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A Framework for Evaluating the Impact of the Center for Medicare and Medicaid Innovation

The CMS Innovation Center was established by the Affordable Care Act to test innovative payment and service delivery models to reduce program expenditures while preserving or enhancing the quality of care. A comprehensive analytic framework is proposed to fully evaluate the impact of the CMS Innovation Center's efforts on the Medicare program and the broader health care system.

KEY POINTS

- The CMS Innovation Center has been testing and evaluating payment and service delivery models in the Medicare, Medicaid, and Children's Health Insurance Program (CHIP) programs for more than 12 years. Accountable care organizations now serve 32 million patients, bringing more patients into value-based care arrangements.
- The Innovation Center also plays an important role in setting goals for value-based care, providing leadership for delivery system transformation through the work of the Health Care Payment Learning and Action Network (LAN), and encouraging multi-payer alignment.
- In addition to the evaluations of the individual models that have been tested, it is important to consider how to properly evaluate the CMS Innovation Center's impact on the healthcare system as a whole.
- In this brief, we propose a comprehensive framework for analyzing the CMS Innovation Center's impact on Medicare, Medicaid, CHIP, and the broader health care system. The framework accounts for observed transformational effects of models on care delivery, longer term spending impacts, spillover effects, and the value of testing and evidence creation.
- Given the importance of these metrics and outcomes, the proposed evaluation framework may provide a more robust assessment of impacts that have already occurred and help guide future policymaking.

BACKGROUND

The Center for Medicare and Medicaid Innovation (CMS Innovation Center) was established under the Affordable Care Act for the purpose of testing "innovative payment and service delivery models to reduce program expenditures while preserving or enhancing the quality of care." Through rigorous testing, evidence development, and feedback mechanisms, the CMS Innovation Center has the potential to positively influence spending, quality, and value beyond the providers and patients in their models, including all of those served by CMS programs and the nation writ large. In 2021, the Innovation Center assessed its first decade of operation and proposed a strategy refresh which included an ambitious goal of having all Medicare beneficiaries and the

vast majority of Medicaid beneficiaries in a care relationship with accountability for quality and total cost of care by 2030.[1] Given CMS Innovation Center's likely impact on the entire healthcare system through its model tests, and efforts to support the adoption of value-based care, it is important to consider a comprehensive framework for evaluating its past, current, and future impact on the health care delivery system.

Often stakeholders view the success of the CMS Innovation Center only through the lens of reducing expenditures. For example, recent studies have based the net federal spending impact of the Innovation Center on model specific savings.[2] In a recent blog, we have proposed a more comprehensive framework for evaluating the impact and value of the CMS Innovation Center.[3] In this Issue Brief we expand on the proposed framework, emphasizing its role in transforming health care delivery on the overall healthcare system. This transformation is crucial given that the U.S. health care system in 2022 accounts for roughly $4.5 trillion or 17.3% of GDP.[4] In the following sections, we discuss: the history of the CMS Innovation Center, a more comprehensive framework for assessing the CMS Innovation Center's impact; and recent analysis of the impact the CMS Innovation Center models have already had on transforming the delivery of health care. We then present proposed quantitative and qualitative analytic approaches to assess the impact of the CMS Innovation Center models on spending, quality, and delivery system transformation on the health system as a whole.

The CMS Innovation Center – Brief Description of Statutory Framework and History to Date

The CMS Innovation Center was established by section 1115A of the Social Security Act (as added by section 3021 of the Affordable Care Act). Congress created the CMS Innovation Center to test "innovative payment and service delivery models to reduce program expenditures … while preserving or enhancing the quality of care" for those individuals who receive Medicare, Medicaid, or Children's Health Insurance Program (CHIP) benefits. The statute provided the Secretary of the Department of Health and Human Services (HHS) with the authority through rulemaking to expand (including implementation on a nationwide basis) through rulemaking the duration and scope of a model being tested or a demonstration project under section 1866C, subject to certain requirements.

For the Secretary to exercise this authority, the Secretary must determine that the expansion is expected to either reduce program spending without reducing quality of care or improve quality of care without increasing spending. CMS' Chief Actuary must certify that expansion of the model would reduce (or not increase) net program spending, and the Secretary must determine that the expansion would not deny or limit the coverage or provision of benefits under Medicare, Medicaid, or CHIP. The Secretary's expansion determinations, informed by the CMS Office of the Actuary, are made based on evaluations performed by CMS under section 1115A(b)(4).

Thus, the CMS Innovation Center is organized to support the design and testing of new payment and service delivery models. In addition, the CMS Innovation Center works on other initiatives designed to improve quality and reduce expenditures across the health care system, such as the Health Care Payment Learning and Action Network (LAN). The Innovation Center was created with a clear mission: lower costs and improve or maintain quality by driving delivery system transformation. As such, the CMS Innovation Center is dedicated to creating and assessing innovative healthcare payment and service delivery models with the objectives of (1) enhancing patient care, (2) reducing costs, and (3) fostering patient-centered practices. If an Innovation Center model test is successful and meets the statutory requirements, the Secretary may expand the model and test it on a nationwide basis. If a model does not meet the standard for certification, the Innovation Center goes back to the drawing board to make modifications or develop something different, often in the form of a successor model that draws on lessons learned. Learning from these models may also be used to influence changes to

other parts of the Medicare program such as the Medicare Shared Savings program (MSSP) and the physician fee schedule.

Table 1 provides a comprehensive list of all CMS Innovation Center models. Table 2 presents data on Medicare models spanning from 2012 to 2020, along with estimates of positive gross or net Medicare savings associated with these models.

Table 1. CMS Innovation Center Models

CMS Innovation Center Models	Category
Accountable Health Communities Model (AHC)	State & Community-Based Models
Accountable Care Organization Realizing Equity, Access, and Community Health Model (ACO REACH)	Accountable Care Models
ACO Primary Care Flex Model (ACO PC Flex)	Accountable Care Models
Bundled Payments for Care Improvement Advanced Model (BPCI Advanced)	Disease-Specific & Episode-Based Models
Cell and Gene Therapy Access Model (CGT Access)	Prescription Drug Models
Community Health Access and Rural Transformation Model (CHART)	State & Community-Based Models
Comprehensive Care for Joint Replacement Model (CJR)	Disease-Specific & Episode-Based Models
Comprehensive End-Stage Renal Disease Care Model (CEC)	Accountable Care Models, Disease-Specific & Episode-Based Models
Comprehensive Primary Care Plus Model (CPC+)	Accountable Care Models
Emergency Triage, Treat, and Transport Model (ET3)	Disease-Specific & Episode-Based Models
End-Stage Renal Disease Treatment Choices (ETC) Model	Disease-Specific & Episode-Based Models
Enhancing Oncology Model (EOM)	Disease-Specific & Episode-Based Models, Accountable Care Models
Expanded Home Health Value-Based Purchasing Model (Expanded HHVBP)	Disease-Specific & Episode-Based Models
Global and Professional Direct Contracting (GPDC) Model	Accountable Care Models
Guiding an Improved Dementia Experience Model (GUIDE)	Disease-Specific & Episode-Based Models
Home Health Value-Based Purchasing Model (HHVBP)	Disease-Specific & Episode-Based Models
Integrated Care for Kids (InCK) Model	State & Community-Based Models
Innovation in Behavioral Health Model (IBH)	State & Community-Based Models
Increasing Organ Transplant Access Model (IOTA)	Disease-Specific & Episode-Based Models
Kidney Care Choices Model (KCC)	Accountable Care Models, Disease-Specific & Episode-Based Models
Maryland Total Cost of Care Model (Maryland TCOC)	State & Community-Based Models, Accountable Care Models

