Should we use outcomes data to help manage general practice?

INTRODUCTION

More information on selected outcomes at practice level are being made public,[1] an outcomes framework for monitoring the performance of the NHS has been introduced,[2] research is investigating the elements of primary care that can influence outcomes,[3] and outcome measures are included in the monitoring of clinical commissioning groups.[4] In monitoring and rewarding general practices, has the time come, therefore, for shifting the emphasis from the process indicators of the Quality and Outcomes Framework (QOF) to genuine measures of outcomes? In this article, we discuss whether we should aim, in partnership with patients, to develop outcomes monitoring combined with greater understanding of the role of demographic, economic, and social determinants of health.

WHAT ARE THE OUTCOMES OF PRIMARY CARE?

Health outcomes may be defined as a change in a patient's health (including physical, psychological, and social health) that can be attributed to antecedent health care.[5] They may be used in relation to patients with a specific condition or to entire practice populations. There are few frameworks of outcomes focused on primary care, but examples can be found.[3,6–10] Drawing on these, we drew up a classification (Box 1) and distinguish between the final outcomes (mortality, adverse events, costs, satisfaction) and those intermediate outcomes that, although arising from antecedent care, go on to influence final outcomes. For example, patients' experience of care will influence their satisfaction.

PROBLEMS AND OPPORTUNITIES IN OUTCOMES MEASUREMENT

Patient factors tend to be more important than health care in determining mortality or morbidity, and they influence how people experience care as well. Even if health care is a major factor, much of that care may have been provided in secondary care. Furthermore, the effect of primary care on outcome may be delayed for many years. Measurement is complicated by technical issues including the need to avoid recording errors, response rates to patient surveys, and validity, reliability, and sensitivity to change, but just as important is the size of effect that primary care can have on the outcome. In Box 1 we have included a summary estimate of the potential effect size of various outcomes, although more evidence is required.[3,11] In the small populations of general practice, random variation is another important factor. Since outcomes can be related to complete practice populations, the risk of cherry picking in the context of financial incentive schemes may be reduced, although measures may be needed to prevent practices only taking on more healthy patients. There may also be other unanticipated and undesirable impacts on clinical practice. For these reasons, the use of outcomes for planning and monitoring primary care services may seem inappropriate.

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OUTCOMES MATTER

However, outcomes do have advantages. They are what truly matter; preserving health and minimising suffering are key goals, and consequently deserve attention in monitoring performance. If general practice *does* affect outcomes, surely we should understand how to maximise the effect. Moreover, general practices are responsible for registered populations. Each practice offers anticipatory preventive care as well as managing acute and chronic conditions. Process measures tend to concentrate on people who attend for acute or chronic problems, and do not fully encompass the health needs of the population. Thus, although coronary heart disease and stroke are leading causes of death, the detection of hypertension remains unsatisfactory; in England, as the number of people recorded as having hypertension on general practice registers increases, the population mortality from coronary heart disease and stroke tends to decline.[11] Since increased deprivation is associated with higher rates of undetected chronic disease, concentration on process measures also potentially weakens efforts to address inequalities in health. High achievement of process measures by practices with deprived patients may be assumed to indicate an adequate level of care, whereas a population perspective driven by measurement of outcomes could well lead to a very different conclusion.

Concentration on outcomes also presents an opportunity for a new dialogue with patients. Practices and their patient participation groups would be able to better understand the health needs of the practice population and develop strategies to improve health, perhaps involving other agencies in the local community, including schools and the local authority.

PRACTICES SHOULD MONITOR LESS AND PLAN MORE

At present, measures tend to be used to indicate whether performance reaches a level agreed to be acceptable. This provides reassurance to policymakers and patients that care is of an adequate standard, and draws attention to providers whose care needs particular scrutiny. More effective in improving health, however, would be to use measures to show whether performance reaches the level that is possible. In this approach, both process and outcome measures are used, and attention turns from whether target levels of performance are reached to understanding how process influences outcome.

Given the population served by a general practice, and the resources available to it, performance can reasonably be expected to reach a specific level. It is conceivable that the reasonably expected level could

Box 1. Summary of primary health care outcomes

	Outcome	Effect of primary care[a]
Outcomes	• Mortality, morbidity	Small
	• Disease episodes, for example, myocardial infarction, stroke	Moderate
	• Quality of life, change of health status	Moderate
	• Adverse incidents	Large
	• Equity: the extent to which there are differences in outcomes between different socioeconomic, ethnic and other groups, (sex, age, and the homeless)	Small
	• Patient satisfaction with care	Large
	• Costs, including costs of health care, costs to patients, and to society	Large
	• Time off work, time off school	Small
Intermediate outcomes	**Clinical outcomes**	
	• Immunisation, cancer screening, health checks, clinical measures (BP, HbA1C, cholesterol, and BMI)	Moderate
	• Early detection of disease (numbers of people with undiagnosed conditions)	Moderate
	Health behaviours	
	• Smoking, diet, exercise, psychological behaviour. Capacity for self-management	Small to moderate
	Utilisation	
	• Admissions, use of accident and emergency departments, referrals, prescriptions, nursing services	Moderate
	Patient experience	
	• Experience of care, involvement in own care and in planning services	Large
	Practitioner-related outcomes	
	• Satisfaction with work, role, relationship with patients	Large

[a]Indicates an assessment of the extent to which primary care can affect a particular outcome. It is not an assessment of the importance of an outcome; mortality is an important outcome, for example, although population factors are much more powerful predictors than primary care of mortality. BMI = body mass index. BP = blood pressure. HbA1C = glycated haemoglobin.

be determined by comparison with other practices carefully selected to have very similar populations and resources, and through monitoring of performance in the practice over several years; although research is required to establish whether such comparisons would be trustworthy. This information must be united with an understanding of the reasons for the outcomes achieved. Each practice needs to understand how its actions (the processes of care) are producing the observed outcomes. Those organisations responsible for monitoring general practice (including the regulator and commissioner, both of which incorporate patients' perspectives) do not need to know the level of performance for every process and outcome measure, but merely that the outcomes that can reasonably be expected have been achieved. If the possible outcomes have not been achieved, both the practice itself and the monitor will want to understand the explanation.

IMPLICATIONS

We do not yet know enough about the measurement of outcomes in primary care to allow outcomes to replace QOF. It is possible, however, to suggest promising approaches and identify the gaps to be addressed by research. Comparing like with like will be key, and therefore we need to investigate the extent to which this is possible. The applicability of statistical techniques to evaluate outcomes in small populations are being explored, and for outcomes for which these methods cannot be used, analysis may be undertaken at the level of groupings of similar practices. Further work to extend our understanding of how primary care affects outcomes will be needed, and practices will need to increase their knowledge of the populations they serve in order to anticipate what outcomes to expect, and set goals for the future.

Before outcomes are used, more extensive agreement is needed on which outcomes to select. For example, patients may prefer quality of life to be given greater emphasis in place of the primacy often given to mortality. Patients, practitioners, and policymakers have different perspectives, and they should all be involved in agreeing which measures should be used. A further consequence is that practices would have to adopt a population approach as well as the care of individuals, and, once this step is taken, it may become possible to target some services to address those in greatest need. Perhaps the health inequalities to which we are so accustomed could eventually be reduced.

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