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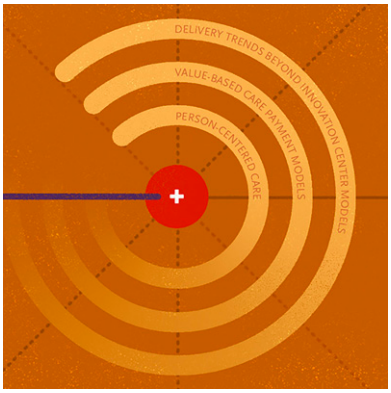
IN DEPTH

Accelerating Care Delivery Transformation — The CMS Innovation Center's Role in the Next Decade



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Over the past decade, the U.S. Centers for Medicare & Medicaid Services (CMS) Center for Medicare and Medicaid Innovation (CMS Innovation Center) has tested more than 50 payment models with a range of participants and value-based payment features. Value-based payment models can provide the necessary flexibility to support care delivery that better addresses people's health and health-related social needs. This transformation of the delivery system, supported by value-based payment models, can drive better care, improve outcomes, and lower costs. The impact of CMS Innovation Center models has largely focused on financial impacts, with varied results in terms of total health care cost reduction. There has been less focus on the extent to which payment models have enabled care delivery transformation. To inform the development of a new framework to better assess the impacts of payment models and to drive care delivery transformation, the CMS Innovation Center undertook a retrospective review and synthesis of select models to assess if — and which — care delivery changes have been observed. The review indicated demonstrable evidence of enhanced care delivery in several areas, such as care coordination, team-based care, and leveraging data to risk-stratify patients, among other strategies. Three broad themes are shared among the more successful efforts. (1) Participants across models used common care coordination and other strategies to deliver person-centered care, (2) practice changes enabled by value-based care models showed

evidence of tailoring care to local needs, and (3) care delivery trends and changes extend beyond the CMS Innovation Center models. This article summarizes those findings, which are informing the development of a new framework to accelerate care transformation.

Introduction

The U.S. Centers for Medicare & Medicaid Services (CMS) Center for Medicare & Medicaid Innovation (CMS Innovation Center) was created by the Patient Protection and Affordable Care Act in 2010 to test new health care payment and care delivery models to improve quality and reduce spending in the Medicare, Medicaid, and Children's Health Insurance Program programs. The CMS Innovation Center has primarily done this by testing alternative payment models that shift the health care system away from traditional fee-for-service (FFS) to value-based payment, which aims to improve quality and outcomes for people and reduce health care costs for the system.

In addition to their potential for controlling spending growth, value-based payment models — which aim to link provider payments to improved clinical performance and patient-centric outcomes — enable innovations in care delivery that better address people's unmet needs. Through payment innovation that untethers providers from FFS incentives, these models give more flexibility to organize care around patient needs, including care coordination, keeping patients at home or in the community, and avoiding hospital admissions and readmissions — all in service of improving the care experience. Models that provide population-based or prospective payments in particular offer flexibility in care delivery and in the ability to shift resources and incentives to people and communities with greater needs. Allocating resources where needs are greatest may be especially important to improve equity in care and outcomes.[1]

In 2010, when the CMS Innovation Center was established by Congress, value-based care was a nascent concept with limited reach in the U.S. health care market. The potential of payment reform notwithstanding, many providers and payers were understandably reluctant to move from familiar FFS payment to fledgling value-based payment models that posed numerous questions about operational and financial impacts. Over the past decade or so, the CMS Innovation Center has tested more than 50 payment models with a range of value-based payment features — including different incentive structures and approaches to setting financial benchmarks — and the health care delivery and payment landscape has changed demonstrably.

By 2021, 44% of traditional Medicare beneficiaries enrolled in Parts A and B were in a care relationship with providers accountable for quality and total cost of care.[2] Value-based payments, including population-based payments, have also grown steadily in Medicare Advantage, Medicaid, and commercial markets.[3] The Health Care Payment Learning & Action Network has been measuring the percentage of payments moving through risk-based arrangements.[4,5] By 2021, Medicare FFS and Medicare Advantage were approximately 40.2% and 56.8%, respectively, of payments in arrangements involving accountability for cost.[6] This proliferation of models testing innovative payment approaches, combined with growth in the

Medicare Shared Savings Program, has contributed to a surge in provider experience with value-based care. Participation in the Medicare Shared Savings Program has grown from 220 accountable care organizations (ACOs) with 3.2 million assigned beneficiaries in 2012–2013 to 456 ACOs and 10.9 million assigned beneficiaries in 2023; in 2023, more than 573,000 physicians and nonphysicians from more than 15,500 unique organizations (on the basis of Taxpayer Identification Number) are participating in the Medicare Shared Savings Program.[7] Similarly, ACO Realizing Equity, Access, and Community Health (ACO REACH), one of the ACO models within the CMS Innovation Center, grew from 53 ACOs and about 350,000 lives when it began in 2021 to 132 ACOs and 2.1 million lives in 2023.[8] In spite of the lingering impact of the Covid-19 pandemic on the health system, there is increasing interest to try new payment models emphasizing global, population-based payments.

