

ISSUE BRIEF #1

Center for Medicare and Medicaid Innovation: Findings from Medicare Models To-Date

Jennifer Podulka and Yamini Narayan

June 2021

Executive Summary

For more than a decade, the Centers for Medicare & Medicaid Services' (CMS's) Center for Medicare and Medicaid Innovation—the Innovation Center—has been implementing and testing models to determine if new approaches to providing care to beneficiaries could reduce Medicare, Medicaid, and Children's Health Insurance Program (CHIP) program spending, improve the quality of care, or both. Health Management Associates (HMA) examined the progress the Innovation Center has made to date in fulfilling this mission specifically for the Medicare program. We reviewed publicly available information posted by the Innovation Center, independent evaluations of the models, and Congressional legislations and reports to catalog characteristics of the 172 Medicare models that the Innovation Center has implemented so far. The full results of this review are available in a companion catalog available [here](#). A unique characteristic of our review is the description of the 110 individual Medicare models included under the umbrella of the Round One and Two Health Care Innovation Awards and State Innovation Models, which are typically reported in aggregate in other studies. The results that follow illustrate various characteristics of the Innovation Center Medicare models, such as the length of performance, geographic scope, and evaluation results.

Overall, the results from the Innovation Centers' first decade show minimal success in fulfilling its statutorily defined objectives. Despite spending more than \$10 billion overall and testing hundreds of models, only four models have met the statutory criteria of lower spending or improved quality and been expanded—or introduced—to the Medicare program nationwide. With a new Administration and Innovation Center Director, along with the start of the next decade of \$10 billion in funding, now is an opportune time to look ahead and consider how the Innovation Center's approach might be adjusted to improve the chances for model success. With this in mind, throughout the issue brief we note questions raised by our various findings that policy makers may consider as they plan for the next phase of CMMI's work. We plan to discuss these questions in more depth in a subsequent issue brief that will offer recommendations on the future outlook for the Innovation Center.

This brief was supported by Arnold Ventures.

Acknowledgements

The authors would like to thank Arnold Ventures for supporting this work and Amber Burkhart, Hunter Kellett, Erica Socker, and Alexandra Spratt for their guidance and support throughout the project. We also express our appreciation to Jonathan Blum for his contributions to this issue brief; to Samantha Di Paola, Amanda Glickman, Elaine Henry, and Cami McIntire for their assistance with summarizing information about Innovation Center models for the companion catalog; to Matt Hudson for graphic design support; and Matt Roan for comments on a draft of this issue brief.

Introduction

Throughout its history, the Centers for Medicare & Medicaid Services (CMS) conducted testing of demonstration models across different departments within the organization.¹ Statutory limits to the Secretary's authority to modify the Medicare program based on findings from these tests meant that models with favorable results were generally only implemented on a nationwide basis if Congress included these changes in legislation.²

In 2010, the Affordable Care Act (ACA) sought to speed up the testing and program-wide adoption of models by establishing CMS's Center for Medicare and Medicaid Innovation (CMMI)—the Innovation Center. The ACA called for the Innovation Center to test “innovative payment and service delivery models to reduce program expenditures . . . while preserving or enhancing the quality of care” provided to people who receive benefits from Medicare, Medicaid, or the Children's Health Insurance Program (CHIP).³ The statute provides the Secretary of Health & Human Services (HHS) with authority under section 1115A of the Social Security Act to expand through rulemaking the duration and scope of a model being tested, including implementation on a nationwide basis.⁴ To exercise this authority through rulemaking:

- the Secretary must determine that an expansion would either
 - reduce spending without reducing quality of care, or
 - improve quality of care without increasing spending,
- CMS's 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.⁵

The statute also requires that the Secretary terminate or modify CMMI models before testing is completed if the Secretary determines that the model is not expected to fulfill these spending and quality goals (and CMS's Chief Actuary agrees with the spending expectations).⁶ In other words, if initial testing results indicate that a model is **not** expected to improve the quality of care without increasing spending or **not** reduce spending without reducing the quality of care, then

¹ The Secretary of the Department of Health and Human Services had authority to initiate demonstration projects under Section 402 of the Social Security Amendments of 1967. This authority generally was interpreted to limit agency-initiated demonstrations to changes in Medicare payment policy or to experiment with changing the basis of provider payments, such as prospective payment systems, bundled payments, or basing a portion of payments on improvements in quality. Such changes could not decrease the quality of care for beneficiaries.

http://medpac.gov/docs/default-source/reports/Jun10_Ch01.pdf?sfvrsn=0

² “Enhancing Medicare's ability to innovate.” Centers for Medicare and Medicaid, accessed May 28, 2021,

http://medpac.gov/docs/default-source/reports/Jun10_Ch01.pdf?sfvrsn=0

³ “H.R. 3590- Patient Protection and Affordable Care Act.” 111th Congress (2009-2010), accessed May 28, 2021,

<https://www.congress.gov/bill/111th-congress/house-bill/3590>

⁴ “Compilation of the Social Security Laws: Center for Medicare and Medicaid Innovation.” Social Security Administration, accessed May 28, 2021, https://www.ssa.gov/OP_Home/ssact/title11/1115A.htm

⁵ “Compilation of the Social Security Laws: Center for Medicare and Medicaid Innovation.” Social Security Administration, accessed May 28, 2021, https://www.ssa.gov/OP_Home/ssact/title11/1115A.htm

⁶ “Compilation of the Social Security Laws: Center for Medicare and Medicaid Innovation.” Social Security Administration, accessed May 28, 2021, https://www.ssa.gov/OP_Home/ssact/title11/1115A.htm

CMMI has a responsibility to make changes to the model to improve the likelihood of a successful outcome or cease operating the model.

The statute provides dedicated funding for CMMI for activities as follows:

- \$5 million for fiscal year 2010,
- \$10 billion in total for fiscal years 2011 through 2019, and
- \$10 billion for each subsequent 10-year period beginning with fiscal year 2020.⁷

The statute also requires that the Secretary evaluate each CMMI model and “make the results of each evaluation ... available to the public in a timely fashion.”⁸ Additionally, the Secretary must issue a report to Congress every other year that describes CMMI’s models including:

- the number of Medicare and Medicaid beneficiaries participating in the models,
- payments made by Medicare and Medicaid for services for these participating beneficiaries,
- any models chosen for expansion, and
- the results from model evaluations.^{9,10}

The bi-annual report to Congress must also include recommendations that the Secretary determines are appropriate for legislative action to facilitate the development and expansion of successful payment models.¹¹

Methodology

Health Management Associates (HMA) reviewed information about Innovation Center models that was made publicly available by CMMI through May 11, 2021. Primary data sources include model summaries, CMS Reports to Congress, model evaluations, and legislation pertaining to CMMI models. We cataloged this information in a model catalog available [here](#) according to the characteristics listed in Appendix A. For each characteristic, we either used the same potential values that CMMI used in published information (e.g., urban versus rural, other payers) or assigned our own categories based on our review of the same information (e.g., we used “Part A” to describe hospital-based services). Throughout the data collection and review process, we encountered inconsistencies in the information available about the models across many characteristics, such as start and end dates, number and location of testing sites, and inclusion of other payers. Data sources include the website pages that CMMI posts for most models;

⁷ “Compilation of the Social Security Laws: Center for Medicare and Medicaid Innovation.” Social Security Administration, accessed May 28 2021, https://www.ssa.gov/OP_Home/ssact/title11/1115A.htm

⁸ “Compilation of the Social Security Laws: Center for Medicare and Medicaid Innovation.” Social Security Administration, accessed May 28, 2021, https://www.ssa.gov/OP_Home/ssact/title11/1115A.htm

⁹ “Compilation of the Social Security Laws: Center for Medicare and Medicaid Innovation.” Social Security Administration, accessed May 28, 2021, https://www.ssa.gov/OP_Home/ssact/title11/1115A.htm

¹⁰ To date, CMMI has issued reports to Congress for 2012, 2014, 2016, and 2018. The 2018 report was released in July 2019. The 2020 report is yet to be released.

¹¹ “Compilation of the Social Security Laws: Center for Medicare and Medicaid Innovation.” Social Security Administration, accessed May 28, 2021, https://www.ssa.gov/OP_Home/ssact/title11/1115A.htm

documents listed on those pages, including independent evaluator reports, fact sheets, and others; and references to CMMI models in Congressional legislation. We generally resolved inconsistencies by selecting the description from the most recently published source. In situations where data inconsistencies were especially challenging or where we were unable to locate specific information, we have noted that data were “not readily available” or “missing.”

HMA opted to catalog and assess the individual models included in the various Health Care Innovation Awards (HCIA) and State Innovation Models (SIM) efforts, where these models included Medicare. CMMI and others tend to report HCIA and SIM results in the aggregate. There are advantages and disadvantages associated with either choice. HMA chose the individual model option because one of the four CMMI models that was determined to be successful enough to be eligible for expansion nationwide was an HCIA model, HCIA and SIM models account for a significant share of Innovation Center models that include Medicare and total model spending, and HCIA and SIM individual model design and evaluation results include some lessons learned that provide guidance on the future direction of the Innovation Center.

Results

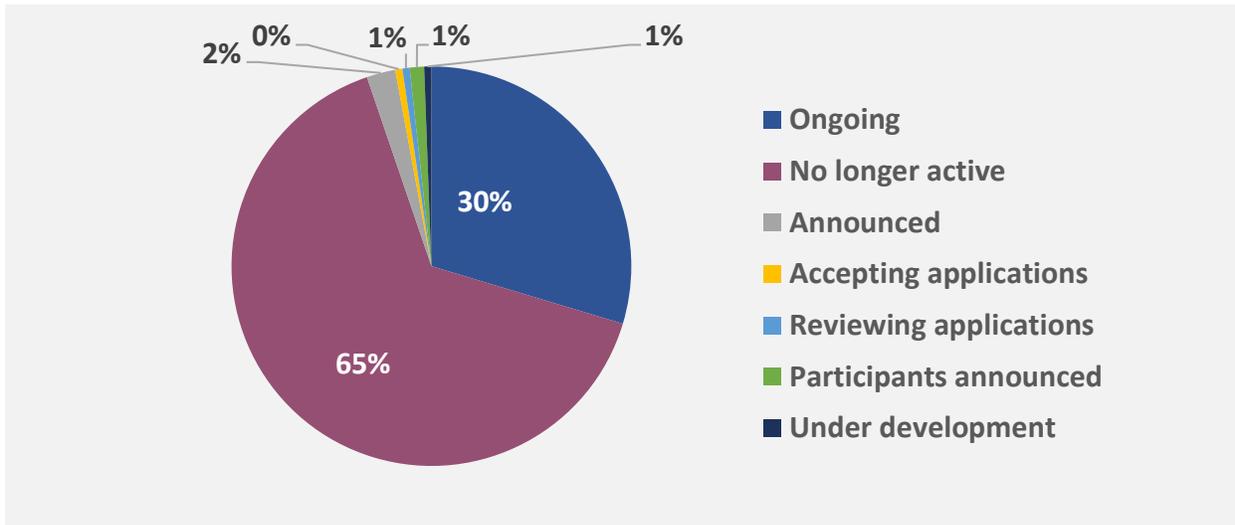
HMA identified a total of 172 CMMI models that included Medicare through May 11, 2021.¹² Summaries of the share of Medicare models by various characteristics follow. Note that all percentages refer to the number of models that pertain to each characteristic; we did not weight the models by size, scope, spending, relative importance, or other characteristic.

Status as of May 11, 2021

We cataloged CMMI models that focus on Medicare in any stage from newly announced to fully completed that appear in Innovation Center records up through May 11, 2021. Throughout this issue brief, percentages presented are inclusive of models that focus on Medicare that are past, present, and announced, except where specifically noted. More than two-thirds of CMMI models that include Medicare (65%) have ended (Exhibit 1). Nearly a third of models that focus on Medicare are “Ongoing,” (30%) meaning that performance years are underway, or evaluators continue to analyze results from those performance years. Five percent of models that focus on Medicare are in one of the stages of starting up: under development, announced, accepting applications, reviewing applications, and participants announced.

¹² Nine of these models began before CMMI was established in 2010. Responsibility for the operation and evaluation of these models was transferred to CMMI from other CMS divisions. These models include 1) Frontier Extended Stay Clinic, 2) Medicare Acute Care Episode (ACE), 3) Medicare Coordinated Care, 4) Medicare Health Care Quality, 5) Medicare Hospital Gainsharing, 6) Nursing Home value-based purchasing (VBP), 7) Physician Hospital Collaboration, 8) Private For-Profit Demo Project for Programs of All-Inclusive Care for the Elderly (PACE), and 9) Rural Community Hospital Demonstration.