CMS Innovation Center Models	Category
Maternal Opioid Misuse (MOM) Model	State & Community-Based Models, Disease-Specific & Episode-Based Models
Medicare Advantage Value-Based Insurance Design Model (VBID)	Health Plan Models, Disease-Specific & Episode-Based Models
Medicare Care Choices Model (MCCM)	Disease-Specific & Episode-Based Models
Medicare Diabetes Prevention Program Expanded Model (MDPP)	Disease-Specific & Episode-Based Models, Health Plan Models
Making Care Primary Model (MCP)	Accountable Care Models
Medicare Prior Authorization Model: (RSNAT) Model	State & Community-Based Models
Medicare-Medicaid Financial Alignment Initiative (FAI) and State Demonstrations	State & Community-Based Models, Health Plan Models
Million Hearts®: Cardiovascular Disease Risk Reduction Model (MH Model)	Disease-Specific & Episode-Based Models
Next Generation Accountable Care Organization Model (NGACO)	Accountable Care Models
Oncology Care Model (OCM)	Disease-Specific & Episode-Based Models
Part D Enhanced Medication Therapy Management Model (MTM)	Health Plan Models, Prescription Drug Models
Part D Payment Modernization Model (PDM)	Prescription Drug Models
Part D Senior Savings Model (PDSS)	Prescription Drug Models, Health Plan Models
Pennsylvania Rural Health Model (PARHM)	State & Community-Based Models, Accountable Care Models
Primary Care First Model Options (PCF)	Accountable Care Models
States Advancing All-Payer Health Equity Approaches and Development Model (AHEAD)	State & Community-Based Models
Transforming Episode Accountability Model (TEAM)	Disease-Specific & Episode-Based Models
Transforming Maternal Health Model (TMaH)	State & Community-Based Models
Vermont All-Payer Accountable Care Organization Model (VT APM)	State & Community-Based Models, Accountable Care Models

Source: https://www.cms.gov/priorities/innovation/models
https://www.cms.gov/priorities/innovation/data-and-reports/2022/rtc-2022

Table 2: Performance of Selected CMS Innovation Center models between 2012-2020

Models	Years	Savings	Savings type	Examples of Quality Impacts
Maryland (MD) All-Payer Model*	2014-2018	$975 million	The multi-payer model resulted in $975 million in Medicare savings, primarily driven by slower growth in hospital expenditures.	Reduced mortality by 8.8%
Vermont (VT) All-Payer ACO Model	2017 - 2022	$8 million	Total net shared savings payments amounted to $7.94 million during the first two years of performance.	Not available
Home Health Value-Based Purchasing (HHVBP) Model*	2016-2020	$949 million	Resulting in $949 million in aggregate savings	Reduced mortality by -37%. No change in patient experience
Accountable Care Organization (ACO) Investment Model (AIM)	2015-2018	$381.5 million	The model achieved $526.4 million in Medicare savings over three performance years, resulting in net savings of $381.5 million.	No change in mortality or patient experience of care
Financial Alignment Initiative (FAI) for Medicare-Medicaid Enrollees, Washington	2013 -2023	$297 million	The demonstration has generated $385 million in gross Medicare savings and $297 million in net savings for Medicare by the sixth year of the demonstration.	Not applicable
Pioneer ACO Model*	2012-2016	$254 million	The model saved $384 million over the first two performance years ($254 million in net savings), driven by reductions in inpatient admissions and PAC utilization.	Improved experience of care
Comprehensive Joint Replacement (CJR) Model*	2016 -2019	$76 million	These efforts led to $251.8 million in gross Medicare FFS savings ($76 million net savings, not statistically significant) with improvements in readmissions, PAC, and model-specific quality measures like complication rates and unplanned readmissions.	No change in mortality or experience of care

Models	Years	Savings	Savings type	Examples of Quality Impacts
Medicare Care Choices Model (MCCM)	2016-2021	$33 million	MCCM achieved $33.2 million in net Medicare savings by reducing hospital services (admissions, ED visits, readmissions, and PAC) and increasing beneficiaries' use of Medicare hospice benefits.	Improved caregiver experience
Prior Authorization of Repetitive, Scheduled Non-Emergent Ambulance Transport (RSNAT)*	2014 - 2020	$ 1 billion	For beneficiaries with end-stage renal disease (ESRD) and/or stages 3-4 pressure ulcers requiring these services, RSNAT saved approximately $1 billion for the Medicare Trust Fund.	No change in mortality
Medicare Diabetes Prevention Program (MDPP) Expanded Model*	2018-2027	Evaluation Ongoing	Expanded nationwide in 2018 to offer lifestyle intervention programs for diabetes prevention among Medicare beneficiaries.	Evaluation Ongoing

* Models expanded.
Source: Synthesis of Evaluation Results across 21 Medicare Models, 2012-2020, CMS. https://www.cms.gov/priorities/innovation/data-and-reports/2022/wp-eval-synthesis-21models

A More Comprehensive Framework for Assessing the CMS Innovation Center's Impact on Delivery System Transformation

In this section we describe a framework for evaluating the impact of the CMS Innovation Center on the health care system beyond its impact on model specific expenditures. The framework considers a full range of potential health system impacts including spending and quality of care; as well as incorporating these impacts beyond those associated with each model (spillover effects).

Efforts to slow the trajectory of health care spending have been the focus of public policy for almost 60 years. The rate of growth and overall level of spending is an important performance indicator for both the Medicare, Medicaid, and CHIP programs and the health system in general. In addition to spending, we need to broaden our focus to assess value: by many measures, the quality and outcomes derived from our health care spending are disappointing, and numerous studies suggest roughly 25% or more of health spending is wasteful. [5]

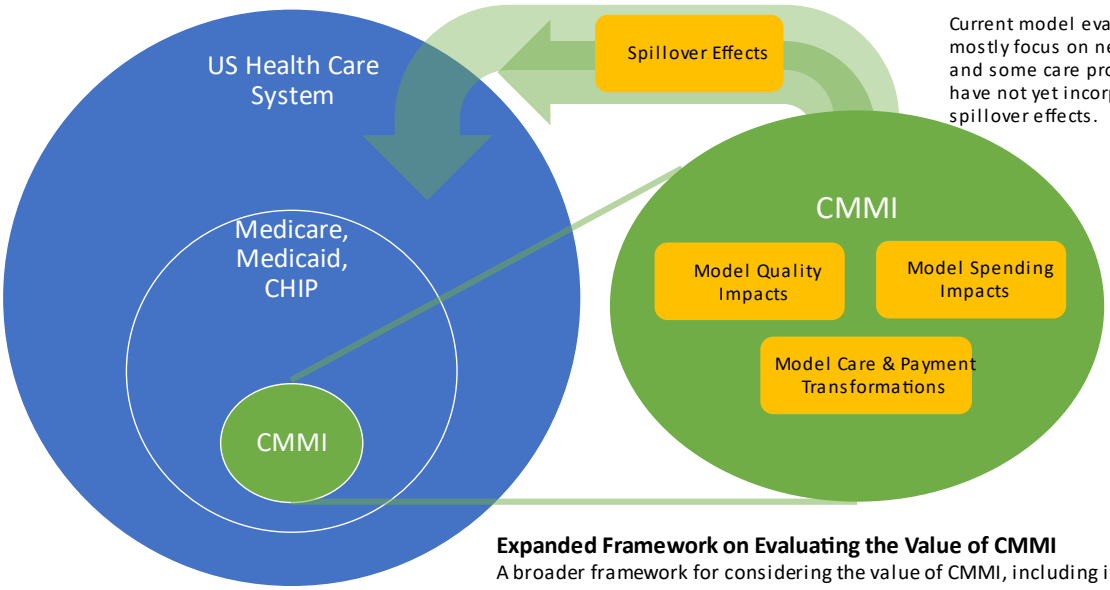
For the most part, past cost containment policies had attempted to work through existing payment methods or new payment methods to the existing delivery system. In recent years, there has been an emerging consensus among providers, payers, patients and consumers, purchasers, and other stakeholders that efforts to deliver high-value, person-centered care are often challenged by payment systems that are oriented toward paying for volume, as opposed to value for patients and caregivers.[6] Shifting from traditional fee-for-service

(FFS) payments (i.e., claims-based payments that are not linked to quality or value) to value-based care, which ties payments health care providers earn to the quality of the care they deliver to patients, could help correct the misaligned incentives of the U.S. fee-for-service system. That is, transforming the delivery system to one that consistently provides high-value care cannot happen without a substantial change in payment methods. Among the suggested methods is population-based payments (in which all or much of a person's overall care, care for related conditions, or care for episodes is encompassed within a single payment and tied to performance indicators).

