Advancing Value-Based Care in the U.S. Health Care System

Foreword

The U.S. health care system is the most expensive in the world, yet it delivers inconsistent quality, uneven outcomes, and significant waste. A major contributor to high costs and low-value care is the system's reliance on fee-for-service (FFS) payment models, which reward providers for the volume of products and services rather than the effectiveness of care delivered.

Value-based care shifts the focus from treating individual health issues as they arise to actively supporting people in staying healthy and achieving better long-term outcomes.

Value-based care promotes a more efficient, high-performing health care system by emphasizing:

- Preventive services and primary care
- Coordination among providers and payers
- Better outcomes at a lower cost

Unlike FFS, which incentivizes additional procedures and uncontrolled spending, value-based care aligns payments with patient outcomes. Providers are rewarded for keeping people healthy and delivering the right care, at the right time, in the right setting.

UnitedHealth Group (UHG) is at the forefront of the transformation of the U.S. health system. UHG is helping to build a simpler, more connected system that delivers higher-quality care at a lower cost through its different lines of business, including UnitedHealthcare Medicare Advantage plans and Optum Health physician practices.

Moving from Fee for Service to Value-Based Care

Fee for Service	Value-Based Care
Fragmentation within the health care system; providers operate independently.	Encourages collaboration among providers and payers for patient-centered, integrated care.
Payments made for each individual service, regardless of outcome.	Payments tied to quality and effectiveness of care for the patient.
Incentivizes a high volume of costly services.	Prioritizes primary care and prevention to improve health and reduce costs.
Results in inconsistent quality and outcomes with no cost controls.	Delivers higher quality and better outcomes by linking payment to performance.
Leads to substantial overuse and waste.	Focuses on effective care to lower total costs.

Decades of bipartisan efforts have laid the groundwork for value-based care. Today, there is both an urgent need and a strategic opportunity for policymakers and private-sector leaders to accelerate the adoption of value-based care models.

This report explores:

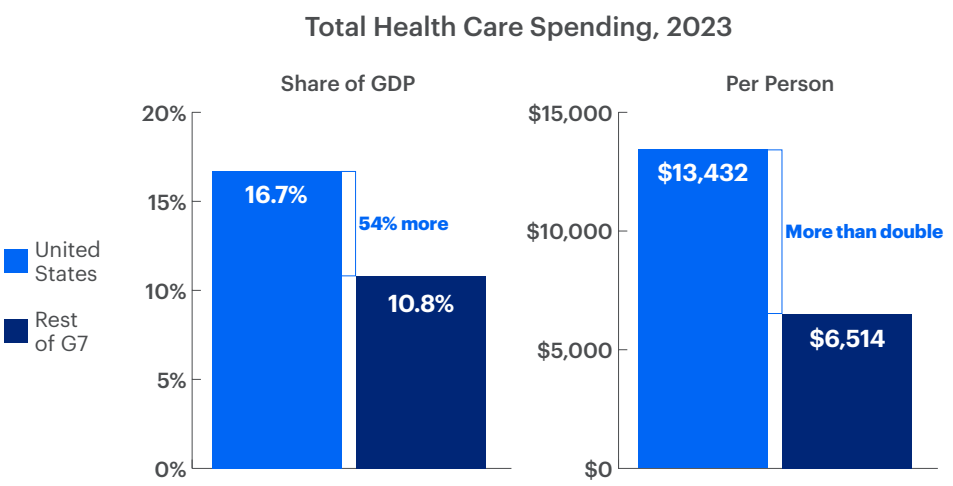
- **Performance of the U.S. Health Care System**
- **Value-Based Care Evolution and Key Concepts**
- **Adoption of Value-Based Payments and Accountable Care Arrangements**
- **Lessons from Government-Funded Value-Based Care Models**
- **Key Drivers of Successful Value-Based Care Program Performance**

Executive Summary

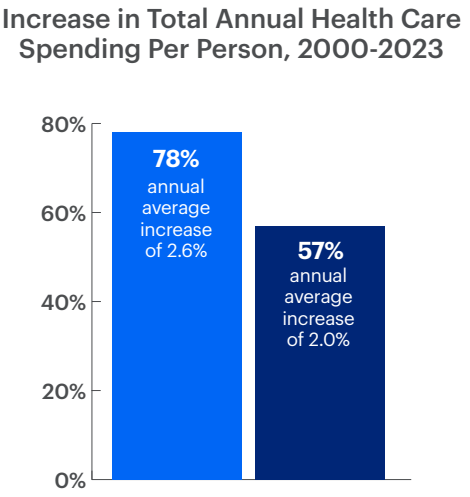
I. Performance of the U.S. Health Care System

Substantial U.S. health care spending continues to yield mixed results on system performance and health outcomes.

The U.S. spends more on health care than the other G7 countries (Canada, France, Germany, Italy, Japan, and the United Kingdom)[1]

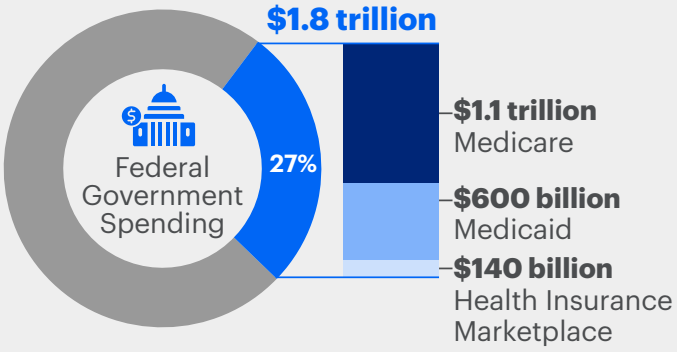


U.S. health care spending has grown faster[2]

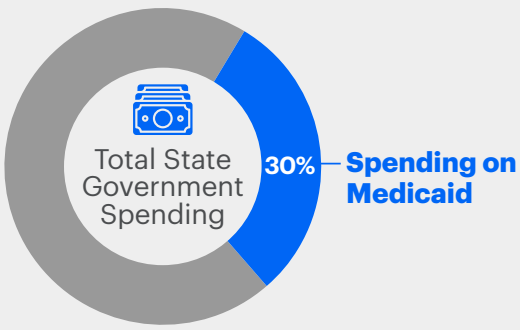


Health care is expected to account for an increasing share of U.S. GDP. Between 2023 and 2032, U.S. health care spending growth (5.6%) is projected to outpace annual average GDP growth (4.3%) by 1.3 percentage points.[3]

Health care will account for 27% of federal government spending in 2025[4,5,6,7]



In 2024, states spent $300 billion on Medicaid[8]



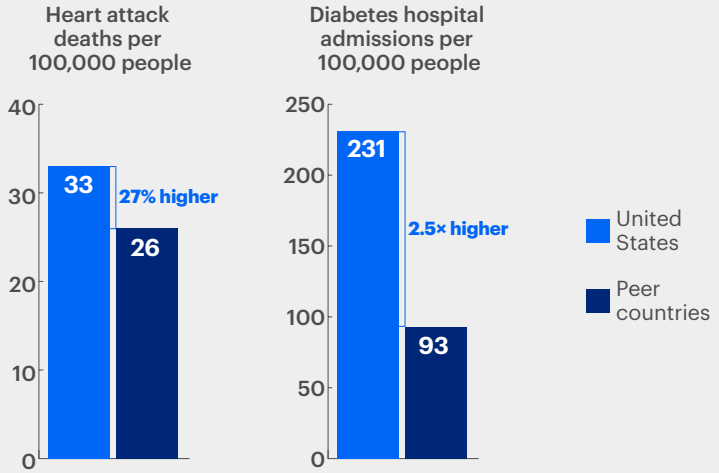
Overall, research indicates that an estimated 25% of total U.S. health care spending[9] – representing about $1.4 trillion out of $5.6 trillion in 2025[10] – is waste, including: failure of care delivery, failure of care coordination, overtreatment or low-value care, pricing failure, fraud and abuse, and administrative complexity.[11]

Significant investment in health care has enabled the U.S. to remain a global leader in medical science, technology, and education.[12,13,14] The U.S. leads in:

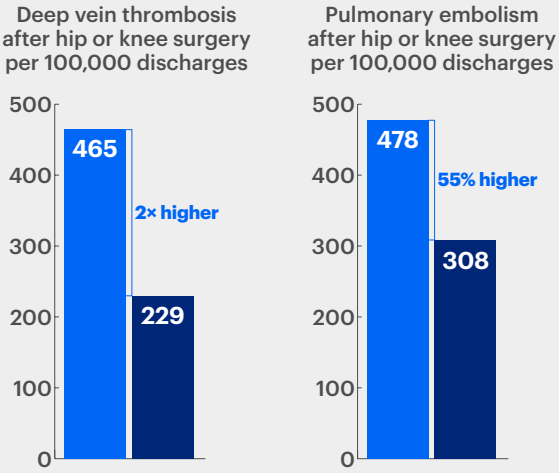
- Medical device and pharmaceutical innovations, including breakthrough technologies and new drug approvals.[15]
- Digital health advancements, such as behavioral health virtual care, on-demand telehealth, and the integration of digital and in-person care models.[16,17]
- Academic research excellence, demonstrated by the global impact of U.S. scientific research and publications and receiving the highest number of Nobel Prizes in chemistry or medicine per capita.[18,19]
- Universities that consistently rank among the world's best for clinical medicine, driven by their emphasis on medical research and specialization.[20,21]

Despite spending more on health care and leading in medical innovations, health outcomes in the U.S. are mixed relative to peer countries.

The U.S. underperforms compared to peer countries in managing chronic conditions[22,23]



Post-operative complications, which are important measures of hospital safety, are more common in the U.S. than in peer countries[24]



Medication and medical errors are slightly more common in the U.S. than in peer countries.[25] Between 2018 and 2020, the frequency of errors reported during care was 13%, compared to 11%.[26]

The widespread use of fee-for-service (FFS) payments is a longstanding cause of the U.S. health care system's fragmentation, inconsistent quality, and high and growing costs.[27]

FFS payments compensate providers for each service they deliver to patients, incentivizing a higher volume of care regardless of clinical value or patient outcomes.[28,29,30] As a result, FFS payments:[31,32]

- Promote the delivery of costly services that may be unnecessary.
- Do not incentivize the delivery of high-quality, individualized, efficient care.
- Do not encourage care coordination and management of patients across providers and settings.

System-wide transitions away from FFS can reduce cost growth by encouraging high-quality, cost-efficient care delivery patterns.[33]

II. Value-Based Care Evolution and Key Concepts

Value-based care is the primary solution to address the legacy and misaligned incentives of the FFS health care payment system. The term "value-based care" advances a framework and metrics to better understand the U.S. health care system's high costs and poor health outcomes,[34] and to chart a course towards progress. The common theme across definitions of value-based care is the shared goal of achieving the best possible health outcomes for patients at the lowest cost,[35] and recognition of the need to shift away from volume-based FFS payments.

The concept of value-based care has roots in the managed care era of the 1970s and 1980s and further evolved during the pay-for-performance era of the 1990s and 2000s, before becoming an explicit cornerstone of policy efforts in the 2010s and 2020s.

