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INDUSTRY RESEARCH

Value-Based Care: An Investor's Guide

PitchBook is a Morningstar company providing the most comprehensive, most accurate, and hard-to-find data for professionals doing business in the private markets.

Introduction

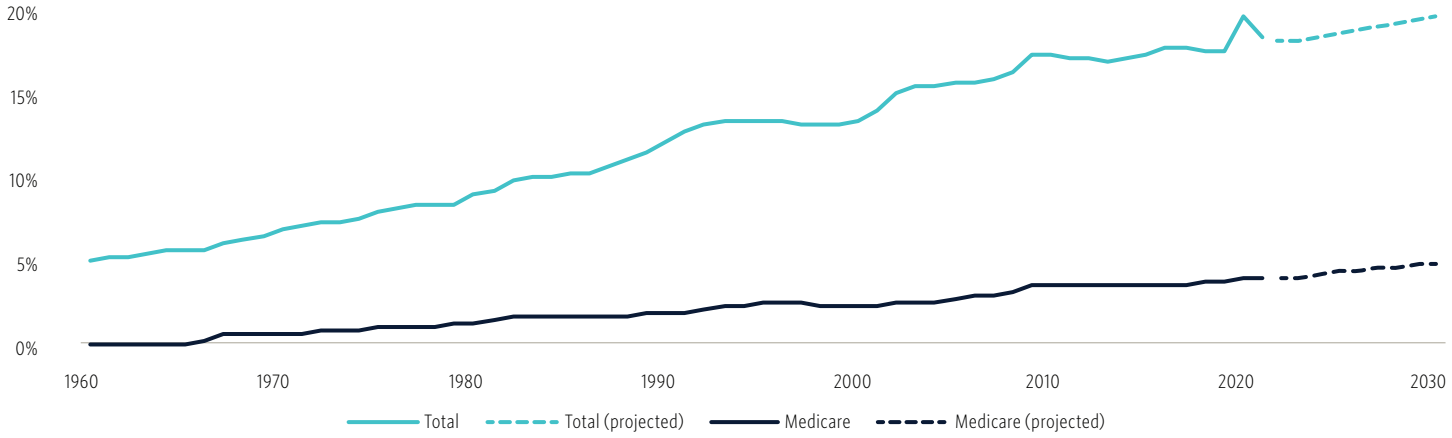
Value-based care is healthcare that focuses on improving holistic patient outcomes across a population while controlling costs. It involves refocusing healthcare delivery on preventative care, lower intensity interventions (for example, physical therapy rather than orthopedic surgery), whole-person well-being (behavioral and physical), and social determinants of health (such as nutrition, housing, transportation, and employment). This is often achieved by improving coordination among different clinical and community support providers, helping the patient navigate their care journey between appointments, using predictive analytics to identify patients at risk for certain conditions and proactively intervene, and following clinical best practices and care pathways that reduce unexplained outcomes variation.

In the US, value-based care is specifically associated with alternative payment models (APMs). Traditionally, healthcare in the US is reimbursed by payers on a per-procedure basis—the fee-for-service (FFS) model. This financially incentivizes healthcare providers to see as many patients as possible, to focus their patient encounters on the procedures that result in the highest reimbursement margin (such as surgery), and to act in silos relative to one another. Payers, in turn, are incentivized to reduce reimbursement rates, deny claims, require prior authorizations, and otherwise reduce utilization to control costs.

APMs attempt to realign incentives so that both payers and providers are rewarded when patients stay healthier—resulting in not only better outcomes but a lower total cost of care (TCOC). Attempts at VBC in the US reach back decades to the managed care HMO plans of the 1990s. However, technology at the time—prior to the widespread adoption of electronic health records (EHRs)—was not sufficient to allow effective care coordination, referral management, or outcomes analysis. As a result, managed care effectively focused on reducing utilization, doing little to actually improve patient care.

Over the past 15 years, the Centers for Medicare & Medicaid Services (CMS) has led the way in a new wave of VBC innovation. Predictive analytics and growing EHR interoperability are enabling more robust care coordination, outcomes measurement, and interventional risk analysis. The Center for Medicare & Medicaid Innovation (CMMI) has frequently taken on the role of piloting new payment models, which are then replicated by commercial and managed care organization

US national health expenditures as a share of GDP*



Sources: CMS | FRED
*As of December 31, 2022

(MCO) payers, although there is some innovation among these parties, too. CMS' leadership stems from its role not only as the single largest payer in the US healthcare system, but from the agency's urgent need to "bend the cost curve" and slow the growth of US healthcare spending. CMS projects that Medicare alone will cost $1.7 trillion by 2030, or 4.8% of projected GDP.[1] Currently, the Medicare Hospital Insurance (HI) Trust Fund, which covers Part A spending, is expected to face a shortfall beginning in 2028.[2] Although shortfalls for the HI Trust Fund have been predicted every year since its inception in 1966—and have been averted through funding and budgeting changes—the current growth rate of spending is unsustainable.[3] As a result, CMMI has set a public goal to have 100% of traditional Medicare beneficiaries treated by a provider who participates in an APM by 2030.[4]

Another key development has been the rise of vertical payer-provider integration, prominent examples of which include UnitedHealthcare-Optum, Kaiser Permanente, CVS (Oak Street)-Aetna, Humana-CenterWell, and Highmark Health. If APMs attempt to align payer and provider incentives, the "payvider" model encodes this alignment within an organizational structure. If Optum invests in its primary care clinics to lower the TCOC for its patients, United reaps the benefits in the form of a lower medical loss ratio (MLR). Payviders also benefit from internally sharing organizational expertise in risk management, the bread and butter of insurer operations but relatively foreign to most provider organizations.

The final driver of value-based care in the US healthcare system is self-insured employers. Approximately 65% of US employees are enrolled in a self-funded plan.[5] Self-insured employers contract with a third-party administrator (TPA) or administrative services only (ASO) for insurance design, network access, claims processing, and other administrative services. Captive insurance is a variation of self insurance in which the employer creates its own small insurance company and then

1: "Historical," CMS.gov, December 15, 2022.
2: "FAQs on Medicare Financing and Trust Fund Solvency," KFF, Juliette Cubanski and Tricia Neuman, June 17, 2022.
3: "Medicare: Insolvency Projections," Congressional Research Service, October 25, 2021.
4: "Innovation Center Strategy Refresh," CMS, n.d., accessed April 17, 2023.
5: "2022 Employer Health Benefits Survey," KFF, October 27, 2022.

pays into it with pretax premium contributions. Self-insured employers often work with care navigation, utilization management, and directly contracted providers to improve population health outcomes and reduce costs.

Finally, although this note focuses on APMs for medical spending in the US, VBC also has other technical valences. There is also a growing movement, fairly mature in Europe and gaining traction in the US, toward value-based agreements (VBAs) for outcomes-based drug pricing arranged among pharmaceutical companies, payers, and providers. In Canada and Europe, the term "value-based care" is typically used in its broader or softer sense—that is, orienting healthcare around measures of holistic patient well-being and achieving that well-being through care pathways and interprovider coordination.

Value-based care ecosystem market map

Providers

Primary care aggregators

Claremedica · Community Medical Group · InnovaCare Health · Millennium Physician Group · MyCare Medical · Optum · Rancho Family Medical Group · Southeast Primary Care Partners

De novo primary care

CanoHealth · CenterWell Senior Primary Care · cityblock · Oak St. Health · one medical

Specialist PPMs

Axia Women's Health · Cricket Health · DaVita · Fresenius Medical Care · HOPCo · OneOncology · The Oncology Institute of Hope & Innovation · The Orthopaedic Institute · Mississippi Sports Medicine and Orthopaedic Center · U.S. Renal Care · Unified Women's Healthcare · Verdi Oncology

Employer-direct primary care (brick-and-mortar)

CareATC · crossover · everside Health · Marathon Health · Premise Health · vera Whole Health

VBC enablement

Primary care enablers

agilon health · Aledade · apollomed · AMM · Caremax · Equality Health · P3 Health Partners · pearl · PRIVIA Health · Vytalize · wellvana

Specialty enablers

Episode Solutions · Karoo Health · Oncology Care Partners · panoramic · SOMATUS · strive Health · Wildflower

Technology and ancillary services

Population health and predictive analytics

arkos health · azara healthcare · Cedar Gate Technologies · Chordline Health · Clarify · ClosedLoop · enlace Health · Health Data Analytics Institute · innovaccer · inovalon · IntusCare · Lightbeam Health Solutions · MEDALOGIX · navina · NEUROFLOW · NUNA · Persivia · POSTACUTE Analytics · Socially Determined · springbuk · unislink

Surgery coordination

Avant-Garde Health · caresyntax · docspera · kēlaHealth · wellbe

Care management and navigation

Accolade · array Behavioral Care · Collective Health · engooden Health · healthmap · Kepro · MedArrive · MedCom Care Management · monogram health · PAIR TEAM · PHCN · Quantum Health · SentryHealth · SIGNALLAMP Health · signifyhealth · TAILOR CARE · TIMEDOC Health · transcarent · Välenz Health · Waymark · Wayspring · wellbox

Care coordination and referral management

Bamboo Health · carevive · cordata · dina · Hatch · lumeon · PointClickCare · referwell · UNITE US

Outcomes measurement

Heartbeat · OUTCOMEMD · Owl · patientIQ

Source: PitchBook • Geography: Global
*As of March 31, 2023
Note: Companies included are a representative selection of PE-backed, VC-backed, public, and privately held players relevant to key value-based care investment themes.

