



Effective Value-based Contracting in Life Sciences

Navigating the Journey from Traditional Payment Models to Value-based Arrangements

Abhishek Singh, Vice President
Nitish Mittal, Vice President
Chunky Satija, Practice Director
Pranav Kumar, Senior Analyst

Copyright © 2020, Everest Global, Inc. All rights reserved.

Cognizant

This report has been licensed for exclusive use and distribution by Cognizant

Executive summary

Value-based contracts are innovative agreements among life sciences firms, healthcare payers, and healthcare providers in which the cost of a therapy – whether a drug or a medical device – is decided based on the health outcomes from that therapy, rather than the volume of drugs/devices consumed. A value-based contracting model makes it imperative for life sciences firms to rethink their R&D and commercial and contracting operations. It also mandates greater collaboration with healthcare payers and a renewed focus on digital adoption.

Such contracts have come into prominence in the US over the last five to eight years, with payers, patient groups, and governments increasingly urging drug and device manufacturers to demonstrate value from their offerings.

This viewpoint examines the emergence of value-based contracting in the life sciences industry, the role technology can play in enabling such contracts, and what life sciences firms can do to prepare for effective value-based contracting.

Some of our key findings include:

- Currently, roughly 100-150 biopharmaceutical drugs are covered by value-based contracts in the US
- Each stakeholder, including patients, healthcare payers, and life sciences firms, stands to benefit from value-based contracts
- An integrated technology framework based on blockchain smart contracts and real-world data through Electronic Health Record (EHR) integration and IoT patient monitoring can enable transparent and secure collaboration among patients, healthcare payers, healthcare providers, and life sciences firms for automated value-based contracting
- By 2025, approximately 60-70% of patented drugs in the US are expected to be covered by value-based biopharmaceutical contracts

Value-based contracting is a secular trend and can potentially create a fundamental and sustainable shift in the way the life sciences industry functions. While this viewpoint addresses the life sciences enterprise and technology provider audience in the US, anecdotes from across the globe have been brought in to serve as examples to learn from

Introduction

The rising cost of medication

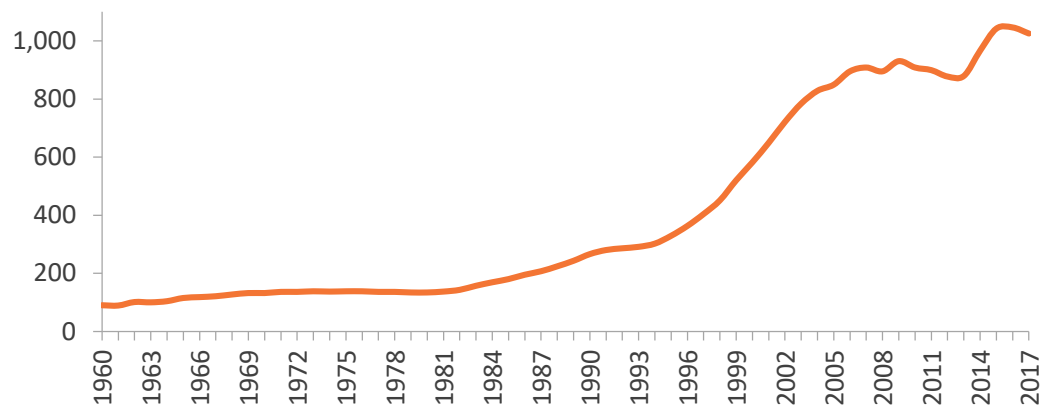
For decades, drug pricing has been an opaque and contentious issue. Traditionally, drugs and devices have been priced on a per-unit basis, with a part of the cost being paid by the patient, called the “co-payment,” with the rest being covered by the health plan.

However, with specialty therapies such as those for cancer and cardiovascular disease becoming more personalized and expensive, uncertainties around the efficacy of drugs and medical devices have started posing a high financial risk for payers and patients alike. Exhibit 1 illustrates the inflation-adjusted per capita spending on prescription drugs in the US over 1960-2017.

EXHIBIT 1

Inflation-adjusted per capita spending on prescription drugs in the US\$, 1960-2017

Source: Everest Group (2020), Kaiser Family Foundation



In 2017, spending on drugs constituted 10% of the national health expenditure in the US. Spending on prescription drugs is further projected to increase over the next five to seven years, owing to increased adoption of specialty drugs, price hikes for drugs currently under patent protection, and new brand launches. Consequently, healthcare payers have been witnessing shrinking margins, in part due to rising prescription costs, and are looking for newer ways to remain competitive.

Prescription drug costs have also become a matter of concern for the US government, with 25-30% of patients in the US facing difficulty in affording the cost of their prescription medications. A recent Kaiser Family Foundation survey found bipartisan support for government action to lower prescription drug costs. The issue has also become a contentious topic for the US 2020 presidential election, with several candidates promising lower prescription drug costs.

At the same time, drug/device efficacy and health outcomes have not been improving in line with increasing prices.

With an increase in out-of-pocket expenses for medicines and medical devices, patients have been turning to cheaper options. There have been instances of patients of specialty therapies opting for cheaper alternatives, which may not be as effective as the innovative drugs they were prescribed. Other cases have involved patients asking their doctors to prescribe only a medication covered by their insurance plan or simply not filling their prescriptions.

“We are seeing an uptick (in value-based contracts) because people are extremely worried about these extremely high-priced drugs generally targeted toward orphan populations. Unless these therapies live up to the promise of being curative, there will be some refund for them.”

- Kathy Hughes,
Managing Director,
Avalere Health,
March 2019

The case for innovative value-based payment models

Medical benefit is unpredictable, and traditional per-pill pricing arrangements place little emphasis on outcomes. With a shift toward value-based care, life sciences firms are increasingly expected to provide measurable value to patients and receive payments accordingly.

Government, healthcare payers, and patient groups alike are pressurizing life sciences firms to take on more financial accountability and reconsider how they price their products. At the same time, intense competition from biosimilars, generics, and substitute therapies is driving innovative drug manufacturers to enter into performance-based pricing contracting agreements to showcase better outcomes and differentiation.

Further, recent advances in big data, edge analytics, and patient monitoring techniques using IoT technologies have made it much more feasible to measure real-world health data and gain accurate insights on health outcomes.

All of these factors, coupled with various healthcare reforms, such as the Affordable Care Act, are driving life sciences companies to collaborate with healthcare payers, pharmacy benefit managers, and providers to adopt innovative pricing models that link payments to performance and measurable health outcomes.

