



University of Pennsylvania
ScholarlyCommons

Health Care Management Papers

Wharton Faculty Research

9-19-2014

Relative Value Health Insurance and pay for Performance for Insurers: Complements, not Substitutes

Ari B. Friedman
University of Pennsylvania

Siyabonga Ndwandwe
University of Pennsylvania

Follow this and additional works at: https://repository.upenn.edu/hcmg_papers

Recommended Citation

Friedman, A. B., & Ndwandwe, S. (2014). Relative Value Health Insurance and pay for Performance for Insurers: Complements, not Substitutes. *Health Affairs Blog*, Retrieved from https://repository.upenn.edu/hcmg_papers/49

This paper is posted at ScholarlyCommons. https://repository.upenn.edu/hcmg_papers/49
For more information, please contact repository@pobox.upenn.edu.

Relative Value Health Insurance and pay for Performance for Insurers: Complements, not Substitutes

Abstract

The quest for value dominates contemporary health policy. Value, properly defined, is not about cost-savings but about the balance of costs and health benefits – improving the average cost-effectiveness of health interventions. In choosing which care is funded, insurers are a crucial but commonly neglected driver of health system value.



Health Affairs **Blog**

Relative Value Health Insurance And Pay For Performance For Insurers: Complements, Not Substitutes

Ari Friedman and Siyabonga Ndwandwe

September 19, 2014

Background

The quest for value dominates contemporary health policy. Value, properly defined, is not about cost-savings but about the balance of costs and health benefits — improving the average cost-effectiveness of health interventions. In choosing which care is funded, insurers are a crucial but commonly neglected driver of health system value.

Insurers can increase health system value by covering fewer cost-ineffective interventions or covering more cost-effective interventions. Perhaps the earliest attempt to reform insurance, managed care, attempted to pursue both goals, but by the time it was implemented it widely focused (or was perceived to focus) on cost-containment.

A recent insurance reform proposal, known as Relative Value Health Insurance (RVHI), received considerable attention, for instance, in *The Upshot*, *The Incidental Economist*, and *Forbes*. RVHI enables insurers to reduce their contractual obligation to cover “usual and customary” care. This and similar earlier proposals rely on the insurers’ natural incentive to cut costs. Less well-covered, however, are proposals to alter the very incentives of insurers to improve health, which we will call “pay-for-performance-for-insurers” (P4P4I).

Like RVHI and its relatives, P4P4I proposals allow insurers to deny coverage for expensive care that provides few health benefits, but they also incentivize insurers to cover care that they suspect will improve health cheaply. P4P4I faces substantial drawbacks, however, which limit its ability to substitute for traditional health insurance or its RVHI-reformed variants.

In this post, we will categorize existing insurance-based proposals according to whether they reduce contractual obligations to cover care (contract reform proposals) or increase insurer incentives to improve health (P4P4I). We will examine the limitations and advantages of each. Finally, we will offer a proposal for combining the two into a more efficient insurance product.

Overview Of Insurance Reform Proposals

Before discussing the relative merits of each proposal, we first describe each. This is not meant to be a definitive list, but rather to capture many of the major proposals in common discussion today or which have interesting features related to the health improvement/cost containment tradeoff.

Relative Value Health Insurance proposes that, rather than the government ranking plans based on the anticipated percentage of all costs that they cover—as is the case with the current “metal” rating system in the exchanges—the government should rank plans based on the maximum cost-effectiveness of interventions that they cover. As an attempt to allow insurers to deny coverage for

care that is very expensive relative to the amount of additional health improvement provided, it is spiritually similar to what could be called the Pauly Plan (“last year’s care at last year’s prices”) or even the pure form of managed care (consider the number of denials issued by early 1990’s HMO’s).

All three approaches — MC, RVHI, and Pauly — operationalize these denials somewhat differently, however. Managed care seeks to customize denials on a per-patient basis, but in untethering itself from explicit contractual language about each intervention opens itself to substantial legal disputes. RVHI declares a cost-effectiveness threshold above which no care will be covered. Pauly’s proposal primarily serves to limit coverage of new interventions. (Pauly also alluded to the possibility of using cost-effectiveness for existing interventions, but for the purposes of this post that component of his proposal will be lumped in with RVHI.)

By contrast, pay-for-performance schemes aimed at insurers do not attempt to specify in advance what interventions the insurer must cover or must not be obligated to cover. Instead, they look at outcomes, from proximal ones such as what proportion of patients receive screening thought to be related to health, to distal (or longer-term, more indirect) ones such as blood pressure, to true health outcomes such as the number of myocardial infarctions and deaths.

