

## **Value-Based Purchasing in Health Care: An Idea Whose Time Has Gone**

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In 2010, with the passage of the Affordable Care Act (ACA), the U.S. healthcare system began to make a series of dramatic changes. Many of the estimated 18 million individuals who suddenly became insurance-eligible began to purchase their insurance through a set of newly established insurance exchanges. In many instances, their care was to be provided through some new entities known as accountable-care organizations, or ACOs. Moreover, a host of new measures was to be put in place in an effort to reduce the cost of providing care.

One of the goals of the ACA was to “bend the cost curve.” To do so, insurers (including ACOs) would need to transcend the “mano-a-mano” negotiations that traditionally had characterized the U.S. healthcare system. Indeed, most of the entities involved viewed the “system,” correctly, as a zero-sum game where each player attempted to maximize its slice of the total revenue pie.

### **Market-Related Issues**

One reason for this internecine warfare lies in the structure of the U.S. healthcare market (which, ironically, is similar to the markets in many countries that claim to offer universal coverage). This market is unlike any other described in an economics textbook. In no other market that we know of, does Person A (a patient) receive services ordered by Person B (a physician or nurse) that are delivered by Person C (a hospital, clinic, laboratory, radiology suite, etc.), paid for by Person D (a health plan or social security agency), that receives much of its revenue from Person A’s employer (or Person A as a purchaser, not a patient).

The result, shown in Exhibit 1, is five separate markets each with a distinct pricing unit. For example, in one of the sub-markets, there is premium sharing or direct payments to an employer or similar entity (such as a social security system, or an insurance exchange). In another, there is a per-member-per-month payment between two of the parties. In a third sub-market, there is a deductible or co-insurance payment, In a fourth there is a co-payment.

In the fifth sub-market (the one involving a health plan (or other payer) and one or more care providers, there is a wide variety of payment arrangements. The options in this last market include sub-capitation, fee for service, discounted fee for service, per discharge (DRG), and “bundled” per-discharge payments that include the care provided by both physicians and a hospital, and that comprise both inpatient and post-discharge settings.

### **Value-Based Purchasing**

The current darling of the healthcare industry—and the purported solution to all the woes of the past—is known as *value-based purchasing*. Indeed, value-based purchasing has become so popular that, a few years ago, the Healthcare Financial Management Association initiated a Value Project that focused on “value-driven business models of care.”<sup>1</sup> In part, the effort originated from the work of some of the faculty at Harvard Business School, where the main focus was on the value-creating power of competition.<sup>2</sup>

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<sup>1</sup> “HFMA Announces Next Phase of Value Project,” Healthcare Financial Management, May 2013

<sup>2</sup> Porter, M., and E.O. Teisberg, *Redefining Health Care: Creating Value-Based Competition on Results*, Boston, Harvard Business Press, 2008.

A subsequent approach to this concept focused on matters such as risk (actuarial, financial, and strategic), how it was going to be managed, and how the resulting savings in a contract were going to be distributed among the various occupational groups involved in the contract.<sup>3</sup> Nothing could better represent health care's pernicious zero-sum game.

Not to be outdone, the *New England Journal of Medicine* joined in the fray. The *NEJM Catalyst*, published in 2015, contained several articles that were related to value in health care.<sup>4</sup>

Finally, supporting the idea that the issue of striving to increase value is not unique to the United States, a study was undertaken in Europe that addressed what the authors called "strategic purchasing." This study compared purchasing practices in 10 European countries. Despite not finding good evidence of actual strategic purchasing, the authors nonetheless concluded that "there are individual components of strategic purchasing that are worth pursuing and can provide benefits to health systems."<sup>5</sup>

Despite all this work, and notwithstanding the array of value-based purchasing models that have been proposed, we should not deceive ourselves. If the cost curve is going to bend under value-based purchasing, all players are going to be striving to grab some value from someone else in the system. As the healthcare "food chain," shown in Exhibit 2, suggests, bending the cost curve means that some players in the system are going to be receiving less than before. Indeed, unless an entity can make sure that its costs decline by less than the reduction in its payments, its value is going to worsen.