Investment opportunities in value-based care

Since the mid-2010s, value-based care has attracted growing PE and VC attention as an investment theme. There are several reasons for this. First, there is now a consensus among policymakers, healthcare operators, and payers that the US healthcare industry is in the early stages of a broad shift toward value. How far this movement will progress and how rapidly is the subject of debate; we present our view in the final section of this report. But regardless, investors are eager to be on the right side of a secular change in an industry that represents nearly 20% of GDP.

Second—and underlying the first point—the social and individual value of better healthcare at a lower cost is undeniable. Additionally, as mentioned above, the unsustainability of US healthcare spending from CMS' perspective alone—not to mention state Medicaid agencies—demands a policy response. A growing focus on health equity has underscored that people of color and people of lower socioeconomic status have poorer health outcomes. VBC's emphasis on population health has the potential to significantly improve care for these groups. Finally, clinicians, nurses, and other healthcare providers are feeling firsthand the weight of a system that rewards procedure volume and ultimately produces sicker patients, and a value-based clinical approach is often a draw from an employment or partnership perspective. These factors make VBC personally compelling for many investors and add to its attractiveness as an investment theme.

Third, VBC is difficult and requires technological, operational, and clinical acumen to successfully implement. The transition toward value has already required, and will continue to require, significant capital investment not only into provider groups that are pursuing APMs, but into technology and tech-enabled services solutions that facilitate VBC for both providers and payers.

VBC investment opportunities can be organized into three buckets: provider management, VBC enablement, and technology and ancillary services.

The key advantage of the de novo approach is that it facilitates consistent branding, patient experience, and clinical and operational approaches. This consistency can allow a de novo practice to take on much greater levels of risk earlier than a traditional practice that is transitioning toward risk. The disadvantage of the de novo model is that it is capital intensive.

Provider management

Investors may back or acquire medical groups practicing under value-based care models. This can take several forms:

De novo primary care: In this model, a company opens new brick-and-mortar clinics and hires physicians and other practitioners to staff them. (Care is often provided in a hybrid model, but the brick-and-mortar footprint is essential; purely virtual provider organizations rarely take on risk.)

The key advantage of this approach is that it facilitates consistent branding, patient experience, and clinical and operational approaches. New locations can also be positioned strategically in communities with a targeted demographic profile. This consistency can allow a de novo practice to take on much greater levels of risk earlier than a traditional practice that is transitioning toward risk. The disadvantage of the de novo model is that it is capital intensive. In an environment in which private funding availability is limited and capital and staffing costs are elevated, many de novo groups are experiencing slower growth than they predicted in 2020 and 2021.

A variation on this approach is the employer-direct model. These companies contract directly with self-insured employers to provide "primary care plus" to employees. (The "plus" refers to behavioral health, musculoskeletal care, occupational health, pharmacy, and sometimes vision and dental care.) New clinics are typically opened de novo either on-site or near an employer's campus. The basic fee structure for employer-direct primary care is either per member per month (PMPM) or cost-plus. However, some providers put fees at risk relative to performance benchmarks or TCOC outcomes. The unique advantage here is that growth follows demand from a new employer contract, thus decreasing clinic ramp-up time.

The progress that a practice can realistically make in transitioning toward value within an average five-year PE hold is unlikely to have a significant revenue impact. Instead, groups will transition gradually toward value over several turns in PE hands. The theory is that a group becomes a more sophisticated VBC player, making it more attractive to subsequent sponsors and, ultimately, to a strategic buyer—and this should be reflected in the multiple it commands at each exit.

Primary care aggregator: In this model, a PE-backed platform rolls up physician-owned primary care practices and gradually transitions them toward greater risk. Like any other traditional physician practice management (PPM) roll-up, this model benefits from multiple arbitrage. However, independent primary care practices that are already successfully participating in value-based contracts, or are ready to do so, are few and far between and command high valuations, especially in attractive Sunbelt markets.

This leaves aggregators with a heavy operational lift—not only integrating practices with disparate EHRs and clinical cultures, but implementing outcomes measurement, care coordination, care pathways, referrals management, predictive analytics, and other measures necessary for success in value-based care. Because of this, the progress that a practice can realistically make in transitioning toward value within an average five-year PE hold is unlikely to have a significant revenue impact. Instead, groups will transition gradually toward value over several turns in PE hands. The theory is that a group becomes a more sophisticated VBC player, making it more attractive to subsequent sponsors and, ultimately, to a strategic buyer—and this should be reflected in the multiple it commands at each exit. Firms will generally try to avoid having their aggregator platforms partner with enablers because this entails giving up around 70% of shared savings economics.

Specialty PPM: Similar to primary care aggregation, this model involves moving a PPM in a category such as orthopedics into value-based contracting as a value creation strategy. However, unlike with senior primary care roll-ups, VBC is typically not the core operational thesis for the investment. (There are noteworthy exceptions, such as HOPCo.) Because the outcomes measurement and contract design necessary to support value-based contracting are less developed for specialties than for primary care, in most cases, the majority of revenue will still come from FFS contracts. However, according to McGuireWoods partners Geoffrey Cockrell and Kristen McDermott Woodrum, success in some degree of value-based contracting signals a level of operational and clinical sophistication to buyers and positions a group at the forefront of industry change. Engaging in APMs can also provide a competitive advantage in geographic markets that are dominated by FFS models, because payers will often push patients toward providers that have demonstrated superior TCOC outcomes.[6]

6: Geoffrey Cockrell, Partner and Healthcare Group Chair, McGuireWoods, and Kristen McDermott Woodrum, Partner, McGuireWoods, phone interview with Rebecca Springer, September 9, 2022.

Different specialties are at different levels of development in VBC contracting—and have characteristics that make them more or less suited to measuring outcomes. Orthopedics is undoubtedly farthest along. Nephrology (kidney/renal) is also well established. Medical oncology is now the subject of a second-generation CMMI model, but the ability of providers to drive consistent TCOC reductions still varies significantly by cancer type and disease stage. Some women's care groups have been experimenting with maternity bundles. Skilled nursing facilities (SNFs) are frequently preferred providers in primary care ACOs, and we are beginning to see more activity from SNFs in long-term-care ACOs and MA as well. A few SNF and home care groups take on MA risk. Finally, we have heard that cardiology and pain & spine may be next to begin experimenting with pay-for-performance. VBC in behavioral health is in its infancy, but some providers have entered value-based contracts, and partnership collaborations are working to develop outcomes standards for applied behavior analysis (ABA).[7]

The more nascent a specialty's VBC contracting, the greater the need for investors and their management teams to have deep operational knowledge of the specialty, its clinical culture, and the approaches of specific payers. For this reason, firms pursuing specialty value-based care are more likely to partner with enablers. The loss of economics is of less concern because the shared savings potential is limited to begin with; the point is clinical/operational upskilling and positioning the group ahead of the curve in the specialty's VBC transformation.

The primary advantage of the enabler model is that it is capital light. The pitfall is for growth to outpace the maturation of new cohort practices into significant TCOC reduction and therefore shared savings.

VBC enablement

Instead of building or acquiring practices, value-based care enablers partner with independent physicians, physician groups, and/or health systems to facilitate a transition toward value.

The basic business model is as follows: The enabler provides the practice with proprietary population health software (with no subscription cost). Plugging into a standard EHR, this software typically guides providers on care pathways, prompts interventions for at-risk patients, and provides an analytical view of outcomes and contract performance. Aggregated/de-identified data from across the enabler's cohort is used for benchmarking. The enabler handles contracting and payer relationships, which often involves the practice joining one or more ACOs. The provider also provides services to facilitate (and influence) the practice's transition toward value, which can include consulting/change management, white-labeled care coordination/case management, home care teams, and partnerships with other providers (such as behavioral health groups and health systems). The enabler takes on the full downside risk of the practice's value-based contracts and receives a cut—70% is standard for primary care—of any shared savings.

