HEALTHCARE INDUSTRY GROUP

AMAZON, JP MORGAN AND BERKSHIRE HATHAWAY: DISRUPTION, INCREMENTALISM OR BOTH

ALVAREZ & MARSAL

The market reaction to Amazon, JP Morgan and Berkshire Hathaway's January 30, 2018 announcement of plans to form an independent healthcare company to reduce healthcare costs for their employees reflects their potential for disruption based on Amazon's history, JP Morgan's financial expertise and Berkshire Hathaway's willingness to invest for the longer-term.

Combined, the three companies have 1.15 million employees; Amazon with 542,000, JP Morgan 243,000 and Berkshire Hathaway 368,000. Assuming 2.0 covered lives (spouse, children) per employee implies 2.3 million covered lives, creating an opportunity for scale purchasing of healthcare services.

Walmart, with 1.3 million U.S. employees, is the only employer larger than the announced combination. Other companies with more than 300,000 employees often have a predominance of low wage workers including UPS, Target, Kroger, Home Depot, Target and McDonalds; GE, HP and IBM are also on the list.

Scale purchasing alone is insufficient to generate a sustainable reduction in healthcare costs. Healthcare purchasing coalitions have had limited success in "bending the cost curve." In this article, we discuss the opportunity associated with employer-led healthcare initiatives to reduce healthcare costs while improving health quality and outcomes. Implications for providers and insurers are also referenced.

Analytics and consumer engagement will be essential to moderate spending. The new company will initially focus on technology solutions.[1]

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Background

Employer-sponsored private health insurance spending of $1.0 trillion in 2016 far exceeds that of Medicare ($678.6 billion) and Medicaid ($565.5 billion).[2] And yet, their ability to influence care delivery, health outcomes and costs does not reflect their purchasing power due to several reasons including their primary focus on benefit design, over-reliance on third party consultants, limited understanding of the disease life cycle and total cost of care, inadequate use of population health principles and the application of analytics. Healthcare remains difficult to navigate for the purchasing employer and the at-risk patient who experiences it.

Although the healthcare system is inefficient and ineffective, employers must enact strategies that allow them to control costs while improving health outcomes. In January 2016, 11 months ahead of schedule, the Centers for Medicare and Medicaid Services (CMS) announced reaching its goal of 30 percent of Medicare fee-for-service payments in alternative payment models (e.g., accountable care organizations, bundled payments) in its efforts to "reward value and care coordination – rather than volume and care duplication."[3] CMS has established a 50 percent goal for 2018. Employers also need to accelerate the transformation of healthcare delivery via an increased focus on alternative payment models.

The days of cost-shifting to employees are over; employers must find alternative approaches to manage expenses based on data, an increased focus on the 5-10 percent of members accounting for 49-63 percent of costs, opportunities for prevention, self-management and earlier intervention. A more clinical, whole-person approach is necessary to manage costs recognizing that the same employee may have several risk factors and medical conditions (co-morbidities).

SITUATION ANALYSIS

Since 1980, national healthcare expenditures have increased at 2.6x the Consumer Price Index (CPI) from $256 billion to $3.5 trillion in 2017.[1,3] During this period the percentage of GDP allocated to healthcare has risen from 8.9 percent to 18.1 percent of the GDP. Repeated attempts at cost containment such as managed care, new payment methodologies, reductions in payment growth, changes to coverage, consumer cost shifting and technology enhancements have had a limited impact on longer-term trends. Many of these initiatives failed to adequately address the fundamental "failures" of healthcare delivery: fee-for-service reimbursement combined with limited, if any, accountability for health outcomes and the total cost of care.

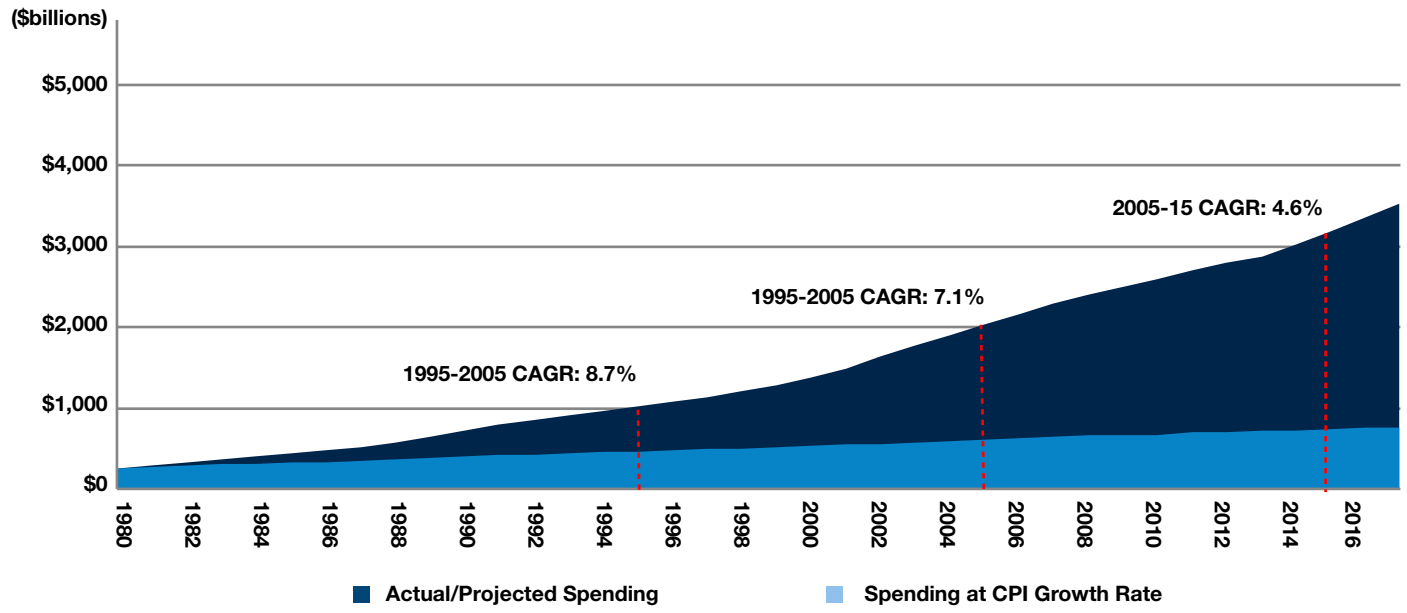
During the next eight years, from 2017-2025, CMS projects an increase in spending from $3.5 trillion to $5.5 trillion. According to Warren Buffet, Chairman and CEO of Berkshire Hathaway, "the ballooning costs of healthcare act as a hungry tapeworm on the American economy."

Employer-sponsored insurance accounts for 35.3 percent ($1.0 trillion) in U.S. personal healthcare spending. Employers spend more on healthcare than Medicare and Medicaid. CMS has utilized its ability to manage healthcare costs more effectively than employers primarily due to its ability to single-handedly influence Medicare payment terms (coverage, reimbursement) and Medicaid spending at the state level. Employers, especially those with self-insured health plan enrolling 60 percent of covered workers, have under-utilized their market "power."[5]

Importantly, the management of healthcare benefits (and health outcomes) has been largely outsourced to third-parties without an adequate internal understanding of health care delivery, condition and/or disease progression, evidence-based programs, measurable outcomes and potentially conflicting business models. Financial and clinical personnel need to increase their involvement to ensure analytic rigor.

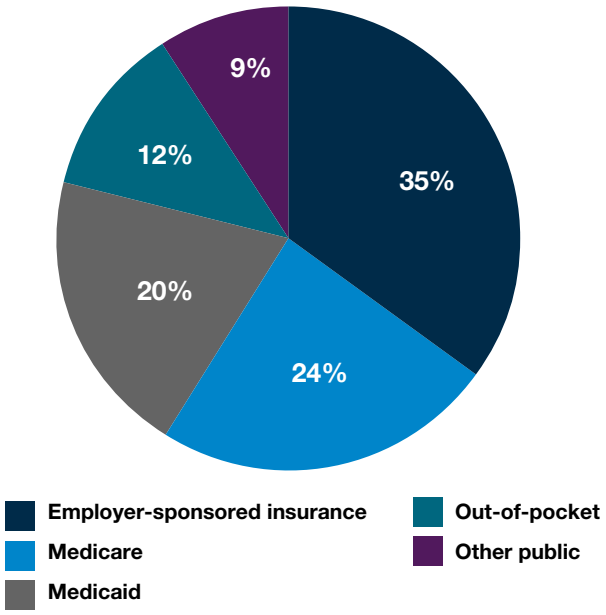
Employers, directly and through relationships with other large employers or coalitions, have the ability to influence healthcare outcomes and costs with the appropriate strategic approach, skill sets and negotiating leverage. Disruption, as practiced by Amazon elsewhere, rather than incrementalism, is required. The forecast acceleration of spending per employee in 2015-2020 represents an opportune period for the initiation of ecosystem disruption.

