Medical Savings Accounts: What is at Risk?

Justine HSU, World Health Organization Report (2010) Background Paper

Can Health Savings Accounts Reduce Health Spending?: Evidence from China.

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Part 1: Medical Savings Accounts: What is at Risk?
Background

- Health Savings Accounts (HSAs) – individuals saving and paying for their own medical needs – response to concerns of escalating healthcare costs.
- HSAs available only to people who have a high-deductible health plan (HDHP, plan with lower premiums and higher deductibles), offer a trifecta of tax benefits.
- HSAs purport to address some of the inefficiencies of private health insurance
- Supply side incentive: control consumption
- Demand side incentive: receive tax shelter

Theoretical predictions of HSAs

- Encourages consumers to seek cost-effective services
- Fosters provider competition on price and quality -> reduced costs
- Reduces selection incentives without risk pooling
- Assumes individuals save for lifetime healthcare needs
- Cost-sharing is argued to effectively address moral hazard

Errors in predictions of HSAs

- HSAs encourage healthier and wealthier people to switch from comprehensive coverage to HDHP.
- For people with chronic, expensive illness, the HDHP can mean greater out-of-pocket medical costs compared to standard comprehensive insurance.
- Higher-income people receive a larger tax break for each dollar they put into an HSA than lower-income people do because they are in a higher tax bracket.
- In addition, higher-income people generally can afford to put more money into HSAs each year than lower-income people can.

Medical Savings Accounts: accounting for the evidence

Singapore

- While HSAs were effective in reducing consumption, they were ineffective in containing costs or extending coverage (Barr 2001).
- HSAs were not successful in introducing price competition as the Singaporean system operates on quality rather than on price or technical measures (Dixon 2002)
- Reductions were not seen until the government recognised supply-side forces and intervened with regulations (Hanvoravongchai 2002).
- ⅓ of population are non-citizens, only citizens are eligible for HSA

South Africa

- Mixed success in reducing consumption and little in containing costs or extending coverage (Jost 2005).
- Consumption of outpatient services and drugs were somewhat reduced relative to private insurance (Dixon 2002, Soderlund & Hansl 2000).
- Key drivers of costs in South Africa, e.g. hospital, technology, HIV/AIDS, are beyond the reach of HSAs (Jost 2005).
- Due to the mixed market and lack of government oversight, risk selection was a prominent feature of early HSAs (Glied 2008).

USA

- HSAs were introduced in the USA in 1996 together with HDHP for catastrophic events (Dixon 2002).
- Research literature of its impact on reducing moral hazard, containing costs, and expanding coverage in the USA is lacking (Lav & Park 2001).
- What does exist is based on simulation exercises with findings debated for their assumptions in overestimating cost-savings. Buntin et al (2006) summarises these simulations with HSAs providing cost-savings from 10% to 25%. Other analyses predict expenditures unlikely to be reduced by HSAs because most healthcare costs in the USA are above $2000 and thus covered under catastrophic insurance and not HSAs (Moon, Nichols & Wall 1996).

China

- Initial decline in total health expenditure; however, closer examination attributes this to a shift from inpatient to outpatient care and not a decline in overall consumption (Dixon 2002).
- Secondary effects of HSAs: improper use of funds and high administrative costs (Yi & Maynard 2008).
- HSAs impact on financial protection in China is not conclusive.

Conclusion

HSAs impact depends on the country context, notably government stewardship, values of solidarity, and other institutional health financing mechanisms.

Part 2: Can Health Savings Accounts Reduce Health Spending?: Evidence from China

Paper Summary

- **Objective:** To empirically examine the effectiveness of HSAs in containing medical expenses and reducing moral hazard.
- **Methodology:** This paper used individual-level data from the CHFS in 2011, a nationally representative survey in China. The sample size was 29,324 individuals and 8,438 households. The author conducted regression and difference-in-difference analysis.
- **Findings:** Chen found negative results for the effectiveness of HSAs in containing medical expenses and reducing moral hazard. Healthier and wealthier consumers tend to spend more as the balances in their HSAs increase.

Strengths

- Strong methods, inclusion of proxies for risk tolerance
- Strong instrumental variable for HSA balance (when conducting regression to see how HSA balance affects out of pocket spending on medical care)
- Tested the non-linear effects of HSAs

Limitations

- Outdated data (2011)
- Use of self-reported health variables
- Proxy of the *attitude toward risky investment* (categorical variable that takes a value from 1 to 5, indicating the increasing risk and return of the investment) may be weak. Individuals' attitudes toward financial risk may differ from their attitudes toward *risk behaviors.*

What would a behavioral economist have to say about the paper? I

- A behavioral economist may reference the “dual-self model.”
- One half of this dual-self is the “Planner”: deliberate, slow, logical, self-aware, and effortful. In contrast, the “Doer” is impulsive, fast, intuitive, and error-prone, and his/her actions involve neither effort nor much voluntary control (A Behavioral).
- A foundational principle of behavioral economics is that *people do not always engage these different modes of decision making at the appropriate times.*

What would a behavioral economist have to say about the paper? II

- Because health economics shows that consumers often do not possess the information/judgement required to selectively reduce only unnecessary care, demand-side cost sharing deters **both** necessary and unnecessary care
- Reductions in necessary care can generate adverse health effects: increased use of emergency rooms, increased admissions to hospitals, and even death.

Conclusion I

- The WHO report and Chen paper demonstrate weak, at best mixed, evidence supporting theoretical arguments that HSAs effectively address moral hazard, escalating costs, and coverage gaps.
- HSAs purport to address the key deficiencies of private health insurance
- Unfortunately, there is not enough experience with HSAs to date. What empirical evidence does exist is limited to country contexts and confounding factors of other reform efforts.

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Conclusion II

- Proponents of HSAs argue that rising healthcare costs are due to demand-side moral hazard that can be resolved by cost-bearing and cost-conscious consumers.
- However, a behavioral economist's "dual-self model" may indicate that relying on a "cost-bearing and cost-conscious" consumer may be unrealistic.
- Accordingly, an interesting extension of this paper could be an empirical analysis of American HSAs and healthcare expenditure with more current data.

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Thank you for listening!

Questions?