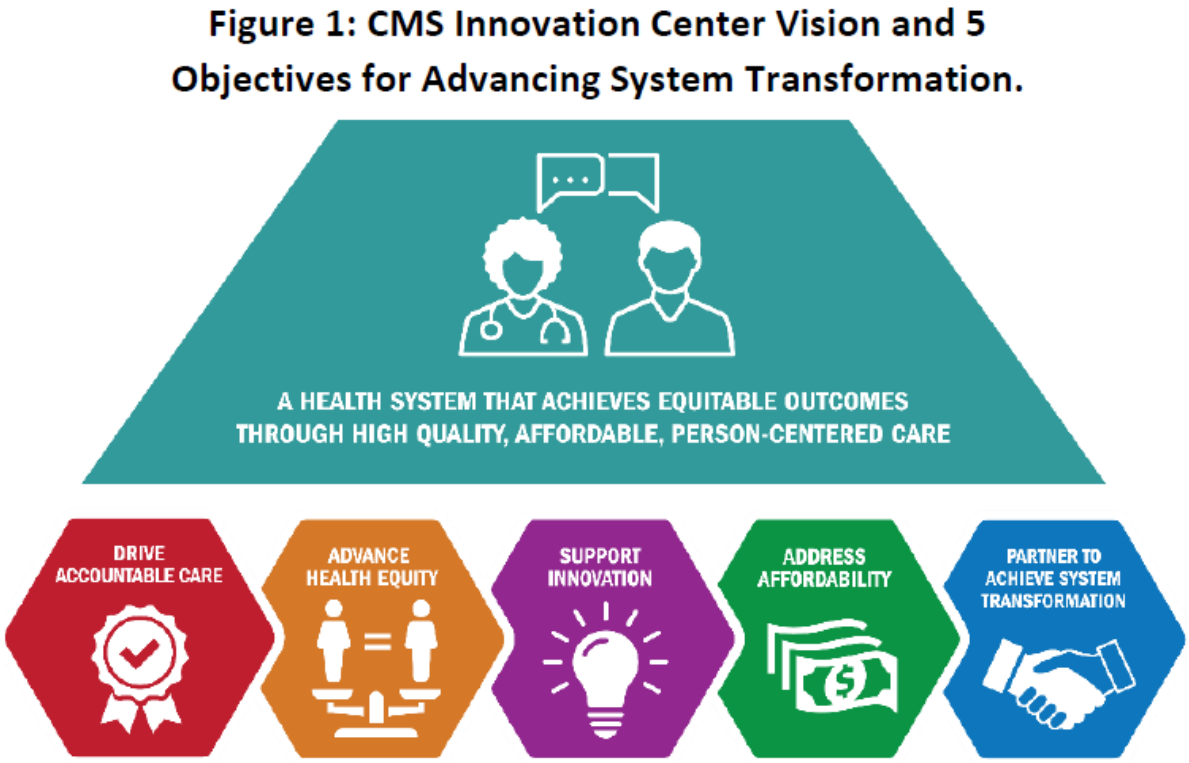
The U.S. health care system is a $4.5 trillion enterprise whose structure is based on decades of FFS incentives. Transforming to a high-value system requires strong evidence about new payment methods and their potential impact on expenditures and quality. The CMS Innovation Center was established to test new models of payment and service delivery to produce evidence and expand model tests that were expected to reduce spending without reducing quality or increase quality without increasing spending. The implementation of and evidence from these models was expected to drive value-based transformation throughout the health delivery system. There has been little focus on these spillover effects to the overall health care system. As displayed by the dotted oval in Figure 1, the CMS Innovation Center's evaluation efforts to date, as well as external studies, have focused mostly on each model's spending and quality impacts, a subset among these potential impacts. As described in a following section, the CMS Innovation Center has recently done an assessment of important changes in care delivery within the models.

CMS Innovation Center strategy refresh charted a new path for the next ten years of value-based care after taking stock of lessons learned from its first decade of experience developing, testing and refining over 50 models.[7] This new strategic plan sets forth a broad, multi-dimensional vision for a "*health system that achieves equitable outcomes through high quality, affordable, person-centered care"* through five strategic objectives, encompassing accountable care, health equity, care innovations, affordability, and partnering to achieve system transformation. These five objectives have been incorporated into the proposed expanded framework for evaluating the value of the CMS Innovation Center in advancing delivery system transformation (Figure 1).

Figure 1. Expanded Framework on Evaluating the Value of the CMS Innovation Center



Expanded Framework on Evaluating the Value of CMMI
A broader framework for considering the value of CMMI, including its role in testing and expanding new payment and delivery models and the spillover effect these may already have on transforming health care in the US.



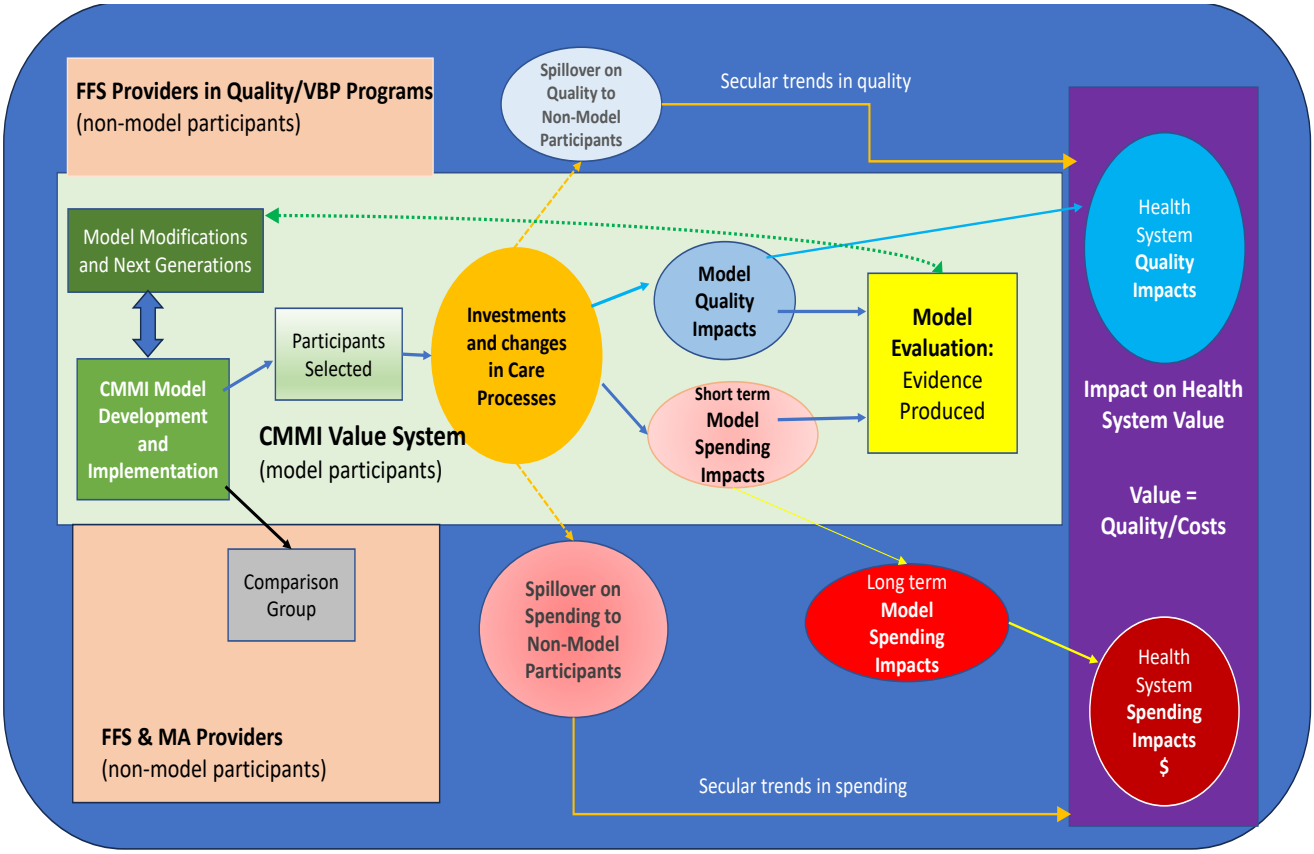
Source: Adapted from CMS Innovation Center 2021 Strategy Refresh – Putting All Patients at the Center of Care, www.cms.gov/priorities/innovation/about/strategic-direction

The CMS Innovation Center has now tested and evaluated models for twelve years. A review of the evaluations to date raises the important question of how we more comprehensively evaluate the impact the CMS Innovation Center has had on the entire health care system in order to support broader health system transformation. As we think about this impact, questions for consideration include:

- What are the short- and long-term effects of testing and evidence generation on quality and costs
- To what extent should spending be viewed in the short term (observed impact from the first few years of a model) vs. projections of the long-term spending trajectory
- What is the extent of health system "spillovers" (described below) from the CMS Innovation Center models
- What delivery system changes, such as increase in team-based care and access to virtual care, should be monitored and evaluated as measures of success for the CMS Innovation Center?