Exhibit 3 is an example of how one aspect of this scenario played out at Trinity Regional Health System in Illinois. Working with an oncologist, Trinity's management developed protocols for using less expensive medications for chemotherapy. For example, they switched to mixing an antibiotic with a solution on-site at the pharmacy, rather than buying the pre-mixed medication in frozen form. Over the course of a year, Trinity implemented 58 medication utilization initiatives, saving \$600,000 in the first six months, with total annualized savings of \$2.2 million.<sup>6</sup> *And*, it should be noted, a decline in *some other entity's* revenue by a equivalent amount!

Trinity is not alone. There is ample evidence to suggest that the prices charged for various tests and procedures vary enormously from one region to the next. These variations are large enough to suggest that something other than differences in efficiency and factor prices are at work. For example, a recent report by the Centers for Medicare and Medicaid Services, shows that the price charged for an MRI and Magnetic Resonance Angiography without Contrast ranges from a low of \$1,518 in Dubuque, Iowa to \$7,258 in Lancaster Pennsylvania. Even the little stuff shows wide variations—the prices for a Level II Eye Test and Treatment ranged from \$120 in Madison,

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<sup>3</sup> Pizzo, J.J., et. al., "Navigating Performance-Based Risk," *Healthcare Financial Management*, July, 2013

<sup>4</sup> See, for example, Lee, T.H., E.W. Campion, S.M. Morrissey, and J.M. Drazen, "Leading the Transformation of Health Care Delivery—The Launch of the NEJM Catalyst," *New England Journal of Medicine*, 9 December 2015

<sup>5</sup> Klasa, K., S.L. Greer, and E.van Ginneken, "Strategic Purchasing in Practice:Comparing Ten European Countries," *Health Policy*, 122 (2018) 457-472.

<sup>6</sup> C. Bates and B. Richards, "Reducing Pharmacy Costs Through Improved Utilization," *Healthcare Financial Management*, June 2013.

Wisconsin to \$719 in Philadelphia.<sup>7</sup> Data from the Dartmouth Atlas of Health Care show similar variations for the chronically ill. The range during the last two years of life for treatment that CMS rated as similar was from \$105,067 at New York University's Langone Medical Center to \$44,090 at Scott and White Memorial Hospital in Texas.<sup>8</sup>

Unless there are significant differences in the benefits being received in these different locales, which CMS suggests is not the case, something is seriously out of whack with value-based purchasing. Some stakeholder, somewhere in the system, is not getting high enough benefits for the payments it is making, or it is paying too much for the same benefits that others get elsewhere.

Even the elimination of waste, estimated by some to account for over one-third of the system's resources, is not without its value-related consequences.<sup>9</sup> If over-treatment is eliminated, those people who did the (over) treatments will have their compensation reduced. If administrative complexity is to decline, those who processed and otherwise dealt with that complexity will no longer need to be on the payroll. Indeed, in a system where a large fraction of the resources expended are in salaries, bending the cost curve can only be achieved by bending unemployment queues in the opposite direction. Similar analyses can be made for other forms of waste, such as failure to coordinate care, unreliable execution of care, and fraud and abuse. In essence, value-based purchasing is, at its core, a zero-sum game.

### **A Non-Zero-Sum Approach**

To talk about value in a non-zero-sum way, we need to begin by comparing the benefits that the average consumer (or patient) receives in exchange for his or her payments (premiums, deductibles, and co-payments). As a recent OECD report indicated, the U.S. spends almost twice per capita of what other developed countries spend. But in terms of benefits (the numerator of value), the U.S. is not even close to many of these countries.<sup>10</sup> Even when benefits are measured solely in terms of insurance coverage, infant mortality and life expectancy, the U.S. falls far behind.

Take France, for example. Exhibit 4 indicates how dramatic the differences are between the French and U.S. systems. Given the greater benefits received by the French population in terms of insurance coverage (universal), life expectancy (higher) and infant mortality (lower), compared to the associated costs (much lower across the board) one can easily argue that the French system is creating much higher value than the American one.

So, bearing in mind that bending the cost curve means reducing someone's (perhaps many people's) value, the more important question is "How can value be enhanced for stakeholders in the most sustainable way possible?" The answer lies not value-based purchasing, but in value-based partnering.

To understand the difference between these two concepts, consider what constitutes value, not just for one stakeholder but for all of them. As Exhibit 5 indicates, each stakeholder in a health-care system has a different measure of value, and each has a different set of desired benefits it wishes to receive and different costs it is willing to incur to obtain them.