FIGURE 1 | NATIONAL HEALTHCARE EXPENDITURES, 1980–2017



Sources: CMS National Health Expenditures, BLS CPI Inflation Calculator. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html

FIGURE 2 | EMPLOYERS HAVE SIGNIFICANT PURCHASING "POWER" THAT IS UNDERUTILIZED

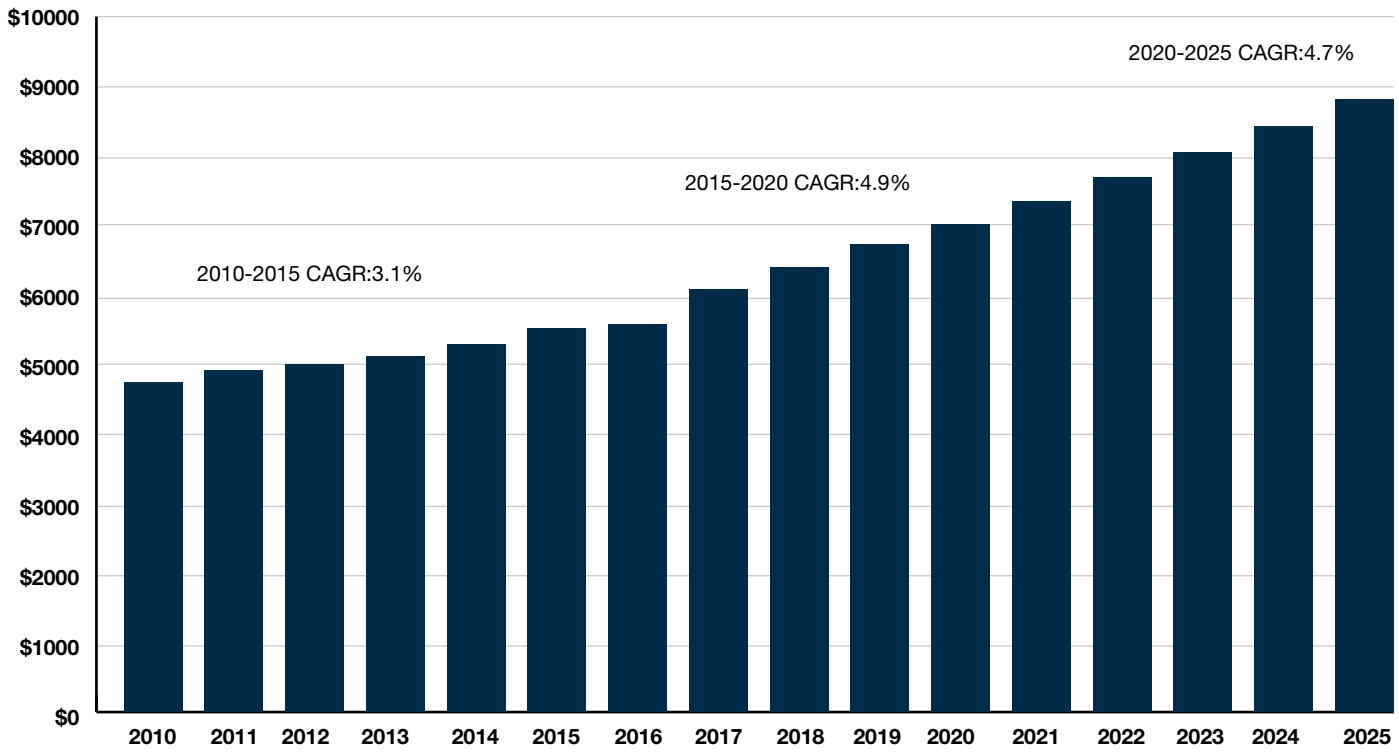


REASONS FOR UNDER-UTILIZATION

- Focus on benefit design and not health outcomes and total cost of care
- Complexity of healthcare delivery and clinical conditions
- Over-dependence on third-party consultants and vendors that may have a conflict of interest
- Inadequate use of data analytics; and generation of related insights
- Inadequate measurement of health and wellness initiative effectiveness
- Inadequate collaboration between Human Resources and Finance Department
- Division between healthcare, disability, worker's compensation, leave of absence and other health-related costs

Personal healthcare expenditures, 2016

FIGURE 3 | EMPLOYER SPONSORED HEALTH INSURANCE SPENDING PER EMPLOYEE, 2010-2025



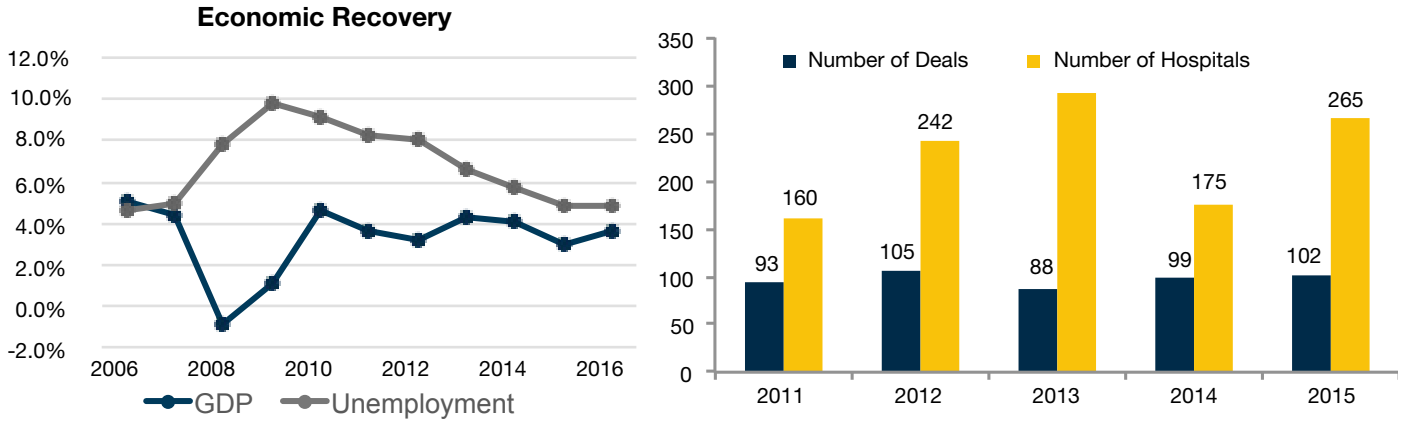
Source: CMS National Health Expenditures

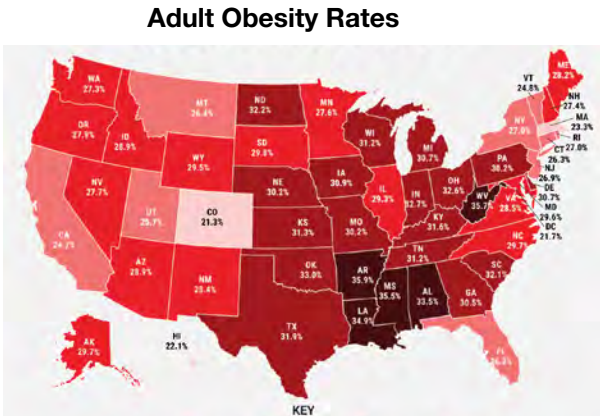
The modest growth rate in spending per employee in 2010-2015, though still above the average annual CPI increase of 1.9 percent, reflects a variety of factors including recovery from the Great Recession, employer cost shifting and the end of the generic cliff, with newly off-patent drugs with $73 billion in revenues offsetting double-digit increases in brand prices and new specialty products.[6] Structural changes due to significant provider, insurance company and supplier consolidation, as well as pharmaceutical drug inflation portend higher prices as already seen in 2016-2017.

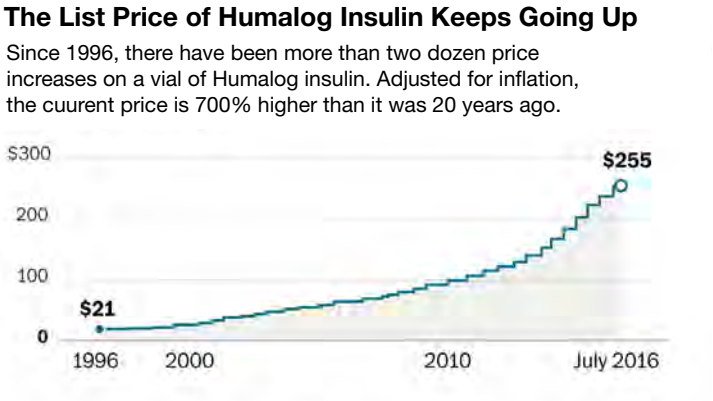
The acceleration in spending requires context, and cannot be viewed as a single point of time. Compounding has a significant impact on the actual dollars spent, with an increase in baseline spending over time. For example, from the overall perspective, national health expenditures increased by $129 billion, +6.5 percent in 2005-2006, as compared to $154 billion, + 4.8 percent in 2015-2016. The threshold of affordability for many employees has passed.

