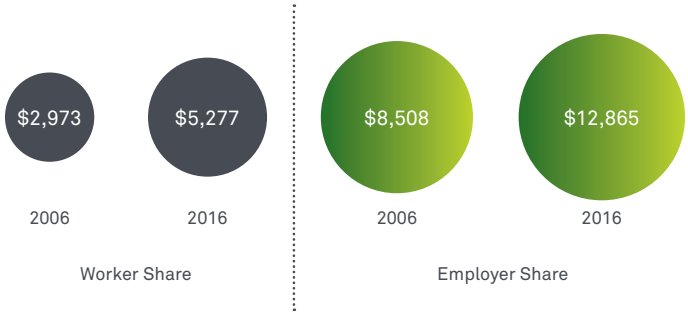
Lab spend management: Cost-effective strategies for health plans and employers

Introduction

The United States spends more on healthcare services than any other country in the world. In 2015, national spending was $3.2 trillion, or $9,990 per person[1] and this total is expected to reach $4.8 trillion by 2021.[2] Chronic conditions such as type 2 diabetes, obesity, heart disease, stroke, cancer, and arthritis are significant drivers of rising costs. As of 2012, the Centers for Disease Control estimated that about half of all adults in the U.S.—117 million people—had one or more chronic health conditions.[3] Yet, many of these conditions are avoidable or controllable with behavioral modifications including diet, activity, smoking cessation, and medical interventions.

For the average American worker, the rising cost of healthcare is felt in both rising out-of-pocket expenses and steadily increasing health plan premiums. According to one study, 83% of workers had a deductible in 2016 that averaged $1,478.[4] The average deductible for workers has gone up $486, or 49%, since 2011. Likewise, the cost of health plan premiums have grown by nearly 20% for individuals and 24% for families in the past five years. In real dollars, annual premiums for employer-sponsored family health coverage reached $18,142 in 2016, with workers paying on average $5,277 towards the cost of their families' coverage[5] (see Figure 1)—more than 9% of the U.S. median household income.[6]

Figure 1. Average annual health insurance premiums for family coverage, 2016.



Private employers that sponsor 20% of all healthcare spending[7] are also struggling with rising costs and the $1.1 trillion lost each year in productivity due to chronic disease.[8] To combat this trend and better engage their employees in managing their health, many employers have adopted high-deductible health plans that shift more healthcare costs onto their employees. Even with employees bearing more of the cost, the average healthcare coverage contribution an employer made for a single worker's family in 2016 reached $12,865 (see Figure 1), an amount that does not include the indirect costs due to loss of productivity, absenteeism, and increased workers' compensation.

For individuals, employers, and health plans alike, U.S. healthcare spending is rising at an unsustainable trajectory, necessitating action to bring costs under control. In response, the industry is designing payment models that focus healthcare spending away from acute care to prevention, early intervention, and health maintenance. Central to this transition is the role of fundamental healthcare services, such as clinical laboratory testing, given its role in improving diagnosis, treatment, and health management.[9]

In 2015, Medicare payments for clinical lab services totaled $8.8 billion, or 1.4 percent of total Medicare spending.[10] While it may be a relatively small proportion of total spending, the insights derived from lab testing impact not only diagnosis but most medical treatment decisions, subsequently defining the quality of patient care, clinical outcomes, and the total cost of care. Thus, the ability of health plans and employers to develop cost-effective strategies that optimize lab test utilization will be essential for total spend management.

