Centers for Medicare & Medicaid Services

Center for Medicare and Medicaid Innovation

2018 REPORT TO CONGRESS

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The Center for Medicare and Medicaid Innovation 2018 REPORT TO CONGRESS

1. Executive Summary

The Centers for Medicare & Medicaid Services' (CMS) Center for Medicare and Medicaid Innovation (the CMS Innovation Center) was established by section 1115A of the Social Security Act for the purpose of testing "innovative payment and service delivery models to reduce program expenditures . . . while preserving or enhancing the quality of care" provided to individuals who receive benefits from Medicare, Medicaid, or the Children's Health Insurance Program (CHIP). The CMS Innovation Center operates under this statutory mandate in support of CMS' goal of fostering an affordable, accessible health care system that puts patients first.

Section 1115A(g) of the Social Security Act requires the Secretary of Health & Human Services (HHS) to submit to Congress a report on the CMS Innovation Center's activities under section 1115A at least once every other year beginning in 2012. This is the fourth Report to Congress submitted by the CMS Innovation Center; it focuses on activities between October 1, 2016 and September 30, 2018, but also highlights certain important activities that were announced between September 30, 2018 and December 31, 2018.

Between October 1, 2016 and September 30, 2018, the CMS Innovation Center announced or tested 36 payment and service delivery models and initiatives under section 1115A authority (see Appendix One for a list[1]). In addition, it conducted eight congressionally mandated or authorized demonstration projects. The CMS Innovation Center also played a central role in the implementation of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) during the period of this report.

The CMS Innovation Center is integral to the Administration's efforts to accelerate the move from a health care system that pays for volume to one that pays for value and encourages health care provider innovation. Paying for value is a central premise of the Alternative Payment Models (APMs) that CMS Innovation Center tests, which include Accountable Care Organization (ACO) models, episode payment models (also known as bundled payment models), population-based payment models, and models that test integrated care for Medicare and Medicaid beneficiaries.

Models that are selected for testing are generally subject to a multi-year period of performance designed to demonstrate the impact of the model on both expenditures and quality of care. The CMS Innovation Center conducts independent evaluations of CMS Innovation Center model tests and releases those findings publicly. Reports posted online include cumulative to-date information

[1] The Bundled Payments for Care Improvement Initiative is counted as four separate models; each round of the Health Care Innovation Awards and State Innovation Models is considered a separate model. The Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents has two phases and is counted as two separate models.

on the model results and in-depth analyses of the results using quantitative and qualitative data. These reports provide stakeholders with information on the impact of the model test as a whole on health care expenditures and utilization, beneficiary and health care provider experiences with care, and, where feasible, health outcomes.

A number of CMS Innovation Center model tests and initiatives have shown favorable impacts on cost and/or quality. Models demonstrating savings to Medicare include but are not limited to the following:

- The CMS Chief Actuary certified that expansion of the Pioneer ACO Model as tested in its first two years would reduce net program spending with no decrements in quality of care or patient experience. The Pioneer ACO Model's final evaluation impact analysis showed that the model generated two-year savings to Medicare of approximately $384 million, or almost 3 percent of beneficiary spending.
- The CMS Chief Actuary certified that expansion of the Y-USA Diabetes Prevention Program (DPP) model test would not result in an increase in net program spending. The DPP model test final evaluation showed that the model generated savings to Medicare of $278 per participating beneficiary per quarter, or almost 14 percent of average Medicare Part A and B spending on those beneficiaries. Model participants were also significantly less likely to be hospitalized or have an Emergency Department (ED) visit during the period of performance.
- The Prior Authorization Model: Repetitive Scheduled Non-Emergent Ambulance Transport's (RSNAT) first interim evaluation report showed average quarterly per beneficiary spending on Medicare ambulance services for beneficiaries with End-Stage Renal Disease (ESRD) declined by $523, for a 72 percent decrease. Average quarterly spending on total Medicare Part A and B services for this group declined by $530, or almost 4 percent. There was no decline observed in quality of care as measured by the probability of emergency department visits, emergency ambulance utilization, unplanned inpatient admissions, and death.
- Evaluation data for the Maryland All-Payer model test show $679 million in total cost of care Medicare savings over the first three years of the model, amounting to almost 3 percent reduction in Medicare spending relative to a comparison group of non-Maryland hospitals. There was no decline in quality of care as measured by the Hospital Consumer Assessment of Healthcare Providers and Services (HCAHPS) for Maryland hospitals relative to comparison group hospitals.
- The first-year evaluation report for the Next Generation ACO (NGACO) model test showed Medicare savings of approximately $100 million (1.7 percent of Medicare spending), or $62 million after adjusting for shared savings/loss payments (1.1 percent net savings). There was no decline in quality of care as measured by the probability of inpatient readmissions or ambulatory care sensitive admissions. The number of inpatient hospital days per month declined by 1.3 percent in the first year of the model.

Some CMS Innovation Center model tests have not shown reduced expenditures, but have provided valuable insights to inform the design and development of subsequent models or other models with common approaches. These model tests include but are not limited to the following:

- The Bundled Payments for Care Improvement (BPCI) model evaluation to date has found that Medicare payments declined by $534 million ($707 per episode) under Model Two and $85 million ($924 per episode) under Model Three. However, there were no net savings in aggregate in each of BPCI Models Two and Three after deducting reconciliation payments CMS made to model participants. The design of BPCI Advanced, a new bundled payment model test, was informed, in part, by the experience with BPCI. BPCI Advanced features revised target prices compared to BPCI that incorporate risk adjustment for patient complexity and reflect peer performance and a higher discount than BPCI. Changes to the target prices are intended to encourage both high and low cost providers to participate, which would lessen the self-selection we have seen in BPCI. Some BPCI clinical episodes were not included in BPCI Advanced due to high clinical heterogeneity or small volume. In addition, the participant entry and exit opportunities are scaled back under BPCI Advanced compared to BPCI. Under BPCI Advanced, payments will also be tied, in part, to performance on quality measures.
- The Comprehensive Primary Care (CPC) model was a multi-payer collaboration between public and private health care payers, to strengthen and reform primary care payment and care delivery by supporting patient-centered, coordinated care. Not taking into account the care management fees, the CPC model reduced Medicare Part A and B expenditures by 1 percent; however, after including care management fees, Medicare expenditures increased by 1 percent. The Comprehensive Primary Care Plus (CPC+) model builds on lessons learned from the original CPC model. Specifically, CPC+ includes two tracks, including a second track that deepens care delivery requirements, moves away from fee-for-service (FFS) through a hybrid payment, strengthens incentives, and emphasizes health information technology. Incentive payments in both CPC+ tracks are tied to individual practice performance, rather than to regional performance. In the CPC+ model, CPC+ Practices are also required to take on two-sided risk.

Finally, some CMS Innovation Center models are too early in operations to generate any results. For example, the Accountable Health Communities model and the Million Hearts Cardiovascular Risk Reduction model have been launched, but first-year evaluations for each of these models have not yet been completed.

The statute provides the Secretary of the United States Department of Health & Human Services (the "Secretary") with the authority under Section 1115A(c) of the Social Security Act to expand through rulemaking the duration and scope of a model being tested, including implementation on a nationwide basis if the model meets certain statutory criteria. To date, two CMS Innovation Center models have met the criteria to be eligible for expansion: the Pioneer ACO model (as tested in its first two years) and the Health Care Innovation Award's Diabetes Prevention Program model.

In addition, section 515(b) of MACRA requires the Secretary to expand the Repetitive Scheduled Non-Emergent Ambulance Transport (RSNAT) Prior Authorization Model to all states if the requirements in paragraphs one through three of section 1115A(c) of the Social Security Act are met. CMS believes this model is a viable approach to reducing unnecessary expenditures without impacting quality of care, and is continuing to evaluate the model and determine if the model meets the statutory requirements for nationwide expansion.

Congress has also acted in two instances to require CMS to include additional states in models – the Bipartisan Budget Act of 2018 required the Medicare Advantage Value-based Insurance Design Model (VBID) to include all states beginning in 2020, and MACRA required additional states to be included in the RSNAT model.

In some cases, the CMS Innovation Center has created new models that build on existing models to take advantage of evaluation findings and new ideas about care delivery and payment learned from physicians and other innovators in the health care community. Examples include but are not limited to the CPC+ Model, as noted above, which was developed based on insights from the previous Comprehensive Primary Care (CPC) model; the Maryland Total Cost of Care (TCOC) model, which built upon the positive results from the previous Maryland All-Payer Model; and the BPCI Advanced model, also noted above, which was designed using lessons from the BPCI initiative. Existing models are also continually being refined, such as the Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents Phase Two, which incorporated evaluation findings from Phase One. Such improvement efforts are a continuous part of CMS Innovation Center model testing.

CMS estimates that over 26,636,000 Medicare and Medicaid beneficiaries and individuals with private insurance in multi-payer model tests have been impacted by, have received care, or will soon be receiving care from more than 967,800 health care providers participating in CMS Innovation Center payment and service delivery models and initiatives.[2]

To support its mission to test payment and service delivery models that show promise of reducing expenditures while preserving or enhancing the quality of care, the CMS Innovation Center seeks and reviews ideas from physicians, researchers, and other stakeholders in the health care community. To that end, the CMS Innovation Center has conducted hundreds of interviews and consultations with technical experts and leading health care providers, payers, and researchers to learn from their innovations and experiences, has held a Consumer Roundtable Listening Session, and presents scores of webinars each year to announce and explain model tests and initiatives and increase stakeholder engagement.

In order to increase the transparency, responsiveness, effectiveness, and currency of the CMS Innovation Center's work, CMS issued in 2017 a Request for Information (RFI) seeking public comments about a potential new direction for the CMS Innovation Center. The RFI specifically

[2] The CMS Innovation Center counts beneficiaries and individuals by model test. In specific circumstances, it is possible that a beneficiary or individual might participate in multiple model tests.

asked for feedback on promoting patient-centered care, testing market-driven reforms, empowering beneficiaries as consumers, providing price transparency, and increasing choices and competition to drive quality, reduce costs, and improve outcomes, with special attention to the following eight general areas:

- Increased participation in Advanced Alternative Payment Models (APMs);
- Consumer-Directed Care & Market-Based Innovation Models;
- Physician Specialty Models;
- Prescription Drug Models;
- Medicare Advantage (MA) Innovation Models;
- State-Based and Local Innovation, including Medicaid-focused Models;
- Mental and Behavioral Health Models; and
- Program Integrity.

CMS received over 1,000 responses to the RFI from a wide variety of individuals and organizations located across the country, including medical societies and associations, health systems, physician groups, consumers, and private businesses. The responses provided valuable insight about possibilities for improving existing models as well as ideas for transformative new models that aim to empower beneficiaries with more choices and result in better quality of care and health outcomes and reduced expenditures.

Based on these responses and other input from stakeholders, the CMS Innovation Center is actively reexamining its portfolio and is in the process of developing a new array of models. In a manner consistent with the RFI, the comments received, and CMS' current goals, these models will be based on the following principles:

- Enhancing Choice and Competition in the Market: promoting competition based on quality, outcomes, and costs.
- Supporting Provider Choice and Incentives: model testing with defined and reasonable control groups or comparison populations, to the extent possible, aimed at reducing burdensome requirements and unnecessary regulations to allow physicians and other providers to focus on providing high-quality health care to their patients; giving beneficiaries and health care providers the tools and information they need to make the decisions that work best for them.
- Promoting Patient-Centered Care: empowering beneficiaries, their families, and caregivers to take ownership of their health and ensure that they have the flexibility and information they need to make better choices as they seek care across the care continuum.
- Increasing Benefit Design and Price Transparency: using data-driven insights to ensure cost-effective care that also leads to improvements in beneficiary outcomes.

- Making Model Design and Evaluation More Transparent: drawing on partnerships and collaborations with public stakeholders and harnessing ideas from a broad range of organizations and individuals across the country.
- Improving Efficiency through Small Scale Testing: testing smaller scale models that may be expanded if they meet the requirements for expansion under section 1115A(c) of the Social Security Act. Focusing on key payment interventions rather than on specific devices or equipment.

New models are expected to test innovations in areas that provide the greatest opportunity to reduce expenditures while improving quality of care. Specific areas under consideration may include (but will not necessarily be limited to):

- Further empowering and incentivizing primary care providers to improve efficiency and quality of care;
- Innovative payment for radiation oncology services;
- Management of chronic kidney disease and end stage renal disease;
- Testing cutting edge private payer utilization management techniques, including prior authorization, in CMS programs;
- New and innovative value-based insurance designs within Medicare Parts C and D;
- Use of competition to reduce prices and improve outcomes in Medicare fee-for-service by empowering patient and provider choice;
- Better managing the care of patients with serious illness, who account for a disproportionate share of Medicare expenditures;
- Appropriately aligning incentives for emergency medical transport suppliers; and
- Integrating fragmented care at the state and regional level to improve beneficiary experience.

As part of this broadened work, the CMS Innovation Center has recently announced the Integrated Care for Kids model (InCK) and the Maternal Opioid Misuse (MOM) model[3] and sought comment on a potential International Pricing Index (IPI) model.[4]

[3] The Maternal Opioid Misuse (MOM) Model was announced on October 23, 2018. Since the announcement was made after the end of the period covered by this report, the model is not described in detail in this Report to Congress. Webpage: https://innovation.cms.gov/initiatives/maternal-opioid-misuse-model/.

[4] An advance notice of proposed rulemaking for a potential International Pricing Index Model was released on October 25, 2018. Since the announcement was made after the end of the period covered by this report, the model is not described in detail in this Report to Congress. Webpage: https://innovation.cms.gov/initiatives/ipi-model/.

2. Introduction

The Center for Medicare and Medicaid Innovation (CMS Innovation Center) was established by statute in 2010 for the purpose of testing "innovative payment and service delivery models to reduce program expenditures . . . while preserving or enhancing the quality of care" provided to individuals who receive benefits from Medicare, Medicaid, or the Children's Health Insurance Program (CHIP).[5] The results of this model testing help guide decisions about improvements in health care payment at the Centers for Medicare & Medicaid Services (CMS), supporting CMS' goal of fostering an affordable, accessible health care system that puts patients first.

The statute provides the Secretary of Health & Human Services with the authority under Section 1115A(c) of the Social Security Act to expand through rulemaking the duration and scope of a model being tested or a demonstration project under section 1866C, including implementation on a nationwide basis. In order for the Secretary to exercise this authority, 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' 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 are made taking into account evaluations performed by CMS under section 1115A(b)(4).

In addition to model expansion determinations, section 1115A also requires that the Secretary of HHS terminate or modify models tested under section 1115A, at any time after testing has begun and before completion, unless the Secretary determines that the model is expected to improve the quality of care without increasing spending, reduce spending without reducing the quality of care, or improve the quality of care and reduce spending.

To support its mission to test payment and service delivery models that show promise of reducing expenditures while preserving or enhancing the quality of care, the CMS Innovation Center seeks and reviews ideas from physicians, researchers, and other stakeholders in the health care community. Significant opportunities for improvement are analyzed to ensure that there is a sufficient evidence base to justify testing, that testing would not duplicate previous work, that prior research has not disproven the concept, and that a model would meet the statutory requirements.

Efforts underway through the CMS Innovation Center now serve over 26,636,000 Americans and involve more than 967,800 health care providers. These efforts are promoting innovative approaches to care and payment in the health care system aimed at reducing expenditures and improving health outcomes in every state across the country.[6]

[5] Section 1115A provided $5 million in fiscal year 2010 and provides a total of $10 billion over the fiscal years 2011 through 2019, in addition to $10 billion each decade thereafter.

[6] The CMS Innovation Center counts beneficiaries and individuals by model test. In specific circumstances, it is possible that a beneficiary or individual might participate in multiple model tests.

Between October 1, 2016 and September 30, 2018, the CMS Innovation Center announced, began testing, or continued to test innovative payment and service delivery models such as Accountable Care Organization (ACO) models, episode payment models, and various preventive and integrated care delivery models. These models are designed to improve clinical practice and deliver better outcomes for patients, making it easier for individuals and their families to access high-value, coordinated care and prioritize prevention and wellness to improve their health and long-term outcomes.

During implementation, data on performance and outcomes measures are collected and reviewed at prescribed intervals. CMS conducts independent evaluations, based on quantitative and qualitative data, of CMS Innovation Center models and releases those findings publicly. Reports posted online include cumulative-to-date information and in-depth analyses on the model. These reports provide stakeholders with information on the impact of the model as a whole on health care expenditures and utilization, health outcomes, and, where feasible, beneficiary and health care provider experiences with care. Often the reports also provide site-specific results. Links to evaluation reports that have been issued during the current period of this report are included throughout this Report to Congress within the description of the model tests to which they pertain, as well as in a table in Section 6, Part A.

Evaluations of CMS Innovation Center models and initiatives have indicated that a number of them have had sufficient impact on expenditures and/or quality to justify further testing. These results are described in detail in Section Three of this Report to Congress.

In addition, two CMS Innovation Center models have met the statutory criteria to be eligible for expansion by reducing program spending while preserving or enhancing quality—the Pioneer Accountable Care Organization (ACO) Model (as tested in its first two years) and the Health Care Innovation Award's Diabetes Prevention Program model (DPP).

The Pioneer ACO Model generated more than $384 million in savings to Medicare over its first two years—an average of approximately $300 per participating beneficiary per year with no adverse effects on quality of care or patient experience.[7]

The DPP model test saved Medicare an estimated $278 per beneficiary per quarter, which covered program costs and helped participants lose an average of 5 percent of their body weight to significantly reduce their risk of developing diabetes.

A. CMS Innovation Center Methods and Practices

As required by statute, the CMS Innovation Center studies improvements in care delivery and payment that are already being tested in the real world by physicians, health care providers,

[7] The model was certified for expansion based on the findings from these first two years, though the model completed a total of five performance years.

innovators, researchers, and other agencies, components, and payers. It meets with a wide array of stakeholders, requests ideas and input, learns from published research, coordinates efforts with other components in HHS and CMS and with other agencies, and conducts listening sessions and focus groups with beneficiaries. This outreach contributes materially to the CMS Innovation Center's efforts to achieve real, measurable, and significant results that are improving health and lowering spending.

Paying for outcomes rather than quantity is a central premise of the CMS Innovation Center's Alternative Payment Models (APMs), which include Accountable Care Organization (ACO) models, episode payment models (also known as bundled payment models), population-based payment models, and models that test integrated care for Medicare and Medicaid beneficiaries. The goal of such model testing is to determine through testing and evaluation the most effective ways to align payment with best practices and improve the value of health care received by beneficiaries.