The Patient Protection and Affordable Care Act (ACA), also known as "Obamacare" was signed by President Obama on March 23, 2010. Obamacare was largely about increasing coverage and not increasing the efficiency and effectiveness of care delivery, managing competition, moderating drug costs or enhancing the experience of care. It actually raises employer costs by the employer mandate, raises the coverage age of dependents to 26 and eliminates pre-existing condition exclusions and caps on spending.

FIGURE 4 | 2010-2014 HEALTHCARE INFLATION MASKED BY RECOVERY FROM GREAT RECESSION, GENERIC CLIFF AND OTHER FACTORS







Sources: U.S. Bureau if Economic Analysis; U.S. Bureau of Labor Statistics; Irving Levin Associates, Inc. (2016). The Health Care Services Acquisition Report, Twenty-Second Edition.

FIGURE 5 | COMPOUNDING HAS A SIGNIFICANT IMPACT ON HEALTH EXPENDITURES: AN ACCELERATION OF U.S. EMPLOYER SPENDING IS FORECAST

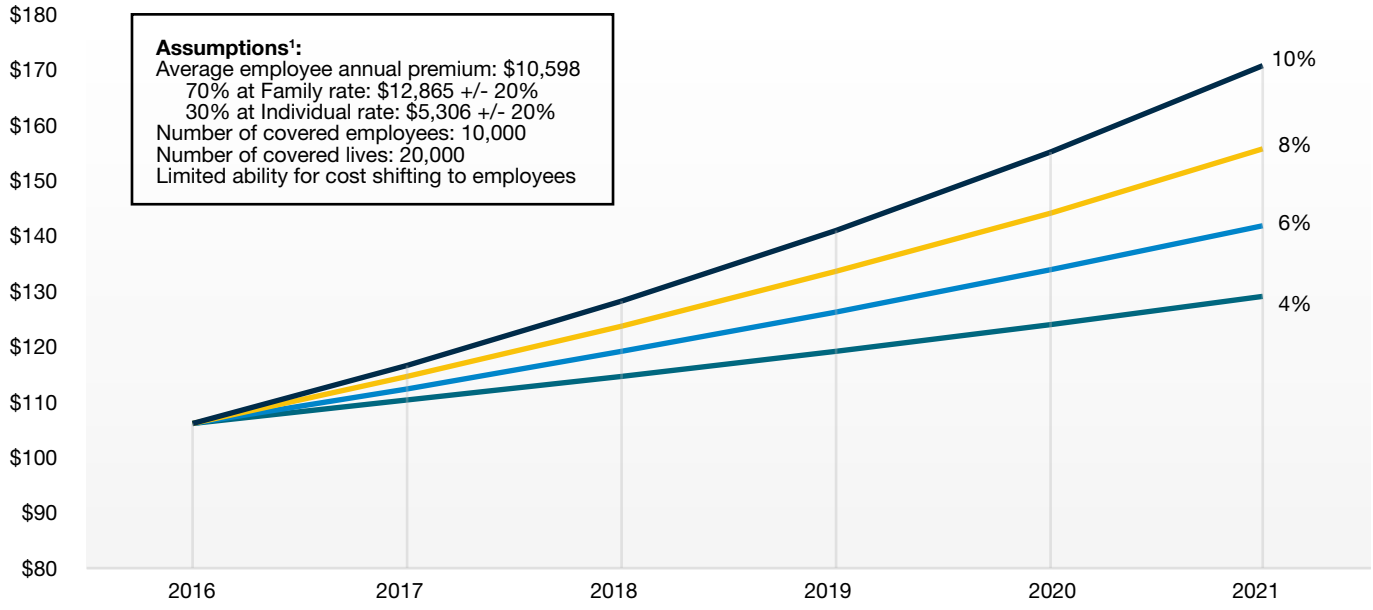


FIGURE 6 | PATIENT PROTECTION AND THE AFFORDABLE CARE ACT ACTUALLY RAISES EMPLOYER COSTS

COVERAGE:

- Medicaid eligibility expansion to those earning 138 percent of the Federal Poverty Level (FPL), including adults without dependents, in participating states. Federal government to pay in 2014-16: 100 percent, 2017-2019: 95 percent and 2020+: 90 percent thereafter.
- Individual mandate; if uninsured, 2016 penalty of $695 or 2.5 percent of family income, whichever is greater.
- Employer mandate. Employers with >50 full-time (f/t) employees (>30 hours per week) are required to offer health insurance coverage that meet affordability provisions (i.e., no more than 9.5 percent of gross pay for individual coverage). They will be charged a $2,000 penalty per full-time employee that lacks health coverage.
- Insurers may not deny coverage to individuals for pre-existing conditions; and must offer the same premiums within the same age and geographical group regardless of gender and pre-existing conditions, except tobacco use.
- Young adult coverage; can remain under parents' health plan through age 26.
- Health plans are required to provide essential health benefits (n=10 categories); i.e., ambulatory (outpatient) services, emergency services, hospitalization, pregnancy/newborn, mental health/substance abuse, Rx drugs, rehabilitation, labs, prevention, wellness and chronic disease, pediatric including oral and vision care.
- Elimination of annual and lifetime spending caps.

ACCESS:

- Created health exchanges at the federal and state levels to make "affordable" health plans meeting essential ("basic") health plan requirements available to uninsured and low-to-moderate income individuals and households.
- Employers may not require employees to wait more than 90 days for health insurance eligibility.

AFFORDABILITY:

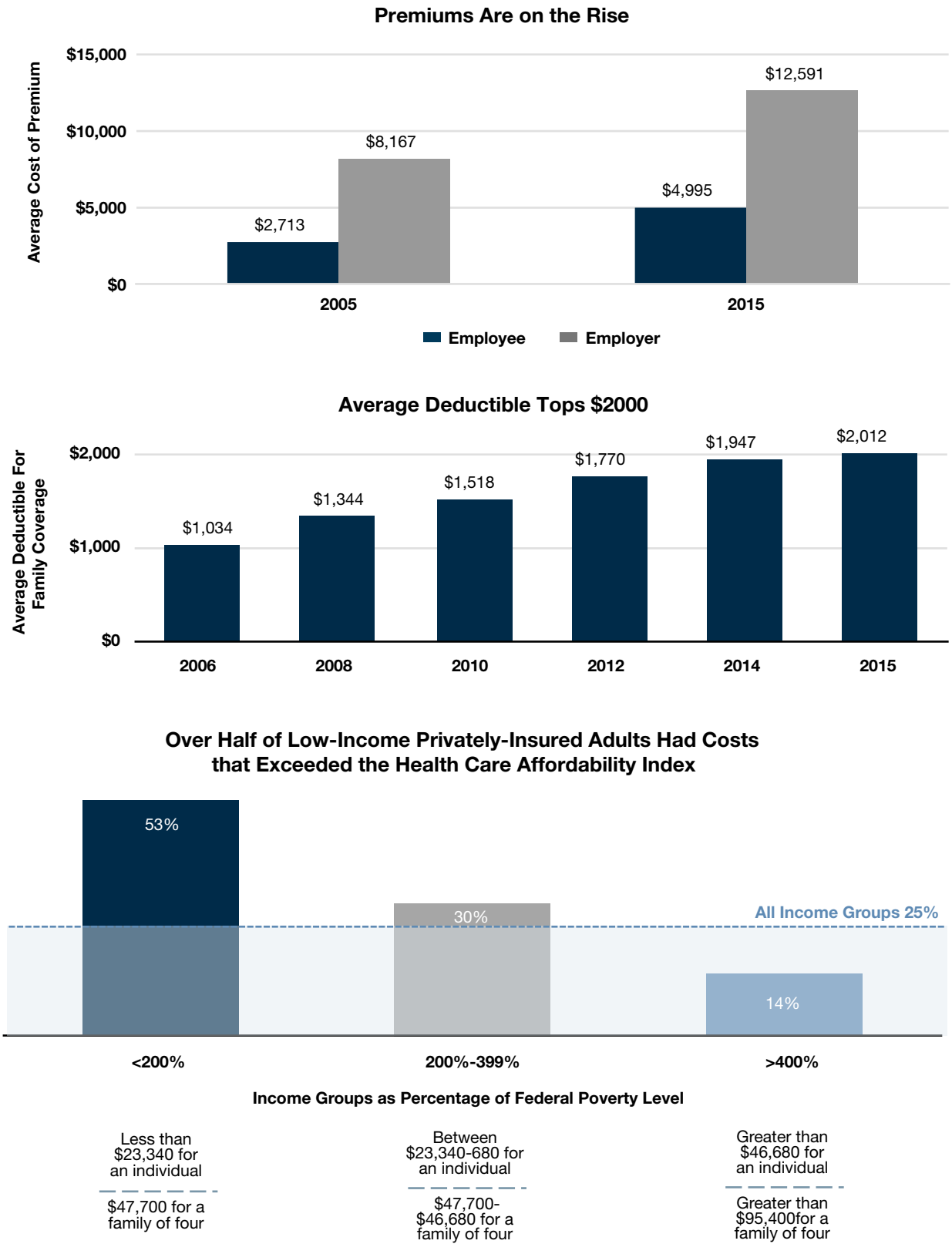
- Subsidies (in the form of refundable tax credits) available on the state health insurance exchanges for individuals with a household income up to 400 percent of the FPL. Note, average premium subsidy $291/month.
- No out-of-pocket costs for preventive services (n=66); e.g., annual primary care visit, screenings (e.g., BP, cholesterol, colorectal cancer, depression, diabetes, hepatitis, HIV) and vaccinations.
- Pretax Health Savings Accounts [HSAs] for enrollees in high deductible health plans.
- Patients are granted the right to appeal whenever an insurer denies payment for healthcare services.