The rise of value-based contracting models

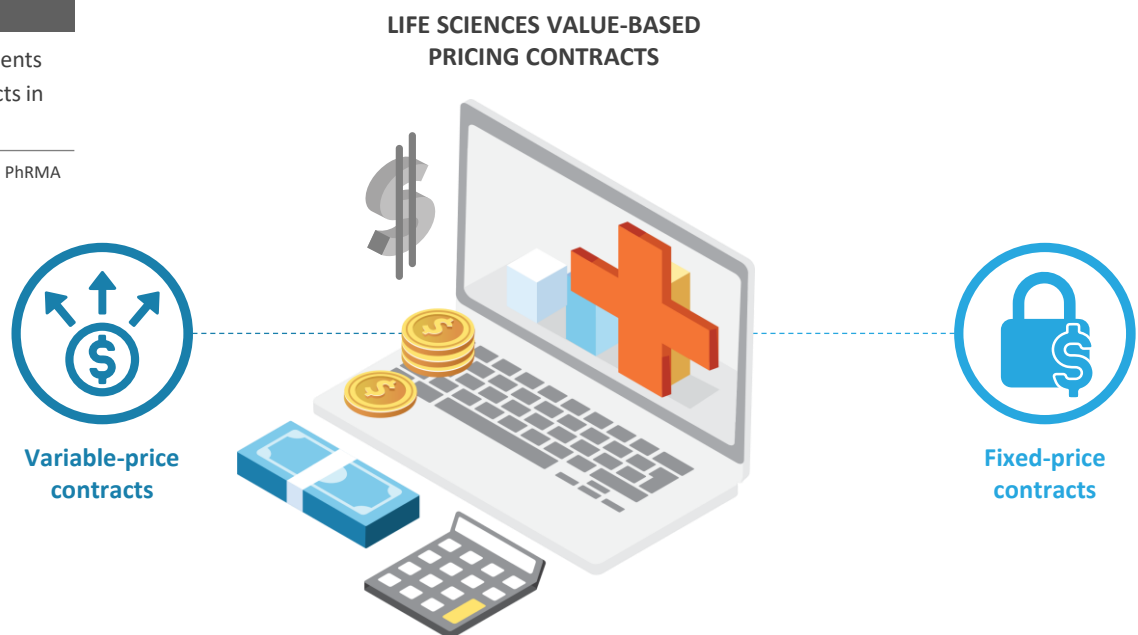
Value-based contracts and impact on co-payments

Common value-based models involve rebates/discounts on the co-payment, as well as the amount paid by the insurer. The rebate amount is tied to measurable patient outcomes in the given therapy area. Outcomes can be measured at an individual patient level or an aggregate therapy group level. Exhibit 2 depicts the different pricing structures for life sciences value-based contracts.

EXHIBIT 2

The different arrangements for value-based contracts in life sciences

Source: Everest Group (2020), PhRMA



Representing a shift from traditional medication volume-based pricing and reimbursement models, innovative value-based arrangements can take several forms:

Variable-price contracts

- **Outcomes-based:** These are the most common type of publicly disclosed value-based contracts, which tie drug/device costs or a discount on the copayment to patient outcomes
- **Regimen-based:** Such contracts mandate that the net price of a medicine/device must decrease when a patient must take an additional treatment to make the regimen more effective
- **Cost-cap:** These agreements limit therapy cost per patient to a certain negotiated upper threshold. They are implemented as a version of indication-based pricing for infused cancer medicines

Fixed-price contracts

- **Indication-/case-specific:** In such contracts, the net price of a drug differs for different indications/symptoms
- **Fixed cost per patient:** Such a model involves a fixed cost per patient for a particular indication, throughout the course of the treatment
- **Mortgage model:** This model allows purchasers to spread the cost of an expensive therapy over time, as opposed to requiring the entire payment upfront

A history of value-based contracting in life sciences

One of the earliest examples of innovative pricing in biopharmaceuticals dates back to 1994 and relates to Merck's finasteride (Proscar) for benign prostatic hyperplasia. The company offered to refund the drug's cost if it failed to improve symptoms within six months or if the patient needed prostatic surgery within two years.

Many economies with a universal healthcare system have negotiated such outcomes-based reimbursements with life sciences firms. For example, in 2007, the UK negotiated a deal with Johnson & Johnson in which the firm would forgo charges for patients who did not have an adequate medication response to Velcade, the company's oncology drug.

Value-based contracting in life sciences began to gain prominence in the US in about 2011, with payers and governments pressuring drug and device manufacturers to demonstrate value from their offerings. Additionally, healthcare reforms such as Affordable Care mandates, claim evidence reasoning, and bundled payments increased scrutiny on biopharmaceutical pricing. During this time, pharma firms, including Merck, Bayer, Acordia, and EMD Serono, began entering into value-based contracts with healthcare payers.

As these contracts gained in popularity, risk-sharing methods also evolved and grew to three broad risk-sharing constructs, as showcased in Exhibit 3.

EXHIBIT 3

Three methods of risk-sharing for value-based payments in life sciences

Source: Everest Group (2020)

One-way risk	Two-way risk-sharing	Additional risk bearing entities
<p>The life sciences firm provides a rebate on the medication cost to the healthcare payer if certain established clinical endpoints are not met. Hence, all the risk resides with the life sciences firm.</p> 	<p>The therapy's reimbursement amount paid by the healthcare payer to the life sciences firm is tied to measurable patient outcomes in the given therapy area. There is hence a two-way financial risk-sharing between the healthcare payer and the life sciences firm, with clinical outcomes determining the level of shared cost.</p> 	<p>External risk-bearing entities such as reinsurers can calculate the risk and cost of treatment, design and price policies for insurers/healthcare payers, and provide reinsurance. This is particularly helpful for midsize and small life sciences firms with differentiated products and payers that do not have the ability to take on heavy financial risk.</p> 
<p>Case in point In May 2017, Harvard Pilgrim signed an outcomes-based refund contract with Amgen for the latter's Repatha. The contract provides Harvard Pilgrim with a rebate on Repatha for an eligible patient who has a heart attack or stroke while on Repatha.</p>	<p>Case in point In January 2019, UPMC Health Plan and AstraZeneca announced the initiation of a value-based contract for UPMC for Life Medicare members who are prescribed AstraZeneca's BRILINTA, a medication used to lower a patient's chances of having a second heart attack.</p>	<p>Case in point In 2012, Roche and Swiss Re partnered with local health insurers in China to provide cancer drugs and designed insurance policies, with Swiss Re providing reinsurance.</p>

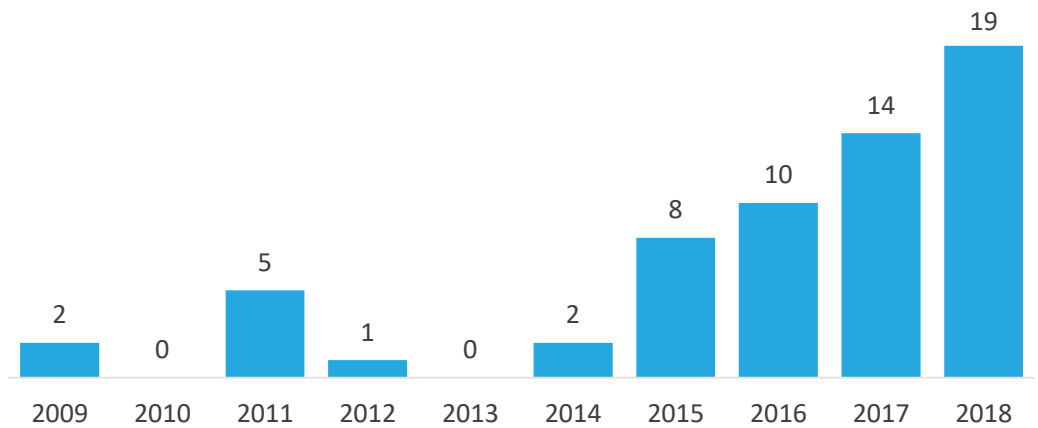
The growing prevalence of value-based contracts

Interest in biopharmaceutical outcomes-based contracts spiked significantly in the US in 2015 and 2016, with Amgen and Novartis signing multiple contracts for their drugs Repatha for high cholesterol and Entresto for chronic heart failure, respectively. Exhibit 4 illustrates the number of publicly announced value-based biopharmaceutical contracts in the US over 2009-2019.

