Abstract for “Experimental Measures of Output and Productivity of the Healthcare Sectors”

Wulong Gu (Statistics Canada)
Jiang Li (University of Victoria, Canada)

Total health expenditures accounted for a large and increasing share of gross domestic product in Canada and in many other countries. Recent discussions in Canada and other countries have focused on two issues related to healthcare expenditures. First, to what extent is the increase in total health expenditures due to the increase in quantity of health care services as opposed to the increase in price of health care services? Second, what is the efficiency and productivity of the health care providers?

The key to adequately address both issues is to develop a direct output measure of health care services in Canada. That measure does not exist in Canada. In the National Accounts of Canada, the output of the health care sector has been measured by the volume of inputs in the health care sector. An input-based output measure assumes that there are no productivity gains in the health care sector. As such, it does not provide for a measure of productivity performance in the health care sector, nor does it allow for a decomposition of total health care expenditures into its price and quantity components.

The paper builds on the previous work that constructed a direct output measure for the hospital sector (Gu and Morin, 2013). It will construct a direct output and labour productivity measure for two other health care sectors: office of physicians and residential care facilities. Once completed, the direct output estimates will have been constructed for most healthcare sectors.

The paper will follow the methodology outlined in an OECD handbook (Schreyer 2010) and construct an estimate of direct output based on the number of services performed by physicians for the office of physicians sector and on the number of resident days for the residential care facilities sector, weighted across levels of care and service using the relative cost share as weights. The paper will make use of data from the Annual Survey of Residential Care Facilities of Statistics Canada. It will also make use of data from the National Physician Database maintained by the Canadian Institute for Health Information.