P4P4I has received much less attention than pay-for-performance-for-providers (typically just called “pay-for-performance”) or pay-for-performance-for-patients (P4P4P). The major example so far has been the Medicare Advantage Quality Bonus Payments Demonstration program (MA QBP). The QBP program has focused heavily on process measures; its 48 performance measures include only 3 outcome measures (e.g. readmissions) and 8 intermediate outcome measures (e.g. proportion of diabetics whose blood sugar was well-controlled). Pay-for-Health, a proposal by one of the authors, is conceptually similar, but would involve much more substantial payments for broad outcomes such as the mortality rate.

To understand how P4P4I proposals differ from the contract reform proposals, and in what circumstances they produce similar results, we must dig deeper into the economics of health insurance.

A Brief Introduction To Some Of The Economics Of Health Insurance

A simple but powerful model of insurance is to conceive of it as having just two stages in which decisions must be made, corresponding to the annual purchase/consume cycles of most health insurance. In the first period (often during an open enrollment period), an individual purchases an insurance contract. In the second (the covered period), she either gets sick or she doesn’t. Then the cycle begins again with the purchase of the next year’s contract. The question we are concerned with when comparing insurance reform proposals is what interventions the insurer covers in the second period.

Game theorists would call this a “two-period, repeated game.” In a repeated game in which a customer purchases a bottle of water at his corner store, he is largely protected from fraud (say, the cashier claiming he handed her a \$5 bill instead of a \$20 when providing change) because the store knows his future business is worth more than the value of this one transaction. In a repeated game in which he buys a used car, however, he might be stuck with paying too high a price or receiving a low-quality automobile. Two factors combine to produce this different result: the amount of this transaction relative to the anticipated number of future transactions is high, and the amount of information he has is low—if the car breaks three years later he might not necessarily blame to the car salesman.

Health insurance suffers from both of these problems. Turnover in the health insurance market is high, meaning each year’s contract represents a substantial fraction of the revenue the issuer will receive from each customer. And, because there are thousands of potential diseases one could develop, each of which with its own evidence base on which interventions improve health and in whom, customers are not likely to notice if the insurer doesn’t cover less visible but health-improving interventions.

This problem is particularly acute because, as pointed out by Korobkin and others, with health insurance, the insurer may not want the customers who have the most information about the quality of their product (those who have used substantial amounts of care this year) to buy contracts again the next year, because they are more likely to have higher expenses next year. So insurance companies' incentives are to cover care to the extent that they are legally and contractually obligated, avoid any allowable coverage denials that might receive enough publicity to hurt future contract purchases, and otherwise deny care.

The traditional solution to this problem was the "usual and customary" wording of most insurance contracts. Unfortunately, because of the phenomenon of moral hazard, consumers push for the insurer to pay for care in period 2 that they would not be interested in paying in period 1. Thus, in a traditional health insurance arrangement, we should expect that insurers cover every health-improving intervention they are contractually required to cover—no matter how poor its cost-effectiveness.

Since contract wording is the problem when it comes to too much care, contract wording may provide the solution. The contract reform proposals operationalize this in slightly different ways. The pure version of managed care added other contractual language giving HMOs power to deny or burden certain claims. The Pauly Plan leaves past coverage largely intact but deals with spending growth by empowering insurers to limit coverage of new technologies representing incremental improvements. Korobkin's Relative Value Health Insurance goes after existing interventions that are cost-ineffective by essentially changing contract wording to, "Usual and customary care not exceeding a cost-effectiveness of X."

If traditional health insurance covered every possible health-improving intervention, then these proposals would offer a Panglossian solution: the most health possible for a given insurance dollar. However, given the myriad complaints of providers, public health officials, and providers about denial of cost-effective care by even fee-for-service insurers (as well as suggestive anecdotes such as the decades-long non-coverage of expensive but highly cost-effective smoking cessation programs and other examples), that may not be the case. Insurers may be particularly loathe to cover unusual or not customary care, such as behavioral economics interventions or quality improvement initiatives.

Pay-for-performance-for-insurer proposals tackle the problem of under-provision of high-value interventions. Rather than contractually requiring coverage of usual and customary care, then allowing non-coverage of certain types of care which may be low-value, they place the insurer at risk if customer health does not improve, using metrics related to the patient's health outcomes.

For a P4P4I contract, in the first period a consumer (the insured individual, employer, or government agency) purchases a contract that stipulates penalties and rewards to the insurer that vary depending on the health state of each patient or population of patients. In the second period the insured winds up in a given health state and the insurer pays out accordingly. If the incentives are big enough, the insurer should cover care that makes measured disease states less likely, be it through primary prevention or treatment.