The affordability of healthcare has declined during the past few years and represents a major barrier to patient access. Rising out-of-pocket expenses (see Figure 7) driven by higher premiums, coinsurance, copayments and especially deductibles represent financial challenges to many Americans. The ACA has contributed to premium increases, higher copayments and rising coinsurance not only for Americans newly covered by health exchange products, but for Americans who had already been covered by employer-based coverage or by their own individual insurance. Employers have also contributed directly to this trend by shifting additional out-of-pocket expenses to their employees.

It's important to note that nearly three-quarters of American households have income below $97,000 per annum — the family of four maximum for health exchange subsidies. The median household income was $55,775 in 2015.[7] The out-of-pocket maximum for exchange products is $7,150 for an individual and $14,300 for a family in 2017.[8]

The Commonwealth Fund has developed a Health Care Affordability Index (see Figure 7) based on premium, deductible and out-of-pocket costs. One-quarter of all privately insured adults have high healthcare cost burdens. In a 2016 survey, 26 percent of Americans described healthcare costs as causing a serious financial problem during the prior two years, 27 percent describe being unable to pay for basic necessities like food, heat or housing, and 42 percent mention spending all or most of their personal savings.[9] Healthcare costs are a major contributor, if not the leading factor, to personal bankruptcy.

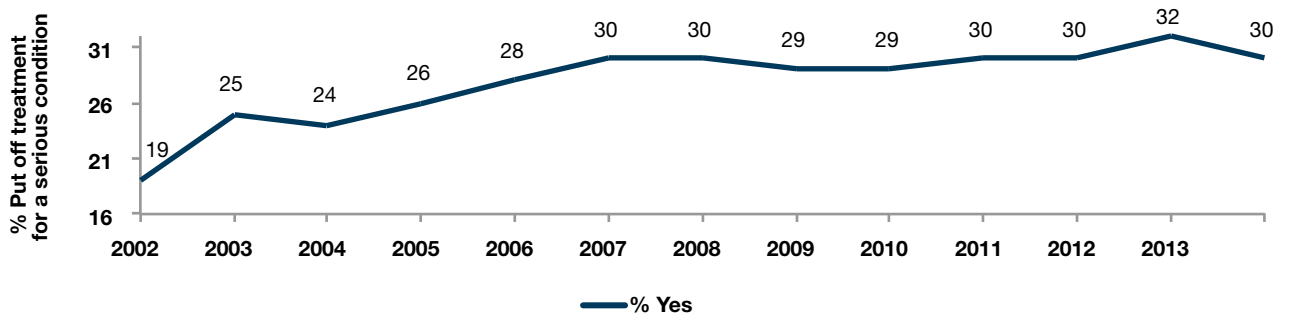
FIGURE 7 | RISING OUT-OF-POCKET EXPENSES



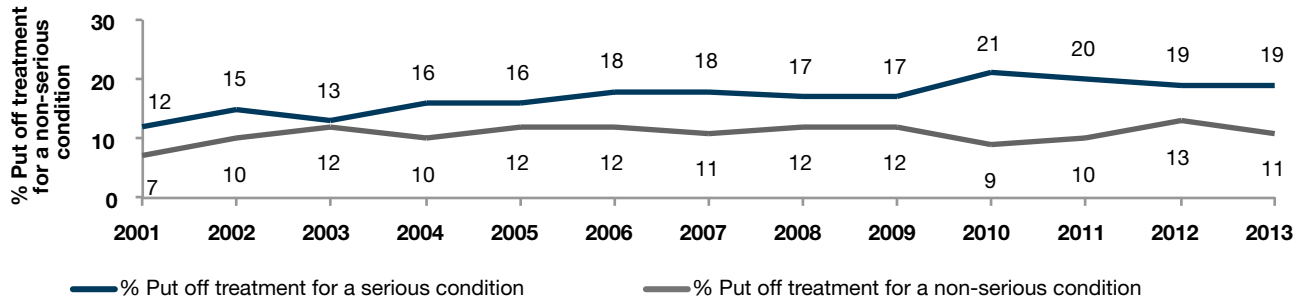
Sources: Kaiser/HRET Survey, 2015; http://www.commonwealthfund.org/publications/press-releases/2015/nov/commonwealth-fund-health-care-affordability-index

FIGURE 8 | HIGHER COSTS AFFECT UTILIZATION OF HEALTH SERVICES

Within the last 12 months, have you or a member of your family put off any sort of medical treatment because of the cost you would have to pay?



When you put off this medical treatment, was it for a condition or illness that was – very serious, somewhat serious, not very serious, or not at all serious?



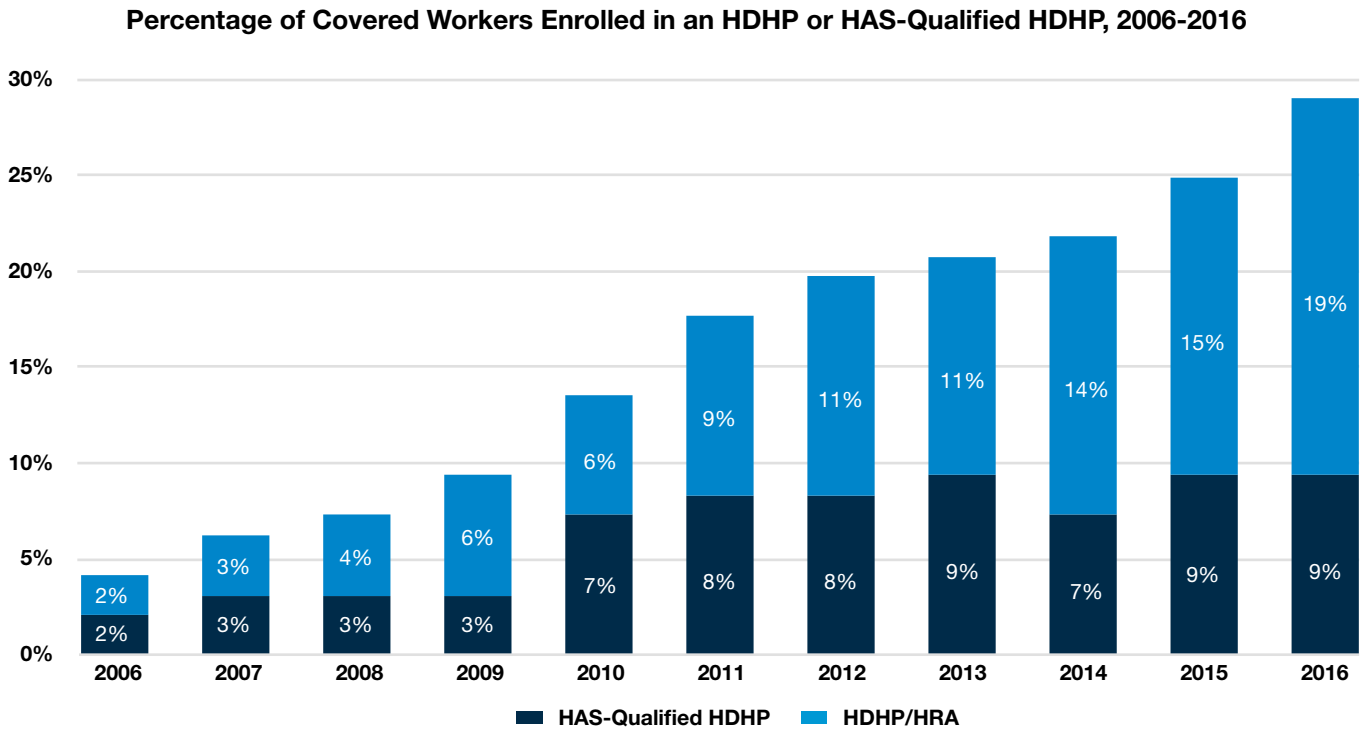
Source: GALLUP Well-Being. Costs Still Keep 30 percent of Americans From Getting Treatment. December 9, 2013.

