





Robert Wood Johnson Foundation

Value-Based Purchasing: How to Succeed in the Changing Business of Health

June 2018

The Green & Healthy Homes Initiative (GHHI), founded in 1986, is a national 501(c)3 nonprofit, nonpartisan organization that provides evidence-based direct services and technical assistance to create healthy, safe and energy efficient homes to improve health, economic and social outcomes for low-income families while reducing public and private healthcare costs.

With support from the Robert Wood Johnson Foundation, AcademyHealth launched the Payment Reform for Population Health initiative in 2016 to explore improving community-wide health through the transformation of the health care payment system. As part of their efforts to identify the opportunities and challenges associated with linking payment reform to population health, AcademyHealth contracted with the Green and Health Homes Initiative (GHHI) to provide technical assistance to a large social service organization to explore structuring a risk-based contract with a major local Medicaid managed care plan to provide targeted services to a high cost-high needs population.

To learn more about the Payment Reform for Population Health initiative, visit <u>www.academyhealth.org/p4ph</u>.

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Executive summary

Value-based purchasing, when appropriately enabled, changes the competitive landscape for insurance purchasers, plans, and service providers, who will need to adapt to be successful.

The current healthcare system in the United States is changing by moving towards a system of value-based purchasing. That change will impact how insurance, care, and health are paid for, which will impact the business operations of those purchasing insurance and services that impact health. Those changes will alter the competitive dynamics that determine which players in the healthcare system are successful as businesses. Value-based purchasing can make good health good business, which makes the players that have a larger health impact more competitive – if they can leverage it.

The dynamic of better health being better business leaves the insurance purchasers, insurance plans, and service providers in need of new organizational capabilities to be competitive. Insurance purchasers will need to understand the value of their insurance purchases including the long-run health impacts as well as how their insurance purchasing decisions impact their insurance plan's decisions about investing in health. Insurance plans will need to have deep understanding of their revenue models and be able to strategically manage investments in health in new, more nuanced, and complex ways. Service providers, including a new bevy of nontraditional providers, will have opportunity and risk associated with new payment models.

If the healthcare system stays the payment reform course, funding changes will impact insurance-purchasing behavior and service provider payments. Comprehensive approaches to population health may include advertising campaigns, food-banks, and technology companies alongside the traditional hospitals, provider groups, and research facilities; all while delivering better outcomes at the same or lower costs.

To get there, each type of entity in the healthcare system will have to change. Purchasers of insurance will need to start putting a financial value on the health impact that health insurance plans have. To compete for more sophisticated consumers, the insurance plans

will need to deliver that value by developing highly sophisticated approaches to monetizing improvements in health and parsing the value that different services have. Service providers will need to develop high-value service-delivery approaches and be accountable financially for the impact their services have on health in the long run.

Overall, organizations will face critical strategic decisions in the face of uncertainty. Technology is often heralded as the golden solution, but it may not even be a silver bullet and without fundamentally reexamining the business of health, existing organizations may fall victim to a new wave of competition. Meanwhile, new business models are bringing new opportunities and those firms best adapted to deliver health value for their consumers will have the best chance of winning the day.

Value-based purchasing, where appropriately implemented, has created a real market and business case for making long-term investments in the health of high-risk populations. Those firms that do so most cost-effectively will have the greatest ability to reinvest and drive future profitability.

Contents

Executive summaryi
Contentsiii
Report Overview 1
Value-Based Purchasing in Brief2
The Business of Health
Market Segment and Strategy 10
Market Position and Strategy11
Government Regulators 14
Insurance Purchasers 19
Employer Insurance Purchases 21
Individual Insurance Purchases22
Government Insurance Purchases for Medicare and Medicaid22
Insurance Plans
Insurance Plans in Employer Markets26
Insurance Plans in Individual Markets28
Insurance Plans in Government Markets of Medicare and Medicaid28
How Insurance Plans Can Create Value29
Operational value-creation29
Procuring value-creation
Information technology value-creation
Primary activities
Supporting activities
Service Providers
Traditional Healthcare Service Providers34
Changing Horizons
Nontraditional Service Providers
Moving Forward

Bibliography	42
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Report Overview

Once a system of value-based purchasing is in place, parties within that system have different roles and ways to create value that contribute to the system. This document will describe:

- The roles each of the healthcare system entities have played and can play under value-based purchasing models;
- What opportunities and challenges the future may hold for the entities;
- How those entities can take full advantage of their opportunities; and
- What the impact of taking those opportunities can be.

This is important because:

- While performance-based contracting is not a new idea, increasing use of the models has created business opportunities that were not previously available;
- The funding for healthcare in the United states now contains substantial financial incentives for nontraditional services and the accompanying business models; and
- New systems of funding healthcare in the U.S. will require new organizational systems and relationships to ensure success.

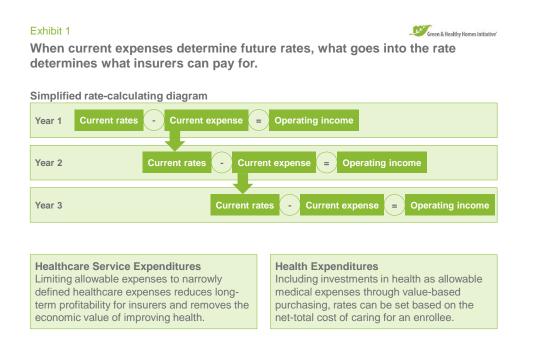
This report contains a brief overview and recap of "Value-Based Purchasing: Making Good Health Good Business"¹ and is followed by a targeted discussion of what is necessary for regulators, insurance purchasers, insurance plans, and service providers to be successful under new funding models that include value-based purchasing arrangements.

¹ (Olson and Martinez-Vidal 2018)

Value-Based Purchasing in Brief

A system change: from healthcare to health

Value-based purchasing can only be understood in the context of its alternative—traditional health-insurance funding. For a myriad of reasons, health insurance purchasers and plans have not invested in health, but rather paid for the cost of healthcare services or a part thereof. This payment was typically through a process of billing for specific activities, at set rates, and based on the volume of those activities – charging on a fee-forservice basis. Healthcare service providers billed their insurance companies, who charged premiums to the people enrolled with the insurance plan. Insurance plans managed healthcare services access and billing.

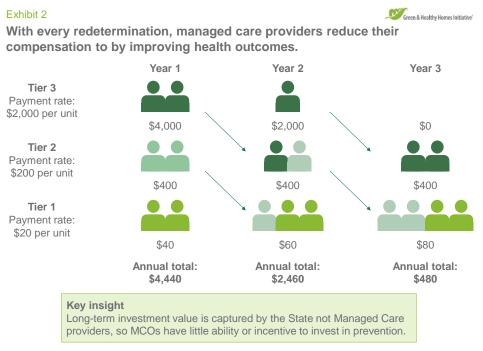




Managed care was a move to a system where this year's costs determine the prospective rate paid to the insurance companies next year, *see Exhibit 1*. There were, however, complications stemming from the financial controls enacted through medical loss ratio effects and how expenditures were classified to determine prospective rates.

For financial accountability, all expenses were classified as medical expenses or not, a categorization that very closely aligned with what you were allowed to pay for under feefor-service. Only those costs that were deemed as medical expenses would count towards setting future rates. The plan's administrative budget was limited to a proportion of their medical expenses and plans would have to rebate all premiums beyond that amount. Plans would also have to make investments in health, retain savings, and profitability from their administrative budgets.

In theory this created a system where better health was better business because the plans could invest in better health and keep the savings up to a point, where their profitability was capped as a percentage of their healthcare service expenses. There are limits to the efficacy of that managed care payment system. Each year, if the plans improved the health of their population, the next year – even at the maximum allowable profitability – the plan would earn less, *see Exhibit 2*. Each year the plan's revenue would decrease, and the set percent of that smaller amount decreases as well.