Exhibit 1. Status of Innovation Center models that include Medicare



Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

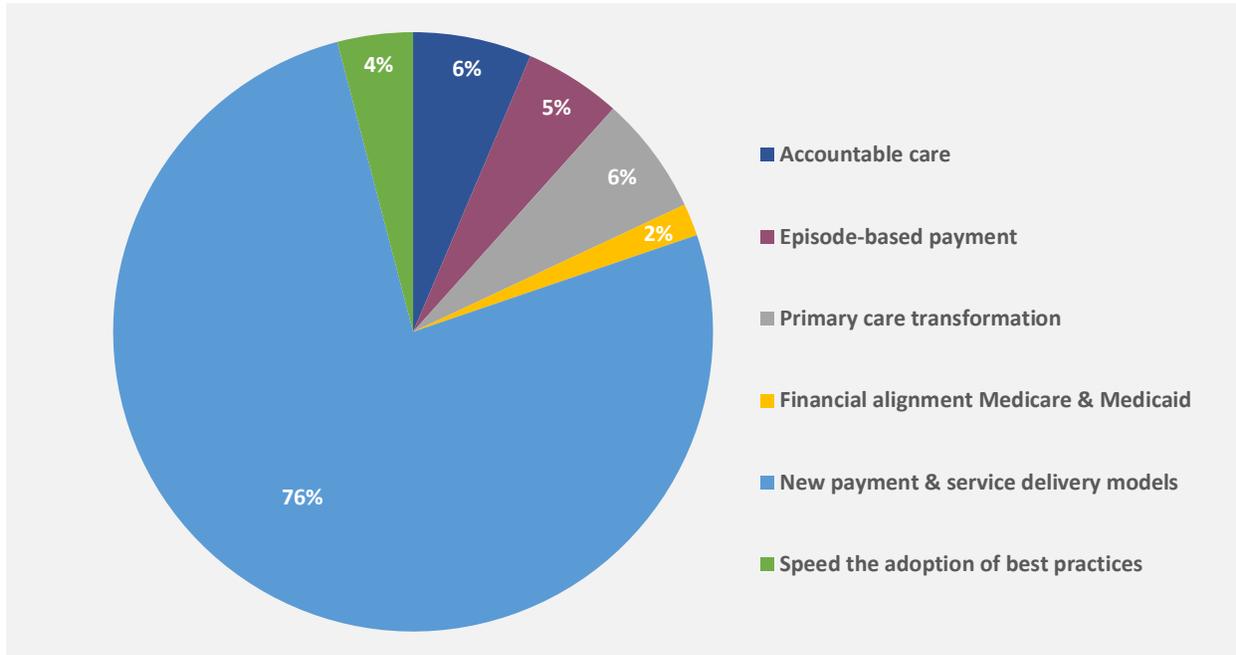
Many more Medicare models (30%) are currently operating than are planned to begin (5%).

What share of CMMI’s resources will ongoing and new models consume?

Will there be sufficient resources to initiate new model priorities?

Model categories

CMMI organizes models into seven categories; we excluded models that fall into the Medicaid & CHIP category. Most CMMI models that focus on Medicare (76%) fall under the “New Payment and Service Delivery” category (Exhibit 2). Other models that focus on Medicare are evenly distributed (4% to 6%) between “Accountable Care,” “Episode-based Payment,” “Primary Care Transformation,” and “Speed the Adoption of Best Practice,” except for “Financial Alignment of Medicare and Medicaid,” which accounts for two percent of models that include Medicare.

Exhibit 2. Categories of Innovation Center models that include Medicare

Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

The most common Medicare model category by far is “New Payment and Service Delivery” (76%).

Is this the right portfolio mix for CMMI models?

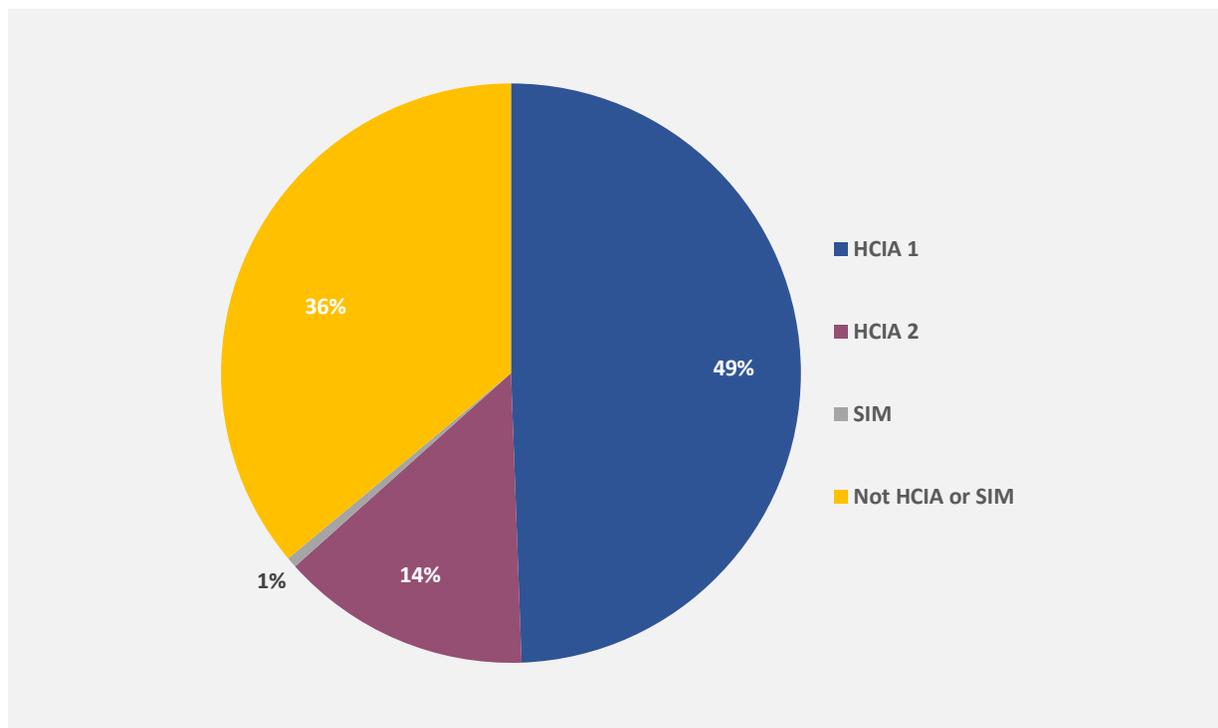
Health Care Innovation Awards (HCIA) and State Innovation Models (SIM)

CMMI has operated several rounds of umbrella models—Health Care Innovation Awards (HCIA) and State Innovation Models (SIM)—that each included multiple individual models. CMMI and others typically report results for these umbrella models in the aggregate. We chose to report the individual models that fall under HCIA and SIM these represent a significant share of Innovation Center models that include Medicare and total model spending, the ideas tested continue to be suggested as potential Medicare reforms, one of the four models certified by OACT for expansion to the full Medicare program was an HCIA awardee, and the evaluations of six additional HCIA models that focus on Medicare found that these models decreased spending while improving quality.

Most of the CMMI models that include Medicare (49%) through May 11, 2021 were HCIA Round One models (Exhibit 3). Thirteen percent of models that focus on Medicare were HCIA

Round Two, one percent were SIM, and 36% did not fall into an HCIA or SIM category.¹³ CMMI included all HCIA and SIM models in the “New Payment and Service Delivery,” accounting for 126 of the 146 models in that category.

Exhibit 3. Health Care Innovation Awards and State Innovation Models that include Medicare



Note: HCIA 1 (Health Care Innovation Awards, Round One), HCIA 2 (Health Care Innovation Awards, Round Two), SIM (State Innovation Models). Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

From about 2012 to 2015, HCIA Round One funded more than \$826 million in awards to organizations.^{14,15,16} (Models began on various dates in 2012 and 2013, and CMMI granted no-cost extensions for up to 12 months to about half of the 108 awardees.)¹⁷ HCIA Round One’s objectives were to:

¹³ There were a total of 38 SIM models, but only one—Washington’s State Innovation Model Initiative—included Medicare.

¹⁴ “Centers for Medicare and Medicaid Services: Center for Medicare and Medicaid Innovation 2018 Report to Congress.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://innovation.cms.gov/files/reports/rtc-2018.pdf>

¹⁵ “Health Care Innovation Awards.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://innovation.cms.gov/innovation-models/health-care-innovation-awards>

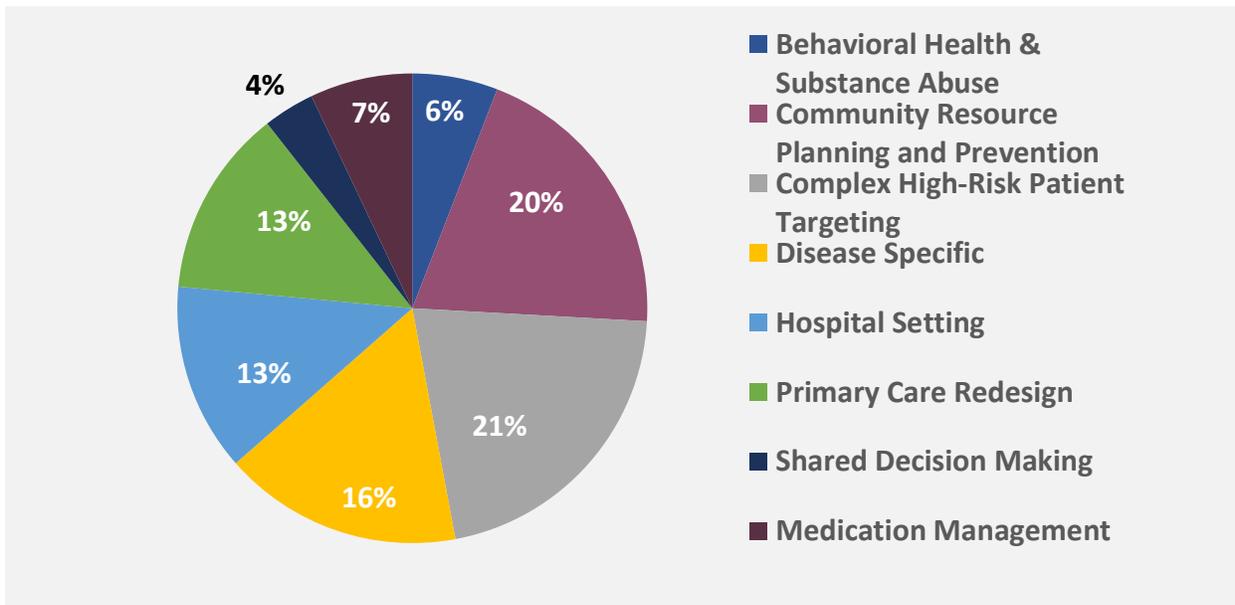
¹⁶ “Health Care Innovation Awards, Round 2 Final Awardee Evaluation Report (2014-2018).” Centers for Medicare and Medicaid Services, Center for Medicare and Medicaid Innovation, accessed May 28, 2021, <https://innovation.cms.gov/data-and-reports/2020/hcia2-fg-finalevalrpt>

¹⁷ “Health Care Innovation Awards (HCIA) Meta-Analysis and Evaluators Collaborative, Annual Report, Year 3.” RTI International, accessed May 28, 2021, <https://downloads.cms.gov/files/cmmi/hcia-metaanalysisthirdannualrpt.pdf>

- engage a broad set of innovation partners to identify and test new care delivery and payment models that originate in the field and that produce better care, better health, and reduced cost through improvement for identified target populations,
- identify new models of workforce development and deployment and related training and education that support new models either directly or through new infrastructure activities, and
- support innovators who can rapidly deploy care improvement models (within six months of award) through new ventures or expansion of existing efforts to new populations of patients, in conjunction (where possible) with other public and private sector partners.¹⁸

HCIA Round One awardees primarily included various providers that are similar to other Innovation Center model awardees, such as hospitals, physicians, home health providers, federally qualified health centers (FQHCs), and dialysis providers. Awardees also included providers that are more unique to HCIA, such as social service providers, community health workers, community mental health centers, and providers that employ peer counselors. CMMI assigned additional categories to each of the models included in HCIA Round One and Round Two. The most common category for HCIA Round One models that focus on Medicare was “Complex High-Risk Patient Targeting” (21%) followed by “Community Resource Planning and Prevention” (20%) (Exhibit 4).