The MA QBP program, then, is really two insurance contracts. The first is a traditional health insurance contract, stipulating that the insurer will pay for all usual and customary care. The second is the contract on health metrics, stipulating that the insurer will receive more or fewer dollars when given health outcomes are achieved. There is no reason to think that the first contract could not be reformed according to either the RVHI or Pauly proposals, as will be discussed later.

Advantages And Disadvantages Of Each Proposal

There is no clearly superior proposal. Rather, each carries with it various trade-offs and assumptions. The table summarizes these differences (click on table for enlarged view).

Reform type	Proposals	Contract timing	Required consumer rationality and information to pick optimal plan	Government intervention required above status quo	Data requirements	The degree to which insurers are at risk for health outcomes	Intervention types covered	Tradeoff between lower costs and better health	Cover all the time vs. some of the time (degree of personalization)	Moral Hazard	Proportion of all health needs covered
Status quo	"Traditional" health insurance - managed care or fee for service	Ex ante (Inputs)	-Full comprehension of insurance policies—what would and would not be covered by different insurance plans -hyper-rational, mathematical, and can articulate preferences in order to optimally allocate resources (Korobkin, 2013)	None	Actuarial value	Only through demand feedback effect for next year's contract purchasing	"Usual and customary"	Status quo	Contractually obligated to provide covered interventions to all (absent managed care-like utilization review)	Substantial	High
Contract reform proposal	Pauly Plan	Ex ante (Inputs)	Very low: Pick a year of technology	None	Knowledge of which interventions were covered in previous year by most plans	Only through demand feedback effect for next year's contract purchasing	"Usual and customary" interventions introduced before cutoff date	Does not cover newer interventions (typically higher costs relative to benefits)	Contractually obligated to provide covered interventions to all (absent managed care-like utilization review)	Substantial but "frozen" (no growth due to moral hazard)	High
	Relative Value Health Insurance (RVHI)	Ex ante (Inputs)	Low: Comprehension of relative rankings on 1-10 scale.	Conduct CER, rate plans	Cost- and comparative-effectiveness of each potential intervention	Only through demand feedback effect for next year's contract purchasing	"Usual and customary" interventions below a cost-effectiveness threshold*	Does not cover interventions whose costs relative to benefits exceed a threshold	Contractually obligated to provide covered interventions to all (absent managed care-like utilization review)	Limited in terms of which interventions are covered; no limits on quantity consumed of covered services (i.e. personalization)	In pure form, only those for which cost-effectiveness data is available
P4P4I	MA VBP and P4I	Ex post (Outputs)	Medium: Understanding of what is captured by metrics and what isn't.	Calculate metrics based on insured population's health outcomes	Non-gameable metrics covering dimensions of health contracted on	Substantially for dimensions of health captured by the metrics.	No bias towards medical care vs. other types of interventions.	Lower costs, lower health if standalone; higher costs, better health if added to traditional health insurance contract	Insurer fully incentivized and empowered to cover interventions in those who benefit most	Low (resembles Zeckhauser 1970 state-contingent contracts)	Low-moderate (Mortality well-covered; morbidity less so until/unless broader metrics can be developed)

Author's note: *Korobkin's proposal is ambiguous as to whether unconventional interventions that fall within the cost-effectiveness threshold of a plan would be covered. It seems not implausible that such an arrangement could be written into contracts.*

Value

New interventions are often very expensive relative to health benefits (both because fixed development costs have been paid long ago and because the "easy" targets in drug development were the first to be targeted). Therefore, an insurer operating under RVHI and one operating under the Pauly Plan will have substantial overlap in which interventions they will deny coverage for. With either, the cost effectiveness can be fine-tuned for each plan by changing the threshold.

In their purest form, P4P4I contracts take the value proposition one step further: not only do they enable denial of payment for interventions that are expensive relative to the amount of health benefit, but they enable the insurer to decide on a per-patient basis what to cover and what not to, as long as health improves sufficiently. It also allows insurers to substitute freely between "usual and customary" care and unusual and not customary interventions such as health systems interventions, quality improvement interventions, behavioral economics interventions, and public health-style interventions. While many of these are being covered tentatively by a few insurers, because insurers are not contractually obligated to cover them, their future remains uncertain if they are merely very cost-effective rather than cost-saving.

Domains of health covered

In its pure form (not attached to a traditional health insurance contract), P4P4I can address only those health concerns for which there is a metric available. Particularly likely to be neglected are mental health and other health domains which are not only difficult to measure, but for which available measurements are subjective and therefore subject to manipulation when substantial sums are at risk. The Pauly Plan's emphasis on past treatments may bias coverage away from particular domains for which newer treatments predominate (neurological or oncological treatments, for instance), but overall it is much more able to cover the broad sweep of human health than P4P4I proposals. This may be why MA QBP is tied to traditional health insurance rather than a pure, standalone P4P4I contract.