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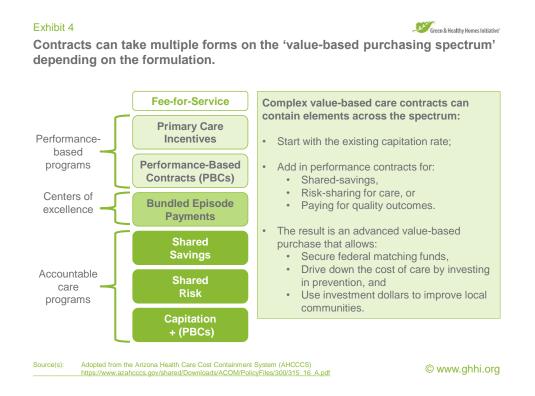
Historical healthcare services utilization was still at the core of how rates were set to pay managed care companies and this played out deep inside the mechanics of the rate-setting process. Rates are set using standards for actuarial soundness, where baseline data are collected, adjusted for the historical trends, and the acuity of the patients in a specific plan's enrollment, see Exhibit 3. Unfortunately, these adjustments remove the very economic incentives for improving health that managed care was intended to provide because better health now leads to lower payments. Worse, the implementation of ratesetting practices often lacked transparency and relied on complex or proprietary analytical tools or methods where few parties were focused on improving health. By including payments for services that improve health in the core areas of the rate setting process, governments can change the economic dynamic entirely, but they need a mechanism for doing so.

Exhibit 3

Green & Healthy Homes Initiative Premium slide will prevent any MCOs from signing on unless you appropriately include health-related value-based purchases in re-basing.



Value-based purchasing provides a mechanism that make good health good business. Value-based purchasing is different from the traditional system that was paying healthcare service providers for the activities they billed. Instead, payments are for a newly-defined measure of health-value or the impact that a program has on health or healthcare costs. Examples include bundled payments, shared savings, and complex means that include both a capitation rate and layer of performance payments. Under bundled payments, an insurance plan may opt to recognize that services usually come in groups with an expected average total cost and pay that amount rather than for each lineitem. Shared-savings or risk payments allow insurers to partner with organizations and make payments based on prevented costs, opening the door to entirely new funding to address the root causes of poor health and high healthcare costs. States, in their regulatory capacity for public and private markets, can also allow plans to layer on specific health-outcomes performance payments, when seen as socially valuable and advancing the state's quality plan. Any state can enable any insurance plan to propose their own arrangements, leaving the government to evaluate the effectiveness, and promote successes.



These new payment mechanisms, *see Exhibit 4*, when appropriately implemented can turn the current healthcare services expense for entire populations into investment opportunities for partnerships between insurance plans and service providers. For example, while the burden of asthma is nearly \$50 billion per annum in the United States, nearly

\$13.8 billion of medical expenses could be prevented and converted into investments in healthy housing through cost-effective means.² Means such as healthy housing programs that invest in families, their built environment, education, and employment opportunities – all paid for with the savings from avoided hospitalizations and emergency-department visits with no budgetary impact to any government entity.

Another example is creating behavioral health programs with broad-ranging wraparound services in addition to existing clinical standards of care. A service provider could set up programs requiring investments in infrastructure, personnel, and new models of care delivery for a specific high-cost and high-risk population. The organization could be assigned a capitation rate for this subpopulation and take the financial responsibility for their medical care, while receiving incentive payments for improvements in specific quality measures. Similar efforts are underway nationally.

To transition to a system of health-value, many entities will need to redefine their valuepropositions and support them with very different business operations. First, a measure of health value must exist that can be used as the basis for payment. Then and only then can organizations transition to new business models that align with the new funding relationships. Those organizations, new and old, that align better with the health valuecreating process will be better rewarded, while those that fail to do so will struggle, if not fall out of the market entirely.

For example, a hospital system that provides narrowly-defined healthcare services at set rates profits from delivering a higher volume of services or higher margins. Under valuebased purchasing, compensation is based on outcome measures and creates an inverse relationship between volume of services and profitability. The hospital system, without changing the operating model, may fail; however, hospitals will be successful if they work to create a business system that optimizes the impact they have on health measured perunit-cost.

² Based on a GHHI analysis of over 20 actuarial assessments assessing the potential value of comprehensive home-based asthma intervention programs.

Value-based purchasing changes the competitive dynamics for each party in the healthcare system:

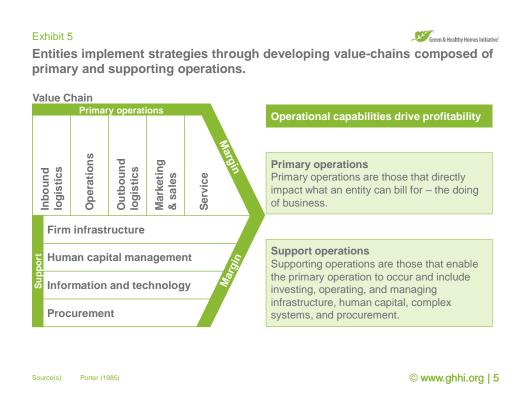
- Regulatory bodies will have to develop deep and nuanced understandings of how their market-shaping activities support making good health good business in order to deliver public value.
- Purchasers of insurance, if they can change their procurement operations to do so, can move to paying for the value of health impact that insurance plans have.
- Insurance plans will need to compete for business based on the health-impact that their products have. Plans will retain earnings based on the impact their programs generate at scale and that will dictate their ability to grow and reinvest.
- Service providers will need to develop new quality and cost control measures for existing services.
- Organizations new and old will need to seize new business opportunities for investments in health that address the root causes of healthcare needs beyond the traditional continuum of care.

The transitions may not be easy across the board. There likely will be winners and losers, but the new system will better serve the broader population in terms of health improvement and cost-effectiveness. Additionally, variability between market-segments and geographies will create differences. States like New York, Texas, and others are aggressively pushing forward with advanced value-based purchasing programs, while other states have yet to implement the underlying managed-care insurance relationships in some market segments that make value-based purchasing possible.

The Business of Health

Our health is a function of the business models we enable to fund investments in health. As funding shifts to make good health good business, the entities in the healthcare system will have to change their business models to be successful.

Health in the United States is governed by business logic and economics. Businesses typically operate through developing value chains to produce a profit margin on a volume of business. Businesses develop their value chains to support a business strategy that they believe will be successful. Those value chains are comprised of multiple elements, both primary and supportive, that determine the effectiveness of operations, *see Exhibit 5*. With the transition in the healthcare system to value-based purchasing, success will be determined by a different set of operations than they previously were and be influenced by which market segments they are working in and by the market position the firms have.



Firms' primary operations are the direct value-creating activities, while the supporting activities enable the primary operations without directly creating value.³ In general, primary operations involve taking in resources, processing them, and outputting goods and

³ For definitions please see the appendix or the original work by Michael Porter (Porter 1985).

services that are marketed and sold with accompanying services. The critical component of this effort is creating a value proposition that entices consumers to buy the goods or services being offered. The shift to value-based purchasing is a transition of the value proposition from "healthcare-services" value to "health" value more broadly.

For example, a healthcare services provider would have:

- Primary operations designed to effectively deliver cost-effective services measured in their ability to bill for those services less the cost of providing them;
- Marketing and selling the services based on the healthcare services provided; and
- Supporting activities that aim to improve the perceived value of accessing healthcare services by developing human capital, monitoring and managing access to and billing for healthcare services, and procuring goods and services based on their billing impact.

In comparison, an organization providing health would have:

- Primary operations designed to cost-effectively deliver health outcomes that enable them to capture revenue at lower costs;
- Marketing and selling their services based on the comparative marginal-impact that the health programs have; and
- Supporting activities that aim to improve health impact by developing human capital, monitoring and managing the health impact of their activities, and procuring goods and services based on their health impact.

The new business model of value-based purchasing changes the value proposition. Insurance plans must 'sell' health to those purchasing insurance, so the plans become responsible for providing health and not just healthcare services. A different value chain is driven by this value proposition. The core operations all revolve around impacting health, requiring a similar shift in supporting activities.

For example, regulators will need to invest heavily in the logistics of securing access to, managing, and analyzing health data. In this, the regulators will need to decide about the age-old "make or buy" decision for these investments. The other entities in the system

will have similar decisions. Insurance plans will need to broaden their operational functions and determine when best to partner or acquire new, and possibly non-healthcare, services.