Exhibit 4. Categories of Health Care Innovation Awards Round One that include Medicare



Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

From about 2014 to 2017, HCIA Round Two funded nearly \$339 million in awards that were designed to “[support] public and private organizations in four defined areas that have a high

¹⁸ “Health Care Innovation Awards.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://innovation.cms.gov/innovation-models/health-care-innovation-awards>

likelihood of driving health care system transformation and delivering better outcomes.”^{19,20,21} (Models began on various dates in 2014 and 2015, and CMMI granted no-cost extensions for up to 12 months to 30 of the 39 awardees.)²² These included models that were designed to:

- rapidly reduce Medicare, Medicaid, and/or CHIP costs in outpatient and/or post-acute settings,
- improve care for populations with specialized needs,
- test approaches for specific types of providers to transform their financial and clinical models, and
- improve the health of populations – defined geographically (health of a community), clinically (health of those with specific diseases), or by socioeconomic status – through activities focused on engaging beneficiaries, prevention (for example, a diabetes prevention program or a hypertension prevention program), wellness, and comprehensive care that extend beyond the clinical service delivery setting.²³

Like Round One, HCIA Round Two awardees primarily included various providers that are similar to other Innovation Center model awardees, such as hospitals, physicians, home health providers, and FQHCs. Awardees also included providers that are more unique to HCIA, such as paramedics, other emergency responders, and senior independent housing providers. The three most common categories for HCIA Round Two were “Low-risk chronic conditions,” (29%) “High-risk chronic conditions,” (25%) and “Acute and subacute care” (25%) (Exhibit 5).

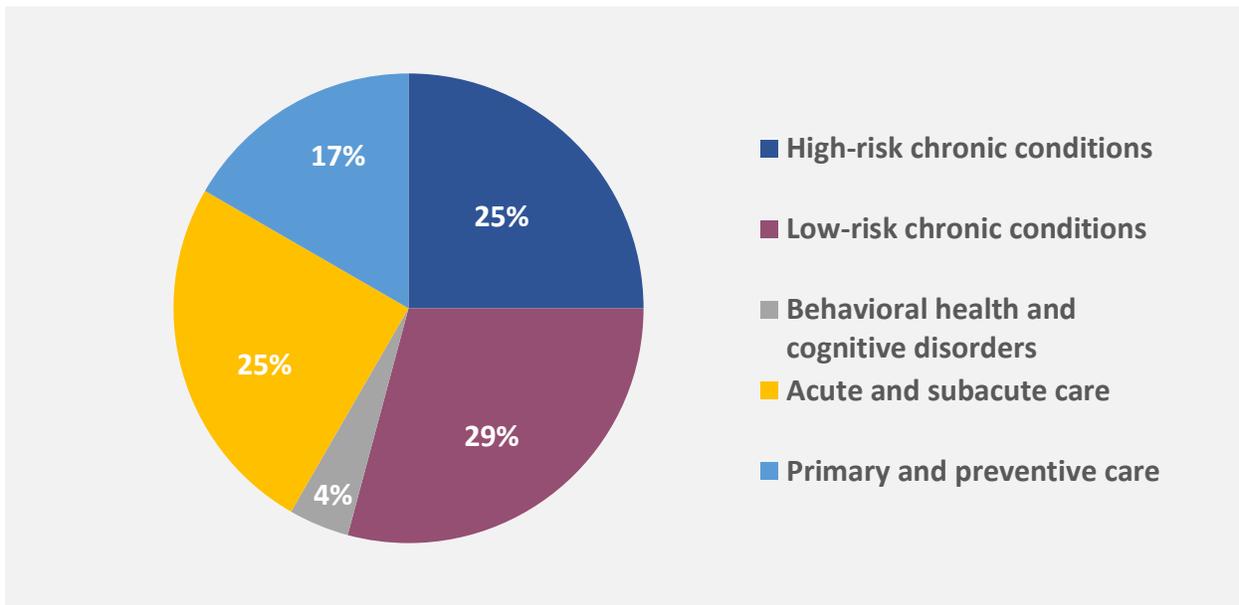
¹⁹ “Centers for Medicare and Medicaid Services: Center for Medicare and Medicaid Innovation 2018 Report to Congress.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://innovation.cms.gov/files/reports/rtc-2018.pdf>

²⁰ “Health Care Innovation Awards, Round 2 Final Awardee Evaluation Report (2014-2018).” Centers for Medicare and Medicaid Services, Center for Medicare and Medicaid Innovation, accessed May 28, 2021, <https://innovation.cms.gov/data-and-reports/2020/hcia2-fg-finalevalrpt>

²¹ “Health Care Innovation Awards, Round 2 Final Awardee Evaluation Report (2014-2018).” Centers for Medicare and Medicaid Services, Center for Medicare and Medicaid Innovation, accessed May 28, 2021, <https://innovation.cms.gov/data-and-reports/2020/hcia2-fg-finalevalrpt>

²² “Evaluation of the Health Care Innovation Awards, Round 2: Final Report.” Mathematica, accessed May 28, 2021, <https://innovation.cms.gov/data-and-reports/2020/hcia2-round-2-final-eval-report-sept-2020-0>

²³ “Health Care Innovation Awards Round Two.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://innovation.cms.gov/innovation-models/health-care-innovation-awards/round-2>

Exhibit 5. Categories of Health Care Innovation Awards Round Two that include Medicare

Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

From 2013 to 2020, SIM partnered with states to advance multi-payer health care payment and delivery system reform models.^{24,25,26} Through multiple design, pre-test, and test rounds, SIM funded about \$960 million to awardee states. SIM was designed to test the ability of state governments to use their policy and regulatory levers to accelerate healthcare transformation efforts in their states with a primary goal to transform more than 80% of payments to providers into innovative payments and service delivery models.²⁷ Most SIM models (37) excluded Medicare; just one SIM model—for Washington State—included Medicare.

Performance period

All models include a performance period that consists of time when demonstration sites provide services to participating enrollees, as well as a pre- and post-performance period. About half of Innovation Center models that include Medicare operate between three and less than five performance years (48%) (Exhibit 6). The next most common performance period length is less than three years (32%). Six percent of models that focus on Medicare have seven or more

²⁴“Next Steps for the State Innovation Models Initiative Request for Information.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://www.cms.gov/newsroom/fact-sheets/next-steps-state-innovation-models-initiative-request-information>

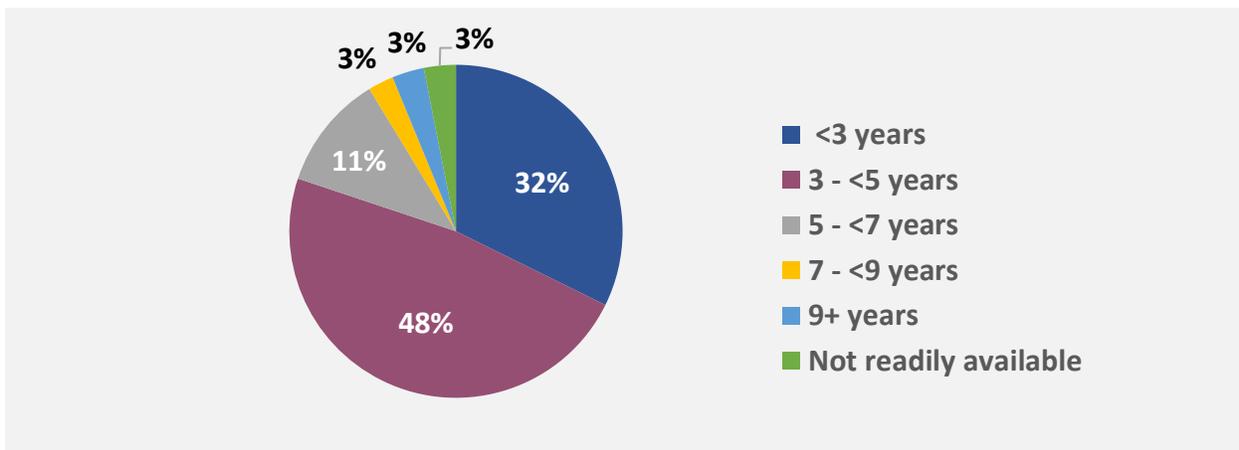
²⁵ “State Innovation Models Initiative: General Information.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://innovation.cms.gov/innovation-models/state-innovations>

²⁶ “Centers for Medicare and Medicaid Services: Center for Medicare and Medicaid Innovation 2018 Report to Congress.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://innovation.cms.gov/files/reports/rtc-2018.pdf>

²⁷ “Next Steps for the State Innovation Models Initiative Request for Information.” Center for Medicare and Medicaid Services, accessed May 28, 2021, <https://www.cms.gov/newsroom/fact-sheets/next-steps-state-innovation-models-initiative-request-information>

performance years. Multi-year performance periods allow time for demonstration sites to gain experience carrying out the model and allow sufficient data for evaluators to assess the impact of models. For about two-thirds of models that focus on Medicare, the length of the performance period is followed as planned (66%) (see Testing extensions and delays section). Almost a third of models that focus on Medicare (31%) have been extended for additional time, mostly for 12 months or less.

Exhibit 6. Number of performance years for Innovation Center models that include Medicare



Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Most Medicare models are tested for 3 to 5 years.

Some Medicare models are tested for 7 or more years.

Are Medicare models being tested for the best length of time?

Should some long-running Medicare models be ended?

Testing extensions and delays

Almost a third of models that include Medicare (31%) have been extended to allow additional time for testing. This includes about half of HCIA Round One models that include Medicare and more than three-quarters of HCIA Round Two models that include Medicare. Ten models that include Medicare have been extended for more than a year (Exhibit 7). Half of these were extended due to Congressional legislation. A few models that include Medicare are in operation for about a decade or longer. For example, the Medicare Intravenous Immune Globulin (IVIG) demonstration is scheduled to have more than nine performance years. The Medicare Coordinated Care model had more than 12 performance years. The Independence at Home model is scheduled to have more than 11 performance years. The Rural Community Hospital demonstration is scheduled to have 18 performance years. None of these long-running models have yet been found to be successful enough in reducing spending or improving quality

to be expanded into the Medicare program nationwide (see Models expanded to the traditional Medicare program section).

Exhibit 7. Innovation Center models that include Medicare that were extended by more than one year

Demonstration name	Extended for additional time	Total performance period
Comprehensive Care for Joint Replacement (CJR)	3 years	>8 years
Frontier Community Health Integration Project	5 years ¹	8 years
Graduate Nurse Education	2 years	6 years
Independence at Home	7 years ²	>11 years
Medicare Coordinated Care	>8 years	>12 years
Medicare Intravenous Immune Globulin (IVIG)	>6 years ³	>9 years
Multi-Payer Advanced Primary Care Practice	3 years	6 years
Next Generation Accountable Care Organization (NextGen ACO)	3 years	6 years
Repetitive Scheduled Non-Emergent Ambulance Transport (RSNAT) Prior Authorization	3 years ⁴	6 years
Rural Community Hospital	15 years ⁵	18 years

Note: Data include models announced through May 11, 2021. The following models were extended through an act of Congress:

¹A 5-year period was added to the Frontier Community Health Integration Project by the Consolidated Appropriations Act of 2021.²⁸

²The Independence at Home model was extended from 3 to 5 years by the Medicare Independence at Home Medical Practice Demonstration Improvement Act of 2015,²⁹ from 5 to 7 years by the Bipartisan Budget Act of 2018,³⁰ and from 7 to 10 years and by the Consolidated Appropriations Act of 2021, which also expanded participation from 15,000 to 20,000 members.³¹

³The Medicare Intravenous Immune Globulin (IVIG) demonstration began October 1, 2014 and was initially scheduled to end on September 30, 2017. However, the Disaster Tax Relief and Airport and Airway Extension Act of 2017 extended the demonstration through December 31, 2020.³² The Consolidated Appropriations Act of 2021 extended the demonstration

²⁸ "H.R. 133-Consolidated Appropriations Act, 2021." 116th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/116th-congress/house-bill/133>

²⁹ "S.971-Medicare Independence at Home Medical Practice Improvement Act of 2015." 114th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/114th-congress/senate-bill/971>

³⁰ "H.R. 1892 – Bipartisan Budget Act of 2018." 115th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/115th-congress/house-bill/1892/text>

³¹ "H.R. 133-Consolidated Appropriations Act, 2021." 116th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/116th-congress/house-bill/133>

³² "Disaster Tax Relief and Airport and Airway Extension Act of 2017." 115th Congress, accessed May 28, 2021, <https://www.congress.gov/115/plaws/publ63/PLAW-115publ63.pdf>

through December 31, 2023.³³ In addition, the Medicare Access and CHIP Reauthorization Act of 2015 expanded participation in the demonstration to all states that meet certain requirements.³⁴

⁴The Repetitive Scheduled Non-Emergent Ambulance Transport (RSNAT) Prior Authorization model has been expanded nationwide.³⁵ See section “Models expanded to the traditional Medicare program” for more information.