EXHIBIT 4

Number of publicly announced value-based biopharmaceutical contracts in the US by year

Source: Everest Group (2020), PhRMA



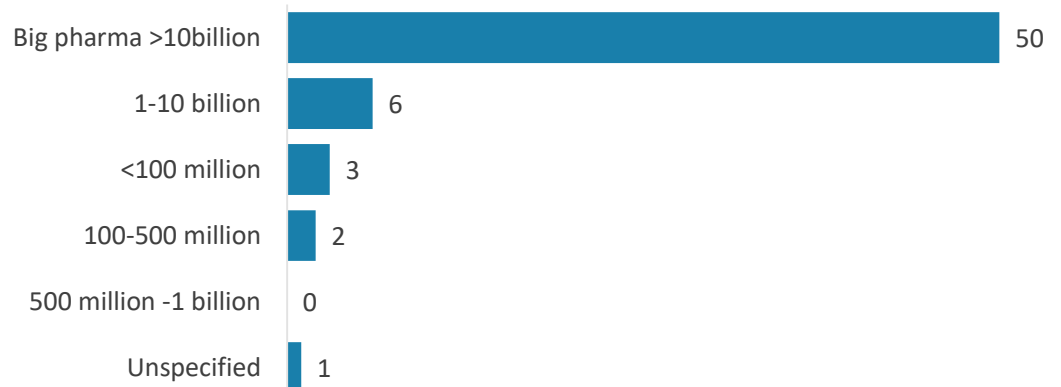
According to a recent study published in the American Journal of Managed Care, more than 100 value-based contracts were signed between payers and drug manufacturers between 2014 and 2017, with over 70% of these not being publicly disclosed.

The expected CAGR for the number of drugs covered under outcomes-based contracts in the US is in the range of 15-20% over 2019-2021. Exhibit 5 showcases the number of publicly announced value-based biopharmaceutical contracts in the US by size of firm.

EXHIBIT 5

Number of publicly announced value-based biopharmaceutical contracts in the US by size of firm FY2018 revenue in US\$; 2009-May 2019

Source: Everest Group (2020), PhRMA



Most of these contracts pertain to drug performance, while a few cover medical devices, such as cardiac implants from Johnson & Johnson and Medtronic, as well as insulin pumps.

The larger players have taken the greatest initiative on value-based contracting to justify the prices of their innovative therapies and differentiate from biosimilars and other drugs meant for similar indications. These players have been able to take on the financial risk associated with such contracts and gain the first-mover advantage in their respective therapy areas.

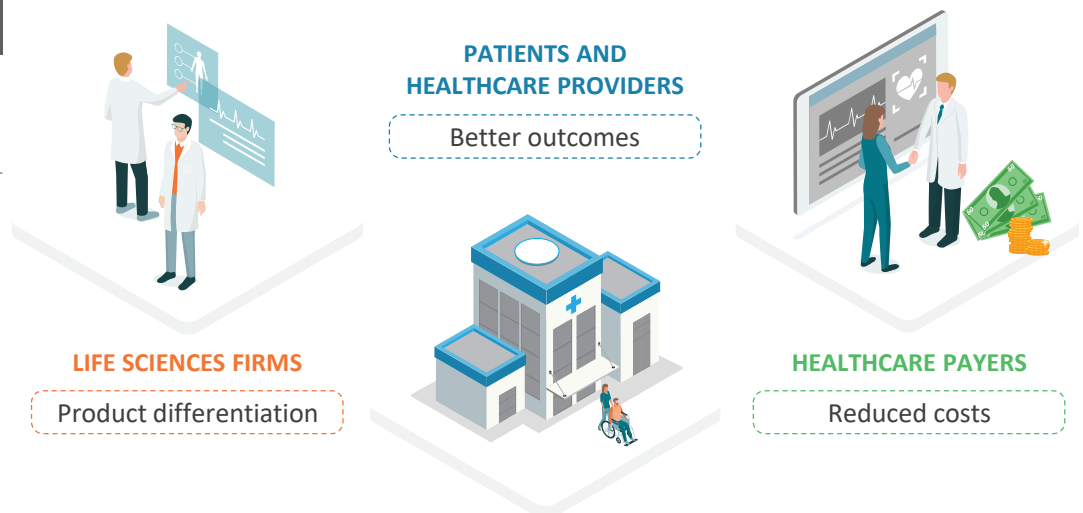
Understanding the incentives for different stakeholders

A life sciences value-based contract offers incentives to all the stakeholders associated with it. Exhibit 6 illustrates the different benefits for different stakeholders involved in a value-based contract.

EXHIBIT 6

Incentives for different stakeholders in a value-based contract

Source: Everest Group (2020)



Life sciences firms: Entering into value-based contracts gives life sciences firms the opportunity to demonstrate product differentiation by showcasing superior real-world health outcomes and, consequently, enabling them to substantiate their value proposition in a market characterized by increasingly commoditized medicines and intensifying competition. At a time when consumers have a fundamental trust deficit with the life sciences industry, the willingness of life sciences companies to opt for a risk-sharing model enhances their perception as patient-centric organizations and sends a positive message to health plans, prescribing physicians, and patients alike.

Patients and healthcare providers: When drugs/devices are priced based on the value realized and not the volume consumed, the out-of-pocket healthcare expenditure incurred by patients reduces significantly. More patients can confidently take on specialty drugs instead of turning to cheaper ineffective options or restricting themselves to formularies covered in their health plans, which may not provide the desired effects.

In line with their best interests, life sciences companies themselves become more involved in helping patients achieve positive health outcomes. The reduced financial risk for healthcare payers implies that they can offer wider coverage and access to innovative medicines at lower prices, which means that high-risk groups or patients suffering from diseases in specialty therapy areas can obtain insurance at lower costs. This also benefits healthcare providers, as they also share an interest in positive patient outcomes.