Market Segment and Strategy

Insurance-purchasing behavior will vary across the different market segments. Broadly, there are three market categories examined here: the government market, the employer market, and individual market, *see Exhibit 6*.

Exhibit 6

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Different insurance market segments have different economic motives
resulting from the competition within the segments.

Insurance market segments		Business logic
Employer market (49 percent)	Private funds	Employer market To recruit and retain talent, employers arrange for insurance packages where value is the perceived value to the employer differentiation is a viable option.
Individual markets (7 percent)	Private funds	Individual contributions Individuals determine the perceived value of largely standard plans on including tax penalties for non- selection. Competition is cost-focused.
	Public funds	Subsidies and reinsurance Entry to the individual market place is based on meeting requirements for service standards and competition heavily weighted to cost-leadership.
Public market (35 percent)	Public funds	Medicaid market Entry is predicated on cost-effectiveness for implementation of legally required standard of service. Competition is over perceived cost-leadership.

Source(s): GHHI analysis of publicly available information

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Different consumer behavior structurally differentiates these markets in many ways. The same operating strategies that are effective in one market segment will not be effective elsewhere because the party paying for the insurance and making the purchasing decision will differ. In the employer market, the employer is choosing the insurance as a form of nonmonetary compensation with value to current and prospective employees. For the individual market, government regulation, subsidization, reinsurance, procurement practices, and other factors play a major role in establishing markets where individuals

then purchase insurance through a standardized process. Governments also directly procure insurance, creating the third market segment where procurement practices and other items shape market dynamics.

Given this market segmentation, this brief will identify what the transition to value-based purchasing will mean for participants in the system: purchasers, insurers, and service providers. Those organizations will need to re-examine what is the added value they provide and which operations matter most.

Market Position and Strategy

Finally, the organizations will need to determine how they will position themselves in the market. There are four dimensions of this positioning that determine an organization's implicit market strategy: price, differentiation, specialization, and alignment. Price is the consumer price for the good or service. Differentiation is a measure of how different is the offering. Price and differentiation form the core of the relative value-proposition among competitors. Specialization is the measure of how specific the target market is and how narrowly the value-proposition is competing. Finally, alignment is how well the other three elements of strategy complement each other. All dimensions should be considered as being relative to competing organizations not as absolutes.

Price is the perceived cost to consumers. Sometimes, price is paid in hard currency on the spot, but other times price is long-term ownership or use costs – all depending on the type and sophistication of a customer in that circumstance. Price determines profitability through a function of volume and margin. Cost leaders try to extract profits through volume. Higher volumes bring the leader economies of scale and gains in organizational capacity or experience that lower the leader's costs. Lower costs allow the leader to lower its prices to attract more customers – trading off margin for volume, which can be a very profitable proposition. They drive down costs by maximizing volume, boost volume by lowering prices to consumers, and the increased volume helps drive costs down further.

The appropriate trade-off is the strategic question that plays out through price to consumers. Setting prices too low can limit the capital available for reinvestment, but if prices are not set low enough, it may not sway enough consumers to increase volume.⁴

Differentiation is offering value by being different from the competition. By creating a perception of additional benefits, real or otherwise, differentiators try to secure higher prices. All market offerings are inherently different in some way, shape, or form. While someone in southern California may not know a single doctor, a single surgeon's comparative surgical success rate, or anything else about the Johns Hopkins Medical Center, they would likely have a consumer preference between a 'generic' procedure and receiving the Hopkins offering. The Hopkins offering may be based on its quality of care, but the perception thereof is what impacts the market. Even with the highest quality of care there are no guarantees that business will improve. Monetizing that perceived difference in value is the challenge of differentiation, though it is generally harder to charge higher prices for inferior goods.

The third dimension is specialization, which is the degree of focus on a subset of a market. Within that segment of a market, the organization still must include elements of price and differentiated offerings. In health, centers of excellence and narrow networks can be examples of this specialization. An orthopedic center of excellence may offer higher prices because they cater to athletes at higher prices. They can secure this position through higher perceived quality, more-likely full recoveries, faster recovery times, and wrapping other 'premium' service offerings or amenities around the core orthopedic services. Narrow networks may choose to work with a specific set of patients that have specific needs. The network may be able to offer lower prices to that group because they have lower costs resulting from custom-tailored care with better outcomes.

The fourth consideration is the degree of alignment amongst the aforementioned three factors. While there are no hard and fast rules, the market position should be internally aligned, that is the key elements should reinforce rather than detract. For example, cost-

⁴ Additionally, not all consumers are price-sensitive and not all markets are set up so that consumers are able to drive price-based competition.

leadership is a very viable strategy that relies on low prices and is best aligned by investing only in differentiated elements that advance or reinforce their relative price proposition. For example, a logistics company adding package-tracking improves convenience for consumers but also avoids costs from fraudulent claims and other areas, which allows them to lower the price to the consumer. That element of differentiation compliments their low prices and reinforces the strategy.

There is a legitimate question whether the change to value-based purchasing will be a threat or an opportunity for the current system participants. For early adopters who make the right moves, there is certainly an opportunity. Others will likely be left behind. Additionally, upstarts may take full advantage of the newer system structures and invest heavily in building a lean infrastructure to specifically support value-based purchasing and disrupt the status quo.

Government Regulators

Creating effective and efficient market structures to drive good health through good business.

In theory, market regulations' role is to ensure proper market function, but the purpose of markets is often debated. Regulation of health insurance products has long been regulated narrowly with the purpose to ensure that the purchase of insurance provides access to appropriate quality healthcare services. There is an alternate view that insurance, as part of a broader system of health, should aim to improve health through means inclusive of healthcare services. If regulators choose to change their focus to one where insurance is a means to improving health, then the operations of regulators need to change, *see Exhibit 7.* Those changes would bring with them many opportunities for improved health at lower costs, private-sector opportunities for employment and business growth, as well as the ability to address complex societal problems using the investment opportunities created by their costs.

For example, asthma treatment costs \$50.3 billion in healthcare costs annually in the United States⁵ and \$81.9 billion to the economy overall.⁶ Rather than treating this as an expense, regulators can create natural market incentives for firms and governments to address the problem by turning the expense into a business opportunity. The shared savings opportunities in value-based purchasing allows insurers to do just this. Service providers willing to invest in the health of asthma patients can run programs that reduce the cost of care for high-risk populations and secure payment for the reductions in cost. Asthma care goes from a \$50 billion expense to a multi-billion-dollar business opportunity.⁷ Similar opportunities present themselves around the country by identifying the key-drivers of high cost in specific populations.

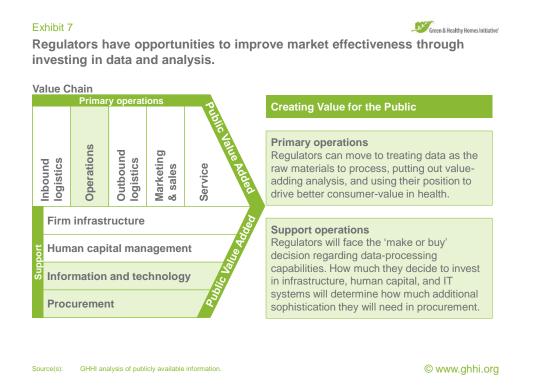
Health insurance regulations shape the market-segment dynamics and can create or inhibit systems that make good health good business. Regulations that focus on improving

⁵ (Nurmagambetov, Kuwahara and Garbe 2018)

⁶ (Nurmagambetov, Kuwahara and Garbe 2018)

⁷ A GHHI analysis of nearly 500,000 member-months of actuarially assessed claims data indicates that as much as \$13.8 billion might be preventable through comprehensive home-based interventions for high-risk patients.

access to healthcare services will lead to higher costs as more persons use those services. Regulations that focus on ensuring that insurance markets function efficiently in driving improvements in health, not just access, will result in better health for populations and can reduce costs.



Regulators face numerous challenges to move toward a health-focused system in the United States. The challenges include: (1) defining, measuring, and evaluating the health impact of operational programs;⁸ (2) creating efficient markets aimed at improving health; and (3) doing so given the fiscal responsibilities they hold.