To reduce costs, avoid duplicative effort, and leverage resources, the CMS Innovation Center works closely with other CMS components and other Federal agencies in developing and testing models of improved care delivery and payment, particularly when expertise required for such a model test is already available elsewhere within CMS or in another agency. Examples include working with the following components and supporting model tests they conduct, where applicable, in cooperation with the CMS Innovation Center:

- The Center for Clinical Standards and Quality: for the Transforming Clinical Practice Initiative;
- The Center for Medicaid and CHIP Services: for the Medicaid Innovation Accelerator Program and the State Innovation Models;
- The Center for Medicare: for all ACO models and episode payment models;
- The Federal Coordinated Health Care Office (Medicare-Medicaid Coordination Office): for the Medicare-Medicaid Financial Alignment Initiative and the Initiative to Reduce Avoidable Hospitalizations Among Nursing Facility Residents; and
- The Center for Program Integrity: for the Medicare Prior Authorization Models (Non-Emergent Hyperbaric Oxygen Therapy Model and Repetitive Scheduled Non-Emergent Ambulance Transport Model).

In addition, the CMS Innovation Center has partnered with other federal agencies to develop and improve its models and initiatives. Some of these federal agency partners have included the following:

- The Centers for Disease Control and Prevention;
- The Health Resources & Services Administration;
- The Agency for Healthcare Research and Quality;

- The Office of the National Coordinator of Health Information Technology;
- The Administration for Community Living;
- The Department of Housing and Urban Development;
- The Administration for Children & Families; and
- The Substance Abuse and Mental Health Services Administration.

For the Medicare Diabetes Prevention Program (MDPP) expanded model, in particular, CMS has relied on a close partnership with the Centers for Disease Control and Prevention (CDC). Rather than develop separate metrics and certification processes for MDPP suppliers, the CMS Innovation Center requires prospective suppliers to achieve certification through the *Centers for Disease Control and Prevention Diabetes Prevention Recognition Program*.[8]

B. Conducting Congressionally Mandated or Authorized Demonstrations

The CMS Innovation Center is responsible for implementing a number of specific demonstration projects authorized by statute. For example, in accordance with section 1866E of the Social Security Act, the CMS Innovation Center is implementing the Independence at Home Demonstration, a home-based primary care model that provides incentive payments to health care providers that meet designated quality measures and reduce expenditures for Medicare beneficiaries with multiple chronic conditions. The findings from these demonstrations will inform possible changes in CMS policies, as well as the development and testing of new models, if appropriate. Note that these demonstrations are not conducted under section 1115A authority, and therefore are not the main subject of this report. However, a list of such demonstrations implemented or evaluated by the CMS Innovation Center during the current period of this report is included in Appendix One.

C. Evaluating Results and Advancing Best Practices

Section 1115A(b)(4) requires the CMS Innovation Center to conduct evaluations of CMS Innovation Center model tests, and it specifies that evaluations must include an analysis of the quality of care furnished under the model, including the measurement of patient-level outcomes and patient-centeredness criteria, as well as changes in spending. As noted above, the Secretary of HHS is required to take the evaluation into account in deciding whether to expand the duration and scope of a model.

The CMS Innovation Center, generally using independent evaluators, routinely and rigorously assesses the impact of each model on quality and expenditures. The evaluations include advanced

[8] Centers for Disease Control and Prevention Diabetes Prevention Recognition Program; information available at https://www.cdc.gov/diabetes/prevention/pdf/dprp-standards.pdf.

statistical methods and carefully defined and selected comparison groups, as appropriate, to ensure that models deemed to be successful represent true opportunities for high-value investments of taxpayer dollars.

Central to this evaluation approach is the recognition that evaluators must not only assess results, but also understand the context that generates those results. For each model, the CMS Innovation Center tailors the collection of qualitative information to the needs of the model, with the goal of integrating the qualitative information with quantitative findings in order to best identify and understand the impact of the model.

Every CMS Innovation Center model also includes a plan of action to ensure that the lessons learned and best practices identified during the test can be spread as widely and effectively as possible to support improvement for both public programs and the health care system at large.

The CMS Innovation Center has created model-specific learning collaboratives that promote broad and rapid dissemination among health care providers of evidence-based best practices that have the potential to deliver higher quality care for Medicare, Medicaid, and CHIP beneficiaries at a lower cost to the Medicare, Medicaid, and CHIP programs. In addition, the CMS Innovation Center leverages claims data, patient surveys, and other data to deliver actionable feedback to health care providers about their performance, while encouraging participants to use their own performance data to drive continuous improvement in outcomes.

D. Model Tests Eligible for Expansion

Section 1115A(c) provides the Secretary of Health & Human Services the authority to expand through rulemaking the duration and scope of a model that is being tested under section 1115A(b) or a demonstration project under section 1866C, including implementation on a nationwide basis.

In order for the Secretary to exercise this authority, the Secretary must determine that an expansion is expected to either reduce 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 model expansion would not deny or limit the coverage or provision of benefits under Medicare, Medicaid, or CHIP. The Secretary's and the Chief Actuary's expansion determinations are made taking into account evaluations performed by CMS under section 1115A(b)(4).

As of September 30, 2016, two CMS Innovation Center models tested under section 1115A of the Act have been determined to meet the requirements to be eligible for expansion: the Pioneer ACO Model as it was tested during the first two years of the model and a Diabetes Prevention Program award from the Health Care Innovation Awards Round One.

In addition, section 515(b) of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) requires the Secretary to expand the Repetitive Scheduled Non-Emergent Ambulance

Transport (RSNAT) Prior Authorization Model to all states if the requirements in paragraphs one through three of section 1115A(c) of the Social Security Act are met. CMS believes this model is a viable approach to reducing unnecessary expenditures without impacting quality of care, and is continuing to evaluate the model and determine if the model meets the statutory requirements for nationwide expansion.

Congress has also acted in two instances to require CMS to include additional states in models – the Bipartisan Budget Act of 2018 required the Medicare Advantage Value-based Insurance Design Model (VBID) to include all states beginning in 2020, and MACRA required additional states to be included in the RSNAT model.

Pioneer Accountable Care Organization Model

The CMS Innovation Center launched the Pioneer Accountable Care Organization (ACO) Model in 2012 with 32 ACOs. The model was designed for health care organizations and health care providers that were already experienced in coordinating care for patients across care settings. In the model, organizations agreed to an initial three-year period of performance with the option to extend for two additional years. The model came to an end in December 2016.

The Pioneer ACO Model evaluation found favorable results on both cost and quality measures for the first two performance years of the Model. In May 2015, the CMS Chief Actuary certified that the Pioneer ACO Model was eligible for expansion and that expansion would reduce net program spending, and the Secretary determined that expansion would maintain or improve the quality of patient care without limiting coverage or benefits. The model was the first CMS Innovation Center model to meet the statutory requirements for expansion by the Secretary of Health & Human Services. The CMS Chief Actuary's certification can be accessed here.

After the Pioneer ACO Model met the statutory requirements for expansion, CMS incorporated several successful elements of the Pioneer ACO Model into Track 3 of the Shared Savings Program through notice and comment rulemaking. These elements include prospective alignment of beneficiaries, higher levels of shared savings and losses, and waiver of the Skilled Nursing Facility (SNF) Three-Day Rule to allow coverage of SNF services without a prior three-day inpatient hospital stay.

Health Care Innovation Awards Round One, Y-USA Diabetes Prevention Program Model

In 2012, the CMS Innovation Center awarded a Health Care Innovation Award (in Round One) to The Young Men's Christian Association (YMCA) of the USA (Y-USA) to test whether the Diabetes Prevention Program (DPP) could be successfully provided by non-physician and community-based organizations to Medicare beneficiaries with prediabetes to reduce expenditures or enhance quality.

The Y-USA Diabetes Prevention Program model test was derived from the DPP administered by the Centers for Disease Control and Prevention (CDC). The DPP is a structured health behavior change program delivered in community or health care settings by trained community health workers or health professionals. Awardees participating in the Health Care Innovation Awards Round One had a three-year period of performance, from June 2012 to June 2015. The Y-USA received a one-year no cost extension to June of 2016.

At the conclusion of the model, a total of 6,947 participants enrolled in the model (*i.e.*, completed at least four sessions), which was 88.7 percent of those recruited (those who attended at least one session). In addition, Y-USA kept participants engaged with the model; for example, 6,199 participants completed at least nine sessions and an average of 17.3 sessions. Each additional session that participants attended was associated with an increase of 0.42 percent weight loss. Those who attended at least nine sessions achieved significantly more weight loss (6.23 percent) than those who attended fewer than nine sessions.

The Y-USA Diabetes Prevention Program model test 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 Emergency Department (ED) visit during the period of performance. The model did not affect readmissions.

In March 2016, the CMS Chief Actuary certified that expansion of the DPP model would not results in an increase in net program spending and the Secretary determined that expansion would maintain or improve patient care without limiting coverage or benefits. As a result, the DPP model became the second CMS Innovation Center Model to meet the statutory requirements for expansion.

The certification and evaluation report can be accessed here.

On July 15, 2016 CMS issued the Calendar Year (CY) 2017 Physician Fee Schedule proposed rule, which included a proposal to expand the DPP model test to the Medicare program through a broadened model test called the Medicare Diabetes Prevention Program (MDPP) Expanded Model. The final rule was published in the Federal Register November 16, 2016, and can be accessed here.

The CY 2017 and 2018 Physician Fee Schedule final rules finalized aspects of the expansion that enable organizations, including those new to Medicare, to prepare for enrollment into Medicare as MDPP suppliers. Specifically, the CY 2018 Physician Fee Schedule final rule finalized additional policies necessary for suppliers to begin furnishing MDPP services nationally in 2018, including the MDPP payment structure, as well as additional supplier enrollment requirements and supplier compliance standards aimed to enhance program integrity.

The MDPP expanded model is explained further in Section Three, Part A, below.

E. Developing and Testing New Payment and Service Delivery Models

The CMS Innovation Center develops new payment and service delivery models in accordance with the requirements of section 1115A. During the development of models, the CMS Innovation Center builds on ideas received from stakeholders and consults with clinical and analytical experts, as well as with representatives of relevant federal and state agencies. In addition, when appropriate or necessary, the CMS Innovation Center seeks input through Requests for Information (RFI) or Notice and Comment Rulemaking.

In general, the CMS Innovation Center solicits model test participants through an open process that includes competitive Notices of Funding Opportunities and Requests for Applications. The selection process follows established protocols to ensure that it is fair and transparent and that it provides opportunities for all potential participants to ask questions regarding the CMS Innovation Center's expectations.

During the period between October 1, 2016 and September 30, 2018, the CMS Innovation Center announced or tested 36 models and initiatives authorized under section 1115A authority and managed eight demonstrations mandated by other statutes. In April of 2018, the Government Accountability Office (GAO) released a report on the CMS Innovation Center's model implementation and center performance to date based on three performance goals: "(1) Reducing the growth of health care costs while promoting better health and healthcare quality through delivery system reform; (2) Identifying, testing, and improving payment and delivery models; and (3) Accelerating the spread of successful practices and models."[9] The GAO report found that the CMS Innovation had partially met goals one and three, and fully met goal two.

For purposes of this report, some models and initiatives appear under the same name but are testing distinctly different approaches to payment and care delivery through multiple phases, rounds, or models.

For example, the State Innovation Models includes two rounds, which the CMS Innovation Center has counted as two separate model tests. Most other model tests announced under the same name but as separate versions of the model have different requirements, parameters, and evaluations for each version of the model test. In these cases, models and initiatives are also counted separately. This approach results in the aggregate count of 36 models and initiatives that have been announced or implemented during the period of this report. These distinctions, where applicable, are noted in in Section Three, Parts A and B, in this report.

As noted above, between October 1, 2016 and September 30, 2018, the CMS Innovation Center has announced or tested 36 model tests and initiatives under section 1115A authority. These models and initiatives are listed below and described in Section Three of this Report to Congress.

[9] Government Accountability Office. CMS Innovation Center: Model Implementation and Center Performance, April 25, 2018. https://www.gao.gov/products/GAO-18-302

1. Accountable Health Communities
2. ACO Investment Model
3. Bundled Payments for Care Improvement, Model One
4. Bundled Payments for Care Improvement, Model Two
5. Bundled Payments for Care Improvement, Model Three
6. Bundled Payments for Care Improvement, Model Four
7. Bundled Payments for Care Improvement Advanced
8. Comprehensive Care for Joint Replacement Model
9. Comprehensive ESRD Care Model
10. Comprehensive Primary Care Initiative
11. Comprehensive Primary Care Plus Model
12. Health Care Innovation Awards, Round Two[10]
13. Health Care Payment Learning and Action Network[11]
14. Home Health Value-Based Purchasing Model
15. Initiative to Reduce Avoidable Hospitalizations Among Nursing Facility Residents, Phase Two[12]
16. Integrated Care for Kids Model
17. Maryland All-Payer Model
18. Maryland Total Cost of Care Model
19. Medicaid Innovation Accelerator Program[13]
20. Medicare ACO Track 1+ Model
21. Medicare Advantage Value-Based Insurance Design Model
22. Medicare Care Choices Model
23. Medicare Diabetes Prevention Program (MDPP) Expanded Model

[10] The Health Care Innovation Awards, Round One, is not included in this list. Although the evaluation of Round One continued into the current period of report, activity in Round One ended prior to October 1, 2016.
[11] The Health Care Payment and Learning and Action Network is a national learning collaborative funded by the CMS Innovation Center under Section 1115A authority.
[12] The Initiative to Reduce Avoidable Hospitalizations Among Nursing Facility Residents, Phase One, is not included in this list. Although the evaluation of Phase One continued into the current period of report, activity in Phase One ended prior to October 1, 2016.
[13] The Medicaid Innovation Accelerator Program (IAP) is an initiative that functions as an infrastructure program for State Medicaid Agencies: the goal of IAP is to improve the care and health of Medicaid beneficiaries and to reduce costs by supporting states' ongoing delivery system and payment reforms through targeted technical support, tool development, and cross-state learning opportunities.

24. Medicare Prior Authorization Models: Non-Emergent Hyperbaric Oxygen Therapy Model
25. Medicare Prior Authorization Models: Repetitive Scheduled Non-Emergent Ambulance Transport Model
26. Medicare-Medicaid Financial Alignment Initiative and State Demonstrations to Integrate Care for Dual Eligible Individuals
27. Million Hearts®: Cardiovascular Disease Risk Reduction Model
28. Next Generation ACO Model
29. Oncology Care Model
30. Part D Enhanced Medication Management Therapy (MTM) Model
31. Pennsylvania Rural Health Model
32. Pioneer ACO Model
33. State Innovation Models, Round Two[14]
34. The Strong Start for Mothers and Newborns Strategy Two[15]
35. Transforming Clinical Practice Initiative
36. Vermont All-Payer Accountable Care Organization Model

F. A New Direction for the CMS Innovation Center

In order to increase the transparency, responsiveness, and effectiveness of the CMS Innovation Center's work, CMS issued in 2017 an informal Request for Information (RFI) seeking comments about a potential new direction for the CMS Innovation Center. The RFI specifically asked for feedback on promoting patient-centered care, testing market-driven reforms, empowering beneficiaries as consumers, providing price transparency, and increasing choices and competition to drive quality, reduce costs, and improve outcomes, with special attention to the following eight general areas:

- Increased participation in Advanced Alternative Payment Models (APMs);
- Consumer-Directed Care & Market-Based Innovation Models;
- Physician Specialty Models;
- Prescription Drug Models;
- Medicare Advantage (MA) Innovation Models;

[14] State Innovation Models, Round One, is not included in this list. Although the evaluation of Round One continued into the current period of report, activity in Round One ended prior to October 1, 2016.
[15] The Strong Start for Mothers and Newborns, Strategy One, is not included in this count, since the initiative ended before the period of this report

- State-Based and Local Innovation, including Medicaid-focused Models;
- Mental and Behavioral Health Models; and
- Program Integrity.

CMS received over 1,000 responses to the RFI from a wide variety of individuals and organizations located across the country, including medical societies and associations, health systems, physician groups, consumers, and private businesses. The responses provided valuable insight about possibilities for improving existing models as well as ideas for transformative new models that aim to empower beneficiaries with more choices and better health outcomes.

Based on these responses and other input from stakeholders, the CMS Innovation Center is actively reexamining its portfolio and is in the process of developing a new array of models. In a manner consistent with the RFI, the comments received, and with CMS' current goals, these models will be based on the following principles:

- Enhancing Choice and Competition in the Market: promoting competition based on quality, outcomes, and costs.
- Supporting Provider Choice and Incentives: model testing with defined and reasonable control groups or comparison populations, to the extent possible, aimed at reducing burdensome requirements and unnecessary regulations to allow physicians and other providers to focus on providing high-quality health care to their patients; giving beneficiaries and health care providers the tools and information they need to make the decisions that work best for them.
- Promoting Patient-Centered Care: empowering beneficiaries, their families, and caregivers to take ownership of their health and ensure that they have the flexibility and information they need to make better choices as they seek care across the care continuum.
- Increasing Benefit Design and Price Transparency: using data-driven insights to ensure cost-effective care that also leads to improvements in beneficiary outcomes.
- Making Model Design and Evaluation More Transparent: drawing on partnerships and collaborations with public stakeholders and harnessing ideas from a broad range of organizations and individuals across the country.
- Improving Efficiency through Small Scale Testing: testing smaller scale models that may be expanded if they meet the requirements for expansion under 1115A(c) of the Act. Focusing on key payment interventions rather than on specific devices or equipment.

New models are expected to test innovations in areas that provide the greatest opportunity to reduce expenditures while improving quality of care. Specific areas under consideration may include (but will not necessarily be limited to):

- Further empowering and incentivizing primary care providers to improve efficiency and quality of care;

- Innovative payment for radiation oncology services;
- Management of chronic kidney disease and end stage renal disease;
- Testing cutting edge private payer utilization management techniques, including prior authorization, in CMS programs;
- New and innovative value-based insurance designs within Medicare Parts C and D;
- Use of competition to reduce prices and improve outcomes in Medicare fee-for-service; empowering patient and provider choice;
- Better managing the care of patients with serious illness, who account for a disproportionate share of Medicare expenditures;
- Appropriately aligning incentives for emergency medical transport suppliers; and
- Integrating fragmented care at the state and regional level to improve beneficiary experience.

As part of this broadened work, the CMS Innovation Center has recently announced the Integrated Care for Kids Model (InCK) and the Maternal Opioid Misuse (MOM) Model and sought comment on a potential International Pricing Index (IPI) Model.[16] The MOM Model and the advance notice of proposed rulemaking for the potential IPI Model were announced after September 30, 2018, the end of the period of report, and therefore are not described in this Report to Congress.

CMS will continue engaging with stakeholders to help foster the design and successful testing of payment and service delivery models that put patients first, reduce unnecessary burden, increase efficiencies and improve the patient experience and the quality of care they receive.