Healthcare payers: Value-based payment models reduce the risk for payers to cover innovative treatments and specialty therapy areas. Moreover, arrangements such as indication-specific, fixed cost per patient, and cost-cap contracts allow payers to predict costs with higher accuracy.

Further, in economies with a universal healthcare system, a greater focus on positive health outcomes means a healthier population, accompanied by a range of socioeconomic benefits, such as high labour productivity and reduced poverty.

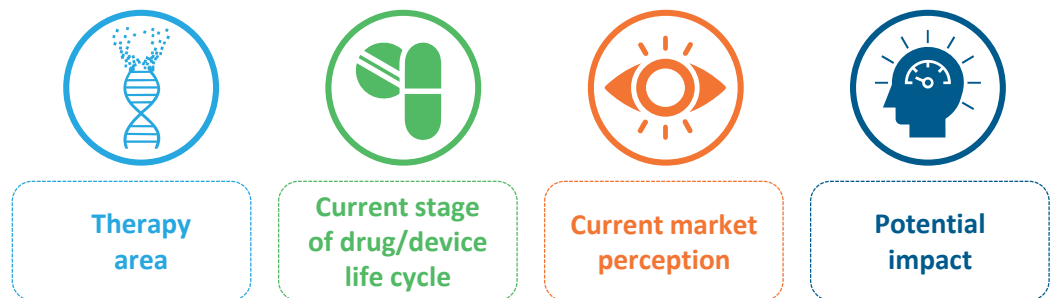
Assessing product suitability for a value-based model

Not all drugs or medical devices are suitable to be covered under a value-based contract, however, and companies must carefully choose the best fit products to ensure a win-win for all the stakeholders involved. Exhibit 7 illustrates the key factors to consider when deciding on the feasibility of a value-based model for a drug.

EXHIBIT 7

Factors impacting feasibility of a value-based contract

Source: Everest Group (2020)



Therapy area

Measurable innovative arrangements are best suited for therapies for which patient populations and clinical end points are well defined and the outcomes are measurable. For example, cardiology and oncology therapies have clear measurable outcomes and unambiguous clinical end points. In contrast, it is difficult to measure outcomes objectively for pain therapies, which are thus not suited for risk-sharing arrangements.

Current stage of drug/device life cycle

Value-based arrangements are well suited to newly launched drugs/devices. They are also better suited for drugs nearing patient cliffs that will subsequently face high competition from biosimilars or other drugs that work on the same indications. Both these scenarios provide life sciences companies an opportunity to differentiate their products by showcasing superior outcomes.

Current market perception

Entering into a risk-sharing model to demonstrate real-world outcomes is an effective way of showcasing drug/device efficacy and improving brand value, especially when perception is a matter of concern.

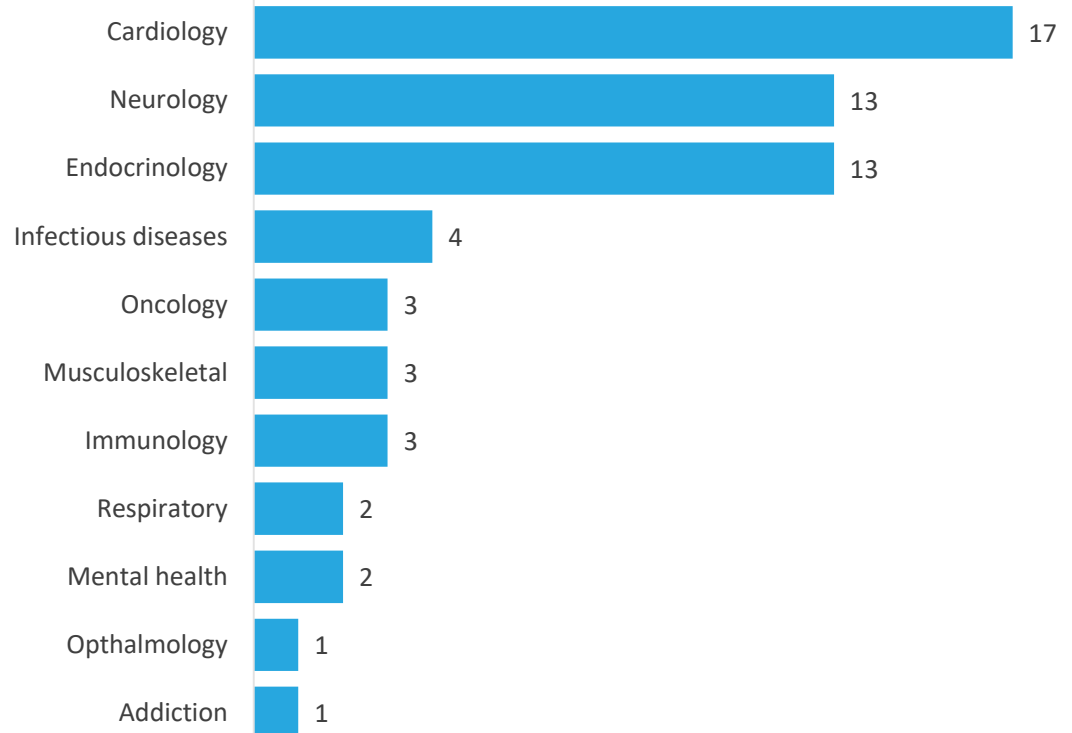
Potential impact

Consumers tend to change health plans frequently and might also switch drugs or fail to take medications as prescribed if they do not expect their health to improve with their current treatment regimen. Life sciences firms can offer patient engagement ancillary services, such as support and counselling services, patient-facing apps/portals, and education materials, to manage expectations and ensure adherence to the full treatment regimen. A drug that has a high potential to demonstrate impact, whether on its own or in tandem with patient engagement ancillary services, is a better candidate for value-based arrangements.

EXHIBIT 8

Number of publicly announced value-based biopharmaceutical contracts in the US by therapy area 2009 – May 2019

Source: Everest Group (2020), PhRMA



The financial implications of a life sciences value-based contract

This section explores the financial implications of a value-based contract for a life sciences firm in different scenarios. The commercial value of a patient over the therapy period is considered for each scenario.

As part of a value-based contract, a life sciences firm may provide therapeutic interventions, such as taking initiatives that help patients ensure adherence or continuously monitoring and proactively identifying and treating at-risk patients, to increase the likelihood of a cure or even realize a cure faster.

Additionally, life sciences firms can provide ancillary services to help patients incorporate behavioral and lifestyle changes, such as exercise, more sleep, and a better diet, to further increase chances of cure. These ancillary services are usually covered by a mix of commercial insurance and out-of-pocket payments by the patient.