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<sup>7</sup> Centers for Medicare & Medicaid Services (CMS), 2013

<sup>8</sup> Wennberg, J. E. et. al., Dartmouth Atlas of Health Care, 2008

<sup>9</sup> Berwick, D. and A. Hackbarth, "Eliminating Waste in U.S. Health Care," JAMA, 11 April 2012, reported in an interview with *Healthcare Financial Management*, May 2013 issue

<sup>10</sup> See Anderson, G.F. et al., "Per Capita Health Expenditures of 10 Selected Countries in the Organization for Economic Cooperation and Development (OECD), 2010," *New England Journal of Medicine*, 2013;368:2247-2249.

For example, the final benefit for an employer might be improved employee productivity (measured in terms of time lost to absenteeism, longer than (or more frequent than) needed breaks, reduction in workplace errors, lower turnover, and a variety of other factors). An employer also wants its employees to be satisfied with the health benefit plan it provides to them. The employer's cost can be measured in terms of administrative activities needed to manage the plan, premium payments, or, in the case of a self-insured entity, direct payments for care.

In terms of the 4-actor market discussed earlier (5 actors if we distinguish consumers who purchase insurance from the same consumers when they become patients), each pair of stakeholders has a different way of giving and receiving value. As shown in Exhibit 5, the process begins with each stakeholder group determining what it expects to gain with its participation in, or contribution to, the healthcare system. Out of these expectations arises a set of "value equations." Moreover, as Exhibit 6 indicates, the value equations are *linked*. As a result, all stakeholders are part of a *collaborative partnership*, rather than simply purchasers of goods or services in a zero-sum game. Under these circumstances, everyone can win.

### **Structuring a Value-Based Partnership: The Cincinnati Project**

Structuring this partnership so that each stakeholder can have enhanced value is tricky. A true collaborative partnership can be achieved, however, if everyone brings his or her value equation to the bargaining table and all stakeholders are willing to negotiate in good faith.<sup>11</sup> As a simple example, consider the following:

In Cincinnati, Ohio, several years ago, the value-based partnering process began with a problem that appeared to be impeding employee productivity. Clinical depression had been identified as an impediment to productivity by Cincinnati's Community Health Status Committee, a collaborative provider- and employer-funded effort. After gathering and analyzing community data, the committee recommended that health care providers be given additional education in the detection and treatment of depression.

Under the value-based partnering approach, such a recommendation would indicate a need for one or more of Cincinnati's health plans to develop an appropriate new program. To do so, however, health plans would need to consider an employer's value equation, and undertake their analyses in such a way that the increased cost of the program could be translated into an increase in the employer's value equation. Under this scenario, employers would pay more in healthcare premiums, but they would expect an increase in, say, employee productivity that more than offset their higher premium cost. If they did not see the potential for such a payoff, they would not accept the program and the problem would be referred to the county's department of public health.

Simultaneously, health plans would be working with health care providers using the plans' value equations to make sure that appropriate quality was being delivered at reasonable cost. Again, for the plans to find the effort worthwhile, their value equations would need to increase.

Once employers agreed, the program would be included in their health plan's offering. However, employees' decisions to avail themselves of the new program would depend upon *their* value equations; i.e., whether they felt that the new program's features and their potential satisfaction with them would be worth whatever incremental costs (co-payments, travel expenses, opportunity costs) they would incur. If employees did not take advantage of the new program, the employer's value equation would not increase as planned.

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<sup>11</sup> For additional discussion of these ideas, see Young, D.W., et. al, "Value-Based Partnering in Healthcare: A Framework for Analysis," *Journal of Healthcare Management*, 46:2, March/April 2001. See also Young, D.W., et. al, "Toward a Value-Based Healthcare System," *American Journal of Medicine*, Volume 110 (February 1, 2001); Young, D.W., et. al., "Beyond Health Care Cost Containment: Creating Collaborative Arrangements Among the Stakeholders," *International Journal of Health Planning and Management*, 2001; 16: 207-228.

