

Our systems are now restored following recent technical disruption, and we're working hard to catch up on publishing. We apologise for the inconvenience caused. Find out more: <https://www.cambridge.org/universitypress/about-us/news-and-blogs/cambridge-university-press-publishing-update-following-technical-disruption>

English | **Français**

**15**

Cited by.

# Medical savings accounts: assessing their impact on efficiency, equity and financial protection in health care

Published online by Cambridge University Press: **17 February 2016**

Olivier J. Wouters, Jonathan Cylus, Wei Yang, Sarah Thomson and Martin McKee



Article contents

[Get access](#)

## Abstract

Medical savings accounts (MSAs) allow enrollees to withdraw money from earmarked funds to pay for health care. The accounts are usually accompanied by out-of-pocket payments and a high-deductible insurance plan. This article reviews the association of MSAs with efficiency, equity, and financial protection. We draw on evidence from four countries where MSAs play a significant role in the financing of health care: China, Singapore, South Africa, and the United States of America. The available evidence suggests that MSA schemes have generally been inefficient and inequitable and have not provided adequate financial protection. The impact of these schemes on long-term health-care costs is unclear. Policymakers and others proposing the expansion of MSAs should make explicit what they seek to achieve given the shortcomings of the accounts.

Type

**Information**

*Health Economics, Policy and Law*, Volume 11, Issue 3, July 2016, pp. 321 - 335

DOI: <https://doi.org/10.1017/S1744133116000025>

**Copyright**

© Cambridge University Press 2016

**References**

- Asher, M. and Nandy, A. (2006), 'Health financing in Singapore: a case for systematic reforms', *International Social Security Review*, 59(1): 75–92. [CrossRef](#) [Google Scholar](#)
- Asher, M., Ramesh, M. and Maresso, A. (2008), 'Medical savings accounts in Singapore', *Euro Observer*, 10(4): 9–11. [Google Scholar](#)
- Baicker, K., Dow, W. H. and Wolfson, J. (2007), 'Lowering the barriers to consumer-directed health care: responding to concerns', *Health Affairs*, 26(5): 1328–1332. [CrossRef](#) [Google Scholar](#) [PubMed](#)
- Barr, M. (2001), 'Medical savings accounts in Singapore: a critical inquiry', *Journal of Health Politics, Policy and Law*, 26(4): 709–726. [CrossRef](#) [Google Scholar](#)
- Bloche, M. G. (2006), 'Consumer-directed health care', *New England Journal of Medicine*, 355: 1756–1759. [CrossRef](#) [Google Scholar](#) [PubMed](#)
- Bloche, M. G. (2007), 'Consumer-directed health care', *Health Affairs*, 26(5): 1315–1327. [CrossRef](#) [Google Scholar](#) [PubMed](#)
- Buchmueller, T. C. (2008), 'Consumer-oriented health care reform strategies: a review of the evidence on managed competition and consumer-directed health insurance', *Milbank Quarterly*, 87(4): 820–841. [CrossRef](#) [Google Scholar](#)
- Buntin, M. B., Damberg, C., Haviland, A., Kapur, K., Lurie, N., McDevitt, R. and Marquis, M. S. (2006), 'Consumer-directed health care: early evidence about effects on cost and quality', *Health Affairs*, 25(6): w516–w530. [CrossRef](#) [Google Scholar](#) [PubMed](#)
- Buntin, M. B., Haviland, A. M., McDevitt, R. and Sood, N. (2011), 'Healthcare spending and preventive care in high-deductible and consumer-directed health plans', *American Journal of Managed Care*, 17(3): 222–230. [Google Scholar](#)
- Charlton, M. E., Levy, B. T., High, R. R., Schneider, J. E. and Brooks, J. M. (2011), 'Effects of health savings account-eligible plans on utilization and expenditures', *American Journal of Managed Care*, 17(1): 79–86. [Google Scholar](#) [PubMed](#)
- Chen, S., Lo Sasso, A. T. and Nandam, A. (2013), 'Who funds their health savings account and why?', *International Journal of Health Care Finance & Economics*,

13(3-4): 219-232. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Chia, N. C. and Tsui, A. K. (2005), 'Medical savings accounts in Singapore: how much is adequate?', *Journal of Health Economics*, 24: 855-875. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Cress, J. R. and Zimmer, D. M. (2011), 'Medical savings accounts and preventive health care utilization', *Journal of Economics and Management*, 7(1): 1-22. [Google Scholar](#)