Addressing the technical issues first: defining, measuring, and evaluating health impact is no easy task for insurance plans or health-improvement programs. Fortunately, much of the world of healthcare already includes many standard or semi-standard measuresets, with the most universal being cost of care. Cost and an accompanying layer of quality metrics can be easily used by regulators. Finding a way to continuously monitor the impact of an ongoing operational program brings many additional complications, but as

⁸ Also discussed as, translating research into practice and operating a continuous improvement program.

claims, encounters, and enrollments are continually monitored for billing purposes, they provide an opportunity for ongoing measurement of the cost and quality of programs. Finally, current methods for determining appropriate capitation rates differ in many ways from established research and evaluation techniques – some in very beneficial and pragmatic ways, others may diverge in ways with unintended detrimental impacts on health and investments therein.⁹ Regulators will need to invest in understanding the impact of these decisions and potentially changing course as needed.

The role that regulation can and should play within the health insurance markets is an open question, but there is a huge opportunity for regulatory action to drive improvement in health, reduction in long-term costs, and establish new business opportunities to drive economic and employment growth. Aggregating the historical medical claims for the national population could allow for new depths of insights about health and financial ac-

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Many traditional research and evaluation techniques rely on statistical methods that entail working with normally distributed populations and making an appropriate comparison to determine the marginal impact that something has. They have issues to consider involving the applicability of statistical methods, entailed limitations for working with programs that are highly targeted to attain high impact, and the use of random-assignment for establishing control groups.

The first issue with applying these methods to operational health-improvement programs is that those programs work with population intentionally selected because they are high-risk outliers, ruling out statistical methods that rely on normal distributions. Well addressed elsewhere, the application of these techniques has unintended consequences on everything from preventing investments in health, increasing the long-run costs of working with populations, to the financial risk assumed by governments.

Second, many programs custom tailor their enrollment requirements to ensure they are impactful and align with existing research standards. Those programs may involve using smaller sample-sizes than traditional techniques would require, which may prevent some of the most disproportionately impactful programs from ever getting off the ground. The oft cited Pareto principle leads programs to aim specifically for those small but disproportionately impactful subpopulations where there is the largest opportunity to improve health and reduce costs. The small handful of patients with even a single hospital admission related to asthma can cost an average of \$42,500 dollars per patient per year for a health plan. Individuals within that population can cost an order of magnitude above that cost-level. Building programs to address people like the high-risk asthma population, like the homeless frequent-fliers, and others where this applies is the very area where programs can be most effective. They should not be ruled out, if at all possible.

Finally, research techniques rely on creating ongoing comparisons using random-assignment to create a control group, which means that health-improvement programs would only be able to enroll a subset of the already smaller populations targeted for their high-risk profile. Additionally, this would require with-holding potentially beneficial services from those they were intended to help, to add financial accountability – an ethical and political dilemma. However, existing standards of rate-setting are lacking in their rigor in terms of establishing appropriate comparisons which can be problematic in other ways. The currently reliance on historical level-setting leaves long-term programs at high risk of improper analytical findings that expose governments to financial risk on both the up and down sides.

countability and, critically, also allow for understanding the comparative value that insurance plans¹⁰ or health-improvement programs¹¹ have. For example, insurance could be compared to determine which plans have the best impact on health or healthcare costs in the long run and that information could be used to drive government procurement or even influence consumer behavior to make markets more effective at improving health. Consider that an employer would then be able to advertise to prospective employees that their health insurance benefits of their offered plan actually lower the rate of heart-attacks more than other plans.

Regulators can create these market opportunities and use consumer behavior to drive health by convening parties, requiring participation, and directing their resources. Doing so will require investments of time and money around data integration, management, and analytic capabilities to better understand the health impact of insurance plans or healthimprovement programs such as value-based purchasing arrangements. Further, regulators could then require the disclosure of those measures to drive consumer behavior, including government purchasing. This may include requiring reporting of all claims and encounters in public and private markets to build a better understanding of the dynamics and report the marginal comparative health impact of programs to drive value-based purchasing across market segments.

This regulatory approach could create a new opportunity to make good health good business through more efficient markets. Consumers who can make purchasing decisions based on the comparative, marginal health impact of health plans can drive insurers to focus on health and not just access to services. In the employer market, this information will increase the drive to include services that address health risk-factors more broadly so

¹⁰ For example, regulators can direct or facilitate a third party's determination of the comparative marginal net-present value impact for a year's enrollment for each health plan in the country. The analysis would allow various government entities to adjust their procurement practices to get the most long-run value for their spending on insurance. Additionally, regulators could make the analysis public, even require disclosure of the finding by insurers on exchanges or in employer-procurement processes so that consumer behavior would drive insurers to aim for good health just to win new customers.

¹¹ For example, tracking health improvement programs in managed care by recording value-based purchasing payments in encounter data could allow for retrospectively analyzing the comparative effectiveness of those programs and creating a national registry of operationally demonstrated programs for regulators to continuously implement newly-tested effective programs at little cost to the government.

18 Value-Based Purchasing: How to Succeed in the Changing Business of Health - June 2018

long as they are cost-effective. The ability to secure more enrollments by advertising better health impact will be the driving market force. In the individual markets, governments can require reporting health impact information during the plan selection process to drive consumer behavior and use the reporting for their own benefit while making purchasing decisions within the government market segment. Consumer behavior shifts will drive operational changes by insurers and ensure efficient, effective, and equitable market function that controls long-term healthcare costs by creating opportunities for investment in health.

Insurance Purchasers

Buying insurance can change if consumers are willing to pay for impact on their health and have the information available to make those decisions.

The role of insurance purchaser is played by many organizations including employers, individuals, and governments. Insurance purchasers historically have had varied reasons for purchasing insurance depending on their market segment. Employers may be complying with regulations or investing in their human capital productivity. Individuals may be purchasing insurance for themselves or households to comply with regulations, avoid tax penalties, or invest in the health and even financial well-being of themselves or their families. Governments may be making required investments in the health of whole populations, their workforces, and economic vitality.

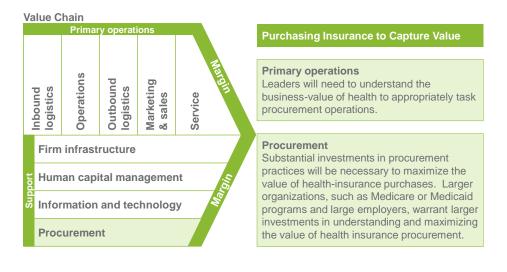
Historically, insurance purchasing ensured access to healthcare services and limit the downside financial risk to the insured party. The aim was often to ensure that poor health would not result in bankruptcy and so that limited financial means would not prohibit access to beneficial or necessary healthcare services. Increasingly, the relative value of health outcomes in the United States per-unit cost has been called into question and the overall healthcare system has been moving towards value-based purchasing reforms.

In the world of value-based care, the value-proposition for insurance purchasers is better health at lower costs not simply access to healthcare services. In that world, the role of purchasers becomes more complex as the role of insurers becomes more complex. Currently, insurers need to ensure cost-effective access to healthcare services; now they also will need to become strategic investors in their enrolled population's health. So, with this addition, those purchasing insurance will need to become more sophisticated in their consumer behavior. Consider an employer—a Google, Walmart, or State Department of Health—the employer will now have the ability to make the insurance-purchasing decision based on the health-impact value of their purchase rather than simply the cost-effectiveness of access to providers for care services.

Exhibit 8

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Insurance purchasers will need heavy investment in sophistication of procurement practices to understand the business value of health.



Source(s): GHHI analysis of publicly available information

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Insurance purchasers will need different core operations to get better health-value in their purchase, *see Exhibit 8*. Fundamentally a procurement operation, often led by a human resources department, insurance purchasing can change substantially. Those insurance purchasers who understand the health impact their purchases will have and the value that creates for the rest of the purchasing organization will be able to create an advantage in human-capital productivity. Firms with better purchases will be able to recruit, retain, and secure higher productivity from their people. To do so effectively, insurance purchasers will need to be able to attribute health impacts to either: (a) the plan offering them; or (b) to the individual program elements offered by plans. For example, an employer would need to know if the health impact of comprehensive home-based interventions for asthma were due to the evidence-based practices or the manner in which one plan implemented their specific health-improvement program. That level of due diligence is something many purchasers are not set up to do and even most third-party benefits advisory firms may be lacking.