The primary advantage of the enabler model is that it is capital light. This has enabled rapid growth for some enablers, especially those that focus on partnerships with scaled, multisite groups and health systems. Because the enabler's primary revenue source is shared savings from value-based contracts (unless the organization also directly owns and operates some clinics), achieving profitability requires rapidly growing the number of attributed lives—that is, moving as much as possible of a

7: "New Collaboration Between Evernorth and BHCOE Seeks to Standardize, Improve Autism Treatment Outcomes," Behavioral Health, Chris Larson, April 18, 2022.

partnered practice's patient panel into risk-based contracts relatively quickly. The pitfall for enablers is for growth to outpace the maturation of new cohort practices into significant TCOC reduction and therefore shared savings. A new partnership will typically incur losses in risk-based contracts in its first one to two years due to increased utilization of preventative primary care services (such as wellness visits and screenings) and the delay in realizing the resulting reduction in TCOC. Investors in VBC enablers must ensure that cohort maturation projections are reasonable and that the enabler is sufficiently capitalized to withstand the low point of the J-curve.

Because they are often piloting new contract models, specialty enablers tend to grow more slowly. They may pursue more creative partnership strategies, such as three-way partnerships with health systems and ambulatory groups, subcapitation from at-risk primary care providers, and employer-direct contracts. The hope for a specialty enabler is that the group can derive enough revenue from subcapitation and employer-direct channels—while gathering evidence on TCOC outcomes—until payers come around to VBC contracting for that specialty at scale.

Key questions for technology and ancillary services investments are: whether the target provider customer is transitioning toward value at a rapid enough pace to sustain revenue growth—including whether the contracting "technology" is sufficiently accepted by payers and creates enough additional revenue to justify the cost of the technology; and whether the target provider customer has the operating sophistication to engineer and execute a broader transition toward value—not to mention financial success in VBC programs and contracts.

Technology

Rather than backing providers that are taking on risk, or taking on risk directly as an enabler, investors can gain exposure to the healthcare industry's transition toward value by focusing on technologies and ancillary services that help providers successfully take on risk.

As detailed below, transitioning from FFS to VBC requires retooling almost every aspect of the provider enterprise and the payer-provider relationship. Technology is foundational in these transformations, and recent VBC successes simply would not have been possible 10 years ago. Services such as care coordination, case management, home care, and community services (programs that address housing, food, and employment needs) are also necessary components of a VBC program that must often be bolted on to traditional medical practices.

Key questions for technology and ancillary services investments are: whether the target provider customer is transitioning toward value at a rapid enough pace to sustain revenue growth—including whether the contracting "technology" is sufficiently accepted by payers and creates enough additional revenue to justify the cost of the technology; and whether the target provider customer has the operating sophistication to engineer and execute a broader transition toward value—not to mention financial success in VBC programs and contracts. Unsurprisingly, historical analyses have shown that providers often drop out of VBC initiatives (or scale back their level of risk) following negative financial outcomes.[8] The enabler model has been successful precisely because it solves this problem, encasing technology and services enablement in hands-on change management. One way to mitigate this risk is to focus on providing that change management service, even light consulting, in addition to the technology itself. Another way is to focus on only the most sophisticated risk-bearing providers and health systems, although this significantly restricts the addressable market. Additionally, many of the provider organizations best equipped to take on risk may also prefer to develop in-house solutions.

8: "Fifth Evaluation Report: Next Generation Accountable Care Organization (NGACO) Model Evaluation," NORC, Kristina Hanson Lowell, et al., November 2022.

The key technological differentiators for population health software tend to be its usability and its ability to integrate siloed data sources within and outside an organization to provide a full view of the patient.

The scope of technologies and services that might contribute to a provider's value-based care program is broad. Here, we highlight a few key categories:

Population health/predictive analytics: Software that presents an analytical view of a provider's entire patient census. These tools help providers track population-level health outcomes, utilization patterns, and risks, with a view toward 1) identifying the highest-risk patients and systematically intervening to provide enhanced care before those risks materialize into more costly episodes, and 2) tracking the effect of those systematic interventions on population-level outcomes. The software may provide high-level dashboard views for retrospective study and forward care planning, as well as point-of-care guidance on recommended screenings or interventions, often following care pathways. It may also incorporate remote patient monitoring, referral management, and contract building and performance analysis.

The key technological differentiators for population health software tend to be its usability (Does it deploy seamlessly within the EHR? Are reporting functions accessible and useful to physicians?) and its ability to integrate siloed data sources within and outside an organization to provide a full view of the patient. Population health software-as-a-service (SaaS) companies can also benefit from diversifying end markets (not just health systems, but also ACOs, payers, brokers/care navigators, and TPAs) and from expanding functionality to displace point-solution vendors.

Care coordination and referral management: Providers that take on TCOC risk must be concerned not only with their own care for patients, but with the care their patients receive following a referral and how the patient's various care relationships work together to (hopefully) promote overall well-being. This requires using performance data to build high-quality referral networks, ensuring that referral loops are closed, and sharing information about a patient's history and treatment plans among care providers, as well as helping patients understand and utilize relevant benefits (such as Medicaid waiver programs). Other providers may include specialists, behavioral health providers, post-acute care facilities, home care agencies, and community-based organizations (CBOs) that provide social determinants of health (SDOH)-related services (such as food, housing, employment, and social needs). Care coordination and referral platforms run the gamut of these functions, with many focusing on post-acute handoffs.

One key question for investors considering care coordination and referral management investments is how successful a vendor has been in establishing connectivity with SNFs, home care agencies, CBOs, and other providers that often have limited technology resources. Closed-loop referral rates—the proportion of referrals that result in a transmission of patient information back to the referring provider following an initial consultation with the referred provider—are the most basic performance metric. More sophisticated players may report on referred services actually provided and on outcomes (for example, 30-day readmissions versus a benchmark). Finally, and perhaps most importantly, investors must ask whether a point-solution care coordination tool can compete on distribution with roughly comparable functionality integrated into EHR and population health software suites.

Surgery coordination: This is a particular flavor of care coordination. A variety of software tools help hospitals, ASCs, and orthopedic provider groups orchestrate

surgeries, which are a key—if not *the* key—revenue center for many provider types. Although some tools focus on capacity management, workforce orchestration, and equipment/supply management—helping providers maximize FFS surgical revenue while minimizing overhead—others have a more VBC bent, helping providers track patient journeys and manage costs, especially in the postoperative phase. These software tools may also facilitate outcomes reporting for bundled payments.

Outcomes measurement: VBC has seen the greatest adoption in provider categories wherein benchmarks exist that clearly align with a patient's well-being, influence total cost of care, and are readily measurable via claims data. For instance, in orthopedic surgery bundles, typical outcomes benchmarks include risk-adjusted complications rates and days in hospital. In maternity care, measurable outcomes include cesarean section and neonatal intensive care unit admission rates. Defining and measuring quality care in other specialties—especially for therapies such as physical therapy and ABA that are used to manage chronic conditions—is more challenging. Some companies are attempting to record and quantify outcomes using patient feedback (patient reported outcomes, or PROs) and other discipline-specific methodologies. This data can be used for internal clinical improvement as well as for reporting to payers. However, the market for outcomes measurement remains small and subject to a detrimental chicken-and-egg dynamic: Until a specialty has developed widely accepted outcomes measurements, there will be insufficient financial upside available from VBC contracts to justify spending on an outcomes reporting software tool for many providers.

The healthcare industry has increasingly recognized that good care management can have an equal or greater effect than good medical care on patient outcomes, but it is difficult for many provider organizations to contemplate adding full-time staff in an environment where labor costs are already sky-high.

Care management and navigation: Broadly speaking, this category includes services that help guide patients, especially patients with greater health needs, through the healthcare system in a way that improves outcomes and minimizes costs. This can take several forms: services that extend a provider's (usually a primary care or health system) team through contract labor, providing care coordination/management services and potentially virtual care; care navigation and, sometimes, utilization management services for self-insured employers, or via delegation from government payers; and care management (often including virtual care and RPM in addition to concierge navigation services) for patients with chronic conditions, via contracts with either risk-bearing providers or payers.

We believe there are many tailwinds in this segment. The healthcare industry has increasingly recognized that good care management can have an equal or greater effect than good medical care on patient outcomes, but it is difficult for many provider organizations to contemplate adding full-time staff in an environment where labor costs are already sky-high. For payers, care management providers offer more patient-centric experiences and improved patient trust than most payers can achieve in-house. Employer-facing care navigation companies benefit from growing corporate scrutiny of costs and point solutions.

