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Response

Still waiting for the great leap forward

ALAN SHIELL*

Professor, AHFMR Health Scientist and CIHR / PHAC Chair in the Economics of Public Health, Population Health Intervention Research Centre, University of Calgary, Canada

Now is a good time to be discussing how equity might feature more prominently in health economic evaluations given the recent publication of the report by the WHO Commission on the Social Determinants of Health and the Commission's call to eliminate inequalities in health in a generation (Commission on the Social Determinants of Health, 2008). The lack of economic evidence is just one among many obstacles that has held back action to reduce inequalities in health (Syme, 1998; Williams, 1999). Despite the fact that most public health systems around the world have both the promotion of population health *and* the reduction in inequalities as twin objectives, most economic evaluations concern themselves only with the former. With this as their starting point, Cookson, Drummond, and Weatherly (hereafter CDW) examine some of the ways in which equity might be included explicitly in economic evaluations of public health interventions.

CDW identify three types of equity concern that they suggest policy makers in public health might be interested in: (i) concern to reduce inequalities in health between social groups; (ii) priority given to the claim on resources from some groups – with children and the severely ill given as examples; and (iii) concern for competing ethical rules such as respect for individual liberty. There is no evidence of this tripartite concern in the WHO's report. The Commission's concern was on reducing type (i) inequity only, especially inequalities in health between countries but also among social groups within countries. Their recommendations emphasize the needs of children, but not because children have prior claim on resources. Instead, improving the life chances of children is an especially *efficient* means of reducing disparities in health. The same is true of efforts to improve access to education for young girls.

The Commission's report also openly privileges social justice over individual liberty. I suspect most public health decision-makers share this belief (though this is a testable hypothesis in need of data), and respect for individual liberty acts more as a constraint on the ability to reduce inequalities in health and promote population health rather than as a competing equity objective. Competition exists, but not among multiple objectives held by a single decision-maker.

*Email: ashiell@ucalgary.ca

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It arises instead among the varied interests and/or values of different constituencies. If there is a trade-off between social justice and individual liberty, it is not one that can be solved by striving to equalize ratios of marginal benefits and marginal costs. Instead, the challenge for public health decision-makers is to devise ways of framing the social justice/inequalities agenda in ways that push back the point at which the individual liberty constraint actually bites. In these circumstances, conventional micro-economic evaluation of costs and benefits is still necessary, but it needs to be situated within a better understanding of the *political* economy of strategic decision-making (Petticrew *et al*., 2004).

According to CDW, the four things that economists can do to make the treatment of equity more explicit are: (a) to include in each economic evaluation descriptive information relevant to equity such as the socio-economic status of people most affected by the issue being addressed; (b) to have a health inequality impact assessment, through sub-group analysis for example, which because of the paucity of primary data will probably require additional modelling beyond that required to extrapolate the results of trial data to longer time frames and final health outcomes; (c) to make a calculation of the 'opportunity cost' of favouring interventions shown to promote equity by quantifying the health gains forgone from not favouring outcome maximizing options; and (d) to have equity weighting of health outcomes. They argue that options (a) to (c) ought to be implementable now with existing methods and data, but that (d) requires much more empirical work to establish an acceptable weighting system. In the meantime, CDW suggest that efforts be concentrated on re-examining interventions known to be cost-effective and believed likely to increase inequalities in health and on interventions believed to be equity enhancing but shown to be cost-ineffective.

These proposals will make a modest contribution. Certainly, any more information on equity-relevant considerations will be helpful in advancing knowledge and understanding of the issues. Here we might follow the lead taken by the Cochrane Health Equity field, which has adopted a framework, known as PROGRESS (Evans and Brown, 2003; Morris, 2008) for describing distributional implications in effectiveness studies, and by extension this could be used in economic evaluations. PROGRESS is an acronym for seven dimensions of equity about which we might seek information. The Cochrane Public Health Review Group have endorsed the PROGRESS approach and will recommend that it be included in proposals for new Cochrane reviews of public health interventions (Waters *et al*., 2008). The PROGRESS approach applies to systematic reviews but this may push back towards primary evaluations and provide a small but nonetheless important incentive to include some consideration of distributional matters in that work. In Canada, there are moves to introduce new research funding streams to improve the quality and quantity of evidence on public health interventions and one might hope that equity will be an important consideration in the success of applications to that stream. In

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the UK, we would see real advances in our understanding of equity if NICE were also to endorse PROGRESS or some equivalent and require consideration of distributional matters in the reviews that it commissions.

