

Does Co-payment Reduction Improve Children's health ?*

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Abstract

In Japan, the national government provides public health care services with 20 percent coinsurance rate everywhere for preschool children. Local governments, however, can reduce it through a subsidization program on their own discretion. This program, named Medical Subsidy for Children and Infants (MSCI), has been dramatically expanded in the last decade. I investigate whether the lowered co-payment improves children's health status, exploiting the expansion of MSCI in the prefecture level as exogenous interventions. In order to reveal the causal effect of MSCI expansion, I utilize the identification strategy which is essentially the same as difference-in-difference-in-differences technique. The triple difference technique in this paper is based on the two-sided before-after comparisons of children's health. One is the comparison between the children in the prefectures with generous MSCI and the others. This standard difference-in-difference technique, however, does not control the differential trends of health status across prefectures correctly. Then, I make additional before-after comparisons using the sample of elementary school-age children, who were not eligible for MSCI in all the period before 2007. An identification assumption is that trends in health status between preschool and school-age children is similar in the absence of the MSCI expansion. To enhance the validity of this assumption, I restrict my analysis for the children at the age of 4 to 8 because their disease structure and socio-economic environments are likely to be similar. Using the nationally representative survey data from 1995 to 2007, I reveal that lowered co-payment through the expansion of MSCI significantly reduced the subjective symptom among preschool children. Numerically, the probability to have any subjective symptoms decreases by 2.3 percent in prefecture where all preschool children are eligible for MSCI, compared to the prefectures without MSCI. In addition, I find significant increase in outpatient visits, but not in hospital admission.

Keywords : child health, subjective symptom

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