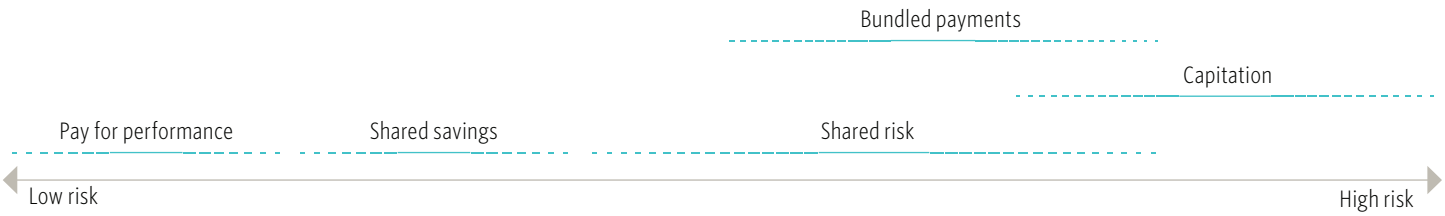
In the future, it may eventually be possible for chatbots and virtual voice assistants powered by large language models such as GPT-4 to displace some of the human labor of care navigation, although the ability to empathize and build trust with patients undergoing difficult medical situations—not to mention navigating the information silos of prior authorizations, insurance plans, and provider networks—currently evades the abilities of artificial intelligence. In the meantime, care management service providers

may be able to differentiate themselves by using technology to empower their care management/care navigator workforces, assembling powerful customer relationship management platforms, suggesting actions based on patient histories, identifying the highest-risk patients, and intelligently prioritizing tasks.

Taxonomy of alternative payment models

Value-based care contracts can be conceptualized on a sliding scale.[9] In the accompanying graphic, on the left are low risk/reward models, typically upside-only and layered over traditional FFS architectures, which require relatively modest clinical and administrative enhancements from the provider. These are value-based contracts but are typically not considered "risk." In the middle are contracts that put the provider at risk for defined care episodes or specific care categories, or at very limited risk for TCOC. These require providers to implement significant clinical, operational, and care coordination improvements. On the right are comprehensive, population-based models that carry a high financial risk/reward potential and require providers to transform their care paradigm.

Risk spectrum of alternative payment models



Source: PitchBook Industry and Technology Research • *Note: For illustrative purposes*

Pay-for-performance: A FFS contract in which the provider can receive limited additional payments on top of FFS revenue for meeting certain quality or utilization targets, such as having a certain proportion of attributed patients complete their recommended annual screenings. In some arrangements, FFS payments may also be adjusted downward for underperformance. Targets may be evaluated against a prior performance year or peer group benchmark. Medicare's value-based purchasing programs are examples of the pay-for-performance model.[10]

Shared savings (upside only): In this model, the provider is paid via FFS reimbursement. However, at the end of a performance year, the provider's billed cost of providing care for a specified population is compared to a benchmark, and the provider and payer split the savings in the form of an additional payment from the payer to the provider. If the cost of care exceeds the benchmark, the provider is not penalized. The Medicare Shared Savings Program (MSSP) Basic Track Level A and Level B are examples of the shared savings model.

Shared risk (upside-downside): As above, but with both shared savings and shared risk (upside and downside). If the provider bills above the benchmark, they must partially

9: The Health Care Payment Learning and Action Network (HCPLAN) has established a helpful framework for categorizing alternative payment model (APM) contracts. The following definitions draw on HCPLAN's APM Methodology but add additional detail: "APM Framework," HCPLAN, 2017, accessed April 17, 2023.

10: Hospital value-based purchasing (HVBP), home health value-based purchasing (HHVPB), and skilled nursing facility value-based purchasing (SNFVBP)

What is an ACO?

An ACO is a group of clinically integrated providers that organize to engage in value-based contracts. ACOs can be formed for the purposes of contracting with Medicare, Medicaid, and commercial payers; a provider can participate in multiple ACOs. Depending on the contract design, beneficiaries may be attributed to an ACO either prospectively using historical claims data or retrospectively using data from the contract performance year. Beneficiaries can also voluntarily align with an ACO by designating a primary care physician who is an ACO participant. Clinically integrated networks are the legal entities that support ACO contracts.

reimburse the payer for the difference. Shared risk models often include "corridors" to mitigate extreme financial outcomes on the payer or provider side. Corridors progressively decrease the provider's share of savings/losses as the actual TCOC moves further below or above the benchmark. The MSSP Basic Track Levels C, D, and E and MSSP Enhanced Track are examples of shared risk models.

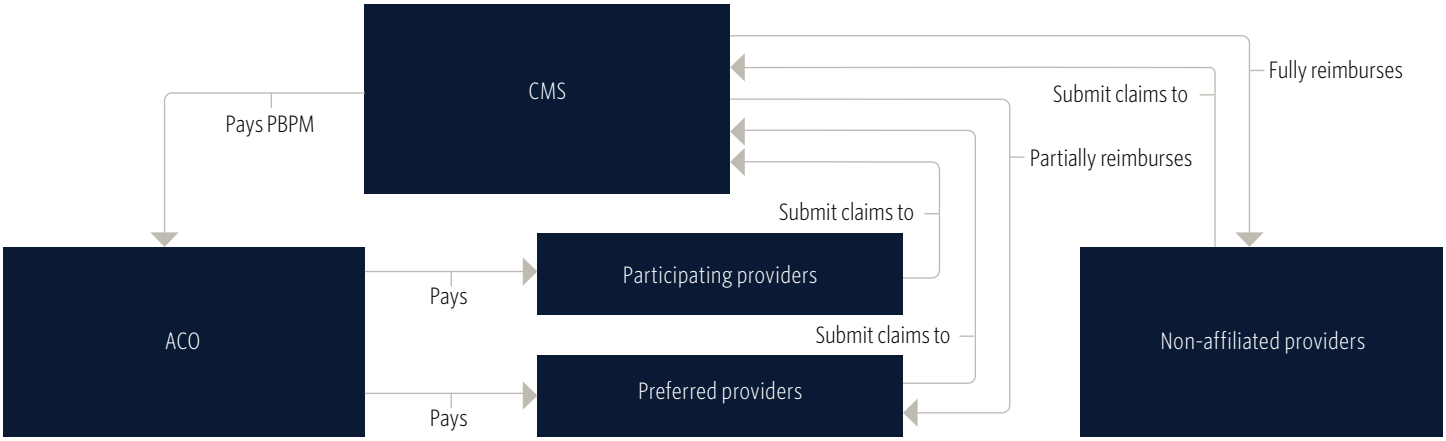
Bundled or episodic payment: This model designates a specific care episode, typically triggered by a diagnosis or procedure code, and reimburses providers in a prospective lump sum for all care related to that episode, including complications. Bundles typically cover procedures, such as total joint replacement (knee and hip) surgeries, or defined care episodes, such as maternity or perinatal care. For procedure-based bundles, the bundle extends for a defined time period postprocedure (for example, 90 days) to capture complications and readmissions, among other things. CMS' BPCI-A program is an example of a bundled payment model.

A variation of this model transfers upside and downside risk to the provider for the TCOC incurred by a patient during an extended care episode, such as cancer, heart disease, or end-stage renal disease, whether that care is directly related to the condition that triggered the episode or not, with certain exclusions. CMS' Enhancing Oncology Model (EOM) and Kidney Care Choices (KCC) programs are examples of the episodic model.

Capitation: This model puts providers at full risk for the TCOC of an entire population on a given plan. The provider receives a fixed or capitated prospective payment, calculated via a per-beneficiary-per-month (PBPM) rate. The PBPM rate is calculated using the historical cost of care for the relevant population or, in the case of MA, as a percentage of premium (for example, 85%). The use of stop-loss or excess insurance is common in capitated contracts, and contracts may also incorporate corridors. A milder variation is partial capitation, in which the provider's FFS revenue for preventative, primary care services is replaced by prospective payments, while all other services are reimbursed via FFS. Full-risk contracts between providers and MA plans are examples of this model.