For more information on the New Direction RFI and to access public comments received by the CMS Innovation Center, see the following link.

G. Modernizing Medicare through the Quality Payment Program

The CMS Innovation Center is committed to moving the Medicare program, as well as the health care system at large, toward paying health care providers based on quality and value rather than the quantity of care delivered.

In April 2015, Congress passed the bipartisan Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), which significantly reformed the way that Medicare pays physicians and other clinicians. Specifically, MACRA repealed the Sustainable Growth Rate, streamlined multiple legacy value-based payment programs into one new system known as the Merit-Based Incentive

[16] The potential International Pricing Index Model was announced on October 25, 2018. Webpage: https://innovation.cms.gov/initiatives/ipi-model/.

Payment System (MIPS), and provided incentives for eligible clinicians who significantly participate in alternative payment models that meet certain criteria, otherwise known as "Advanced APMs." These changes will accelerate the adoption of APMs by building on existing efforts to tie payment to quality and improvements in care delivery and will modernize the way Medicare pays clinicians.

The CMS Innovation Center has primary responsibility for development of policies and operations to implement the APM incentive provisions of MACRA through the Quality Payment Program. In October of 2016, CMS developed and announced the CY 2017 final rule with comment period for the Quality Payment Program. The Quality Payment Program has been updated regularly since publication of the CY 2017 final rule with comment period. In the CY 2018 final rule, CMS implemented changes and additional policies namely with respect to the All-Payer Combination Option and Other Payer Advanced APMs. The All-Payer Combination Option allows eligible clinicians to become Qualifying APM Participants (QPs) and earn the APM incentive payment through participation in a combination of Advanced APMs with Medicare and Other Payer Advanced APMs starting in 2021 (based on participation in the 2019 QP Performance Period). In the CY 2019 final rule, CMS finalized changes to the Advanced APM criteria and Other Payer Advanced APM criteria, while also implementing a number of other policies aimed at increasing flexibility under the All-Payer Combination Option for clinicians and non-Medicare payers participating in the Quality Payment Program.

The CMS Innovation Center has continued to enlarge its portfolio of Advanced APMs from six Advanced APMs in 2017 to ten Advanced APMs in 2018. The CMS Innovation Center is the principal pathway for creation of new alternative payment models, including consideration of models recommended to the Secretary of HHS by the Physician-Focused Payment Model Technical Advisory Committee (PTAC), which is described in more detail below. The CMS Innovation Center intends to broaden opportunities for health care providers, including small practices and a wide range of specialties, to participate in these initiatives. It also intends to provide clinicians more payment options in Medicare that support high quality patient care, as well as more ways to be eligible to receive an incentive payment under the Quality Payment Program for sufficient participation in Advanced APMs.

As of the second QP Determination snapshot on June 30, 2018, 174,303 eligible clinicians attained QP status through their participation in Advanced APMs. The CMS Innovation Center supports many of these eligible clinicians through the Transforming Clinical Practice Initiative (TCPI), which is helping more than 140,000 practices learn how to prepare for participation in APMs and reduce waste while improving the quality of care for millions of patients.

For more information on the Quality Payment Program, including a comprehensive list of Advanced APMs, see the Quality Payment Program Webpage and the Quality Payment Program Resources Library.

Physician-Focused Payment Model Technical Advisory Committee

Section 101(e)(1) of MACRA (42 USC § 1395ee(c)) created the Physician-Focused Payment Model Technical Advisory Committee (PTAC). PTAC, a Federal Advisory Committee Act (FACA) committee, reviews proposals for Physician-Focused Payment Models (PFPMs) submitted by individuals and stakeholder entities to assess the extent to which proposed models meet ten criteria for PFPMs set forth in the Quality Payment Program final rule (42 CFR § 414.1465). PTAC typically holds quarterly public meetings to deliberate and vote on proposed models. PTAC subsequently submits its comments and recommendations to the Secretary on each proposal. The Secretary, in turn, must review PTAC's comments and recommendations and post a detailed response on the CMS website.

As of September 30, 2018, the Secretary has responded to all of the comments and recommendations that PTAC has submitted. Most recently, the Secretary's responses to PTAC's comments and recommendations on 12 PFPM proposals voted on during September 2017 – March 2018 public meetings was posted in June 2018. As of September 30, 2018, PTAC has received a total of 25 PFPM proposals.

PTAC provides an independent, expert-reviewed avenue for health care providers, associations, coalitions and individuals to share their ideas for PFPMs with HHS and the public. The PTAC's thoughtful discussions, comments, and recommendations have been a highly-valued contribution to HHS' thinking about how to achieve health care priorities and goals.

HHS is currently exploring how it might revise current model tests or potentially develop new ones based on ideas from the proposed models recommended by PTAC. These model designs might include ways to test increasing value in health care while providing optimal care to seriously ill beneficiaries; offering a more holistic approach to primary care; and supporting customized, patient-centered care to improve the well-being and medical management of patients with chronic kidney disease or end-stage renal disease. The proposed models submitted to PTAC, PTAC's thoughtful comments on them, and our discussions with submitters, have been valuable in shaping Innovation Center work.

For more information on the PTAC, see the Physician-Focused Payment Models Webpage.

H. Engaging Stakeholders

Section 1115A(a)(3) requires the CMS Innovation Center, in carrying out its duties under Section 1115A, to "consult representatives of relevant Federal agencies, and clinical and analytical experts with expertise in medicine and health care management." Accordingly, the CMS Innovation Center has since its inception consulted and worked with stakeholders across the country, other federal agencies, and other components within HHS to help design CMS Innovation Center models.

The CMS Innovation Center has actively sought input from a broad array of stakeholders across the country in order to identify promising new payment and service delivery models. In addition to the CMS Innovation Center New Direction RFI, the CMS Innovation Center has held model-specific listening sessions, webinars, and information sharing sessions, engaging thousands of innovators from around the country. Moreover, hundreds of ideas for improving health care have been shared through the CMS Innovation Center website and CMS Innovation Center staff routinely meet with health care researchers, innovators, clinicians, professional associations, subject matter experts from sister agencies, and other stakeholders who have provided feedback on current model tests, as well as suggestions to inform the design of future model tests.

The CMS Innovation Center interacts with people across the country interested in service delivery and payment innovation through its website, social media outreach, and an e-mail listserv. The CMS Innovation Center listserv can be accessed here. Since 2012, the listserv audience has grown from 30,000 to over 100,000 and Twitter followers of the CMS Innovation Center Twitter account have increased from 5,000 to more than 43,000. The CMS Innovation Center website and listserv continually update innovators in the field on new funding and learning opportunities.

Another extensive outreach effort over the past two years has been the Health Care Payment Learning and Action Network (LAN), convened and independently managed by the CMS Alliance to Modernize Healthcare (CAMH), a Federally Funded Research and Development Center (FFRDC) operated by a contractor. The LAN engages public and private payers, purchasers, health care providers, consumers, and states to align development of alternative payment models that improve the quality and value of health care.

To date, more than 7,100 individual patients, public and private payers, purchasers, health care providers, consumers, and states have registered to participate in the LAN, including more than 610 organizations. As of September 30, 2018, LAN activities have the potential to inform the ways in which health care providers provide value-based care to over 226 million Americans, approximately 77 percent of the lives covered by payers participating in the LAN.[17]

Last September, the CMS Innovation Center hosted a one-day Behavioral Health Payment and Care Delivery Summit (Summit) that was held at CMS headquarters. The Summit convened over 300 community health organizations, medical societies, patient advocacy groups, government and non-government organizations, and other interested stakeholders. Panels at the Summit addressed the following topics: substance use disorders; mental health disorders in the presence of co-occurring conditions; Alzheimer's disease and related dementias; and behavioral health workforce challenges.

[17] 2018 HCP-LAN APM Measurement Methodology & Results Report, available here.

Requests for Information Issued in the Past Two Years

The CMS Innovation Center invites and seeks input on issues in health care payment and delivery through forums that are open to all members of the public, including Requests for Information (RFI), Notice and Comment Rulemaking, and "open door" phone conferences.

During this reporting period, the CMS Innovation Center issued three RFIs seeking input from stakeholders on possible models, initiatives, and program implementation under consideration and on anticipated notice and comment rulemaking. These are described below.

Pediatric Alternative Payment Model Concepts

On February 27, 2017 the CMS Innovation Center issued an RFI to seek input on the design and development of a potential pediatric health care payment and service delivery model. Specifically, the RFI sought input on ideas for developing a model aimed at improving the health of children and youth covered by Medicaid and CHIP through state-driven integration of health care, as well health-related social services with shared accountability and cost savings.

The Pediatric Alternative Payment Model Concepts RFI can be accessed here.

Centers for Medicare & Medicaid Services: Innovation Center New Direction

On September 19, 2017, CMS issued an RFI seeking input on a new direction for the CMS Innovation Center (explained in more detail above). The CMS Innovation Center New Direction RFI sought feedback on ways to better promote patient-centered care and test market-driven reforms that empower beneficiaries as consumers, provide price transparency, increase choices and competition to drive quality, reduce costs, and improve outcomes.

The CMS Innovation Center New Direction RFI can be accessed here.

Direct Provider Contracting Models

As a follow-up to the New Direction RFI (described above), on April 25, 2018 CMS released an RFI seeking broad input on direct provider contracting (DPC) between payers and primary care or multi-specialty groups to inform potential testing of a DPC model within the Medicare fee-for-service (FFS) program (Medicare Parts A and B), Medicare Advantage program (Medicare Part C), and Medicaid. A DPC model would aim to enhance the beneficiary-physician relationship by providing a platform for physician group practices to provide flexible, accessible, and high quality care to beneficiaries who have actively chosen this care model.

The Direct Provider Contracting Models RFI can be accessed here.

3. Review of CMS Innovation Center Activities

Between October 1, 2016 and September 30, 2018, the CMS Innovation Center has announced or tested 36 payment and service delivery models and initiatives aimed at reducing expenditures under Medicare, Medicaid, and the Children's Health Insurance Program (CHIP) while preserving or enhancing the quality of care that beneficiaries receive. Collectively, the health care providers participating in CMS Innovation Center models are furnishing services to Medicare, Medicaid, and/or CHIP beneficiaries in all 50 states, the District of Columbia, the Northern Mariana Islands, and Puerto Rico. The CMS Innovation Center's portfolio of models has attracted participation from a broad array of health care providers, states, payers, and other stakeholders.

This section of the report is divided into two parts. Part A includes models and initiatives authorized and funded by section 1115A of the Social Security Act that were announced (some of which also had implementation activity) between October 1, 2016 and September 30, 2018. Existing section 1115A models (those announced prior to October 1, 2016) are covered in Part B.

A. New Models and Initiatives Announced Since the 2016 Report to Congress

Bundled Payments for Care Improvement Advanced

Model Announcement Date: January 9, 2018

Model Performance Period: October 2018 – December 2023

Model Participants: Acute Care Hospitals and Physician Group Practices (can participate as Convener Participants or Non-Convener Participants); Eligible entities that are Medicare-enrolled providers or suppliers or any other type of entity that is not enrolled in Medicare that brings together multiple Episode Initiators (can participate only as Convener Participants).

Geographic Scope: Participation was open to eligible participants nationwide. For Model Years One and Two Model participants are located in 49 states, plus Washington, D.C. and Puerto Rico.

Model Description: Building on the lessons learned and ongoing experience of the Bundled Payments for Care Improvement (BPCI) initiative, BPCI Advanced is designed to align incentives for reducing costs while improving coordination and quality of care. BPCI Advanced uses a bundled payment methodology that involves combining the payments for physician, hospital, and other health care provider services into a single bundled payment amount. This amount is calculated based on the expected costs of all items and services furnished to a beneficiary during an episode of care. Payment models that provide a single bundled payment to health care providers can motivate care redesign by adopting best practices, reducing deviation from standards of care, and providing a clinically appropriate level of services for patients throughout the Clinical Episode. Health care providers receiving a bundled payment may realize a gain or loss, based on how

successfully they manage resources and total costs throughout each episode of care. A bundled payment also creates an incentive for providers and suppliers to coordinate and deliver care more efficiently because a single bundled payment will often cover services furnished by various health care providers in multiple care delivery settings.

BPCI Advanced includes two types of participants: Convener Participants and Non-Convener Participants. Both participant types bear financial risk under the model. A Convener Participant can be a Medicare-enrolled provider or supplier or any other type of entity that brings together multiple downstream entities referred to as Episode Initiators. Convener Participants facilitate care coordination among their Downstream Episode Initiators and bear (and apportion) financial risk under the model. A Non-Convener Participant is either an Acute-Care Hospital or a Physician Group Practice that is itself an Episode Initiator and bears financial risk only for itself rather than on behalf of a Downstream Episode Initiators. Episode Initiators are limited to Acute Care Hospitals and Physician Group Practices. For the first year of the model, 1,299 have signed a Participation Agreement with CMS, which includes 832 Acute Care Hospitals and 715 Physician Group Practices as episode initiating entities.

Participants must choose to be held accountable for at least one Clinical Episode, and are able to choose from 29 inpatient and three outpatient Clinical Episodes, comprised of both medical and surgical episodes. The length of the Clinical Episode will depend on the site of service. For inpatient Clinical Episodes, the episode length is the Anchor Stay plus 90 days beginning the day of discharge. For the outpatient Clinical Episodes, the episode length is the Anchor Procedure, plus 90 days beginning on the day of completion of the outpatient procedure. Participants (Convener Participants and Non-Convener Participants) are not permitted to drop active Clinical Episodes, nor add new Clinical Episodes, except when expressly permitted by CMS. The same limitation applies to the withdrawal or addition of Downstream Episode Initiators by a Convener Participant.

At this time, CMS has announced two opportunities for Participants to make changes in their selection of active Clinical Episodes and Downstream Episode Initiators – March 2019 (only drop Clinical Episodes and Episode Initiators) and Model Year Three – January 2020 (add/drop Clinical Episodes and Episode Initiators). BPCI Advanced is a voluntary model, and Participants may terminate their agreement to participate in the Model at any time upon advance written notice to CMS).

The Model aims to broadly engage Participants across geographic areas, with varying demographic attributes of their patient populations, organization size, and clinical types. In addition to the different Participant types, the model also aims to also involve a broad range of Medicare-enrolled practitioners, including participating physicians and non-physician practitioners.

BPCI Advanced aims to reduce Medicare fee-for-service (FFS) expenditures and to improve the quality of care and health outcomes for Medicare beneficiaries. Success will be measured by the reduction in Medicare FFS expenditures for Clinical Episodes relative to historical expenditures, as well as by improved performance on quality measures and health outcomes.

The BPCI Advanced Request for Applications (RFA) was issued on January 9, 2018, and applications were accepted through March 12, 2018. Applicants who successfully completed the screening process and signed a Participant Agreement with CMS began participating in the model on October 1, 2018. CMS intends to provide an additional opportunity for organizations to start participating in the Model – January 2020 (Model Year Three). The application period is anticipated to be announced in the spring of 2019. The Model's final Performance Period will end on December 31, 2023.

BPCI Advanced is an Advanced Alternative Payment Model (Advanced APM), meaning that participating clinicians who meet certain participation thresholds may obtain Qualifying APM Participant (QP) status, beginning in 2019.

Evaluation Status/Results: An evaluation is planned to estimate the impact on Medicare payments and beneficiary quality of care to assess whether BPCI Advanced achieved the goal of Medicare savings without compromising quality or improving quality

Webpage: Bundled Payments for Care Improvement Advanced Webpage

Integrated Care for Kids Model

Model Announcement Date: August 23, 2018

Anticipated Model Performance Period: January 2020 – December 2026

Model Participants: State Medicaid Agencies and local providers

Geographic Scope: All 50 states and U.S. territories are eligible to apply; we anticipate that up to eight awards will be made

Model Description: The Integrated Care for Kids (InCK) Model is a child-centered local service delivery and state payment model aimed at reducing expenditures and improving the quality of care for children covered by Medicaid and the Children's Health Insurance Program (CHIP) through prevention, early identification, and treatment of priority health concerns like behavioral health challenges and physical health needs. The model will offer states and local providers support to address these priorities through a framework of child-centered care integration across behavioral, physical, and other child providers.

The goals of the InCK Model are to improve child health, reduce avoidable inpatient stays and out of home placement, and create sustainable APMs. The InCK Model will support states and local providers to conduct early identification and treatment of children with health-related needs across settings. Participants will integrate care coordination and case management across physical and behavioral health and other local service providers to provide child- and family-centered care. Through the model, states and local providers will share accountability for cost and outcomes.

Evaluation Status/Results: The goal of the evaluation is to assess quality of care, health status of participants, and costs of care. The evaluation will compare pre- and post-intervention data from Medicaid claims/encounters for children in the model and for a similar group of children not in the model but residing in the same state (a difference-in-differences approach).

In addition, the evaluation will employ quantitative and qualitative methods to consider individual participant data; program documents and data; implementation and program operations; provider and administrative buy-in; and patient and family experiences. These data will augment Medicaid data for assessment of quality of care, health status of participants, and patient experiences.

Webpage: Integrated Care for Kids (InCK) Model Webpage

Maryland Total Cost of Care Model

Model Announcement Date: June 6, 2018

Model Performance Period: January 2019 - December 2026

Model Participants: Acute care hospitals, primary care practices, and Care Transformation Organizations in the state of Maryland

Geographic Scope: State of Maryland

Model Description: On June 6, 2018 CMS, in partnership with the state of Maryland, announced the Maryland Total Cost of Care (TCOC) Model. Beginning on January 1, 2019, the Maryland TCOC Model will build upon Maryland's All-Payer Model (described below). The Maryland TCOC Model sets a per capita limit on Medicare total cost of care for beneficiaries in Maryland. The Maryland TCOC Model is the first CMS Innovation Center model to hold a state or health care provider fully at risk for the total cost of care.

The Maryland TCOC Model commits Maryland to over $1 billion in cumulative Medicare savings by 2023 relative to a 2013 baseline, and creates new opportunities for a range of nonhospital providers and suppliers to participate in an effort to limit Medicare spending across an entire state.

The performance period of the Maryland TCOC Model will begin on January 1, 2019 and conclude on December 31, 2026. By the end of Model Year Six (2024), CMS will determine, in consultation with the state, whether to pursue a model expansion or a new model test in Maryland.

The TCOC Model includes three programs:

1. **The Hospital Payment Program** continues the use of population-based payments used under the Maryland All-Payer Model and adds accountability for Medicare TCOC for Maryland hospitals. In Maryland's Hospital Payment Program, each hospital receives a population-based payment amount that covers all hospital services provided during the

course of the year. The Hospital Payment Program creates a financial incentive for participating hospitals to provide value-based care and to reduce the number of unnecessary hospitalizations, including readmissions.