In contrast to FFS, value-based care models align providers' incentives with patient outcomes, rewarding providers for keeping their patients healthy and using cost-effective, evidence-based care to treat chronic conditions and acute illness.[36]

Value-based care redefines the physician's role away from providing episodic, condition-specific interventions and toward proactively stewarding patients' health by maintaining wellness and optimizing long-term outcomes.[37] Medical schools and their curricula can help drive the adoption of value-based care by helping physicians reframe their roles in care delivery, redefining effective care, and prioritizing the measurement of outcomes that matter most to patients.[38]

Efforts to spread the adoption of value-based care as an alternative to FFS have been longstanding and bipartisan.

> ***"...We've been moving Medicare toward a payment model that rewards quality of care over quantity of care. And that means we want doctors and hospitals to focus on giving folks the right tests and the right treatment, not just trying to sell more tests and sell more treatments. And that delivers better outcomes."***[39]
>
> —President Barack Obama, 2016

> ***"It is the policy of the United States to protect and improve the Medicare program by enhancing its fiscal sustainability through alternative payment methodologies that link payment to value, increase choice, and lower regulatory burdens imposed upon providers."***[40]
>
> —President Donald Trump, 2019

CMS aims to use value-based care to achieve better care for individuals, better health for populations, and lower costs.[41] These goals were derived from the original "Triple Aim" approach developed by the Institute for Healthcare Improvement (IHI) to improve and optimize the performance of the U.S. health system.[42] Value-based care rewards providers based on patient outcomes.

The payment method for health care significantly impacts the delivery of services. The implementation and testing of alternative payment models (APMs), which use financial incentives to encourage providers to deliver high-quality, coordinated, and cost-effective care, have driven the evolution and refinement of value-based care efforts nationally. By aligning provider payment incentives with patient outcomes, the more advanced APMs can facilitate improvements in care coordination and reductions in unnecessary services.[43]

III. Adoption of Value-Based Payments and Accountable Care Arrangements

National payment reform efforts aimed at reducing health care costs, increasing clinical efficiency, and encouraging care coordination have focused on value-based models of care delivery that incentivize providers to keep patients healthy, and to treat those with acute or chronic conditions with cost-effective, evidence-based treatments.[44] In an accountable care arrangement, health care providers work with each other to manage their patients' overall health. These arrangements can include accountable care organizations (ACOs), bundled payment arrangements, and managed care arrangements.[45] ACOs are among the most widespread APMs, are provider organizations designed to take accountability for a patient population, invest in infrastructure and redesigned care processes, and enable and incentivize high-quality, coordinated, and efficient care.[46]

Medicare Shared Savings Program (MSSP)[47]

In 2023, ACOs in the MSSP, the largest ACO program in the country with 10.9 million enrollees:

Earned shared savings payments to providers totaling **$3.1 billion**

While also yielding **$2.1 billion** in net savings to Medicare

Recent Growth in Accountable Care Organization Enrollment Across All Payers[48]

81.2 million in 2022

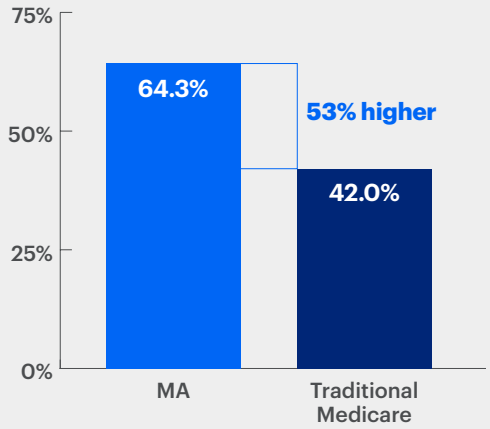
9% increase in one year

88.5 million in 2023

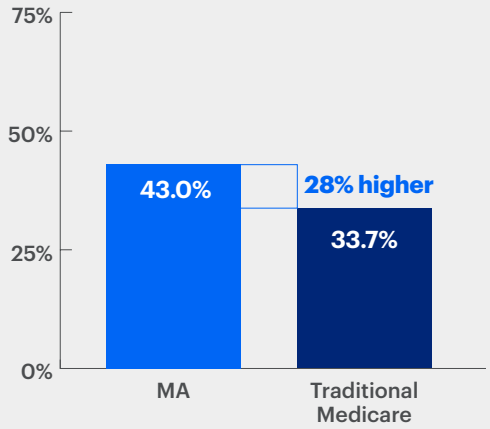
In recent years, there has been systemwide progress shifting payments from FFS to value-based models, including those with two-sided risk where providers can increase their revenue, but also can decrease their revenue, depending on the quality and cost-effectiveness of the care they provide. Between 2019 and 2023, the share of payments to providers flowing through APMs across all payers increased from 38.2% to 45.2%.[49,50]

Medicare Advantage (MA) plans, private managed care plans that administer Medicare benefits, are leading the adoption of value-based payments, with a larger share of payments to providers flowing through APMs and greater use of APMs with two-sided risk than Traditional Medicare and other payers in 2023.[51]

Payments Flowing Through APMs[52]



Payments Flowing Through APMs with Downside Risk[53]



MA plans offer extra benefits – which are not covered by Medicare FFS – at no additional cost to the federal government and with out-of-pocket (OOP) savings to the beneficiary by leveraging care and cost management strategies, including care coordination programs, utilization management programs, negotiated provider networks, and risk sharing arrangements with providers.[54]

IV. Lessons from Government-Funded Value-Based Care Models

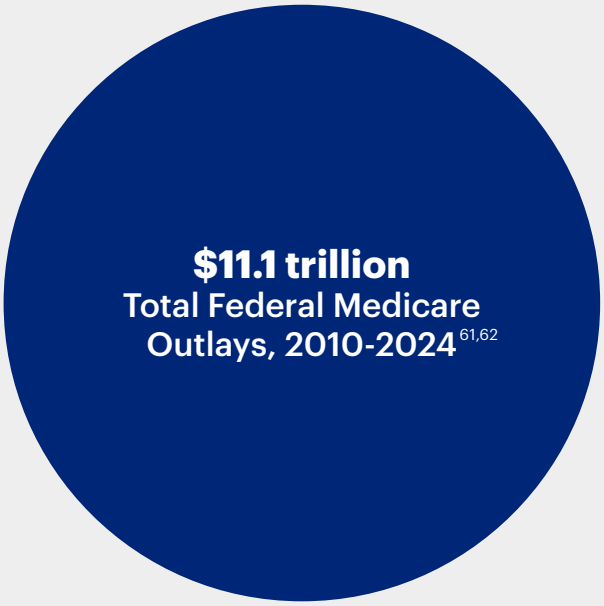
Since its establishment in 2010 within CMS, the Center for Medicare and Medicaid Innovation (CMMI) has developed and implemented over 50 novel payment and care delivery models aimed at improving patient care, lowering costs, and better aligning payment systems to promote patient-centered practices.[55] CMMI uses evaluations of prior models to inform the creation and implementation of new models with the aim of identifying and scaling sustainable and impactful value-based programs nationally. By analyzing the outcomes and lessons learned from previous models, the Center can identify best practices and areas for improvement.

In recent years, CMMI has shifted its broader strategy after most of its models did not yield meaningful cost savings and qualify for national expansion.[56] In 2025, CMMI shifted its focus to emphasize evidence-based prevention, patient empowerment, and greater choice and competition.

Key components of CMMI's current strategy include:[57]

- Requiring models to have downside financial risk and requiring individual providers to assume some of that downside risk
- Reducing the role of state governments in setting provider payment rates
- Refining and simplifying the methodology for model benchmarking – the process of evaluating and comparing model performance using standardized metrics and datasets

To date, twelve of CMMI's over 50 models have produced cost savings to the federal government and taxpayers, of which four have been expanded by CMS and HHS.[58,59,60]



$2.7 billion, 0.02%
Net Medicare Savings From Four CMMI Models Certified for National Expansion[63]

Overall, CMMI's activities increased net federal Medicare spending by an estimated **$5.4 billion** between 2011 and 2020,[64] as the savings generated by some CMMI models were more than offset by the net cost of other CMMI models and the Center's operating costs.

V. Key Drivers of Successful Value-Based Care Program Performance

Despite the challenges related to precisely evaluating the performance of each complex and varied CMMI model, past evaluations have produced useful policy and operational insights into the critical elements, approaches, and strategies that facilitated or inhibited the achievement of quality improvements and cost savings. Findings from academic scholarship, independent evaluation reports, and government analyses indicate that drivers of program success relate to:[65,66]

1. **Downside financial risk.** Two-sided risk agreements provide downside financial risk, along with upside incentives for providers to meet quality targets and reduce unnecessary spending and care for specific patient populations or care episodes.[67] Of the twelve CMMI models that have produced net savings to Medicare, ten included providers accepting two-sided risk arrangements.[68]
2. **Upside incentives.** Financial incentives are critical levers to influence provider behaviors and promote the delivery of high quality and cost-effective care.[69] The effectiveness of incentives is determined in large part by their size, as well as their clarity, and alignment among different models.[70,71,72]
3. **Alignment of models.** The establishment of CMMI accelerated the proliferation of value-based care programs with varying approaches and designs for cost and quality interventions. Increasing alignment across models' design and implementation processes to the extent possible facilitates broader provider participation and scalable and sustained care delivery transformation.[73]
4. **Provider and patient engagement.** Providers and patients are key drivers of the successful adoption of value-based care programs at the practice level.
5. **Performance targets.** Performance benchmarks, cost and quality targets against which providers are measured, serve as the basis for assessing progress toward the goals of value-based care and creating accountability for provider's performance.[74]
6. **Data and other quality improvement support.** Significant investments in infrastructure, including electronic health record enhancements, staffing, and data analytic support, are often required to participate in models.[75] As a result, providers serving vulnerable populations, including rural and low-income patients, face barriers to participation in value-based care models, thereby excluding many underserved populations from assignment into these models.

Evaluation of the history and successes of CMMI's past pilots suggests that well-designed value-based care models have the potential to yield meaningful improvements in cost and quality. While the health care system has reached a series of important milestones in its shift to value-based care, past initiatives have yet to achieve large-scale, systemic change.

Advancing Value-Based Care in the U.S. Health Care System

I. Performance of the U.S. Health Care System

Significant health care spending in the U.S. has failed to produce improvements in the overall performance of the health care system and population health outcomes.