Such ancillary services may be provided in two ways:

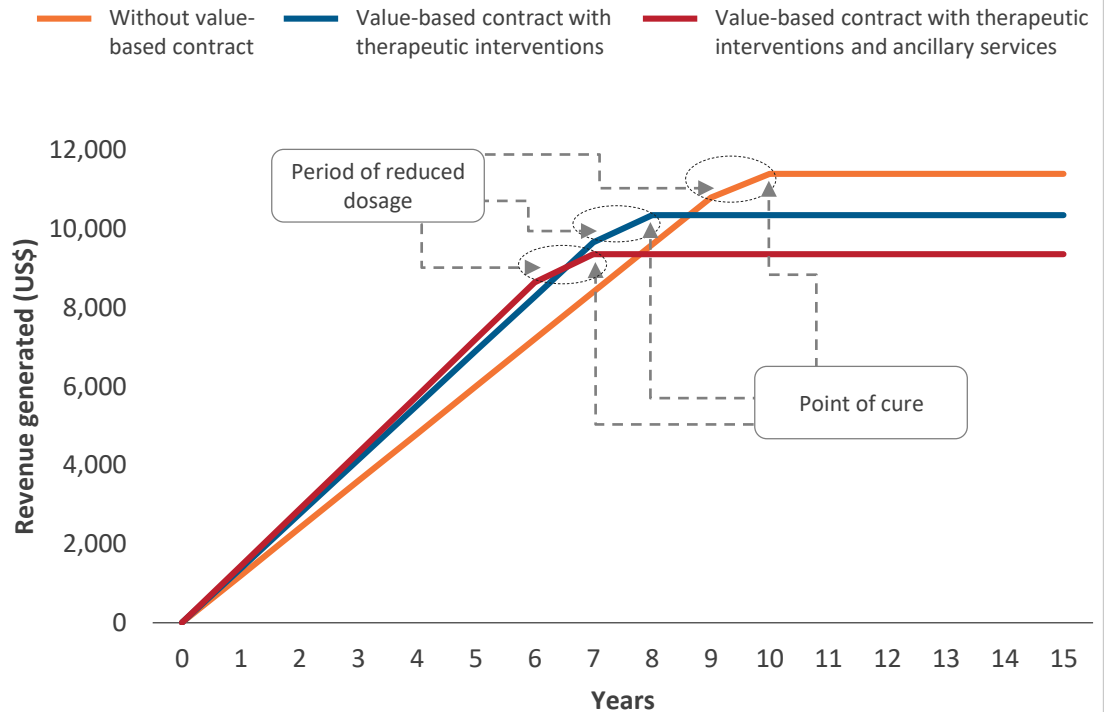
- The entire infrastructure for ancillary services is set up, owned, and controlled by the life sciences firm:** For example, in the US, AstraZeneca offers Fit2Me, a diet and lifestyle support program that helps create a customized care plan for people with complex diseases such as diabetes and heart disease.
- The life sciences company partners with other parties to create an ancillary services ecosystem:** For example, in the Netherlands, Medtronic has partnered with the QURO Obesity Center to offer patients that undergo surgery extended care via a behavioral and lifestyle program that helps maintain long-term weight loss and improves health outcomes for patients.

For a non-chronic illness, a value-based contract may not necessarily generate higher revenue from a patient. Exhibit 9 illustrates the possibility of diminished lifetime commercial value of a patient for a life sciences firm for a non-chronic curable disease.

EXHIBIT 9

Diminished patient commercial value in a VBC for a life sciences firm, for a non-chronic curable disease

Source: Everest Group (2020)



In the illustrative example above, a drug costs US\$100 per month for a patient under a traditional payment model and increases to US\$115 under a value-based contract with only therapeutic intervention, when positive outcomes are realized.

With a value-based contract in place, the revenue generated from a responding patient is higher initially and a cure is realized earlier (8 years compared to 10 years) versus the traditional payment model. However, the life sciences firm generates lower revenue from the patient over his/her lifetime – US\$10,350 compared to US\$11,400 under the traditional payment model.

If ancillary services are provided alongside therapeutic intervention to expedite treatment, there is an even greater spike in the revenue generated due to quicker response as well as revenue from these additional services. The monthly therapy cost then increases to US\$120. A cure is realized even sooner, with the total therapy period coming down to seven years. In this case, the revenue generated from a patient is further reduced – US\$9,360 compared to US\$11,400 under the traditional payment model.

Note: Contract performance will depend on several factors such as the disease, the contract governance model, and the extent of intervention. This is an illustrative model which assumes:

- Therapy pricing model does not change substantially and includes products/services/ solutions that improve compliance/adherence
- Improved compliance/adherence results in faster and more complete responses on the part of treated patients

Challenges hindering accelerated adoption

While collaboration is the key to an effective value-based contract, it is a challenge to get all parties to agree on the specifics of the contract. Thus far, only few value-based contracts have been implemented due to a range of clinical, operational, and financial barriers, as listed in Exhibit 10:

EXHIBIT 10

The challenges to value-based contracts in life sciences

Source: Everest Group (2020)

“Previously, the only thing that you had to do was prove that your drug was safe and effective. Now, there is much more onus on us to prove that the drug delivers more than that and has a positive patient outcome.

So one of the hardest things we had to do in the development of Entresto was to agree with the FDA on the end points of the trial. How are we physically going to measure things like reduced hospitalization? There was a lot of back and forth.”

- Joe Jimenez, Former CEO, Novartis, September 2015

“Manufacturers and payers report that approximately 67% and 40% of early dialogues for value-based contracting, respectively, do not reach implementation.”

- The American Journal of Managed Care, February 2019



Clinical challenges

- **Consensus on value metrics and price thresholds:** It may take several rounds of negotiations before payers and life sciences firms agree on what medical end points equate to value, as well as the highest price or reward for achieving a value metric and the lowest price or penalty for not achieving it. Payers would likely want to assess value as early as possible, while life sciences firms would probably want to ensure there is enough time to conclude that value has been achieved
- **Outcomes measurement:** Effective value-based arrangements require accurate patient health tracking, which, in turn, requires significant data gathering and data analysis and heavy technological infrastructure investments. Disagreements could occur on which party makes the technology investments or on the time interval for when value metric assessments are conducted
- **Data access and permissions:** The parties involved also need to decide who can access information such as procedural data, patient data, and insights on outcomes, at what level, and for which purposes. Mechanisms would be required to securely share this data among different stakeholders in the value-based contract

“Drug companies have been reluctant to enter into risk-based deals for cancer treatments, knowing that it’s particularly tough for payers to refuse to cover them. In this country, at this point, if there is an unmet need, health plans have virtually no ability to say no.”