The above categories represent a general guiding framework, but actual contract structures may combine elements from multiple categories. For instance, Medicare's ACO REACH program is effectively a hybrid shared-risk/capitation model with both

Billing and reimbursement in CMS ACO models



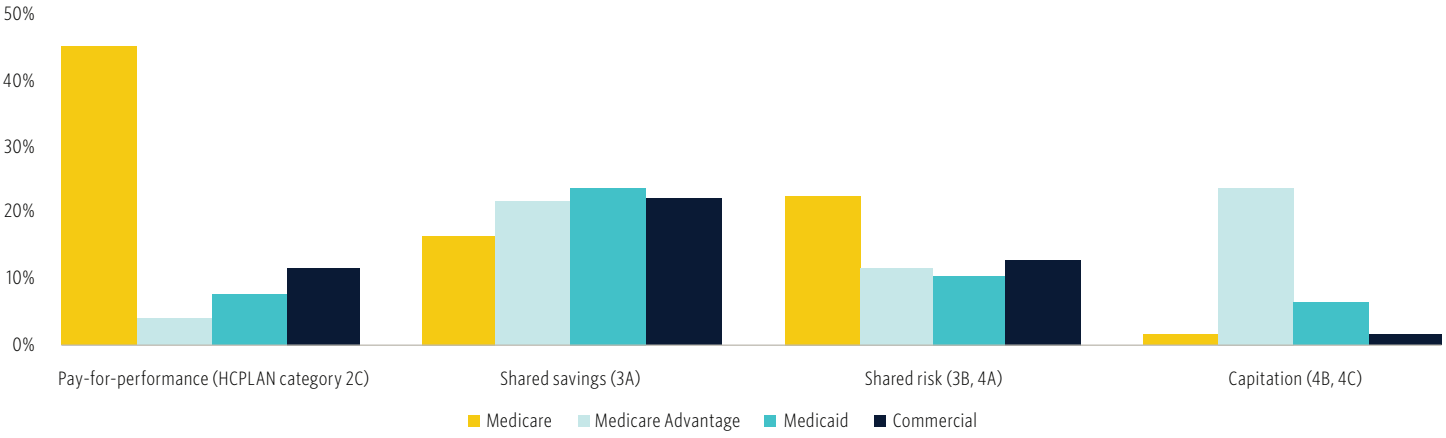
Source: PitchBook Industry and Technology Research • *Note: For illustrative purposes*

primary care capitation (PCC) and total care capitation (TCC) options. It is also common for APM contracts to incorporate monthly, fixed PBPM payments to providers to enable technology upgrades and investment in care coordination.

Value-based care considerations by payer type

There are five main payer types involved in APMs in the US: traditional (FFS) Medicare, Medicare Advantage, Medicaid MCOs, commercial payers, and self-funded employers. When we say "commercial," we are referring to employer-sponsored commercial plans, employer self-funded plans administered via a TPA or an ASO, and individual plans sold via the Affordable Care Act (ACA) exchanges. Other payer types in the US healthcare system include workers' compensation and disability insurance, liability claims, and Tricare. These are relatively minor parts of overall healthcare spending and are not covered in this note.

Share of base and incentive payments to providers in APMs in 2021*



Source: Data reproduced with permission from HCPLAN • Geography: US
*Data collected summer 2022

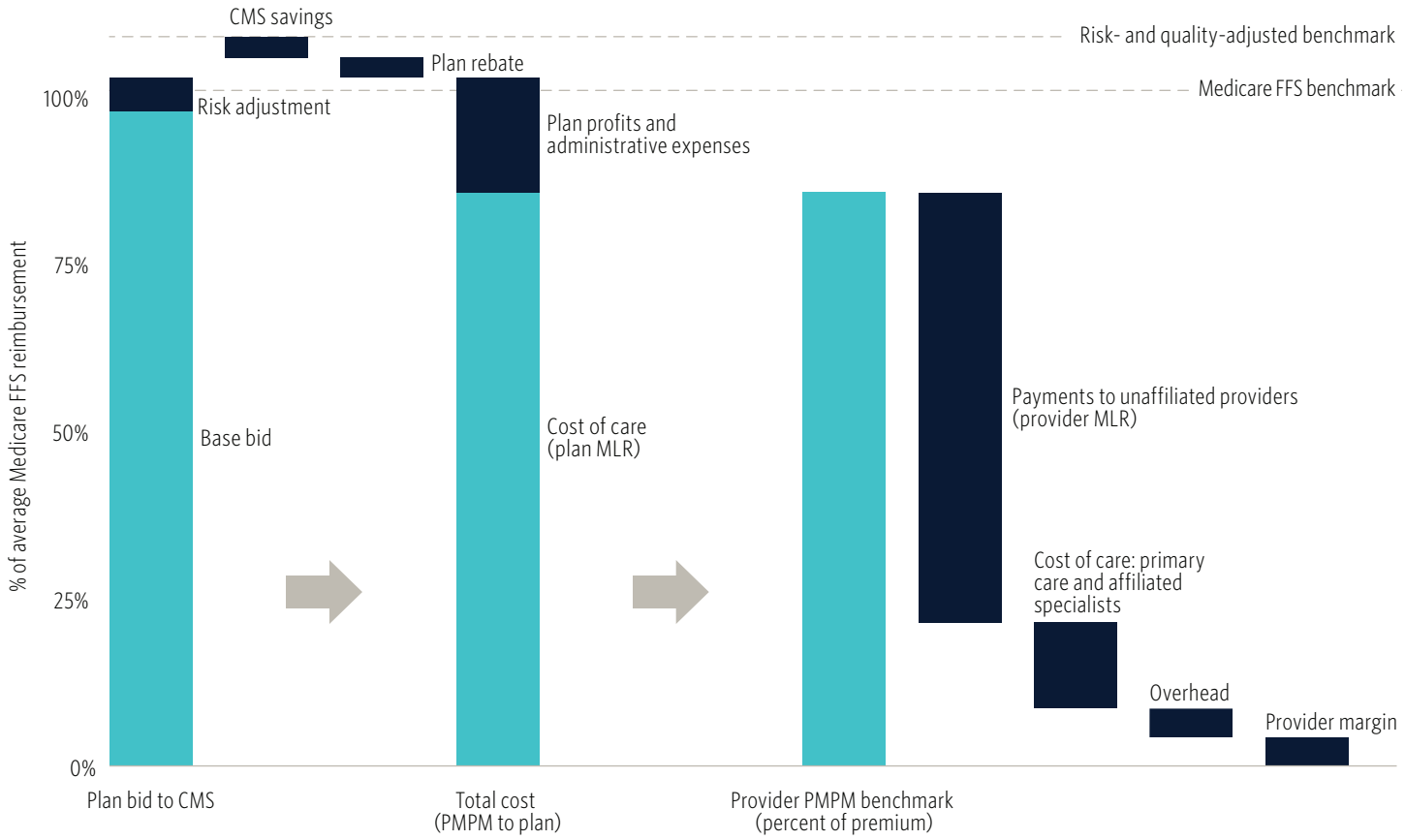
Medicare: Medicare (both MA and traditional) is the primary site of VBC innovation in the US. As the largest payer in the US healthcare system, CMS sets de facto industry standards and has considerable leverage to drive adoption of APMs. Additionally, people age 65+ have higher rates of illness and more comorbidities, on average. This, coupled with the fact that people typically remain insured by Medicare from age 65 until death, means that VBC interventions have the potential to significantly lower a patient's TCOC.

Within traditional Medicare, the MSSP program, which offers mild shared savings and shared-risk arrangements, has the broadest participation. The higher-risk ACO REACH program has fewer participants and tends to attract more sophisticated VBC providers that are also engaged in MA capitated contracts. CMMI also administers BPCI-A, a multispecialty procedural bundles program particularly relevant in orthopedics, and specialty-specific programs such as KCC and EOM.

Medicare Advantage is a private insurance program for Medicare. Each year, MA plans submit bids to CMS to provide care at a certain PMPM cost, which is then risk-adjusted and compared to a geography- and quality-adjusted benchmark.

PMPM bids above benchmark must make up the difference by charging premiums to their members, while bids below the benchmark are given a rebate by CMS, which they must re-invest in plan features and benefits. CMS generally considers the MA program successful at lowering costs and improving beneficiary satisfaction, and therefore has historically paid MA plans more per enrollee than it would have under FFS, with the goal of enabling plans to grow membership.[11] In recent years, most MA plans have offered members $0 premiums as well as free add-ons such as vision and dental insurance. This has helped to grow MA membership from 25% in 2010 to 48% in 2023.[12]

Medicare Advantage plan with full risk delegated to provider



Source: PitchBook Industry and Technology Research • *Note: For illustrative purposes*

The MA program transfers insurance risk from CMS to plans. In many cases, plans in turn pass that risk along to providers via capitated contracts, often set at 85% of premium, or other APMs. The significant margins that can be achieved by managing MA patients have attracted some VBC groups, including Oak Street and ChenMed, to focus exclusively on the MA market. However, taking on MA risk requires considerable savvy in negotiating separately with each MA payer, including understanding the payer's own bid process with CMS, and many providers fail to capture an adequate share of the plan's margin.