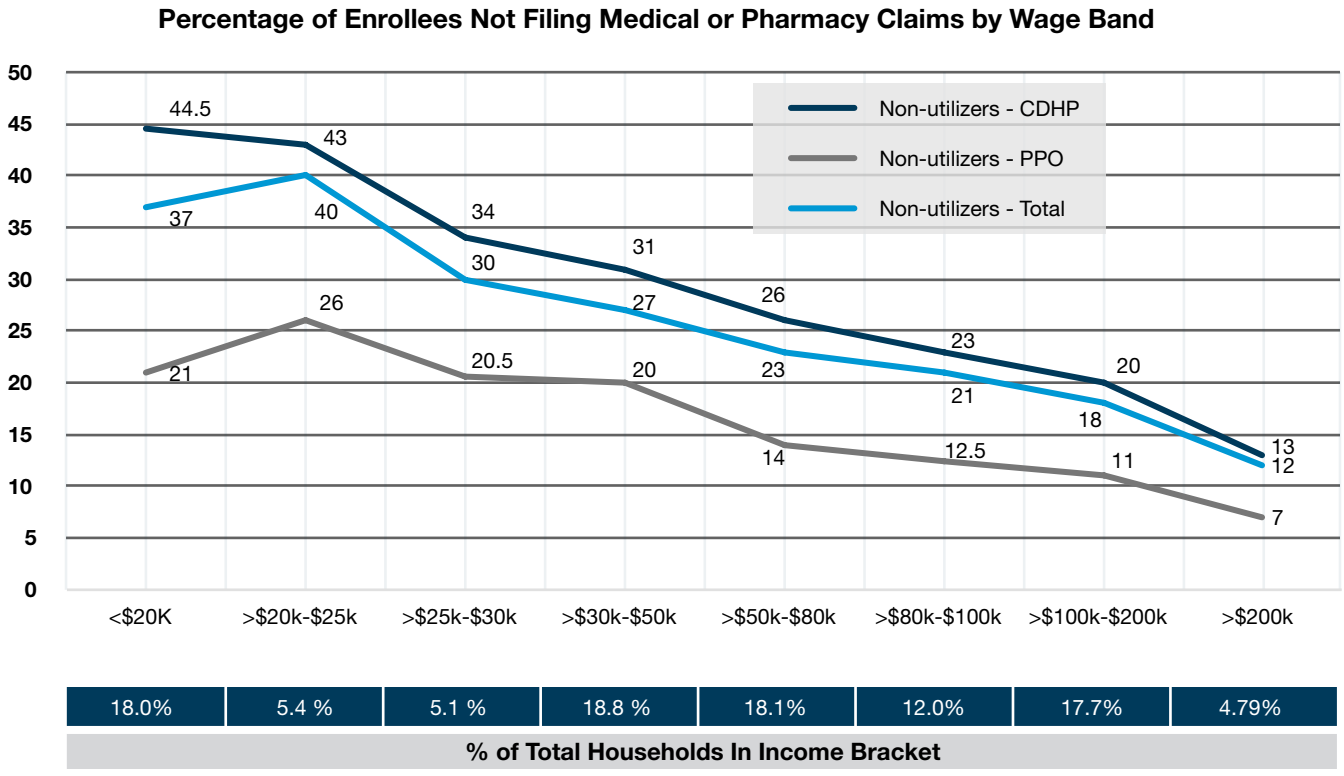
A Gallup Poll from 2013 suggests the possible occurrence of negative healthcare consequences in one-third of avoided visit (see Figure 8).

Recently published data highlights the relationship between household income and the possible avoidance of filing medical or pharmacy claims (i.e., avoiding a physician visit or not filling a prescription). The era of employer cost shifting appears to be over.

A seminal study published in Health Affairs studied 135,600 patients with diabetes in 2005-2008.[10] The study highlighted the impact of non-adherence on resource utilization and the total cost of care on patients with a chronic condition. The study results are far more significant today as the cost of diabetes drugs have "skyrocketed" during the past five years.

FIGURE 9 | COST SHIFTING APPEARS TO HAVE A DISPROPORTIONATE IMPACT ON LOWER AND MIDDLE INCOME PERSONNEL AND THEIR FAMILIES





Note: Covered workers enrolled in HDPHP/SO are enrolled in either an HDP/HRA or a HAS-Qualified HDHP.

Source: http://statisticalatlas.com/United-States/Household-Income#overview; Kaiser HRET Survey of Employer Sponsored Health Benefits

According to a study by the Business Coalition on Health, the primary drivers of employer healthcare costs in 2017 are specialty pharmacy, high cost claimants and specific diseases and conditions.[11] Over the past 10 years, the pharmaceutical industry has altered its business model from high volume, low-priced drugs targeting common conditions such as hypertension, elevated cholesterol, gastric ulcers and depression to low volume, high priced drugs targeting niche (infrequent or orphan) conditions and specific cancer treatment failures.

Specialty drugs are often biologics that require an injection or infusion (J-code medical claims), but can be oral (e.g., Hepatitis C). Specialty drug spending is forecast to reach $402 billion in 2020.

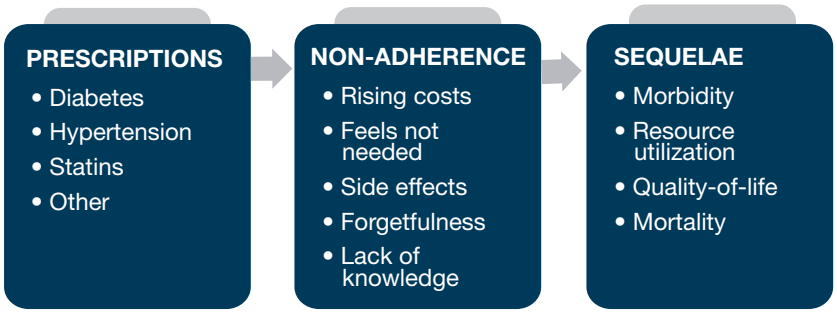
Healthcare spending among employers is highly concentrated with 5-10 percent of employees accounting for 49-63 percent of costs. The concept of population health is focused on the health and cost outcomes of a group of individuals, including the distribution of such outcomes within the group. High cost conditions such as major trauma secondary to an accident may largely be unpreventable, whereas the outcomes and costs associated with cancer, substance abuse, musculoskeletal conditions and high-risk pregnancies may be affected by the expertise of the treating physician and/or institution, site of service, process of care, prescribed drugs and the role of economics (fee-for-service) payments in driving resource utilization.

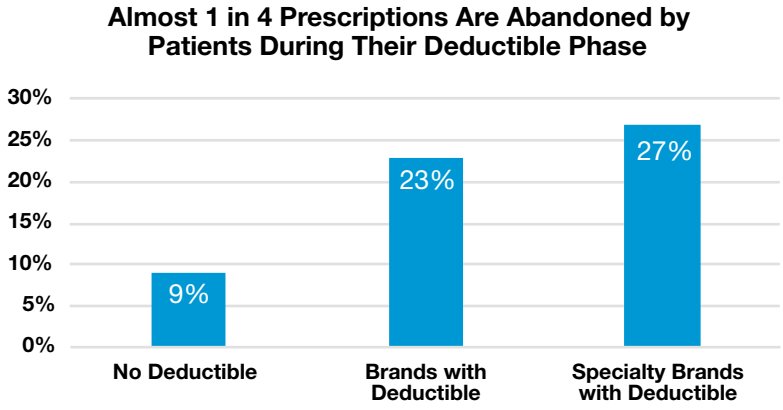
Population health principles should also extend to moderate-to-high risk individuals who have preventable conditions (e.g., obesity-diabetes-comorbidity continuum). 50 percent of the population – often the target of broadly defined health and wellness initiatives - account for three percent of costs.

FIGURE 10 | EVERETT KOOP: "DRUGS DON'T WORK IN PATIENTS WHO DON'T TAKE THEM."