- Dr. Michael Sherman,
Chief Medical Officer,
Harvard Pilgrim Health
Care, March 2019

Operational challenges

- **Incompatible pricing structures:** Many countries, such as the UK, negotiate drug prices centrally or have pricing programs associated with government-sponsored health plans, leaving little scope for private healthcare payers to negotiate outcome-based arrangements separately. Pricing programs in the US, such as Medicare Best Price, Medicare Part B, and 340B, run along similar lines
- **Aversion/reluctance:** Not all healthcare payers are interested in collaborating with life sciences companies. The latter may not want to enter into contracts that cover high-risk or very unhealthy individuals
- **Patient preferences:** Ensuring compliance can be difficult as patients cannot be forced to participate in sharing their health outcomes data. Many value-based pricing agreements will have to be conducted over a specific number of years, which can pose a challenge when consumers transition between health plans. In case of a chronic illness, a patient may even leave the health plan before any positive health outcome is observed
- **External determinants:** In addition to the therapy’s action, social and environmental factors, individual lifestyles, and health-related choices all have an impact on health outcomes. This introduces an additional element of risk for life sciences firms

Financial challenges

- **Risk for payers:** Healthcare payers may be exposed to higher reimbursement risks if the drug/device showcases positive outcomes
- **Risk of a drug not paying off:** A drug/device could also present significant financial risk to a life sciences firm if it does not pay off to the extent that was intended during its development
- **Diminished commercial value of a patient:** A life sciences company could derive lower commercial value from a patient over a treatment cycle under a value-based contract for a non-chronic disease as compared to the pay-for-volume model. This has been illustrated earlier in the paper, in the financial model for a value-based life sciences contract. With most life sciences firms working with constrained R&D budgets, it can be argued that a rebate-based pricing model could bring down profits and inhibit R&D activity even further, which could lead to a backlash from life sciences firms

Understanding the role of technology

Effective capture and analysis of real-world data is critical to enabling value-based contracting. As incentives are aligned in a value-based contracting model, investing in technology enablers is beneficial for both healthcare payers and life sciences firms. Proactive adherence to using that technology in tandem with medication is in the best interests of patients too. Exhibit 11 showcases the technology enablers of value-based life sciences contracts.

EXHIBIT 11

The tech enablers of value-based life sciences contracts

Source: Everest Group (2020)



Data capture

Electronic Health Records (EHRs) and patient registries are traditional sources of patient outcomes data. Today, smart IoT medical devices in a cloud-based connected health ecosystem can also be used for remote monitoring and capturing real-time health information from target patients.

Security

Security protocols and risk modeling are crucial, as data is shared among several stakeholders and any compromise with integrity can have commercial ramifications for the entire ecosystem. Blockchain-based smart contracts in themselves carry security benefits.

Data orchestration

The data orchestration layer involves automating analytics processes end-to-end, from data gathering to analyzing and drawing insights. Big data and advanced analytics algorithms are used to analyze data from several patients from the study group and draw insights on the health outcomes and efficacy of a particular therapy. Edge analytics algorithms can be introduced to detect spikes/sudden adverse effects.

Interoperability

For effective collaboration among different stakeholders, data formats need to be standardized and a common interoperable data-sharing platform needs to be set in place among payers, providers, and life sciences firms.

Smart contracts

A smart contract with a distributed ledger model can ensure a correct outcome and resulting financial transaction by validating across a blockchain network. Being stored on a blockchain makes the contract immutable, while integrating smart contracts with EHRs and a connected health ecosystem can effectively automate the entire case management and reimbursement process, bringing in significant efficiencies.

Cloud

As data volume grows, the cloud is expected to provide on-demand scale and computing power.

An integrated technology framework for value-based contracting

An integrated technology-enabled value-based contract can effectively bring together the life sciences firm, healthcare payer, healthcare provider, and patient in a transparent setting. Exhibit 12 showcases an integrated technology framework for value-based contracting.

In a blockchain-based smart contract, a new block is triggered for each prescription at the time a drug/device is purchased. With the established payer-life sciences contract governance model as reference and measured patient data as input, a smart contract uses advanced analytics algorithms to decide the payment/reimbursement. The payment/reimbursement process can also be automated further.

Key benefits of a technology-backed value-based contracting setup

- Transparency and trust among all stakeholders
- Accurate analytics-based decision-making
- Reliable validation of each transaction in a blockchain network
- End-to-end automation of the reimbursement/payment process
- Security and credibility of a blockchain setting
- All stakeholders have an incentive to participate

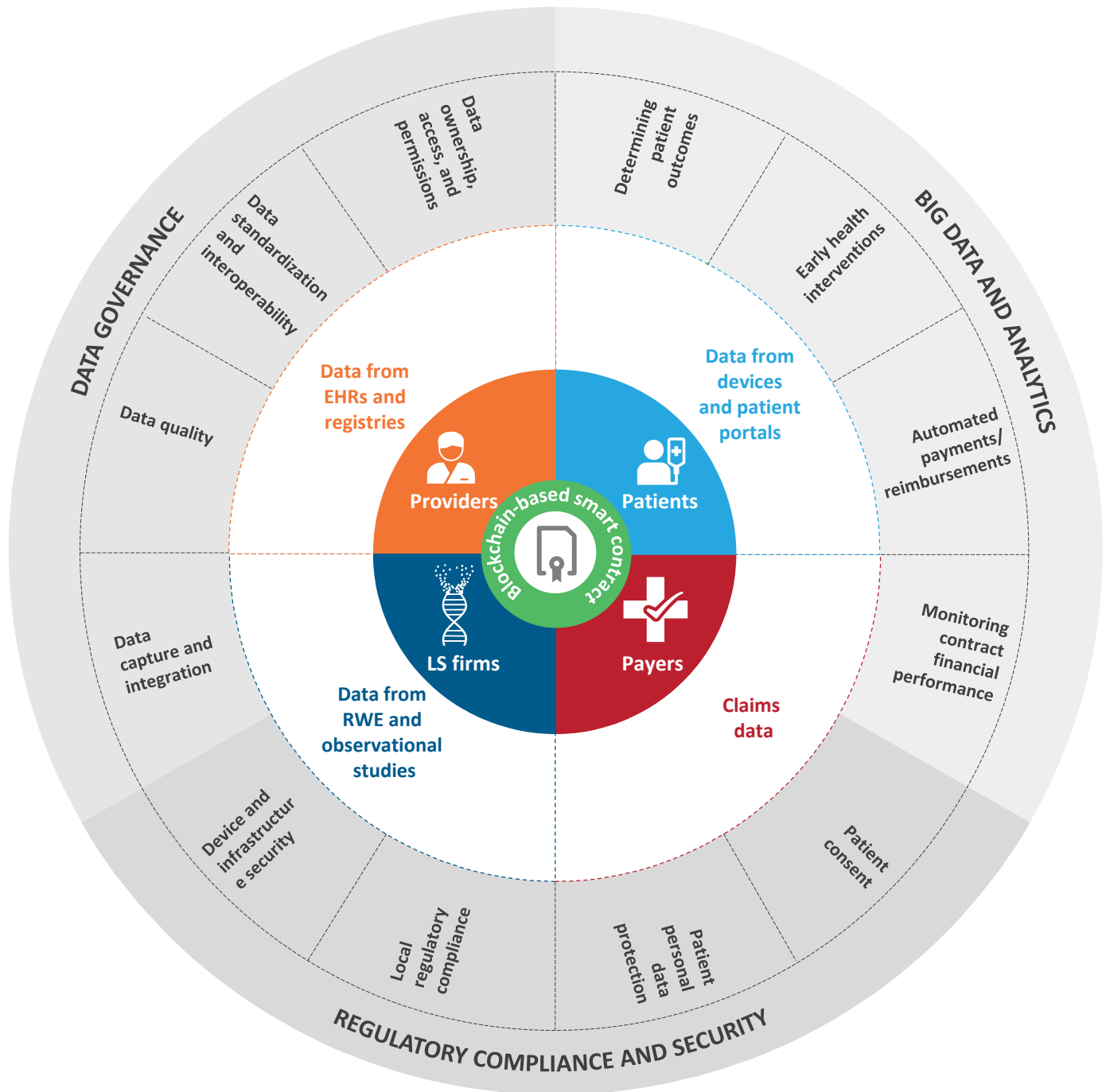
EXHIBIT 12

An integrated technology ecosystem for value-based contracting

Source: Everest Group (2020)



CONTRACT GOVERNANCE MODEL



Note: This is an illustrative model and not an all-inclusive representation of technology use cases in value-based contracting.