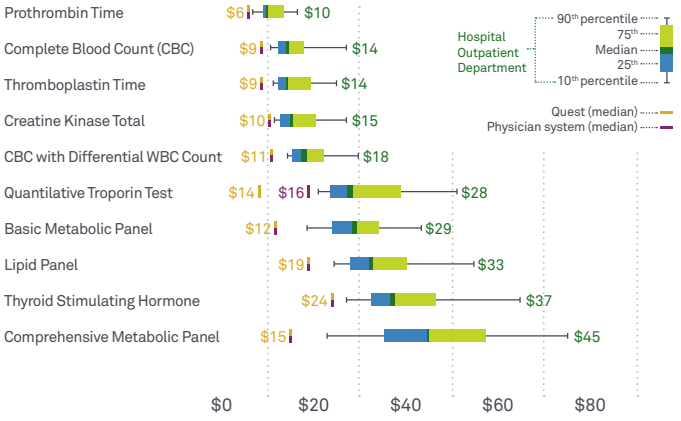
The need for lab spend management

The price of lab tests are based on a number of factors including the type of test, place of service, and complexity of the results interpretation. In a 2014 study by the University of California at San Francisco, researchers found that prices for lab tests charged by California hospitals varied greatly. The study compared charges for 10 common clinical laboratory tests that were reported in 2011 by all non-federal California hospitals. For example, a patient could be charged as little as US$10 or as much as US$10,169 for a lipid panel, depending only on which hospital they visited.[11] In response, the California Hospital Association was quick to point out list prices for lab tests are rarely charged, as health plan contracts intervene or self-pay patients are given discounts. However, it is these list prices that are a starting point for negotiations with insurers and patients, potentially contributing to higher overall healthcare costs.

Generally, tests performed in a hospital setting are more expensive than the same tests performed in other settings, such as a standalone commercial laboratory.

A 2015 study by the Commonwealth of Massachusetts Health Policy Commission compared commercial payments in Massachusetts for 10 common lab tests across different settings of care: hospital outpatient departments, physician offices, and freestanding diagnostic facilities.[12] For prices at freestanding diagnostic facilities, the study evaluated Quest Diagnostics, the most commonly used freestanding lab services provider in Massachusetts. The sample included 3,252,584 claims, totaling $102,327,046 in patient and health plan payments in 2012. For each lab test studied, prices were higher in hospital outpatient departments than for the same test in a physician office or Quest lab. For most tests, the price at a hospital was double the price at Quest (see Figure 2). Although not a focus of this analysis, higher costs may also translate to higher out-of-pocket expenses for the member. Thus, health plans can achieve cost savings by establishing a contract with a preferred commercial laboratory partner and then creating strategies to drive members to utilize these lab services through incentives, price transparency, and ongoing engagement.

Figure 2. Prices for common lab tests by setting in Massachusetts, 2012.



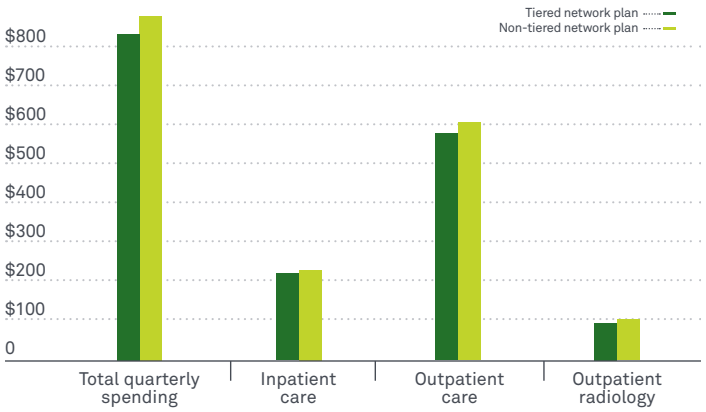
Note: Tests in the hospital setting were only included if billed as an outpatient service. Providers are included if they performed at least 15 tests. Source: HPC analysis of Massachusetts All-Payer Claims Database, 2012.