Therefore, the results of the effort would need to be measured: increased productivity, greater employee satisfaction, and higher quality of care. As these results were measured, the improvements could be translated into their impact on the various value equations, and all parties could determine whether their equations increased as planned. The resulting learning could be used to reevaluate the new program and perhaps make changes to it.

### **Win-Win Relationships**

In short, in a true partnering relationship, health plans can receive more revenue from employers to cover the cost of developing new programs to provide new services that are based on the needs of their consumers/patients. Most employers will gladly provide this additional revenue if the health plan can demonstrate that the new services are enhancing employee productivity in measurable ways, and the enhanced productivity can be translated into benefits that exceed the incremental costs, i.e., that the employers' value equations are increasing.

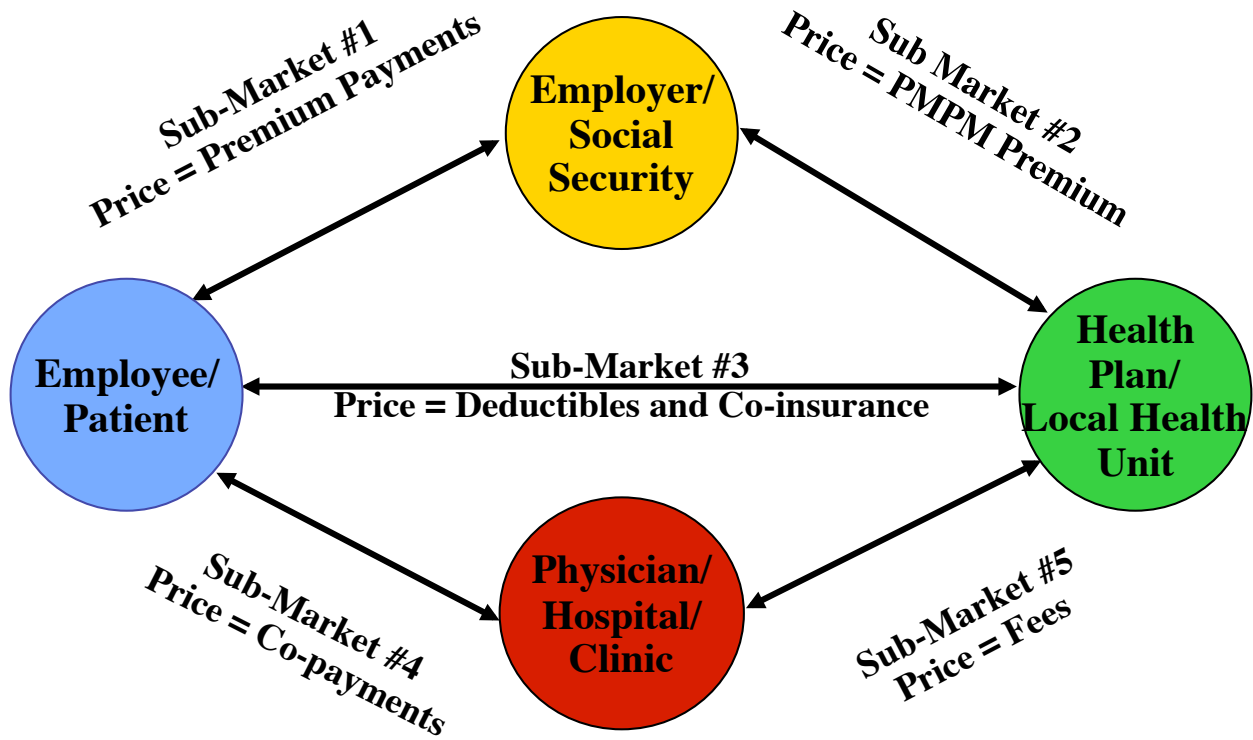
In addition, physicians and other providers can be compensated differently for providing the new services such that *their* value equations also can increase, but often in nontraditional ways. Imagine, for example that instead of pressuring a primary care physician to provide more visits per hour, an ACO or health plan changed its compensation formula to pay a nurse practitioner for one hour spent educating a group of, say, 10 diabetic patients on how to better manage their blood sugar. A physician might attend the last 15 minutes of the meeting to answer questions. The result: in one hour, 10 patients would have learned from the NP (and from each other) about how to better manage their blood sugar, and the physician would have answered the questions of all 10 patients in a single 15-minute visit.