⁵The Rural Community Hospital demonstration was extended from 5 to 10 years by the Affordable Care Act of 2010,³⁶ from 10 to 15 years by the Cures Act,³⁷ and for an additional 5-year period by the Consolidated Appropriations Act of 2021.³⁸

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

In addition, the first performance year for four models that include Medicare have been delayed (Exhibit 8). In addition, the Artificial Intelligence (AI) Health Outcomes Challenge was paused for three months during performance, then concluded April 30, 2021.

Exhibit 8. Delayed Innovation Center models that include Medicare

Demonstration name	Delayed by	Delayed until
Radiation Oncology (RO)	1 year	January 1, 2022
Kidney Care Choices (KCC)	1 year	January 1, 2022
Geographic Direct Contracting	To be determined	To be determined
Emergency Triage, Treat, and Transport (ET3)	1 year	January 1, 2021

Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

³³ “H.R. 133-Consolidated Appropriations Act, 2021.” 116th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/116th-congress/house-bill/133>

³⁴ “H.R.2 – Medicare Access and CHIP Reauthorization Act of 2015.” 114th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/114th-congress/house-bill/2/text>

³⁵ “Prior Authorization of Repetitive, Scheduled Non-Emergent Ambulance Transport.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/Medicare-FFS-Compliance-Programs/Prior-Authorization-Initiatives/Prior-Authorization-of-Repetitive-Scheduled-Non-Emergent-Ambulance-Transport->

³⁶ “H.R. 3590 – Patient Protection and Affordable Care Act.” 111th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/111th-congress/house-bill/3590>

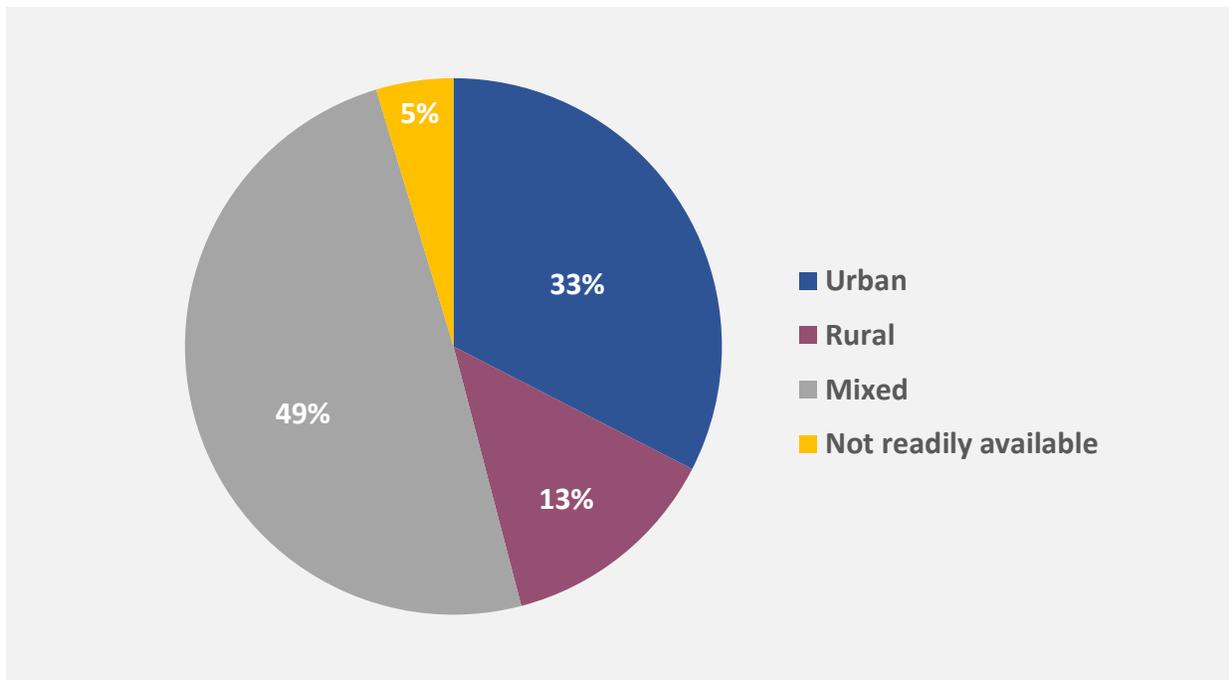
³⁷ “H.R.34 – 21st Century Cures Act.” 114th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/114th-congress/house-bill/34/text>

³⁸ “H.R. 133-Consolidated Appropriations Act, 2021.” 116th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/116th-congress/house-bill/133>

Geography

About half of CMMI models that include Medicare span both urban and rural areas (49%) (Exhibit 9). A third primarily serve urban areas (33%) and 13% focus primarily on rural areas.

Exhibit 9. Urban versus rural scope of Innovation Center models that include Medicare



Note: Data include models announced through May 11, 2021.

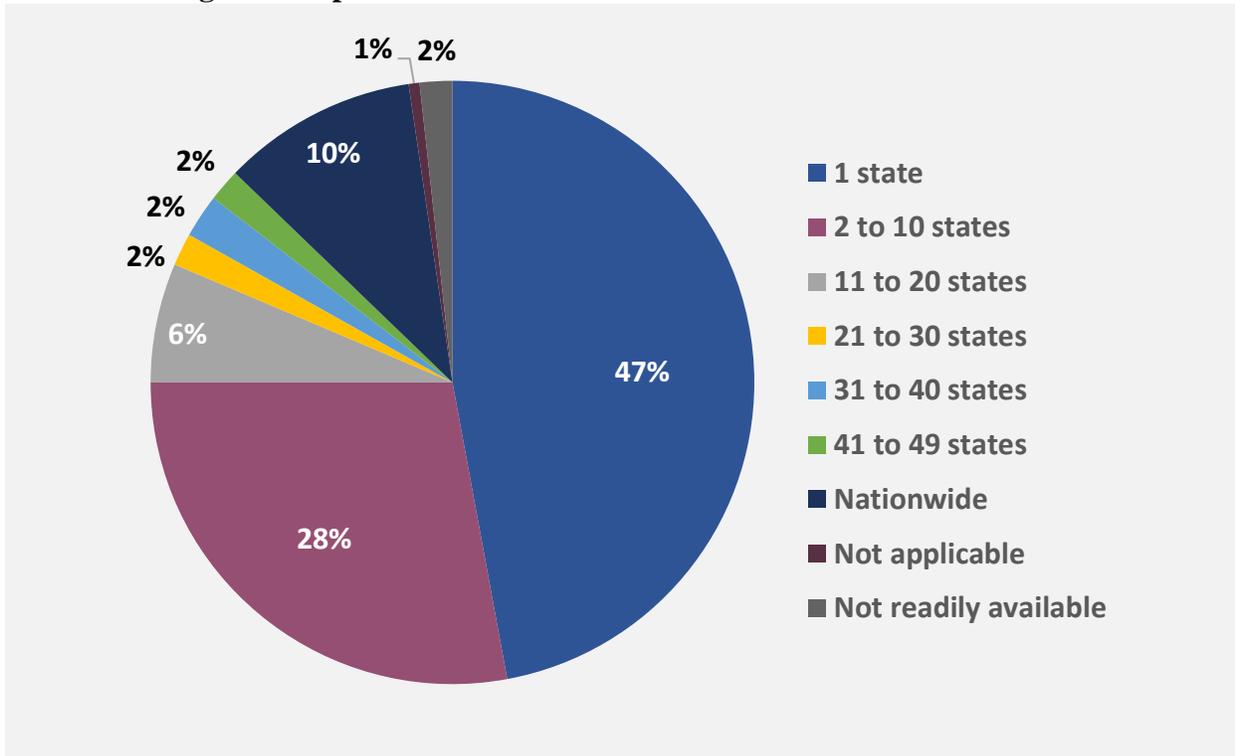
Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Only 13% of Medicare models specifically target rural areas.

Should rural models and others designed for populations of interest be a greater focus for CMMI?

Nearly half of Innovation Center models that focus on Medicare operate in a single state (47%) (Exhibit 10). About a quarter of models that include Medicare operate in an area that includes 2 to 10 states (28%). 10% of models that include Medicare operate nationwide.

Exhibit 10. Regional scope of Innovation Center models that include Medicare



Note: Data include models announced through May 11, 2021

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

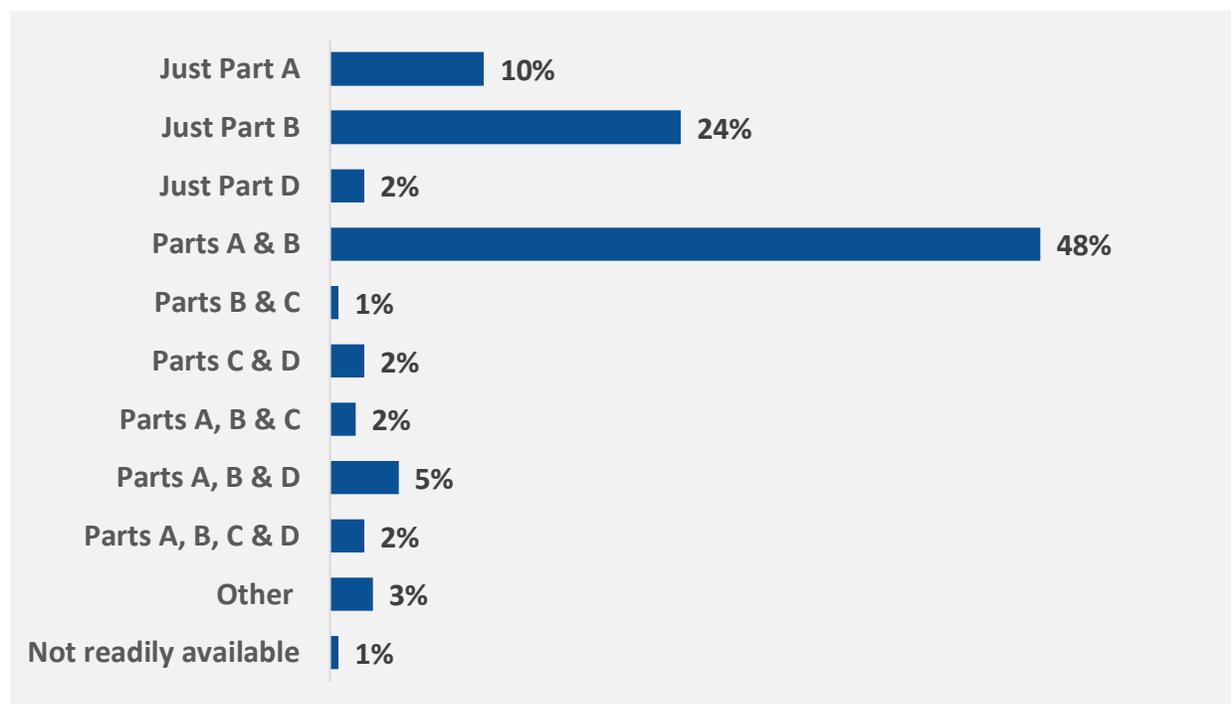
47% of Medicare models operate in a single state.
75% of Medicare models operate in 10 or fewer states.

Should more Medicare models be tested in larger geographic areas to improve the chances that models are generalizable and can be scaled up?

Scope of services

Innovation Center models that include Medicare rarely (2%) include all parts of Medicare (i.e., Parts A, B, C, and D) (Exhibit 11). Models that provide services under Parts A and B are the most common, accounting for about half of all models (48%). Only 12% of models include Part D, and just 2% focus exclusively on Part D. Only 6% of models include Part C (Medicare Advantage), and no models focus exclusively on Part C.