Cylus, J. and Thomson, S. (2012), 'Medical savings accounts'. Background paper prepared for a Senior Policy Seminar in Bishkek, Kyrgyzstan, 29-30 November, on behalf of the WHO Regional Office for Europe. [Google Scholar](#)

Davis, K. (2004), 'Consumer-directed health care: will it improve health system performance?', *Health Services Research*, 39(4 Pt 2): 1219-1234. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Dixon, A. (2002), 'Are medical savings accounts a viable option for funding health care?', *Croatian Medical Journal*, 43(4): 408-416. [Google Scholar](#) [PubMed](#)

Dixon, A., Greene, J. and Hibbard, J. (2008), 'Do consumer-directed health plans drive changes in enrollees' health care behavior?', *Health Affairs*, 27(4): 1120-1131. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Fowles, J. B., Kind, E. A., Braun, B. L. and Bertko, J. (2004), 'Early experience with employee choice of consumer-directed health plans and satisfaction with enrolment', *Health Services Research*, 39(4): 1141-1158. [CrossRef](#) [Google Scholar](#)

Fronstin, P. (2012), 'Health savings accounts and health reimbursement arrangements: assets, account balances, and rollovers, 2006-2011', *Employee Benefit Research Institute*, 367(Issue Brief): 1-28. [Google Scholar](#)

Fronstin, P. (2014), 'Lifetime accumulations and tax savings from HSA contributions', *Employee Benefit Research Institute Notes*, 35(7): 1-24. [Google Scholar](#)

Fronstin, P., Sepúlveda, M. J. and Roebuck, M. C. (2013a), 'Medication utilization and adherence in a health savings account-eligible plan', *American Journal of Managed Care*, 19(12): e400-e407. [Google Scholar](#)

Fronstin, P., Sepúlveda, M. J. and Roebuck, M. C. (2013b), 'Consumer-directed health plans reduce the long-term use of outpatient physician visits and prescription drugs', *Health Affairs*, 32(6): 1126-1134. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Glied, S. (2008), 'Health savings accounts in the United States', *Euro Observer*, 10(4): 5-6. [Google Scholar](#)

Glied, S. and Remler, D. (2005), 'The effect of health savings accounts on health

insurance coverage', The Commonwealth Fund, 811(Issue Brief): 1–8. [Google Scholar](#)

Goldsworthy, T. (2014), 'The NHS is terminally ill—we need a new Healthcare system'. Adam Smith Institute, [www.adamsmith.org/blog/uncategorized/the-nhs-is-terminally-ill-we-need-a-new-healthcare-system/](http://www.adamsmith.org/blog/uncategorized/the-nhs-is-terminally-ill-we-need-a-new-healthcare-system/) [20 May 2015]. [Google Scholar](#)

Gramm, P. (1994), 'Why we need medical savings accounts', *New England Journal of Medicine*, 330(24): 1752–1753. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Greene, J., Hibbard, J., Murray, J. F., Teutsch, S. M. and Berger, M. L. (2008), 'The impact of consumer-directed health plans on prescription drug use', *Health Affairs*, 27(4): 1111–1119. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Greene, J., Hibbard, J. H., Dixon, A. and Tusler, M. (2006), 'Which consumers are ready for consumer-directed health plans?', *Journal of Consumer Policy*, 29(3): 247–262. [CrossRef](#) [Google Scholar](#)

Hardie, N. A., Lo Sasso, A. T., Shah, M. and Levin, R. A. (2010), 'Behavioral healthcare services use in health savings accounts versus traditional health plans', *Journal of Mental Health Policy and Economics*, 13(4): 159–165. [Google Scholar](#) [PubMed](#)

Haseltine, W. A. (2013), *Affordable Excellence: The Singapore Healthcare Story*. Brookings Institution Press, Washington, D.C., 182pp. [Google Scholar](#)

Haviland, A. M., Sood, N., McDevitt, R. and Marquis, M. S. (2011), 'How do consumer-directed health plans affect vulnerable populations?', *Forum for Health Economics and Policy*, 14(2): 1–12. [Google Scholar](#)

Helmchen, L. A., Brown, D. W., Lurie, I. Z. and Lo Sasso, A. T. (2015), 'Health savings accounts: growth concentrated among high-income households and large employers', *Health Affairs*, 34(9): 1594–1598. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Hoffman, C. and Tolbert, J. (2006), 'Health savings accounts and high deductible health plans: are they an option for low-income families?', issue paper, Volume 7568. The Henry Kaiser Foundation (KFF), Washington, D.C., 23pp. [Google Scholar](#)