2. **The Care Redesign Program (CRP)** allows hospitals to make incentive payments to Medicare providers and suppliers (most likely physicians and group practices) who collaborate to improve quality of care. Three tracks of CRP exist for hospitalists, community-based providers, and post-acute care providers. Under the CRP, any incentive payments from hospitals to collaborating providers and suppliers must be counted as hospital spending under the Hospital Payment Program; as a result, there will be no increased cost to CMS for enabling this program.
3. **The Maryland Primary Care Program (MDPCP)** is a program that supports primary care providers in Maryland who choose to offer advanced primary care services to their patients. Participating practices will receive risk-stratified per beneficiary per month payments from CMS to cover care management services. The program also offers a performance-based incentive payment to providers who succeed in reducing certain utilization metrics and improving quality of care for their patients. Practices selecting the advanced track also receive partially capitated payments for select primary care services they furnish to beneficiaries. To assist smaller practices that may not have the capacity to deliver all aspects of advanced primary care on their own, a new entity, Care Transformation Organizations, may assist practices who voluntarily elect to partner with them. These organizations are paid a portion of the per-beneficiary-per month payments otherwise paid to partner practices.

Maryland selected six high-priority areas to focus on improving population health under the Maryland TCOC Model: (1) Substance Use Disorder (SUD); (2) Diabetes; (3) Hypertension; (4) Obesity; (5) Smoking; and (6) Asthma.

Maryland will select its own measures and targets within each population health area for CMS approval. The model also includes an outcomes-based credits framework, which enables CMS to grant the state credits for the state's performance on these outcomes measures, structured as a discount applied to the state's actual Medicare TCOC used in calculating the state's performance against the model's annual savings targets. Any outcomes-based credit approved by CMS will be based on savings that Medicare would expect from the state's improved performance on the population health measures.

Evaluation Status/Results: An evaluation is planned to examine whether, in a fixed population-based payment system for hospital payment, involvement of a broad spectrum of providers and suppliers outside of the hospital environment in care coordination is an effective model for improving quality of care and patient health outcomes in the state while reducing Medicare costs.

Webpage: Maryland Total Cost of Care Webpage

Medicare ACO Track 1+ Model

Model Announcement Date: December 20, 2016

Model Performance Period: January 2018 – December 2020

Model Participants: Track 1 Shared Savings Program ACOs.

Geographic Scope: Nationwide

Model Description: The Track 1+ Model tests a payment design that incorporates more limited downside risk than is currently present in Track 2 or Track 3 of the Shared Savings Program. The Track 1+ Model is designed to encourage more practices, especially small practices, to advance to performance-based risk, and also allows hospitals, including small rural hospitals, to participate. In January 2018, 55 Track 1+ ACOs joined the model.

This model allows clinicians to join an Advanced APM to improve care and potentially earn an incentive payment under the Quality Payment Program.

The Track 1+ Model is testing an innovative design for a two-sided risk model, offering a bifurcated approach to determining the maximum level of the ACO's loss liability according to the composition of ACO participants; applying either a revenue-based loss sharing limit (a percentage of the ACO participants' Medicare FFS revenues) or a benchmark-based loss sharing limit (a percentage of the ACO's updated historical benchmark); in order to determine whether:

- ACOs that accept performance-based risk have greater incentives to drive more meaningful change in providers' and suppliers' behavior, specifically lowering the growth in Medicare FFS expenditures while maintaining or improving the quality of beneficiaries' care;
- An alternative performance-based risk participation option will work for organizations that are not experienced with performance-based risk and the accountable care framework and for more risk-averse organizations;
- An alternative performance-based risk option might be effective in retaining ACOs that might otherwise have terminated their participation in the Shared Savings Program if required to enter Track 2 or 3;
- A less burdensome repayment mechanism requirement facilitates participation in performance-based risk by physician-only ACOs and ACOs that include rural ACO providers and suppliers, which typically are less well-funded and more risk-averse; and
- A model that includes these features might encourage more rapid progression to performance-based risk.

Evaluation Status/Results: The performance of the Track 1+ Model is being monitored and evaluated on an ongoing basis by the CMS Office of the Actuary.

Webpage: Medicare Shared Savings Program Data webpage

Pennsylvania Rural Health Model

Model Announcement Date: January 12, 2017

Model Performance Period: January 2017 – December 2024

Model Participants: Acute care hospitals and critical access hospitals (CAHs) in rural Pennsylvania

Geographic Scope: State of Pennsylvania

Model Description: The Pennsylvania Rural Health Model seeks to increase rural Pennsylvanians' access to high-quality care and improve their health, while also reducing the growth of hospital expenditures across payers, including Medicare and Medicaid, and improving the financial state of acute care hospitals and CAHs in rural Pennsylvania to ensure continued access to care.

The Pennsylvania Rural Health Model was developed in response to specific requests from the state to develop a pathway to sustainability for rural health care providers. The state continues to play a central role in designing and operationalizing the Model. The model aims to offer more reliable, higher-quality care to patients in rural communities, by enabling participating rural hospitals a measure of financial predictability while they transform care and care experience to better meet the needs of their patients.

Under this Model, beginning in 2019, participating rural hospitals will be paid based on all-payer global budgets—a fixed amount that is set in advance for inpatient and outpatient hospital-based services, and paid throughout the year by Medicare fee-for-service and other participating payers. In addition, participating rural hospitals will deliberately redesign the delivery of care in accordance with their CMS-and State-approved Rural Hospital Transformation Plans to improve quality of care and meet the health needs of their local communities. Pennsylvania, through the Pennsylvania Department of Health, is the state partner working with CMS to jointly administer this model.

The Model tests whether the predictable nature of the global budgets will enable participating rural hospitals to invest in quality and preventive care, and to tailor the services they deliver to better meet the needs of their local communities. The Model is open to acute care hospitals and CAHs in rural Pennsylvania. In addition, other payers in Pennsylvania, including Medicaid and commercial plans, may participate in the model.

CMS intends to provide up to $25 million in funding over four years to help Pennsylvania begin its implementation of the Model. Under the Model, Pennsylvania will use this funding to begin the Model's implementation activities, including to conduct Model operations, global budget

administration, data analytics, technical assistance, quality assurance, and to establish a Rural Health Redesign Center (if authorized), to which the Pennsylvania Department of Health may delegate these operations once it is established. The goal of this funding is to help Pennsylvania operationalize the Model and to ultimately achieve the Model's targets described below. Pennsylvania will also contribute funding for the operation of the Model.

Pennsylvania requested and was granted a 12-month extension to performance year zero, which is the model's operationalization period. The extension was needed because of delays by the state in achieving model milestones, including finalizing Medicaid managed care agreements. As a result, global budgets for participating rural hospitals, which originally were slated to begin January 2018, now are expected to begin in January 2019.

Two key components of the model that will be present in the latter six of the model's performance years (2019 through 2024) are:

- **Hospital Global Budgets:** Each such performance year of the Model, Pennsylvania will prospectively set the all-payer global budget for each participating rural hospital, based primarily on the hospital's historical net revenue for inpatient and outpatient hospital-based services from all participating payers. Each participating payer will then pay each participating rural hospital for all inpatient and outpatient hospital-based services based on the payer's respective portion of the participating rural hospital's global budget. CMS will review and approve the Medicare fee-for-service portion of the global budgets that Pennsylvania proposes for each participating rural hospital, as well as Pennsylvania's methodology for calculating the global budgets. A rural hospital must have a CMS-approved global budget in order to participate in the model.
- **Hospital Care Delivery Transformation:** Participating rural hospitals will also plan deliberate changes to redesign the care they provide. As part of their Rural Hospital Transformation Plans, participating rural hospitals will develop plans to invest in quality and preventive care, to obtain support and continuous feedback from stakeholders in the community, and to tailor the services they provide to the needs of their local community. Pennsylvania and CMS must approve a rural hospital's Rural Hospital Transformation Plan before that hospital can participate in the model. Pennsylvania will provide rural hospitals with the technical assistance they need to prepare Rural Hospital Transformation Plans in accordance with the requirements of the model. Pennsylvania and CMS expect that this care delivery transformation will help participating rural hospitals make meaningful improvements in the quality of the care they provide and impact the largest health needs in their community.

Under the Pennsylvania Rural Health Model, Pennsylvania agrees to meet targets regarding the following:

- Scale of payer and rural hospital participation;
- Financial impact; and

- Impact on population health outcomes, access and quality.

Together, these targets create incentives for Pennsylvania to help participating rural hospitals improve quality; enhance collaboration among health care providers and the Pennsylvania public health system to improve health for the rural population of Pennsylvania; and reduce the growth in hospital expenditures.

Evaluation Status/Results: An evaluation is planned to examine the implementation of the Pennsylvania Rural Health Model, including the challenges encountered by participating rural hospitals when executing their Rural Hospital Transformation Plans. The evaluation will also investigate the model's impact on the health care spending for rural beneficiaries and the quality of care these beneficiaries receive, as well as the financial stability of participating hospitals.

Webpage: Pennsylvania Rural Health Model Webpage

Vermont All-Payer Accountable Care Organization Model

Model Announcement Date: October 26, 2016

Model Performance Period: January 2017 – December 2022

Model Participants: Accountable Care Organizations in Vermont

Geographic Scope: State of Vermont

Model Description: The Vermont All-Payer Accountable Care Organization (ACO) Model tests an alternative payment model in which the most significant payers throughout the state – Medicare, Medicaid, and commercial health plans – incentivize health care value and quality, with a focus on health outcomes, under aligned risk-based arrangements tied to health outcomes and healthcare expenditures.

The Vermont All-Payer ACO Model represents a partnership between CMS and Vermont to design a model that meets the needs of Vermont's local health care providers, other stakeholders, and patients. The state played a significant role in designing the model and continues to play a significant role in operationalizing the model. In addition, the model aims to apply consistent incentives across the state, offering physicians and other health care providers better financial predictability and reducing health care provider burden. As a result, Vermont hopes that the model will afford patients a more consistent experience of care.

Beginning in 2019, the Vermont All-Payer ACO Model offers ACOs in Vermont the opportunity to participate in a Medicare ACO initiative tailored to the state, called the Vermont Medicare ACO Initiative. During 2018, ACOs in Vermont had the opportunity to participate in a version of the Next Generation ACO Model (described below). Under the Vermont All-Payer ACO Model, CMS and Vermont entered into a cooperative agreement under which CMS will provide for $9.5 million

to the state to assist Vermont health care providers with care coordination and bolster their collaboration with community-based providers.

In addition, CMS approved an amendment to Vermont's section 1115(a) Medicaid demonstration, the Vermont Global Commitment to Health Demonstration, effective July 1, 2018 through December 31, 2021. The Vermont All-Payer ACO Model and the Vermont Global Commitment to Health Demonstration are complementary frameworks that support Vermont's health care reform efforts. Under the Vermont All-Payer ACO Model, the state commits to achieving statewide health outcomes, financial, and ACO scale targets across all significant health care payers. Participation by health care providers and other payers in the Vermont All-Payer ACO Model is voluntary, and CMS and Vermont expect to work closely together to achieve success.

The Vermont Medicare ACO Initiative is expected to be an Advanced APM under the Quality Payment Program in 2019.

Statewide Targets: The Vermont All-Payer ACO Model establishes a number of statewide targets, each described below. The model will test whether establishing state accountability for these targets for a state's entire population will incentivize the collaboration between the care delivery and public health systems that is necessary to achieve these outcomes.

ACO Scale Targets:

- Vermont must encourage Vermont payers and health care providers to participate in ACO programs such that, by the end of 2022, 70 percent of all Vermont residents insured by Medicare, Medicaid, and certain commercial plans, including 90 percent of Vermont Medicare beneficiaries, are aligned to one of certain specified ACO initiatives.
- ACOs will continue to have payer-specific benchmarks and financial settlement calculations, but the ACO initiative design (*e.g.*, ACO quality measures, risk arrangements, payment mechanisms, beneficiary alignment methodology, and services included for determination of the ACO's Shared Losses and Shared Savings) will be reasonably aligned across payers.

Statewide All-Payer and Medicare Financial Targets: Vermont will limit the annualized per capita health care expenditure growth for all major payers to 3.5 percent. Vermont will also limit Medicare per capita health care expenditure growth for Vermont Medicare beneficiaries to at least 0.2 percentage points (and, in some cases 0.1 percentage points) below that of projected national Medicare growth.

Statewide Health Outcomes and Quality of Care Targets: Vermont will focus on achieving Statewide Health Outcomes and Quality of Care Targets in four areas prioritized by Vermont: substance use disorder, suicides, chronic conditions, and access to care. Vermont will be held accountable for three categories of measures for each of these four priority areas:

- **Population-level Health Outcomes Targets**: Statewide measures and targets related to

the health of the population consistent with the priority areas, regardless of whether the population seeks care from the health care providers in the ACO.

- **Health Care Delivery System Quality Targets**: Statewide measures and targets primarily related to the performance of care delivered by the ACO.
- **Process Milestones**: Milestones that would support achievement of the population-level and health care delivery system measures and targets.

Evaluation Status/Results: An evaluation is ongoing to understand the process of creating a state-wide total cost of care model, the impacts of all of the strategies employed, the effectiveness of an all-payer ACO model, the state-wide impacts on population health and quality of care, and the ACO-level impacts on health care and costs for the aligned populations.

Webpage: Vermont All-Payer ACO Model Webpage

B. Existing Models and Initiatives Announced Prior to the 2016 Report to Congress

Accountable Health Communities

Model Announcement Date: January 5, 2016

Model Performance Period: May 2017 to April 2022

Model Participants: Community-based organizations, health care practices, hospitals and health systems, and local governmental entities (Bridge Organizations)

Geographic Scope: Rural and urban communities across 193 counties in 23 states.

Model Description: In January 2016, the CMS Innovation Center issued a Notice of Funding Opportunity (NOFO)) for the Accountable Health Communities (AHC) Model. The AHC Model was developed based on emerging evidence that addressing health-related social needs through enhanced clinical-community linkages can improve health outcomes and reduce costs. The AHC Model tests whether systematically identifying and addressing the health-related social needs of community-dwelling Medicare and Medicaid beneficiaries, including those who are dually eligible, impacts total health care costs and inpatient and outpatient health care utilization.

Over a five-year period of performance, CMS is testing two promising service delivery approaches:

- **Assistance Track**: Provide person-centered community service navigation services to help high-risk beneficiaries access community services in order to address certain identified health-related social needs.

- **Alignment Track**: Provide person-centered community service navigation services to help high-risk beneficiaries access community services in order to address certain identified health-related social needs, and encourage partner alignment to ensure that community services are available and responsive to the needs of beneficiaries.

When the AHC Model launched, the NOFO offered funding for an additional track, the Awareness Track. However, CMS withdrew the Awareness Track funding opportunity because the agency did not receive enough qualified applications to move forward with the track.

AHC awarded up to $111 million in cooperative agreements to 32 community bridge organizations in order to implement the model during the five-year performance period. Currently there are 31 community bridge organizations participating in the model. Eleven organizations were awarded up to $2.57 million per recipient to participate in the Assistance Track, and 20 organizations were awarded up to $4.51 million per recipient to participate in the Alignment Track. Bridge organizations that were awarded cooperative agreements include: community-based organizations, health care practices, hospitals and health systems, and local governmental entities. Awardees are located in rural and urban communities across 193 counties in 23 states.

Bridge organizations participating in the model have worked with their community partners to establish screening and referral protocols, finalize and memorialize arrangements, and develop health information technology solutions to effectuate data-sharing. These bridge organizations are partnering with about 140 hospitals, 285 primary care practices and 68 behavioral health providers. CMS anticipates that the bridge organizations will screen over 7.5 million beneficiaries for health-related social needs between May 1, 2018 (the intervention launch date after infrastructure is built) and April 30, 2022.

Evaluation Status/Results: The evaluation will assess the impact of two intervention tracks: 1) the Assistance Track, which tests the navigation intervention, and 2) the Alignment Track, which tests the navigation intervention and the community alignment intervention. The evaluation will examine whether the interventions in each track reduce beneficiaries' health care costs, emergency department visits, and inpatient hospital admissions, and improve beneficiaries' social and health outcomes.

Webpage: Accountable Health Communities Model Webpage

ACO Investment Model

Model Announcement Date: October 15, 2014

Model Performance Period: April 2015 to December 2018

Model Participants: Shared Savings Program ACOs

Geographic Scope: As of January 1, 2017 44 ACO Investment Model (AIM) ACOs had approximately 1,200 providers serving approximately 479,000 beneficiaries across 34 states

Model Description: The ACO Investment Model (AIM) is designed for organizations participating as ACOs in the Medicare Shared Savings Program (Shared Savings Program). The ACO Investment Model is a model of pre-paid shared savings that builds on experience learned from the Advance Payment ACO Model. AIM was developed to encourage new ACOs to form in rural and underserved areas (Test One) and current Shared Savings Program ACOs to transition to arrangements with greater financial risk (Test Two).

Currently, 44 ACOs participate in the AIM. Approximately 75 percent of AIM participants primarily serve rural areas. AIM participants are required to participate in the Shared Savings Program, and may be part of an Advanced APM depending on the track they are participating in.

The ACO Investment Model was available to:

1. **New Shared Savings Program ACOs that joined in 2015 or 2016:** The ACO Investment Model sought to encourage uptake of coordinated, accountable care in rural geographies and areas where there has been little ACO activity, by offering pre-payment of shared savings in both upfront and ongoing per beneficiary per month payments. CMS believed that encouraging participation in areas of low ACO penetration would spur new markets to focus on improving care outcomes for Medicare beneficiaries.
2. **ACOs that joined the Shared Savings Program starting in 2012, 2013, or 2014:** Here, the ACO Investment Model was designed to help ACOs succeed in the Shared Savings Program and encourage progression to higher levels of financial risk, ultimately improving care for beneficiaries and generating Medicare savings.

AIM ACOs have until the end of the December 2018 to finish spending the approximately $96 million in pre-paid shared savings that was distributed to them.

Evaluation Status/Results: The first evaluation report for the model has been released. Consistent with key goals of AIM, approximately 75 percent of beneficiaries assigned to Test One AIM ACOs resided in rural areas, and two of the four currently active Test Two AIM ACOs have already renewed participation under a two-sided financial risk track. After their first AIM performance year, total spending across Test One ACOs amounted to $105.4 million in significantly lower spending, or $82.8 million in savings to the Medicare program (1.7 percent of total AIM ACO Medicare spending) after subtracting their shared savings. Only two (one statistically significant) of six original Test Two AIM ACOs had lower spending than comparable non-AIM ACOs participating in the Shared Savings Program, with no statistically significant differences in total Medicare spending for Test Two AIM ACOs compared with non-AIM ACOs. Although it is early in the evaluation to assess quality of care, beneficiaries in AIM ACOs did not appear to have higher rates of all-cause 30-day hospital readmission or admissions for ambulatory care sensitive conditions than other fee-for-service beneficiaries. Test Two AIM ACOs performed better than comparable non-AIM ACOs on some measures of patient experience and preventive health.