Alongside the shift toward population-based payment, the health system has seen considerable changes in care delivery over the past decade, including broad implementation of new modes of coordinating and accessing care, such as complex care management that supports management of medical conditions and social needs, physical–behavioral health integration, and virtual care. This shift included increasing involvement of nonphysician and ancillary providers, such as nurse practitioners, physician assistants, community health workers, pharmacotherapists, and patient navigators.[9-13] The flexibility afforded to providers to meet people's unique needs through value-based payment models is a key component to promoting successful accountable care.

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Measuring Impact and Success of CMS Innovation Center Models

Although the health care landscape has changed as value-based payment has grown over the past decade, only four models tested by the CMS Innovation Center have met the most prominent measure of success — the statutory requirement for expansion on the basis of whether models are certified to achieve reduced expenditures while maintaining or enhancing quality or enhance quality without increasing expenditures.[14] The CMS Innovation Center's 2021 strategic refresh called out the need to define the success of models more broadly than what is currently required for expansion for several reasons.[15]

First, many models have achieved gross savings in the form of reduced utilization,[16] which is an important measure of behavioral change in response to incentives. Net savings, after accounting for enhanced model payments that support changes in care delivery, have been more challenging to achieve in voluntary models in part because of limited or selective participation.[17,18] Second, existing and future models continue to be refined to strengthen incentives and better support flexibility in care delivery, with evidence indicating that savings have been greater where incentives have been stronger.

A reduction in expenditures also may not fully capture the impacts of payment models on the Medicare and Medicaid programs or the broader health system. For instance, key features from CMS Innovation Center ACO models have been incorporated into the Medicare Shared Savings Program. The Pioneer ACO Model was one of the four models that met the criteria for expansion, elements of which were incorporated into the Medicare Shared Savings Program. More recently, lessons learned from the Accountable Care Organization Investment Model (AIM) informed the advance investment payments option that will be available nationally beginning in 2024 to support the efforts of new organizations with fewer resources — including those in underserved and rural areas — to join the Medicare Shared Savings Program. Lastly, the application of certification criteria has focused mostly on the achievement of net savings while maintaining or improving quality, and less on quality improvement without increased spending. Quality measurement and implementation science have evolved significantly over the past decade. This allows the CMS Innovation Center to draw on a more sophisticated set of tools to measure quality and beneficial changes in care delivery in model development to help determine whether a model has successfully enhanced quality.

The CMS Innovation Center has shown that value-based payment models can be designed and tested on a nationwide basis across the health system. To enable continued progress, it is essential to more systematically evaluate effective care delivery strategies, disseminate best practices, and increase the likelihood that all Americans receive access to the most effective, patient-centered, high-value care.

This need to drive care delivery transformation, which was underscored by the Covid-19 pandemic, will require measuring the impacts of value-based care beyond cost savings by focusing on quality, equity, outcomes, patient experience, and providers and their care delivery. To drive this transformation, the CMS Innovation Center is developing a new framework to systematically assess and identify effective care delivery changes that support care transformation for patients and providers. The development of this framework is informed by results from this retrospective review and synthesis of select CMS Innovation Center models to assess if — and which — care delivery changes have been observed in models.

Retrospective Review to Assess Care Delivery Changes in Models

The CMS Innovation Center collects performance data on cost and quality measures, conducts ongoing monitoring of model performance, and performs independent evaluations of its models, which inform decisions on expansion. In addition, data are collected on model implementation and the experience of providers both through learning system engagement and through formal qualitative analyses in evaluations. For this retrospective analysis, data and information were gathered from a review of evaluation findings from currently active models (as of November 2022) or recently ended models (ending no earlier than December 2018) with two or more publicly available reports as of November 2022; the goal was to examine the degree to which transformation was explored in previous model evaluations and elicit themes and lessons to inform future work.

> *"The flexibility afforded to providers to meet people's unique needs through value-based payment models is a key component to promoting successful accountable care."*

Model evaluations, summarized in such publicly available reports through the life of a model, include a broad range of quantitative and qualitative methodologies, including key informant interviews, site visits, focus groups, case studies, and statistical analyses such as trend analyses and robust impact analyses. In addition, learning system data from four models were assessed to more closely examine the types of care delivery changes that occurred or were reported to occur in models.

