Expert Review of Pharmacoeconomics & Outcomes Research ›
Volume 15, 2015 - Issue 1

Editorial

Financing cures in the United States

Anirban Basu

Pages 1-4 | Published online: 06 Dec 2014

Cite this article https://doi.org/10.1586/14737167.2015.990887 Check for updates

Abstract

True cures in health care are rare but likely not for long. The high price tag that accompanies a cure along with its rapid uptake create challenges in the financing of cures by public and private payers. In the US, the disaggregated nature of health insuranc s multiple health p has the incentive lth plans. Here, a r l impact bond tha ded not only betw suing debate as to care system well.

There are growing concerns about the financing of technological breakthroughs in medicine that provide not just incremental health benefits, but substantial leaps in patients' health in the form of cures. The introduction of Sovaldi by Gilead, which is shown to cure 80–95% of Hepatitis-C infections, highlights these issues [1], but is not a unique case. US FDA approval of Harvoni, [2], a first combination pill approved to treat chronic Hepatitis-C virus genotype one infection, and other targeted treatments in cancer and emerging health technologies like regenerative medicine and gene therapy indicates that the concerns of financing these technologies are real [3]. The concerns are not only that these cures come, and rightfully so, with a high price tag, but they are likely to be adopted by a large patient population in a short amount of time. For example, a recent analysis shows that the potential cost to Medicare of covering Sovaldi alone is a 3–8% increase in federal Part D outlays and Part D premiums [4]. Similar concerns are expressed for Medi-Cal, California's Medicaid Program about financing stem-cell therapies [5]. Payers need access to sufficient capital in order to finance such a sharp impact on their budgets. While the development of generic markets to bring down costs of a high price cure has been put forth as a solution [6], these markets appropriately take time to develop in order to preserve the incentives for innovation for the original developer of the cure. In the meantime, payers and the patients bear the steep upfront costs of a cure while the benefits, in terms of longevity, quality of life, reduced health care costs and other economic benefits, are realized over a longer time period. This creates discrepancies in motifs for financing cure. Recent discussions have highlighted the need to develop credit markets that will be able to amortize the costs of financing a cure over a longer time period [7,8].

I argue t they are not enough disaggre [3] compare realized over a long ti using sector shou t's lifetime. But P thin the private i iaries in those pl ystem in the US as th

A soluti with

a cure can be conceptualized as a ‘non-excludable’ public good. That is, a cure is valued by all private and public payers, but no one payer can exclude the others from appropriating some of its value. Consequently, since no one payer can appropriate the full value of the cure, none may be willing to bear the full costs of the cure – a classic ‘free-rider problem’ [5], which leads to the under-provision of cures and under-investment in innovation. While collective action and consensus are often put forward as a solution to a free-rider problem [10], they may be subject to insurmountable transaction costs within the US health insurance system. Here, I propose a different solution that may lead to efficient provision of cures in the US – monetization of the public good, the trading of which can happen at a much lower transaction costs, much in line with the concept of social impact bonds but more general in its reach [11].

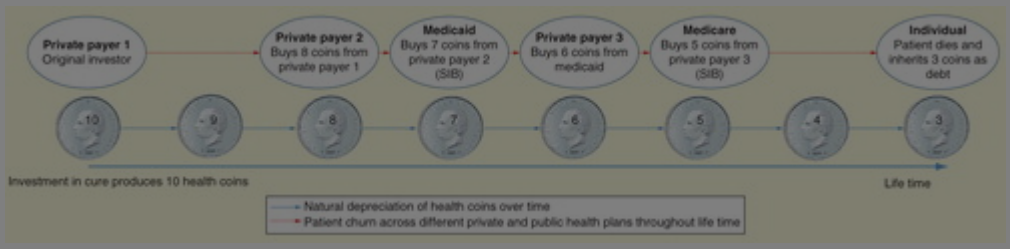
Monetization of cures – HealthCoin?

In Philipson’s housing example, credit markets alone can solve the buyer’s financing problem since a house is an ‘excludable good’. If you do not want to sell the house, you benefit living in it over time and can exclude any other entity to enjoy it during that time. If you sell it, you stop getting the value of living in that house, but recover the forgone value through its selling price. This is not the case when a payer purchases a cure. Even if a payer access credit markets to finance the high costs of cures, it cannot exclude other payers to enjoy the benefits of cure if patients decide change insurance plans. Here, although the original payer is foregoing the subsequent value of cure for these pa[illegible]nt in the cure.

This pro[illegible]uld convert the incre[illegible]) by certain well-esta[illegible]life-years equiv[illegible]nCoins will depre[illegible]ld be traded with rea[illegible] Medicare is the large[illegible]ent of a substant[illegible]fe, it would be expe[illegible]ary

the HealthCoins as patients become eligible for Medicare, much in line with the spirit of social impact bonds that are being used across the world to pay for investments that produce returns to public sector (Figure 1) [12].