Lower total spending was generally driven by lower inpatient and SNF utilization; increases in utilization were found for physician services, particularly in annual wellness visits and transitional care management services. Roughly half of what AIM ACOs spent on care transformation was from up-front payments, with the other half funded by the ACO. Through the 2016 performance year, $19.1 million (24 percent) of distributed payments have been recouped from shared savings among currently participating ACOs.

The ACO Investment Model Year One evaluation report can be accessed here.

Webpage: ACO Investment Model Webpage

Bundled Payments for Care Improvement (Models One-Four)

Model Announcement Date: August 23, 2011

Model Performance Period: October 2013 – September 2018

Model Participants: Acute care hospitals (ACH), skilled nursing facilities (SNF), physician group practices (PGP), home health agencies (HHA), and inpatient rehabilitation facilities (IRF)

Geographic Scope: 48 states, excluding Hawaii and North Dakota

Model Description: The Bundled Payments for Care Improvement (BPCI) initiative was developed to test whether bundled payments lead to higher quality and more coordinated care at a lower cost to the Medicare program. A bundled payment approach, which focuses on the total cost of an episode of care, is unique from the traditional Medicare payment structure that makes separate payments to providers and suppliers for each individual item and service.

BPCI was voluntary and comprised of four broadly defined models of care that link payments for the multiple services provided to beneficiaries during an episode of care. Individuals and entities (referred to as Awardees) entered into agreements with CMS that included financial and performance accountability for episodes of care. In the BPCI models, episodes of care were triggered by an inpatient stay in an acute care hospital. BPCI participants had the opportunity to choose to participate in one or more of 48 clinical episodes, representing a range of surgical and medical episodes.

The breakdown of participants by health care provider type is as follows: ACH (287), SNF (540), PGP (197), HHA (58), and IRF (9). Participation spans 48 states, excluding Hawaii and North Dakota.

In Model One, the episode of care was defined as the inpatient stay in the ACH. Medicare paid the hospital a discounted amount based on the payment rates established under the Inpatient Prospective Payment System used in the traditional Medicare program. Medicare continued to pay physicians separately for their services under the Medicare Physician Fee Schedule. The first

cohort of Awardees in Model One began in April 2013 and concluded on March 31, 2016. One remaining Awardee concluded their participation on December 31, 2016.

Models Two and Model Three used a retrospective bundled payment approach where actual expenditures were reconciled against a target price for an episode of care. In Model Two, the episode included the inpatient stay in an ACH plus post-acute care and all related items and services up to 90 days after hospital discharge.

In Model Three, the episode of care was triggered by an ACH stay, however the episode began at initiation of post-acute care services with a skilled nursing facility, inpatient rehabilitation facility, long-term care hospital, or home health agency. Under these retrospective bundled payment models, Medicare continued to make fee-for-service (FFS) payments; the total expenditures for the episode was later reconciled against a bundled payment amount (the target price) determined by CMS based on the aggregate expenditures compared to the target price; and the Awardee either owed funds to or was owed funds by the Medicare program.

In Model Four, CMS made a single, prospectively determined bundled payment to the hospital that encompasses all items and services furnished by the hospital, physicians, and other practitioners during the episode of care, which lasts the entire inpatient stay. Physicians and other practitioners submitted "no-pay" claims to Medicare and were paid by the hospital out of the bundled payment, unless they opted out and chose to be paid as usual under Medicare FFS.

In April 2013, Model One of the BPCI Initiative started. Models Two, Three, and Four were implemented in two phases. Phase One, which started April 2013, was the initial period of participant preparation for implementation and assumption of financial risk. By October 2013, some BPCI participants entered into Awardee Agreements with CMS, and began bearing financial risk for some or all of their episodes. CMS required all participants to transition at least one episode into Phase Two, the risk bearing phase, by July 2015 in order to continue participating in the initiative. Awardees were required to transition any remaining episodes into Phase Two by October 2015.

On September 30, 2018, the BPCI initiative concluded its period of performance for Models Two, Three, and Four.

Evaluation Status/Results: The final report from BPCI Model One was released in March 2017 and evaluates the participation of 24 Awardees. Results did not reveal any savings or losses to Medicare. Although IPPS discount lowered Medicare payments for an average episode, these declines were offset by increases in post-episode Medicare payments to post-acute care facilities.

The fourth annual evaluation report for BPCI Models Two, Three, and Four was released in June 2018. The evaluation analyzed 731,734 Model Two and 84,041 Model Three episodes initiated in the first three years. Average tenure in the initiative was five quarters due to a long window to join the models and also due to exits from the models. Model Four was not analyzed in this report due to limited participation and substantial withdrawals. Key highlights include:

- This report does not include evaluation results for PGP episodes due to early episode attribution issues. These issues have been fixed and evaluation results for PGPs are included in the next report.
- BPCI Models Two and Three reduced episode costs, as measured by Medicare fee-for-service payments, for the majority of the clinical episodes evaluated (35 of 46). Cost declines for ten of these clinical episodes were statistically significant ($p<0.05$).
- These lower episode costs were achieved by shifting care away from institutional PAC (such as SNFs or IRFs) and sending beneficiaries home sooner.
- Claims-based measures did not indicate quality declines or improvements in Model Two or Three.
- Analysis of beneficiary surveys (which was conducted only for Model Two ACHs this year), did not indicate changes in quality under Model Two.
- Even though BPCI Models Two and Three lowered total episode costs for the majority of the clinical episodes evaluated, Medicare did not fully realize the CMS discount built into the target prices. Reconciliation payments outweighed the decline in episode costs in 22 of 35 clinical episodes with declining episode costs. In fact, Medicare likely incurred additional costs under Model Three.
- These unfavorable financial results were due to challenges with target pricing, exacerbated for Model Three due to small case volume per PAC facility. It is likely that inaccuracies with target pricing disproportionately disadvantaged the Medicare program as participants could enter/exit the Model, add/drop clinical episodes, or make other changes depending on how favorable or unfavorable pricing was to them.
- These financial results would be even less favorable for the Medicare program if waiving of the downside risk were taken into account. This issue will be addressed in the next annual report.

The Bundled Payments for Care Improvement Model One final evaluation report can be accessed here.

The Bundled Payments for Care Improvement Models Two-Four Year Four evaluation report can be accessed here.[18]

To access earlier evaluation reports please visit the model's webpage at the link below.

Webpage: Bundled Payments for Care Improvement Webpage

[18] The Year Five evaluation report for the Bundled Payments for Care Improvement Models Two-Four was released after the period of reporting, in October 2018, and can be accessed here.

Comprehensive Care for Joint Replacement Model

Model Announcement Date: July 9, 2015

Model Performance Period: April 2016 – December 2020

Model Participants: Hospitals

Geographic Scope: 67 metropolitan statistical areas (MSAs) in the following states: Alabama, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Kentucky, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Utah, and Wisconsin.

Model Description: The Comprehensive Care for Joint Replacement (CJR) model aims to support better and more efficient care for beneficiaries undergoing the most common inpatient surgeries for Medicare beneficiaries: hip and knee replacements (also called lower extremity joint replacements or LEJR). This model tests bundled payment and quality measurement for an episode of care associated with hip and knee replacements to encourage hospitals, physicians, and post-acute care providers to work together to improve the quality and coordination of care from the initial hospitalization through recovery. The model was implemented through notice and comment rulemaking in a final rule published on November 24, 2015. Certain model policies were modified in two subsequent final rules which took effect May 21, 2017 and January 1, 2018.

As of April 1, 2016, there were approximately 800 acute care hospitals paid under the Inpatient Prospective Payment System (IPPS) that were included in the CJR model although only 684 of these hospitals had at least one CJR episode during performance year one. As of February 1, 2018 participant requirements changed (described in greater detail below) and the total number of participating providers as of February 1, 2018 was 465; 390 of these 465 providers are located in the 34 mandatory MSAs while 75 of these 465 providers are located in the voluntary MSAs. The list of participating providers is available on the CJR webpage listed at the end of this section.

There were 47,182 CJR episodes during performance year one, which covered April 1, 2016 through December 31, 2016. The reconciliation for performance year 2 will initiate in April of 2018 and final episode counts are not yet available. As of January 1, 2018 we estimate there will be approximately 111,955 episodes in CJR for performance year two, but note the actual number may be somewhat lower when exclusions are applied at reconciliation (*e.g.*, beneficiaries aligned to certain ACOs were excluded from CJR as of July 1, 2017).

The CJR model has two tracks: Only track one, where participating providers attest to Certified EHR Technology (CEHRT), is an Advanced APM under the QPP.

CJR is currently in its third performance year. Hospitals paid under the IPPS and located in 67 selected MSAs listed in the November 24, 2015 final rule, with few exceptions, were required to participate in the model for the first two performance years. As of February 1, 2018, participation

requirements were changed as finalized in the December 1, 2017 final rule. While participation for providers in 34 of the 67 areas remained mandatory, CJR participant hospitals in the 33 voluntary areas, along with those hospitals in all 67 areas identified as low-volume or rural, were given a one-time opportunity during January of 2018 to voluntarily opt-in to the CJR model for the remainder of the model. Those providers eligible for voluntary participation who chose not to opt in will have all of their CJR performance year three episodes cancelled.

Evaluation Status/Results: The first evaluation report for CJR found that LEJR episodes in CJR areas had total episode payments 3.3 percent lower than control group episodes. On average across all LEJR episodes, total Medicare standardized (wage adjusted) episode payments went down by $910 more for CJR episodes between the baseline and the intervention periods than for control group episodes, which resulted in an estimated $40 million reduction in Medicare payments. It should be noted, however, that this decrease in Medicare payments does not take into account reconciliation payments earned by CJR participant hospitals. Reductions in total episode payments were driven by reductions in the use of more intensive post-acute care settings and shorter lengths of stay. Among fracture episodes, utilization analyses suggest the substitution of SNF for IRF care, and patients also spent fewer days in SNF. The shift to less intense post-acute care did not impact readmission rates, emergency department visits, or mortality.

The report also found that CJR participant hospitals are becoming more efficient regardless of their market's historic episode spending. While there may be greater opportunities to reduce episode payments in MSAs with historically high payments, it appears that there is also opportunity for improvement for hospitals in historically efficient markets. Hospitals reported making changes along the clinical care pathways with a heavy focus on provider and patient education. Additional strategies include engaging caregivers in the process, same day ambulation, coordinating with post-acute care facilities and follow up with patients after hospital discharge.

The Comprehensive Care for Joint Replacement Model Year One evaluation report can be accessed here.

Webpage: Comprehensive Care for Joint Replacement Model Webpage

Comprehensive End-Stage Renal Disease Care Model

Model Announcement Date: April 15, 2014

Model Performance Period: October 2015 – December 2020

Model Participants: ESRD Seamless Care Organizations (ESCOs)

Geographic Scope: 37 ESCOs in the following states: Alabama, Arizona, California, Delaware, Florida, Georgia, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Nevada, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, and Washington.

Model Description: The Comprehensive ESRD Care (CEC) Model is designed to identify, test, and evaluate new ways to improve care for Medicare beneficiaries with End-Stage Renal Disease (ESRD). Through the CEC Model, CMS is partnering with health care providers and suppliers to test the effectiveness of a new payment and service delivery model in providing beneficiaries with person-centered, high-quality care. The Model builds on Accountable Care Organization experience from the Pioneer ACO Model, Next Generation ACO Model, and the Medicare Shared Savings Program to test Accountable Care Organizations for ESRD beneficiaries.

In the CEC Model, dialysis facilities, nephrologists and other providers join together to create an End-Stage Renal Disease Comprehensive Care Organization (ESCO) to coordinate care for aligned beneficiaries. ESCOs are accountable for clinical quality and cost of care provided to aligned ESRD beneficiaries, as measured by Medicare Part A and B spending, including all spending on dialysis services. This model encourages dialysis providers to think beyond their traditional roles in care delivery and creates incentives for them to provide patient-centered care that will address beneficiaries' health needs, both inside and outside of the dialysis facility.

There are currently 37 ESCOs participating in the CEC Model, with a total of 48,000 ESRD beneficiaries in the model as of January 8, 2018. There are currently 2,999 providers in the model as of January 1, 2018. Of the 37 ESCOs in the model, 33 include dialysis facilities owned by Large Dialysis Organizations (LDOs) (24 from Fresenius, six from DCI, three from DaVita) and four include dialysis facilities owned by Non-Large Dialysis Organizations (Non-LDOs) (Rogosin Institute, Northwest Kidney Centers, Atlantic Dialysis, Centers for Dialysis Care (CDC)). ESCOs with participation by dialysis facilities owned by LDOs are able to receive shared savings payments but also are liable for shared losses (two-sided risk). ESCOs with participation by dialysis facilities owned by non-LDOs have the option to participate in a one-sided risk track where they will be able to receive shared savings but will not be liable for shared losses, or to participate in a two-sided risk track with the potential for shared savings or shared losses. 34 of the 37 ESCOs participate are in two-sided risk (all 33 LDO ESCOs and one Non-LDO ESCO - CDC) and three ESCOs participate in one-sided financial risk (Rogosin, Northwest, and Atlantic). 13 of the ESCOs began the Model on October 1, 2015 and 24 additional ESCOs joined beginning January 1, 2017.

The CEC Model two-sided tracks qualify as an Advanced APM. The CEC Model is scheduled to end on December 31, 2020. There are no plans to add any more ESCOs, though ESCOs can add new providers within their existing market areas.

Evaluation Status/Results: The first evaluation report found that in the first performance year (October 2015 through December 31, 2016) for ESCOs that started on October 1, 2015, standardized allowed charges for CEC beneficiaries declined while increasing slightly for matched comparison group non-participants, resulting in $29.9 million in savings over the 15-month period. This savings estimate represents about 2 percent of average total Medicare Part A and B allowed charges for the performance year. Most of these savings are due to declines in spending for acute inpatient stays and post-acute institutional care relative to the comparison group. CEC beneficiaries were 6 percent less likely to have a hospitalization in in the first performance year for ESCOs that

started at the model's inception on October 1, 2015. However, the average length of stay among those beneficiaries who were hospitalized increased by 0.16 days.

The percentage of CEC beneficiaries who used catheters as a means of vascular access in the first performance year was 0.7 percentage points lower relative to the comparison facilities, translating to an 8.5 percent decrease. Because catheters are associated with higher infection rates, fistulas are the preferred mode of vascular access for dialysis treatment. CEC beneficiaries were 14 percent less likely to experience a hospitalization for vascular access complications and 12 percent less likely to be hospitalized for ESRD complications relative to comparison beneficiaries. There were no clinically meaningful increases or decreases in self-reported quality of life among participants. The cost impact estimates do not take into account what may have been paid out in shared savings, and therefore, do not represent net savings.

The Comprehensive ESRD Care Model Year One evaluation report can be accessed here.

Webpage: Comprehensive ESRD Care Model Webpage

Comprehensive Primary Care Initiative

Model Announcement Date: September 2011

Model Performance Period: October 2012 – December 2016

Model Participants: Primary care practices

Geographic Scope: The initiative was implemented in seven U.S. regions: statewide in Arkansas, Colorado, New Jersey, and Oregon; and regionally in Capital District-Hudson Valley, New York; Cincinnati-Dayton Region, Ohio/Kentucky; and Greater Tulsa, Oklahoma.

Model Description: The Comprehensive Primary Care (CPC) initiative was a multi-payer collaboration between public and private health care payers to strengthen primary care.

The CPC initiative tested whether the provision of five CPC functions at each practice site—supported by multi-payer payment reform, the continuous use of data to guide improvement, and meaningful use of health information technology—could achieve better care, improved health, and reduced costs and inform Medicare and Medicaid policy.

The five "CPC Functions" that comprise the core of the care delivery model were:

1. **Risk Stratified Care Management:** the provision of intensive care management for high-risk, high-need, high-cost patients.
2. **Access and Continuity**: 24/7 access to the care team; empanelment to a designated health care provider or care team with whom patients are able to get successive appointments.

3. **Planned Care for Chronic Conditions and Preventive Care**: proactive, appropriate care based on systematic assessment of patients' needs.
4. **Patient and Caregiver Engagement**: establishment of systems of care that include patients in goal setting and decision making, creating opportunities for patient and caregiver engagement throughout the care delivery process.
5. **Coordination of Care across the Medical Neighborhood**: management by the primary care practice of communication and information flow in support of referrals, transitions of care when care is received in other settings.

The payment model, designed to support the delivery of the five CPC functions, consisted of a non-visit based per-beneficiary-per-month (PBPM) care management payment and shared savings opportunities. The monthly payment for attributed Medicare FFS beneficiaries averaged $20 PBPM during years one and two of the initiative (calendar years 2013-14), and averaged $15 PBPM in years three and four (calendar years 2015-16).

The PBPM care management payment was in addition to the FFS payment practitioners participating in the CPC initiative received for delivering services to their Medicare patients. CMS also offered each CPC practice the opportunity to share in net savings to the Medicare program for attributed Medicare FFS beneficiaries. For each of the last three years of the initiative (calendar years 2014-16 inclusive), CMS calculated savings to the Medicare program at the regional level, and savings were distributed to practices in that region according to their performance on quality metrics.

Evaluation Status/Results: The final independent evaluation report from CPC was released in May 2018 and summarizes the implementation experience and impact of the model over its four-year period. CPC reduced the ED visit and hospitalization rates of Medicare beneficiaries by two percent, relative to beneficiaries attributed to comparison practices. The favorable difference for ED visits was more pronounced in the last two years of CPC.

Not taking into account the care management fees, the evaluation found that CPC reduced Medicare expenditures by one percent ($9 per beneficiary per month (PBPM)), relative to beneficiaries attributed to comparison practices. However, after including care management fees, Medicare expenditures increased by one percent ($6 PBPM). These estimated effects were not statistically significantly different from zero overall and became less pronounced over time. It is unlikely that these savings were enough to cover the CPC care management fees. There was a 94 percent probability that CPC generated some reduction in Medicare expenditures excluding the care management fees, but a less than one percent likelihood of savings once the average $15 PBPM care management fee is taken into consideration.

The evaluation found that CPC had minimal effects on patient experience or the limited claims-based quality-of-care process and outcome measures examined. Differences on most claims-based quality-of-care measures for Medicare beneficiaries were not statistically significant over the

course of CPC, except for a small (three percent) reduction in the likelihood of an ED revisit within 30 days of an outpatient ED visit relative to the comparison group.