Modelling of the impact that interventions might have on equity offers a relatively quick way of generating 'evidence', and for that reason alone needs to be encouraged and supported. I suspect that CDW have underestimated the complexity of this task, however. Socio-economic status (SES) affects health in a number of ways: through differential exposure to the risks of disease, through differential susceptibility, through differential impact of disease and through differential access, uptake, and response to treatment (Birch, 2001; Diderichsen and Hallqvist, 1998). As the PROGRESS framework makes clear, there are also multiple dimensions of socio-economic status or other factors believed to affect health and each may interact with the others. Social capital for example may act as a buffer, protecting people from some of the stresses associated with adverse economic circumstances (Haines *et al*., 2003). Housing tenure similarly exerts independent effects on health over and above other dimensions of social stratification (Macintyre *et al*., 2001).

The multidimensional nature of the problem (multiple pathways and multiple dimensions of SES), as well as the politicized nature of the issue being tackled is also going to hamper the search for equity weights that command consensus; though in writing that I am acutely aware that many commentators said the same thing about the search for quality of life weights 17 years ago (Carr-Hill, 1991; Williams, 1991).

Interactions among these multiple pathways and dimensions of SES will need to be analysed carefully, whether we are searching for causal pathways, or evaluating possible effects, or considering the differential value of those effects (Birch *et al*., 2000). That said, all of the easy research has been done, and only the hard challenges remain – and that is a research agenda that needs to be advanced.

Why my sense of caution then? Well, I cannot help but read the case put forward by CDW and ask if you really wanted economic analysis to inform efforts to reduce inequalities, would you start from here?

There are grounds for believing that CDW's four-step plan, even if prioritized in the way they suggest, would not take us much further forward unless something more fundamental changes at the same time. More than 90% of the economic evidence relating to public health published to 2002 refers to clinical interventions such as drugs to lower cholesterol, or to individual-lifestyle interventions such as counselling to change diet or activity levels (Rush *et al*., 2004). There is no indication that the type of work being published since then has changed in nature. If anything, the relative weight of economic evidence is moving more strongly towards downstream interventions. Since clinical and lifestyle interventions tackle the proximal causes of disease they leave untouched the social, political, economic, and environmental factors that create inequality in the first place. There are exceptions, but intervening 'downstream' is unlikely

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to change inequalities in health, and may make them worse. Surfacing information about the equity implications of such interventions in the ways suggested by CDW might provide ammunition to the argument that we need to move upstream, but most people in public health are already persuaded of this need. Equity weighting of the outcomes of downstream interventions will make no difference at all, and will make matters worse if the complexity of the research exercise diverts scarce economic resources away from what really needs to be done.

What is needed is a substantial increase in the quality and quantity of primary evidence relating to the cost-effectiveness of interventions tackling the social determinants of health: that is interventions addressing the 'circumstances in which people are born, grow, live, work, and age' (Commission on the Social Determinants, 2008). This means health economic evaluation of policies and programmes to increase access to early child development programmes and secondary education; improving housing, employment and working conditions; redistribution of income, power and other resources, and so on.

What little evidence we have about such interventions *suggests* that they may be both cost-effective means of improving population health, *and* efficient ways of reducing inequalities in health. Equity weighting of outcomes is not necessary in these circumstances, even if it were possible, since it would only reinforce the conclusions one drew from the evaluation of efficiency. To a critical eye, however, the evidence is only suggestive. In early child development for example, the evidence is dated, tends to be from the USA, and relates to well-resourced, targeted programmes serving the needs of very disadvantaged children. The transferability of this evidence to current-day contexts in countries such as Canada and the UK is, at the very least, questionable (McIntosh *et al*., 2007). Thus, we need more primary economic evaluations of social interventions, and more modelling of their consequences, and we need this much more than we need equity-related refinement of the existing evidence on downstream interventions.

Even this will not be enough however, because of the politically contested nature of many public health interventions, especially those tackling the social determinants. Economic evidence is necessary but not sufficient. It can help re-frame the political debate however, and promote the public health agenda. Poverty, for example, imposes costs on the rest of society and not just the poor. If support for poverty reduction strategies cannot be won on grounds of social justice, then it might be won on grounds of self-interest.

CDW's classification of the field and their specification of options help to make sense of what is otherwise a large and disparate literature. This provides fresh impetus for new work and holds out the promise of a non-marginal shift in our understanding of inequalities. For this reason alone, their paper is welcome. Their recommendations constitute just one small step however. There are better things that economists could do with their time if their interest really

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stretches to reducing inequalities in health. Looking beyond the current field of health economics to interventions that address the social determinants is a better place to start.

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