

Reviewer's report

Title: Physician supply forecast: what are the right numbers?

Version: 1 **Date:** 18 October 2008

Reviewer: Michael Clemens

Reviewer's report:

I find the article to address an important issue, it is well-reasoned and balanced, and well-written. The goal of briefly but comprehensively summarizing the literature is very much met. I have studied it from beginning to end and I do not have any major compulsory revisions to suggest. I learned a lot from reading it.

Two revisions would improve the paper by making it more broadly applicable beyond Belgium where the focus currently lies.

Minor essential revisions:

The first would be to treat explicitly, in a couple of paragraphs, the issue of health professionals' international mobility. Many countries around the world that are carrying out human resource planning in the health sector are doing so in contexts where the majority of trained physicians and Registered Nurses leave the country to live and work elsewhere. This means that the reference population for planning purposes is not just the national population. An adequate demand-based forecasting model of human resources for health flows in the Philippines, for example, would consider the aging of the population of the United States, where a large fraction of Filipino nurses work. Unfortunately, a major problem (in some cases, the major problem) with HRH planning in countries where health professionals are highly mobile is that forecasting models—bizarrely—are designed as if there is no international mobility, and that the only important reference population is the local one. The value of the article would increase for a broader audience if the article discussed these issues as well, and they will fit neatly into the article's existing framework. I think this is sufficiently important for a more global interest in this article that I classify this addition as 'essential'.

Discretionary revisions:

The second change, a discretionary one, would be to make more explicit the discussion of alternate approaches to fulfilling human resource needs. The article alludes to these alternative approaches in its conclusion, which says correctly that "health provider requirements will be determined by broader societal decisions about the level of commitment of resources to health care, organization of the delivery and funding of health care programs, and level and mix of health care services." This is certainly true, and what is one of the biggest choices societies face in this regard? I'd assert that it is the degree of public intervention in the labor market for health workers. In many European countries medical

education is free, medical care is free, and physician salaries are tightly and centrally regulated; the United States has taken a dramatically different route. There are certainly many benefits and costs of that different route, but one characteristic of the US system is that the forecasting problem is relatively much, much smaller. Because physicians' salaries are largely determined by the market (at least to a much greater extent than in Europe), there is a source of information about whether or not there are 'enough' physicians to meet coming needs that is absent in a purely planned system: the prices of physician services. When this price rises, more people will become physicians and fewer people will seek out physician care, bringing demand and supply into closer alignment, without anyone ever having to do a single forecasting exercise to centrally determine the number of physicians that will equilibrate supply and demand. It is certainly not necessary in an article of this type to give an extensive discussion of this subject, but the choice of public-private emphasis in the health system is the obvious elephant in the room when the current text refers vaguely to "broader societal decisions", and I would have had a more satisfying experience as a reader if I had gotten an explicit treatment of perhaps the most important of those decisions.

I recommend acceptance after one minor essential revision and one discretionary revision.

This article is important to those like me with related research interests, but not of major importance to its field more generally.

The quality of written English is acceptable, though it does need editing by a native speaker for some very minor issues of usage.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.