Practices engaged in substantial, challenging transformation, the evaluation showed, and improved how they delivered care over the course of CPC. Overall, the largest areas of improvement were in risk-stratified care management, expanded access to care, and continuity of care. Practices faced barriers to change, including the burden of quality monitoring and reporting for CMS and other payers, existing incentives in the FFS payment system for the practices and the other providers that serve their patients that may encourage volume of services over efficient use of services, and the lack of an infrastructure for comprehensive and efficient health information exchange between providers.

The CPC final evaluation report can be accessed here.

To access earlier evaluation reports please visit the model's webpage at the link below.

Webpage: Comprehensive Primary Care Initiative Webpage

Comprehensive Primary Care Plus Model

Model Announcement Date: April 2016

Model Performance Period: January 2017 – December 2022

Model Participants: Primary care practices

Geographic Scope: 2,969 practices, which include 17,870 practitioners, participating in 18 regions across the United States: Arkansas, Colorado, Hawaii, Kansas and Missouri: Greater Kansas City Region, Michigan, Montana, New Jersey, New York: North Hudson-Capital Region, Ohio: Statewide and Northern Kentucky: Ohio and Northern Kentucky Region, Oklahoma, Oregon, Pennsylvania: Greater Philadelphia Region, Rhode Island, and Tennessee. CPC+ Model 2018 starters are in four additional regions: Louisiana, Nebraska, North Dakota, and the Great Buffalo Region of New York.

Model Description: Comprehensive Primary Care Plus (CPC+) is a national advanced primary care model that aims to strengthen primary care through state-based multi-payer payment reform and care delivery transformation. CPC+ was built on the foundation and lessons learned from the original Comprehensive Primary Care (CPC) model.

The first cohort of CPC+ Practices began participation in the CPC+ Model on January 1, 2017 and will continue participation for five years. The second cohort began participation in the CPC+ Model on January 1, 2018 and will also continue participation for five years. The CPC+ Model includes two primary care practice tracks that have differing care delivery requirements and payment options to meet the diverse needs of primary care practices in the United States. The care delivery

requirements ensure practices in each track have the processes and skills to deliver better care. The multi-payer payment redesign gives practices greater financial resources and the flexibility to make appropriate investments to improve the quality and efficiency of care, and reduce unnecessary health care utilization. The CPC+ Model provides practices with a robust learning system, as well as actionable patient-level cost and utilization data feedback to guide their decision making.

The more advanced track of the CPC+ Model requires CPC+ Practices to develop health IT capabilities necessary to delivering advanced primary care in collaboration with a Health IT vendor(s). The CPC+ Model's multi-payer design brings together CMS, commercial insurance plans, and state Medicaid agencies to provide the financial support necessary for practices to make fundamental changes in their care delivery. The CPC+ Model also promotes alignment and integration with Medicare accountable care organizations (ACOs) by allowing CPC+ practices to participate in both CPC+ and a Medicare Shared Savings Program ACO. CMS determined CPC+ regions based on sufficient and aligned multi-payer interest in the Model. CMS entered into a Memorandum of Understanding (MOU) with over 60 payer partners who share CMS' commitment to alignment on payment, data sharing, and quality metrics in the CPC+ Model. CMS also entered into MOUs with over 60 health IT vendors that support the CPC+ Practices participating in the more advanced track (Track Two) of the Model.

Approximately 1.8 million Medicare Fee-for-Service beneficiaries are attributed to participating CPC+ Practices every quarter. The CPC+ Model is an Advanced APM.

Evaluation Status/Results: The evaluation plan for the CPC+ Model has been designed to provide a robust assessment of implementation and impacts using a mixed-methods approach. The evaluation will use site visits, key informant interviews, observations of learning support, surveys, and program data to establish how the intervention was implemented and received. Building on this analysis, the evaluation will use additional survey data and administrative claims to analyze the intervention's impact on beneficiaries and the primary care workforce.

Key outcome and quality measures will include total Medicare expenditures per beneficiary, hospitalization rates, emergency department visit rates, process of care outcomes, readmission rates, beneficiary experience of care, and beneficiary health-related quality of life. Finally, the impact and implementation analyses will be synthesized to attempt to identify the key factors that drive positive impacts.

Webpage: Comprehensive Primary Care Plus Model Webpage

Health Care Innovation Awards

Model Announcement Date: June 2012 (Round One); May 2013 (Round Two)

Model Performance Period: June 2012 – June 2015 (Round One); September 2014 to September 2017 (Round Two)

Model Participants: Awardees encompassed a diverse set of organizations, including clinicians, hospitals and health systems, academic medical centers, information technology entrepreneurs, community and faith-based organizations, state and local governmental entities, nonprofit organizations, and advocacy groups.

Geographic Scope: The Health Care Innovation Awards (HCIA) funded interventions in urban and rural areas in all 50 states, the District of Columbia, and Puerto Rico.

Model Description: HCIA was designed to accelerate the development and testing of service delivery and payment innovations originating in the field. HCIA funded organizations proposing new payment and service delivery models that hold promise of delivering better care, lower costs, and improved health for people enrolled in Medicare, Medicaid, and CHIP, particularly those with the greatest health care needs. The CMS Innovation Center issued two solicitations for HCIA, each receiving a robust response.

Health Care Innovation Awards Round One[19]

Round One, announced in November 2011, was a broad solicitation that encouraged applicants to focus on high-risk populations and to include new models of workforce development. There were 107 Round One awards announced in two groups in May 2012 and June 2012.[20] The Round One period of performance was three years. Round One awardees enhanced primary care, coordinated care across multiple settings, deployed new types of health care workers, helped patients and health care providers make better decisions, and tested new service delivery technologies. More than one million Medicare, Medicaid, and CHIP beneficiaries have been served directly through Round One awards. Round One concluded on June 30, 2015, but several awardees received no cost extensions. No Round One models were active during the current period of report, but evaluation of Round One continued into the current reporting period.

Evaluation Status/Results: Model tests were grouped together into seven discrete groups to facilitate their evaluation. In addition to the seven model-specific annual evaluations, the CMS Innovation Center also awarded a meta-evaluation contract to synthesize and identify themes and lessons learned spanning across these seven groups. Key findings include:

- Although some awardees produced cost savings, the HCIA awards as a whole did not increase or decrease total cost of care on average and a few had losses. The report did find some evidence of increased savings when awardees expanded existing interventions (versus implementing new interventions), directly targeted beneficiaries (versus intervening at a higher level), and made use of community health workers.

[19] Round One ended before the current period of report. However, evaluation continued into the current period of report, and Round One is therefore included here.

20 One of the awards encompasses two separate initiatives that have been evaluated separately. Accordingly, there are 107 awards and 108 evaluations.

- Other key outcomes—hospitalization rate, ED visit rate, and readmission rate—followed similar distributional patterns as total cost of care (i.e., had no impact on average across awardees, but also had a mix of awardees with favorable and unfavorable effects).
- The meta-evaluation did not assess quality of care outcomes beyond service use, since the number and type of quality measures varied greatly from one awardee to the next. With that said, front line evaluators did observe awardees with favorable effects on quality of care.
- Key implementation challenges included:
    - Cultural barriers (*e.g.*, language barriers, lack of trust) for innovations delivering care or placing self-monitoring technologies in patients' homes
    - Vulnerable patients' needs for additional resources and support affected recruitment and treatment maintenance
    - Recruitment and retention of staff
    - Building trust and forging strong relations with partners

Through identifying promising results, lessons learned, and best practices, several awardees have helped to inform the development of new models such as the Medicare Diabetes Prevention Program expanded model and the Oncology Care Model. Round One also incorporated a learning system framework to disseminate strategies and resources to help awardees successfully implement their projects and make sustainable improvements in health care system design and delivery. Lessons from Round One were applied in the design, implementation and operations of HCIA Round Two.

For more information and to access the Round One evaluation reports, see the Health Care Innovation Awards Webpage.

Health Care Innovation Awards Round Two

The second round of the Health Care Innovation Awards funds applicants who proposed new payment and service delivery models with the greatest likelihood of driving health care system transformation and delivering better outcomes for Medicare, Medicaid, and CHIP beneficiaries. In Round Two, the CMS Innovation Center sought new payment and service delivery models in four broad categories described below. These categories were identified as gaps in the current CMS Innovation Center portfolio and as areas that could result in potential payment models in Medicare, Medicaid, and CHIP.

The four broad categories are:

1. Models designed to rapidly reduce Medicare, Medicaid, and/or CHIP costs in outpatient and/or post-acute settings (three awardees).
2. Models that improve care for populations with specialized needs (11 awardees).

3. Models that test the means through which specific types of health care providers might transform their financial and clinical models (13 awardees).
4. Models that improve the health of populations through activities focused on prevention, wellness, and comprehensive care that extend beyond the clinical service delivery setting (12 awardees).

Round Two required each applicant to propose both an innovative care delivery model and a payment model that would support sustainability. Applicants were encouraged to focus on alternative payment models that did not simply expand FFS payments.

The performance period for Round Two began in September 2014 and extended through June 2017. Round Two awardees are testing new models in all categories and priorities. Lessons learned from Round One have been leveraged in the implementation and management of Round Two awards. These lessons include incorporating operational plans into the application process, soliciting payment models, and requesting financial and actuarial review.

Evaluation Status/Results: The most recent results from Round Two are included in the third annual evaluation report. The report provides findings for three awards. Staff survey results for University of California, San Francisco (UCSF) reported the intervention was successful in lowering caregiver burden and increasing caregiver self-efficacy. Similarly, the staff survey for the University of Illinois (U Illinois) reported that the program had positive impacts on the delivery of care and outcomes for participants and their families. Interviews with staff at New York City Health + Hospitals (NYC H+H) thought that the program's core goals of reductions in utilizations in ED visits were attainable. Other awardees' specific quality outcomes will be reported when participant data is available.

Preliminary utilization and expenditure impact findings for the three awards were mixed and should be interpreted with caution as the analysis includes a limited period of time. Early utilization results were not significant and found increased ED visits and decreased primary and specialist care visits with the NYC H+H intervention while U Illinois showed decreased ED visits. UCSF had no effect on utilization. Estimated effects on total expenditures were not statistically significant for any of the three awardees. However, for two of the three awardees, the treatment group had eight percent lower expenditures than the control group.

We anticipate the final evaluation report will include rigorous impact analyses for 23 of the 39 awardees (nine for Medicare FFS, eight for Medicaid, and six for both Medicare and Medicaid). Alternative analyses such as a comparison of outcomes among treatment beneficiaries in the pre- and post-award periods will be conducted for the remaining 15 awardees.

The Round Two Year Three evaluation report can be accessed here. To access earlier evaluation reports please visit the model's webpage at the link below.

Webpage: Health Care Innovation Awards Round One and Round Two Webpages

Health Care Payment Learning and Action Network

Announcement Date: January 2015

Geographic Scope: Nationwide

Description: The Health Care Payment Learning and Action Network (LAN) is a public-private learning collaborative (or network) built on the principle that sharing information about successful models, aligning key design components of APMs, and encouraging concerted implementation of APMs will increase the rate of APM adoption across the country and lead to reduced costs and improved quality

The LAN brings together private, public, and nonprofit partners with the shared goal of increasing multi-stakeholder adoption of APMs that have proven effective in promoting better value and quality in health care. Convened and independently managed on behalf of CMS by the contractor who operates the CMS Alliance to Modernize Healthcare (CAMH) Federally Funded Research and Development Center (FFRDC), the LAN is coordinated by a Guiding Committee that meets regularly to provide recommendations on LAN agendas, learning topics, and other efforts to achieve LAN goals. Activities of the LAN include in-person large events (to which all LAN participants are invited), Work Groups, collaboratives, and the production and dissemination of white papers designed to facilitate multilayer alignment among stakeholders.

Now a 7,100-member stakeholder network dedicated to advancing APM adoption, the LAN coordinates efforts to increase the adoption of APMs across the U.S. health care system through the following processes:

- Serving as a convening body to facilitate joint implementation of new models of payment and care delivery;
- Identifying areas of agreement on how best to move toward alternative payment models, how to analyze data, and how to report on these new payment models;
- Collaborating to generate evidence, share approaches, and remove barriers;
- Developing common approaches to core issues such as beneficiary attribution, financial models, benchmarking, quality and performance measurement, risk adjustment, and other topics raised for discussion; and
- Creating implementation guides for payers, purchasers, health care providers, and consumers.

These efforts have evolved in response to the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), which increases the need for multi-payer collaboration and APM measurement at the clinician level. The LAN now studies ways to overcome the challenges of coordinating payment schema, incentives, and metrics in multi-payer APMs, increases understanding of APMs,

and helps expand opportunities for providers to qualify for APM incentives under the Quality Payment Program, contributing to the transformation of health care payment across the country.

Webpage: Health Care Payment Learning & Action Network

Home Health Value-Based Purchasing Model

Model Announcement Date: November 2015

Model Performance Period: January 2016 – December 2020

Model Participants: Medicare-certified Home Health Agencies

Geographic Scope: Arizona, Florida, Iowa, Maryland, Massachusetts, Nebraska, North Carolina, Tennessee, and Washington

Model Description: The Home Health Value-Based Purchasing (HHVBP) Model is designed to test whether higher payment incentives can significantly change health care providers' behavior to improve quality of care by shifting Medicare-certified home health agencies (HHAs) from volume-based to value-based purchasing. CMS believes stronger incentives will improve HHAs' investment in transforming care delivery. The specific goals of the model are to (1) provide incentives for better quality of care with greater efficiency, (2) study new potential quality and efficiency measures for appropriateness in the home health setting, and (3) enhance the current public reporting process.

In the Calendar Year (CY) 2016 Home Health Prospective Payment System Rate Update; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements; Final Rule, effective January 1, 2016, CMS implemented the HHVBP Model in nine states through notice and comment rulemaking.

All Medicare-certified HHAs that provide services in Arizona, Florida, Iowa, Maryland, Massachusetts, Nebraska, North Carolina, Tennessee, and Washington participate in the model. Annual payment adjustments are based on each HHA's total performance score (TPS) for the applicable performance year, which is based on quality metrics and data reporting.

Payments will be adjusted incrementally over the course of the model in the following manner:

- a maximum payment adjustment of three percent (upward or downward) in CY 2018;
- a maximum payment adjustment of five percent (upward or downward) in CY 2019;
- a maximum payment adjustment of six percent (upward or downward) in CY 2020;
- a maximum payment adjustment of seven percent (upward or downward) in CY 2021; and
- a maximum payment adjustment of eight percent (upward or downward) in CY 2022.

In the CY 2017 Home Health Prospective Payment System Final Rule, CMS finalized several changes to the model's design including calculation of benchmarks and achievement thresholds; cohort size requirements; timeframe for submission and reporting period for new measure data; removal of four measures; and implementation of recalculation and reconsideration processes. The CY2017 Final Rule also provided an update on the progress toward developing public reporting of performance under the HHVBP Model.

In the CY 2018 Home Health Prospective Payment System Final Rule, in addition to summarizing the comments received on possible quality measures for future consideration, CMS finalized the following changes to the HHVBP Model:

- Amended the definition of "applicable measure" to mean a measure for which a competing HHA has provided a minimum of 40 completed surveys for Home Health Care Consumer Assessment of Healthcare Providers and Systems (HHCAHPS) measures, for purposes of receiving a performance score for any of the HHCAHPS measures, beginning with performance year one; and
- Removed the Outcomes and Assessment Information Set (OASIS) -based measure, Drug Education on All Medications Provided to Patient/Caregiver during all Episodes of Care, from the set of applicable measures for performance year three and subsequent years.

Included in the HHVBP Model's applicable measure set are measures that have the potential to follow patients across multiple settings, reflect a multi-faceted approach, and foster the intersection of health care delivery and population health. The HHVBP Model also studies measures self-reported by competing HHAs that are outside of the set of quality measures currently used by CMS, or "New Measures," which we believe fill gaps in the NQS Domains not completely covered by existing measures in the home health setting. All competing HHAs are required to submit data on the New Measures via the HHVBP's secure portal and reporting on them accounts for ten percent of the HHA's TPS.

Evaluation Status/Results: The evaluation focuses primarily on the success of the model in achieving improvements in: total quality of care performance, clinical care process measures; clinical outcome measures (*e.g.*, functional status); utilization outcomes; access to care; total Medicare cost of care and patients' care experience.

The first-year quality findings include a 7.4 percent greater improvement in the HHA Total Performance Scores (TPS) observed in participating agencies relative to a matched comparison group. This improvement was driven by improvement in the OASIS-based process and outcome measures that reflect changes in coding the start-up OASIS assessment. No effect on HHCAHPS patient experience measures was observed.

First year Medicare spending and utilization findings were mixed. No significant effects were found for home health use and spending. No impact was observed for the number of unplanned hospitalizations but there was a significant decrease in spending associated with unplanned Acute Care Hospital stays. Skilled Nursing Facilities use and spending decreased in CY 2016. In contrast,

emergency department utilization increased 0.21 percentage points or 1.8 percent. These first-year findings should be viewed as preliminary since payment adjustment did not occur during the time examined.

The Home Health Value-Based Purchasing Model Year 1 evaluation report can be accessed here.

Webpage: Home Health Value-Based Purchasing Model Webpage

Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents

Model Announcement Date: March 15, 2012 (Phase One); August 27, 2015 (Phase Two)

Model Performance Period: September 2012 to September 2016 (Phase One; the actual start date varied by facility); October 2016 – September 2020 (Phase Two)

Model Participants: Enhanced Care and Coordination Provider (ECCP) organizations and partnering long-term care (LTC) facilities and practitioners.

Geographic Scope: Alabama, Colorado (Phase Two only), Indiana, Missouri, Nebraska (Phase One only); Nevada, New York, and Pennsylvania.

Model Description: Through Phases One and Two of the Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents, CMS is testing strategies to reduce potentially avoidable Emergency Department (ED) visits and hospitalizations for nursing facility residents and improve the quality of care.

***Phase One*:** Unnecessary hospitalizations can be disruptive and dangerous for nursing facility residents and costly for Medicare. Through the Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents, CMS funded seven organizations, known as Enhanced Care and Coordination Providers (ECCPs), to test strategies to reduce avoidable hospitalizations for Medicare and Medicaid enrollees who are long-stay residents of nursing facilities. These organizations provided clinical staff and/or staff training in partnership with 143 nursing facilities to test evidence-based interventions over a four-year period.

Phase Two: CMS is implementing a second phase of the Initiative to test whether three new fee-for-service payments for nursing facilities and practitioners will further reduce avoidable hospitalizations, lower combined Medicare and Medicaid spending, and improve the quality of care received by nursing facility residents.

