RCT and feasible application in developing countries

Quan-Hoang Vuong, Universite Libre de Bruxelles
POLICY FORUM

Randomize evaluations to improve health care delivery

Amy Finkelstein, Sarah Taubman | 1 Comments

Administrative data and experimental designs lead the way

Add a new comment

First Name *
Randomize evaluations to improve health care delivery | Science Comments

In a recent article (Science, 347(6223), p.720) Finkelstein and Taubman (1) has raised a valid question of research quality in health care delivery following randomized controlled trial (RCT) “gold standard” in best practices of clinical studies. There are two points to add to the authors’ arguments and suggestions that are relevant to the reality of developing countries.
The value of science has frequently been compromised by researchers in developing countries, e.g. a recent retraction of the paper by Vietnamese researchers from SpringerPlus (2) for the ethical reasons. Both principles and methodologies of research have a pivotal role to play. Yet RCT studies are more time-consuming and financially costly, in both design and implementation, and researchers in developing countries face budget constraints, let alone the problem of obtaining primary data in less transparent systems.

Fortunately, the spirit of RCT can still be applied in both design and implementation. My experience is with a statistical investigation into conditional probabilities of Vietnamese patients falling destitute, following hospitalizations. By employing categorical data variables, following polytomous modeling, patients can be controlled for important categories such as “residency status”, “insured or not”. This helps bring the RCT principle to the empirical strategy without significantly higher financial burden on the researcher. This kind of “controlling” for instance can be imposed on financial burden on patients (different levels from Destitute-Unaffected) in relation to levels of insurance coverage (Nil-High). Effects of health insurance policy changes can then be measured against groups of categories, through estimated conditional probabilities (3).

This is to say that structuring the statistical problem is a general issue for quality of health economics research. And, “gold standard” RCT is neither the only option, nor always the optimal.


(3) Vuong QH, CEB N°WP-14/031, Université Libre de Bruxelles.

Quan Hoang Vuong, qvuong@ulb.ac.be Centre Emile Bernheim, Université Libre de Bruxelles, 50 Ave. F.D. Roosevelt, B-1050, Brussels, Belgium.

Submitted on Mon, 03/02/2015 - 21:33