Building on Figure 1, a more detailed framework for evaluating the CMS Innovation Center's impact on health system value is presented in Figure 2. The green shaded box encompasses the care transformation changes, spending, and quality impacts of the models on its participants, both short- and long-term evidence of which is yielded in the model evaluation. The areas outside of the shaded box illustrate the spillover effects on care, spending, and quality associated with non-model participants and people with Medicare Advantage (MA) and those covered by Medicaid and commercial payers. Oval-shaped items are potential targets for assessment using quantitative or qualitative methods.

Figure 2. A More Comprehensive Analytic Framework for Evaluating the Value of the CMS Innovation Center



Source: Author's analysis

Ultimately, the observed impact on health system value derives from the direct and indirect effects of the CMS Innovation Center models on the overall health system, with a more expansive view of quality and success in driving towards accountable care and health system transformation. Below we provide a more detailed discussion of the key questions described above. Specifically, we discuss three related topics concerning the Innovation Center role and impacts: its responsibility for testing models and producing evidence, considering spending by the Innovation Center as an investment, and incorporating long term with short term impacts on net spending attributable to the Innovation Center's operations. In addition, we discuss the issue of model spillovers. Taken together, these issues provide a broader context for assessing the Innovation Center's net spending and other impacts on the health delivery system.

Testing - The first issue is that of testing strategy and what that means in terms of achieving the desired outcomes for the delivery system. Specifically, should each model test, particularly the early ones, be viewed in terms of their savings within the performance period of the model or in terms of their contributions to further testing and scaling that moves our health system toward our objectives? In 2010, accountable care organizations (ACOs), patient-centered medical homes (PCMHs), episode-based payment models and disease specific alternative payment models were relatively new ideas that needed to be tested. Arguably, if Congress knew exactly how the models should be constructed, they could have legislated them and required monitoring of the results. This would have been a more costly approach, so inherently, CMMI models reduce risk and expenses by allowing testing before scaling nationally. In contrast, it seems reasonable that Congress authorized the CMS Innovation Center because we did not have the evidence to know what these models should look like and how payment for them might be constructed, as well as how they should be evaluated, and lessons disseminated. If we are attempting to substantially change an enterprise the size of the health care system, with such a large potential impact on population health and the economy, a careful approach to evidence development is warranted. That is, an incremental and iterative testing, learning, and diffusion strategy may be prudent. In this case, the real value of many models is not only their immediate spending and quality impacts, but what they teach us about how the next model should be developed to move us closer to the evidence we need.

There are several examples of earlier models informing the design of their successors.[8] For example, evidence from early ACO models, like the Pioneer ACO model, informed and was directly incorporated into the Medicare Shared Savings Program. Other learnings from earlier ACO models, like Next Generation ACO, has led to successor models like ACO REACH. The Bundled Payments for Care Improvement Advanced (BPCI-A) Model is an example of a model built upon the evaluation and operational experiences of its predecessor, the Bundled Payments for Care Improvement Initiative (BPCI). The subsequent model addressed technical implementation issues in its predecessor, like introducing more accurate prospective pricing and using clinical episode service line groupings for which the participant organizations bear financial risk. Certain elements of the Comprehensive End-Stage Renal Disease Care (CEC) Model also became part of the ESRD Treatment Choices (ETC) Model and the Kidney Care Choices (KCC) Model, with an increased emphasis on care coordination for patients and the addition of this coordination for those with chronic kidney disease who haven't yet progressed to dialysis. Other models that benefited from knowledge gained from a preceding model test include Comprehensive Primary Care Plus (CPC+) and Primary Care First, which built on the lessons learned in the Comprehensive Primary Care Initiative.

One parallel to this approach is how clinical trials for new medicines are typically conducted. Clinical trials are often conducted in four phases. The trials at each phase have a different purpose and help scientists answer different questions. Researchers may first test an experimental drug or treatment in animals, then a small group of people. Later phases increase the size of the trial groups, increase the length of the study period, add control groups, and examine a wider set of outcomes to generate evidence for a determination of the success of the drug or treatment. Of course, the models the CMS Innovation Center implement do not necessarily

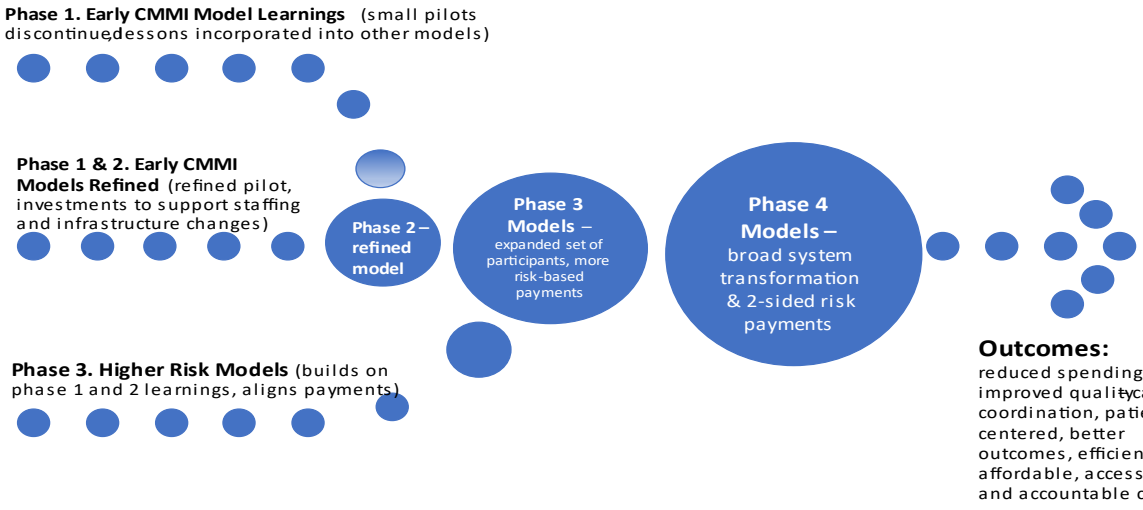
follow this exact path, the parallel is that considerable evidence and learning from early tests, including from models that are not continued, is used to develop new models that incorporate this wealth of learning from prior models. If the CMS Innovation Center testing is viewed in this context, early ACO models, for example, would be evaluated based on what they contribute to the larger tests (e.g., how did Pioneer contribute to ACO REACH or to modifying the Medicare Shared Savings Program), rather than their short-term impact on expenditures.

The Health Care Payment Learning and Action Network (HCPLAN) laid out a framework for alternative payment models (APMs) that provides a useful taxonomy for categorizing models and their evolution in stages, from a fee-for-service (FFS) payment system with no link to quality and value in category 1, adding quality and value in category 2, starting models with shared savings and some downside risk but still built on a FFS architecture in category 3, to population-based payments and integrated finance and delivery systems like global budgets in category 4.[9] Under this framework, earlier models may start to test and incorporate quality and value into care delivery redesign to support care coordination which later become fully integrated as part of global budget-based models.

Based on this framework, we can further conceptualize phases in the evolution of models based on the extent to which the models start to address delivery system transformation with increasingly higher levels of financial risk to align payment incentives with target outcomes and across a broader patient population. Figure 3 depicts how the CMS Innovation Center may first start with smaller pilots in phase 1 that may test care redesign with upfront investment payments to support investments into IT infrastructure, or staffing for care coordination; then incorporate refinements to care processes in phase 2; expand participation and engagement in care transformation in phase 3 with more financial risk payment arrangement options and performance-based payment incentives, and progress up to phase 4, where model participants work to achieve delivery system transformation across a broad patient population through two-sided financial risk arrangements or integrated population-based payments to most providers in a geographic area.