As a consequence, fewer diabetics will need to visit the emergency room due to blood-sugar issues, *and* individuals with diabetes will be more productive in the workplace. They will have lower absenteeism, need fewer breaks, be more focused on their jobs, and make fewer job-related errors.

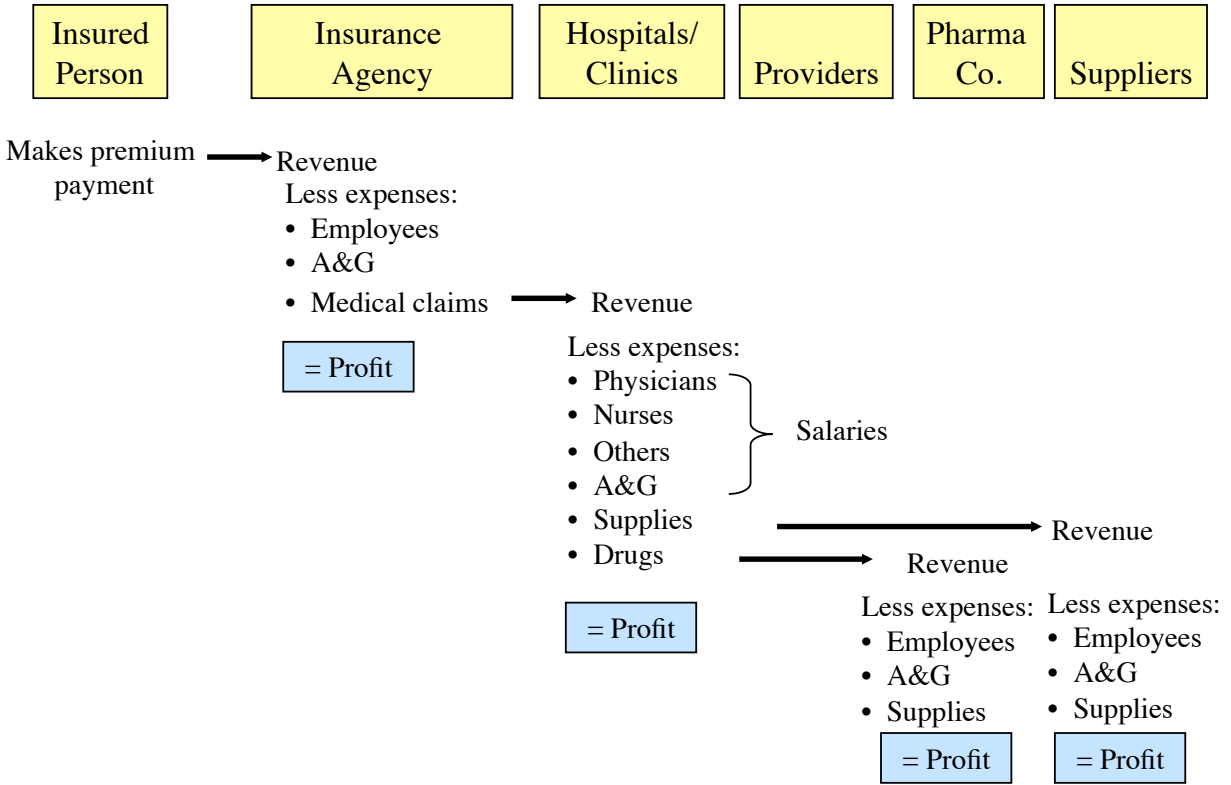
Importantly, however, the physician's compensation for the 15-minute visit would need to reflect the fact that he or she has sacrificed the compensation from ten 10-minute visits with individual patients in exchange for one 15-minute visit with ten patients. If the compensation formula is not modified, the health plan's value equation will have increased at the expense of the physician's value equation.

As new stakeholders in the healthcare system, newly-insured patients (and their employers), health exchanges, and ACOs have a unique opportunity to cast off the shackles of the past—to find new ways to manage healthcare costs and the resulting benefits. If they begin by defining their value equations, and are willing to sit at a negotiating table as partners, not as competitors (in a bizarre continuation of health care's zero-sum game), they will have the opportunity to be truly revolutionary in how they approach their mandates. All it takes is a willingness to think beyond the current models of care delivery and to focus instead on how each stakeholder can enhance his or her value equation while simultaneously improving the value equation of the others. This is not value-based *purchasing*; it is value-based *partnering*.