Creating affordable care through network optimization

One cost-control method involves the use of tiered networks with high-quality, affordable providers. In the case of labs, tiered networks offer a premium level of benefits to members who use specific in-network labs that meet quality and cost thresholds, and another level of benefits for those who elect to seek services with other in-network lab providers. The intent is to increase member awareness of and responsibility for the cost of testing and drive service utilization to preferred lab providers. The strategy, widely adopted by health plans for physician and hospital services, has been met with success both in changing member behavior and driving down costs. The Commonwealth Fund explored how tiered networks affiliated with Massachusetts' largest insurer affected hospital admission choices.[13] Under these tiered network plans, the average cost to a member for a hospital admission was $1,070 for out-of-network hospitals, $360 for middle-tier hospitals, and $170 for preferred hospitals. Members with a tiered network plan were more likely than control group members, who were not enrolled in a tiered network plan, to seek care at preferred hospitals compared with non-preferred hospitals. The health plan re-tiers hospitals periodically based on a combination of cost and quality measures. Over the course of the 3-year study period, 44% of hospitals changed tiers, mostly from middle to preferred, and nearly all because they decreased their prices.

Health plans also benefit financially from savings generated by tiered network programs. A study published in 2017[14] describes the impact of a tiered network health plan on total healthcare spending and on inpatient, outpatient, and outpatient radiology services for non-elderly members of a commercial health plan in 2008–12. The tiered network was associated with $43.36 lower medical spending per member per quarter ($830.07 versus $873.43), representing nearly a 5 percent decrease in spending as compared to spending by members in plans without a tiered network (see Figure 3).

Figure 3. Tiered network associated with lower medical spending, per member per quarter.



Source: Adapted from Health Affairs, May 2017 36(5):870–75.

Likewise, tiered networks work for clinical lab services, creating more affordable testing options for members and reducing the cost of care. Figure 4 illustrates the power of directing members to the most cost-effective lab to reduce total cost to the health plan, employer, and member.

Figure 4. Sample member out-of-pocket costs based on the average negotiated payment for in-network labs and average charges for out-of-network labs by site of service.

	In-Network Independent Lab	In-Network Hospital Lab	Out-of-Network Independent Lab
Basic Metabolic Panel	$9	$36	$48
Lipid Panel	$14	$65	$54
Pap Smear	$15	$51	$52

Source: Anthem Blue Cross. Saving Your Patients Money with In-Network Referrals. https://www11.anthem.com/ca/provider/f0/s0/t0/pw_e194232.pdf?refer=provider. Example based on a member who has met his or her annual deductible.

Still, careful design of tiered networks is important for maintaining high levels of member satisfaction. A 2015 survey found that almost one-third of privately insured adult patients had received a surprise medical bill in the previous two years.[15] This can happen in many situations, including when a physician knowingly or inadvertently sends a member's test to a non-preferred lab. When the test is performed and the health plan processes the claim based on the member's benefits plan, the member may be left holding a large bill—a major source of member dissatisfaction. Thus, it is important to educate members on the cost and quality-related benefits of utilizing the preferred lab and drive compliance with compelling incentives, convenient locations, and easy-to-access information.

Health plan benefit design change strategies for appropriate lab spending

A key approach to lowering healthcare costs focuses on covering preventive care, wellness visits, and cost-effective health management treatments such as medications to control blood pressure or diabetes, thereby reducing the likelihood that members will need more expensive medical procedures in the future. Evolving health coverage models are contributing to this goal. In partnership with or independent of tiered networks as described in the previous section, tiered benefit design options can help financially incent positive health behaviors by offering a lower or no copay for using certain in-network labs, shifting members to more cost-effective lab settings. Benefit design changes can then be implemented at the health plan level or plan sponsor level for large, self-insured employers. Benefit design changes may include value-based insurance design (V-BID), steerage programs, convenience and access improvements, and the creation of greater price transparency.

Incentivize cost-effective care through value-based insurance design

Value-based insurance design (V-BID) programs aim to increase healthcare quality and decrease costs by using incentives to promote cost-efficient services and consumer choices. To incentivize members to make use of these benefits, health plans typically have no or low copays for ordered lab tests and other high-value services for certain conditions to remove the concern for out-of-pocket costs. The American College of Physicians (ACP) recommended the implementation of V-BID to counteract consumer cost-sharing, particularly deductibles, that may cause patients to forgo or delay care, including medically necessary services.[16] Likewise, plans may use high cost-sharing models to discourage services considered to be of uncertain value or that are avoidable, unnecessary, or repetitive. Health plans apply evidence-based data to identify high-quality, low-cost providers and services that can lower overall costs.