The selected models represented a cross-section of the CMS Innovation Center's portfolio with advanced primary care, ACO, specialty, and state-based models included. The review and synthesis of evaluation reports and learning system surveys informed the identification of care delivery themes and changes that occurred across models. This review was not exhaustive but aimed to identify patterns in the types of care delivery changes occurring. The themes identified through this review come from the 23 models examined and are illustrated through selective examples drawn from a subset of models for which there was evidence of higher levels of care transformation and that were more extensively reviewed (Table 1). Additional details are provided in the Appendix.

Three key themes emerged from the retrospective review that are informing how the CMS Innovation Center will accelerate this work through enhanced learning and evaluation approaches:

1. Participants across models used common care coordination and other strategies to deliver person-centered care.

2. Practice changes enabled by value-based care models showed evidence of tailoring care to local needs.

3. Care delivery trends and changes extend beyond CMS Innovation Center models.

Each of these themes includes subthemes drawn from CMS Innovation Center model evaluations included in this review (Table 2).

The retrospective review indicates that within these models, a range of care delivery innovations has occurred — only some of which were required in model tests as further explained below — and underscores the need and benefit of evaluating the types and effectiveness of these changes more systematically. The CMS Innovation Center can accelerate transformation by identifying the factors, conditions, and care delivery tactics and strategies that can be used across the health care system to improve quality, outcomes, and experience for people and providers.

Table 1. The U.S. Centers for Medicare & Medicaid Services Center for Medicare & Medicaid Innovation Models Included as Illustrative Examples from Retrospective Review

CMS Innovation Center Model	Model Years Covered	Model Description
Accountable Health Communities (AHC) Model	2017–2022	The AHC Model addressed a critical gap between clinical care and community services in the current health care system by testing whether systematically identifying and addressing the health-related social needs of Medicare and Medicaid beneficiaries, through screening, referral, and community navigation services, would affect health care costs and utilization.
ACO Investment Model (AIM)	2016–2018	AIM was an initiative designed for organizations participating as ACOs in the Medicare Shared Savings Program as a prepaid shared savings model that built on the experience with the Advance Payment ACO Model, an earlier iteration of that approach. AIM tested the use of prepaid shared savings to encourage new ACOs to form in rural and underserved areas and to encourage current Medicare Shared Savings Program ACOs to transition to arrangements with greater financial risk.
Bundled Payments for Care Improvement Advanced (BPCI Advanced) Model*	2018–2025	The BPCI Advanced Model is a voluntary episode payment model aiming to support health care providers who invest in practice innovation and care redesign to better coordinate care and reduce expenditures while improving the quality of care for Medicare beneficiaries. BPCI Advanced qualifies as an Advanced Alternative Payment Model under the Quality Payment Program.
Comprehensive ESRD Care (CEC) Model	2015–2020	The CEC Model was designed to identify, test, and evaluate new ways to improve care for Medicare beneficiaries with ESRD. Through the CEC Model, CMS partnered with health care providers and suppliers to test the effectiveness of a new payment and service delivery model for kidney care that provides person-centered, high-quality care.
Comprehensive Care for Joint Replacement (CJR) Model*	2016–2024	The CJR Model is designed to improve care for patients on Medicare undergoing hip and knee replacements (also called lower-extremity joint replacements) performed in the inpatient or outpatient setting and for total ankle replacements performed in the inpatient setting. Hip and knee replacements are the most common surgeries for Medicare beneficiaries, and by providing participating hospitals with bundled payments for these procedures as well as ankle replacements, the CJR Model encourages hospitals, physicians, and postacute care providers to work together to improve the quality and coordination of care from the initial hospitalization or outpatient procedure through recovery.
Comprehensive Primary Care Plus (CPC+) Model*	2017–2021	The CPC+ Model was a national advanced primary care medical home model that aimed to strengthen primary care through regionally based multipayer payment reform and care delivery transformation. CPC+ included two primary care practice tracks with incrementally advanced care delivery requirements and payment options to meet the diverse needs of primary care practices in the United States.
Financial Alignment Initiative for Medicare–Medicaid Enrollees (FAI)	2013–ongoing	The FAI is designed to provide individuals dually enrolled for Medicare and Medicaid with a better care experience and to better align the financial incentives of the Medicare and Medicaid programs. Through the FAI, CMS partners with states to test two new models for their effectiveness in accomplishing these goals.
Integrated Care for Kids (InCK) Model	2019–2026	The InCK Model is a child-centered local service delivery and state payment model that aims to reduce expenditures and improve the quality of care for children younger than 21 years of age covered by Medicaid through prevention, early identification, and treatment of behavioral and physical health needs. Some programs also include Children's Health Insurance Program beneficiaries and pregnant woman aged older than 21 years who are covered by Medicaid. The model empowers states and local providers to better address these needs as well as the impact of opioid addiction through care integration across all types of health care providers.
Medicare Advantage Value-Based Insurance Design (MA VBID) Model	2017–2030	Through the MA VBID Model, CMS is testing a broad array of complementary MA benefit flexibilities and innovations designed to reduce Medicare program expenditures; enhance the quality of care for Medicare beneficiaries, including those with low incomes such as dually eligible Medicare–Medicaid beneficiaries; and improve the coordination and efficiency of health care service delivery. Overall, the VBID Model contributes to the modernization of MA and tests whether these innovations and flexibilities improve health outcomes and lower costs for MA enrollees.

