

ABSTRACT

Expanding health insurance coverage does not automatically produce equal use of health services, particularly among low-income groups that face financial barriers to care. This study examines the effect of subsidized public health insurance ownership (BPJS Kesehatan Penerima Bantuan Iuran, PBI) on the frequency of outpatient care utilization in Central Java Province, using individual microdata from the March 2023 National Socioeconomic Survey (Susenas). The sample is restricted to 30,616 individuals who reported a health complaint in the preceding month, because the outpatient question is administered only to those respondents. This restriction gives the zero values of the dependent variable a single meaning, namely individuals who needed care but did not obtain it.

PBI membership is assigned administratively rather than at random, so ownership is potentially endogenous and correlated with unobserved health needs. To examine this possibility, the study estimates Ordinary Least Squares (OLS) alongside Instrumental Variable Two-Stage Least Squares (IV-2SLS), using the logarithm of regional elevation in meters above sea level as an instrument. Elevation shapes the probability of enrollment through differences in the reach of population administration across areas, and is assumed not to affect care-seeking directly.

The first-stage estimation confirms a relevant instrument ($F = 46.55$), while the Wu-Hausman test does not reject exogeneity ($p = 0.241$), indicating that endogeneity in PBI ownership is not detected in these data. OLS is therefore used as the main estimator and IV-2SLS as a comparison. PBI ownership is associated with 0.0378 additional outpatient visits, significant at the 1 percent level and equivalent to about 7.4 percent of the sample mean. Since 63.43 percent of individuals in the sample made no visit despite reporting a health complaint, the increase is read as an access effect rather than moral hazard. The effect is significant among urban residents but indistinguishable from zero among rural residents, indicating that subsidized premiums relieve financial barriers while distance and service availability remain binding. Financial protection through PBI is therefore a necessary but not sufficient condition for outpatient access among individuals in the sample.

Keywords: BPJS-PBI, Outpatient Utilization, Ordinary Least Squares (OLS), Endogeneity Test, Access Effect, Susenas March 2023

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