promoting the economic value of public-health intervention makes up a Sisyphus task, but it also provides a measure to further improve population health. Today, decision making based on economic assessments primarily focuses on individual clinical care. Only adding the population perspective and public-health intervention will provide the full health benefit that evidence-based decision making is able to achieve.

## References

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