Table 1. The U.S. Centers for Medicare & Medicaid Services Center for Medicare & Medicaid Innovation Models Included as Illustrative Examples from Retrospective Review (cont.)

CMS Innovation Center Model	Model Years Covered	Model Description
Medicare Care Choices Model (MCCM)	2016–2021	Through the MCCM, CMS tested a new option for Medicare beneficiaries to receive supportive care services from selected hospice providers while continuing to receive services provided by other Medicare providers, including care for their terminal condition. CMS evaluated whether providing these supportive services could improve the quality of life and care received by Medicare beneficiaries, increase patient satisfaction, and reduce Medicare expenditures. This model waived payment rules requiring Medicare and dually eligible Medicare–Medicaid beneficiaries to forgo care related to their terminal condition to receive services under the Medicare or Medicaid hospice benefit and provided a per-beneficiary per-month fee for the services provided.
Million Hearts Cardiovascular Disease Risk Reduction Model (MH Model)	2015–2021	The MH Model initiative focused, coordinated, and enhanced cardiovascular disease prevention activities across the public and private sectors and scaled up proven clinical and community strategies to prevent heart attack and stroke across the nation.
Next Generation ACO (NGACO) Model	2016–2021	Building upon experience from the Pioneer ACO Model and the Medical Shared Savings Program, the NGACO Model offered a new opportunity in accountable care — one that set predictable financial targets, enabled providers and beneficiaries greater opportunities to coordinate care, and aimed to attain the highest-quality standards of care.
Oncology Care Model (OCM)*	2016–2022	The OCM aimed to provide higher quality and more highly coordinated oncology care at the same or lower cost to Medicare. Under OCM, physician practices entered into payment arrangements that included financial and performance accountability for episodes of care surrounding chemotherapy administration to patients with cancer. The practices that participated in OCM committed to providing enhanced services to Medicare beneficiaries, such as care coordination, navigation, and national treatment guidelines for care.

CMS Innovation Center = U.S. Centers for Medicare & Medicaid Services Center for Medicare and Medicaid Innovation, ACO = accountable care organization, ESRD = end-stage renal disease, CMS = U.S. Centers for Medicare & Medicaid Services, MA = Medicare Advantage. *Data from model learning systems are included in analysis. Source: The authors on the basis of descriptions from CMS Innovation Center model websites

Theme 1. Participants across models used common care coordination and other strategies to deliver person-centered care.

Although some changes in the organization and delivery of care were specific to certain model types, participants across a wide range of models used common, multifaceted, and related strategies to coordinate care across settings. These strategies included the use of team-based care to support these care delivery changes; an emphasis on patient navigation, including postacute care follow-up; and focused care management using risk assessment and segmentation.

Team-Based Care

Across models, participants reported implementing team-based care approaches. For example, in the Comprehensive Primary Care Plus (CPC+) Model, 43% of practices reported widespread use of regularly scheduled care team meetings to discuss high-risk patients and to plan care.[19] In-depth case studies with 40 CPC+ practices found that the team-based approach fostered a culture of shared responsibility and that meeting regularly increased awareness and understanding of practitioner and staff member roles and improved formal and informational communication.

In the Oncology Care Model (OCM), some practices instituted daily or weekly team huddles or care coordination meetings to focus holistically on the needs of new patients with cancer, those