- The U.S. spends more on health care than the other G7 countries (Canada, France, Germany, Italy, Japan, and the United Kingdom). In 2023:
  - Total U.S. health care spending represented 16.7% of GDP, 54% more than the 10.8% average in the rest of the G7.[76]
  - U.S. spending per person was $13,432, more than double the $6,514 average in the rest of the G7.[77]
- U.S. health care spending has been growing faster. Between 2000 and 2023:
  - Spending per person increased by an annual average of 2.6% annually compared to 2.0% in the rest of the G7,[78] resulting in a total increase of 78% compared to 57%.
- Health care is expected to account for an increasing share of U.S. GDP. Between 2023 and 2032:
  - U.S. health care spending growth (5.6%) is projected to outpace annual average GDP growth (4.3%) by 1.3 percentage points.[79]
- Health care will account for 27% of federal government spending and total $1.8 trillion in 2025, including:[80]
  - $1.1 trillion in Medicare spending,[81]
  - $600 billion in Medicaid spending,[82] and
  - $140 billion in Health Insurance Marketplace spending.[83]
- Health care currently represents 30% of total state government spending.[84] In 2024, states spent $300 billion on Medicaid.[85]
- Overall, research indicates that an estimated 25% of total U.S. health care spending[86] – representing about $1.4 trillion out of $5.6 trillion in 2025[87] – is waste, including: failure of care delivery, failure of care coordination, overtreatment or low-value care, pricing failure, fraud and abuse, and administrative complexity.[88]

Significant investment in health care has enabled the U.S. to remain a global leader in medical science, technology, and education.[89,90,91] The U.S. leads in:

- Medical device and pharmaceutical innovations, including breakthrough technologies and new drug approvals.[92]
- Digital health advancements, such as behavioral health virtual care, on-demand telehealth, and the integration of digital and in-person care models.[93,94]
- Academic research excellence, demonstrated by the global impact of U.S. scientific research and publications and receiving the highest number of Nobel Prizes in chemistry or medicine per capita.[95,96]
- Universities that consistently rank among the world's best for clinical medicine, driven by their emphasis on medical research and specialization.[97,98]

Despite spending more on health care and leading in medical innovations, health outcomes in the U.S. are mixed relative to peer countries.

- The U.S. underperforms compared to peer countries in managing chronic conditions such as coronary artery disease, diabetes, and asthma. In 2022:[99]
  - Heart attack mortality in the U.S. was 27% higher, with 33 deaths per 100,000 people, compared to 26.
  - Hospital admissions for diabetes in the U.S. were 2.5 times higher, with 231 admissions per 100,000 people, compared to 93.
- Medication and medical errors are slightly more common in the U.S. than in peer countries.[100] Between 2018 and 2020:
  - The frequency of errors reported during care was 13%, compared to 11%.
- Post-operative complications, which are important measures of hospital safety, are more common in the U.S. than in peer countries. For example, in 2018:[101]
  - The rate of deep vein thrombosis after hip or knee surgery in the U.S. was 2 times higher, at 465 clots per 100,000 discharges, compared to 229.
  - The rate of pulmonary embolism after hip or knee surgery in the U.S. was 55% higher, at 478 clots per 100,000 hospital discharges, compared to 308.

The widespread use of fee-for-service (FFS) payments is a longstanding cause of the U.S. health care system's fragmentation, inconsistent quality, and high and growing costs.[102]

- FFS payments compensate providers for each service they deliver to patients, incentivizing a higher volume of care regardless of clinical value or patient outcomes.[103,104,105] As a result, FFS payments:[106,107]
  - Promote the delivery of costly services that may be unnecessary.
  - Do not incentivize the delivery of high-quality, individualized, efficient care.
  - Do not encourage care coordination and management of patients across providers and settings.
- System-wide transitions away from FFS can reduce cost growth by encouraging high-quality, cost-efficient care delivery patterns.[108]

II. Value-Based Care Evolution and Key Concepts

Defining Value-Based Care

The concept of value-based care, which predates the term, has roots in the managed care era of the 1970s and 1980s, and further evolved during the pay-for-performance era of the 1990s and 2000s, before becoming an explicit cornerstone of policy efforts in the 2010s and 2020s. (See Appendix A for more detailed information on the history and evolution of value-based care, including salient legislation and landmark initiatives.) Refining and scaling value-based care initiatives are urgent priorities as the nation faces increasing health spending and federal budget deficits.

The term "value-based care" – coined by Dr. Michael Porter and Dr. Elizabeth Olmsted Teisberg in their 2006 book, *Redefining Health Care*[109] – advances a framework and metrics to better understand the U.S. health care system's combination of high costs and poor health outcomes,[110] and to chart a course towards progress. The term prioritizes measurable value. At a systemwide level, it speaks to the aggregate quality of care and the population health outcomes measured against systemwide health care spending.[111] At an individual level, it speaks to whether a patient is getting effective care at a reasonable cost.

Since its introduction, the term value-based care has varied. Leading definitions of value and value-based care include the following (verbatim):

1. **Centers for Medicare and Medicaid Services (CMS)** definition (2023):[112] Value-based care describes health care that is designed to focus on quality of care, provider performance and the patient experience. The "value" in value-based care refers to what an individual values most.

2. **National Conference of State Legislatures** definition (2023):[113] A spectrum of health care delivery models designed to realign financial incentives and other aspects of the health care system to hold providers accountable for improving patient outcomes while giving them greater flexibility to deliver the right care at the right time.
3. **American Medical Association** definition (2024):[114] Value-based care arrangements tie payment amounts for services provided to patients to the results that are delivered, such as the quality, equity and cost of care.
4. **New England Journal of Medicine** definition (2017):[115] Value-based health care is a health care delivery model in which providers, including hospitals and physicians, are paid based on patient health outcomes. Under value-based care agreements, providers are rewarded for helping patients improve their health, reduce the effects and incidence of chronic disease, and live healthier lives in an evidence-based way. The "value" in value-based health care is derived from measuring health outcomes against the cost of delivering the outcomes.

The common theme across definitions of value-based care is the shared goal of achieving the best possible health outcomes for patients at the lowest cost,[116] and recognition of the need to shift away from volume-based FFS payments. Value-based care redefines the physician's role away from providing episodic, condition-specific interventions and toward proactively stewarding patients' health by maintaining wellness and optimizing long-term outcomes.[117] Medical schools and their curricula can help drive the adoption of value-based care by helping physicians reframe their roles in care delivery, redefining effective care, and prioritizing the measurement of outcomes that matter most to patients.[118]

The essential element of value-based care is that it ties providers' payment to the quality and/or cost of the care delivered, often using specific performance metrics. In contrast to FFS, value-based care models align providers' incentives with patient outcomes, rewarding providers for keeping their patients healthy and using cost-effective, evidence-based care to treat chronic conditions and acute illness.[119] Efforts to spread the adoption of value-based care as an alternative to FFS have been longstanding and bipartisan, as evidenced by support from prominent policy and political leaders over the last two decades.

The Importance of Value-Based Care as Described by Prominent Policy and Political Leaders

2006 — Representative Newt Gingrich, Former Speaker of the House of Representatives: "If we truly want an intelligent, modernized health system that delivers more choices of greater quality at lower cost, then we must enact real change—starting with the reimbursement structure. Our current payment system is not based on the quality of care that is delivered. Instead, it pays providers for simply delivering care, regardless of outcome."[120]

2010 — Dr. Mark McClellan, Former CMS Administrator: "The cost of healthcare continues to rise at rates that make it difficult for many people to afford healthcare or health insurance. At the same time, we still have really big gaps between the kind of care that we ought to be providing to all Americans and what we are actually doing... The idea of accountable care... is to pay more when we get what we really want better health for patients at a lower cost, not just more services and more intensive procedures, and more preventable complications."[121]

2016 — Former President Barack Obama: "...We've been moving Medicare toward a payment model that rewards quality of care over quantity of care. And that means we want doctors and hospitals to focus on giving folks the right tests and the right treatment, not just trying to sell more tests and sell more treatments. And that delivers better outcomes."[122]

2018 — Dr. Donald Berwick, Former CMS Administrator: "I would move us as fast as I possibly could to global budgeting, budgeting for the care of populations... We need to get out of volume-based payment, fee-for-service."[123]

2019 — President Donald Trump: "It is the policy of the United States to protect and improve the Medicare program by enhancing its fiscal sustainability through alternative payment methodologies that link payment to value, increase choice, and lower regulatory burdens imposed upon providers."[124]

2024 — Representative Vern Buchanan, Chairman of the Health Subcommittee: "Value-based care emphasizes providing actual quality care to the patient while improving their health outcomes... and generating savings instead of incentivizing and paying providers based on how many patients they see through a given day."[125]

Value-based care programs can leverage interventions across the care continuum and include a diverse set of stakeholders including federal and state governments, health plans, health systems, hospitals, and clinicians. Medicare-focused value-based care initiatives at the provider and practice levels are the predominant focus of this brief. Rigorous evaluation of the design, implementation, and the cost and quality outcomes associated with these programs are made publicly available by CMS and rely on federal Medicare data. These evaluations of Medicare's value-based care programs have produced useful policy and operational insights into the critical elements, approaches, and strategies that facilitated or inhibited value-based care programs' achievement of quality improvements and cost savings more broadly. For these reasons, most available evidence on value-based care programs in the U.S. relates to Medicare.

Defining Specific Goals

According to CMS, value-based care aims to achieve:[126]

- Better care for individuals,
- Better health for populations, and
- Lower costs.

These goals were derived from and informed by the "Triple Aim" approach, developed by the Institute for Healthcare Improvement (IHI), to improve and optimize the performance of the U.S. health system.[127] The Triple Aim, which was subsequently expanded to the Quadruple Aim and then the Quintuple Aim to include improving provider experience and advancing health equity.[128] The Quintuple Aim relies on conceptual frameworks such as the Institute of Medicine's STEEEP framework to define and measure care quality. The National Academy of Medicine defines quality as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."[129] In the STEEEP framework, there are six domains of high-quality care: safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity (STEEEP).[130]

AHRQ reported the STEEEP framework with the following definitions (verbatim):[131]

Safe: Avoiding harm to patients from the care that is intended to help them.

Timely: Reducing waits and sometimes harmful delays for both those who receive and those who give care.

Effective: Providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and misuse, respectively).

Efficient: Avoiding waste, including waste of equipment, supplies, ideas, and energy.

Equitable: Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

Patient-centered: Providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.

Both public and private-sector value-based care initiatives have used this and other frameworks to define and measure care quality through the establishment of specific performance measures.[132] Performance measures are used to quantify health care processes, outcomes, patient (or other stakeholder) perceptions, and organizational structure and/or systems that are associated with the provision of high-quality care.[133] There are four main categories of performance measures: quality, cost and resource use, efficiency, and access measures.[134] Quality measures are tools used to consistently and reliably evaluate and quantify distinct aspects of health care delivery that are integral to the provision of care that is safe, timely, effective, efficient, equitable, and patient-centered.[135,136] Measures can relate to processes, patient outcomes, and organizational structures and/or systems.[137]

These measures are associated with the provision of high-quality health care and/or relate to one or more of the STEEEP domains, as they act as critical benchmarks to assess provider performance for improvement initiatives

and value-based payments.[138] For providers, quality measures and benchmarking enable self-assessment and the identification of best practices in care, while patients and families can leverage quality information to select high-performing clinicians.[139] Clinical decisions by providers and patients based on sound quality measures increase the likelihood of desired health outcomes.[140] The longstanding quality improvement and value-based care efforts have taken diverse approaches to quality measurement and improvement. Additionally, efforts to reform payment systems to center on value have used diverse quality measures to incentivize performance improvement.