This stepped learning and model refinement process may take place over several phases as depicted in Figure 3, where later phases involve an expanded set of participants and often incorporate their feedback for feasibility and how payments need to be aligned to encourage delivery system transformation.

Figure 3 – The CMS Innovation Center Model Development Phases



Source: Author's Analysis.
Note: This figure depicts the CMS Innovation Center Model Development Phases similar to Clinical Trials.

An example of the phased progression of a model is the transition from Pioneer ACO (phase 1) to Next Generation ACO (phase 2) and Global and Professional Direct Contracting (GPDC) Model/ACO REACH models (phase 3) over more than a decade. These tested higher levels of financial risk than offered in the Medicare Shared Savings Program. See example in box below.

Example of the Phased Model Progression – CMS Innovation Center ACO Models

In this example, phase 1 of the development of the ACO model by the Innovation Center began with the Pioneer ACO model which first started in 2012-2016 and tested higher levels of financial risk as well as the option to transition to population-based health. In phase 1, this model targeted high performing health systems who already had experience with value-based care through care coordination and financial risk in managed care contracts. The Pioneer ACO model* started with 32 ACOs and ended with 25, with 9 ACOs leaving before the end of the 5-year model and opted instead to join the Medicare Shared Savings Program. The Pioneer ACO model was certified for expansion into the Medicare program in 2015.

Building on the learnings of the Pioneer ACO model, phase 2 continued the development of the ACO model with the Next Generation ACO model, tested from 2016-2021, with 62 ACOs participating over a 6 year model period, including 16 continuing Pioneer ACOs. The model tested stronger financial incentives, with higher two-sided financial risk (80% or 100%), more flexible payment options and care management tools. The model targeted a wider array of ACO types, primary care-based physician practices, hospital-affiliated, small as well as large ACOs that were successful in reducing gross spending reductions and improved population health management, but the model did not demonstrate net spending reductions.

Learnings from phase 2 were incorporated into phase 3 with the testing of the GPDC/ACO REACH models which expanded the reach of the models to a broader patient population and different types of providers as well as test different payment mechanisms. From 2021-2022, the GPDC voluntary model tested various financial options - partially capitated primary care payments and total capitation care payment, professional and global risk among 53-99 direct contracting entities (DCE) and sought to reduce provider administration burden through a focus on beneficiary experience and outcomes measures. The GPDC Model aimed to improve beneficiaries' experience of care by allowing increased access to telehealth and in-home skilled care for beneficiaries who are not otherwise eligible for home health services and were at high risk for hospitalizations. The model also sought to expand to new entrants to ACO participation, as well as those who serve a high-needs population including beneficiaries dually enrolled in Medicaid and Medicare. Although the evaluation of the model found an increase in net Medicare spending, it did also find reduced ambulatory care sensitive hospitalizations, except among ACOs targeting high-needs beneficiaries. By the end of the second performance year, 12 DCEs planned to exit the model and switch to MSSP or episode-based models or reorganize and consolidate with other ACOs for scale.

The model was redesigned as the ACO REACH model for 2023-2026 and expanded to include specialty providers in addition to primary care providers. The redesigned model required greater participation by providers in the ACO governance including patient/consumer representatives, a focus on health equity, and vetting of potential participants including monitoring for upcoding and risk score growth. Drawing upon the learnings from the GPDC 2022 evaluation report, in 2025 the ACO REACH model seeks to improve model sustainability, accuracy of financial benchmarks and strengthen operational flexibility. Many of these changes reflect refinements to the methodology for determining savings, especially as the models encompass the broader population including high needs beneficiaries.

In summary, with the learnings from each iteration of the ACO model and increased experience among participants with care transformation and financial risk, the model may advance to phase 4 to test innovations on a larger scale and payment incentives that are aligned with delivery system transformation efforts that address the different needs of patients and achieve accountable care.

* Most of the Pioneer ACO participants already had experience with essential elements of the model such as care coordination risk management, clinical integration, and health information technology, according to the model evaluation. However, the ACOs who did not achieve shared savings were more likely to drop out, due to lack of understanding of the ACO financial benchmarks and beneficiary alignment methodology, challenges with engaging providers and beneficiaries in an ACO context instead of traditional managed care. Even those that were able to progress towards population-based payments opted not to take on the higher risk of managing total cost of care.

Investment model vs. savings model – The iterative nature of testing value-based payment models suggests that a broader conceptualization for evaluating the CMS Innovation Center and its operations may be needed. One way to look at this issue is to consider whether the appropriate context for evaluating success should be considered at least partially in an investment framework rather than a savings framework. That is, current spending is an investment in the evidence and infrastructure needed to transform the delivery system to value-based care. Particularly in early phases of models, upfront investments necessary for startup can be significant. In addition, the testing that has occurred through the CMS Innovation Center can result in changes occurring in the delivery system and payment environment that can reasonably be thought of as necessary for long run improvements in value – both reducing spending and increasing positive health outcomes. The models may also identify mechanisms that are not effective and prevent further spending on disseminating and implementing them. In either case, a case could be made that CMS Innovation Center spending could be considered an investment. If considered as an investment in the context of a business balance sheet, the spending on many models would be an asset to be amortized over time rather than a current expense, which only confers value during that time period.

Long vs. short term spending impacts – A related question is to what extent short term spending impacts - whether on a model-by-model basis or in aggregate, should be the focus in evaluating the CMS Innovation Center, or whether the expected long term spending effects are more important. Transforming the delivery system to provide value-based care make take ten or more years and thus, potential and larger savings may occur further into the future. An ever-present factor in this decision is that we can calculate the short-term impacts, but the longer-term effects are more difficult to forecast. That is, we can know the outlays and estimate savings quickly after a set time period but projecting the trends in savings over a longer period is more challenging.

It should be noted that the criteria for expanding a model in the statute are:

"the Secretary determines that such expansion is expected to— (A) reduce spending under applicable [3] subchapter without reducing the quality of care; or (B) improve the quality of patient care without increasing spending;

(2) the Chief Actuary of the Centers for Medicare & Medicaid Services certifies that such expansion would reduce (or would not result in any increase in) net program spending under applicable subchapters; and

(3) the Secretary determines that such expansion would not deny or limit the coverage or provision of benefits under the applicable subchapter for applicable individuals."

Because longer-term spending effects are difficult to forecast, it is important that we monitor and assess shorter-term impacts that are reasonably related to them. In 2022, Medicare ($944 billion) and Medicaid ($805 billion) spending accounted for $1.7 trillion or about 40% of total national health expenditure. Transforming the health care system to value-based care takes time, involves collaboration with other payers and necessitates substantial changes and investments at the delivery system level. It will also require significant transformation of practice patterns, relationships among providers, new forms of provider organization, workforce deployment, innovation strategies and patient engagement. Thus, measuring these changes as important success factors would be needed since they would represent important intermediate outcomes on the road to reducing the rate of growth in spending and improved health outcomes.

Spillovers – Along with a wider set of outcomes to consider, it is critical to address the spillover of delivery system changes that produce savings to non-model providers and patients. Spillover effects occur when changes made to improve areas measured by value-based purchasing (VBP) programs extend to other areas or individuals not included in the VBP program. Spillovers might be narrowly defined to capture effects on Medicare, Medicaid, and CHIP beneficiaries who are not attributed to the CMS Innovation Center models or

more broadly to capture impacts on commercially insured or uninsured patients as well. In addition, evidence from Innovation Center models has been used to modify the MSSP, potentially enhancing its positive impacts.

Spillovers can occur indirectly as providers anticipate the expansion of value-based payment and start to prepare for it. It also occurs directly as participants in models spread the practices from the model to the care of non-model patients. Models can initiate peer-to-peer learning that occurs among the participants on care redesign and quality improvement that is also highly valued by the participants. In this way, the models can help nonparticipating providers gain experience for participating in Medicare and other payer's value-based programs. A recent survey found that alternative payment models seem to be having a widespread impact on moving the delivery system toward value-based care. The survey report concludes that, "Through its models, priorities, and messaging, CMS has helped to create broad buy-in for the shift to accountable care and has fostered private sector innovation and investment, cultivating the environment for new types of entities that are specifically designed for a value-based ecosystem."[10]

Not accounting for these spillovers results in an underestimate of the savings and impact on quality that may occur across the health system as a result of a specific model and across all models. Moreover, evaluation results that do not consider spillover effects may produce an underestimate of the models' quality and savings impacts relative to a comparison group whose trajectory on these factors improved due to the spillovers. In the next section we suggest a methodology to capture the broader effects of the CMS Innovation Center models on spending – including spillover effects.