Hsiao, W. (1995), 'Medical savings accounts: lessons from Singapore', *Health Affairs*, 14(2): 260–266. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Hsiao, W. (2001), 'Behind the ideology and theory: what is the empirical evidence for medical savings accounts?', *Journal of Health Politics, Policy and Law*, 26(4): 733–738. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Hurley, J., Guindon, G. E., Rynard, V. and Morgan, S. (2008), 'Publicly funded medical savings accounts: expenditure and distributional impacts in Ontario,

Canada', *Health Economics*, 17: 1129–1151. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Jost, T. (2005), 'Consumer-driven health care in South Africa: lessons from comparative health policy studies', *Journal of Health & Biomedical Law*, 1(2): 83–109. [Google Scholar](#)

Jost, T. (2007), *Health Care at Risk: A Critique of the Consumer-Driven Movement*, Durham: Duke University Press. [Google Scholar](#)

Lee, T. H. and Zapert, K. (2005), 'Do high-deductible health plans threaten quality of care?', *New England Journal of Medicine*, 353: 1202–1204. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Lei, X. and Lin, W. (2009), 'The new cooperative medical scheme in rural China: does more coverage mean more service and better health', *Health Economics*, 18: S25–S46. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Liu, G. G., Zhao, Z., Cai, R., Yamada, T. and Yamada, T. (2002), 'Equity in health care access to: assessing the urban health insurance reform in China', *Social Science and Medicine*, 55(10): 1779–1794. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Liu, J. and Chen, T. (2013), 'Sleeping money: investigating the huge surpluses of social health insurance in China', *International Journal of Health Care Finance and Economics*, 13(3–4): 319–331. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Lo Sasso, A., Shah, M. and Frogner, B. (2010), 'Health savings accounts and health care spending', *Health Services Research*, 45(4): 1041–1060. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Lo Sasso, A. T., Rice, T., Gabel, J. R. and Whitmore, H. (2004), 'Tales from the new frontier: pioneers' experiences with consumer-driven health care', *Health Services Research*, 39(2): 1071–1090. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Lueck, S. (2015), 'New Republican proposal would leave millions uninsured or underinsured'. Center on Budget and Policy Priorities, <http://www.cbpp.org/blog/new-republican-proposal-would-leave-millions-uninsured-or-underinsured> [24 October 2015]. [Google Scholar](#)

Mallya, G., Pollack, C. E. and Polsky, D. (2008), 'Are primary care physicians ready to practice in a consumer-driven environment?', *American Journal of Managed Care*, 14(10): 661–668. [Google Scholar](#)

Massaro, T. A. and Wong, Y.-N. (1995), 'Positive experience with medical savings accounts in Singapore', *Health Affairs*, 14(2): 267–272. [CrossRef](#) [Google Scholar](#) [PubMed](#)

McConnell, K. (2005), 'What do health savings accounts mean for the emergency department?', *Annals of Emergency Medicine*, 46(6): 536–540. [CrossRef](#) [Google Scholar](#) [PubMed](#)

McKee, M. and Busse, R. (2013), 'Medical savings accounts: Singapore's non-

solution to healthcare costs', *BMJ*, 347: f4797. [CrossRef](#) [Google Scholar](#) [PubMed](#)

McLeod, H. and McIntyre, D. (2008), 'Medical savings accounts in South Africa', *Euro Observer*, 10(4): 7–9. [Google Scholar](#)

Minicozzi, A. (2006), 'Medical savings accounts: what story do the data tell?', *Health Affairs*, 25(1): 256–267. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Monheit, A. (2003), 'Persistence in health expenditures in the short run: prevalence and consequences', *Medical Care*, 41(7 Supplement): 53–64. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Muhlestein, D. B., Wilks, C. E. and Richter, J. P. (2013), 'Limited use of price and quality advertising among American hospitals', *Journal of Medical Internet Research*, 15(8): e185. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Newhouse, J. P., Insurance Experiment Group (1993), *Free for All? Lessons from the RAND Health Insurance Experiment*, Cambridge: Harvard University Press. [Google Scholar](#)

Nichols, L., Prescott, N. and Phua, K. (1997), 'Medical savings accounts for developing countries', in G. Schieber (ed.), *Innovations in Health Care Financing*, Washington, DC: World Bank, 233–245. [Google Scholar](#)

Parente, S. T., Christianson, J. B. and Feldman, R. (2007), 'Consumer-directed health plans and the chronically ill', *Disease Management and Health Outcomes*, 15(4): 239–248. [CrossRef](#) [Google Scholar](#)

