The Causal Effects of Health Insurance Among Children

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Health Insurance and Children

What is the causal effect of health insurance?

Standard economic theory suggests that the benefit of insurance is to provide a way for risk-averse individuals to insure against some fraction of a "bad state" such as an illness or accident. However, a different portrayal of health market exchanges creates potential benefits of being insured, such as increased access to care and preventive care. Specifically, those who are insured may receive higher-quality providers and care (Boyle 2002), ultimately resulting in better health for the insured. Combined with the view that early health investments, promoted through health insurance, on children may be especially important (Hedman 2007; Currin & Gruber 2003), policymakers have begun to promote the expansion of public insurance programs, such as SCHIP, in the United States and similar programs around the world.

Researchers have documented the effects of these national expansions of the formal public health insurance system among covered individuals in countries as diverse as Vietnam (Rossi et al. 2007), Morocco (Bosco 2008), and the United States (Lerman & Gruber 1998). Overall, these studies find strong results on increased utilization of services, but conflicting results on the effects of insurance on outcomes and out-of-pocket expenditures. The role of unobserved family income-wealth—namely adverse selection (Oster et al. 2010), endogenous sorting (Parg et al. 2006), or moral hazard (Manning et al. 1987) makes this a difficult question to empirically estimate. Despite these methodological challenges, emerging global health inequalities and the concern that the poor may experience negative health shocks makes determining the effects of health insurance important both historically and in terms of policy. However, these studies focus on an adult U.S. population and may not apply in a setting with different institutions or in the developing world context, or to children.

Nicaraguan Health System

- 2nd poorest country in the Western Hemisphere
- 7 million people, 1.2 million informal workers
- Everyone has access to free clinics
- Understaffed and understaffed
- Formula for government health insurance
- $5/month
- Covered providers (SPM), private hospitals
- Dependents age 11 and under
- Cover birth and cataracts
- Free care for the poorest

The Intervention

- Baseline survey (2007)
- 4022 representative market vendors
- Individuals open envelopes which randomly contain 6 months of free insurance
- Treatment: 6 Months of Free Health Insurance
- Control: No subsidy
- Respondents choose whether to enroll in health insurance
- Follow-up survey (2008): 2408 vendors; 1334 have eligible dependents

Why Randomize Subsidies?

The random allocation of the subsidy provides a way to account for differences between the insured and uninsured. Specifically, we use whether the parent was awarded a 6-month subsidy as an instrument for parental insurance status to correct for any selection differences in health insurance enrollment. Therefore this is an unbiased measure, and a causal effect.

Y = β0 + β1Insurancex + δX + ε

The random allocation of the subsidy provides a way to account for differences between the insured and uninsured.

Results

Visit Results

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<tr>
<th>Figure 1: Children Under 5 Summary Statistics (N=2376)</th>
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<td>Age</td>
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Results by Baseline Sick Status

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<th>Table 2: Health Outcomes by Baseline Sick Status</th>
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<td>Parent in Health Insurance</td>
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<td>Sicks Per Year</td>
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Health Outcomes

Table 1: Health Outcomes, Full Sample

| Parent in Health Insurance | Parent Not in Health Insurance |
| --- |
| Sicks Per Year | (2) | (2) |
| 0.250 | 0.256 | 0.251 | 0.257 |
| 0.256 | 0.257 | 0.250 | 0.251 |
| 0.197 | 0.202 | 0.203 | 0.208 |
| 0.173 | 0.178 | 0.185 | 0.203 |
| 0.091 | 0.090 | 0.094 | 0.100 |

Moral Hazard

Insured parents with sick children engage in more risky health behaviors according to our constructed index. For example; they are less likely to take their child to the doctor if their child has a fever.

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Works Cited