Exhibit 11. Scope of services for Innovation Center models that include Medicare

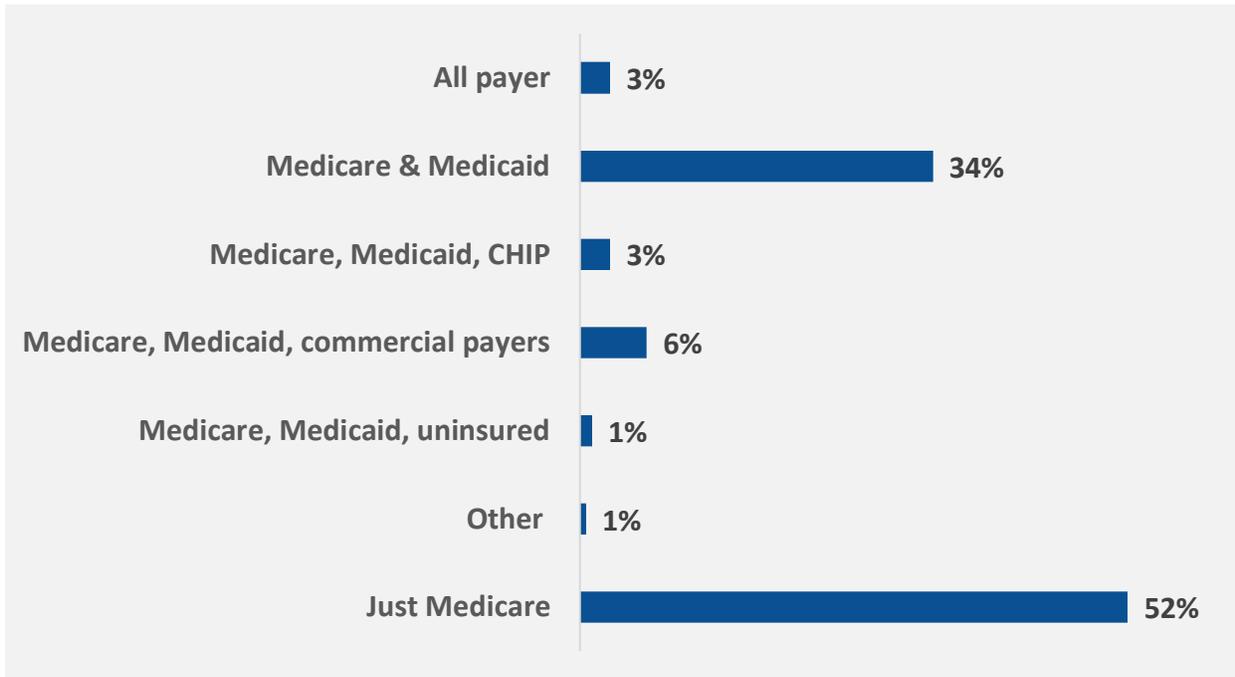


Note: Data include models announced through May 11, 2021. No models focus exclusively on Part C.
 Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Only 6% of Medicare models include Part C, and 12% include Part D.

Should models that address Part C and Part D be a greater focus for CMMI?

About half of Innovation Center models that include Medicare exclude other payers (52%) (Exhibit 12). A third of Innovation Center models that include Medicare also include Medicaid (34%). Only 12% of Innovation Center models that include Medicare include some other payer, such as CHIP or commercial insurance.

Exhibit 12. Other payers included in Innovation Center models that include Medicare

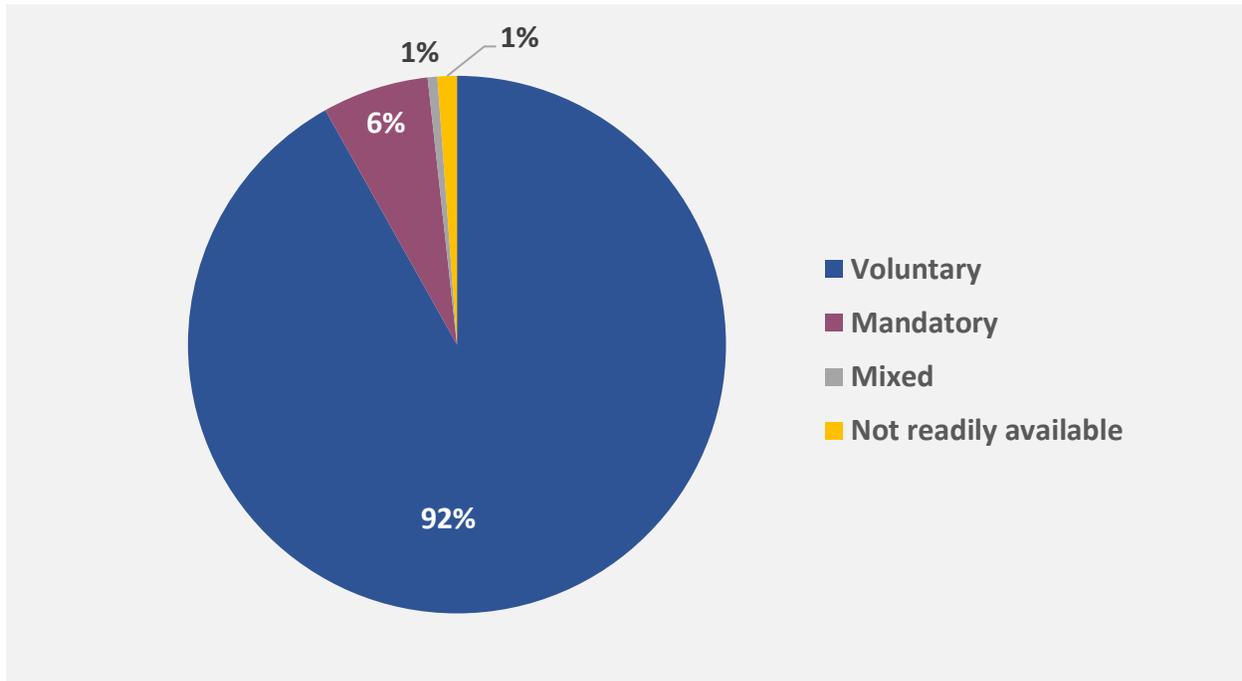
Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Voluntary versus mandatory participation

Most Innovation Center models that include Medicare offer voluntary participation (92%) (Exhibit 13). Only 6% of Innovation Center models that include Medicare require mandatory participation. 1% of models included mixed participation, blending mandatory participation requirements for certain providers and voluntary participation by other applicants.

Exhibit 13. Voluntary versus mandatory participation in Innovation Center models that include Medicare



Note: Data include models announced through May 11, 2021.

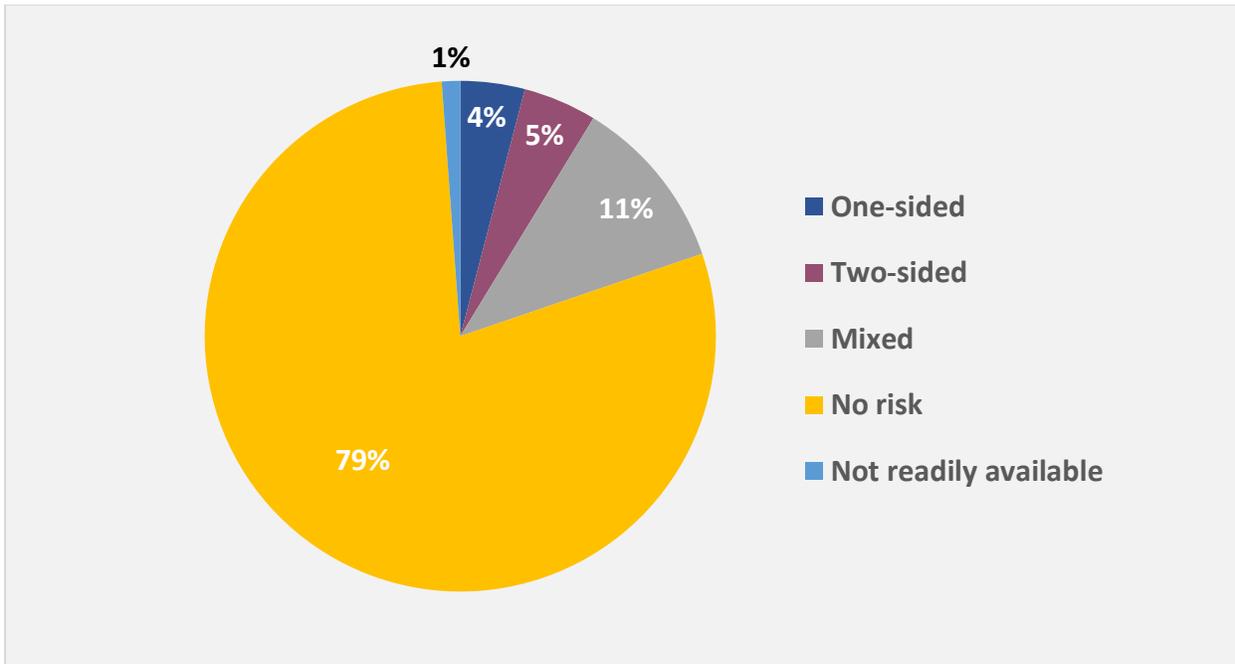
Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Only 6% of Medicare models require mandatory participation.

Is it time for CMMI to require mandatory participation for more models?

Risk and Advanced Alternative Payment Model (A-APM) status

To date, most Innovation Center models that include Medicare (79%) have not required awardees to accept risk in terms of shared savings or losses (Exhibit 14). 11% of models that include Medicare involve mixed risk – meaning that participants may have an option of risk levels or may be required to move from one-sided to two-sided risk by a later performance year. Nearly an equal share of models that include Medicare incorporates one-sided (4%) and two-sided risk (5%).

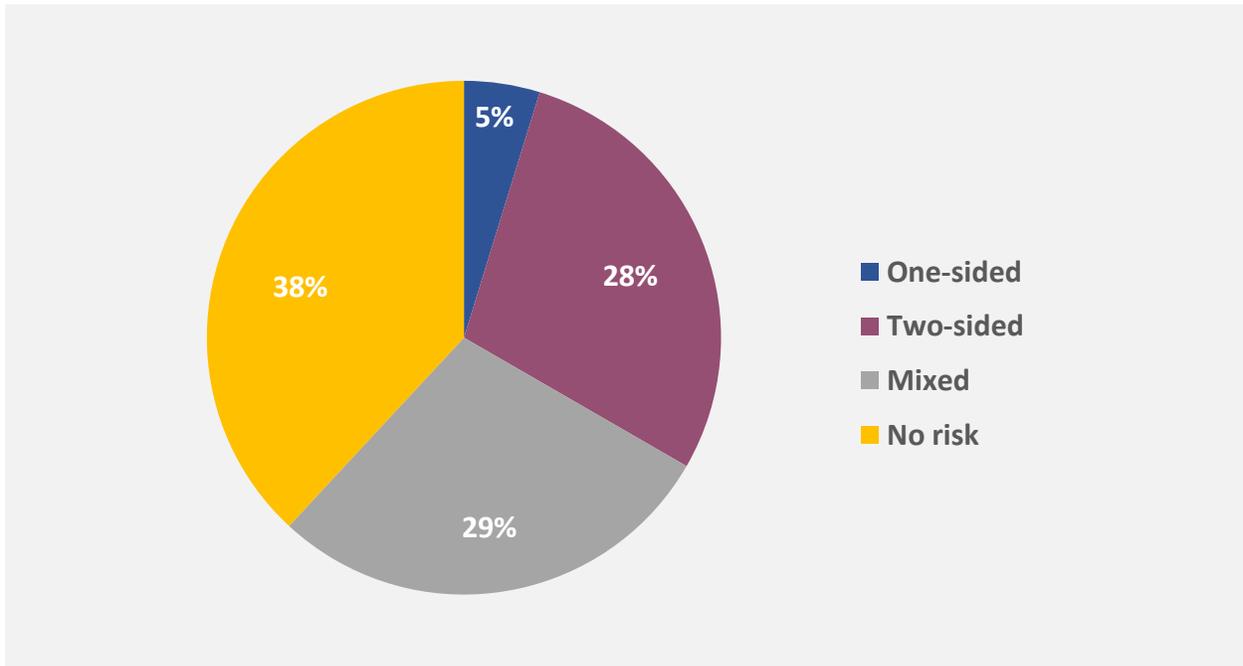
Exhibit 14. Risk arrangements among Innovation Center models that include Medicare

Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Risk arrangements differ for models that commenced more recently. Since 2017, more than half of models that include Medicare include either mixed risk (29%) or two-sided risk (28%) (Exhibit 15). More than a third of Innovation Center models that include Medicare (38%) have not required awardees to accept risk in terms of shared savings or losses.