Preparing for effective value-based contracting

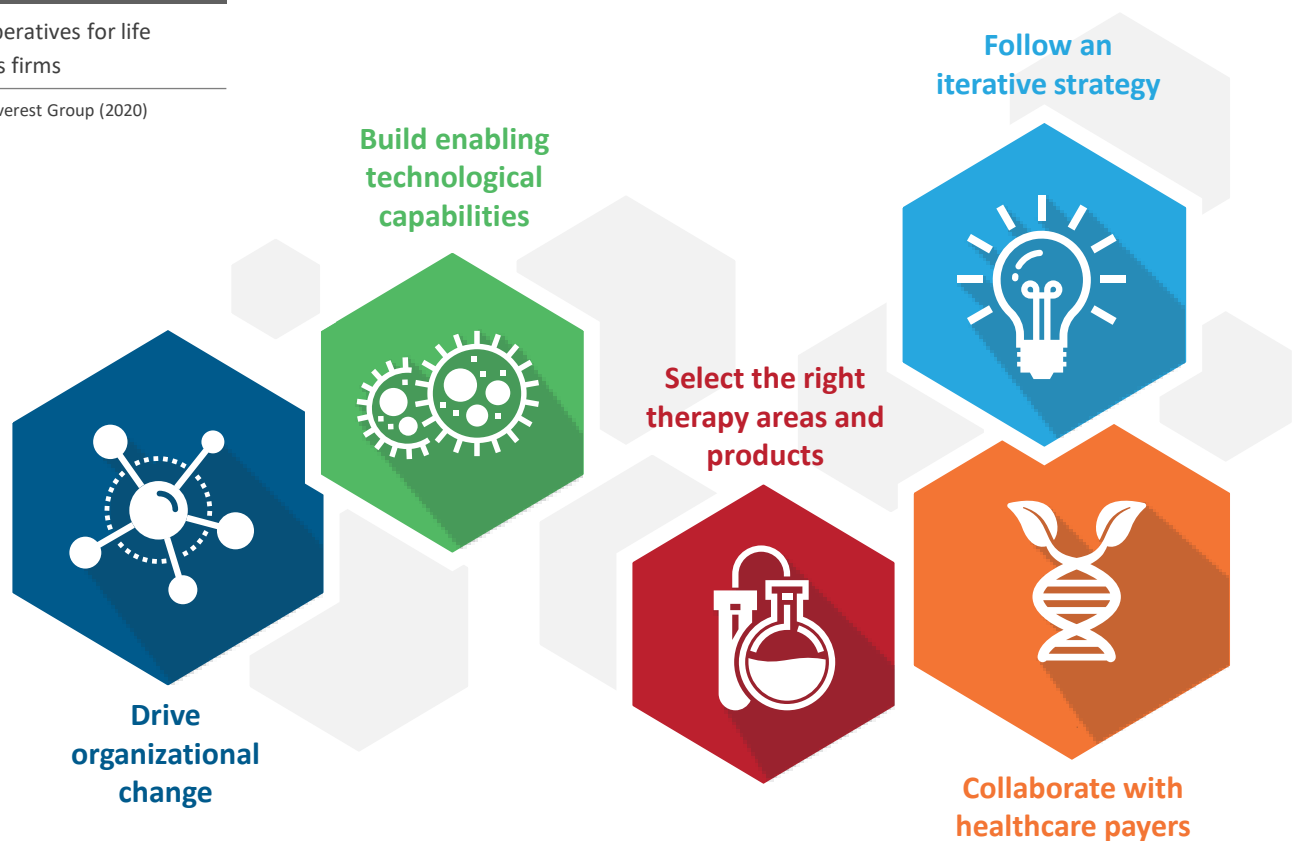
Imperatives for life sciences firms

Life sciences firms need to rethink their organizational strategies and take initiatives to transform R&D and commercial functions in order to effectively enter into and execute value-based contracts. Exhibit 13 showcases the necessary steps to prepare for effective value-based contracting.

EXHIBIT 13

The imperatives for life sciences firms

Source: Everest Group (2020)



Drive organizational change

- Design clinical trials to also predict outcomes and measure the cost-effectiveness of therapies. Use these observations in negotiations with healthcare payers. Demonstrate value to payers based on real-world outcomes
- Bring in strong financial risk analysis and contracting capabilities to study the feasibility of value-based contracts across the existing product portfolio, as well as dedicated teams to engage healthcare payers for value-based contracting
- Redesign processes to capture and measure patient outcomes
- Showcase strong C-suite commitment and drive change throughout the organization, especially in R&D and sales teams, where a revamped approach will be required

Build enabling technological capabilities

- Engage with technology partners, such as service providers and start-ups with life sciences expertise and relevant digital capabilities, and co-create technology solutions to support value-based contracting
- Ramp up IT talent if enabling solutions are to be partially or completely developed internally. Create dedicated teams of tech professionals skilled in data management, big data and edge analytics, IoT networking, connectivity, and blockchain
- Build platforms to gather real-world de-identified patient data at scale and analytics capabilities for risk analysis, value analysis, and reward analysis
- Invest in IT infrastructure / cloud services to store and handle vast volumes of patient data and aspects of networks to ensure connectivity with smart contracts, other stakeholders, and smart medical devices/wearables
- Put in place data privacy and security measures to safeguard patient data

Follow an iterative strategy

- Enter into value-based contracts with payers for a particular drug/device and therapy. Capture key learnings and assess financial impact and change in the market perception of the drug/device and brand. Calibrate value-based contracting strategy accordingly

Select the right therapy areas and products

- As stated earlier, measurable innovative arrangements are best suited for therapies in which patient populations and clinical end points are well defined and the outcomes are measurable, such as cardiology and oncology therapies
- Carefully evaluate and select products for which the outcomes are measurable and that are expected to succeed under value-based arrangements