Parente, S. T., Feldman, R. and Chen, S. (2008), 'Effects of a consumer driven health plan on pharmaceutical spending and utilization', *Health Services Research*, 43(5): 1542–1556. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Parente, S.T., Feldman, R. and Christianson, J.B. (2004a), 'Evaluation of the effect of a consumer-driven health plan on medical care expenditures and utilization', *Health Services Research*, 39(4): 1189–1210. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Parente, S. T., Feldman, R. and Christianson, J. B. (2004b), 'Employee choice of consumer-driven health insurance in a multiplan, multiproduct setting', *Health Services Research*, 39(4): 1091–1112. [CrossRef](#) [Google Scholar](#)

Park, E. (2015), 'Cassidy health plan allows more tax sheltering for well-to-do'. Center on Budget and Policy Priorities, <http://www.cbpp.org/blog/cassidy-health-plan-allows-more-tax-sheltering-for-well-to-do> [18 October 2015]. [Google Scholar](#)

Park, E. and Biniek, J. (2015), 'Republican Study Committee health plan would likely result in many more uninsured and fewer consumer protections'. Center on Budget and Policy Priorities,

<http://www.cbpp.org/research/health/republican-study-committee-health-plan-would-likely-result-in-many-more-uninsured> [24 October 2015]. [Google Scholar](#)

Pauly, M. V. and Goodman, J. C. (1995), 'Tax credits for health insurance and medical savings accounts', *Health Affairs*, 14(1): 126–139. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Pei, Y. (2008), 'The issue of keeping medical saving account with the social health insurance', *Population and Economics*, 168(3): 65 (in Chinese). [Google Scholar](#)

Reed, M., Benedetti, N., Brand, R., Newhouse, J. P. and Hsu, J. (2009), 'Perspectives from deductible plan enrollees: plan knowledge and anticipated care-seeking changes', *BMC Health Services Research*, 9: 244. [CrossRef](#) [Google Scholar](#)

Reed, M., Graetz, I., Wang, H., Fung, V., Newhouse, J. P. and Hsu, J. (2012), 'Consumer-directed health plans with health savings accounts: whose skin is in the game and how do costs affect care seeking?', *Medical Care*, 50(7): 585–590. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Reinhardt, U. E. (2006), 'The pricing of US hospital services: chaos behind a veil of secrecy', *Health Affairs*, 25(1): 57–69. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Remler, D. K. and Glied, S. A. (2006), 'How much more cost sharing will health savings accounts bring?', *Health Affairs*, 25(4): 1070–1078. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Robinson, J. C. (2005), 'Health savings accounts – the ownership society in health care', *New England Journal of Medicine*, 353(12): 1199–1202. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Rowe, J. W., Brown-Stevenson, T., Downey, R. L. and Newhouse, J. P. (2008), 'The effect of consumer-directed health plans on the use of preventive and chronic illness services', *Health Affairs*, 27(1): 113–120. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Sedjo, R. L. and Cox, E. R. (2009), 'The influence of targeted education on medication persistence and generic substitution among consumer-directed health care enrollees', *Health Services Research*, 44(6): 2079–2092. [CrossRef](#) [Google Scholar](#)

Sheng, S. and Hou, X. (2011), 'Inequities and inefficiency in medical saving account-the findings from Guangdong, China', *Chinese Journal of Population Science*, 5(1): 75 (in Chinese). [Google Scholar](#)

Sichuan News (2015), 'New healthcare reform in Chengdu city-using medical saving account to pay for commercial health insurance (in Chinese), <http://scnews.newssc.org/system/20150106/000526607.html> [3 July 2015]. [Google Scholar](#)

Singapore Ministry of Health (2013), 'Healthcare financing sources', [http://www.moh.gov.sg/content/moh\\_web/home/pressRoom/Parliamentary\\_QA/2013/healthcare-financing-sources0.html](http://www.moh.gov.sg/content/moh_web/home/pressRoom/Parliamentary_QA/2013/healthcare-financing-sources0.html) [7 December 2013]. [Google Scholar](#)

Stanton, M. W. and Rutherford, M. K. (2006), 'The high concentration of U.S. health care expenditures', Issue 19, AHRQ Pub No. 06-060. Rockville, MD: Agency for Healthcare Research and Quality: Research in Action. [Google Scholar](#)

Thomson, S., Vörk, A., Habicht, T., Roováli, L., Evetovits, T. and Habicht, J. (2010), 'Responding to the challenge of financial sustainability in Estonia's health system', World Health Organization, Regional Office for Europe, Copenhagen, 142pp. [Google Scholar](#)

Thorpe, K. E. (1995), 'Medical savings accounts: design and policy issues', *Health Affairs*, 14(3): 254–259. [CrossRef](#) [Google Scholar](#)

