Topic 3: The cost-effectiveness of health system strengthening and service level interventions

The benefits of health care are affected by the availability, quality and efficiency of the health care systems in which it is delivered. Factors like infrastructure, the configurations of care and the availability of different health care inputs (e.g. managers, physicians, nurses, medications) play a key role in determining the benefits that health care spending can provide. Economic evaluation, most commonly using cost-effectiveness analysis, is now widely used to inform the selection of which treatments and clinical interventions are funded for patients based on whether they represent ‘value for money’. However, much less attention has been paid to the ‘value for money’ of investing in system strengthening and service-level interventions. As such, these larger scale investments risk being under-prioritised when compared to health care interventions focused at the per patient level. Furthermore, without appropriate system strengthening investments, it is possible that the benefits of specific treatments and other interventions are lower than they could be.

A range of analytic methods have been proposed for the consideration of such policies, with each focusing on different components such as investments in overall capacity to improve utilisation levels (Faria et al., 2017), investments in improving the supply of different health care inputs (Revill, Walker, Cambiano, Phillips, & Sculpher, 2018; van Baal, Morton, & Severens, 2018) and investments which alter the production or cost functions of programmes within the health care system (Morton, Thomas, & Smith, 2016). A further body of literature relates to extending the ‘programme evaluation’ approach which has been used widely in evaluating these types of system level policies in terms of changes in surrogate outcomes (e.g. 30 day mortality, length of stay) to reflect ‘value for money’ by establishing the full cost and outcome impacts (Meacock, 2018; Pandya et al., 2018).

The aim of this PhD is to explore how health system strengthening and other service-level interventions may impact upon population health and the distribution of that health. The PhD aims to further develop and integrate analytical methods and to generate evidence which can be used to assess the ‘value for money’ of such activities. The successful candidate will review and further develop analytical methods for the evaluation of system strengthening and other service level interventions. As part of the PhD, a policy evaluation will likely be undertaken to demonstrate the ‘value for money’ of such a policy. The project will cut across many of the research themes in CHE, including economic evaluation, health policy, equity and econometrics.

The ideal candidate will have (or be about to complete) a Master’s degree in economics or a specialization within economics, with a substantial quantitative component such econometrics. A good knowledge of econometrics, decision analytic modelling and methods for economic evaluation would be beneficial.

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References