Role of Payment Reform and Alternate Payment Models

The goal of value-based payment reform is to shift provider payments and incentives from volume to value to promote the best care at the lowest cost.[141] The implementation and testing of alternative payment models (APMs), which use financial incentives to encourage providers to deliver high-quality, coordinated, and cost-effective care, have driven the evolution and refinement of value-based care efforts nationally. By aligning provider payment incentives with patient outcomes, the more advanced APMs can facilitate improvements in care coordination and reductions in unnecessary services.[142] APMs vary in their design and approach and can relate to a clinical condition, care episode, or specific patient population.[143] Models can include varying degrees of upside and downside risk for providers, whose participation may or may not be mandatory.[144] The Health Care Payment Learning and Action Network – a group of public- and private-sector health care leaders dedicated to supporting and accelerating the adoption of APMs and accountable care – developed a widely used categorical framework to classify and measure existing payment models.[145] (See Appendix B for more detailed information and examples for each category.)

- **Category 1: FFS – Not Linked to Quality and Value (No APM)**
  Medicare's traditional payment model in which payments are volume-based. Includes the Medicare Physician Fee Schedule.
- **Category 2: FFS – Linked to Quality and Value (No APM)**
  Payment models that use FFS, while also tying some payments to quality and, in some instances, cost. Includes Pay-for-Performance and Pay for Reporting models.
- **Category 3: APMs Built on FFS Architecture**
  APMs that utilize a base FFS infrastructure, while providing performance-based payments based on quality, utilization, and/or cost to incentivize the effective management of a set of procedures, an episode of care, or a patient population. Includes APMs with Shared Savings and APMs with Shared Savings and Downside Risk.
  - **Category 3N: APMs Built on FFS Architecture with Risk Linked only to Cost**
    APMs that utilize a base FFS infrastructure, while providing performance-based payments based on cost and/or utilization, but not quality.
- **Category 4: Population-Based Payments**
  APMs that provide prospective and population-based payments, in which providers are accountable for total cost of care and quality outcomes for a defined scope of practice, a comprehensive collection of care, or a highly integrated finance and delivery system. Includes capitated models such as the Condition-Specific Population-Based Payment, Comprehensive Population-Based Payment, and Integrated Finance and Delivery Systems models.
  - **Category 4N: Capitated Payments Not Linked to Quality**
    Includes payments models that provide prospective and population-based payments, without tying payment to quality measures.

Many existing and past APMs have been part of the Quality Payment Program (QPP) administered by CMS and established under the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA).[146] Under the QPP, providers can participate in either the Merit-based Incentive Payment System (MIPS) or Advanced Alternative Payment Models depending on their practice size, specialty, location, or patient population.[147] Advanced APMs enable eligible practices to earn higher payment by assuming risk related to patients' outcomes.[148] In 2022, there were 386,263 QPP

APM participants and 624,209 clinicians who received a MIPS payment adjustment;[149] during this year, participating MIPS clinicians received an average unweighted quality performance score of 74.63% and a mean unweighted cost score of 59.70%.[150] Clinicians' scores on cost, quality, promoting interoperability, and improvement activities categories determine the Medicare payment adjustment they receive.[151]

III. Adoption of Value-Based Payments and Accountable Care Arrangements

Scaling value-based care requires a systemwide transition away from volume-based FFS payments and entails expanding value-based payments (VBP) to providers from all payers, including state and federal governments, managed care plans, commercial health plans, and employers. Increasing the volume of payments flowing through APMs, which include transferring financial risk to providers, can better incentivize quality improvement and cost reduction.[152] In recent years, there has been systemwide progress shifting payments from FFS to value-based models. **Between 2019 and 2023, the share of payments to providers flowing through APMs across all payers increased from 38.2% to 45.2%.**[153,154]

Within the Medicare program, where the federal government has the most direct influence, over 50% of payments to providers were linked to quality as early as 2011; however, practically none were in alternative payment models.[155] To accelerate the adoption of value-based payments to providers within Medicare, the Department of Health and Human Services (HHS) declared in 2015 the following 2018 targets:[156,157]

- 90% of Traditional Medicare FFS payments tied to quality, and
- 50% of all Traditional Medicare payments flowing through APMs.

While CMS met the goal of tying 90% of Traditional Medicare FFS payments to quality, it shifted a lower share of payments to APMs: 40%.[158]

Medicare Advantage (MA) plans – private managed care plans that deliver Traditional Medicare benefits as well as supplemental benefits, care management, and reduced cost sharing – are leading the adoption of value-based payments, with a larger share of payments to providers flowing through APMs and greater use of APMs with downside risk than Traditional Medicare and other payers in 2023.[159]

- MA's share of payments flowing through APMs is 53% higher than Traditional Medicare's share (64.3% vs. 42.0%),[160] and
- MA's share of payments flowing through APMs with downside risk is 28% higher than Traditional Medicare's share (43.0% vs. 33.7%).[161]

Share of Payments to Providers: FFS vs. APMs[162,163]

	FFS Share		APM Share	
Payer	**2019**	**2023**	**2019**	**2023**
Medicare Advantage	**50.0%** Including **4.0% with some link to quality and value**	**35.7%** Including **4.4% with some link to quality and value**	**50.0%** Including **28.6% in two-sided risk APMs**	**64.3%** Including **43.0% in two-sided risk APMs**
Traditional Medicare	**58.1%** Including **44.0% with some link to quality and value**	**58.0%** Including **41.0% with some link to quality and value**	**41.9%** Including **20.2% in two-sided risk APMs**	**42.0%** Including **33.7% in two-sided risk APMs**
Medicaid	**64.4%** Including **6.8% with some link to quality and value**	**56.3%** Including **9.0% with some link to quality and value**	**35.6%** Including **10.6% in two-sided risk APMs**	**43.7%** Including **21.1% in two-sided risk APMs**
Commercial Health Plans	**67.9%** Including **14.4% with some link to quality and value**	**60.8%** Including **10.8% with some link to quality and value**	**32.1%** Including **11.1% in two-sided risk APMs**	**39.2%** Including **21.6% in two-sided risk APMs**

MA is accelerating the systemwide adoption of value-based payments as MA plans now enroll more than half of all Medicare beneficiaries. In 2024, 32.8 million people were enrolled in MA, accounting for most (54%) of the eligible Medicare population[164] – a near-tripling of enrollment since 2010, when MA enrolled 11.1 million people, less than a quarter (24%) of Medicare beneficiaries.[165]

MA plans' additional benefit offerings – which are not covered by Medicare FFS – such as coverage of vision, hearing, fitness, and dental services have likely contributed to its enrollment growth.[166] Plans deliver these benefits at no additional cost to the federal government and with out-of-pocket savings to the beneficiary by leveraging care and cost management strategies, including care coordination programs, utilization management programs, negotiated provider networks, and risk sharing arrangements with providers.[167]

Value-based payments must be complemented by care delivery models oriented around the provision of high-quality care. In an accountable care arrangement, health care providers work with each other to manage their patients' overall health. These arrangements can include accountable care organizations (ACOs), bundled payment arrangements, and managed care arrangements.[168] ACOs are among the most widespread APMs, are provider organizations designed to take accountability for a patient population, invest in infrastructure and redesigned care processes, and enable and incentivize high-quality, coordinated, and efficient care.[169] By 2030, CMS aims to have every Traditional Medicare enrollee and the vast majority of Medicaid enrollees in an accountable care arrangement,[170] a broad category of relationships among health care payers and providers designed to improve care coordination, patient experience, and health outcomes, and to reduce health care expenses.[171] The categories of accountable care arrangements, as defined by AHRQ, include (verbatim):[172]

- **Medicare Shared Savings Program (MSSP) ACOs**
  A permanent Medicare program mandated by the Affordable Care Act offering a pathway for groups of health care providers to become ACOs. To achieve shared savings, participating organizations must submit data on 33 quality measures and reduce overall spending by more than 2% from a pre-defined benchmark. MSSP ACOs can choose between one-sided and two-sided risk arrangements.
  - In the one-sided risk arrangement, an ACO can receive shared savings but is not responsible for paying Medicare if total costs exceed the benchmark.
  - In the two-sided risk arrangement, the ACO has the potential to receive a higher amount of shared savings, but the ACO must pay Medicare if costs are higher than a set benchmark.
- **Commercial ACO Arrangements**
  Many shared savings arrangements exist between provider organizations and commercial insurance companies. Each commercial insurer has its own policies and rules for quality measures and cost savings that must be met in order to receive shared savings.
- **Managed Care Arrangements**
  Managed care organizations receive a per-member-per-month fee to assume responsibility for total cost of care for patients. Managed care arrangements exist within Medicare, Medicaid, and commercial insurance companies.
- **Bundled Payment Arrangements**
  Bundled payments entail reimbursement to health care providers and larger organizations, including providers, for expected costs of specific episodes of care over time. Bundled payments represent an intermediary payment model between fee-for-service and capitation (i.e., full risk arrangements).

Enrollment in any accountable care arrangements where providers have a responsibility for the total cost of care reached 88.5 million across all payers in 2023,[173] a 9% increase over 2022 enrollment of 81.2 million.[174]

Among Medicare accountable care arrangements in 2025, there were over 700 ACOs, comprising over 800,000 providers or provider organizations, participating across 4 active models:[175,176,177]

- Shared Savings Program: 476 participating ACOs with 655,725 health care providers serving 11.2 million Traditional Medicare enrollees.
- ACO Realizing Equity, Access, and Community Health Model: 103 participating ACOs with 161,765 health care providers and organizations serving 2.5 million Traditional Medicare enrollees.
- Kidney Care Choices Model: 78 participating contracting entities and 15 CMS Kidney Care First Practices with 8,430 health care providers and organizations serving 240,000 Traditional Medicare enrollees with chronic kidney disease and End-Stage Renal Disease.
- ACO Primary Care Flex Model: 24 participating ACOs with 18,538 health care providers and organizations serving 350,000 Traditional Medicare enrollees.

CMS administers the permanent Medicare Shared Savings Program (MSSP), which is the largest ACO program in the country.[178] The MSSP is a voluntary, multi-track program to encourage the formation of ACOs by sharing generated savings with ACOs meeting cost and quality goals.[179] The number of enrollees assigned to MSSP ACOs grew rapidly through 2018, but plateaued in recent years:[180]

- Increasing from 3.2 million assigned enrollees in 2013 to 10.5 million enrollees in 2018, but
- Decreasing from 10.9 million assigned enrollees in 2023 to 10.8 million enrollees in 2024, with
  - 18% of all Medicare enrollees assigned to a MSSP ACO.