The same analysis can be applied to the procurement department as if it were a standalone organization. Within the procurement department, there will need to be investments to understanding the nuanced impact of their purchases may require new investments such as in special personnel who understand the complexity of health impact, the technology systems to support them, and other areas. Many organizations may be illsuited for this type of analysis and will seek to use effective procurement of benefit managers or consulting firms to advise on these issues. Internally or externally, those making the value-based insurance purchasing decisions will need to more heavily invest in understanding the health impact of their insurance purchases.

Employer Insurance Purchases

Employers, including governments as employers, will need to develop more effective procurement practices for their employees' insurance. In many cases, employers may choose to outsource their insurance-procurement decisions. The improvements to the procurement process include knowing the business case for improved health and health-benefits for the employer procuring the group plan and how changes in health impact the employer strategically, financially, and qualitatively. Armed with that internal understanding of impact, the employer's procurement team can turn to the external market to better understand the links between health and the insurance products they are considering, finally turning to the negotiating process to seek to make gains.

Government regulators can play a key role here by arranging to report or requiring the insurance plans to provide information on their products, the investments they make in health, and the health impact their products have. If embedded into the procurement process, that information can drive better health and better value for employers as consumers of health insurance.

Employers also have the option of creating self-insurance pools, if the employer is large enough or can rally a group of like-minded organizations. Substantial difficulties are associated with this approach, but it is not impossible. Additionally, the employer would then have insights into the health impacts of the services they have purchased and be positioned to strategically invest in the health of their employees in ways that benefit not only from health-related services savings but also from the potential productivity gains.

Individual Insurance Purchases

Individuals will have the arduous task of understanding the links between health and their insurance purchases. Structurally, individuals have little market-power to influence insurance plans and their offerings, but the individual can and should demand information about how health plans impact health and then buy insurance based on that information. Unfortunately, individual insurance purchases are very complex in terms of the available market information. Few persons know what the health-value of access to care is or how useful the investments in health made by insurers will be. Fewer persons still have the time and mental energies to do the research into the health impact that the products insurance plans can have in health and financial terms.

Here, too, governments can play a critical role of making purchasing decisions easier for individual consumers by encouraging or requiring insurers to provide information about their products, the investments they make in health, and the health impact their products have. The primary difference here is that governments stand to directly benefit from driving the consumers to make better health and better value-choices. Governments fund a substantial part of the individual market through practices of reinsurance and subsidization of premiums and out-of-pocket costs. Additionally, many persons in the individual markets are on the edge of eligibility for formal government programs like Medicaid. Preventing a health-related event from triggering a slide onto assistance programs is very much in the government's financial interest.

Government Insurance Purchases for Medicare and Medicaid

Governments have a legal requirement to provide insurance to certain populations, specifically Medicare and Medicaid. This legal requirement creates a baseline fiscal responsibility from a governmental perspective.¹² While governments have historically been limited to providing for healthcare services within those programs, the formula of funding

¹² Additionally, governments operate many other programs for the public benefit that amount to fiscal responsibilities.

may not be the most effective mix of dollars to reduce aggregate costs or achieve healthy outcomes.¹³ Value-based purchasing has enabled governments to work through existing insurance relationships to address broad health-risk factors that would have otherwise resulted in healthcare expenses.¹⁴ For example, funding insurance may increase fiscal burden, while investing in disease prevention may reduce long-term insurance costs.

To actualize this potential, governments will need to change their procurement practices to purchase insurance on the basis of the comparative marginal impact on *health* that an insurance plan has relative to their competition and that change will require investments in government procurement business operations. A number of actions can advance these aims including aggressively pushing forward in the move to managed care, developing data infrastructure to better assess value, and then integrate that information into their procurement practices.

Aggressively moving to managed care means increasing the total market size for managed-care plans to compete for. Increased market size leads to a larger business opportunity for insurers, which will lead to increased competition among insurance plans. Increased market size also means increased impact opportunity through the increased impact of value-based purchasing for government savings, health impact, data collection, and insights into the health impact of the health-improvement programs run by insurers or service-providers.

Developing the data infrastructure to measure the marginal comparative health impact of insurance offerings will be imperative in the value-based purchasing world. Decisions including what data to collect, how to collect them, and how to use them will meaningfully impact lives through health improvement but also have major financial implications for governments. Decision-science programs have been very successful at evaluating and attributing value to operational programs, a different proposition from a clinical research

¹³ For example, consider the arguments in (Bradley, Sipsma and Taylor 2017).

¹⁴ Additionally, governments may be able to consolidate multiple funding streams to approach complex problems. For example, departments of health regular invest in community heath-improvement programs that reduce costs to Medicaid programs. Using value-based purchasing programs, states and other government sources can expand those programs by capturing Medicaid savings and reduce aggregate costs.

program. Governments should use these techniques to identify the effectiveness of insurance plans and their products, so the government entities can change their procurement processes accordingly. Having a comparative measure of each plan's impact on health and healthcare costs included in the purchasing decision can go a long way toward incenting insurance plans to develop offerings that can meaningfully impact health.

State governments implementing Medicaid programs can benefit immensely from differentiated offerings for health insurance that benefit other areas such as public health, workforce development, and even economic development, while also benefiting their federal partners. State governments that can take a government-wide total-cost approach to their Medicaid programs can find ways to use health insurance economics to drive strategic investment in health that have substantial ancillary benefits. Insurers investing in environmental-health factors not only make investments in the built environment within the state, but they use federally matched dollars to do so – at no additional cost to the federal government through investing savings. For example, asthma is a leading cause of kids missing school.¹⁵ By investing in comprehensive home-based interventions, contractors are employed, the home is improved, the family is in better health, the children go to school, the parents go to work, and the entire community benefits. Consider the rippleeffect of better education, better employment, and better health on a community. The state's programs ranging from truancy enforcement, to county education budgets, and beyond benefit from strategic investments in health.

¹⁵ (U.S. Centers for Disease Control and Prevention 2017)

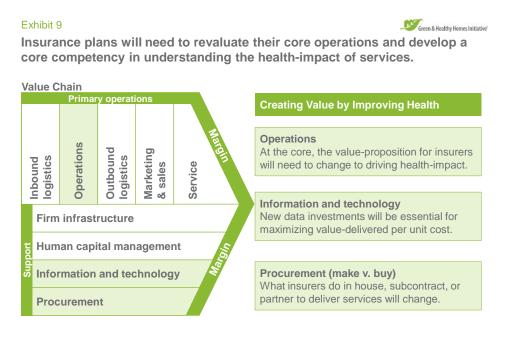
Insurance Plans

When value-based purchasing makes good heath good business for managed-care insurance plans, they will need to invest in new business models to compete.

Historically, the value proposition for health insurance was two-tiered. First, access to care—that better healthcare service access would keep you in better health and less likely to die. For example, an insurance company makes arrangements with doctors' offices, hospitals, and other providers to ensure that if enrollees are sick, they can get the care they need. Second, financial protection—a medical emergency would be less likely to put enrollees, their families, and their futures at financial risk. A long-term stay in a hospital or debilitating illness not only reduces income from missing work, but also creates substantial medical bills for the family. Slowly that value-proposition has evolved.

In the world of value-based purchasing, the health insurance value proposition is stronger. By making good health good business for insurance plans, their value proposition is moving to 'buying insurance is an investment in health' which can mean living longer, with a higher quality of life, and at lower total cost. This transition has also changed what the core business operations for health insurers are and will need to be to compete successfully. Who would buy insurance from an insurance plan that is more expensive and with the likelihood of having uncontrolled asthma, diabetes, heart-disease, and winding-up in a hospital for an extended stay. Insurers are now combing through scientific research on behavioral, environmental, and social research to determine if there are ways to profit from improving the health of their enrolled populations.