Table 2. Summary of Care Delivery Themes from Retrospective Review

Theme	Subtheme	Illustrative Examples Discussed in Text
(1) Participants across models used common care coordination and other strategies to deliver person-centered care.	Enhanced patient navigation	• Medicare Care Choices Model • Oncology Care Model
	Team-based care	• Comprehensive Primary Care Plus Model • Oncology Care Model
	Focused care management	• Comprehensive Joint Replacement Model • Comprehensive Primary Care Plus Model • Next Generation ACO Model
(2) Practice changes enabled by value-based care models showed evidence of tailoring care to local needs.	Freedom and flexibility in care delivery	• Integrated Care for Kids Model • Medicare Advantage Value-Based Insurance Design Model • Next Generation ACO Model
	Data to enhance quality improvement	• Next Generation ACO Model • Oncology Care Model
	Strengthened provider partnerships	• Comprehensive ESRD Care Model • Next Generation ACO Model
(3) Care delivery trends and changes extend beyond CMS Innovation Center models.	Widespread changes in screening	• Accountable Health Communities Model • Comprehensive Primary Care Plus Model
	Care delivery changes beyond a model test	• Comprehensive ESRD Care Model • Financial Alignment Initiative for Medicare–Medicaid Enrollees • Medicare Advantage Value-Based Insurance Design Model • Million Hearts Model • Next Generation ACO Model
	Increasing shift from fee-for-service to value-based payments	• ACO Investment Model • Bundled Payments for Care Improvement Advanced Model

ACO = accountable care organization, ESRD = end-stage renal disease, CMS Innovation Center = U.S. Centers for Medicare & Medicaid Services Center for Medicare and Medicaid Innovation. Source: The authors

with complex or highly toxic treatments, and those with psychosocial needs. The analysis of 47 case studies including more than 900 providers found that patient navigators, care coordinators, and social workers in particular cited examples of how these meetings facilitated information sharing that supported more person-centered care.[20]

> *"More recently, lessons learned from the Accountable Care Organization Investment Model informed the advance investment payments option that will be available nationally beginning in 2024 to support the efforts of new organizations with fewer resources — including those in underserved and rural areas — to join the Shared Savings Program."*

Enhanced Patient Navigation

One of the most common strategies was the use of care coordinators to track patient needs and support care. Care coordination, care navigation, and care management were required of participants in many but not all models. Where it was required, participants had broad flexibility in how, how much, and for whom they provided these services. Care coordinators and care managers varied in their backgrounds, responsibilities, and how they were integrated into care workflows. Participants reported implementing innovative approaches to identify beneficiaries who would benefit from care management, staffing, and workflows to achieve improved outcomes.

In OCM, participating practices were required to provide the core functions of care coordination, including but not limited to 24/7 patient access to an appropriate clinician who has real-time access to the patient's medical record and a documented care plan. In-depth case studies with 47 participating practices and interviews with more than 900 practice staff found both widespread use of care coordinators and variation in the specific roles they performed.[20] Navigation typically focused on guiding patients through the delivery system, but also sometimes took on a broader role, such as addressing health-related social needs.

Through 36 case studies and 78 interviews with beneficiaries and their caregivers in the Medicare Care Choices Model (MCCM), two promising approaches emerged for how participants were coordinating care and supporting patients and families.[21] The first was having intentional ongoing discussions with enrollees and their caregivers about care goals and using strategies, such as maintaining the same care team or facilitating warm handoffs between teams, to ease the transition to hospice care. The second approach was having systems in place for MCCM enrollees to work with participating hospices as an alternative to ED care. A survey of more than 3,000 caregivers rated enrollee quality of life as high (8.6 of 10) during the time they were receiving care under the model, and 96% would have recommended the model to friends and family.

Focused Care Management

Regardless of whether it was an explicit model requirement, participants across models used a range of tools and reported screening patients and stratifying by risk to identify those with the highest needs and allocate resources accordingly. For example, the Comprehensive Care for Joint Replacement model found that practices used risk stratification tools before surgery to help identify appropriate discharge destinations, barriers to a successful transition, and risk factors for readmission.[22]

CPC+ participants implemented a variety of approaches to risk stratification and segmentation of the population to facilitate focusing care management resources to those most likely to benefit. Practices adopted a patient-centered approach that layered clinical judgment onto algorithm-based stratification strategies available through the electronic health record or claims-based data. Starting in Performance Year 2, approximately 93% of practices reported on the annual practice survey that they consistently used a standard method or tool to stratify all patients by risk level, up from 59% in Performance Year 1.[19]

> *"This need to drive care delivery transformation, which was underscored by the Covid-19 pandemic, will require measuring the impacts of value-based care beyond cost savings by focusing on quality, equity, outcomes, patient experience, and providers and their care delivery."*

The Next Generation ACO (NGACO) Model evaluations found that 43 NGACOs, or 87%, described using risk stratification to identify high-cost, high-risk beneficiaries for more intensive care management services. Risk stratification methods and their level of sophistication varied among NGACOs, with many indicating they only recently developed the ability to risk-stratify patients prospectively. NGACOs reported specifically identifying beneficiaries for intensive care management on the basis of characteristics, including past patterns of high utilization, recent inpatient stays, frequent ED visits, predicted high spending, risk of hospitalization, and having multiple chronic conditions.[23] Similarly, interviews with representatives from 45 AIM ACOs confirmed significant investment in care management and care coordination, including hiring additional staff. By 2017, expense reports for AIM ACOs showed that more than one half of AIM payments were allocated to care management. AIM ACO representatives described prioritizing identification of and outreach to beneficiaries eligible for these services, and AIM beneficiaries received substantially more care management services, including rates of chronic care management visits that were more than twice that of other FFS beneficiaries in their markets.[24]