Study of 135,600 patients with diabetes enrolled in fully- and self-insured health plans in 2005-2008. Primary predictor was changes in adherence to noninsulin hypoglycemic (glucose-lowering) medications for diabetes. Adherence defined as taking medications 80 percent of time[2]

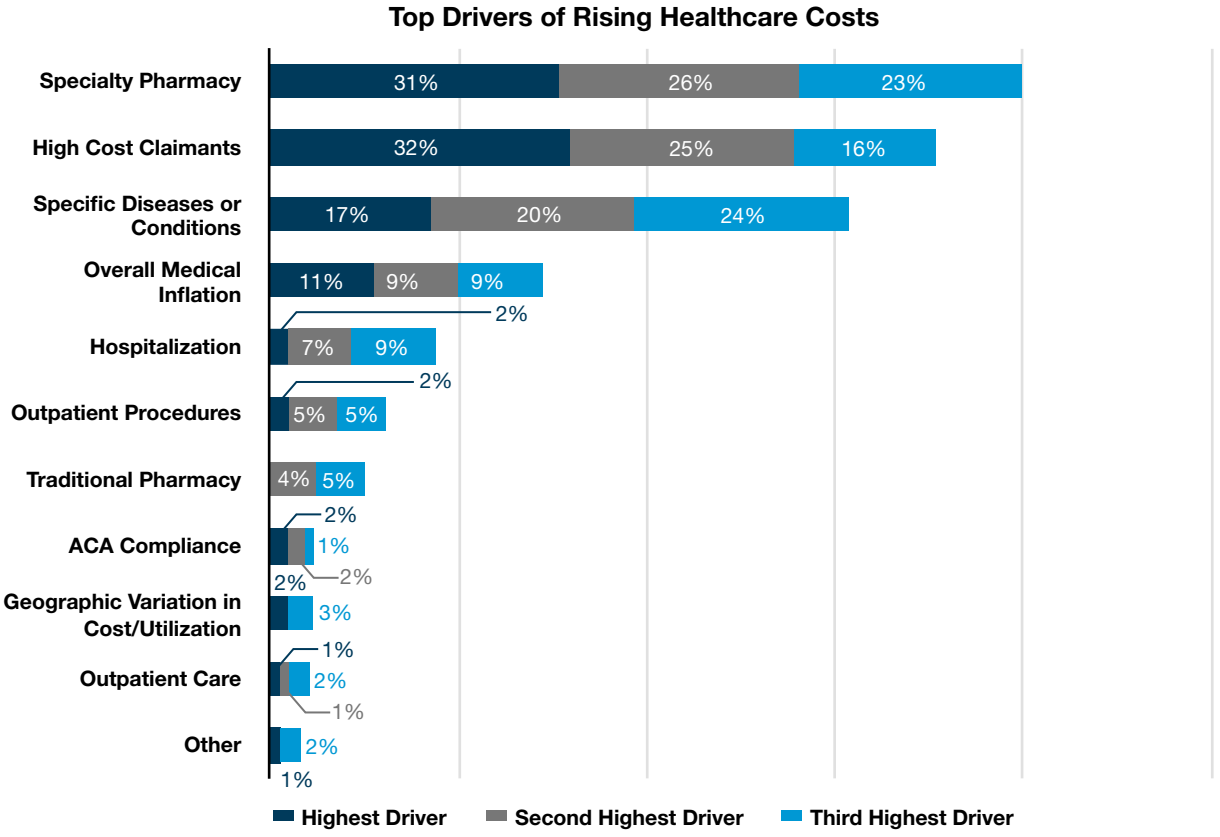
- Only 60 percent of patients adherent
- Poor adherence leads to premature and significant morbidity (e.g., vision, cardiac, renal, peripheral vascular)
- Nonadherent patients are 15 percent more likely to be hospitalized (344 hospitalizations) and use emergency room (699,000 visits) an incremental cost of $4.7 billion
- 25 percent of previously adherent patients become non-adherent the following year
- Improved adherence among patients with diabetes should be a key goal for the health care system and policy makers

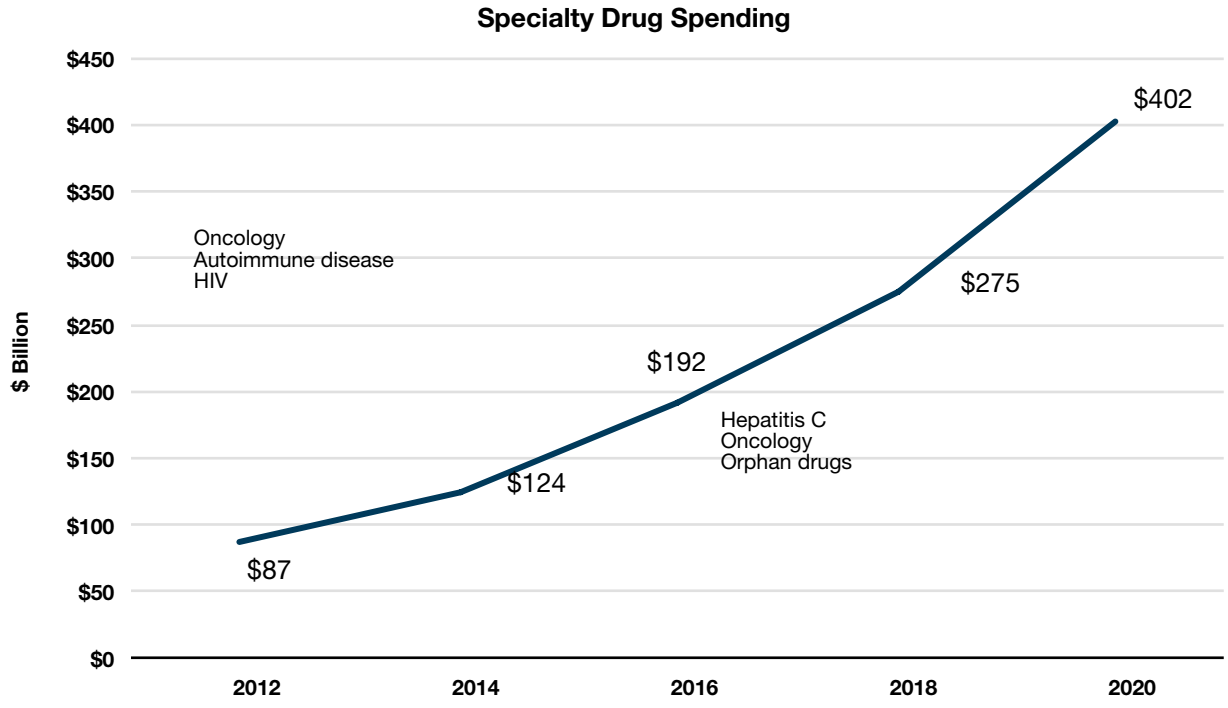




1 Medicines Use and Spending in the U.S.: A review of 2016 and Outlook to 2021; May 2017. https://structurecms-staging-psyclone.netdna-ssl.com/client_assets/dwonk/media/attachments/590c/6aa0/6970/2d2d/4182/0000/590c6aa069702d2d41820000.pdf?1493985952;
2 Jha AK et al. Greater adherence to diabetes drugs is linked to less hospital use and could save nearly $5 billion annually. Health Affairs 2012 Aug;31(8):1836-46.

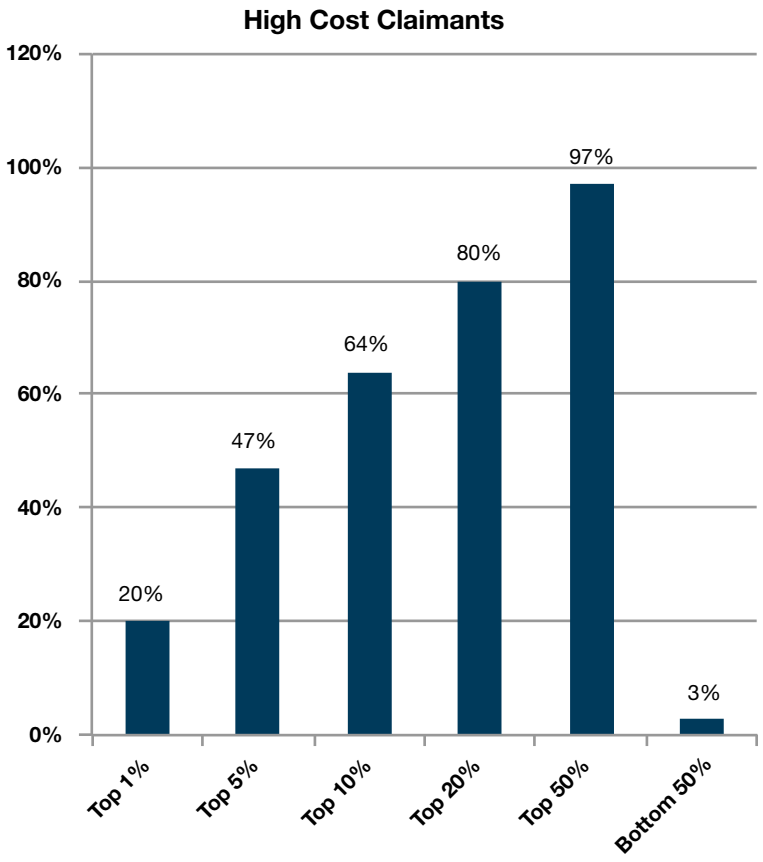
FIGURE 11 | DRIVERS OF EMPLOYER HEALTHCARE COSTS





Sources: http://www.cnbc.com/2016/08/11/expect-your-health-insurance-costs-to-rise-in-2017.html; Express Scripts, CVS, Quintiles IMS Health

FIGURE 12 | HEALTHCARE SPENDING BY EMPLOYERS IS HIGHLY CONCENTRATED



HIGH COST CONDITIONS AND/OR DISEASES

Chronic Disease
- Obesity-Diabetes-Comorbidity Continuum
- Chronic Kidney Disease (CKD)