The new payment reforms aim to reduce avoidable hospitalizations by funding higher-intensity interventions in nursing facilities for residents who may otherwise be hospitalized upon an acute change in condition. The Initiative includes fee-for-service billing codes for practitioners to diagnose and treat acute changes in condition in the nursing facility setting at the same payment

rate as for a comparable visit in a hospital setting. Practitioners can also bill Medicare for increased provider engagement in multidisciplinary care planning activities.

Two separate categories of participating facilities exist. The "Payment-only" group consists of facilities newly selected to participate in Phase Two and eligible to bill for the model payments; these facilities did not participate in Phase One and are not receiving any of the clinical or educational interventions from Phase One. The "ECCP + Payment" group consists of facilities continuing from Phase One with ECCP-funded RNs and APRNs on site and also eligible to bill for the new payments. As of September 2017, ECCPs are partnering with 144 Payment-only nursing facilities from six states (Alabama, Colorado, Indiana, Missouri, New York, and Pennsylvania) and 107 ECCP + Payment nursing facilities from six states (Alabama, Indiana, Missouri, Nevada, New York, and Pennsylvania).

Evaluation Status/Results: Phase One**:** The final evaluation report from Phase One was published in October 2017. The report found that all seven ECCPs reduced hospitalizations, with six of the seven achieving statistically significant improvement in all-cause hospitalizations (significant reductions ranged from a decline of 2.8 to 7.9 percentage points), potentially avoidable hospitalizations (significant reductions ranged from a decline of 3.9 to 6.1 percentage points), or both. While Medicare expenditures were reduced in six of the seven individual programs, only four reached statistical significance, and the overall savings of $48 million in total Medicare expenditures was not statistically significant.

When the intervention cost is taken into account, four of the seven ECCPs achieved net reductions in Medicare expenditures (ranging from under $3 million to almost $38 million). While only one of the ECCPs demonstrated a statistically significant reduction in net total Medicare expenditures, that ECCP's estimate should be interpreted with caution. Over all the programs combined, we observed a net loss of about $28 million in total Medicare expenditures, but this loss was not statistically significant.

The report found the strongest improvements in both cost and quality at the intervention sites with a full-time nurse at each facility providing direct care to residents. These models demonstrated greater changes in facility culture, greater support for the need to reduce avoidable hospitalizations, and greater overall buy-in to the Initiative from facility staff, resulting in stronger intervention effects. Intervention sites where nurses did not provide direct care, or where nurses rotated across multiple facilities, showed less consistent effects.

According to the report, "Overall, these findings provide persuasive evidence of the Initiative's effectiveness in reducing hospital inpatient admissions, ED visits, and hospitalization-related Medicare expenditures."

The Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents – Phase One final evaluation report can be accessed here.

To access earlier evaluation reports please visit the model's webpage at the link below.

Phase Two: The first annual evaluation report from Phase Two covers 2016 baseline intervention facility resident characteristics. Qualitative data provides context for future quantitative findings and highlights specific areas of interest for further data collection and evaluation. Telephone interview findings highlighted good progress in implementation and use of the new billing codes, with 76 percent of facilities reporting that they have submitted one or more claims under the Initiative. Likewise, the majority (72 percent) believe the components of the Initiative are helping to reduce avoidable hospitalizations.

The Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents – Phase Two Year One evaluation report can be accessed here.

Webpage: Phase One: Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents - Phase One Webpage. Phase Two: Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents - Phase Two Webpage

Maryland All-Payer Model

Model Announcement Date: January 10, 2014

Model Performance Period: January 2014 – December 31, 2018

Model Participants: Hospitals

Geographic Scope: All acute care hospitals in the state of Maryland

Model Description: Maryland operates the nation's only all-payer hospital rate regulation system. Under this system, Maryland sets rates for hospital services and all third-party payers pay the same rate. From 1977 until December 2013, Maryland set payment rates for Medicare services that would otherwise be reimbursed under the Inpatient Prospective Payment System (IPPS) and Outpatient Prospective Payment System (OPPS) pursuant to a waiver under section 1814(b)(3) of the Social Security Act.

Effective January 2014, Maryland entered into a new agreement with CMS to implement the Maryland All-Payer Model, a five-year hospital payment model. Under the terms of this agreement, Maryland agreed to meet a number of quality targets and limit annual cost growth for all payers including Medicare. The purpose of this model is to test the impact of transformation in the context of an all-payer rate setting system. Specifically, the model tests whether an all-payer system for hospital payment that is accountable for the total hospital cost of care on a per capita basis is an effective model for advancing better care, better health, and reduced costs. Building on this model, CMS announced the Maryland Total Cost of Care Model in June 2018; the Maryland Total Cost of Care Model is expected to start in January 2019.

The Maryland All-Payer Model offered significant flexibility to the state in operationalizing the model for stakeholders. It contains design elements, such as a quality target to reduce readmissions,

and programs, such as the Care Redesign Program, meant to engage physicians and reduce provider burden, and to facilitate productive partnerships between health care providers to make the patient experience more consistent and positive across settings.

The agreement between Maryland and CMS provided for the following:

- Maryland elected that Maryland hospitals would no longer be reimbursed by Medicare in accordance with its previous statutory waiver in section 1814(b)(3), which is based on Medicare payment per inpatient admission, in exchange for the new CMS model based on Medicare per capita total hospital cost growth;
- Maryland agreed to generate $330 million in Medicare savings over a five-year period of performance, measured by comparing Maryland's Medicare per capita total hospital cost growth to the national Medicare per capita total hospital cost growth;
- Maryland agreed to limit its annual all-payer per capita total hospital cost growth to 3.58 percent, the 10-year compound annual growth rate in per capita gross state product;
- Maryland committed to achieving a number of quality targets to improve the care for Maryland residents, including Medicare, Medicaid, and CHIP beneficiaries, such as:
    - *Readmissions*: Maryland committed to reducing its aggregate Medicare 30-day unadjusted all-cause, all-site hospital readmission rate to the national rate over five years.
    - *Hospital Acquired Conditions*: Maryland committed to achieving an annual aggregate reduction of 6.89 percent in 65 Potentially Preventable Conditions (PPC) over five years for a cumulative reduction of 30 percent.
    - *Population Health*: Maryland agreed to submit annual reports demonstrating its performance along various population health measures.

Under the All-Payer Model, Maryland also committed to achieving several delivery transformation goals including, moving 80 percent of its hospital revenue into population-based payments over the five-year performance period.

This statewide model covers all Maryland residents, including approximately 856,500 Medicare FFS beneficiaries. There are currently 46 acute care hospitals waived from the Inpatient Prospective Payment System and Outpatient Prospective Payment Systems, and instead paid in accordance with the Maryland All-Payer Model and regulated by Maryland's all-payer hospital rate setting organization. Under the Maryland All-Payer Model, the state has moved all 46 acute care hospitals into hospital global budgets in which all payers in aggregate pay hospitals a fixed annual amount for inpatient and outpatient services, adjusted for quality and irrespective of hospital utilization. Actuarial analyses and reporting from the state show the following results through the end of CY 2017:

- **Medicare Savings:** $916M in Medicare hospital savings, greatly surpassing the five-year goal of $330M.
- **All-Payer Growth Cap:** Achieving less than 3.58 percent growth in all-payer hospital cost per capita in accordance with the 3.58 percent cap.
- **Medicare Readmissions:** Closed the gap between Maryland's Medicare FFS 30-day all-cause readmission rate and the national average.
- **All-Payer PPC:** 53 percent reduction in all-payer PPC, exceeding the five-year target of 30 percent reduction.

All Maryland acute care hospitals participate in the global budget model and Maryland has moved 100 percent of hospital revenue into a population-based payment model.

Evaluation Status/Results: Using traditional evaluation approaches that examine the impact relative to a comparison group, the Maryland All-Payer Model evaluation is assessing the model's impact on reducing Medicare total cost of care, inpatient and outpatient costs, 30-day readmissions, and potentially avoidable admissions over a five-year period. It is based on a mixed-methods design, using both qualitative and quantitative methods and data to assess both the implementation and the outcomes of the model.

Over the first three years of the Maryland All-Payer Model (2014 – 2016), the evaluation showed both reduced total expenditures and hospital expenditures for Medicare beneficiaries but not for commercial plan members. The model reduced total Medicare expenditures by 2.7 percent ($679 million) and hospital expenditures by four percent ($554 million) over three years, relative to a comparison group of non-Maryland hospitals with similar characteristics. These Medicare savings occurred without shifting costs to other parts of the health care system outside of the global hospital budgets. Hospital savings for Medicare were achieved largely by reducing expenditures for outpatient department services.

Inpatient admissions declined for both Medicare (-4.9 percent) and the commercial plan members (-4.0 percent) in Maryland relative to the comparison group, but there were no savings in inpatient hospital services (as expected) because hospitals offset the decrease in utilization by increasing payments per inpatient admission in order to meet their global budget. Admissions for ambulatory care sensitive conditions decreased more for Medicare beneficiaries in Maryland than for the comparison group (-9.4 percent). However, the same was not true for commercial plan members. Rates of unplanned readmissions did not change for either population relative to the comparison group, although they did decrease in absolute terms. There was no decrease in ED visits for avoidable conditions or in ED visits within 30 days of discharge in the Medicare population. Visits to the ED within 30 days of discharge declined more among commercial plan members in Maryland relative to the comparison group.

The ED visit rate in Maryland increased at a greater rate relative to the comparison group (2.6 percent), yet ED expenditures declined due to a reduction in payments for ED visits (-24.5 percent).

The relatively greater increase in Maryland may be due to reductions in ED visits leading to an admission.

The Maryland All-Payer Model Year Three evaluation report can be accessed here.

To access earlier evaluation reports please visit the model's webpage at the link below.

Webpage: Maryland All-Payer Model Webpage

Medicaid Innovation Accelerator Program

Announcement Date: July 2014

Performance Period: July 2014 – Ongoing Testing

Participants: Medicaid Agencies

Geographic Scope: All 50 states, territories, and the District of Columbia

Description: In July 2014, CMS launched the Medicaid Innovation Accelerator Program (IAP), a collaborative initiative between the Center for Medicaid and CHIP Services and the CMS Innovation Center. The goal of IAP is to improve the care and health of Medicaid beneficiaries and to reduce costs by supporting states' ongoing delivery system and payment reforms through targeted technical support, tool development, and cross-state learning opportunities. To-date, IAP has worked with forty-two states, three territories, and the District of Columbia through direct technical support opportunities (*e.g.*, state collaboratives with individualized coaching and peer-to-peer learning).

As a result of a multi-stakeholder engagement process conducted prior to IAP, CMS selected and designed four program areas that addressed technical assistance gaps identified by states:

- **Reducing Substance Use Disorders (SUD)**: IAP works with states to better identify individuals with a SUD, expand coverage for effective SUD treatment, and enhance SUD practices delivered to beneficiaries. IAP has worked with various cohorts of states on analyzing and using data to design these reforms, as well as assist with implementing them.
- **Improving Care for Medicaid Beneficiaries with Complex Care Needs and High Costs**: IAP worked with five states to design and implement delivery system and payment reforms for their Medicaid beneficiaries with complex care needs and high costs.
- **Promoting Community Integration through Long-term Services and Supports (LTSS)**: IAP supports states in two areas: Housing-Related Services and Partnerships has supported two cohorts of eight state partnerships. Value-Based Payment for Home and Community-Based Services has supported 23 states in designing and implementing related strategies.

- **Supporting Physical and Mental Health Integration:** This program area focused on supporting nine states' spread of physical and mental health integration models and payment approaches through individualized coaching and affinity group activities.

As part of IAP's efforts to support ongoing Medicaid delivery system reforms, targeted technical support and tools are also offered to states in four functional areas: data analytics, quality measurement, performance improvement, and value-based payment and financial simulations. This targeted support represents an opportunity for states to build their capacity in key delivery system reform levers. IAP integrates functional areas across the four program areas, in addition to offering direct technical support to state Medicaid agencies and developing related tools:

- **Medicare-Medicaid Data Integration:** IAP has worked with five states on providing one-on-one technical support to address the overarching challenge of acquiring and successfully integrating Medicare and Medicaid data.
- **Data Analytics:** IAP is offering targeted technical support to states around a variety of data analytic activities such as designing an analytic strategy or integrating non-Medicaid data. IAP has supported two 12-month cohorts of eight-ten states.
- **Value-Based Payment and Financial Simulations:** The IAP provides individualized technical support for states interested in designing, developing, or implementing value-based payment approaches. Further, if a state seeks to pursue a particular value-based payment approach, IAP provides the state with support to conduct financial simulations. IAP has supported two 12-month cohorts of ten states.
- **Children's Oral Health Initiative Value-Based Payments:** IAP launched this 24-month technical support opportunity with three state Medicaid/CHIP agencies to select, design, and test value-based payment approaches that will sustain children's oral health care delivery models that are showing results.
- **Maternal and Infant Health Initiative Value-Based Payments:** IAP launched this 24-month technical support opportunity with four state Medicaid/CHIP agencies to select, design, and test value-based payment approaches to sustain care delivery models that demonstrate improvement in maternal and infant health outcomes.
- **Measurement Development and Measure-Related Resources:** Over the past three years, IAP has been developing quality measures in key gap areas across the IAP's four program areas. IAP is also creating measurement-related resources for states, such as a brief about how to develop performance benchmarks for a Medicaid value-based payment program.
- **Performance Improvement:** IAP integrates performance improvement (i.e. quality improvement) tools and techniques (*e.g.* driver diagrams) into many of its program and functional area technical support opportunities.

All of IAP's program and functional areas host national webinars and develop resources/tools for all state Medicaid agencies to use that highlight topics addressed by states that participate in IAP

direct technical support opportunities, collaboratives, and cohorts. All 50 states and the District of Columbia have participated in national dissemination webinars.

Evaluation Status/Results: An interim evaluation report was released in March 2018 that encompasses findings from the four IAP program areas and one IAP functional area initiative for the period of IAP's inception in 2014 through mid-July 2017. The report findings indicated that IAP has helped raise states' awareness of ongoing Medicaid reforms. The various methods of targeted support offered by IAP have allowed participants to explore substantive and operational concepts both broadly and deeply. State participants have begun to implement some of the lessons learned through their experiences with IAP to further their health systems reforms.

The Medicaid Innovation Accelerator Program Interim evaluation report can be accessed here.

Webpage: Medicaid Innovation Accelerator Program Webpage

Medicare Advantage Value-based Insurance Design Model

Model Announcement Date: September 2015

Model Performance Period: January 2017 – December 2021

Model Participants: Medicare Advantage Organizations (MAOs)

Geographic Scope: In 2017, MAOs in the following seven states could participate: Arizona, Indiana, Iowa, Massachusetts, Oregon, Pennsylvania, and Tennessee. In 2018, MAOs in Alabama, Michigan, and Texas could also participate. Beginning in 2019, the model will include fifteen more states: California, Colorado, Florida, Georgia, Hawaii, Maine, Minnesota, Montana, New Jersey, New Mexico, North Carolina, North Dakota, South Dakota, Virginia, and West Virginia.

The model will be open to MAOs in all 50 states beginning in 2020, as required by the Bipartisan Budget Act of 2018.

Model Description: The VBID model is an opportunity for Medicare Advantage plans (MA plans), including Medicare Advantage plans offering Part D benefits (MA-PD plans), to offer clinically nuanced benefit packages aimed at improving quality of care while also reducing costs. This model test will run for five years and is scheduled to end on December 31, 2021.

Value-Based Insurance Design (VBID) generally refers to health insurers' efforts to structure enrollee cost sharing and other health plan design elements to encourage enrollees to use high-value clinical services – those that have the greatest potential to positively impact enrollee health. VBID approaches are increasingly used in the commercial market, and evidence suggests that the inclusion of clinically nuanced VBID elements in health insurance benefit design may be an effective tool to improve the quality of care while reducing cost for Medicare Advantage enrollees with chronic diseases. CMS tests VBID in Medicare Advantage and measures whether structuring

patient cost sharing and other health plan design elements encourages enrollees to use health care services in a way that improves their health and reduces costs.

In the first three years of the model (2017-2019) CMS has selected states to participate in order to be generally representative of the national Medicare Advantage market, including urban and rural areas, areas with both high and low average Medicare expenditures, areas with high and low prevalence of low-income subsidies, and areas with varying levels of penetration of and competition within Medicare Advantage. Test states have also been selected based on the availability of appropriate paired comparison areas for the purposes of evaluation for the first three years of the model. As previously noted, the model will be open to MAOs in all 50 states beginning in 2020, as required by the Bipartisan Budget Act of 2018.

In the first two years of the Model, CMS identified a limited number of chronic conditions from which organizations could choose to target interventions. Participating organizations were responsible for applying the CMS-defined criteria to identify enrollees who fall within each of the clinical categories selected by the organization and offer varied plan benefit designs to these enrollees. For 2019, eligible MA plans, upon CMS approval, may offer varied plan benefit designs for enrollees who fall into clinical categories proposed by participating organizations using their own methodology for identifying eligible enrollees using CMS accessible data sources (*e.g.*, International Classification of Diseases 10, encounter data, claims data, etc.) or into the clinical categories identified and defined by CMS.

Benefit design changes made through this model may reduce cost sharing and/or offer additional services to enrollees with targeted conditions; however, enrollees can never receive fewer benefits or be charged higher cost sharing than other MA enrollees in their plan as a result of the model.

Evaluation Status/Results: The evaluation will address whether providing MA plans the opportunity to employ VBID strategies has an overall impact on enrollee health outcomes, behavior, service use, quality of care, as well as costs to health plans, enrollees, and Medicare. Both quantitative and qualitative analyses will be used to assess the experience of participating insurers and the uptake and impact of the model. These analyses will be primarily conducted at the model level. Where possible, and depending upon the composition of the group of participating plans, subgroup analyses will be used to examine whether specific plan characteristics impact plan participation, types of VBID strategies adopted, and quality, cost, and use of services.

Webpage: Medicare Advantage Value-Based Insurance Design Model Webpage

Medicare Care Choices Model

Model Announcement Date: June 2014

Model Performance Period: January 2016 – December 2020

Model Participants: Hospices

Geographic Scope: There are currently 93 hospices operating in 34 states

Model Description: According to the Medicare Payment Advisory Commission's March 2016 *Report to Congress: Medicare Payment Policy*, less than half of Medicare beneficiary decedents enrolled in hospice care, and the median length of stay in hospice was a relatively short 17 days. Under the Medicare hospice benefit, a beneficiary must forgo Medicare payment for treatment aimed at curing the terminal condition and this may impede the choice to elect hospice care. In the Medicare Care Choices Model (MCCM), enrollees may continue such treatment.