Figure 1. A stylized model illustrating how health coins could be traded across public and private payers thereby generating the incentives for efficient investments in developing and utilizing cures.



Display full size

The valuation of HealthCoins for Medicare's perspectives must go beyond just the health care costs perspectives since most cures would likely increase total health care costs rather decrease them due to the extension of life. Therefore, a public insurer is assumed to take a public perspective that values life years and quality-adjusted life years gains beyond the health care costs outlays and therefore wants the private payers to invest in these cures. Private payers would value HealthCoins because they can sell these coins to another insurer if a beneficiary leaves their rolls and also because they are able to recruit a patient who is cured of that disease at the point of recruitment, which would mean less expected health care costs over the subsequent years. This is especially important under the Affordable Care Act that disallows private payers t

A concep pact bond and be a f cures in the pres h plans would gi rns on their inves feature in this ma ivate or public, t t to its rolls. In most with residual adjustm on costs. In lieu of pa ch they may

some amount of risk-sharing with individual patients that they can re-insure, is important since financing the full upfront costs of cures through premiums could be prohibitive [4]. Instead, the impact on premium for private health insurance products would be more moderate with Health Coins as private payers need to distribute only the net costs of buying and selling these units. Moreover, early investments in these cures could decrease the prevalence of the disease in older life thereby reducing the budget impact of these cures for Medicare and the impact on premium for Medicare Advantage plans.

An extensive version of this currency formulation could incorporate patients engaging in proven and well-established health promotion behaviors to add to these Health Coins, which their current payers could secure through premium subsidies to the patients. Physicians would continue to play a critical role at the center of this exchange. Generating Health Coins for a payer could be used as a separate dimension of reimbursements for physicians, which could better incentivize physicians to deliver life-saving interventions at lower costs and to engage patients to invest in health promoting behavior.

Conclusions

Given the disaggregated nature of the health care system in the US, investments in patient's health and in long-term innovation can suffer if costly technology of today yields returns over long periods of time. Monetizing well-established and precise effects on healt te and public pa whether and how ell.

Ackn

I thank t sed here is that of t ngton or the NBER.

Financial & competing interests disclosure

The author has no relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript. This includes employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties.

No writing assistance was utilized in the production of this manuscript.

Notes

Refer

1. Loftus … he Wall Street … finance-co… accessed on 11… Goog…

2. FDA a… www.f… tm [Last

Monetization of cures – HealthCoin?

Conclusions

Acknowledgements

Footnotes

References

Google Scholar

3. Mason C, Dunnill P. The strong financial case for regenerative medicine and the regen industry. Regen Med 2008;3(3):351-63
PubMed | Web of Science ® | Google Scholar

4. Neuman T, Hoadley J, Cubanski J. The cost of a cure: Medicare's role in treating hepatitis C. Health Affairs Blog 2014. Available from: http://healthaffairs.org/blog/2014/06/05/the-cost-of-a-cure-medicares-role-in-treating-hepatitis-c/ [Last accessed on 18 October 2014]
Google Scholar

5. Fulton BD, Felton MC, Pareja C, et al. Coverage, cost-control mechanism and financial risk-sharing alternative of high-cost healthcare technologies. California Institute for Regenerative Medicine Mimeo 2009. Available from: www.cirm.ca.gov/sites/default/files/files/about_cirm/UC-Berkeley%20final%20report%20to%20CIRM%2010.08.09.pdf [Last accessed on 18 October 2014]
Google Scholar

6. Hill A, Cooke G. Hepatitis C can be cured globally, but at what costs? Science 2014;345(6193):141-2
PubMed | Web of Science ® | Google Scholar

7. Philips t. Forbes, 2014. medical-breakt
Goog

8. Go st of curing diseas /-establ diseas
Goog

9. Samuelson PA. The theory of public expenditure. Rev Econ Stat 1954;36:386-9
Web of Science ® | Google Scholar

10. Olson M. The logic of collective action. Public goods and the theory of groups. 2nd ed Harvard University Press; Cambridge, MA: 1971
Google Scholar

11. Coase RH. The problem of social cost. J Law Econ 1960;1-44
Web of Science ® | Google Scholar

12. Azemati H, Belinsky M, Gillette R, et al. Social Impact Bonds: Lessons learned so far. Community Development Investment Review.. Federal Reserve Bank of San Francisco. Available from: www.frbsf.org/community-development/files/social-impact-bonds-lessons-learned.pdf [Last accessed on 11 August 2014]
Google Scholar