11: "Higher and Faster Growing Spending Per Medicare Advantage Enrollee Adds to Medicare's Solvency and Affordability Challenges," KFF, Jeannie Fuglesten Binlek, August 17, 2021.
12: "Medicare Advantage in 2022: Enrollment Update and Key Trends," Meredith Freed, et al., August 25, 2022.

Both traditional Medicare APMs and MA also come with considerable stroke-of-the-pen risk. CMMI APMs are experimental by definition and typically last for around five years before they are concluded and, if reasonably successful, redesigned as successor models. Additionally, CMS is subject to statutory budget rules and other federal legislation, which can result in modifications to payment calculations within a model year-to-year. On the MA side, although the program has traditionally enjoyed bipartisan support, it has recently come under scrutiny from both progressive Democrats (who disagree fundamentally with the privatization of Medicare) and budget hawks. Recent policy changes including revisions to the plan star ratings system, which made it more difficult for plans to earn upward benchmark adjustments, and modifications to the RAD-V audit are designed to clamp down on inflated risk coding practices by plans. Changes such as these have a knock-on effect on the premium margin available to providers.

Investors have traditionally shied away from providers with significant Medicaid revenue because Medicaid pays, on average, less than Medicare, which in turn pays less than commercial insurance. However, care coordination that addresses SDOH and health literacy barriers can go a long way in improving health outcomes for Medicaid-insured populations, and the more sophisticated MCOs are increasingly willing to pay for these services.

Medicaid: Medicaid is administered at the state level according to federal guidelines. Like Medicare, Medicaid has two payer categories, the government itself (state Medicaid agencies) and private insurers that contract with the government, or MCOs. State utilization of MCOs to insure their Medicaid populations has increased dramatically over the past decade, and MCOs manage care for 72% of Medicaid beneficiaries nationwide.[13] Like MA plans, many MCOs pass risk on to providers via APMs. State Medicaid agencies generally reimburse via FFS only.

It is difficult to make general statements about Medicaid because of how decentralized the program is, with reimbursement levels, coverage levels, and MCO approaches varying by state and even by county. Some MCOs remain focused solely on cost containment and utilization management, while others have embraced VBC to lower TCOC while achieving better health outcomes. State legislatures, which are subject to political volatility, also play a key role in setting the terms on which MCOs bid for state contracts ("procurement") every three to five years. However, in general, both red and blue states have moved toward more expansive and value-based Medicaid coverage since the passage of the ACA.

Investors have traditionally shied away from providers with significant Medicaid revenue because Medicaid pays, on average, less than Medicare, which in turn pays less than commercial insurance. However, care coordination that addresses SDOH and health literacy barriers can go a long way in improving health outcomes for Medicaid-insured populations, and the more sophisticated MCOs are increasingly willing to pay for these services. Engaging successfully in APMs can significantly increase Medicaid revenue and allow providers to expand into geographies that would have otherwise been financially untenable. But investors in Medicaid VBC models must ensure they, and the leaders they are partnered with, are ready to roll up their sleeves and study the nuances of each geographical market. Like Medicare, Medicaid is subject to stroke-of-the-pen risk—although on a local, rather than a federal, level, which results in more complexity but less risk concentration.

Finally, Medicaid sees a high degree of enrollee "churn" as beneficiaries move in and out of income, job seeking, and other eligibility requirements, especially in states with more restrictive rules. The COVID-19 public health emergency (PHE)

13: "10 Things to Know About Medicaid Managed Care," Elizabeth Hinton and Jada Raphael, March 1, 2023.

temporarily suspended Medicaid redeterminations, in which beneficiaries' eligibility is confirmed and ineligible beneficiaries are removed from the program. As of April 1, 2023, states resumed Medicaid redeterminations. Investors must bear in mind that Medicaid care management models that saw success during the PHE now face a much more difficult task of longitudinally supporting beneficiaries' health—even as they churn in and out of the program.

Commercial: The commercial market has seen the lowest penetration of APMs. There are several reasons for this. First, the commercially insured population is younger and of a higher socioeconomic status than the Medicare and Medicaid populations, respectively. This means that health risks are lower and that a dollar spent on primary care for a commercially insured person will return less in TCOC savings, and will return those savings more slowly, than a dollar spent on primary care for a Medicare- or Medicaid-insured person. Compounding this problem is the fact that commercially insured people change insurance plans almost every time they change jobs—making it difficult for a provider or payer to realize TCOC reductions because of VBC initiatives. According to Anthony Del Rio, Healthcare M&A Partner at Kirkland & Ellis, one of the more successful APM types in the commercial arena has been orthopedic bundles. Blue-collar employee populations often see a higher incidence of musculoskeletal (MSK) conditions, and spending can be managed and outcomes improved by using physical therapy (which can potentially help patients avoid surgery)and utilizing preferred (high-quality) surgery providers.[14]

Additionally, many providers find it difficult to negotiate shared savings via APMs with commercial payers. While MA plans are generally accustomed to sharing risk with providers, commercial plans have varying degrees of experience with and interest in APMs. According to Del Rio, negotiating a commercial VBC contract may involve securing alignment from one or more self-insured employers in addition to a TPA, adding an additional layer of complexity. Historically, another point of negotiation in commercial VBC contracts is what benchmark to use in measuring performance, with some commercial payers attempting to anchor benchmarks exclusively to prior-year performance rather than a broad industry average—so that providers must continually outperform their prior-year mark to succeed. This has become less common since the COVID-19 pandemic, in which the drop in utilization in 2020 created an unusually low benchmark in 2021 for providers in VBC contracts tied to prior-year performance.[15] More recently, providers and payers are actively exploring ways to create win-win risk contracts focused on improving health and reducing costs for specific high-cost/high-need populations (such as populations with heart failure, diabetes, and chronic kidney disease).

On the positive side, contracting with commercial payers avoids stroke-of-the-pen risk. Commercial payers are also nimbler than CMS and have entered partnerships to experiment with value-based contracting in behavioral health, for instance. Additionally, providers that have already taken on risk for their Medicare-eligible patients often find it advantageous to engage in value-based commercial contracts as well to maximize their ROI on clinical and operational improvements.

14: Anthony Del Rio, Healthcare M&A Partner, Kirkland & Ellis, phone interview with Rebecca Springer, October 3, 2022.
15: Ibid.

Moving toward risk

Understanding this scale is important because providers must move gradually along the scale to take on increasingly more risk. When a provider shifts to value, significant operational and clinical changes are involved. The following table briefly outlines some of the key action items for a primary care group (whether independent or part of a health system) transitioning from FFS to value. Note that this list is not exhaustive, and not all items will be applicable to every group, every population, or every stage on the VBC glide path.

Key action items for primary care group transitioning from FFS to value

Category	Action item
Data and analytics	Integrating siloed data sources (such as EHR and claims) to create a fuller view of the patient
	Collecting/normalizing SDOH and patient history data to inform clinical interventions and undergird risk adjustment in the contracting process
	Collecting/normalizing data on outcomes ranging from wellness visit completions to emergency department admissions to blood pressure readings to patient satisfaction surveys
	Setting up population-level analytics to prioritize interventions, prompt screening questions and suggest care pathways at the point of care, and support contracting
Patient engagement and access	Utilizing patient engagement (such as phone calls or text reminders linked to a scheduling app) to increase utilization of wellness visits, screening, lifestyle changes, and other preventative care
	Implementing telemedicine, virtual chronic care management, home testing, and other remote engagement strategies
	Implementing care coordination, remote patient monitoring, and home visits, among other things, for the highest-risk patients
	Offering a care navigation hotline, expanded hours, or an urgent care clinic to reduce unnecessary emergency department visits
Clinical	Reducing physicians' patient panels to allow for greater focus on overall wellness
	Creating care pathways to promote clinical best practices and achieving physician buy-in for necessary behavior changes
	Training physicians, nurses, and administrative staff to utilize new patient engagement, EHR-based systems, and coding methodologies
	Identifying and addressing unwarranted variation in patient outcomes among physicians
Network	Identifying high-performing specialists and post-acute facilities to form referral networks and setting up data exchange systems with referral partners to ensure longitudinal patient data collection
	Subcapitating to providers that specialize in managing complex patients (for example, patients with end-stage renal disease)
	Engaging with CBOs to support patients' SDOH needs and ensure closed-loop referrals
Contracting	Using patient histories, SDOH data, and historical claims to negotiate risk-adjusted quality/TCOC benchmarks with payers
	Compiling data to demonstrate improved health outcomes and risk-adjusted savings to payers
	Negotiating value-based contracts that include shared savings and risk levels appropriate to the provider's scale, value-add, and ability to reliably achieve target outcomes
	Actively tracking outcomes to predict contract performance and facilitate financial planning

Source: PitchBook Industry and Technology Research

VBC transitions must be realistically paced for two reasons. According to Michael Consuelos, Vice President in Optum Advisory Services' Strategy, Growth & Innovation Consulting group, inexperienced providers that take on too much risk too quickly can see significant financial losses as a result. Many organizations underestimate their capability and VBC maturity to shift from FFS to risk contracts. For example, leveraging data insights to understand impact on total cost of care is underutilized to transform clinical care. Activities that once improved margin are seen as a cost in VBC contracts. A typical path for a group transitioning to value-based care would be to spend a couple of years in a pay-for-performance or upside-only shared savings arrangement to prove outcomes before entering into downside risk with one payer. Pending success in a downside program, the provider may begin to gradually add additional risk contracts. A de novo clinic opened by an experienced VBC group may be able to take on risk more quickly and get closer to the premium dollar.[16]

The financial effect of pursuing APMs for providers varies significantly. Each payer contract must be negotiated separately. This means that a provider may work for years to transition just 10% of revenue to upside-downside contracts—although clinical and operational enhancements are usually made across the practice's entire patient population. Participation in an upside-only or low-risk upside-downside model can provide important learnings for a provider gradually transitioning toward greater risk, but the resulting revenue impact is often trivial. By contrast, 100% downside risk or full capitation contracts can generate multiples of Medicare FFS revenue for attributed patients in best-case scenarios.