The Comprehensive ESRD Care (CEC) Model saw increased attention to outpatient dialysis, vascular access, and preventive care. For example, statistically significant increases were observed in outpatient dialysis visits (0.4% per beneficiary per month, which translates to an increase of about 49 outpatient sessions per 1,000 beneficiaries per month) relative to a comparison group of nonmodel counterparts. In 120 site visits of participating dialysis facilities across the model, participants described a variety of care redesign strategies, including increasing weekend and evening dialysis hours, adding chairs to increase capacity, and/or proactively reaching out to beneficiaries who miss appointments to make contact and reschedule. Utilization outcomes also improved, including increased phosphate binder adherence (9%) along with reductions in hospitalizations (3%) and readmissions (2%), opioid overuse (5%), and catheter use (5%).[25]

Theme 2. Practice changes enabled by value-based care models showed evidence of tailoring care to local needs.

The retrospective review examined how models may have affected care delivery for providers, an important issue given the challenges facing the health care workforce today. Model participants reported experiencing freedom and flexibility in care delivery, enhancing quality improvement efforts through CMS Innovation Center data sharing, and strengthening provider partnerships.

Freedom and Flexibility in Care Delivery

Providers in models reported greater ability to tailor care delivery on the basis of their patient population and needs. For instance, the seven awardee organizations across six states implementing the Integrated Care for Kids Model have developed highly tailored approaches to improve the early identification and treatment of children with health-related needs across settings. Their specific designs reflected their own state policy priorities, local context, and fit with existing programs, focusing on different subpopulations such as adding services aimed at parents and delivering services in a variety of ways, including providing telehealth and language services.[26]

> *"The retrospective review indicates that within these models, a range of care delivery innovations has occurred … and underscores the need and benefit of evaluating the types and effectiveness of these changes more systematically."*

Similarly, 37 of 43 NGACOs reported using their resources and the flexibility under the model through waivers and prospective payments to tailor care management services. NGACOs changed existing care management services by contracting with a care management organization; hiring additional care management staff (including medical assistants, pharmacy technicians, and other nonclinical staff); adding predischarge visits; adding community/outpatient palliative care; adding advance care planning; and increasing the presence of care managers in primary care practices.[23]

In the Medicare Advantage Value-Based Insurance Design (VBID) Model, plans identified participation in the model to incubate new emphases in value-based care. Participating plans could use additional flexibility to tailor and focus supplemental benefits on the basis of the specific needs of their enrollees, whether that would be food insecurity among those eligible for Part D Low-Income Subsidy or dual eligibility or would be glycosylated hemoglobin control among those diagnosed with diabetes.[27]

Data to Enhance Quality Improvement

The CMS Innovation Center provides a range of claims- and model-specific data to participants to support implementation of interventions and to provide performance feedback. Most models provided a combination of data, including a participant-level summary feedback report and more granular beneficiary- or claims-level data. Content often included patient demographic characteristics, key utilization measures (e.g., hospitalizations, ED visits), cost of care, and quality measures. Data are formatted in multiple ways to offer flexibility given participants' differing levels of data expertise. For example, larger, more sophisticated organizations used claims-level data to develop predictive algorithms to identify high-risk patients, whereas smaller and independent organizations used data aggregated at the physician or practice level. Data dashboards were often used to communicate performance and to support quality improvement for

a broad array of participants. The review indicated that performance reporting and feedback data can be an important facilitator for physician practices and other participants to transform care.

For example, 96% of the 47 OCM practices surveyed indicated that they created a dashboard to track performance on OCM and other relevant measures.[20] During evaluation site visits, OCM practices reported using Medicare claims and electronic health record clinical data to measure performance relative to benchmarks and to measure performance by individual oncologists and/or clinics to identify outliers for improvement.

In the NGACO Model, data warehousing and analytics investments enabled ACOs to generate reports and tools for clinicians and care managers to identify gaps in care, such as missing annual wellness visits, preventive screenings, or medications. In a survey of NGACOs, 47 ACOs (94%) reported having a data warehouse for in-house claims analysis, financial forecasting, and ad hoc reporting.[23] Reports identifying gaps in care were a common output from expanded data warehouses that NGACOs had invested in while under the model.