In 2023, ACOs in the MSSP earned shared savings payments to providers totaling $3.1 billion, while also yielding more than $2.1 billion in net savings to Medicare in 2023.[181] Importantly, ACOs' performance improved on reported quality measures required to share in savings – including those related to diabetes and blood pressure control, breast cancer and colorectal cancer screening, and fall risk screening.[182]

IV. Lessons from Government-Funded Value-Based Care Models

Since its establishment in 2010 within CMS, the Center for Medicare and Medicaid Innovation (CMMI) has developed and implemented over 50 novel payment and care delivery models aimed at improving patient care, lowering costs, and better aligning payment systems to promote patient-centered practices. CMMI uses evaluations of prior models to inform the creation and implementation of new models with the aim of identifying and scaling sustainable and impactful value-based programs nationally. By analyzing the outcomes and lessons learned from previous models, the Center can identify best practices and areas for improvement. Between 2022 and 2024, CMMI ran 37 active models and initiatives, including nine new models, that involved more than 192,000 providers and/or plans and served 57 million patients.[183]

In 2025, CMMI shifted its broader strategy to empower Americans to build healthier lives through evidence-based prevention, patient empowerment, and greater choice and competition.

Key components of CMMI's strategy include:

- Requiring models to have downside financial risk and requiring individual providers to assume some of that downside risk
- Reducing the role of state governments in setting provider payment rates
- Refining and simplifying the methodology for model benchmarking – the process of evaluating and comparing model performance using standardized metrics and datasets[184]

CMMI has undertaken shifts in its overall strategy and approach in response to the failure of the vast majority of its models to yield meaningful cost and quality results and to qualify for national expansion.[185]

Of CMMI's more than 50 unique value-based care pilots developed and implemented since 2010, twelve models have produced statistically significant cost savings to the federal government and taxpayers through 2024, of which four have been expanded by CMS and HHS.[186,187,188] (See Appendices C-1 to C-3 for more detailed information on the performance of specific CMMI models in terms of cost and quality outcomes.) Collectively, the four CMMI models certified for national expansion produced an estimated $2.7 billion in net Medicare savings,[189] which represents 0.02% of the $11.1 trillion in total federal Medicare outlays between 2010 and 2024.[190,191]

Overall, the Congressional Budget Office (CBO) estimates that CMMI's activities increased net federal Medicare spending by more than $5.4 billion between 2011 and 2020,[192] as the savings generated by some CMMI models was more than offset by the net cost of other CMMI models and the Center's operating costs.[193] CBO projects that CMMI's activities will increase net federal Medicare spending by $1.3 billion between 2021 and 2030.[194]

V. Key Drivers of Successful Value-Based Care Program Performance

Despite the challenges related to precisely evaluating the performance of each complex and varied CMMI model – including data limitations, lack of suitable control groups, and the possibility that the most important results will be achieved over the very long term[195] – past evaluations have produced useful policy and operational insights into the critical elements, approaches, and strategies that facilitated or inhibited the achievement of quality improvements and cost savings. Findings from academic scholarship, independent evaluation reports, and government analyses indicate that drivers of program success relate to: (1) financial risk, (2) incentives, (3) alignment, (4) provider and patient engagement, (5) performance targets, and (6) data and other quality improvement support.[196,197]

1. **Downside financial risk.** Two-sided risk agreements provide downside financial risk, along with upside incentives for providers to meet quality targets and reduce unnecessary spending and care for specific patient populations or care episodes.[198] Of the twelve CMMI models that have produced net savings to Medicare, ten included providers accepting two-sided risk arrangements.[199] (The remaining two models that produced net savings to Medicare, the Medicare Diabetes Prevention Program and the Prior Authorization (PA) of Repetitive, Non-Emergency Ambulance Transport Model, were models focused on implementing targeted interventions to increase uptake of specific preventative care and to limit unnecessary care by leveraging prior authorization, respectively.)
    - While two-sided risk arrangements effectively promote the delivery of coordinated and cost-effective care, the inclusion of downside risk in voluntary value-based programs has been shown to discourage participation and increase participant attrition, especially among smaller, physician-led, and low-revenue ACOs.[200,201]
        - For example, 66% of accountable care organization investment models (AIM ACOs) exited the MSSP when faced with the requirement to assume downside financial risk in the fourth year of the program.[202]
    - To support providers' assumption of greater financial risk, future models should continue to provide needed resources for investment in care delivery transformation and increase the availability and uptake of actionable data, learning collaboratives, and payment and regulatory flexibilities.[203] Granting ACOs additional time to transition to two-sided risk agreements may also increase participation and reduce attrition rates, especially among providers serving low-income, Medicaid beneficiaries.[204,205]
        - Recently, increasing numbers of ACOs participating in the MSSP are entering into downside risk contracts. In 2023, 67% of ACOs participating in the MSSP assumed downside risk and were nearly twice as likely to achieve shared savings compared to the 33% of ACOs with upside-only arrangements.[206]
2. **Upside incentives.** Financial incentives are critical levers to influence provider behaviors and promote the delivery of high quality and cost-effective care.[207] The effectiveness of incentives is determined in large part by their size, as well as their clarity and alignment among different models.[208,209,210]

- Evidence indicates that incentives must be sufficiently generous to exert an influence on providers, and commensurate with the additional administrative effort required to obtain them, especially in voluntary models.[211]
  - ACOs participating in voluntary models without sufficiently generous incentives experience high rates of attrition due to perceptions that potential performance payments or shared savings are too inconsequential and realized in the long-term.[212]
- Financial incentives cannot be overly generous such that they offset savings achieved by reducing unnecessary utilization, targeting acute care, or improving care delivery.[213]
  - The Oncology Care Model (OCM) produced savings that were not sufficient to offset the cost to Medicare of providing increased incentive payments to participants.[214]
- Increasing the number of mandatory models and limiting models utilizing FFS infrastructure will drastically increase the effectiveness of models to yield meaningful net savings for Medicare.[215] FFS payment infrastructure and providers' participation in multiple payment models can create conflicting and ineffective incentives.[216]

3. **Alignment of models.** The establishment of CMMI accelerated the proliferation of value-based care programs with varying approaches and designs for cost and quality interventions. Increasing alignment across model's design and implementation processes to the extent possible facilitates broader provider participation and scalable and sustained care delivery transformation.[217]
   - Streamlining quality and performance measures across concurrent models can eliminate competing incentives created by participation in multiple models and reduce the administrative burden on providers.[218]
4. **Provider and patient engagement.** Providers and patients are key drivers of the successful adoption of value-based care programs at the practice level. However, past CMMI models have frequently failed to incorporate the perspectives and feedback of participating clinicians and patients. Successful ACOs have been shown to maintain close relationships with providers, leveraging clinical leaders to promote culture change and encourage widespread buy-in to value-based care goals and strategies.[219]
   - Engaging providers can facilitate the delivery of patient-centered and cost-effective care, drive continuous learning and improvement, foster a culture of quality, safety, and excellence within health care organizations, and alleviate burnout.[220]
     - Evidence from the Next Generation ACO (NGACO) suggests that engaging providers through financial and nonfinancial incentives is an important tool affecting NGACO performance and that patient engagement strategies (such as annual wellness visits) are needed to reduce attrition and yield cost savings.[221]
   - Engaging patients in the design and implementation of value-based delivery systems can result in reductions in health expenditures,[222] enhanced quality, efficiency, and accountability of health services, and improved health outcomes.[223]
5. **Performance targets.** Performance benchmarks, cost and quality targets against which providers are measured, serve as the basis for assessing progress toward the goals of value-based care and creating accountability for provider's performance.[224]
   - Ineffective benchmarks can set unsustainable spending targets for providers that fail to account for the resources required to improve outcomes (especially among vulnerable populations) and unfairly penalize or reward providers for factors unrelated to care delivery.[225] Additionally, aggressive rebasing policies that reset benchmarks periodically can limit progress toward the overall goals of value-based care by restricting cash flow to high-performing providers.[226]

- Effective benchmarks: (a) utilize transparent methodologies and incorporate input from providers, payers, and patients; (b) risk-adjust to account for variations in patient populations and reduce selection bias to promote participation from a diverse group of providers; (c) are financially viable and sustainable over the long-term; and (d) align with well-defined goals related to quality and patient experience.[227,228]
  - Early pay-for-performance and value-based purchasing programs highlighted the need for benchmarks to reward the achievement of absolute targets and relative improvement to be viable for lower-performing, smaller, and under-resourced providers.[229]

6. **Data and other quality improvement support.** Significant investments in infrastructure, including electronic health record enhancements, additional staffing, and data analytic support, are often required to participate in models.[230] As a result, providers serving vulnerable populations, including rural and low-income patients, continue to face barriers to participation in value-based care models, thereby excluding many underrepresented and underserved populations from assignment into these models.
   - Providers serving these populations require robust financial and technical assistance to adopt and leverage health information technology and data analytics to effectively coordinate care, comply with quality reporting requirements, implement continuous learning systems, and address health-related social needs.[231]
   - Modern health information technology can provide application support, share best practices for caring for underserved populations, and assist with screening tools and data collection workflows.[232]
   - While supporting CMS's commitment to promoting health equity, modernized health information technologies and data analytics tools also enables providers to effectively conduct risk assessments, facilitate early interventions, and expand and strengthen patient communication and engagement.[233]
     - Evidence from the AIM ACO model, which provided payments to participants to fund ACO infrastructure investments and staffing, suggest that upfront investments by CMS and provider groups can be offset by reductions in wasteful spending to yield net savings, even under an upside-only financial risk model.[234]

In addition to these key performance drivers, longstanding and emergent health care system forces may impact the trajectory and results of value-based care initiatives moving forward and may offer opportunities to implement and scale them more widely. These major forces include vertical integration, employer purchasing power, and evolving digital technologies.

- **Vertical Integration.** Physician practices have increasingly sought outside sources of capital, administrative infrastructure, and partnership with hospitals to address the growing complexity of both the clinical and business aspects of health care. While acquisition of physician practices by hospitals has resulted in increased costs and spending by payers and consumers to date,[235,236] vertical integration offers providers the scale and capital needed to participate in value-based payment programs.[237,238]
  - Wider participation in these programs in conjunction with the creation of operational efficiencies and improved population management processes have the potential to yield cost savings for patients and payers and quality improvements.[239]
  - Additional regulation may be required to realize the potential of vertical integration to increase adoption of value-based care given that hospital and consolidated health systems may financially benefit from the continuation of FFS payments.
- **Purchasing Power of Employers.** Overall, 60% of people under age 65, or about 164.7 million people, had employer-sponsored health insurance in 2023.[240] As the largest supplier of health coverage in the U.S., employers are especially sensitive to the increasing price of health care and can play a vital role in accelerating the adoption of value-based care.[241]

- Employers can leverage their purchasing power and influence over worker health to:[242]
  - Support efforts to realign payment systems with value,
  - Demand administrators and providers measure and improve plan members' health outcomes,
  - Partner with health plans to direct patients to high-quality and cost-effective providers, and
  - Emphasize prevention and chronic disease management for employees.
- Adoption of value-based care among employers providing health benefits for their employees is increasing but remains limited, with one-third of employers reporting incorporating it into their benefit offerings.
- Growing the number of employers incorporating value-based care into their health benefits can lead to improved outcomes for employees that lead to savings from reductions in unnecessary doctor and ER visits, tests, procedures, drugs, and insurance premiums. Healthier workforces also benefit employers by increasing worker productivity and morale.[243]

- **Evolving Digital Technologies.** The emergence of advanced technologies, such as artificial intelligence (AI), offers the opportunity to enhance existing value-based programs to yield even greater cost and quality results. These tools, when properly developed and tested, have the potential to improve care quality by increasing diagnostic accuracy, reducing medical errors, optimizing treatment plans and supporting clinical decision-making, and streamlining clinical operations.[244,245]
  - AI tools can be used to reduce costs and gain efficiencies by optimizing clinical workflows and staffing processes, reducing medical waste caused by overtreatment or low-value care, addressing pricing failures, combating fraud and abuse, and simplifying administrative complexity.[246]
  - Deploying AI to reduce administrative burdens created by billing processes, quality reporting requirements, and business analytic demands can also help alleviate physician burnout and allow for more time spent with patients.[247]

Evaluation of the history and successes of CMMI's past pilots suggests that well-designed value-based care models have the potential to yield meaningful improvements in cost and quality. While the health care system has reached a series of important milestones in its shift to value-based care, past initiatives have yet to achieve large-scale, systemic change. To achieve the transformative potential of value-based care, stakeholders must continue to innovate and refine these models while addressing the regulatory and operational challenges that hinder their widespread adoption. The integration of advanced technologies alongside robust policy frameworks can propel the health care system towards sustainable, high-quality, and efficient care delivery. The collaboration between employers, health plans, providers, and policymakers will be pivotal in advancing value-based care and ensuring its benefits are fully realized across the continuum of care.