Increases in Medicare beneficiary cost-sharing have been shown to adversely affect vulnerable beneficiaries, contributing to poor clinical outcomes, and, in some instances, increasing Medicare expenditures.[17,18,19] Recognizing this correlation, the Centers for Medicare and Medicaid Services launched the Medicare Advantage Value-Based Insurance Design (MA V-BID) Model Test to pilot cost-sharing reduction strategies that encourage the use of high-value clinical services and providers. Nine Medicare Advantage plans in three states were selected to enroll beneficiaries with specified chronic conditions in 2017. Thus far, expert interviews and quantitative modeling reveal that V-BID programs, which reduce consumer cost-sharing for the targeted chronic conditions, are a viable and cost-effective solution for the Medicare program. Moreover, the alignment of consumer engagement initiatives with ongoing provider-facing, value-based payment initiatives is a critical step to

improve quality of care, enhance patient experience, and contain cost growth.[20] In 2018, the model test will expand to three additional states and will include two additional clinical conditions.

UnitedHealthcare began a V-BID program in 2009 with the objective of more effectively managing their diabetic and pre-diabetic members to control the escalating costs of insuring this population.[21] According to UnitedHealthcare data, treating pre-diabetic patients costs $5,000, while the average annual cost of diagnosed diabetics with complications, such as heart disease or kidney failure, can be as high as $30,000.[22] The Diabetes Health Plan, a first-of-its-kind program, rewarded diabetic and pre-diabetic members for adhering to medically-proven steps to manage their condition, including regular blood sugar checks, routine exams, preventive screenings, and wellness coaching. The benefit incentives included diabetes-related supplies and prescription drugs at no charge, lower copayments for related doctor visits, and a voluntary lab screening model to help members determine if they had undiagnosed diabetes or suffered from prediabetic conditions. The UnitedHealthcare Diabetes Health Plan projected a savings of $500 a year per member.

Establish lab steerage programs for routine testing

Another approach to promoting use of cost-effective lab services and driving savings for employers is a lab steerage program that wraps around a standard benefits plan. In partnership with a commercial lab services provider, and typically used on outpatient lab services, employers and their covered employees and dependents can receive savings (through contractual pricing) to routine lab tests including, but not limited to, blood tests (e.g., cholesterol, complete blood count), urine tests (e.g., urinalysis), cytology and pathology (e.g., pap smears and biopsies), and cultures (e.g., throat culture). The program encourages employees to take a more active role in their healthcare and promotes the use of standalone commercial labs versus other higher-priced, in-network labs. Services are also available to help educate providers on this program—either at the request of the member or employer.

Engage members through convenience and access

Regardless of the strategies implemented, member engagement is key to a health plan's or employer's overall efforts to manage lab spend. Ensuring members use in-network providers, for lab or other types of services, is an important component and access to convenient in-network testing options is critical to these efforts. In partnership with laboratories, health plans are evaluating and piloting models that bring lab services to the member, whether at home, in the office, or through patient service centers in convenient locations, such as grocery stores. These types of services greatly benefit members with geographic, economic, or health limitations, such as homebound and disabled individuals, as well as the most noncompliant members. Similarly, health plans have collaborated with ride-hailing companies to provide free rides to nonemergency medical appointments, addressing the estimated 3.6 million Americans for whom transportation barriers result in missed or delayed medical appointments.[23]

