- All letters must be typed with double spacing and signed by all authors.
- No letter should be more than 400 words.
- For letters on scientific subjects we normally reserve our correspondence columns for those relating to issues discussed recently (within six weeks) in the *BMJ*.
- We do not routinely acknowledge letters. Please send a stamped addressed envelope if you would like an acknowledgment.
- Because we receive many more letters than we can publish we may shorten those we do print, particularly when we receive several on the same subject.

Health of the nation

SIR,—The recent enthusiasm for setting targets based on health outcomes is welcome and long overdue, but we should beware of getting carried away. Targets for improving the health of the nation should also include assessments of managerial activities, many of which can be objectively assessed even though they cannot be quantified (see any textbook on management by objectives). Such an approach might also help to do away with the nonsense that some crucial aspects of the public health (like AIDS and food safety) are omitted from the key areas in *The Health of the Nation* because there are thought to be no measurable indicators from which to set targets.¹

Much of the discussion about such targets rests on a one dimensional view in which processes lead to outcomes. This traditional model has led to the current shibboleth that the only true measure of the effectiveness of health services is an outcome measure and that indicators of process are more proxies for that true measure. By this view, to assess the impact of a programme to prevent coronary artery disease you must ideally count the numbers of people with coronary artery disease—or some known risk factor—before and after the intervention of the programme. Not only are such outcomes usually slow to occur but they are fiendishly difficult and expensive to measure. It is also difficult even to obtain reliable indicators of process such as health related behaviours (for example, the proportion of the population who smoke) or the uptake of services (the numbers attending health promotion clinics).

In the figure such indicators of outcome and process would all be in the top two quadrants. But how helpful are they in indicating what action we need to take to reach targets? They cannot tell us whether the targets were reached as a result of managerial activity or despite it. The vertical axis in the figure adds this dimension to the traditional model, allowing us to distinguish whether the process and outcome are related to the people's health or to the management of the services.

After all, as the figure shows, it is managerial processes (for example, setting up an effective local task force to tackle food safety) that lead to managerial outcomes (when, for example, the task force establishes a better system for monitoring food outlets) that lead in turn to health processes (reduced consumption of unsafe foods) that lead finally to the health outcome (less food poisoning). Unless our target setting, like our audit,² sets out to measure our achievements in all four quadrants we shall be missing three quarters of the story and consequently less able to see where we need managerial activity to make the changes that will be necessary when—as inevitably we shall—we find we have not achieved all our health targets.

Setting clear objectives is an excellent principle

Achieving targets for improved health outcomes (top right quadrant) depends also on setting targets on the management processes and outcomes that lead to them

when you want to achieve anything,³ but at the risk of sounding heretical I suggest that we should not expend too much effort debating the exact level at which our health outcome targets should be set as long as they are of the right order of magnitude. It is the detailed local managerial target setting that will do most to achieve improvements in health. Thus, only by becoming closely concerned in those local managerial processes are we likely as a profession to exert our best influence on the nation's health.

JOHN GABBAY

Health Care Development Unit,
Academic Department of Public Health,
St Mary's Hospital Medical School,
Central Middlesex Hospital,
London NW10 7NS

1 Secretary of State for Health. *The health of the nation*. London: HMSO, 1991. (Cm 1523.)

2 Faculty of Public Health Medicine. *Working party report on the audit of public health medicine*. London: Faculty of Public Health Medicine, 1990.

3 Smith R. Towards a strategy for health. *BMJ* 1991;303:297-9. (3 August.)

SIR,—The series of articles in response to the *Health of the Nation* contains an interesting anomaly. In these statistical times it has become fashionable to describe the burden of a disease in terms of years of life lost—a measure that attempts to take account of the age at death as well as the fact of death itself—such that a death of a young person yields a higher score than a death of an older person.

There are, however, problems with such a measure. In one article in the series cancer is said to account for more years of life lost than anything else,¹ and in another accidents are said to account

for a greater proportion of years of potential life lost than cancer and heart disease combined.² Yet another implies (but does not state) that coronary heart disease is top of the league table.³ Is this another manifestation of the age old phenomenon “my specialty is more important than your specialty”? Surely they cannot all be right?

In fact, it seems as though they might all be right: the anomalies may arise because different cut off points are used. Table I shows the number of deaths from cancer, accidents, and coronary heart disease in our district in 1990. From these figures the number of years of life lost can be calculated for different cut off ages (table II). Thus

TABLE I—Number of deaths from cancer, accidents, and coronary heart disease in district in 1990

Age band (years)	Cancer	Accidents	Coronary heart disease
0-	1	4	
15-	1	14	
25-	3	8	
35-	17	8	5
45-	53	2	19
55-	95	6	77
65-	151	4	131
≥75	244	4	344

TABLE II—Number of years of life lost depending on cut off age

Cut off age (years)	Cancer	Accidents	Coronary heart disease
55	785.5	1026	182
60	1218	1209	340.5
65	2078	1419	845
70	2985.5	1632	1389
75	4628.5	1861	2576

with a cut off of 75 years the rank order is cancer, coronary heart disease, and then accidents. At a cut off of 65 the order is cancer, accidents, and then coronary heart disease, while at 55 the order changes yet again to accidents, cancer, and then coronary heart disease. As table II shows, accidents take the lead at a cut off somewhere between 55 and 60 years.

Clearly it is necessary, when quoting years of life lost, to specify the cut off point that has been used.

CHRIS SINCLAIR
DAVID PINDER

Department of Public Health Medicine,
West Surrey and North East Hampshire Health Authority,
Frimley,
Camberley,
Surrey GU16 5QF

1 Williams CJ. Cancer. *BMJ* 1991;303:516-7. (31 August.)

2 Pless IB. Accident prevention. *BMJ* 1991;303:462-4. (24 August.)

3 Tunstall-Pedoe H. Coronary heart disease. *BMJ* 1991;303:701-4. (21 September.)