RVHI is an intermediate case. While there is no technical barrier to developing comparative effectiveness measures for all domains of health, the studies are expensive and even at post-ACA levels of funding it would take decades to develop enough of a knowledge base on which to base an insurance plan. Instead, Korobkin proposes to couple RVHI to what is essentially the Pauly Plan — grandfather in interventions covered before some date, and require all new interventions to come with cost-effectiveness numbers. Just as in the interest of feasibility the MA QBP demonstration linked a P4P4I contract to a traditional health insurance plan, to practically cover more than a few narrow domains of health, RVHI may need to be linked to a (modified) traditional health insurance plan.

Data requirements, governmental intervention, and ease of enforcement

The Pauly Plan's strength is its ease of enforcement and low data requirements — all parties, including courts, should be able to agree on the introduction date of a new intervention. RVHI and P4P4I schemes require considerably more data and consequent governmental involvement in contract enforcement. Compared to managed care, they are more easily enforceable (for those interventions for which cost/comparative-effectiveness studies have been conducted or those health outcomes for which metrics are available), but compared to the Pauly Plan they are considerably less so.

Adverse selection and “cherry-picking”

Any proposal that seeks to limit the generosity of care will be subject to adverse selection (sicker customers selecting into more generous plans) when traditional insurance plans are available. Korobkin and Frakt offer several solutions for this, including shorter open enrollment periods and exclusion of low-value care for some period after switching to a more generous plan. Selection problems with P4P4I, by contrast, come from the insurer's selection decisions. Because performance pay is rewarded relative to the expected health outcomes, insurers will profit handsomely if they are able to attract a healthier customer base. Competition among insurers may be utilized to partially mitigate this problem, by making payments relative to how other insurers' patients fared rather than relative to an absolute standard.

Whence the ACO

Accountable Care Organizations encourage care coordination and are at least potentially incentivized based on health metrics, albeit with substantial drawbacks. Given the breadth of different structures allowable under the ACO umbrella, however, they may be the best hope for implementing P4P4I, at least among those ACOs which incorporate an insurance component or are otherwise large enough to build true health outcomes in as metrics. Even in the absence of an insurer-ACO, however, they may be efficient partners for insurers which have adopted contract reform or P4P4I to implement their value-improving interventions.

Combining Complementary Characteristics

No plan, be it contract reform or P4P4I-based, has a clear advantage over the others. Combining several proposals may have substantial benefits. For instance, an insurer might offer a plan which covered care with demonstrated cost-effectiveness below \$25,000 per Quality-Adjusted Life Year (RVHI), also covered all “usual and customary” care invented more than a decade prior (Pauly Plan), and in which the insurer refunded 50 percent of premia if all-cause mortality among the insured rose more than two standard deviations above its peers and conversely received an additional 50 percent of premia if all-cause mortality fell by an equivalent amount (P4P4I).

The strengths of each component complement the others weaknesses. Including broad coverage of medical care mitigates concerns over adverse selection and omitted domains of health inherent to high-powered P4P4I schemes. Including usual and customary care deemed acceptable in the past helps to jump-start the feasibility of RVHI given the limited amount of comparative effectiveness research currently available. Including coverage of newer, highly cost-effective interventions (both through RVHI and through P4P4I) makes pushing back the date-based cutoff of the Pauly Plan more palatable.

Palatability—both political and individual—may be the strongest argument for bringing these insurance reform elements together. Since, in Pauly's words, we lack the courage to adopt “cost reducing but slightly quality reducing innovations,” coupling a health-improving, cost-increasing redesign of insurance with a health-neutral or slightly health-reducing but substantially cost-reducing redesign may finally make ‘rationing’ politically viable. At least as importantly, it may finally achieve the long-elusive goal of shifting insurance dollars from expensive, low-benefit care to less expensive, higher-benefit care.

ASSOCIATED TOPICS: COSTS AND SPENDING, INSURANCE AND COVERAGE, PAYMENT POLICY, QUALITY
TAGS: BUSINESS OF HEALTH CARE, COMPARATIVE EFFECTIVENESS, CONSUMERS, EFFECTIVENESS, HEALTH
CARE COSTS, INNOVATION, INSURANCE, PAYMENT, POLICY, PUBLIC OPINION, QUALITY, SPENDING

[About *Health Affairs* Blog](#) | [Contact *Health Affairs* Blog](#) | [Terms Of Use](#) | [Project HOPE](#)

Copyright 1995 - 2017 by Project HOPE: The People-to-People Health Foundation, Inc., eISSN 1544-5208.

Health Affairs gratefully acknowledges the support of many funders.