Create cost-conscious testing behavior through price transparency

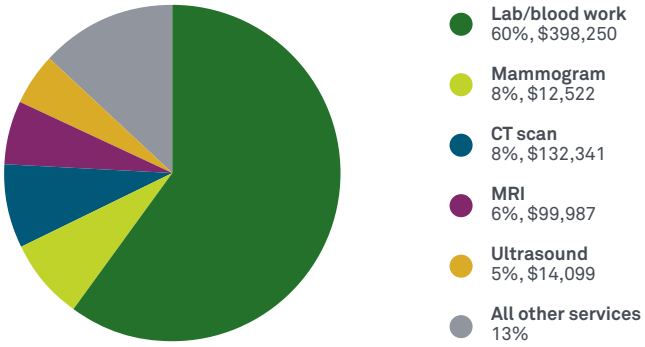
More than 80% of the time consumers will choose a high-quality provider—best quality at lowest price—when given easy-to-understand information on price and quality.[24] Member self-service information tools, such as web portals that offer price transparency, allow individuals to compare services and anticipate the value associated with out-of-pocket costs. Forward-thinking laboratory providers are developing real-time estimation programs and patient pre-registration capability that informs members of their financial responsibility in advance of, or at their visit.

Another strategy is reference-based pricing (RBP), a benefit design that sets a maximum contribution from the health plan to pay for a healthcare service that typically has a wide cost variation. Using evidence-based data, health plans can provide procedural pricing to members to help individuals make cost-conscious decisions supported by education and tools. A growing number of employers, insurers, states, and even hospitals and doctors have created online price databases including large health plans, such as Anthem, UnitedHealth, Humana, Aetna, and Cigna.[25]

Over time, programs such as the "SmartShopper" partnership between Anthem and the City of Manchester, New Hampshire, can generate significant cost savings. City employees or retired employees under 65 have access to the Vitals SmartShopper program, which rewards members for using cost-effective care. By

contacting the SmartShopper hotline, members can find out how much a physician-recommended test or procedure costs at various in-network facilities. If the member elects a cost-effective option, he or she can qualify for a cash reward ranging from $25 to $500. Of the 39 services currently included in the program, lab/blood work is the most commonly used. Year-to-date claims data from June 2017 shows that 3,034 members have received 1,699 lab tests. Of those, 121 members consulted SmartShopper, resulting in a savings of $27,550 for the health plan. If all lab work had been compliant with the program, the health plan could have saved an additional $398,250[26] (see Figure 5).

Figure 5. Top five services with incurred claims by volume and potential savings to the health plan.



In a separate study designed by Cigna and one of their employer customers, Safeway, Inc.,[27] a RBP model was applied to lab services, such as a lipid or comprehensive metabolic panel, as part of their current benefits plan. The study evaluated 492 procedural codes for lab tests from January 2010 through December 2011. Study and control groups were Safeway employees and their covered dependents enrolled in a Cigna health plan. The study group received information from their employer about a set RBP and was provided with access to a free online shopping tool that displayed information about the cost, location, and type of lab services in their geographic area. The control group had no access to the RBP benefit, did not receive information about RBP from their employer, and did not have access to an online lab shopping tool.

A total of 20,144 claims from 4,363 members were analyzed in the study group, while 405,784 claims from 83,059 members were analyzed in the control group. The study demonstrated greater lab compliance, defined as the percentage of lab claims with total charges at or below the reference price, among members with the RBP benefit (69%) compared with those not subject to RBP (57%). As a point of comparison, the overall pre-intervention lab compliance rate was 54%. Members subject to RBP who used the online tool (7%) had higher lab compliance (76%) compared with members who did not use the tool (68%), demonstrating the value of price transparency tools despite the challenges in driving usage. The increase in lab compliance among the study group was equivalent to a $4.45 decrease in the average lab unit cost, relative to the control group, indicating that RBP can promote cost-conscious selection of lab services.

Conclusion

Rising healthcare costs has created serious challenges for the American healthcare system. Health plans, employers, and members have the potential to mutually benefit financially from health plan network optimization and benefit design change. As evidenced in this paper, efforts by health plans and employers to empower members to engage in proactive care through qualified and affordable providers can drive down overall healthcare spending. In particular, ensuring the appropriate utilization of diagnostic lab services has been shown to be especially effective in generating savings through systematic programs such as tiered networks, steerage programs, and cost transparency programs and portals. These different types of strategies, and still others, should be evaluated and used in concert to optimize lab spending.

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