Collaborate with healthcare payers

- Engage/partner with healthcare payers and negotiate on contracts to cover a greater share of the product portfolio with value-based contracts
- Build consensus on contract elements, including disease-specific measures and what is categorized as a favorable outcome, along with the corresponding payment thresholds for different scenarios
- Gain access to patient data, such as patient registries and EHRs, by initiating cross-stakeholder data-sharing partnerships
- Co-create real-world data platforms, to measure and analyze outcomes and determine payments
- Create awareness among patients and healthcare providers to facilitate enforcement and real-world data collection

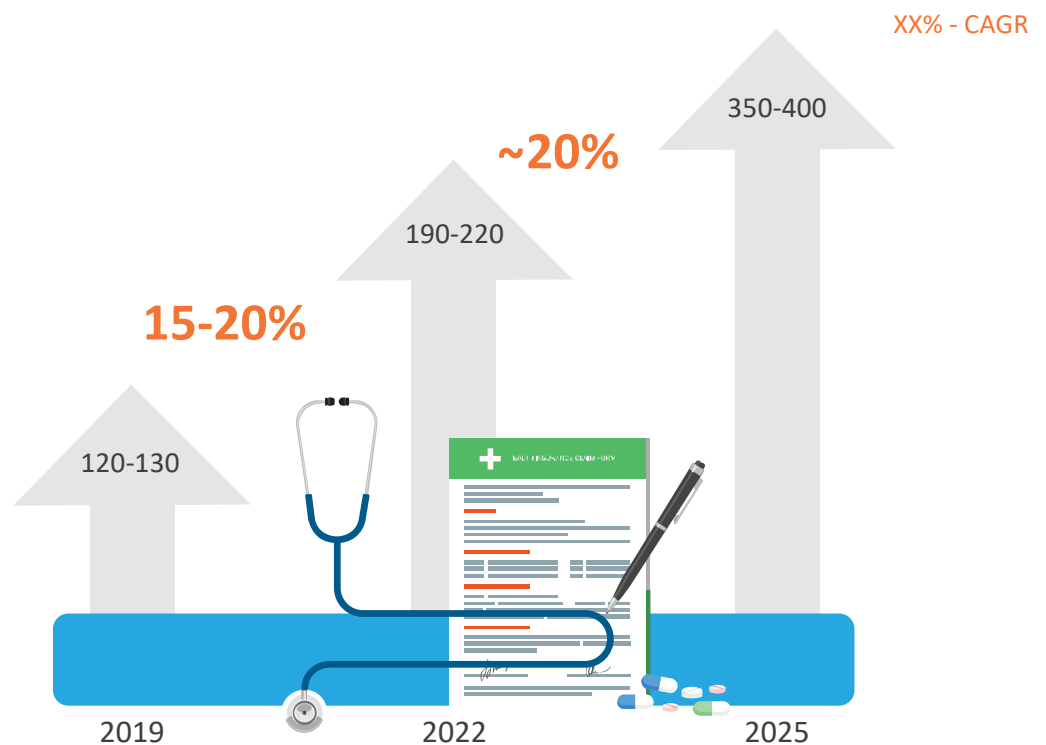
Outlook

Over the last four years, there has been an increase in the adoption of value-based life sciences contracts in the US. The number of such contracts is expected to further increase at a CAGR of 15-20% from 2019 to 2022 and continue at ~20% from 2022 to 2025, as a greater proportion of total drugs in circulation get covered by such contracts. Exhibit 14 suggests that, in the coming years, value-based contracts are expected to become commonplace in the US.

EXHIBIT 14

Projected number of value-based life sciences contracts in the US by year

Source: Everest Group (2020)



Evolving expectations from IT service providers

In line with the growing adoption of value-based contracts, expectations from IT service providers are evolving to include the following:

Develop relevant offerings

IT service providers need to build capabilities to support the adoption of value-based contracts. These players are expected to develop readily implementable solutions for:

- Risk analysis, value analysis, and reward analysis
- Blockchain-based smart contracts
- IoT-based patient data capture
- Security offerings to safeguard patient privacy
- Regulatory compliance for patient data

Orchestrate collaboration through an integrated technology ecosystem

IT service providers can further orchestrate an integrated technology ecosystem to enable collaboration and transparency among patients, life sciences firms, and healthcare providers. They can also facilitate interoperability by enforcing data standards to enable effortless data-sharing among the different stakeholders.

Conclusion

The life sciences industry is experiencing increased uptake of value-based contracts in the light of mounting healthcare expenditures unaccompanied by corresponding improvements in health outcomes. Such contracts promise reduced costs to healthcare payers, lower out-of-pocket expenditure to patients, and an opportunity for life sciences firms to demonstrate product differentiation and enhance brand perception, especially in specialty therapy areas.

However, the shift from volume-based pricing arrangements to value-based contracts is not easy, as it poses a host of clinical, operational, and financial challenges. However, if life sciences firms begin with an outcome-centric approach, driving change across the organization, the change is achievable and can well be worth the effort.

Targeted investments and partnerships across advanced analytics and IoT technologies will enable real-world data collection and insights on outcomes. An integrated ecosystem of blockchain-based smart contracts and data from EHRs, patient portals, and IoT-based patient monitoring setups provide unmatched transparency and security benefits, as well as end-to-end automation of the reimbursement/payment process, effectively mitigating many challenges.

A key question in implementing value-based contracts is: Who is responsible for making the technology investments and developing an integrated ecosystem? Life sciences firms may choose to make these investments themselves to gain the first mover advantage. Alternatively, health plans may develop their own technology ecosystems, with life sciences firms competing to participate. In any case, close collaboration among all the stakeholders – healthcare payers, providers, life sciences firms, and patients – will be paramount to the success of value-based life sciences contracts.


About Everest Group

Everest Group is a consulting and research firm focused on strategic IT, business services, and sourcing. We are trusted advisors to senior executives of leading enterprises, providers, and investors. Our firm helps clients improve operational and financial performance through a hands-on process that supports them in making well-informed decisions that deliver high-impact results and achieve sustained value. Our insight and guidance empower clients to improve organizational efficiency, effectiveness, agility, and responsiveness. What sets Everest Group apart is the integration of deep sourcing knowledge, problem-solving skills and original research. Details and in-depth content are available at www.everestgrp.com.

This document is for informational purposes only, and it is being provided "as is" and "as available" without any warranty of any kind, including any warranties of completeness, adequacy, or fitness for a particular purpose. Everest Group is not a legal or investment adviser; the contents of this document should not be construed as legal, tax, or investment advice. This document should not be used as a substitute for consultation with professional advisors, and Everest Group disclaims liability for any actions or decisions not to act that are taken as a result of any material in this publication.


This study was funded, in part, by Cognizant


For more information about Everest Group, please contact:


 +1-214-451-3000


 info@everestgrp.com

For more information about this topic please contact the author(s):

 Abhishek Singh, Vice President
abhishek.singh@everestgrp.com

 Nitish Mittal, Vice President
nitish.mittal@everestgrp.com

 Chunky Satija, Practice Director
chunky.satija@everestgrp.com

 Pranav Kumar, Senior Analyst
pranav.kumar@everestgrp.com