Behavioral Health
- Substance Abuse

High-Risk Pregnancy and Prematurity

Surgical-Driven

Musculoskeletal conditions

Specialty Drug-Driven
- Oncology
- Orphan (rare) Conditions

Autoimmune Disorders
- Rheumatoid Arthritis
- Psoriasis
- Crohn's Disease

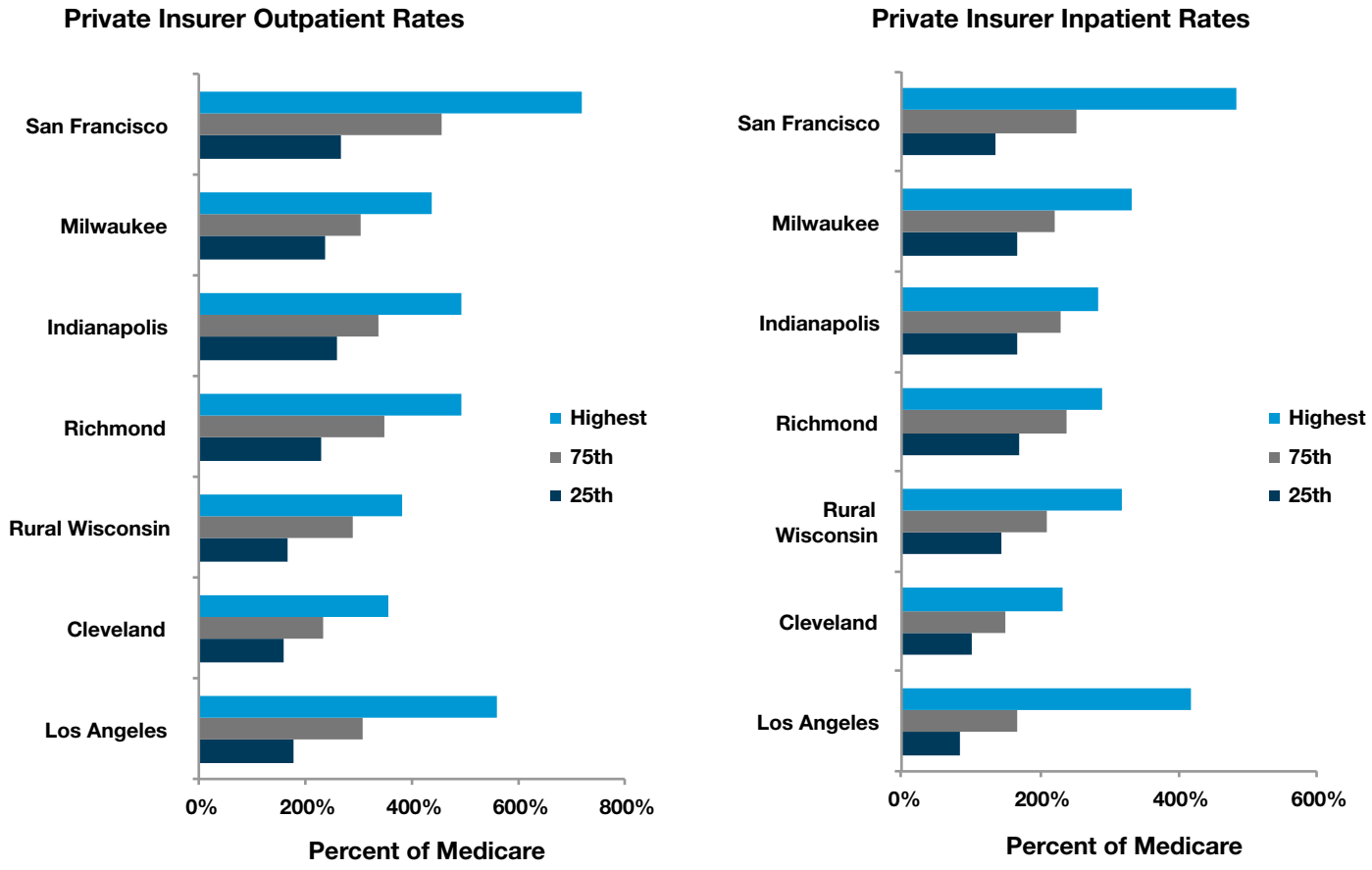
Unlike other sectors of the economy, limited consumer understanding of evidence-based medicine, disease progression, healthcare delivery and payment requirements, combined with a lack of price transparency (despite recent employer efforts) allows for significant price variation for healthcare services within and across specific markets.[12] Provider pricing is multivariate and a function of ownership status, negotiating position, competitive intensity (or lack thereof), payer mix, reimbursement rates, collection status, efficiency (cost of service delivery), investment and governance. Oftentimes, the bills patients receive offer little ability for employers and consumers to discern its meaning and gauge fair value.

A wide variation in commercial inpatient and outpatient payment rates exists within specific (local) markets, thereby creating an opportunity for steerage, narrow networks and reference-based pricing (as a percentage of Medicare above which the consumer pays 100 percent of the incremental cost) to attenuate runaway charges.[13]

Steerage is as simple as having imaging scans, infusions and/or ambulatory surgery procedures at non-hospital owned facilities which tend to charge far lower prices than hospital owned/managed facilities.

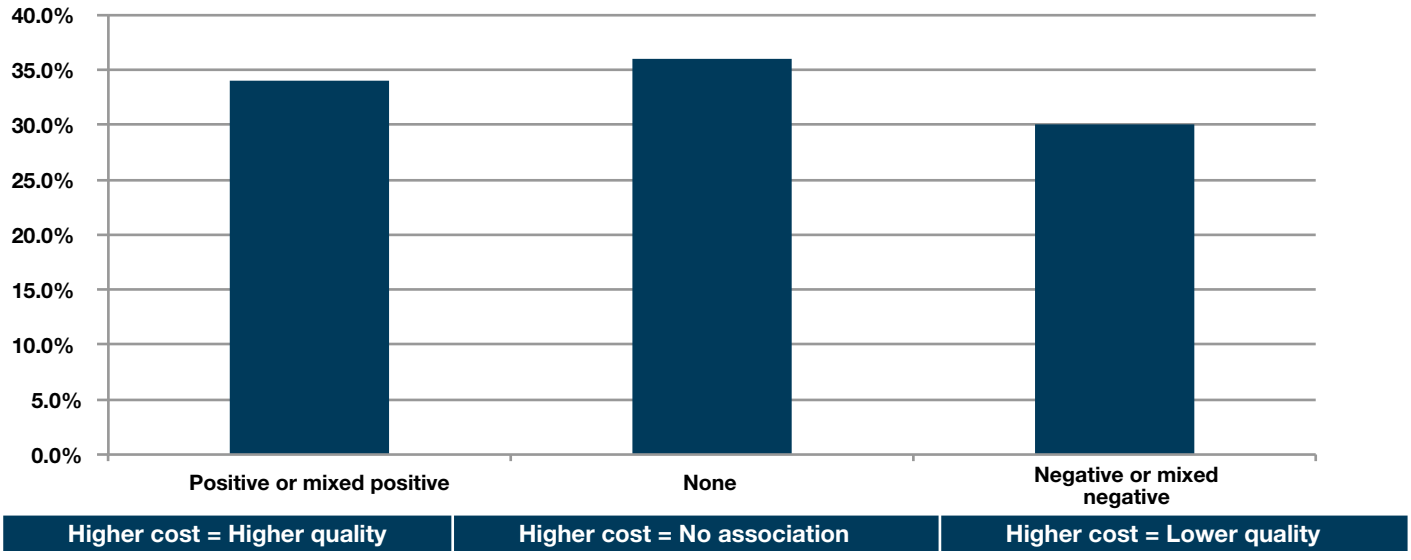
While most Americans assume an association between cost of care and quality of health outcome, the evidence states otherwise (see Figure 14). In 2007, an Institute of Medicine (IOM) roundtable indicated no definitive relationship between regional differences in spending and the "content, quality and outcome of care."[14] Another study funded by the Commonwealth Fund examining the relationship between quality and cost showed similar results.[15] According to a 2013 publication in the Annals of Internal Medicine, "evidence of the direction of association between healthcare quality and cost is inconsistent." Most studies have found that the association between quality and cost is small to moderate, regardless of whether the direction is positive or negative."[16]

FIGURE 13 | SIGNIFICANT PRICE VARIATION EXISTS WITHIN AND ACROSS MARKETS "NETWORK AND SITE OF SERVICE MATTERS"



Source: Center for Studying Health System Change. Wide variation in hospital and physician payment rates evidence of provider market power. Research brief #16, November 2010.

FIGURE 14 | HIGHER PRICES DOES NOT IMPLY SUPERIOR QUALITY



Source: Ann Intern Med. 2013; 158:27-34.

AMAZON: A TECHNOLOGY-DRIVEN INNOVATOR

The Amazon Mission Statement is “To be earth’s most customer-centric company; to build a place where people can come to find and discover anything they might want to buy online.” Healthcare has not been customer-centric; the experience of care varies based on the type of insurance coverage, level of healthcare literacy, need for care coordination, access to technology and attributes of the specific provider.