## Exhibit 1. The Healthcare Market is Actually Five Markets with Five Pricing Units



## Exhibit 2. The Health Care Food Chain



### Exhibit 3. Changes Made at Trinity Regional Health System

<b>Drugs by Department</b>	<b>Old Cost</b>	<b>New Cost</b>
Colony stimulating agents (oncology)	\$2,700/dose	\$250/dose
Bond modifying therapy (oncology)	\$900/dose	\$35/dose
G2b3a inhibitor (cardiology)	\$1,700/patient	\$1,200/patient
Diuretic (nephrology)	\$275/dose	\$2.50/dose
Anesthetic gases (anesthesia)	15% reduction	

Source: C. Bates and B. Richards, "Reducing Pharmacy Costs Through Improved Utilization," *Healthcare Financial Management*, June 2013.




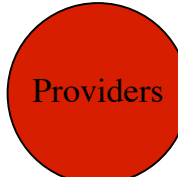


**Exhibit 4. U.S. Healthcare Value Compared to France**  
**(All figures in U.S. dollar equivalents except where noted)**

	<b>France</b>	<b>U.S.</b>
<b>Spending Coverage</b>		
Total health spending per capita	\$3,974	\$8,233
Government health spending per capita	3,061	3,967
Percent uninsured	0%	15.7%
<b>Health Outcomes</b>		
Life expectancy at birth (in years)	81.3	78.7
Infant mortality per 1,000 births	3.6	6.1
<b>Costs per Episode</b>		
Doctor's office visit	30	95
Hospital day	853	4,287
Angioplasty	7,564	28,182
Appendectomy	4,463	13,851
Childbirth delivery (normal)	3,541	9,775
Hip replacement	10,972	40,364
Heart bypass	22,844	73,420
<b>Costs of Tests</b>		
Abdominal CT scan	183	630
Angiogram	264	914
MRI	363	1,121
<b>Name-brand drugs (30 day prescription)</b>		
Cymbalta	42	176
Liptor	48	124
Nexium	30	202

Source: OECD, reported in *Consumer Reports*, July 2013

# Exhibit 5. Stakeholder Value Equations

Value to	equals	Benefits	minus	Costs	
		<p>Final Benefits</p> <ul style="list-style-type: none"> <li>Maximum Health Status</li> <li>Protection against Financial Risk</li> </ul>		<p>Intermediate Benefits</p> <ul style="list-style-type: none"> <li>Access to Quality Care</li> <li>Technical Service</li> <li>Comprehensive Coverage</li> </ul>	<ul style="list-style-type: none"> <li>Premium</li> <li>Contributions</li> <li>Co-pays</li> <li>Deductibles</li> </ul>
		<p>Final Benefit</p> <ul style="list-style-type: none"> <li>High Productivity</li> </ul>		<p>Intermediate Benefits</p> <ul style="list-style-type: none"> <li>Improved Health Status</li> <li>Employee Satisfaction w/Benefits</li> <li>Retention</li> </ul>	<ul style="list-style-type: none"> <li>Premiums</li> <li>Administrative Expenses</li> <li>Claims expenses</li> </ul>
		<p>Final Benefit</p> <ul style="list-style-type: none"> <li>Revenue</li> </ul>		<p>Intermediate Benefits</p> <ul style="list-style-type: none"> <li>Comprehensive Network</li> <li>Manageable Risk</li> <li>Improved population health status</li> <li>Reputation</li> </ul>	<ul style="list-style-type: none"> <li>Cost of administration</li> <li>Cost of Claims</li> </ul>
		<p>Final Benefits</p> <ul style="list-style-type: none"> <li>Professional Satisfaction</li> <li>Revenue</li> </ul>		<p>Intermediate Benefits</p> <ul style="list-style-type: none"> <li>Clinical Autonomy</li> <li>Fair Compensation</li> <li>Satisfying Clinical and Professional Relationships</li> <li>Maintenance of Provider-patient Relationship</li> </ul>	<ul style="list-style-type: none"> <li>Care delivery and administrative costs</li> </ul>

## Exhibit 6. Linkages Among Value Equations