In general, potential savings increase with the clinical complexity of the patient population because clinical interventions can eliminate or mitigate extremely high-cost events; slightly increased utilization of primary care leads to significantly diminished utilization of other services. Complexity increases, broadly speaking, with age and socioeconomic disadvantage. This is one reason why VBC involving commercial insurers has not progressed very far.

The Appendix illustrates this using two tracks in CMS' ACO REACH program: professional (PCC, 50% risk) and global (TCC, 100% risk). The six illustrated scenarios demonstrate how differences in risk model, PBPM benchmark level (average historical care cost, implying clinical complexity), and performance affect ACO shared savings/shared losses. Of these three inputs, benchmark level is the most important factor determining ACO revenue/liabilities. In addition, when a provider begins taking on risk for a high clinical complexity population, they may be able to generate additional revenue by documenting chronic conditions and other risk-scoring factors that were previously unknown to the payer due to low member engagement, thereby increasing the adjusted PBPM benchmark.

Value-based care outlook

For all the promise of value-based care, progress has been slow and hard-won. Technology is one piece of the puzzle: We have come a significant way in the last five years in our ability to integrate data silos and flag risks before they materialize, but there is far more to be done both technically and clinically. For instance, while a proven

16: Michael J. Consuelos, MD, Vice President, Strategy, Growth & Innovation Consulting, Optum Advisory Services, phone interview with Rebecca Springer, September 8, 2022.

playbook now exists for reducing emergency department (ED) utilization by Medicare beneficiaries, reliably predicting and influencing cancer outcomes remains elusive.

Incentives also remain problematic. For many providers—especially health systems—commercial, specialist FFS revenue effectively subsidizes lower reimbursement rates from other payer types. A health system that embarks on a population health initiative to proactively identify and manage chronic conditions shoots itself in the foot, financially speaking, if its volume in the highest-revenue service lines—cardiology, oncology, orthopedics—decreases as a result. Because providers must gradually take on risk by demonstrating to payers that they can improve outcomes, they must make considerable progress in reducing high-revenue procedures long before they can share in the resulting savings via APMs. Alternatively, the health system must simultaneously pull itself in two directions, with some leaders working to maximize FFS revenue and some forging ahead on population health.

This paradox is compounded by the immense financial strain health systems find themselves in in the aftermath of the worst of the COVID-19 pandemic. In an environment where many health system leaders are watching their operating cash reserves dwindle to near zero, it is unlikely that they will collectively make significant progress toward a goal that, at least for the short to medium term, may be a financial net negative. Kaiser Permanente's announced acquisition of Geisinger Health via a newly formed entity, Risant Health, signals a new era of health system-scale VBC enablement, a space OptumInsight has also explored. We are cautiously optimistic that this trend will expedite VBC adoption by leading health systems, but broad and deep industry change remains far off. Geisinger already offers its own MA plan and is well known for its population health programs—in short, it is an ideal candidate for an accelerated VBC transition. The prospect of an enabler helping to move a less sophisticated health system toward value would require long time horizons, considerable capital investment, and strong internal alignment.

Specialists

We believe that VBC progress will continue to be incremental and concentrated primarily in primary care and outpatient specialists. As technology improves, so will innovative ways of improving outcomes for the highest-cost chronic conditions, with specialist enablers and technology vendors helping to manage conditions such as diabetes, heart disease, and cancer in the same way that they have helped to manage chronic kidney disease and MSK conditions. Progress in drug-pricing VBAs, which this report has not covered, will be increasingly important in managing spending as the current pipeline of clinically promising yet expensive drugs and therapies comes to market.

VBC innovation in behavioral health is a promising opportunity, but we see more potential for payers and providers to innovate in using behavioral healthcare to unlock better outcomes in primary care and other specialties, rather than as a standalone bundled contract. Achieving this at scale will require significant growth of the behavioral health workforce, a systemic problem that has begun to attract policymakers' attention.

Primary care

Lying at the heart of the VBC agenda, primary care, particularly senior primary care and especially MA, has become a highly competitive market, with major

retailers joining payviders and enablers—including some well-capitalized new entrants—in an M&A arms race. This competition will not abate in the coming years, and we believe that the value-based care transformation of primary care will be accompanied by considerable consolidation. The major players, which include Optum, CVS, Humana, Walgreens, and Amazon (in that order), cannot capture market share rapidly enough via de novo expansion. What's more, PE firms have bought up most of the risk-bearing or risk-ready primary care groups in key markets, and the process of creating new ones by transitioning FFS revenue gradually along the risk spectrum is too slow to keep pace with demand. This makes the fast-growing enablers an interesting M&A target from the perspective of a strategic trying to build a national network of providers and attributed MA lives quickly.

The upshot for investors is that practically any risk-bearing primary care provider investment may be a contender for strategic M&A—a particularly attractive M&A route for as long as public markets remain volatile. But it also means there will soon be even more dominant players than Optum to compete with in local markets, both for patients and for provider targets. All this will happen against a backdrop of CMS gradually tightening MA margins, which will create additional consolidation as groups that have been weaker on execution bow out. The enabler space will become more competitive, too. As white space erodes, providers may begin to hop from one enabler to another, and larger providers may eventually drop their enabler relationships altogether as they become more confident in taking on risk and look to maximize their own shared savings. Investors on the technology side will need to be nimble in adapting to these changes but should generally benefit from the opportunity to help differentiate winners from losers through innovation.

It is interesting to wonder how much primary care consolidation policymakers will allow before stepping in. Value-based primary care functions as a gateway to the rest of a patient's medical experience, and the further VBC develops, the more this will involve centralizing holistic patient data. In a future state, this could include not only traditional clinical and claims data, but data from wearables and—if a major retailer or technology company is involved—all manner of consumer data as well. Conceptually, this is both very attractive in terms of maximizing a provider's ability to care for patients in a proactive and personalized way, and potentially alarming in terms of centralized control. Policymakers will end up balancing the US' urgent need to slow the growth of medical spending with complex antitrust and privacy concerns.

Medicaid

Finally, we would be remiss not to mention the immense opportunity in Medicaid. With lower margins, more complex populations, and a patchwork policy and payer landscape, the barriers to entry in Medicaid VBC are higher—but as a result, ample room exists for private capital to fuel growth and innovation. VC-backed companies such as Cityblock and Equality Health have demonstrated compelling early results, and PE investors have been growing more comfortable with navigating the Medicaid reimbursement landscape via their interest in behavioral healthcare. Broadly positive policy dynamics, economic countercyclicality, and the chance to effect significant social good round out our reasons for believing that Medicaid offers a compelling VBC investment theme.