Transforming the Delivery of Health Care – Impact of the CMS Innovation Center Models

It is important to remember that while reducing the rate of growth in spending is critical, improving quality and health outcomes is also a priority. There are several CMS Innovation Center models that resulted in quality improvements that may warrant shifting emphasis more toward this outcome compared to cost. The CMS Innovation Center has already begun to focus on enhancing and measuring quality improvements through the Quality Pathway.[11] The new Quality Pathway will drive a heightened focus on improving the quality of care by:

- aligning quality goals throughout model design.
- advancing use of person-centered measures of outcomes and experience, particularly the use of patient-reported measures; and
- designing evaluations to better assess the impact of models on patient-centered quality goals.

It is generally agreed that improving value through both slower spending growth and improved outcomes will require a substantial transformation in the way health care is delivered. Thus, it is important to track indicators that suggest whether or not such changes are occurring both within the CMS Innovation Center models and across the health system. The Innovation Center's vision for 2030 -- models accountable for the total cost and quality of beneficiary care -- has guided discussion at several public meetings of the Physician Focused Payment Model Technical Advisory Committee (PTAC). The Committee suggested a vision for these models including care features such as high touch primary care, primary care/specialty integration, well - coordinated care across all services, population health management and coordination with community services to address health related social needs.[12] This vision provides a useful guide to the types of transformation activities that might be monitored to assess progress.

The innovations introduced by the CMS Innovation Center through their models have already demonstrated substantial progress in reshaping healthcare for Medicare beneficiaries. Approximately 44% of traditional Medicare beneficiaries in 2021, enrolled in both Part A and B, were affiliated with a primary care provider responsible for both cost and quality of care. A 2022 survey found that 41.4 percent of physicians were in a practice that received at least some payment based on pay-for-performance, 39.6 percent received bundled payments, 25.5 percent received capitation, and 22.2 percent received shared savings.[13] Sixty-five percent of physicians worked in practices that received at least some revenue from an APM for care they provided (up from 63.1 percent in 2018). Table 3 highlights the growth in participation in alternative payment models by health care stakeholders.

The purpose of the CMS Innovation Center is to test innovative payment and service delivery models to ***reduce program expenditures….*** **while preserving or enhancing the quality of care** ….give preference to models that also improve the **coordination, quality, and efficiency of health care services.**

A recent review of the CMS Innovation Center models has produced evidence that participants across various models have consistently applied similar strategies, including care coordination, to deliver patient-centered care.[14] 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. These include team-based care, patient navigators and focused care management approaches. The implementation of value-based care models has further allowed for the customization of healthcare practices to address specific local needs. Importantly, the transformations in care delivery extend beyond the initiatives initiated by the CMS Innovation Center, indicating a broader positive impact on the healthcare landscape.

Value-based payment models not only have the potential to control the growth of healthcare spending but also promote innovations in care delivery that effectively address the unmet needs of individuals. These models, designed to tie provider payments to improved clinical performance and patient-centered outcomes, introduce innovative payment mechanisms that free providers from FFS incentives and specifically the pressure to generate high volumes of encounters and procedures. This flexibility enables healthcare organizations to tailor care around the specific requirements of patients. This may involve enhancing care coordination, enabling patients to receive care in their homes or communities, and reducing hospital admissions and readmissions, all aimed at enhancing the overall healthcare experience. Of particular significance are models that adopt population-based or prospective payments, as they provide even greater adaptability in care delivery. Such models allow for the allocation of resources and incentives to individuals and communities with more significant needs.

Table 3. Growth in Alternative Payment Models & Value Based Care Resiliency

Physician participation in Alternative Payment Models (APM)	In 2020, 66.8% of physicians who were employed in practices that received at least some revenue from an APM, up from 63.1% in 2018. Participation in at least one Alternative Payment Model (APM) saw a notable increase of 9 percentage points, rising from 57.6% in 2012 to 66.5% in 2020.
Hospital participation in shared risk arrangements	As of 2020, nearly a quarter of hospitals had received some of their net revenue through shared risk arrangements, indicating a financial stake in the outcomes of patient care. Additionally, close to 60% of hospitals had contractual agreements with commercial payers that linked payment to the quality of care provided. Hospital participation in shared risk payment models saw its most substantial increase, notably rising by 25.7%, during the COVID-19 pandemic. In contrast, the most significant advancements in securing commercial contracts tied to quality occurred prior to the onset of the pandemic.
Learning and Action Network (LAN) APM category	LAN APM category 3+4 payments experienced an overall increase from 2017 to 2021. The most substantial growth in these payments occurred in the domains of Medicare Advantage and Medicaid. Category 3 (APMs Built on FFS Architecture) increased most dramatically within Medicaid, from 17.4% in 2018 to 32.3% in 2021. Category 4 (Population-based Payments) increased most significantly within Medicare Advantage, from 10.3% in 2017 to 25.3% in 2021.
Accountable Care Organization (ACO) participation	Over the decade from 2011 to 2021, the number of ACOs increased from 64 to 1,010, or almost 1500%. Concurrently, the count of individuals covered by ACOs rose from 2.7 million to 32 million, an increase of almost 1100%. In 2020, 55% of physician practices reported participating in at least one type of ACO. While the percentage of physicians in practices that were involved in a single ACO type declined from 19.4% in 2018 to 17.4% in 2020, participation in multiple ACO types increased from 34.4% in to 37.5%. Physicians in practices owned by other physicians were significantly less likely than those in hospital-owned practices to indicate that their practice was engaged in medical homes and ACOs. Providers in value-based payment models shifted care delivery modes without revenue losses. Prior to COVID, 35% of hospitals reported participating in an ACO.

Source: MITRE Corporation, Internal presentation: Center for Medicare and Medicaid Innovation Transformation Strategy, April 11, 2023

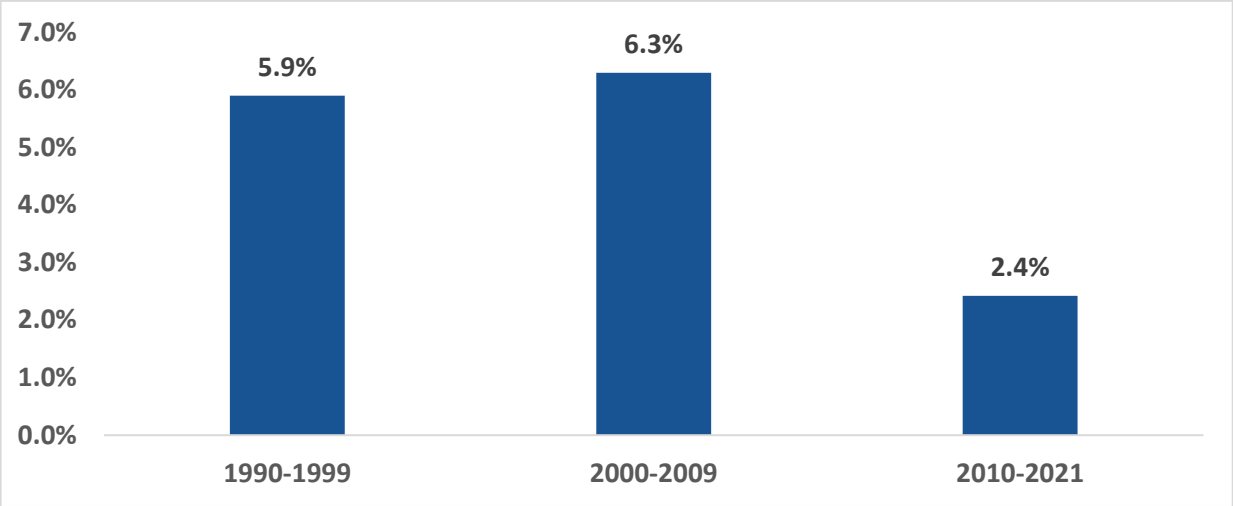
The CMS Innovation Center models are also committed to enhancing equity and access. Core pieces of the current strategy include embedding equity in design (payment, health equity plans, HRSN screening and referral), increasing safety net provider participation, and data collection efforts. Innovation models have gone above and beyond their initial requirements by addressing social determinants of health (SDOH), thereby assisting millions of beneficiaries in addressing health-related social needs. For example, 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 HRSNs through screening, referral, and community navigation services would affect health care costs and utilization. The model improved quality related to hospital use, including fewer avoidable emergency department visits. AHC award recipients explored different ways to independently fund, expand, and/or adapt their model-related work after the model ended, enhancing the potential for long-term impact. Extending post-model impacts, CMS subsequently used the five core

domains of the AHC screening tool to incorporate a measure assessing screening for social drivers of health in the Hospital Inpatient Quality Reporting Program and the PPS-Exempt Cancer Hospital Quality Reporting Program. Through their sustainability plans, AHC award recipients explored different ways to independently fund, expand and/or adapt their model-related work after the model ended based on lessons learned, their community needs, and their own available resources.