Exhibit 15. Risk arrangements among Innovation Center models that include Medicare that began in 2017 or later



Note: Data include models announced through May 11, 2021.

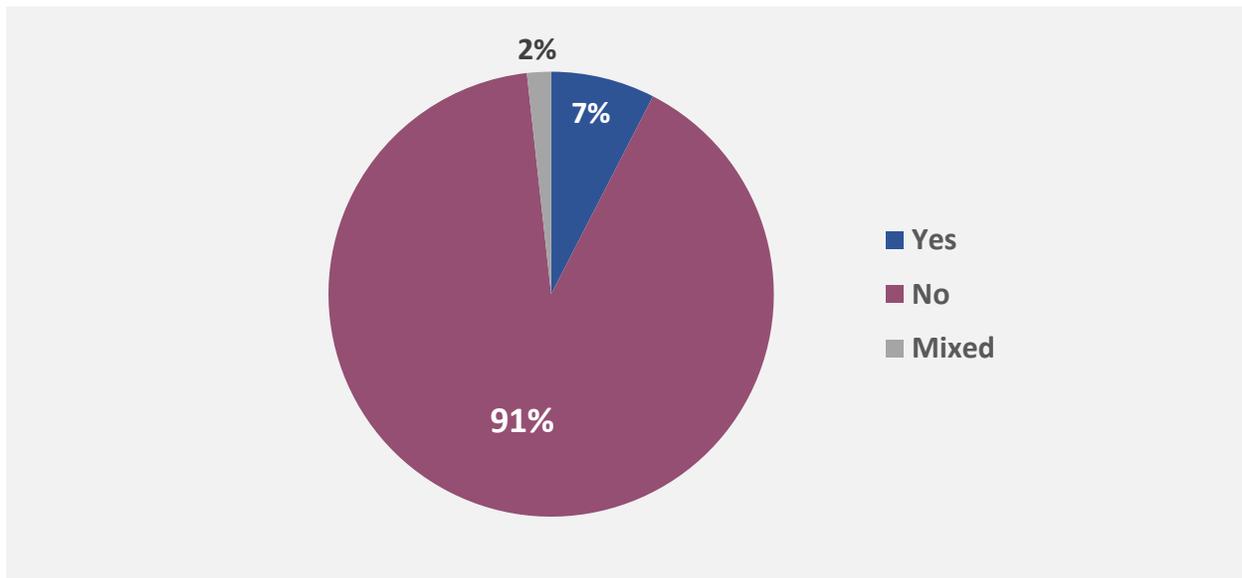
Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Only 28% of Medicare models that began in 2017 or later exclusively require two-sided risk.

Is it time for CMMI to require two-sided risk for more models?

Few Innovation Center models that include Medicare qualify as advanced alternative payment models (A-APMs) (7%) (Exhibit 16). A-APMs are a track of Medicare’s Quality Payment Program that offer qualifying providers a 5% incentive payment for achieving threshold levels of payments or patients.³⁹ A-APM participants must use certified electronic health record technology; pay providers based on certain quality measures, and either qualify as a Medical Home Model under CMS Innovation Center authority or require participants to bear a significant financial risk. 2% of models that include Medicare have been designated as “mixed,” indicating that a particular component or phase of a broader model may qualify as an A-APM.

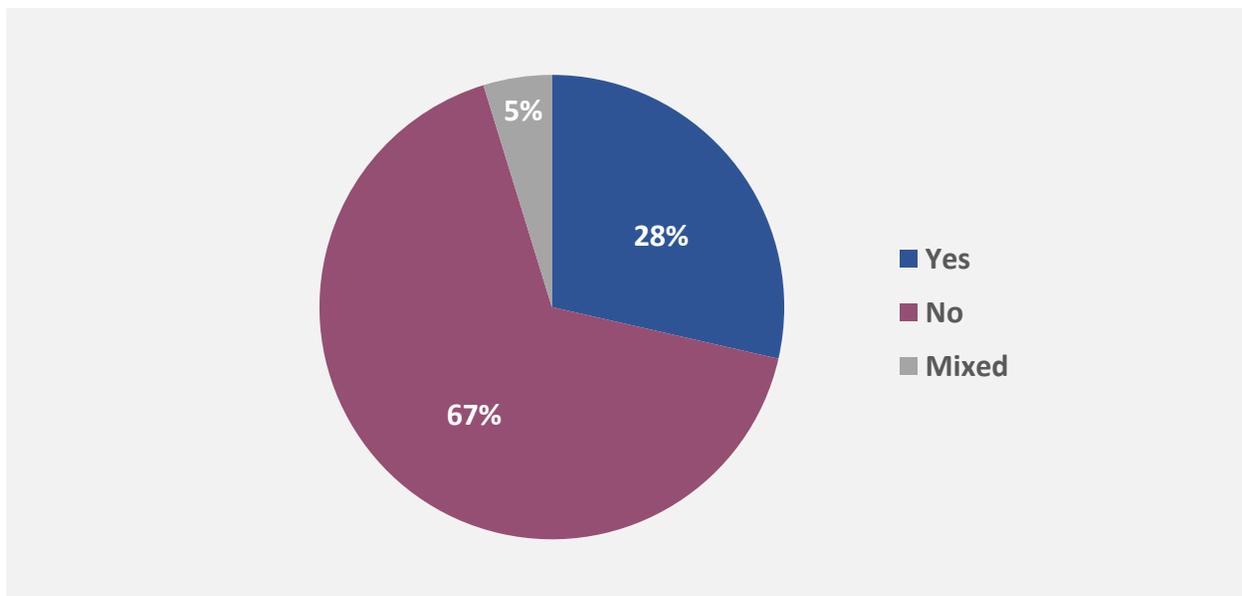
³⁹“Advanced Alternative Payment Models (APMs).” Quality Payment Program, accessed May 28, 2021, <https://qpp.cms.gov/apms/advanced-apms>

Exhibit 16. Innovation Center models that include Medicare and qualify as A-APMs

Note: A-APM (advanced alternative payment model). Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

A-APM status also differs for models that commenced more recently. Since 2017, more than a quarter of Innovation Center models that include Medicare qualify as A-APMs (28%) (Exhibit 17). The share of models that include Medicare with “mixed” A-APM status grew to 5%.

Exhibit 17. Innovation Center models that include Medicare or later and qualify as A-APMs that began in 2017

Note: A-APM (advanced alternative payment model). Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Spending associated with models

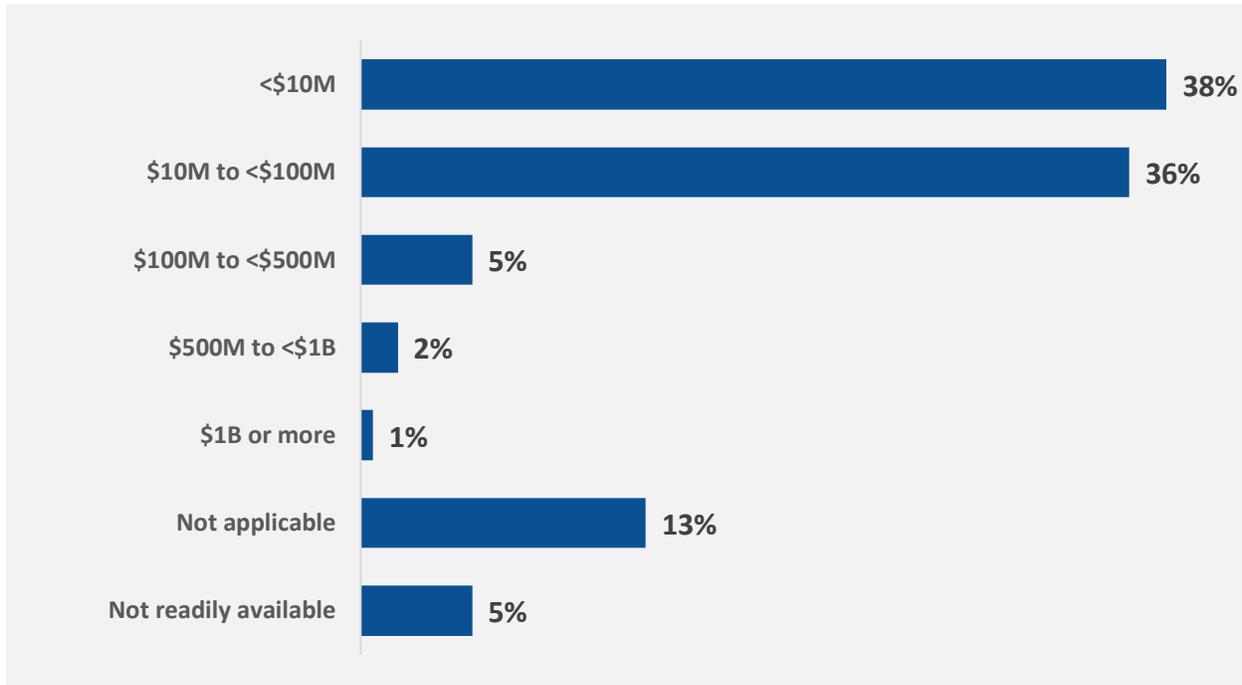
In its most recent annual report to Congress, CMMI reported three categories of spending associated with models made from the inception of the Innovation Center to September 30, 2018:

- CMS Innovation Center payments made to model and initiative participants, such as health care providers, states, conveners, ACOs, and others, under section 1115a of the Social Security Act
- Payments under Title XVIII or XIX made for services on behalf of beneficiaries⁴⁰
- Other CMS Innovation Center funds under section 1115a obligated to support design, implementation, and evaluation⁴¹

We report the total across all three spending categories for the years 2010 through 2018 and group these into spending buckets shown in Exhibit 18. (This does not include new spending or investments on the part of awardees.) There is a very wide range of estimated spending associated with models that include Medicare, from \$3M to \$1.2B between 2010-2018. The most common total spending bucket for Innovation Center models that include Medicare is less than \$10 million (38%). More than a third of models that include Medicare had estimated spending between 2010-2018 of \$10 million to less than \$100 million (36%). 3% of models that include Medicare had total spending greater than \$500 million.

⁴⁰ This category reflects payments, such as shared savings payments, made from the Medicare Trust Funds, as well as any other payments made under Titles XVIII or XIX for model-related services on behalf of beneficiaries. For example, certain models (such as the Next Generation ACO Model) include opportunities to share in the savings that health care providers generate for Medicare through reductions in payments under Title XVIII. This column does not include Medicare, Medicaid, and CHIP payment amounts that health care providers or others receive for covered services provided to the beneficiaries under the applicable titles that would have occurred even in the absence of the models.

⁴¹ This category reflects the total CMS Innovation Center funds obligated as of the end of Fiscal Year 2018, September 30, 2018, such as contract awards for administrative and evaluation obligations, but excluding payments listed under the category “CMS Innovation Center payments made to model participants under section 1115A of the Act.”

Exhibit 18. Total spending on Innovation Center models that include Medicare, 2010-2018

Note: Data include models announced through May 11, 2021. “Not applicable” indicates situations where estimated spending data are available because the model’s performance period began after the 2010–2018 spending window. “Not readily available” indicates that we were unable to locate total spending information

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

CMMI spent more than more than \$100M each on 8% of Medicare models and \$500M each on 3% of Medicare models.

Should CMMI continue to invest hundreds of millions of dollars in individual models?