> *Amazon is also a best-in-class analytics company. Opportunities exist to incorporate social determinants of health such as socio-economics, psycho-social factors and racial and ethnic differences to improve patient treatment adherence.*

Consumer experience, satisfaction and engagement are concepts well-understood by Amazon; and could potentially be applied to healthcare. According to the Agency for Healthcare Research (AHRQ), "patient experience encompasses the range of interactions that patients have with the health care system, including their care from health plans, and from doctors, nurses, and staff in hospitals, physician practices, and other health care facilities. Satisfaction, on the other hand, is about whether a patient's expectations about a health encounter were met."[17]

Patient engagement has been defined "as a concept that combines a patient's knowledge, skills, ability and willingness to manage his own health and care with interventions designed to increase activation and promote positive patient behavior."[18] Patient engagement is critical, as behavioral (lifestyle) patterns and social circumstances represent 40 percent and 15 percent respectively, of the contributors to premature death.[19]

Digital health has emerged from the convergence of healthcare with computer, internet, mobile, wireless and sensor technology to enable patient monitoring, access, communication and intervention. A fee-for-service reimbursement environment has not been supportive of digital health due to its focus on incremental costs and not the total cost of care; the emerging value-based, at-risk ecosystem considers evidence-based digital health technologies attractive.

Digital applications for medical education, condition-specific social networking and support, disease and medication management, genetic screening, price transparency, provider (physician) search and other areas have also emerged and offer consumers an opportunity to increase their engagement.

Amazon is a best-in-class analytics company. Opportunities exist to incorporate social determinants of health such as socio-economics, psycho-social factors and racial and ethnic sensitivities to improve patient treatment adherence.

Among Amazon's healthcare initiatives include the use of its product Alexa as a non-human virtual health assistant and companion; a relationship between Amazon Web Services and Cerner analytics; 1492, a little discussed program involving electronic medical records, telemedicine and applications for ECHO; and an investment in Grail, a startup focused on detection of cancer in blood via genetic sequencing technology.

CONCLUSION

Among the headlines put forth by leading publications to describe the Amazon, JP Morgan and Berkshire Hathaway announcement include fixing, disrupting, transforming and reinventing healthcare. In their own joint press release, a more limited "goal to improve U.S. employee satisfaction while reducing overall costs" was announced.[20] The entity will be independent and free of profit incentive.

Amazon, JP Morgan and Berkshire Hathaway must understand analytics, risk management, provider contracting and behavior change. Actuaries, third-party administrators, contract specialists and behaviorists can be hired or subcontracted.

A few thoughts:

- As all healthcare is local, the ability of the venture to transform the healthcare system will be focused on specific geographic areas with employee concentration. Applying a ratio of 2:1 covered lives for every employee implies 2.3 million lives, not an inconsequential number.[21]
- The "big buyer" ability to influence prices in healthcare is unlike that of any other industry. Hospitals and health systems have not only consolidated, but have been purchasing physician practices. Insurance companies have also consolidated. Nevertheless, an opportunity exists to use analytics to identify price variances associated with the site of service (hospital, health system outpatient clinic, private physician office) for the same service (e.g., imaging studies that may cost between $500-$1,500 based on location). Given declining hospital volume, as well as national average occupancy rates in urban areas of 60 percent, opportunities also exist to negotiate directly with many health systems willing to discount prices for guaranteed volumes.[22]
- Most large employers are self-insured; i.e., already at-risk for their healthcare costs. An opportunity exists to create in-house risk management capabilities and to generate "customized" local provider networks with the assistance of third-party administrators (TPAs) thereby eliminating the insurance "middleman" Direct provider contracting is possible.
- Specialty drug prices continue to "explode," and represent upwards of 25-30 percent of employer spending. Opportunities exist to reduce the utilization of higher cost drugs, increase PBM effectiveness and leverage the combined clout in Washington, D.C. by lobbying for price controls and/or changes to the FDA approval process.
- Knowledge is power. Price variation among providers is very significant and does not correlate with quality. The claim analytics model used by most employers could be improved with an increased focus on patients and their co-morbidities, clinical outcomes, site of service and behavioral (lifestyle) change. 5-10 percent of patients account for 49-68 percent of costs. Amazon can create much value in analytics through risk stratification, persona identification and behavioral modification. Enhanced resource allocation would result.

THREE OPTIONS FOR THE VENTURE ARE EVIDENT: INCREMENTALISM, DISRUPTION OR BOTH.

Healthcare expenditures are expected to increase from $3.5 trillion to $5.5 trillion by 2025, resulting in an increase of GDP from 18.1 percent to 19.7 percent. Disruption will require approaches typically not found in established companies, and would affect providers, insurers, pharmaceutical companies and other healthcare stakeholders. Amazon has been a disruptive influence in the past, and when combined with the capabilities of its partners, JP Morgan and Berkshire Hathaway it can do it again, recognizing that many, but not all, existing stakeholders like it "as it is" and view disruption as a significant risk to their business model. The leadership team for this initiative will indicate the likely trajectory of change and its implications for employees, providers, insurers and others.

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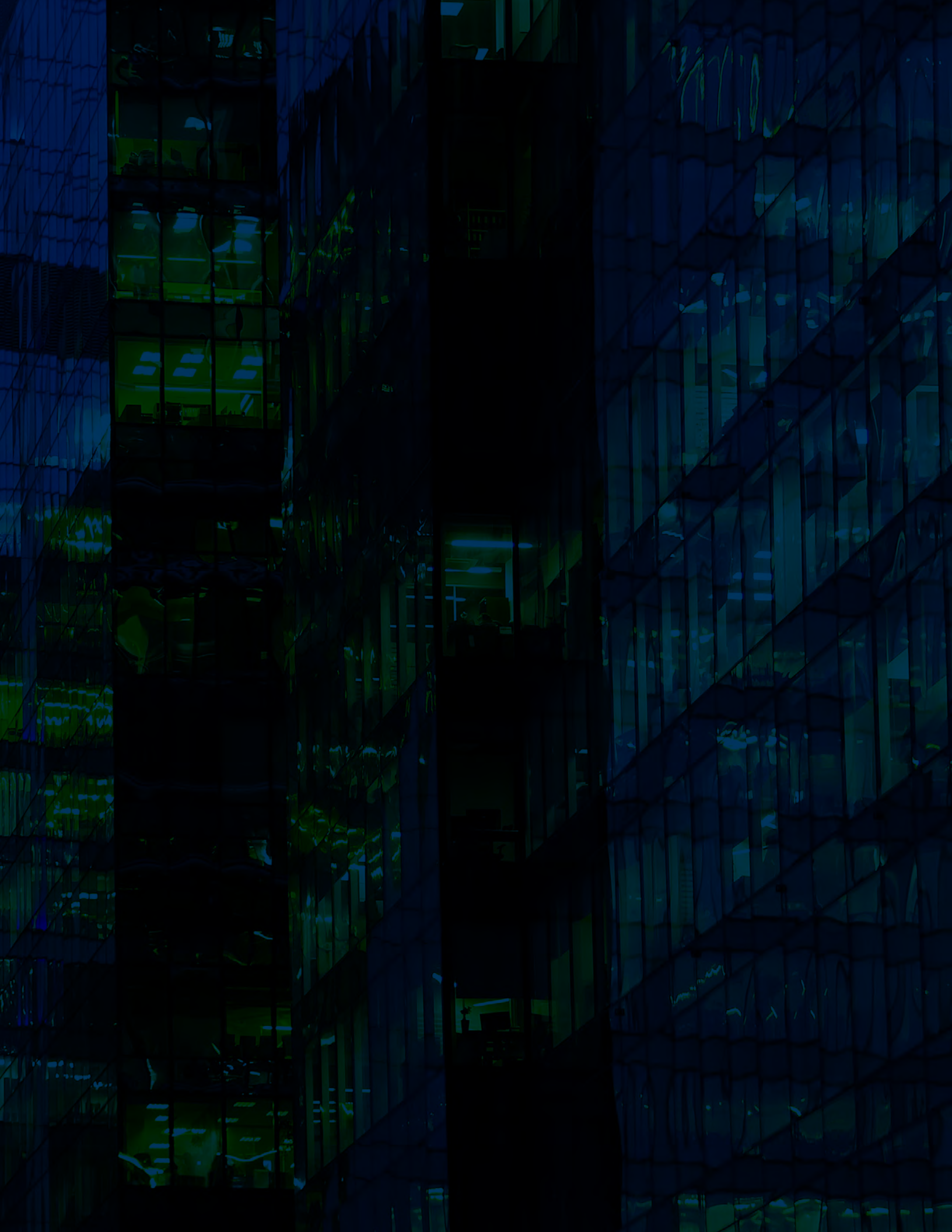

DAVID GRUBER, MD, MBA
MANAGING DIRECTOR AND DIRECTOR OF RESEARCH
+1 212 763 9801
dgruber@alvarezandmarsal.com

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