Moving Forward with the Framework - Estimating Impacts

Going forward, it will be important to consider how policy might be informed by both quantitatively and qualitatively assessing the CMS Innovation Center impacts on spending and quality beyond just those that occur within models. In the past decade Medicare spending growth has exhibited a noteworthy deceleration in the rate of growth. *Per capita Medicare spending in nominal dollars increased from $10,356 in 2010 to $13,418 in 2021, at an annual growth of 2.4%, a substantially lower rate of growth than in previous decades (Figure 4).* CBO has estimated that Medicare spending from 2010 – 2020 was $431 billion lower than was projected by them in August 2010.[15]

Figure 4: Change in Per Capita Medicare Spending



Source: Author's calculation using CMS data

It is reasonable to hypothesize that at least some of this spending difference is due to the CMS Innovation Center models and the Medicare Shared Savings Program, both of which were initiated during most of this time period and changed the public discussion around delivery system reform.[18] On the other hand, estimating what impact the CMS Innovation Center has had - distinct from multiple other non-model factors and secular trends that have likely also affected the spending trend - is extremely difficult. In this section we consider these other factors and suggest both quantitative and qualitative methods that might shed some light on the contribution of the CMS Innovation Center to these savings as well as to indicators of changing healthcare quality and value.

Potential Factors Affecting Slowdown in the Growth of Medicare Spending

There has been considerable discussion of what other non-model factors may have been the significant drivers of the slowdown in the rate of growth in Medicare spending.[16-20] Potential drivers of this slowdown include changes in payments over the years and the application of sequestration, among others. Specifically, these potential factors may include but not limited to:

Policy Changes

1. Reductions in the growth in Medicare provider payment rate through the Affordable Care Act (ACA)
2. Reductions in Medicare payments to Medicare Advantage (MA) plans through the ACA
3. Sequestration under the Budget Control Act of 2011
4. Statutory penalty based value-based purchasing (VBP) programs such as the Hospital Readmissions Reduction Program (HRRP) and Hospital Acquired Conditions Reduction program (HACRP)

Other potential factors

5. Major decrease in cardiovascular events (such as heart attack and stroke)
6. Healthier baby boomer cohort entering Medicare as they become age eligible.

While these factors have undoubtedly played a crucial role, it is reasonable to hypothesize that some of the spending difference may be attributed to the CMS Innovation Center models as well as MSSP and the delivery changes they have facilitated. As discussed earlier, these models likely have had both direct and spillover impacts on care transformation, spending, and quality. The value-based models themselves may have an interactive and synergistic effect in how the other factors impact spending and quality. For example, in a purely FFS environment, reductions in payment amounts may not have their full effect on spending reductions if providers partially or fully offset them with increased volume. By focusing on value, the alternative payment models in the field may reduce the incentives for increasing volume. Likewise, technological advances and new evidence in cardiovascular care and other major diseases may have been adopted differently without the value-based models in the field. Fee for service payment may incentivize treatment regimens that increase revenue as opposed to adopting more cost-effective methods. In addition, the CMS Innovation Center's Million Hearts: Cardiovascular Disease Risk Reduction Model may have also played an important role. This initiative focuses on preventing heart attacks and strokes by identifying and addressing cardiovascular disease risk factors. In the following section, we describe ASPE's approach to estimating the independent effect the Innovation Center models have had on spending and claims-based quality measures.

The Impact of the CMS Innovation Center Models on Medicare Spending and Quality: The ASPE Study

The previous research referenced above has provided estimates of the impact of many factors that may have played a role in the Medicare spending slowdown. These factors include policy changes and other potential factors related to improved health and better treatment of cardiovascular risk factors. Buntin et al. found a marked shift in the annual growth rates of per-beneficiary spending in Medicare Parts A and B.[16] They observed a decline from 3.3% during the period of 2008-2011 to -0.1% in the 2012-2015 period, followed by a slight increase to 1.7% in 2016-2018. Their research estimates that changes in payment rates and demographic shifts explain approximately 44% of the variance in growth rates between the first and second periods, and 63% between the first and the third periods.

These findings underscore the significant impact of policy adjustments and demographic trends on healthcare spending. Apart from changes in policy and patient demographics, other factors may have contributed to this slowdown. For example, treatment of certain cardiovascular risk factors improved significantly, reducing expensive cardiovascular acute hospitalizations and post-acute care (e.g., stroke, heart attack). Cutler et al. estimated that increased medication uses for cardiovascular risk factors (hypertension, high cholesterol, and diabetes) explained 51 percent of the reduction in cardiovascular disease events.

In this methods section, we describe potential quantitative and qualitative approaches to assessing the broader impacts of the CMS Innovation Center on spending, quality, and delivery system transformation. We detail ASPE's current research for estimating these impacts among beneficiaries in the traditional Medicare program – including all such beneficiaries whether or not they were attributed to alternative payment models.

Quantitative Analyses

In this section, we describe the methodology we are currently employing for estimating the impact of the CMS Innovation Center models on both spending and quality measures in Medicare FFS populations at the beneficiary and geographic level. ASPE's method will take advantage of the fact that the intensity of the CMS Innovation Center model participation varies both over time and between geographic areas. We may extend this analysis in the future to include the Medicaid and Medicare Advantage (MA) populations.

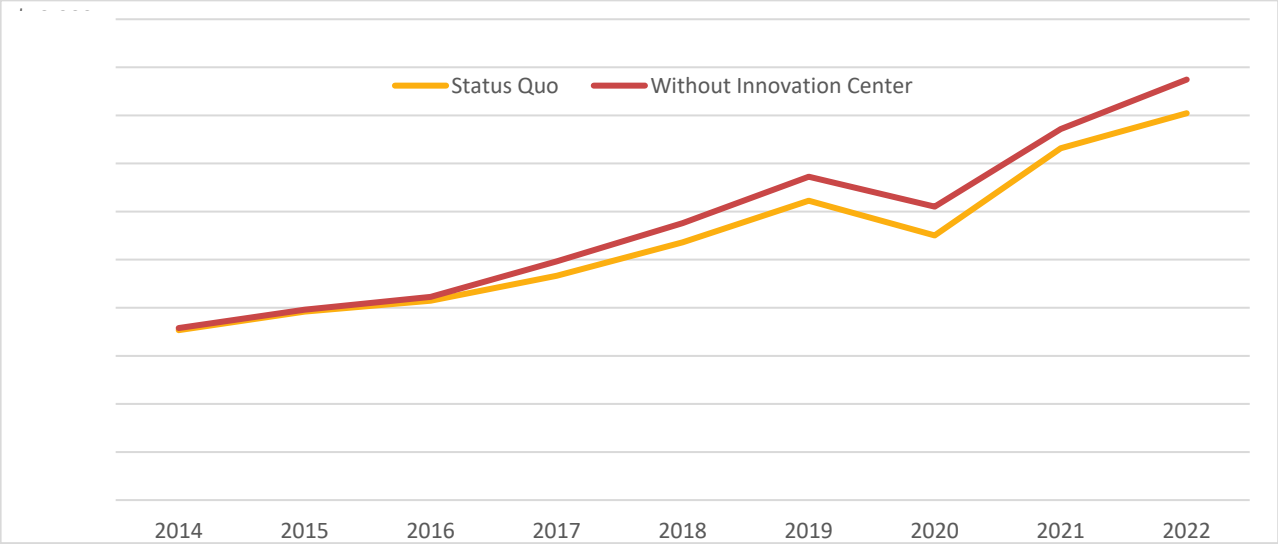
In the first stage of the analysis, we will estimate the impact of Innovation Center model penetration at the county level on the spending and a variety of claims-based quality outcomes. Our analyses are designed to examine changes in these outcomes over a 15-year period – 2007-2022. The goal will be to identify the relationship between market-level penetration of CMS Innovation Center Models and these outcomes. Data for this analysis will be at the beneficiary-year level, as well as at the market-year level. It is important to note that the outcomes are calculated for all FFS beneficiaries whether they were attributed to a model or not. Thus, the estimated impacts include the effects the models had on attributed beneficiaries as well as on non-attributed beneficiaries in the geographic area (spillover effects).