> *"The analysis of 47 case studies including more than 900 providers found that patient navigators, care coordinators, and social workers in particular cited examples of how these meetings facilitated information sharing that supported more person-centered care."*

Strengthened Provider Partnerships

CMS Innovation Center models often encourage strengthening partnerships with providers across the care pathway to support patient care through total cost of care approaches in population- and episode-based models. Providers in the CEC Model reported adoption of health IT platforms and other communication pathways to streamline and/or provide access to information across all care partners.[28] During site visits, CEC Model participants reported focusing on relationships with providers who are part of a patient's care pathway, but not participating in the model. Nephrologists and dialysis facilities participating in CEC established and strengthened partnerships with vascular surgeons, creating dedicated vascular access coordinator roles and changing referral patterns to reflect outcomes over proximity to the beneficiary.[25]

According to leadership surveys from 2016 to 2018, 78% of NGACOs reported engaging primary care providers by investing in systems and workflow processes that supported better care management and population-based care.[23] These systems facilitated new processes for handoffs to other care providers, created better workflows for scheduling follow-up visits, and supported screenings and assessments. The additional resources provided through investments may not have been otherwise available — especially in smaller practices — to support patient care and to facilitate connections between providers to better treat an individual's needs. Systems investments and workflow supports also strengthened provider partnerships, particularly by linking primary

care providers to specialists and postacute care providers. Through 50 interviews with leadership and staff, NGACOs routinely reported that care management programs shifted how clinicians and others think about patient care, bringing preventive care to the forefront and challenging the preconceptions of diagnostic care that many providers have traditionally relied on.[23]

Theme 3. Care delivery trends and changes extend beyond CMS Innovation Center models.

This retrospective review also provides examples of how models have had broader impacts on the health system, such as widespread changes in screening for health-related social needs, care delivery changes beyond a model, and increasing shifts away from FFS.

Widespread Changes in Screening

CMS Innovation Center models often support the incubation of new areas of focus, such as addressing the social determinants of health that are subsequently more widely accepted in the delivery system. Over the 5 years of CPC+, the percentage of Track 2 practices that reported to the CMS that they used a screening tool to capture health-related social needs increased from 78% to 99%. In Performance Year 4, 67% of physicians in Track 2 CPC+ practices reported routinely using the electronic health record or other health IT to document patients' health-related social needs in the past 6 months compared with 53% in comparison practices.[19]

> *"Accountable Care Organization Investment Model beneficiaries received substantially more care management services, including rates of chronic care management visits that were more than twice that of other fee-for-service beneficiaries in their markets."*

Through the Accountable Health Communities Model, more than 1 million Medicare and Medicaid beneficiaries were screened for health-related social needs, and 37% of screened beneficiaries had one or more of the five core health-related social needs. Among the screened, 57% of navigation-eligible beneficiaries reported more than one health-related social need, and 20% reported the three most common needs (housing, food, and transportation). Of those beneficiaries with a closed case, 36% had at least one of their needs resolved.[29]

Care Delivery Changes Adopted Beyond a Model

Models have had impacts both on populations beyond those specifically targeted in a model and on care delivery that is maintained after a model's end. Leaders from more than one half of the 47 NGACOs interviewed reported that care management was an integral part of general care delivery, with services delivered to beneficiaries irrespective of whether they were aligned with the model.[23] The Million Hearts model, which focused on beneficiaries deemed at high risk of heart attack or stroke, observed significant improvements in outcomes, such as medications for cardiovascular disease, among medium-risk beneficiaries not specifically focused on by the model.[30]

Although financial uncertainties of maintaining investments after the conclusion of a model may limit the ability of providers to sustain care delivery changes initially supported by CMS Innovation Center models, qualitative data indicated that providers intended to sustain care delivery changes after the end of some models. For instance, CEC Model participants cited sustaining care coordination, and Million Hearts Model participants cited plans to continue screening and risk stratification efforts.[25,30]

In some cases, CMS Innovation Center models or specific aspects of models were adopted into the wider market. Elements of the Medicaid–Medicare dual plans offered under the Financial Alignment Initiative were adopted into the market for dual special needs plans. These include requirements for enrollee advisory committees, simplified appeals and grievances processes, and requiring social determinants of health in Health Risk Assessments.[31] Similarly, uniformity flexibility that was initially tested in VBID in 2017 was adopted throughout the Medicare Advantage program for Part C services in 2019. This flexibility allows plans to offer reduced cost sharing and supplemental benefits to beneficiaries with certain chronic conditions, such as reduced cost sharing for foot care providers for patients with diabetes. Lastly, the Part D Senior Savings Model tested the impact of a $35 maximum copay for a 1 month's supply of a broad set of plan formulary insulins through eligible enhanced alternative plans; a similar benefit was established in the Inflation Reduction Act as a benefit available to all Medicare beneficiaries.