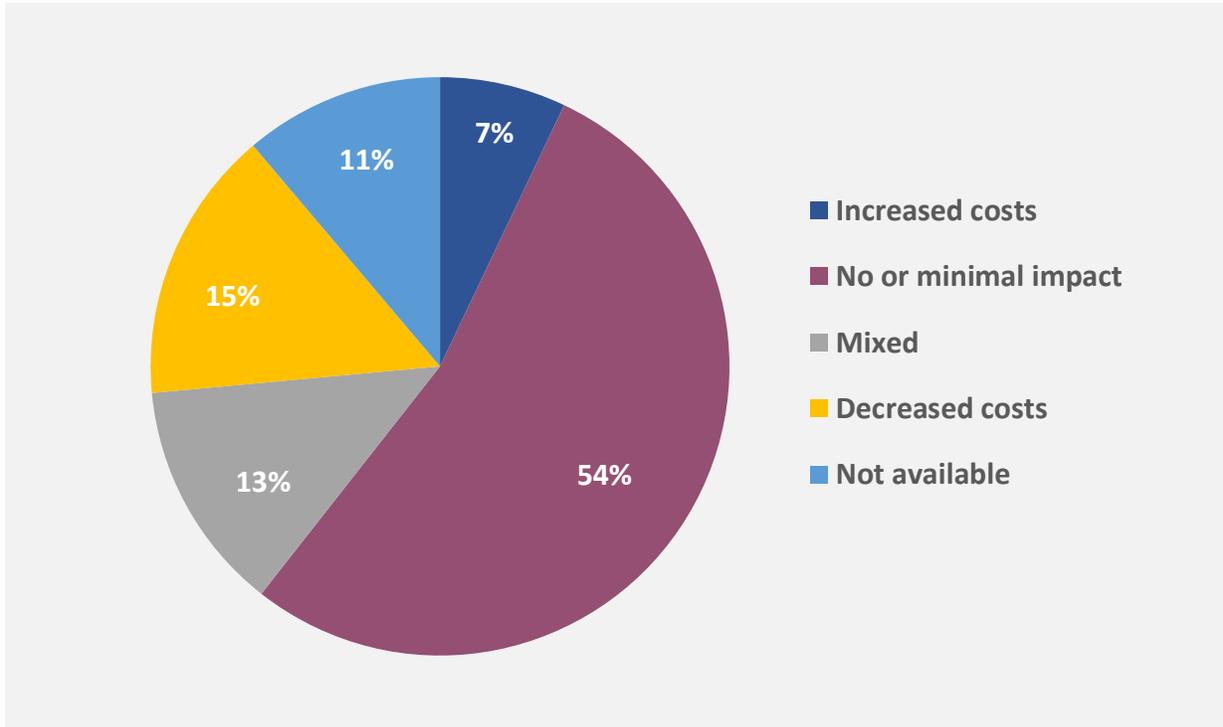
Evaluation

The Innovation Center contracts with organizations to conduct independent evaluations of most models to determine impacts on Medicare spending and quality. Evaluations are generally posted to the Innovation Center website for each performance year of a model, and a final evaluation report is posted after all performance years are completed. Nearly 90% of models that include Medicare have at least one evaluation report posted. 11% of models that include Medicare do not yet have the first evaluation report posted.

Among Innovation Center models that include Medicare, more than half had no or minimal

impact on spending (54%) (Exhibit 19).⁴² Evaluators found that 15% of models that include Medicare were associated with some degree of decreased spending. 13% of models that include Medicare had mixed spending results, for example with results differing by performance year. 7% of models that include Medicare were associated with increased spending to some degree.

Exhibit 19. Spending impact of Innovation Center models that include Medicare



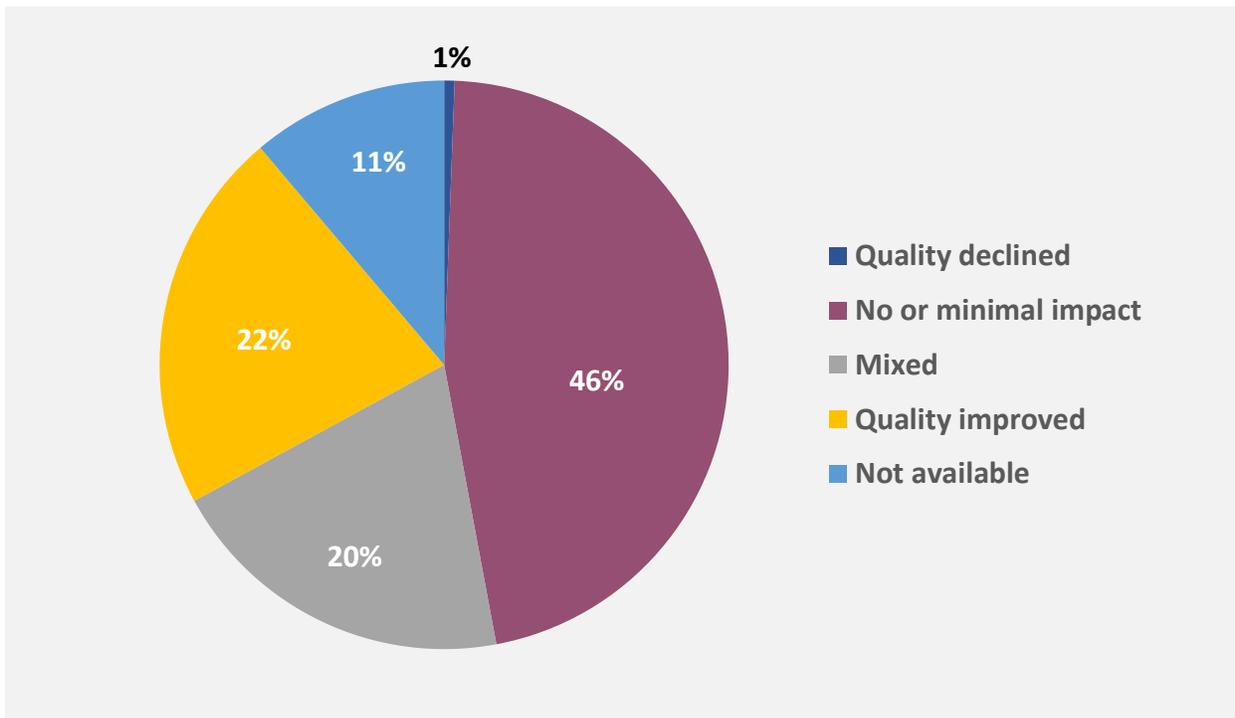
Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Among Innovation Center models that include Medicare, nearly half had no or minimal impact on quality (46%) (Exhibit 20).⁴³ Evaluators found that about a quarter of models that include Medicare were associated with some degree of improved quality (24%). 19% of models that include Medicare had mixed quality results. Less than 1% of models that include Medicare were associated with some degree of decreased quality.

⁴² “Minimal impact” includes results with small dollar amounts or non-statistically significant findings. Many evaluation reports with these findings noted model design challenges, such as small enrollment numbers, lack of a comparison group, and participants that moved in and out of active participation in the test group at unexpected times.

⁴³ “Minimal impact” includes results that the independent evaluator characterized as small, minimal, or non-statistically significant findings. Many evaluation reports with these findings noted model design challenges, such as small enrollment numbers, lack of a comparison group, and participants that moved in and out of active participation in the test group at unexpected times.

Exhibit 20. Quality impact of Innovation Center models that include Medicare

Note: Data include models announced through May 11, 2021.

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.

Few Medicare models have been shown to decrease spending (15%) or improve quality (22%).

Are lessons being learned from less successful models that can improve future models?

Models expanded to the traditional Medicare program

Per the statute, Innovation Center models can be expanded or implemented nationwide into the Medicare program if:

1. the HHS Secretary determines that an expansion would reduce spending, improve quality, or both,
2. CMS's Chief Actuary certifies that expansion of the model would reduce (or not increase) net program spending, and
3. the Secretary determine that the expansion would not deny or limit the coverage or provision of benefits under Medicare.

Thus far, only four models that include Medicare have met these requirements and have been or will be implemented in Medicare nationwide:

- **Home Health Value-Based Purchasing Model (HHVBP)** – On January 8, 2021 CMS announced plans to expand HHVBP beginning January 1, 2022.⁴⁴
 - The HHVBP Model resulted in improved quality of care, without introducing significant provider burden or adverse effects on patient access. The evaluation also reported improvement in functional status for home health patients, and observed reductions in unplanned acute care hospitalizations and skilled nursing facility (SNF) visits, resulting in reductions in inpatient and SNF spending, partially offset by an increase in annual emergency department (ED) spending.⁴⁵
- **Medicare Diabetes Prevention Program (MDPP)** – MDPPs are now a specific type of Medicare provider.
 - The MDPP model was associated with significant reductions in Medicare spending (of \$278 per participating beneficiary per quarter across three years) relative to the comparison group. The average probability of savings over three years is 77.4 percent. Savings were greater among program completers than among non-completers. Model participants were also significantly less likely to be hospitalized or have an ED visit during the period of performance. The model did not affect readmissions.⁴⁶
- **Pioneer ACOs** – CMS incorporated several successful elements of the Pioneer ACO Model into Track 3 of the Medicare Shared Savings Program (MSSP) through notice and comment rulemaking.
 - The Pioneer ACO Model was approved for expansion based on favorable evaluation results on both cost and quality measures for the first two performance years of the Model.⁴⁷ However, findings about the cost and quality performance of the model are missing or unclear in the final evaluation report. Only 9 of the original 32 participants finished the final performance year, which may have had an effect on results and, due to a lack of comparison data, evaluators were unable to determine whether some improvements in quality over time were specific to ACOs, or if care

⁴⁴ “CMS Takes Action to Improve Home Health Care for Seniors, Announce Intent to Expand Home Health Value-Based Purchasing Model.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://www.cms.gov/newsroom/press-releases/cms-takes-action-improve-home-health-care-seniors-announces-intent-expand-home-health-value-based>

⁴⁵ “CMS Takes Action to Improve Home Health Care for Seniors, Announce Intent to Expand Home Health Value-Based Purchasing Model.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://www.cms.gov/newsroom/press-releases/cms-takes-action-improve-home-health-care-seniors-announces-intent-expand-home-health-value-based>

⁴⁶ “Centers for Medicare and Medicaid Services: Center for Medicare and Medicaid Innovation 2018 Report to Congress.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://innovation.cms.gov/files/reports/rtc-2018.pdf>

⁴⁷ “Centers for Medicare and Medicaid Services: Center for Medicare and Medicaid Innovation 2018 Report to Congress.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://innovation.cms.gov/files/reports/rtc-2018.pdf>

was also improving on a broader basis over the same time period.⁴⁸

- **Repetitive Scheduled Non-Emergent Ambulance Transport (RSNAT) Prior Authorization model** – Subsequent to the RSNAT model being expanded by Congressional action in certain instances (see below), the model was approved for expansion based on findings that the model was successful in reducing RSNAT services and total Medicare spending while maintaining overall quality of and access to care levels.⁴⁹

In addition, Congress has passed legislation to expand the scope of two models that include Medicare:

- **Repetitive Scheduled Non-Emergent Ambulance Transport (RSNAT) Prior Authorization model** – The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) expanded the RSNAT model to all states in instances where specific requirements are met.⁵⁰
- **Medicare Advantage Value-based Insurance Design (VBID) Model** – Beginning in 2017, the VBID model was available in seven states, which grew to 10 states in 2018 and 25 states in 2019. The Balanced Budget Act of 2018 (BBA 2018) required VBID to include all states beginning in 2020.⁵¹

After more than a decade, only 4 models have proven successful enough to be expanded into traditional Medicare through CMMI authorities.

*How can CMMI increase the likelihood that models succeed?
Should some current models that have yet to succeed cease operations?*

There are an additional eight models that include Medicare that have especially promising evaluation results in that they have been shown to decrease spending while improving quality ([Appendix B](#)). One of these models will end in December 2021 and the other seven ended in 2015 or 2016. Six of the models were implemented under the HCIA.

⁴⁸ “Evaluation of CMMI Accountable Care Organization Initiatives.” L&M Policy Research, accessed May 28, 2021, <https://innovation.cms.gov/files/reports/pioneeraco-finalevalrpt.pdf>

⁴⁹ “Prior Authorization of Repetitive, Scheduled Non-Emergent Ambulance Transport.” Centers for Medicare and Medicaid Services, accessed May 28, 2021, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/Medicare-FFS-Compliance-Programs/Prior-Authorization-Initiatives/Prior-Authorization-of-Repetitive-Scheduled-Non-Emergent-Ambulance-Transport->

⁵⁰ “H.R.2 – Medicare Access and CHIP Reauthorization Act of 2015.” 114th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/114th-congress/house-bill/2/text>

⁵¹ “H.R.1892 – Bipartisan Budget Act of 2018.” 115th Congress, accessed May 28, 2021, <https://www.congress.gov/bill/115th-congress/house-bill/1892/text>

8 Medicare models have been shown to both decrease spending and improve quality but have not been expanded nationwide.

Should CMMI review and expand or build on past models that show promise?

Looking Forward

More than a decade of testing Medicare models has yielded much information about various approaches to delivering care to beneficiaries, but little success in terms of models that have been expanded nationwide. Just 4 models out of 172 have been introduced into the Medicare program – a 2% success rate. Yet in testing new ideas there are lessons to be learned from both success and failure. Ideally, many of the ideas that the Innovation Center tested in its first decade—the ones that were proven successful as well as the ones that were not—will inform CMMI’s approach going forward. In our next issue brief, we will address the questions raised here and discuss options for improving the chances that more Innovation Center models prove to be successful in the future.