The core operations for an insurance plan still include providing access to, managing, and billing for networks of healthcare service providers. The insurance plans now must also be the arbiters of strategic investments in health including incorporating health-improvement services, which is a very new role for some and substantially changes how they need to invest in their value-chains to operate effectively, *see Exhibit 9*. Doing so will certainly be difficult and there is the legitimate insight that the biggest threat to the current insurance industry in the transition to value-based purchasing is that a new upstart may disrupt the existing industry because they are able to build organizations from the groundup to meet the needs of the new operating models.



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Insurance Plans in Employer Markets

In employer markets, value-based purchasing occurs naturally based on the perceived value for employers in securing contracts with insurers; then their employees select from the available secured options. Employers are weighted more heavily in this process and make their determination of value based on the human capital productivity impact. Value-based purchasing will impact insurance plans in the employer market in two ways. First, insurers will have their profitability tied to both allowable medical expenses and value-based purchasing rather than just being limited to the former – their scope of operations can grow because investments in health can now lead to higher profitability. Second, their value-proposition to employers changes and especially so depending on their choice between using a cost-leadership or a differentiation strategy.

Insurance plan cost leaders will have new tools to drive healthcare costs down and, in turn, lower costs for employers by having a healthier workforce – one that takes fewer sick days and is more productive due to fewer health-related incidents for themselves and their families that result in time off. Additionally, investments in health can drive down long-term costs for a workforce overall. Consider labor-intensive industries, an insurer covering not only medical costs but investing in preventive physical therapies could reduce on-site injuries and drive down legal costs and employee disability claims. An insurance company offering such preventive approaches to support long-term health could offer the employer lower costs because they would have fewer injury claims to support through premiums.

Differentiators will also need new tools to capture higher margins. Especially early on, offering preventive investments in health as part of the health-insurance plan would be seen as differentiating and allow the plan to charge higher rates and capture additional profitability for the insurer through value-based care. When a human capital market is more competitive, employers can benefit from offering better benefits. Imagine if an employer were to offer health improvement as part of compensation. Rather than the competitor offering a few hundred dollars more per month, that employer is able to offer the employee a lower rate of heart-attacks and extra years at the end of life to spend with loved ones. Any employer doing so would have an advantage when competing for high-value recruits and retaining their key employees. Insurers can then realize this value by charging higher premiums and making additional investments in health.

Insurance plans will need to lead these efforts in the employer market. They will need to develop and invest in their value-propositions to create the right competitive dynamics to win. Beyond their own operations, insurers will need to develop and manage external relationships in new ways. Partnerships that provide the knowledge, skills, and abilities to advance their health-focused offering will be strategic investments. Academic institutions, professional service organizations, and even non-profits hold a treasure-trove of information on how to impact health, which has only been opened by the move to value-based purchasing.

Insurance Plans in Individual Markets

In individual markets, insurers demonstrate regulatory compliance of plan options and standardize to a degree before competing for individual enrollments. In the insurance exchanges, the process of competing for enrollees has a standardized user-experience. All potential enrollees will see the same product elements for plans from which they are choosing. This standard user experience limits the ability for plans to differentiate, for example by competing on health impact in this market segment, but that can change. Plans seeking to advance a differentiated offering will need to find creative ways to use investments in health to capture new enrollees or increase margins as a result of their activities.

Cost-leaders will be able to communicate directly through price, supported by appropriate other marketing activities. Insurance plans investing heavily in value-based purchasing to drive down costs have a simple value-proposition to communicate – lower cost to you due to strategic investments in health. The lower prices will drive consumer purchasing and help these cost-leaders capture more market share. Consumers will be less likely to pick a more expensive plan in the first place and, if they research why, they certainly will not pick the more expensive plan that does not provide investments in consumer health.

Differentiated offerings in the individual market have a more challenging task. Despite standardization including a standardized user-experience in purchasing, the plan must make the case to potential enrollees that it is worth paying more for what the plan is doing. While certainly not impossible, this is a difficult proposition in the individual market segment.

Insurance Plans in Government Markets of Medicare and Medicaid

Insurance plans competing in this market segment first need to win government procurement contracts and then may need to compete for individual enrollees. The plan's valueproposition and strategies can play out very effectively depending on the approach a government takes to procurement. Some governments may approach their Medicaid program as a cost-center, where only Medicaid costs count. Others may have a broader approach to government authority and procure their Medicaid contracts in a manner that recognizes the value of the ancillary benefits.

Plans implementing cost-leadership strategies can be successful regardless of the government approach because cost is a near-universal factor in government procurements. Insurers would do well, especially given reinsurance practices, to invest heavily in cost-cutting measures through health improvement or at least demonstrate their intent to do so.

How Insurance Plans Can Create Value

The value-based purchasing world will change the way insurers need to think about delivering value to their customers, no matter the market. If markets move fully to valuebased purchasing, insurers will only earn revenue by improving health. Their insurance programs will not only need to invest heavily in the development of traditional healthcare service networks, but also into programs that address those risk-factors that result in poor health. The insurers will also need to understand the economic and financial value of the allocating resources between the two types of programs. Doing so is no easy task and one that existing insurance companies are not built around doing.

Operational value-creation

With insurers capturing revenue driven by impacting health through services rather than simply providing access to and management of care networks, the way in which they create value will change as well—they will need to change the way in which they operate to be competitive and successful. Firms will need to add on to the historical operations by directly impacting health through new services and supporting activities that determine which services will be most impactful to health. Many examples exist already ranging from comprehensive asthma treatment including environmental remediation to general communicable disease prevention programs. These investments will begin to fall squarely within the core value-creating operations for insurers.

Procuring value-creation

The quintessential decision has been framed in terms of "make or buy" for companies seeking to develop new capabilities and this question will be central for insurers as they move to value-based purchasing. New systems for understanding, measuring, and attributing the health impact that procured services have on their enrolled members will determine their ability to compete in insurance markets. These are complex questions, not easily addressed without substantive investments in supporting activities. Procurement will also need to be in support of the core operation of impacting health. Simply abdicating responsibility may limit risk, but those firms that own the risk and rewards of the new competitive models will be better positioned to know which components of the new business models should be procured rather than internally developed.

Information technology value-creation

Value-based purchasing requires an assertion of what is valuable, which in turn requires being able to measure, evaluate, and attribute the impact that different factors have on health. Doing so will require a reworking of the existing information and technology infrastructure that is currently in place. The historical system was developed in accordance with the previous importance that was placed on providing access to and billing for services provided within a narrowly defined healthcare space. As a result, those systems and the infrastructure supporting them will likely need to be reimagined and reworked, if not wholly disrupted by entities that more effectively deliver health value.

Primary activities

The primary activities for insurers will need to change to support the new value proposition. In brief:

• **Operations changes**: Organizations will need the focus of their primary operations to impact health. This change in focus means providing access to high-quality healthcare services, but only as a means to the end goal of improving health. The organization will increasingly move beyond strict healthcare to include services that impact health in positive ways. Many insurers are already moving to manage care in some ways; these trends will be intensified. The breadth and depth of involvement in the delivery of services beyond traditional healthcare services will increase. Examples include investments in specific types of care management and the capacity to coordinate complex referral systems outside the traditional continuum of care, as well as the ability to conduct complex and ongoing operational research for their populations.

• **Marketing and sales**: Insurers will need to drive business purchases in a new way, by using health impact to drive enrollment and prices in concert with the access to services they provide. Without being able to monetize health impact, insurers will have no economic reason to invest. Some insurers are and more should continue to try to compete on their ability to improve the health of the populations they work with and there is a strong value proposition to do so. Examples include health plans creating case-studies for marketing materials as well as using determinations of where they are effective at improving health to target their future marketing efforts so that they bring in the most valuable groups with which their existing operations can work.

Insurance plans may need to change what they consider their core operations and, in so doing, change their staffing mix to include more professionals whose expertise is in understanding or developing evidence about investments in health. Those staffing changes include not only strategic leadership, but those with experience in: 1) conducting research; 2) doing the development work to create such programs; and 3) operationalizing those research programs. Embedding such experience in organizations will be critical as the new approaches are not 'bolt-on' services. The ability to work along-side, develop relationships with, and internalize approaches to investments in health will need to be embedded within the operational workflows of the insurance plan to be effective.