> *"Over the 5 years of the Comprehensive Primary Care Plus Model, the percentage of Track 2 practices that reported to the U.S. Centers for Medicare & Medicaid Services that they used a screening tool to capture health-related social needs increased from 78% to 99%."*

Increasing Shift from FFS

CMS Innovation Center models are often a testing ground for providers to gain experience in value-based care and payment models. The evaluation reviews indicated that participation in an CMS Innovation Center model served as an opportunity to gain experience for increasing the shift away from FFS payment systems. In a survey of Medicare ACOs during testing of AIM, 89.5% of participating ACOs and 84.8% of non-AIM ACOs reported that the original reason for participating was to prepare for an expected increase in value-based contracting. In a survey of Bundled Payments for Care Improvement Advanced participants, 45 of 70 respondents indicated that they viewed the model as an opportunity to prepare for future value-based care contracts with private payers.

Health care providers in different markets and under a range of models and incentives redesigned care along common themes. Despite the level of experimentation and change in care delivery, it is challenging to identify which strategies and interventions were most effective at improving quality and outcomes and reducing or controlling costs. The first decade of the CMS

Innovation Center's work showed that models are associated with significant care delivery change. In its next decade, the CMS Innovation Center will focus not only on its statutory mission, but will also seek to accelerate learning from care transformation by more systematically assessing which strategies and interventions are most effective at improving quality and care for patients.

Developing a New Framework to Accelerate Transformation

In 2021, the CMS Innovation Center articulated a renewed vision to help build a health system that achieves equitable outcomes through high-quality, affordable, person-centered care.[15] New models are under development — and existing models are being considered for redesign — to address the pressing needs of beneficiaries, such as access to care and coordination across providers. The strategic refresh represented a natural evolution for the CMS Innovation Center after more than a decade of learning about the ways that value-based payment can influence provider behavior, health outcomes, and costs.

As global payment models that support accountable care increase, learning how to best transform the health care system represents another phase in the evolution of the CMS Innovation Center. If the first decade showed that value-based payment can support changes in care delivery, the next should focus on examining the specific strategies and tactics to understand which drive better results and how those strategies interact with each other. As underscored by the findings of this retrospective review, participants across a range of models engaged in and focused on care delivery changes. In the next phase of better fostering delivery transformation, the CMS Innovation Center must develop a stronger evidence base by encouraging iterative learning and evaluation across models to drive more intentional transformation that is meaningful for the end users — patients and providers.

> *"In its next decade, the U.S. Centers for Medicare & Medicaid Services Center for Medicare and Medicaid Innovation will focus not only on its statutory mission, but will also seek to accelerate learning from care transformation by more systematically assessing which strategies and interventions are most effective at improving quality and care for patients."*

Models can more systematically incorporate beneficiary perspectives, use payment incentives to advance equity and support delivery system transformation for providers (particularly safety-net providers), encourage multipayer alignment, and test measures that more meaningfully capture quality and patient experience.[2,15,32,33] In addition to assessing the impact of payment models on health outcomes, costs, and quality, the CMS Innovation Center's evaluation and learning capabilities can also evolve and expand to capture where and how transformation is occurring and the factors associated with improved quality, outcomes, and experience for people and providers. This retrospective review is informing the development of a new framework that will

bring greater consistency in how the CMS Innovation Center is defining, categorizing, and collecting data on elements of care transformation to accelerate health system changes that better meet the needs of patients and providers. In developing this framework, the CMS Innovation Center is considering a number of dimensions:

- ways the CMS Innovation Center can support or encourage health transformation in model design and incentives;
- learning system supports for model participants to redesign care delivery and to generate cross-model learnings;
- expanded set of evaluation methodologies and study designs, such as cluster randomized trials, quasiexperimental methods, and retrospective designs, to assess the impacts of delivery system changes;
- prospective experiments to allow for more intentional study of delivery system reforms, informed by provider input; and
- dissemination of promising delivery system changes to the broader health care system.

As the health system transforms, there is greater urgency to understand the specific strategies and interventions within and across models that have been most effective and which aspects of them work together most effectively. The development of a new framework will help the CMS Innovation Center lead national efforts and collaborate with patients, providers, health system leaders, researchers, payers, and others to improve the delivery system — for patients and providers — by intentionally and systematically assessing which interventions and delivery system reforms, within value-based payment structures, allow providers to succeed and provide better care at lower costs to the benefit of their patients.

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Appendix

Selected CMS Innovation Center Models: Illustrative Examples from Retrospective Review

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