Glossary of acronyms

ACO	Accountable care organization: a group of clinically integrated providers that organize in order to engage in value-based contracts
ACO REACH	ACO Realizing Equity, Access, and Community Health Model: a CMS upside/downside risk program; successor (from most to least recent) to the Global and Professional Direct Contracting, Next Generation ACO, and Pioneer ACO programs
APM	Alternative payment model: a healthcare insurance contract that differs from the traditional FFS model in an attempt to incentivize value-based care by the provider
ASO	Administrative services only: Similar to a TPA, but a subsidiary of a health insurance company
BPCI-A	Bundled Payments for Care Improvement Advanced: a CMS procedural bundled payment model; successor to the BPCI model
CMMI	Center for Medicare and Medicaid Innovation: a subsidiary organization of CMS tasked with developing APMs and other healthcare payment innovations
CMS	Center for Medicare and Medicaid Services
EHR	Electronic health record: a digital version of a patient's medical history and health information
EOM	Enhancing Oncology Model: a CMS shared-risk model for managed care of cancer patients, successor to the Oncology Care Model (OCM)
FFS	Fee-for-service: the traditional structure of healthcare insurance contract in which the provider is reimbursed an agreed amount per unit of service provided
HHVBP	Home Health Value-Based Purchasing: a CMS pay-for-performance program for home health agencies
HMO	Health maintenance organization: a health insurance plan that typically limits coverage to network providers and requires members to designate a primary care physician who coordinates the patient's care via specialist referrals
HVBP	Hospital Value-Based Purchasing: a CMS pay-for-performance program for hospitals
KCC	Kidney Care Choices: a CMS model for managed care of patients with chronic kidney disease with pay-for-performance and shared-risk tracks; successor to the Comprehensive End-Stage Renal Disease Care (CEC) model
MCO	Managed care organization: most commonly used to refer to a risk-based insurance plan that contracts with states to manage care for Medicaid beneficiaries
MLR	Medical loss ratio: for payers, medical expenditures as a percent of total premium. For risk-bearing providers, payments to unaffiliated providers as a percent of the total PMPM delegated by the plan (sometimes "medical expense ratio")
PBPM	Per beneficiary per month: used in the context of ACOs
PMPM	Per member per month: used in the context of insurance plans
PPM	Physician practice management: the organizational structure that physician groups take on when acquired by PE firms; used as shorthand for a single-specialty PE-backed consolidator in a category wherein a physician ownership model is commonplace
RPM	Remote patient monitoring: tracking of patient vital signs, symptoms, and other metrics outside the physician's office via wearable devices and telemedicine
SDOH	Social determinants of health: socioeconomic factors that affect health outcomes, including employment status, food security/insecurity, housing conditions, access to transportation, and race and ethnicity
SNF	Skilled nursing facility: a healthcare institution that provides 24-hour medical and rehabilitation services
SNFVBP	Skilled Nursing Facility Value-Based Purchasing: a CMS pay-for-performance program for SNFs
TCOC	Total cost of care: the total reimbursement for all of a patient's medical expenses by all providers, typically calculated on a per-year or per-month basis
TPA	Third-party administrator: an organization that helps self-insured employers administer healthcare benefits
VBA	Value-based agreement: a pharmaceutical purchasing agreement among providers, pharmaceutical companies, and pharmacy benefit managers that ties price or rebates to patient outcomes
VBC	Value-based care: healthcare that focuses on improving holistic patient outcomes across a population while controlling costs

Appendix

This illustration shows hypthetical TCOC and financial outcomes for an ACO with 5,000 beneficiaries under the ACO REACH Professional Model (primary care capitation, 50% risk) and ACO REACH Global Model (total cost capitation, 100% risk). This model is simplified and does not take into account stop-loss arrangements, retention withholds, health equity adjustments, and other factors.

Monthly capitated payment calculation for a single beneficiary

	ACO REACH professional model (50% risk)	ACO REACH global model (TCC, 100% risk)
Risk-adjusted PBPM benchmark	$1,000.00	$1,000.00
Montly TCC	N/A	$332.50
Monthly PCC	$70.00	N/A
ACO participating providers - primary care		
Claims	$55.00	$55.00
CMS reimbursement	$0.00	$0.00
ACO payment	$70.00	$44.33
Total ACO participating provider - primary care revenue	$70.00	$44.33
ACO participating providers - others		
Claims	$255.00	$255.00
CMS reimbursement	$255.00	$0.00
ACO payment	$0.00	$266.00
Total ACO participating provider - others revenue	$255.00	$266.00
ACO preferred providers - others		
Claims	$45.00	$45.00
CMS reimbursement	$45.00	$22.50
ACO payment	$0.00	$22.17
Total ACO preferred provider revenue	$45.00	$44.67
Non-ACO providers		
Claims	$570.00	$570.00
CMS reimbursement	$570.00	$570.00
Total expenditure	$940.00	$925.00
TCOC reduction %	6.4%	8.1%

Source: PitchBook Industry and Technology Research • *Note: For illustrative purposes*

Annual shared savings/losses calculation for ACO with 5,000 beneficiaries

	ACO REACH professional model (50% risk)	ACO REACH global model (TCC, 100% risk)
Risk-adjusted PBPM benchmark	$1,000	$1,000
x 60,000 aligned beneficiary months		
Annual benchmark	$60,000,000	$60,000,000
Discount (global only)	0.0%	-3.0%
Retention withhold	0.0%	0.0%
Net quality withhold	0.00%	0.00%
Health equity benchmark adjustment	0.00%	0.00%
Final benchmark	$60,000,000	$58,200,000
PBPM TCOC	$940	$925
x 60,000 aligned beneficiary months		
Annualized TCOC	$56,400,000	$55,500,000
Savings before corridor application	$3,600,000	$2,700,000
Savings % of adjusted benchmark	6.0%	4.6%
Savings retained by ACO	$1,710,000	$2,700,000

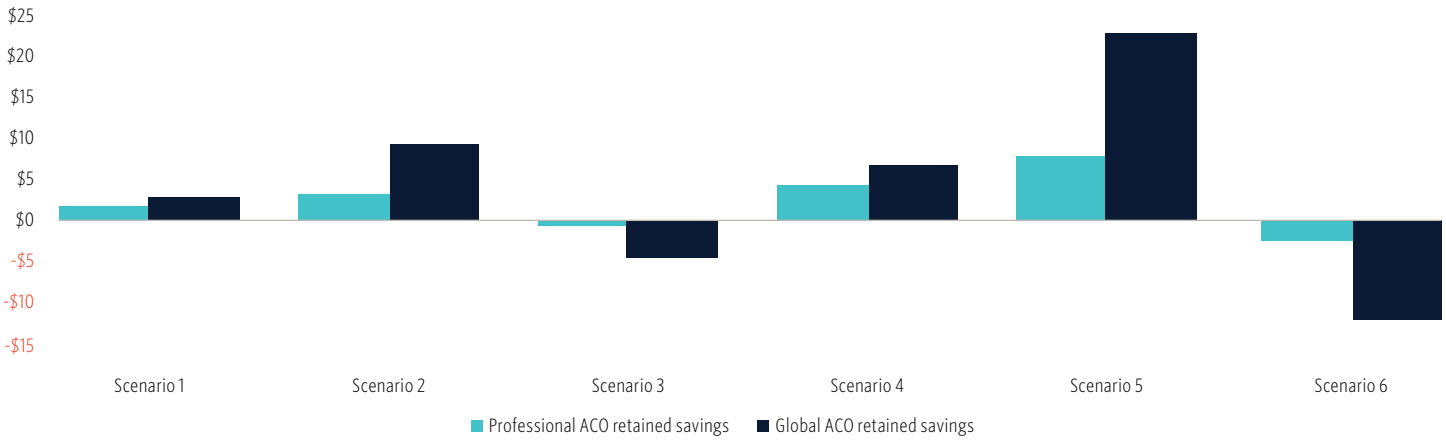
Source: PitchBook Industry and Technology Research • *Note: For illustrative purposes*

Corridor tables

Professional		Global	
Savings/losses	Shared rate	Savings/losses	Shared rate
0%-5%	50%	0%-25%	100%
5%-10%	35%	25%-35%	50%
10%-15%	15%	35%-50%	25%
15%-100%	5%	50%-100%	10%

Source: PitchBook Industry and Technology Research • *Note: For illustrative purposes*

ACO REACH savings ($M) retained by ACO



Source: PitchBook Industry and Technology Research • *Note: For illustrative purposes*

Scenario summary

Scenario	Benchmark	Net quality adjustment	Professional ACO TCOC reduction	Global ACO TCOC reduction	Professional ACO retained savings	Global ACO retained savings
Mid-benchmark/ mid-performance (shown in model)	$1,000	0%	6.4%	8.1%	$1,710,000	$2,700,000
Mid-benchmark/ high performance	$1,000	1%	18.3%	20.5%	$3,070,500	$8,982,000
Mid-benchmark/ low performance	$1,000	-1%	-5.5%	-3.9%	-$993,000	-$4,842,000
High benchmark/ mid-performance	$2,500	0%	6.4%	8.1%	$4,275,000	$6,750,000
High benchmark/ high performance	$2,500	1%	18.3%	20.5%	$7,676,250	$22,455,000
High benchmark/ low performance	$2,500	-1%	-5.5%	-3.9%	-$2,482,500	-$12,105,000

Source: PitchBook Industry and Technology Research • *Note: For illustrative purposes*