Many insurance plans find that a group of persons frequenting the emergency room may have a set of underlying issues that cause their medical needs that are not part of the traditional continuum of care. Using the example of the homeless population, providing for the basic needs of this population may be more cost-effective, while most insurers do not have formal programs in place to identify who the right people are to work with, how to get them into programs that provide housing services, and how to pay for those services in ways that do not financially harm the insurer. Those skills need to become core competencies for insurers under value-based purchasing models. Without them, other insurers will be operating more effectively, have more billable medical expenses, and more headroom in the administrative budget for return on newly invested capital – that leads to faster ability to grow and compete in new ways elsewhere.

Supporting activities

Insurers will also need to change the supporting activities to drive their value proposition. In brief:

- **Organizational Infrastructure**: The physical infrastructure will need to change and focus on improving health. Considered in concert with the procurement decisions related to which services to offer as opposed to which services to subcontract, the firm's physical footprint, design thereof, and others will need be reshaped to support changes in the firm's operations.
- **Human Capital (resources)**: The practices of recruiting, retaining, developing, and managing human capital will need to change. While billing will continue to be a function, the addition of new operational foci will lead to new staffing, staffing mixes, and human resources that are focused on driving health. Procurement decisions, discussed below, will be a primary factor determining how the human capital needs of insurance companies will change in the value-based purchasing world.
- **Information and Technology**: The infrastructure, policies, and practices for using data, information, and technology will need to be reworked—likely with substantive investments needed. With a historical legacy leaving artifact systems that all revolve entirely around billing, retooling those systems to focus on health will

be a massive undertaking. New systems development could overtake the old systems. Extensive transition periods for existing plans could provide substantial opportunities for upstarts to disrupt the existing systems in the near-term.

• **Procurement**: Procurement and specifically the decision whether to develop internally or subcontract out services that address health risk-factors will be a critical strategic decision for insurers. The move to value-based care will drive the value-proposition of insurance companies to that of health-impact per unit cost, but not all insurers will approach the decision of how to deliver services that impact health in the same way. Some may choose to completely abdicate responsibility for these arrangements, deferring to subcontracting with other organizations. This strategy will limit risk in developing those operations but may limit the potential rewards of doing so. Others will aggressively approach the opportunity to develop operations that directly improve health, rather than manage other entities doing so. The variability in these approaches will sort out which are most effective as the market develops.

Returning to the homelessness example, very rarely have insurance plans sought close partnerships with public agencies for the purpose of analyzing data targeting a population as difficult to track as the homeless group. New investments not only in the technology, but the partnerships that enable this analysis will be critical. The organization may then find it beneficial to physically build new facilities to address this group, hire new staff to work with the programs, and develop service relationships with outside partners with expertise working with such programs.

Service Providers

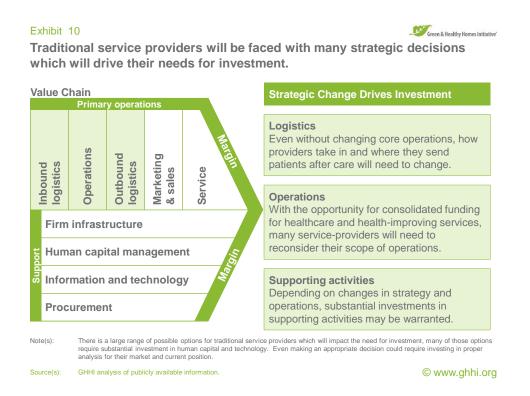
Value-based purchasing brings new challenges and new opportunities for health-driven approaches to services and collaboration. New business opportunities may attract new types of providers and provider-collaboratives.

The roles of providing services for health insurance has changed substantially over time. While once they had a very narrow scope, drawing to mind images of hospitals and expensive equipment, service providers have started to change in scope. More and more service providers that positively impact health but are not considered part of the traditional continuum of care are seeking and capturing insurance dollars. Considering even the state of current medical research, the broader span of health impact ranges well beyond the quintessential hospital image many have. Health is about more than clinical care and allowing insurers to make value-based purchases of services that impact health, not just pay the cost of healthcare services, has changed the way service providers need to think about their industry.

Traditional Healthcare Service Providers

The value-proposition for traditional healthcare services remains largely the same, but the competitive forces governing it have changed. While investments in health that prevent or mitigate the severity of healthcare services were once uncompensated, those broader investments in health now directly compete with healthcare services through temporally indirect means. Insurers can choose to invest in health now, thus preventing healthcare services costs later. While healthcare services will likely always have a place, the role is changing. Traditional service providers will need to investigate how to offer services or change their operations to reinforce or supplement the value of their healthcare service delivery.

Traditional service providers in the U.S. healthcare system will have increased opportunity to develop approaches that focus on having positive impacts on health rather than using volume to drive profitability. Under the historical activity-based purchasing systems where fees were charged for specific services, service provider profitability was driven by the volume of services and the relative contribution to profitability that their services delivered. This model financially limited service providers to mostly offering those services that were directly paid. Value-based purchasing models are now rising to prominence and are bringing changes in business logic for service providers, where payment can now be based on the marginal impact the services have on health. These models reduce or eliminate the financial incentive to deliver low-value services and incent models that focus on health and not healthcare services.



Where the core operation of healthcare service providers was the profitable operating of capital-intensive infrastructures, the new model will increasingly shift to demonstrating the impact their services have on health, *see Exhibit 10*. There is a risk-reward profile to the new system. A one-percent complication rate difference with a competitor that costs an insurer millions of dollars to provide healthcare is still worth a great deal to the insurer and can be priced into the negotiated rates – whichever side of the equation the service provider is on.

Under a value-based compensation system, traditional medical service providers will need a new financial roadmap. Rather than focusing on asset-utilization rates, the organizations will need to focus on the cost-effectiveness of marginal health impact. This means two huge shifts. The first shift is being able to track the marginal health impact that services have and, second, to be able to build new operating model to ensure that workflows focus on these developments. If they do so, there are potentially huge financial rewards. Under the old system, the largest financial payouts were associated with high-cost technological solutions. These solutions allowed high billable rates which drove higher profits. The new system offers another alternative, simple and low-cost solutions with lifelong impacts that can drive higher profits over the long-term.

Consider the example of diabetes. Under fee-for-service models, there is little lifetime cost-of-care consideration and little investment in health until the problem is detected, which may happen in relatively late stages of the disease. In those cases, suddenly the cost-of-care spikes with emergency care, hospitalization, high-cost pharmaceuticals, and even surgery leading to long-term disability care. The service providers' financial opportunity comes late in the disease states because that is where the services are needed. The value-based approach would provide funding for investment in preventive approaches throughout the life-cycle of the persons. A bit more investment is needed early, but the lifetime-cost is lower.

The same incentives and systems can be developed for a host of other conditions including broad health risk-factors. While health-improvement programs present an opportunity for traditional providers, the opportunities are larger for those organizations that have, can develop, or collaborate to deliver services that address those broader factors that cause or impact health. Issues spanning the social determinants of health, genetic predispositions, and beyond are all now business opportunities for service providers that are willing to step in and develop the capabilities to address an issue.

Changing Horizons

To get to those new places, healthcare service providers will need to rethink their existing business strategies and operating models. Much experimentation is underway as well as a debate regarding whether the existing systems are capable of radical change or if new upstarts will displace them in many areas. Everything from human capital, physical and technological infrastructure will need to undergo major shifts on top of the operating model being fundamentally redefined. Given the enormity of these changes, it is understandable that the debate is ongoing. It will require major changes, but there is a path forward:

Healthcare service providers will need to:

- 1. Identify those services that have potential to yield favorable health-impact to cost ratios for new business lines;
- 2. Develop the ability to determine and evaluate the marginal health-impact that services have;
- 3. Develop new business models that can be successful in a "cost-effectiveness of health" paradigm; and
- 4. Redefine the support functions and infrastructure needed to support new business models.