Appendix A: Detailed Methodology

HMA assessed the following characteristics of each CMMI model:

- **Model category**—CMMI organizes models into seven categories:
 - Accountable Care
 - Episode-based Payment Initiatives
 - Primary Care Transformation
 - Initiatives Focused on the Medicaid and Children's Health Insurance Program (CHIP) Population
 - Initiatives Focused on the Medicare-Medicaid Enrollees
 - Initiatives to Accelerate the Development and Testing of New Payment and Service Delivery Models
 - Initiatives to Speed the Adoption of Best Practices

For our analysis, we excluded models that fall into the Medicaid & CHIP category. Therefore, this issue brief and the companion model tracker focus on six of the CMMI categories.

- **Health Care Innovation Awards (HCIA) and State Innovation Models (SIM)**—CMMI organized multiple individual models under three aggregated categories:
 - HCIA, Round One
 - HCIA, Round Two
 - SIM, various rounds

For our analysis, we grouped the various rounds of State Innovation Models into a single category.

- **HCIA Round One category**— CMMI organizes the Round One HCIA models into 10 categories:
 - Behavioral Health and Substance Abuse
 - Community Resource Planning and Prevention
 - Complex High-Risk Patient Targeting
 - Disease Specific
 - Hospital Setting
 - Primary Care Redesign
 - Shared Decision Making
 - Medication Management
 - Meta-Analysis and Evaluators Collaborative
 - State-Based Initiatives
- **HCIA Round Two category**— CMMI organizes the Round Two HCIA models into six categories:
 - Youth with complex medical conditions
 - High-risk chronic conditions
 - Low-risk chronic conditions
 - Behavioral health and cognitive disorders
 - Acute and subacute care
 - Primary and preventive care
- **Status as of May 11, 2021**— CMMI organizes models into seven status categories:
 - Under development
 - Announced
 - Accepting applications

- Reviewing applications
- Participants announced
- Ongoing
- No longer active
- **Announcement, performance start, and performance end dates**— CMMI provides dates when models are announced and when model participant performance begins and ends.
- **Total performance period**—HMA determined models’ total performance period base on the difference in their performance start and performance end dates.
- **Model extensions**—HMA categorized models that have been granted extensions beyond their original performance end date and models that were delayed beyond their original performance start date due to the COVID-19 public health emergency.
- **Model expansions**—HMA categorized models that were expanded either through the Secretary’s action or through Congressional legislation.⁵²
- **Voluntary vs. mandatory participation**—CMMI requires participation from targeted providers/participants for some models (mandatory models) and encourages participants to apply for others (voluntary models). Some models have “mixed” participation, requiring some entities to participate while accepting applications from others.
- **Scope of services.** The services of each model fall into various parts of Medicare, Medicaid, and/or CHIP
- **Participants.** Models may assign mandatory participants and/or accept applications for voluntary participants. Participant type (hospitals, physicians, etc.) was also measured
- **Urban/rural scope**—Characteristics measured include whether models served more urban areas, rural areas, or mixed geographic areas. The definitions of “urban” and “rural” settings reflect CMMI designations.
- **Regional scope**—CMMI reported the states involved in each model and HMA categorized these into buckets.
- **Scope of services**—HMA categorized models based on the inclusion of Medicare Part A, Part B, Part C, and/or Part D services, as well as the inclusion of Medicare and Medicaid services.
- **Advanced Alternative Payment Model (A-APM)**—HMA categorized models based on whether they qualified as an A-APM or not.⁵³
- **Risk**—HMA categorized models based on the degree of risk they require participants to take on. One-sided upside risk models allow participants to share in savings if the models are successful, but in downside risk models, participants can lose revenue if they exceed financial thresholds. Two-sided financial risk combines upside and downside risk and encourages providers to take accept full accountability for care.

⁵² Section 1115A(c) of the Social Security Act provides the HHS Secretary with the authority to “expand” through rulemaking the duration and scope of a model, including implementation on a nationwide basis.

⁵³ APMs provide added incentive payments aimed at promoting high quality and cost-effective care. Advanced APMs (A-APMs) require participants to utilize certified Electronic Health Records (EHR), provide payments for covered services based on quality measures, and either require participants to bear significant financial risk or be considered a Medical Home Model.

- **Latest evaluation**—CMMI publishes evaluations for each performance year of a model, as well as a final evaluation at the end of all performance years. HMA added a category “not available” when no evaluation has yet been published for a model.
- **Evaluation findings spending**—Models are evaluated for effects on spending. A common goal of CMMI models is to reduce program spending. The categorization of model effects on spending were based on terms used by CMMI and evaluators.
- **Evaluation findings quality**— Models are evaluated for effects on quality, including service utilization and health outcomes. The categorization of model effects on quality were based on terms used by CMMI and evaluators.
- **Number of participating sites, providers, and estimated beneficiaries**—HMA categorized these values that were reported by CMMI into buckets as indicated later in this issue brief.
- **Estimated total spending 2010–2018**—For models other than Healthcare Innovation Award (HCIA) and State Innovation Model (SIM) models, HMA calculated the sum of the three categories of spending associated with models from the inception of the Innovation Center to September 30, 2018 that CMMI included in its most recent annual report to Congress:
 - CMS Innovation Center payments made to model and initiative participants, such as health care providers, states, conveners, ACOs, and others, under section 1115a of the Social Security Act
 - Payments under Title XVIII or XIX made for services on behalf of beneficiaries⁵⁴
 - Other CMS Innovation Center funds under section 1115a obligated to support design, implementation, and evaluation⁵⁵

For HCIA and SIM models, we include total estimated spending amounts as reported in CMMI summary descriptions of models.

⁵⁴ This category reflects payments, such as shared savings payments, made from the Medicare Trust Funds, as well as any other payments made under Titles XVIII or XIX for model-related services on behalf of beneficiaries. For example, certain models (such as the Next Generation ACO Model) include opportunities to share in the savings that health care providers generate for Medicare through reductions in payments under Title XVIII. This column does not include Medicare, Medicaid, and CHIP payment amounts that health care providers or others receive for covered services provided to the beneficiaries under the applicable titles that would have occurred even in the absence of the models.

⁵⁵ This category reflects the total CMS Innovation Center funds obligated as of the end of Fiscal Year 2018, September 30, 2018, such as contract awards for administrative and evaluation obligations, but excluding payments listed under the category “CMS Innovation Center payments made to model participants under section 1115A of the Act.”

Appendix B: Successful models that have yet to be expanded nationwide

Exhibit B-1. Innovation Center models that include Medicare that decreased spending and improved quality but are not yet expanded nationwide

Model	Description	HCIA model	Status	Spending findings	Quality findings
Brookdale Senior Living (BSL) Transitions of Care Program	BSL's goal was to prevent the progress of disease, thereby reducing complications, improving care, and reducing avoidable hospital admissions. BSL trained workers, including care transition nurses.	HCIA	Ended 2016	<p>Decrease in total SNF 30-day cost of care (-\$449 per beneficiary episode per quarter)</p> <p>Decrease in total assisted living/memory care (AL/MC) cost of care (-\$1,095 per beneficiary per quarter)</p> <p>Decrease in AL/MC total cost of care in the last 30 days of life (-\$861 per beneficiary per quarter) and last 90 days of life (-\$2,122 per beneficiary per quarter)</p>	<p>Decrease in assisted living/memory care (AL/MC) hospitalizations (-26 per 1,000 beneficiaries per quarter) and 30-day readmissions (-336 per 1,000 beneficiaries per quarter)</p> <p>Decrease in AL/MC ambulatory care-sensitive hospitalizations (-6 per 1,000 beneficiaries per quarter)</p>
Community oncology medical homes (COME HOME)	COME HOME provided integrated, coordinated care to patients with cancer through three main program	HCIA	Ended 2015	Significantly lower average cost of care (\$612 less per patient per quarter).	May prevent or reduce the need for intensive treatment for patients at the end of life

		components: triage pathways, enhanced access, and treatment pathways.		Significant decreases in cost of care in the last 30 to 90 days of life (\$959–\$5,790 per patient).	
Deep South Cancer Navigation Network (DSCNN)	Patient Care Connect (PCC) used lay navigators to improve patients’ adherence to care plans and to educate cancer patients and survivors about how to find and use the resources they need, with the goal of empowering patients, caregivers, and patients’ families to better advocate for their own care.	HCIA	Ended 2015	Significant decreases in cost of care in the last 30 to 90 days of life (\$2,733–\$8,093 per patient)	Significant increases in hospice use in the last two weeks of life

<p>Medicare Care Choices Model (MCCM)</p>	<p>MCCM offers eligible Medicare beneficiaries the option to receive supportive services from participating hospices while continuing to receive treatment for their terminal condition through fee-for-service Medicare. Participating hospices receive \$400 per beneficiary per month.</p>	<p>no</p>	<p>Will end 2021</p>	<p>MCCM led to substantial reductions in total Medicare spending for deceased MCCM enrollees during the first 3 years of the model. Total Medicare expenditures decreased by 25%, generating \$26 million in gross savings and \$21.5 million in net savings, largely by reducing inpatient care through increased use of Medicare hospice benefit (MHB).</p> <p>\$5,967 net savings per decedent driven by reduced inpatient spending in the last 7-180 days of life for the 3,603 MCCM enrollees who died before September 30, 2019.</p>	<p>Caregivers of MCCM enrollees who transitioned to the Medicare hospice benefit (MHB) reported highly positive experiences in the model. Caregivers of enrollees who did not transition to MHB held less positive views of MCCM.</p> <p>96% of caregivers indicated that they would definitely or probably recommend the model to friends and family members.</p>
--	---	-----------	----------------------	--	--

<p>Partnership for Patients (PfP)</p>	<p>PfP is a public-private partnership working to improve the quality, safety and affordability of health care for all Americans. Physicians, nurses, hospitals, employers, patients and their advocates, and the federal and state governments have joined together to form the Partnership for Patients.</p>	<p>no</p>	<p>Ended 2016</p>	<p>Harm reductions nationally have resulted in cost savings of \$8.67 billion to \$11.98 billion over a period of about 3 to 4 years.</p>	<p>Overall, national rates of inpatient harm and Medicare fee-for-service readmissions have markedly improved since the start of the campaign. However, the environment of concurrent activity toward harm reduction complicated attribution to any one initiative.</p>
<p>Race to health: coordination, integration, and innovations in care</p>	<p>This model was designed to improve behavioral and physical health care and outcomes as well as reduce cost of care for adults and children receiving outpatient services at Kitsap Mental Health Services, a community mental health center.</p>	<p>HCIA</p>	<p>Ended 2015</p>	<p>Medicare expenditures decreased \$266 per enrolled beneficiary month for intervention group patients relative to the comparison group (p-value < 0.01).</p>	<p>Fewer hospitalizations and fewer ED visits for patients relative to the comparison group by 0.02 and 0.03 per enrolled month, respectively (p-value <0.01 for both estimates).</p>

<p>Transitional care teams to improve quality and reduce costs for rural patients with complex illness</p>	<p>The University of Iowa partnered with 10 critical access hospitals to improve care coordination and communication for adults with complex illnesses, including psychiatric disorders, kidney disease, endocrine and gastrointestinal disorders, pulmonary, and geriatric issues, regardless of insurance status.</p>	<p>HCIA</p>	<p>Ended 2015</p>	<p>Reduction in total quarterly cost of care (-\$5,533 per beneficiary-episode)</p>	<p>Increase in 30-day practitioner follow-up visits per quarter post-discharge (85 per 1,000 beneficiary-episodes)</p> <p>93% of respondents report receiving a follow-up call from within three days of discharge (timely services delivery)</p> <p>91% report attending the scheduled follow-up appointment with their primary care provider after hospital discharge (timely services delivery)</p> <p>Among those who received a follow-up call, 72% report that the staff member was very or extremely helpful (patient satisfaction)</p>
<p>UCLA Alzheimer’s and dementia care: comprehensive, coordinated, patient-centered</p>	<p>The program used nurse practitioners as dementia care managers (DCMs) to collaborate with patients’ primary care providers. DCMs assessed patients’ health, offered treatment,</p>	<p>HCIA</p>	<p>Ended 2015</p>	<p>Significantly lower average cost of care (\$605 less per patient per quarter).</p>	<p>Improved understanding and management of dementia; improved self-care among caregivers; increased access to community-based support services.</p>

developed care plans, and made referrals to outside community-based services for patient and caregiver support services as needed.

Note: Data include models announced through May 11, 2021

Source: HMA analysis of publicly available information from the Center for Medicare and Medicaid Innovation.