Appendix A: Evolution of Value-Based Care: Salient Legislation and Landmark Initiatives

1965: Amendments to the Social Security Act

- In 1965, Congress passed and President Johnson enacted the Medicare and Medicaid programs under the Title XVIII and XIX Amendments to the Social Security Act.[248] The federally administered Medicare program provided hospital insurance (Part A) and medical insurance (Part B) for individuals aged 65 and older and established the fee-for-service (FFS) payment system.[249] The state-administered Medicaid program provided health insurance to low-income populations using state and federal funding.[250] Program funding was appropriated through a federal tax on employees and matched contributions by employers.[251]
  - The creation of the U.S.'s first social insurance programs highlighted the need for cost containment measures as enrollment increased and federal health expenditures rose dramatically under the FFS system. Between 1966 and 1969, 20 million beneficiaries enrolled in the programs[252] and federal health spending increased by an average 32% annually, driven largely by increases in the intensity and utilization of health care services.[253]

1970s to 1980s: Managed Care Era

- In 1973, the Health Maintenance Organizations (HMO) Act was passed under the Nixon administration.[254] The HMO Act appropriated federal funding to establish and develop HMOs, managed care plans that provide services for beneficiaries through a select network of providers who are pre-paid fixed annual fees to deliver care.[255] HMOs aimed to control costs, reduce unnecessary utilization, and emphasize coordinated primary care by aligning the financial incentives of payers and providers.[256] During the 1970s and 1980s, HMOs and new types of managed care organizations (MCOs) such as preferred provider organizations (PPOs) and independent practice associations (IPAs), proliferated rapidly across the commercial market.[257]
- In 1982, the Tax Equity and Fiscal Responsibility Act (TEFRA) was passed under the Reagan administration. TEFRA enabled the expansion of Medicare managed care arrangements by simplifying the contracting requirements for private plans,[258] and mandating the development and adoption of a prospective payment system in Medicare for hospital reimbursement.[259]
  - HMOs also laid the foundation for subsequent value-based care initiatives by introducing innovative, prospective payment systems, such as capitation and risk-sharing arrangements, while emphasizing quality metrics and performance measurement to encourage the provision of cost-effective and high-quality care.[260] HMOs integrated health insurance and health care delivery within the same organization and thus aimed to align the incentives of the health care payer and provider.[261] Similarly, TEFRA facilitated the proliferation of managed care plans in Medicare and prompted a significant shift from cost-based and retrospective FFS payments to the Medicare Prospective Payment System.[262]

1990s to 2000s: Pay-For-Performance

- In 1997, the Balanced Budget Act (BBA) was passed under the Clinton administration.[263] The BBA aimed to curb Medicare spending, which had increased at an average annual rate of 11.2% between 1980 and 1996 and comprised 54% of federal health expenditures in 1996,[264] through several mechanisms, including the implementation of the Sustainable Growth Rate (SGR) for physician payments.[265] The BBA also established Medicare Part C, currently referred to as Medicare Advantage, to augment Medicare enrollees' ability to receive benefits through private health plans.[266]
- In 2000, the Clinton administration also passed the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act (BIPA).[267] BIPA mandated CMS's establishment of demonstrations that aimed to improve quality of care by linking payment to performance outcomes, known as "Pay-for-Performance" initiatives.[268] One of the

first of such initiatives for physicians, the Physician Group Practice Demonstration (2000), provided physicians with financial rewards for improvements in care quality and efficiency, with the aim of increasing coordination of Part A and Part B services, promoting efficiency through investment in administrative structures and processes, and improving health outcomes.[269]

- In 2003, the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) was passed under the second Bush administration.[270] The MMA, in addition to establishing Medicare's prescription drug benefit (Medicare Part D), mandated the development of several demonstration projects to test potential improvements in Medicare coverage, expenditures, and quality of care.[271,272] Early Medicare pay-for-performance initiatives for hospitals included the Hospital Quality Initiative (2005), which began financial incentives for certain hospitals to report on 10 inpatient quality measures.[273]
  - In 1999, the Institute of Medicine published its seminal report, "To Err is Human," on the prevalence and widespread impacts of preventable medical errors in the U.S.[274] The report followed a national backlash against managed care related to concerns about care quality and constraints on patient choices, prompting payers to create new pay-for-performance initiatives aimed at improving the quality, efficiency, and overall value of health care,[275] a critical step towards large-scale adoption of value-based care. However, pay-for-performance failed to yield widespread quality or cost improvements, as there exists weak evidence that pay-for-performance initiatives have improved patient outcomes and little evidence that such programs altered physician behaviors.[276,277]

2010s: Patient Protection and Affordable Care Act (ACA)

- The Patient Protection and Affordable Care Act (ACA) was signed into law under the Obama administration in March of 2010.[278] The ACA had three primary aims: increase the accessibility of affordable health insurance, expand eligibility for the Medicaid program to cover those with income below 138% of the federal poverty line, and to support novel care delivery systems designed to lower health care costs.[279] Through the creation of the health insurance exchange markets, Medicaid expansions, and several other mechanisms,[280] the ACA expanded coverage to over 30 million Americans, with between 7.0 million and 16.4 million uninsured people gaining health care coverage from the law by 2015.[281]
- The ACA established the Center for Medicare and Medicaid Innovation (CMMI) at CMS for the purpose of developing alternative payment and service delivery models to improve quality and reduce cost within the Medicare and Medicaid programs.[282,283] The law also authorized the Department of Health and Human Services (HHS) to expand and nationally scale CMMI's payment and delivery models that demonstrated: (a) costs reductions without declines in quality, (b) quality improvements without cost increases, or (c) cost reductions and quality improvements.[284] Subsequent to the implementation of the ACA, CMMI launched five early models: the Pioneer and Advance Payment Accountable Care Organization (ACO) models, the Bundled Payments for Care Improvement initiative, the Comprehensive Primary Care Initiative, the Partnership for Patients initiative, and the Health Care Innovation Awards.[285]
- The ACA established its first compulsory value-based payment programs, such as the Hospital Readmission Reduction Program (HRRP) and the Hospital Value-Based Purchasing Program (HVBPP) to reduce hospital readmissions and hospital-acquired conditions and to improve the overall quality of hospital care.[286,287]
  - Two of the most innovative and significant models were launched in 2011 under the ACA, the Medicare Shared Savings Program and the Pioneer ACO model, both of which aimed to promote the integration and coordination of ambulatory, inpatient, and post-acute care services and shift responsibility for the cost and quality of care for a defined population of Medicare beneficiaries to providers.[288] These and the other value-based care initiatives created under the ACA represented a crucial step towards widespread adoption of value-based care in the U.S., as it linked increasing volumes of payments to quality and value.[289]

2015: Medicare Access and CHIP Reauthorization Act and Quality Payment Program

- The Medicare Access and CHIP Reauthorization Act (MACRA) was passed under the Obama administration in 2015.[290] MACRA established the Quality Payment Program (QPP), which repealed the SGR formula, and enabled CMS to provide financial bonuses and penalties in Medicare reimbursement to providers based on their performance on certain cost and quality measures.[291] The QPP offered providers two tracks for participation: the Merit-based Incentive Payment System (MIPS) and the Advanced Alternative Payment Models (AAPMs). MIPS participants are eligible for performance-based payment adjustments for services provided to Medicare enrollees.[292] Providers can also participate in AAPMs, which offer added incentives for clinicians to take on some risk related to patient outcomes, with models including Accountable Care Organizations (ACOs) and Patient-Centered Medical Homes.[293] Although payment rules differ between each of the tracks, common to both is an emphasis on holding providers accountable for high-quality, cost-efficient care.[294]
    - MACRA and the QQP accelerated participation in value-based payment programs among Medicare providers, mandating providers routinely serving Medicare patients to participate. The QPP also established Medicare's system of performance-based payment adjustments for reimbursement and necessitated that providers think critically about strategies to improve care quality and reporting.[295,296]

Evaluation of the history and successes of CMMI's past pilots suggests that well-designed value-based care models have the potential to yield meaningful improvements in cost and quality. While the health care system has reached a series of important milestones in its shift to value-based care, past initiatives have yet to achieve large-scale, systemic change.