Tollen, L. A., Ross, M. N. and Poor, S. (2004), 'Risk segmentation related to the offering of a consumer-directed health plan: a case study of Humana Inc', *Health Services Research*, 39(4): 1167–1188. [CrossRef](#) [Google Scholar](#)

Wilson, A. R., Bargman, E. P., Pederson, D., Wilson, A., Garrett, N. A., Plocher, D. W. and Ailiff, P. L. (2008), 'More preventive care, and fewer emergency room visits and prescription drugs—health care utilization in a consumer-driven health plan', *Benefits Quarterly*, 24(1): 46–54. [Google Scholar](#)

Woolhandler, S. and Himmelstein, D. U. (2007), 'Consumer-directed health care: except for the healthy and wealthy it's unwise', *Journal of General Internal Medicine*, 22(6): 879–881. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Worstall, T. (2013), 'Why not US healthcare? Because we want something much more free market than that'. Adam Smith Institute, <http://www.adamsmith.org/blog/healthcare/why-not-us-healthcare-because-we-want-something-much-more-free-market-than-that/> [1 November 2015]. [Google Scholar](#)

Xia, Y. (2014), 'Medical saving account for urban employee insurance-is it worth keeping?', *Microeconomics*, 4(1): 51 (in Chinese). [Google Scholar](#)

Xinhua News (2009), 'Share the medical saving account with your family in Zhengjiang, Jiangsu [http://news.xinhuanet.com/society/2009-06/04/content\\_11486920.htm](http://news.xinhuanet.com/society/2009-06/04/content_11486920.htm) [3 July 2015]. [Google Scholar](#)

Xinhua News (2015), 'Using the 323 billion surplus in medical saving account to pay for commercial health insurance (in Chinese), [http://news.xinhuanet.com/fortune/2015-01/15/c\\_127388775.htm](http://news.xinhuanet.com/fortune/2015-01/15/c_127388775.htm) [3 July 2015]. [Google Scholar](#)

Xue, X. and Zhao, M. (2007), 'An economic analysis of the low efficiency of private medical savings account', *Chinese Health Economics*, 26(9): 73 (in



Chinese). [Google Scholar](#)

Yi, Y., Maynard, A., Liu, G., Xiong, X. and Lin, F. (2005), 'Equity in health care financing: evaluation of the current urban employee health insurance reform in China', *Journal of the Asia Pacific Economy*, 10(4): 506–527. [CrossRef](#) [Google Scholar](#)

Yip, W. and Hsiao, W. (1997), 'Medical savings accounts: lessons from China', *Health Affairs*, 16(6): 244–251. [CrossRef](#) [Google Scholar](#) [PubMed](#)

Yip, W. and Hsiao, W. (2009), 'Non-evidence-based policy: how effective is China's new cooperative medical scheme in reducing medical impoverishment?', *Social Science & Medicine*, 68(2): 201–209. [CrossRef](#) [Google Scholar](#) [PubMed](#)

## Related content

### AI-generated results: by UNSILO

#### Book

##### Private Health Insurance

[Private Health Insurance: History, Politics and Performance](#)

Published online: 1 October 2020

#### Chapter

##### Health savings accounts in the United States of America

[Private Health Insurance](#)

Published online: 1 October 2020

#### Chapter

##### Health Insurance, Part I

Daniel Shapiro

[Is the Welfare State Justified?](#)

Published online: 12 December 2009

#### Article

##### The Role of State Regulation in Consumer-Driven Health Care

Timothy S. Jost and Mark A. Hall

[American Journal of Law & Medicine](#)

Published online: 6 January 2021

#### Chapter

##### Undermining risk pooling by individualizing benefits: the use of medical savings accounts in South Africa

[Private Health Insurance](#)

Published online: 1 October 2020

#### Article

##### Why Even Egalitarians Should Favor Market Health Insurance\*

Daniel Shapiro

[Social Philosophy and Policy](#)

Published online: 13 January 2009

### **Article**

#### **Between Liberal Aspirations and Market Forces: Obamacare's Precarious Balancing Act**

Jonathan Oberlander

[Journal of Law, Medicine & Ethics](#)

Published online: 1 January 2021

### **Chapter**

#### **Health Insurance in China**

Ambar La Forgia and Lawton Robert Burns

[China's Healthcare System and Reform](#)

Published online: 26 January 2017

### **Chapter**

#### **Seven Financing Models**

Federico Toth

[Comparative Health Systems](#)

Published online: 20 August 2021

---