Researchers face a number of challenges in answering these questions. First, it can be challenging to correctly measure model penetration. While penetration of CMS Innovation Center models is changing over time, so are other factors that can affect outcomes including beneficiary demographics, Medicare Advantage (MA) penetration, MSSP penetration, coding practices, market-level socioeconomic conditions and horizontal and vertical integration. These factors must be accounted for in order to isolate the impact of the Innovation Center models. Additionally, effects of model penetration may have changed over time, as new models are introduced, others are changed, and others conclude.

Our analyses address these challenges in several ways. First, we will use several statistical models capable of estimating the impact of the market level model penetration variables on the spending and quality outcomes while adjusting for confounding factors that potentially bias the results. Second, these models are estimated both at the beneficiary level and geographic levels. Finally, we use several constructions of the market level model penetration variables to test the nature of the relationship between them and the outcomes of interest both across geographies and over time. The convergence of results from the different models will be a test of the validity and robustness of the estimates.

The model will then be used to calculate what beneficiary and market-level outcomes (such as spending) would look like had Innovation Center models not been implemented (the counterfactual). We will construct trends in spending and quality measures and predict how those trends might have looked absent the CMS Innovation Center models. The observed trend in outcomes will then be compared with the counterfactual to provide an estimate of the Innovation Center's impact. Figure 5 illustrates with a hypothetical example how trends in beneficiary-level spending may have been higher if models had not been implemented by the Innovation Center.

Figure 5. Hypothetical example: Beneficiary spending with the CMS Innovation Center (observed, status quo) vs. without the Innovation Center (the "counterfactual")



Qualitative Analysis

Getting better estimates of the impact the CMS Innovation Center models are having on spending and quality measures in the healthcare system as a whole is a critical piece in evaluating overall success of the Agency's efforts. A more complete picture, however, will require a better understanding of the delivery transformation changes taking place that may be leading to long-term, sustainable changes in spending and quality, which can only be obtained directly from health care system participants. Qualitative methods that could elicit these responses may prove valuable in understanding potential spillover effects. For example, key informant interviews, surveys or focus groups with stakeholders might be structured to include health professionals, health system administrators, purchasers, and insurers. In implementation science, evaluations also assess the degree of adoption of innovations or the characteristics of successful adopters. This could address the key policy question whether payment incentives alone are sufficient to drive changes in care delivery. These qualitative methods could look for responses to questions in three broad areas:

A. *How have the CMS Innovation Center models and Medicare Shared Savings Program informed care transformation and changes in behavior among participants?*
    - What changes in care processes and investments are taking place because of, or in anticipation of, the CMS Innovation Center models?

- What changes are taking place because of direct participation in the CMS Innovation Center model?
- Did participation in the CMS Innovation Center model increase productivity in your organization in the short term, or do you anticipate productivity gains over a long-time frame?
- What are the characteristics of adopters of care transformation processes?

B. *How do participants view participation in the CMS Innovation Center models?*
   - In your assessment, how much of current knowledge in the field and your organization about value-based purchasing and ability to participate is a result of the CMS Innovation Center and its models?
   - Longer term effects on patient care and business models - once a model ended, what changes in practice were maintained?

C. *How has participation impacted care delivery and behavior for patients not aligned to the CMS Innovation Center model?*
   - To what extent has participation in the CMS Innovation Center model changed the way care is delivered to all patients, including those not in a model?
   - To what extent have Innovation Center models provided a foundation for models sponsored by private payers?
   - How much investment did you make in your organization to implement these changes (transitioning to integrated health records and training physicians and other healthcare providers)? To what extent is this driven by current or expected demand for value-based care from other payers?

The proposed scope of qualitative research could follow up on previous research efforts in this area. For example, The Dartmouth Institute and University of California at Berkeley were funded by philanthropy to field the National Survey of Accountable Care Organizations, which conducted 4 survey waves from 2012 to 2017/18 and many papers on the early adoption of Accountable Care Organizations (ACOs) and the characteristics of early adopters.[21] Since 2015, the Health Care Payment and Learning Action Network (HCPLAN)[13] has surveyed the health care industry on progress towards APM goals across payers by type of APM risk and payment category. The most recent 2023 survey[22] indicated most respondents felt APMs will improve quality and care coordination, as well as affordability. To assess reaching its 2030 accountable care goals[16], the network has further added 5 measurement tracks to its Accountable Care Curve which include payment reform, quality, data and infrastructure, multi-stakeholder alignment and design, and health equity advancements. CMMI could also incorporate these broad research questions into model evaluations or take a cross-model approach to assess the overall impact of CMMI models in the field on care transformation, similar to its recent synthesis of model evaluations.

Discussion and Conclusion

Through testing alternative models of payment and care delivery, the CMS Innovation Center's 2030 strategy is to provide the evidence needed to transform the health care system to one that provides high value care. Under current statutory authority, the CMS Innovation Center models can be expanded if they demonstrate they have reduced spending by the CMS Office of the Actuary, or improved quality (without increasing spending) which may include care coordination, clinical outcomes, patient- centeredness or efficiency. But beyond this formal expansion process, the CMS Innovation Center has already had an impact on transforming care, improving health equity, and enhancing value for Medicare enrollees. It has the potential to have ongoing favorable impacts across the entire health care system, beyond the Medicare program. Therefore, it

is critical to develop a comprehensive framework for evaluating the success of the CMS Innovation Center, what success looks like, and desired impacts on the broader health care system. Transforming the health care sector -- a $4.5 trillion enterprise -- is a massive undertaking. It requires high quality evidence on how to structure payment to provide appropriate financial incentives for moving to a vision of high value care for all payers. In addition, evidence is needed for health care providers to use in responding to those incentives to make appropriate investments and modify care processes. During its first 12 years of operation, the CMS Innovation Center has made progress at improving health care delivery, contributing to a historic reduction in Medicare costs, and producing much needed evidence to support additional change. By demonstrating that large-scale models such as ACOs could be implemented on a national level, maintain participation, and be systematically evaluated, is a significant achievement.

An expanded conceptual and comprehensive analytic framework (see figures 1 and 2) for evaluating the combined success of these efforts would allow us to weigh existing recent impacts and potential future effects of the CMS Innovation Center models beyond their immediate spending impact. In this paper, we have discussed several ideas for such a framework. First, given the mission of the CMS Innovation Center, it is critical to place more emphasis on its ***role in testing and refining models to produce the evidence we need to transform the healthcare system.*** That is, how do we credit the information produced by early models for what they provide as necessary steps along the way to producing the evidence we need. Similarly, it is important to emphasize that ***net spending on these models is an investment in future value for the health care system*** and find ways to project those future gains and reap them across other payors. This is especially true where gross savings have been achieved but reduced by advanced payments made to participants to make necessary investments in infrastructure and changes in care delivery processes.

The framework should quantify and qualitatively describe the impacts that might already have occurred and be attributable to the CMS Innovation Center models. As summarized in this paper, changes in care delivery are being implemented in the CMS Innovation Center models and beyond. Moreover, ***due to spillover effects, these efforts have likely had a much greater impact on recent spending trends than can be calculated through estimates of model-specific savings.*** We have described ASPE's methods for estimating the full impact of the CMS Innovation Center's models on spending and quality for beneficiaries in the traditional Medicare program. We have also described potential qualitative methods for examining these spillover effects and care transformation efforts and propose that these be incorporated into a broader evaluation framework.

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