Examples of these systems include:

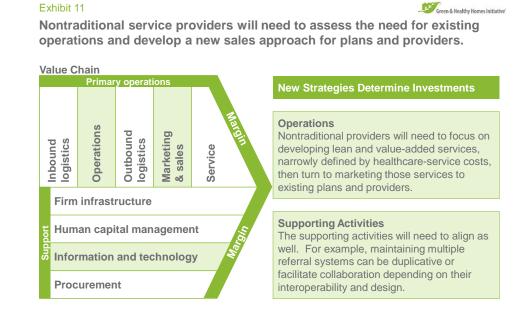
- 1. Creating registries of potential opportunities such as new services, collaborations, and other chances to develop health-impact in cost-effective manners.
- 2. Creating information technology solutions that allow tracking broader measures of health and risk-factors that impact health.
- 3. Creating whole life-cycle models of health and cost to identify the critical junction points for interventions and understanding of their value.
- 4. Reevaluating the physical infrastructure of healthcare delivery and what is needed at what level to move to a new model of care.

Consider the following example of a large mission-driven hospital and provider group (the System) moving aggressively towards value-based purchasing through capitation, value-based subcontracting, and with performance incentives layered on top. The System started with their existing community needs assessment to determine that a key issue for the community was the growing burden of opioid-affected pregnancies, which not only are likely to lead to relapse for the mother but also to cause life-long care needs and structural disadvantages for the children. The System conducted an asset and gap analysis to determine what community resources were available, how they were being used, and what needs remained. Through the analysis they determined that the community had many resources, though usually underfunded and poorly linked. Additionally, the System identified a gap in counseling the population regarding the impact of opioid use and the treatment options on their reproductive health, options, and potentially that of any future children who might be affected. Using this as a roadmap, the system set out to develop an integrated model to address the social-care needs of the specific population, and worked with local insurance plans to create an interoperable data-system to identify the population and each individual's needs to appropriately get the care needed. The system worked to go one step further by developing a whole-lifecycle risk-model for the population, allowing them to effectively create a business case for and monetize the impact their program would have for the insurance plans as well as the local and state government. Armed with this business case, they were able to work across partnerships to develop sustainable funding sources for the comprehensive treatment programs.

Nontraditional Service Providers

The value-proposition for nontraditional service providers offering investment opportunities for better health outcomes has been substantially changed. They are now able to create a monetizable impact on the health of insurance-enrolled beneficiaries. Many traditionally grant-dependent non-profits can move to become social enterprises, where the benefits of their programs create sustainable funding streams. In many cases, these may only partially offset the cost of services, but in others they may create returns on new invested capital that are sufficient to operate as independent businesses and drive their missions. Nontraditional service providers can benefit from value-based purchasing in many ways. The options include:

- 1. Working directly with insurance plans to secure payment;
- 2. Partnering with traditional service providers to create comprehensive offerings; or
- 3. Partnering among consortia of nontraditional service providers to create more comprehensive wrap-around offerings in either of the first two options.



Source(s): GHHI analysis of publicly available information.

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Any of these options can greatly benefit nontraditional service providers by creating new revenue streams and operational changes, *see Exhibit 11*. There are, of course, trade-offs that must be understood. Working directly with plans requires a substantial investment of time and effort as well as the development of certain capabilities that may not have been a focus for the organization earlier. Partnering with a traditional service provider can bring benefits in addition to the new revenue streams, but there are often legitimate questions about attribution of value created. Those questions become even more complicated when partnering among multi-group collaboratives. While these issues are certainly addressable, each organization will need to determine which strategy is best for them to pursue.

Moving Forward

Where the current momentum looks to be bringing the United States healthcare system and what it means to the system participants.

While there is little certainty in the way the healthcare system in the United States will progress, the current trajectory creates many business and health opportunities. Those opportunities are dependent on advancing value-based purchasing on multiple fronts including regulatory enablement under current authorities. Regulators can create the right environment and market dynamics to drive cost-effective investments in health. Those purchasing health insurance can go a very long way to advance important opportunities through their own consumer choices. Insurance plans may have the biggest changes to make to fully realize the potential, but the plans may also have the most to gain. Traditional service providers will need to strategically reassess their value-add to the overall system and be prepared to change and blend revenue structures. Nontraditional service providers will have access to new revenue streams if they can align their revenue models with producing verifiable value measured in healthcare-services cost-savings.

A key issue at the intersection of health, healthcare, and funding is that a model of paying only for sick-care is incompatible with investing in health. Value-based purchasing changes that entirely by capturing the savings impact and monetizing investments in health. The issues of moving forward are how to successfully adapt to a new way of funding the system. New concepts of value and new approaches to business will drive the next generation of investments in health.

The future is not all roses for all parties involved. Major challenges are associated with how to build business operations around new funding models and how to determine appropriate payments. Even attributing impact between programs can be a major issue for parties as they develop sophistication in these areas. Also, many service providers will be faced with new forms of risk. Providers not only will need to take on much of the risk that programs will actually produce results, but during that time their own cash is on the line from running the programs and payment only happens after substantial time has passed. Consider that for an asthma program, not only will a service provider need to secure access to claims, invest in the appropriate data analysis, develop a service-provider program, implement the program at scale – all using their own resources, but then they must wait for a full claims cycle of often a year or more, before they can try to determine an appropriate attribution of impact and then secure payment. While there are methods to mitigate these risks, the point is that value-based purchasing is a clear move in the right direction that will require new levels of sophistication in business model by all participating parties if they want to take full advantage of their new opportunities.

Bibliography

- Bradley, E.H., H. Sipsma, and L.A. Taylor. 2017. "American Health Care Paradox -High Spending on Health Care and Poor Health." QJM: An International Journal of Medicine (Oxford University Press) 110 (2). doi:10.1093/gjmed/hcw187.
- Butler, Stuart M., Dayna Bowen Matthew, and Marcela Cabello. 2017. "Re-balancing Medical and Social Spending to Promote Health: Increasing State Flexibility to Improve Health Through Housing." The Brookings Insitution: Schaeffer Initiative Health Policy Solutions: Building Healthy Neighborhoods (The Brookings Institution). https://www.brookings.edu/blog/upfront/2017/02/15/re-balancing-medical-and-social-spending-to-promotehealth-increasing-state-flexibility-to-improve-health-through-housing/.
- Centers for Medicare & Medicaid Services. 2016. "Medicaid and Children's Health Insurance Program (CHIP) Programs; Medicaid Managed Care, CHIP Delivered in Managed Care, and Revisions Related to Third Party Liability." Final Rule, Department of Health and Human Services, Washington.
- Department of Health and Human Services. 2016. "Medicaid and Children's Health Insurance Program (CHIP) Programs; Medicaid Managed Care, CHIP Delivered in Managed Care, and Revisions Related to Third Party Liability; Final Rule." Federal Register, May 06: 27,582-27,587.
- *Kaiser Family Foundation. 2017.* State Health Facts: Health Insurance Coverage of the Total Population 2016. *Accessed Oct 16, 2017. https://www.kff.org/other/stateindicator/total-population/.*
- Norton, Ruth Ann, and Brendan Wade Brown. 2014. "Green & Healthy Homes Initiative: Improving Health, Economic, and Social Outcomes Through Integrated Housing Intervention." Environmental Justice 7(6): 151-157. doi:10.1089/env.2014.0033.
- Nurmagambetov, Tursynbek, Robin Kuwahara, and Paul Garbe. 2018. "The Economic Burden of Asthma in the United States, 2008-2013." American Thorasic Society:

ANNALSTATS Articles in Press (*American Thorasic Society*). doi:10.1513/AnnalsATS.201703-259OC.

- Olson, Andrew E., and Enrique Martinez-Vidal. 2018. Experiences of a Service Provider: Lessons Learned in Exploring Value-Based Contracts with a Managed Care Insurance Plan.
- -. *2018*. Value-Based Purchasing: How to Succeed in the Changing Business of Health. *Washington, DC*.
- -. *2018*. Value-Based Purchasing: Making Good Health Good Business. *Washington, DC*.
- Porter, Michael E. 1985. Competitive Advantage. New York, NY: Free Press.
- U.S. Centers for Disease Control and Prevention. 2017. Healthy Schools: Asthma in Schools. May 09. https://www.cdc.gov/healthyschools/asthma/.