Appendix B: Health Care Payment Learning and Action Network Framework for Payment Models[297]

- **Category 1: FFS – Not Linked to Quality and Value (No APM)**
  Medicare's traditional payment model in which payments are volume-based and no adjustments for cost or quality are accounted for.
  - Example: the Medicare Physician Fee Schedule (PFS)

- **Category 2: FFS – Linked to Quality and Value (No APM)**
  Payment models that use FFS, while also employing quality and some cost measures to tie some portion of payments to quality and value.
  - Foundational Payments for Infrastructure and Operations
    - Model provides payments for infrastructure investments to improve care quality without adjusting payment rates.
    - Example: Multi-Payer Advanced Primary Care Practice model
  - Pay for Reporting
    - Model provides positive or negative incentives to report specific quality data to the health plan and other stakeholders.
    - Example: Physician Quality Reporting System
  - Pay-for-Performance
    - Models reward providers that meet or exceed specified quality benchmarks and/or penalize providers that underperform. Financial rewards or penalties include adjustments to provider's FFS baseline rate or percent reductions or increases on total claims payments.
    - Example: Hospital Value-Based Purchasing

- **Category 3: APMs Built on FFS Architecture**
  APMs that utilize a base FFS infrastructure, while providing performance-based payments based on cost, appropriate care measures, and/or utilization targets, to incentivize the effective management of a set of procedures, an episode of care, or a patient population.
  - APMs with Shared Savings
    - Models share in a portion of the savings they generate against a cost or utilization target.
    - Example: Medicare Shared Savings Program (Track 1)
  - APMs with Shared Savings with Downside Risk
    - Models share in a portion of the savings they generate against a cost or utilization target for providers when they are met and incur a portion of the losses when targets are not met.
    - Example: Medicare Shared Savings Program (Track 2 and 3)
  - **Category 3N: APMs Built on FFS Architecture with Risk Linked to Cost**
    Payment models that provide FFS payments in addition to payments based on providers' performance on cost and occasionally utilization targets, but not appropriate care or quality measures.
    - Example: Bundled Payments for Care Improvement (BPCI) Initiative: Models 1-3

- **Category 4: Population-Based Payments**
  APMs that provide prospective and population-based payments, in which providers are accountable for total cost of care and quality outcomes for a defined scope of practice, a comprehensive collection of care, or a highly integrated finance and delivery system. These payments are structured in a manner that encourages providers to deliver well-coordinated, high-quality, person-centered care and are tied to specific "appropriate care" measures that ensure safeguards against incentives to limit necessary care.
  - Condition-Specific Population-Based Payment
    - Models provide bundled payments for the comprehensive treatment of specific conditions.
    - Example: Diabetes Population-Based Payment Model
  - Comprehensive Population-Based Payment
    - Models are prospective and population-based and are inclusive of each patient's health care needs.
    - Example: Global budgets
  - Integrated Finance and Delivery System
    - Models cover comprehensive care, and they move from the financing arm to the delivery arm of the same, highly integrated finance and delivery organization.
    - Example: Kaiser Permanente
  - **Category 4N: Capitated Payments Not Linked to Quality**
    Includes payment models that provide prospective and population-based payments, without tying payment to appropriate care or other key quality measures.
    - Examples: Program of All-Inclusive Care for the Elderly

Appendix C-1: Savings and Quality Results for CMMI Models that were Expanded[298]

Model	Description	Size and Scope	Estimated Net Budgetary Effect	Quality Results	Expansion Results
Pioneer Accountable Care Organization (Pioneer) 299,300,301,302 2012–2016 *Certified for expansion in 2015.* *No longer operating.*	Pioneer enabled ACOs participating in the MSSP to assume greater upside and downside risk, with select ACOs being eligible to adopt population-based payments in the third year of the program.	The model began in 2012 with 32 ACOs and concluded in 2016 with 9 participating ACOs. In total, the model included 34,882 providers and 1,173,843 aligned beneficiaries.	During its initial 2-year performance period, Pioneer produced gross Medicare savings of $384 million and net savings of $254 million, primarily driven by reductions in inpatient admissions and PAC utilization.	During its initial 2-year performance period, all 12 participating ACOs improved their quality scores by more than 21 percentage points. Overall quality scores for 9 out of 12 Pioneer participants were more than 90% in 2015.	Of the 9 ACOs that remained in the model beyond the initial performance period, 7 achieved shared savings by year 3, totaling over $68.7 million, and the other 2 did not realize either savings or losses.
Diabetes Prevention Program (DPP) 303,304,305,306 2013–2015 *Certified for expansion in 2016.* *The Medicare DPP (MDPP) Expanded Model began in 2018 and will run through December 31, 2027.*	DPP offered performance-based payments to suppliers to deliver weight loss and lifestyle interventions to prevent Type 2 diabetes among Medicare enrollees.	The DPP originally involved 17 regional networks of YMCAs nationwide.	During its initial 3-year performance period, DPP produced weighted average Medicare savings of $278 per beneficiary per quarter, and cumulative net savings of $5.0 million.	During its initial 3-year performance period, participants in the DPP lost an average of 9.5 pounds and saw average BMI reductions of 1.6 kg/m. DPP reduced inpatient admission and emergency department visits by 0.9% (nine fewer stays and nine fewer ED visits per 1,000 members per quarter).	The most recent evaluation of the expanded model in 2021 found that MDPP has not produced significant changes in Medicare expenditures. In 2021, participants lost an average of 5.1% of their starting weight, with 53% of MDPP participants meeting the 5% weight-loss goal, and 24.6% meeting the 9% weight-loss goal. It is too early to assess the program's impact on diabetes incidence or other key health outcomes.
Home Health Value-Based Purchasing Model (HHVBP) 307,308,309 2016–2021 *Certified for expansion in 2021.* *The expanded HHVBP model was implemented In January 2023 and is ongoing.*	HHVBP provided financial incentives to home health agencies (HHAs) for improvements in care quality by increasing or decreasing Medicare payments based on a composite quality performance and improvement score.	In 2021, the HHVBP model included 1,952 HHAs and over 751,000 aligned Medicare enrollees across nine states.	During its initial six-year performance period, HHVBP produced average annual net savings of $230 million, and cumulative net savings of $1.38 billion for Medicare. This translated into an 1.9% decline in Medicare spending relative to the 41 non-HHVBP states.	During its initial six-year performance period, total performance score values ranged between 3.7% and 7.9% higher among agencies in HHVBP states relative to non-HHVBP states. HHVBP produced: • 1.2% reduction in unplanned hospitalizations • 8.2% reduction in skilled nursing facility use • 1.5% reduction in ED visits leading to inpatient admissions • 2.1% increase in outpatient ED visits • Gains in patients' functional status including mobility and self-care • Modest declines in some aspects of patient experience	CMS will assess the performance of HHAs to determine payment adjustments applied during the first payment year in 2025.

Model	Description	Size and Scope	Estimated Net Budgetary Effect	Quality Results	Expansion Results
Prior Authorization (PA) of Repetitive, Non-Emergency Ambulance Transport (RSNAT) Model [310,311] 2014–2020 *Certified for expansion in 2020.* *The model was expanded in August 2022 to all 50 states, D.C. and all U.S. territories and is ongoing*	RSNAT-PA model uses prior authorization to reduce non-compliant ambulance transports in Medicare Part B, aiming to decrease expenditures while maintaining the accessibility and quality of care.	The original RSNAT-PA model was implemented between 2014 and 2020 in nine states with high rates of RSNAT utilization and improper payments.	During its initial five-year performance period, RSNAT-PA reduced RSNAT use and expenditures by 72% for beneficiaries with ESRD and/or pressure ulcers, representing approximately $746 million in RSNAT-related savings. In total, RSNAT-PA decreased total Medicare expenditures by $381 per beneficiary per quarter, or 2.4%, producing cumulative net savings of $1.1 billion.	During its initial five-year performance period, there was no evidence of adverse impacts on quality of care or access. Enrollees were not more likely to use emergency services or have inpatient admissions. The model did not affect the likelihood of death for beneficiaries.	Updated cost and quality evaluation reports are forthcoming.

Appendix C-2: Savings and Quality Results for Select CMMI Models that were Not Expanded after Resulting in Net Medicare Savings[312]

Model	Description	Size and Scope	Estimated Net Budgetary Effect	Quality Results	Expansion Results
Accountable Care Organization Investment Model – Test 1 (AIM)[313,314,315] 2012–2018	AIM provided up-front payments to select ACOs to invest in technology, infrastructure, and staffing. AIM Test 1 ACOs received an average of $2 million per ACO in up-front and monthly payments known as "pre-paid shared savings" to encourage new ACOs to form in rural and underserved areas.[316] AIM ACOs in Test 2 received funding to encourage smaller, existing ACOs participating in the MSSP to assume greater financial risk.[317]	In 2018, there were 45 AIM ACOs operating across 37 states, with 5,422 ACO practitioners and 691 facility-based providers serving 492,114 assigned enrollees. In 2016, there were 41 AIM Test 1 ACOs and 6 AIM Test 2 ACOs.	During its initial 3-year performance period, AIM Test 1 Model decreased gross Medicare expenditures by $526.4 million and net expenditures by $381.5 million or 2.5%. Per beneficiary per month spending was reduced by an average $34.63. The impacts of AIM Test 2 ACOs on total Medicare spending relative to non-AIM SSP ACOs were variable and not consistently positive or negative across the three performance years. At the end of 2018, of the participating 47 AIM ACOs: • 20 fully repaid AIM funds • 8 ACOs partially repaid AIM funds, and • 19 AIM ACOs (all Test 1) did not earn any shared savings during or after AIM and did not pay back any AIM funds.	During its initial 3-year performance period, AIM ACOs reduced utilization without decreasing the quality of care. AIM Test 1 ACOs produced: • 4.0% reduction in spending on inpatient hospitalizations • 3.7% reduction in hospital outpatient visits • 7.8% reductions in skilled nursing facility stays • 8.2% reduction in home health episodes • 2.9% reduction in emergency department visits not resulting in hospital admission • 4.4% reduction in hospital admissions Impacts of AIM Test 2 ACOs on utilization relative to non-AIM SSP ACOs were variable and not consistently positive or negative across the three performance years. AIM Test 2 ACOs did outperform similar non-AIM MSSP ACOs on measures of preventive health.	Most AIM ACOs opted not to assume financial risk and noted needing more time in an upside-only arrangement or greater financial incentives to remain in the Medicare Shared Savings Program.
Medical Care Choices Model (MCCM)[318,319] 2016–2021	MCCM participating providers received fixed monthly payments to provide care coordination and supportive services similar to those provided under the Medicare hospice benefit.	During its initial six-year performance period, MCCM included 141 Medicare-certified hospices and served 7,263 Medicare enrollees. Significant attrition occurred over time, partly because of low payments and challenges recruiting eligible beneficiaries. Only 89 hospices (63%) enrolled at least one beneficiary and only 44 (31%) participated for all six years.	During its six-year performance period, MCCM decreased Medicare's net per beneficiary expenditures by $7,604 or 13%, and generated net savings of $39.2 million.	During its initial six-year performance period, MCCM decreased acute health care service use, producing a: • 26% reduction in inpatient hospitalizations • 38% reduction in days spent in an intensive care unit • 12% reduction in outpatient emergency department visits and observation stays. MCCM improved the quality of end-of-life care: • Deceased MCCM beneficiaries were 15% less likely than comparison beneficiaries to receive an aggressive life-prolonging treatment in the last 30 days of life (61% versus 76%). • Deceased MCCM beneficiaries spent 5 more days at home on average than comparison beneficiaries before death (183 versus 178 days).	MCCM served a very small population of beneficiaries, and more than 60% of participating providers ultimately exited the model. MCCM failed to be expanded by CMS and HHS given constrains on the generalizability of the model.

Model	Description	Size and Scope	Estimated Net Budgetary Effect	Quality Results	Expansion Results
Bundled Payments for Care Improvement Advanced Model (BPCI-A) 320,321,322 2018–2025 *Results for year four were reported given it was the first year after significant changes to the BPCI Advanced Model were implemented.* *BPCI had been slated to run from 2018 to 2023 and was extended to run through 2025.*	BPCI-A provided 90-day episode-based bundled payments tied to quality to participating hospitals, physician groups, and surgical specialists.	As of 2021, 1,800 acute care hospitals and 69,867 physician group practices (PGPs) who engaged in redesign activities as a result of the model served over 1.2 million Medicare enrollees.	Across its four-year performance period, BPCI-A produced net Medicare savings of $285.2 million. The $464.7 million in net savings (or 3.4% spending reduction) in Model Year 4 offset the $179.5 million in combined losses in the first three years of the model. In Model Year 4, BPCI-A produced estimated net savings of $306.0 million for medical episodes and $147.1 million for surgical episodes.	In Model Year 4, BPCI-A did not produce a statistically significant effect on the hospital readmission rates for surgical or medical episodes. Additionally, in Model Year 4 and 5, BPCI-A did not produce a consistent impact on patients' functional status, care experiences, and satisfaction with care.	BPCI-A and its evaluation is ongoing.
Vermont All-Payer ACO Model (VTAPM) 323,324 2017–2025 *VTAPM had been slated to run from 2017 to 2022 and was extended to run through 2025.*	VTAPM scaled an ACO program with risk-based payments tied to provider performance, enabling the participation of all payers in the state, including Medicare, Medicaid, and commercial plans.	In 2022, there were 14 participating hospitals, 5,452 clinicians, and 259,958 Vermont residents participating in the VTAPM.	During its initial 5-year performance period, VTAPM reduced: • Gross Medicare spending by $789 per ACO-attributed beneficiary per year or 6.6% • Net Medicare spending by $758 per ACO-attributed beneficiary per year or 6.3% Overall, the VTAPM yielded $193.5 million in gross savings and $185.8 million in net savings to Medicare. Trends in gross Medicaid spending showed a decline in spending for the Medicaid ACO-attributed population from 2019 to 2021.	In 2022, as compared to 2018, produced: • Reductions in acute care stays of 35.6 stays per 1,000 beneficiaries per year • Reductions in acute care days by 66.5 days per 1,000 beneficiaries per year • Increases in ED visits and observation of 40.7 days per 1,000 beneficiaries per year. • Reductions in total unplanned E and M visits by 59.6 visits per 1,000 beneficiaries per year. Measures of primary care access improved statewide and for VTAPM Medicare ACO-attributed beneficiaries, despite reported primary care workforce shortages.	The model has faced challenges in scaling value-based care due to limited model participation in all three payer ACO initiatives and variation in payment mechanisms across payers. Financial constraints, administrative burden, and access to timely data were barriers to population health efforts.
Maryland Total Cost of Care Model (MD TCOC) 325,326 2019–2025	MD TCOC shifted accountability for the cost and quality of care to the state by offering its hospitals prospective, annual fixed global budgets, along with incentives and support for providers to invest in primary care and provider engagement.	Across its initial four-year performance period, 52 hospitals including, 44 acute care hospitals, 7 freestanding emergency centers or freestanding medical facilities, and one specialty emergency department participated in MD TCOC.	During its initial four-year performance period, MD TCOC decreased Medicare spending by an average of $292 per beneficiary per year, resulting in $689 million in net savings, a 2.1% reduction. These savings were driven by a 6.1% reduction in hospital spending.	MD TCOC reduced total inpatient admissions by 16.2% and improved related quality measures including a: • 5.9% reduction in outpatient ED visits • 16.8% preventable admissions • 2.6% increase in timely follow-up MD TOCC also reduced disparities in unplanned readmissions, preventable admissions, and timely follow-up by race and place among Black and White beneficiaries by a range of 26% to 40%.	On March 12, 2025, CMS announced the intention to end MD TCOC as of December 31, 2025. Subject to discussions with State authorities, the model will transition to the AHEAD model and begin its implementation period in January 2026.

Model	Description	Size and Scope	Estimated Net Budgetary Effect	Quality Results	Expansion Results
Maryland All-Payer Model (MDAPM) [327,328] 2014–2018	MDAPM exempted Maryland hospitals from Medicare's inpatient and outpatient prospective payment systems and shifted the state's hospital payment structure to an all-payer, annual global budget.	MDAPM included all regulated acute care hospitals in Maryland and all patients hospitalized at Maryland hospitals.	During its five-year performance period, MDAPM generated a 2.8% reduction in in total expenditures growth or $975 million in Medicare savings, relative to the comparison group, largely driven by 4.1% reduction in total hospital expenditures growth, or $796 million in savings.	MDAPM generated a 7.2% decline in hospital admissions and a 6.7% decline in ambulatory sensitive conditions for Medicare beneficiaries over the performance period (relative to comparison groups). The model did not impact emergency department visits or unplanned readmissions for Medicare beneficiaries.	The Maryland Total Cost of Care Model (MD TCOC), which began January 1, 2019, built on the progress made in MDAPM and lessons learned by promoting greater alignment of the health care system in Maryland.
Financial Alignment Initiative Washington Health Home Managed Fee-for-Service Demonstration (FAI-Washington) [329,330] 2013–2025 *FAI-Washington had been slated to run from 2013 to 2019 and was extended to run through 2025.*	The Financial Alignment Initiative (FAI) tests, integrated care models for Medicare-Medicaid enrollees in partnership with state governments. The FAI-Washington model aimed to integrate care, alleviate fragmentation, and improve coordination of services for Medicare-Medicaid enrollees, in health homes across the state.	As of 2019, FAI-Washington included all 11 health homes across the state's 39 counties serving 12,114 enrollees.	During its initial six-year performance period, FAI-Washington generated $385 million in gross Medicare savings and $297 million in net savings.	During performance year four to six, FAI-Washington resulted in a: • 24.2% reduction in the probability of skilled nursing facility admission • 14.8% reduction in the probability of long-stay nursing facility use • 10.2% reduction in the probability of 30-day follow- up after mental health discharge • 15.2% reduction in the number of physician evaluation and management visits	CMS and Washington state agreed to extend the demonstration to run through December 31, 2025. The demonstration and its evaluation are ongoing.
Comprehensive Care for Joint Replacement (CJR) Model [331,332] 2016–2024 *CJR was slated to run from 2016 to 2021 and was extended to run through 2024.*	The CJR Model is a mandatory model for hospitals that tests whether episode-based payment and quality measurement for lower extremity joint replacements (LEJRs) can lower payments and improve quality.	In 2021, 323 participating hospitals across 34 metropolitan statistical areas conducted over 53,000 joint replacement procedures.	During its initial six-year performance period, CJR produced $30.8 million in net Medicare savings. In the sixth year of the program alone, CJR generated estimated Medicare savings of $54.2 million or an estimated $1,017 per-episode of care.	CJR decreased post-acute care use by 28.3% compared to baseline but had no significant impact on the rate of unplanned readmissions, emergency department use, mortality, or complications. Overall, patients who had a joint replacement at CJR and non-CJR hospitals reported similar changes in functional status post-surgery, levels of satisfaction with their overall recovery, and levels of help from their caregivers after returning home.	Evaluation of the model is ongoing.

Appendix C-3: Savings and Quality Results for Select CMMI Models that were Not Expanded, after Resulting in Net Medicare Losses[333]

Model	Description	Size and Scope	Estimated Net Budgetary Effect	Quality Results
Bundled Payments for Care Improvement Initiative Models 2-4 (BPCI)[334,335,336] 2013–2018	BPCI comprised four broadly defined models of care in which Medicare offered providers bundled payments tied to a single episode of care for up to 48 different medical and surgical conditions.	Across the 5-year BPCI initiative, 1.4 million episodes of care were initiated across: • 423 hospitals and 272 physician practices in Model 2 • 873 hospitals and 117 home health agencies in Model 3 • 23 hospitals in Model 4 By the end of the model, • 42% of Model 2 participants had withdrawn. • 47% of Model 3 participants had withdrawn. • 91% of Model 4 participants had withdrawn.	During its initial 5-year performance period, Model 2 produced: • Net Medicare losses of $418 million or $332 per care episode. • This represents a net loss to Medicare of 1.3% of what payments would have been absent Model 2. Model 3 produced: • Net Medicare losses of $110 million or $714 per care episode. • This represents a net loss to Medicare of 3.1% of what payments would have been absent Model 3. The net budgetary impact of Model 4 was not estimated. The model produced no statistically significant changes in total payments for hospital-initiated episodes of care. Had CMS not eliminated temporarily eliminated downside risk during a portion of the model and had CMS required participants to return funds when payments were above the target price, Medicare would have realized no change in net spending for Model 2 and net loss to Medicare would have totaled $66 million or 1.9% under Model 3.	BPCI Model 2-4 did not impact care quality of care as measured by mortality, emergency department visits, and unplanned admissions.
Oncology Care Model (OCM)[337,338,339,340] 2016–2022	OCM offered physician practices two-part payment arrangements that included financial and performance accountability for 6-month episodes of cancer care.	Across OCM's 11 performance periods, over 4,500 participating physicians in 202 oncology practices across 33 states provided care to over 600,000 Medicare FFS enrollees receiving cancer care.	Across OCM's 11 performance periods, OCM practices generated gross savings of $616 or 2.1% per care episode but led to cumulative Medicare net losses of $639 million after accounting for monthly and performance-based payments.	Across its 11 performance periods, OCM did not consistently lead to improvement in clinical and quality outcomes. Both participating practices and non-incentivized, control practices achieved: • Small increases in the timely use of hospice at end of life. • Small decreases in ED visits and inpatient admissions.

Model	Description	Size and Scope	Estimated Net Budgetary Effect	Quality Results
Advance Payment ACO (AP ACO) [341,342,343] 2012–2015	AP ACO participants received prospective and monthly payments for 24 months for investments in their care coordination and infrastructure.	Across the three-year AP ACO model, 36 small, physician-based Medicare Shared Savings Program (MSSP) ACOs participated in the program. By 2014, 288,278 unique enrollees were assigned to an AP ACO.	Across the three-year AP ACO model, lower-than-expected spending in 2012 and 2013 was offset by higher-than-expected spending in 2014, resulting in $242 million in net losses to Medicare. By the end of the model, • $30 million of the $68 million in CMS's prospective payments was not recouped against shared savings. • 47% or 17 AP ACOs repaid CMS for their advanced payments. • 15 of the 36 ACOs earned shared savings.	Across the three-year AP ACO model, AP ACOs' quality results were not statistically distinguishable from comparison enrollees across 11 ambulatory care and hospital-based quality measures.
Next Generation ACO (NGACO) [344,345,346] 2016–2021 *Originally NGACO was to run from 2016 to 2020, but it was extended through December 2021 in response to the COVID-19 public health emergency.*	NGACO was a voluntary, two-sided risk model for ACOs with quality reporting and payment mechanisms designed to facilitate infrastructure improvement, and benefit enhancements for flexibility in care delivery and beneficiary engagement.	Across the six-year model, 62 ACOs and over 91,000 providers serving 4.2 million aligned enrollees participated in the model.	Across the six-year model, NGACO produced: • Gross Medicare savings of $270.3 per beneficiary per year or $1.7 billion in total. This represents a 1.9% spending reduction. • Net losses to Medicare of $15.3 per beneficiary per year or $96.7 million in total. This represents a 0.1% increase in net spending.	Across the six-year model, NGACO reduced utilization in the most intensive care settings and increased the use of preventive care through population health strategies. Overall, NGACO produced: • A 21% increase in annual wellness visits. • Greater spending reductions for patients with 8+ chronic conditions. • Decrease in SNF spending and days, modest increase in SNF stays.

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