MCCM tests whether eligible Medicare and dually eligible beneficiaries would choose to receive hospice support services earlier, if they could also continue to receive benefits related to the treatment for their terminal condition. The model is designed to look at how this flexibility impacts quality of care and satisfaction of the beneficiary, family, and caregivers, as well as whether it reduces Medicare expenditures. Under MCCM, selected hospices furnish support services available under the Medicare hospice benefit that cannot be separately billed under Medicare Parts A, B, and D. These services include nursing, social work, hospice aide, hospice homemaker, volunteer (direct services), chaplain, bereavement, nutritional support, and respite care services (in-home only).

CMS pays a per-beneficiary-per-month (PBPM) fee of $400 to participating hospices for each month a beneficiary is enrolled in the model (except for a reduced fee of $200 in the first month if enrollment is less than 15 days) for model services provided. Providers and suppliers continue to bill Medicare when furnishing reasonable and necessary services covered by Medicare that are not covered by the model. Medicare continues to cover treatment of the beneficiary's terminal condition.

As of September 30, 2018, the model has enrolled 3,098 beneficiaries, and 93 hospices, operating in 34 states, are participating in the model.

Evaluation Status/Results: The first evaluation report of MCCM includes descriptive findings on model implementation and beneficiary enrollment from the start of the model on January 1, 2016 through June 30, 2017. Although enrollment was slow at first, it has been increasing since CMS adjusted the model eligibility criteria. Findings to date indicate that more than four out of five MCCM enrollees (83 percent) elected the Medicare hospice benefit after an average of two months in MCCM and one month prior to death. MCCM hospice staff, referring providers, and enrolled beneficiaries and their caregivers generally expressed high levels of satisfaction with the model, and hospice staff reported that MCCM helped hospice-eligible individuals become more familiar and comfortable with the hospice benefit. As enrollment increases, future reports will provide results on the effect of the model on Medicare expenditures, utilization, and quality of care.

The Medicare Care Choices Model Year One evaluation report can be accessed here.

Webpage: Medicare Care Choices Model Webpage

Medicare Diabetes Prevention Program Expanded Model

Model Announcement Date: July 7, 2016

Model Performance Period: April 2018 – Ongoing Testing

Model Participants: MDPP Suppliers

Geographic Scope: Nationwide

Model Description: In March 2016, under delegation of authority by the Secretary, CMS determined that the Diabetes Prevention Program model test, tested through a Round One Health Care Innovation Award, met the criteria for expansion. The MDPP Expanded Model has been developed through two rounds of rulemaking in the Calendar Year (CY) 2017 Physician Fee Schedule (PFS) final rule and the CY 2018 PFS final rule. Rulemaking resulted in the creation of a new provider type, MDPP suppliers, and the establishment of MDPP as a new preventive service for all eligible beneficiaries with Part B coverage through Original Medicare or Medicare Advantage.

The MDPP Expanded Model uses an evidence-based structured health behavior change intervention to prevent the onset of type 2 diabetes. MDPP services consist of up to two years of sessions furnished in a group-based, classroom-style setting that provides practical training in long-term dietary change, increased physical activity, and behavior change strategies, with the primary goal of at least five percent weight loss by participants. Services are furnished in community and health care settings by coaches, such as trained community health workers or health professionals. MDPP suppliers are paid based on a performance-based payment structure for achieving beneficiary attendance and weight loss goals. The MDPP benefit is once per lifetime for each qualifying beneficiary.

The goals of the MDPP Expanded Model are to prevent or delay progression from prediabetes to type 2 diabetes in beneficiaries with an indication of prediabetes, and to reduce Medicare costs for services related to type 2 diabetes.

MDPP supplier enrollment began on January 1, 2018 and MDPP services are available as of April 1, 2018. Enrollment will be continuous, with no limits on the number of MDPP suppliers who can enroll or on the number of beneficiaries that can receive MDPP services.

Evaluation Status/Results: The evaluation of the Medicare Diabetes Prevention Program Expanded Model will assess whether making these services available to Medicare beneficiaries who show indications of being pre-diabetic leads to weight reduction and improved health outcomes among model participants. In addition, the evaluation will also assess whether these services lead to lower overall health care expenditures among Medicare FFS beneficiaries participating in the model.

Webpage: Medicare Diabetes Prevention Program Expanded Model Webpage

Medicare-Medicaid Financial Alignment Initiative and State Demonstrations to Integrate Care for Dual Eligible Individuals

Model Announcement Date: July 1, 2011

Model Performance Period: Each state demonstration has a unique start date. The first was the Washington managed fee-for-service (MFFS) model on July 1, 2013. In July 2015, CMS offered states the opportunity to extend each demonstration by two years. All state demonstrations are currently scheduled to end on either December 31, 2019 or 2020, with extensions under consideration in a number of states. Demonstrations in Colorado and Virginia ended on their originally scheduled end dates of December 31, 2017.

Model Participants: State Medicaid Agencies and health plans

Geographic Scope: 12 active demonstrations in 11 states

Model Description: CMS developed the Medicare-Medicaid Financial Alignment Initiative to establish innovative models of care for dually eligible beneficiaries. Through this initiative and related work, CMS is partnering with states to test state-specific demonstrations that integrate primary, acute, and behavioral health care, and long-term services and supports for dually eligible beneficiaries. The initiative includes a capitated model and a managed fee-for-service model. Under the capitated model, a state, CMS, and a health plan enter into a three-way contract, and the health plan receives a prospective blended payment to provide comprehensive, coordinated Medicare and Medicaid services.

Under the managed fee-for-service model, a state and CMS enter into an agreement by which the state is eligible to benefit from a portion of the savings from initiatives that improve quality and reduce costs of Medicare and Medicaid services.

In 2018, CMS continued to partner with states and health plans under the initiative. As of September 1, 2018, there were 12 demonstrations in 11 states testing new models.[21] Ten of these demonstrations, including two in New York, are testing the capitated model, serving more than 375,000 beneficiaries as of September 1, 2018.[22] One demonstration, in Washington, is testing the managed fee-for-service model, serving approximately 34,000 beneficiaries as of September 1, 2018. CMS is partnering with Minnesota to implement an alternative model testing Medicare and Medicaid administrative alignment activities, building on the longstanding Minnesota Senior Health Options program, and serving nearly 40,000 dually eligible beneficiaries as of September 1, 2018.

[21] California, Illinois, Massachusetts, Michigan, Minnesota, New York, Ohio, Rhode Island, South Carolina, Texas, and Washington.

[22] California, Illinois, Massachusetts, Michigan, Minnesota, New York, Ohio, Rhode Island, South Carolina, and Texas

Approved demonstrations are at different stages of implementation. Start dates range from July 2013 for the Washington managed fee-for-service demonstration to July 2016 for the Rhode Island capitated demonstration. The Virginia and Colorado demonstrations concluded as scheduled on December 31, 2017. In both states, enrollees will continue to have access to care coordination and support services through integrated care initiatives that build upon demonstration experiences.

Medicare-Medicaid Financial Alignment Initiative Enrollment by State		
State	**Geographic Area**	**Enrollment (As of 9/1/2018)**
California	Seven of 58 counties	115,604
Illinois	21 of 102 counties	55,189
Massachusetts	9 of 14 counties	20,589
Michigan	25 of 83 counties	39,244
Minnesota	Statewide	39,868
New York FIDA	Six of 62 counties	3,831
New York FIDA I/DD	Nine of 62 counties	1,066
Ohio	29 of 88 counties	75,702
Rhode Island	Statewide	13,314
South Carolina	38 of 46 counties	11,377
Texas	Six of 254 counties	41,475
Washington	Statewide	34,070
Total Enrollment		**451,329**

Evaluation Status/Results: Through the period of this report, CMS has released the first independent evaluation reports containing preliminary results for the Washington, Massachusetts, and Minnesota demonstrations, and expect to release additional reports in 2019. CMS also makes performance data from demonstration reporting and other sources available on the MMCO website.

Highlights from the Washington MFFS demonstration's first performance period include enrollment increases in every quarter through the end of 2014 with minimal voluntary disenrollment. Rates of inpatient hospital admission, in general, and Ambulatory Care Sensitive Conditions (ACSC) admissions, in particular, were either flat or increasing during the baseline period and appear to be falling in the demonstration period. The results presented in the 2017 Washington Financial Alignment Initiative managed fee-for-service savings report update the

Demonstration Year One results from the January 2016 report, providing a final estimate of Medicare savings for Demonstration Year One and a preliminary estimate of savings for Demonstration Year Two. The final Medicare results for Demonstration Year One show total Medicare savings of $34,891,668. The preliminary savings results for Demonstration Year Two show total Medicare savings of $32,091,003. Across both Washington MFFS demonstration year's combined, total Medicare savings after the outlier adjustment was $67.0 million.

Highlights from the Massachusetts One Care demonstration first performance period include findings that beneficiaries who are enrolled in One Care plans are largely satisfied with the care model and demonstration. Results from the 2015 CAHPS survey show that when asked to provide an overall rating (on a scale of 1 to 10 with 10 being the best) of their One Care plan, most survey respondents ranked it as a 9 or 10. One notable challenge facing the demonstration since its inception has been reaching hard to find eligible beneficiaries and building a cadre of care coordinators sufficient to conduct health assessments and to assist in the development of an Individualized Care Plan for each enrollee.

Plans involved in the demonstration were still seeking to address beneficiary outreach efforts and building care coordinator capacity during the first demonstration year. Service use measures show that demonstration eligible beneficiaries saw decreases in eight of 13 utilization measures and increases in four of 13 measures during the demonstration period versus the baseline period. Similar trends were also observed in the comparison group. There was one exception; the measure for emergency department psychiatric use saw a small increase in episode counts in the demonstration group and small drop in the comparison group. Findings from the evaluations six quality measures show that rates were largely stable over the baseline and demonstration period and similar to trends in the comparison group.

In October 2017, CMS released a preliminary savings report for Year One of the Colorado Managed Fee-for-Service Demonstration. The preliminary Medicare results for Demonstration Year One show gross losses of $10,253,047. Losses were concentrated among users of Home and Community Based Services (HCBS) and beneficiaries in the community setting, while facility-based beneficiaries showed modest savings.

To access evaluation reports from the Medicare-Medicaid Financial Alignment Initiative please visit the model's webpage at the link below.

Webpage: Medicare-Medicaid Financial Alignment Initiative and State Demonstrations to Integrate Care for Dual Eligible Individuals Webpage

Medicare Prior Authorization Model: Non-Emergent Hyperbaric Oxygen Therapy

Model Announcement Date: May 22, 2014

Model Performance Period: March 2015 – February 2018

Model Participants: Outpatient facilities providing non-emergent Hyperbaric Oxygen (HBO) therapy

Geographic Scope: Illinois, Michigan, and New Jersey

Model Description: In May 2014, the CMS Innovation Center in collaboration with the CMS Center for Program Integrity, announced that it would begin testing a prior authorization model for non-emergent HBO therapy. The model, authorized under Section 1115A, is similar to an earlier prior authorization demonstration for power mobility devices. CMS focused the model on non-emergent HBO therapy due to the high incidences of improper payments for these services as reported by the Department of Health & Human Services' Office of Inspector General as well as concerns regarding beneficiaries receiving services that are not medically necessary.

The objective of the model was to test whether prior authorization helps reduce improper payments and reduce Medicare costs while maintaining or improving quality of care. The model did not create additional documentation requirements. It required the same information that has always been necessary to support Medicare payment, but required it earlier in the process. This helped to confirm that all relevant coverage, coding, and clinical documentation requirements were met before the service was rendered to the beneficiary and before the claim was submitted for payment.

The model was implemented in Illinois, Michigan, and New Jersey. Facilities or beneficiaries in Michigan began submitting prior authorization requests on March 1, 2015 for treatments occurring on or after April 13, 2015. Facilities or beneficiaries in Illinois and New Jersey began submitting prior authorization requests on July 15, 2015 for treatments occurring on or after August 1, 2015. These states were chosen because of their high Medicare expenditures for non-emergent (HBO) therapy. The model ended as scheduled on February 28, 2018, based on date of service.

Prior Authorization Process: The facility or beneficiary was encouraged to submit to their Medicare Administrative Contractor (MAC) a request for prior authorization along with all relevant documentation to support Medicare coverage of the service. The MAC reviewed the request and provided a provisional affirmative or non-affirmative decision within a specified timeframe. A claim submitted with an affirmative prior authorization was paid as long as all other requirements were met, and a claim submitted with a non-affirmative decision was denied (with appeal rights available).

Unlimited resubmissions were allowed. If a health care provider chooses to forego prior authorization and submitted a claim without a prior authorization decision, the claim was stopped

for pre-payment review. The model included an expedited review process to address circumstances where the standard timeframe for making a prior authorization decision could jeopardize the life or health of the beneficiary. However, requests for expedited reviews were rare since the model applied only to non-emergent services.

A provisional affirmative prior authorization decision affirmed up to 40 courses of treatment in a year. Beneficiaries who needed additional treatments required another prior authorization request.

Outreach and education to participating health care providers and beneficiaries began prior to the start of the model and continued throughout the performance period through such methods as open door forums, issuance of an operational guide, frequently asked questions (FAQs) posted on CMS' website, a beneficiary mailing, and educational events and materials issued by the MACs.

Evaluation Status/Results: The evaluation aims to rigorously assess prior authorization as a means of reducing utilization of medically unnecessary non-emergent HBO therapy, thereby reducing costs by decreasing the improper payment rate for these services while maintaining or improving the quality of care provided to beneficiaries. The evaluation will determine the impact of the prior authorization model on service use, quality of care, and Medicare expenditures as well as on health care providers and Medicare program operations.

The interim evaluation report from the HBO therapy model found decreases in HBO therapy use and expenditures for both all beneficiaries with conditions requiring prior authorization for HBO therapy and for the subset of beneficiaries with diabetic lower-extremity wounds. HBO therapy expenditures decreased by approximately 36 percent ($59 per beneficiary quarter) for both groups. This yields aggregate HBO therapy savings of $72 million for beneficiaries with any condition and $59 million for beneficiaries with diabetic lower extremity wounds. Prior authorization did not appear to either reduce the quality of care received by beneficiaries or increase adverse events. The probability of an emergency department visit, probability of an unplanned hospitalization, and probability of death each decreased significantly. These findings are consistent across all states and subgroups examined.

The Non-Emergent Hyperbaric Oxygen Therapy Model interim evaluation report can be accessed here.

Webpage: Medicare Prior Authorization Model of Non-Emergent Hyperbaric Oxygen Therapy Webpage

Medicare Prior Authorization Model: Repetitive Scheduled Non-Emergent Ambulance Transport

Model Announcement Date: May 22, 2014

Model Performance Period: December 2014 – December 2019

Model Participants: Ambulance suppliers

Geographic Scope: Eight states and the District of Columbia: Delaware, Maryland, Pennsylvania, New Jersey, North Carolina, South Carolina, Virginia, and West Virginia.

Model Description: In May 2014, the CMS Innovation Center in collaboration with the CMS Center for Program Integrity, announced that it would begin testing a prior authorization model for repetitive scheduled non-emergent ambulance transport. The model, authorized under Section 1115A, is similar to an earlier prior authorization demonstration for power mobility devices. CMS is focusing the model on RSNAT services due to the high incidences of improper payments for these services as reported by the Department of Health & Human Services' Office of Inspector General as well as concerns regarding beneficiaries receiving services that are not medically necessary.

The objective of the model is to test whether prior authorization helps reduce improper payments and reduce Medicare costs while maintaining or improving quality of care. The model does not create additional documentation requirements. It requires the same information that has always been necessary to support Medicare payment, but requiring it earlier in the process. This helps to confirm that all relevant coverage, coding, and clinical documentation requirements are met before the service is rendered to the beneficiary and before the claim is submitted for payment.

The RSNAT prior authorization model was originally implemented in South Carolina, New Jersey, and Pennsylvania. Ambulance suppliers or beneficiaries began submitting prior authorization requests on December 1, 2014 for transports occurring on or after December 15, 2014. These states were chosen because of their high Medicare expenditures for repetitive scheduled non-emergent ambulance transports.

Section 515(a) of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) broadened the scope of the RSNAT prior authorization model to six additional areas: Delaware, the District of Columbia, Maryland, North Carolina, Virginia, and West Virginia. Ambulance suppliers or beneficiaries began submitting prior authorization requests on December 15, 2015 for transports occurring on or after January 1, 2016.

The model was originally scheduled to end on December 1, 2017. In 2017, CMS extended the model a fourth year for all current states through December 1, 2018, based on date of service. In 2018, CMS extended the model one additional year and it is currently scheduled to end in all current states on December 1, 2019, based on date of service.

Section 515(b) of MACRA added paragraph (16) to section 1834(l) of the Act, which requires that, beginning January 1, 2017, the Secretary expand the model nationally to all States if an expansion of the model to all States meets the statutory requirements for model expansion described in paragraphs (1) through (3) of section 1115A(c) of the Social Security Act. These requirements are that

1. The Secretary determines that such expansion is expected to
    A. reduce spending under applicable title without reducing the quality of care; or
    B. improve the quality of patient care without increasing spending; and
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 titles; and
3. The Secretary determines that such expansion would not deny or limit the coverage or provision of benefits under the applicable title for applicable individuals.

CMS continues to evaluate the model and determine if the model meets the expansion requirements described above.

Prior Authorization Process: The ambulance supplier or beneficiary is encouraged to submit to their Medicare Administrative Contractor (MAC) a request for prior authorization along with all relevant documentation to support Medicare coverage of the service. The MAC reviews the request and provides a provisional affirmative or non-affirmative decision within a specified timeframe. A claim submitted with an affirmative prior authorization is paid as long as all other requirements are met, and a claim submitted with a non-affirmative decision is denied (with appeal rights available).

Unlimited resubmissions are allowed. If an ambulance supplier chooses to forego prior authorization and submits a claim without a prior authorization decision, the claim is stopped for pre-payment review. The model includes an expedited review process to address circumstances where the standard timeframe for making a prior authorization decision could jeopardize the life or health of the beneficiary. However, requests for expedited reviews are expected to be extremely rare since the model applies only to non-emergent services.

A provisional affirmative prior authorization decision affirms a specified number of trips (up to 40 round trips) within a 60-day period. Beneficiaries who need additional transports require another prior authorization request.

Outreach and education to participating health care providers and beneficiaries began prior to the start of the model and continues throughout the performance period through such methods as open door forums, issuance of an operational guide, frequently asked questions (FAQs) posted on CMS' website, a beneficiary mailing, and educational events and materials issued by the MACs.

Evaluation Status/Results: The evaluation aims to rigorously assess prior authorization as a means of reducing utilization of medically unnecessary RSNAT services, thereby reducing costs by decreasing the improper payment rate for these services while maintaining or improving the quality of care provided to beneficiaries. The evaluation will determine the impact of the prior authorization model on service use, quality of care, and Medicare expenditures as well as on health care providers and Medicare program operations.

Findings from the first interim evaluation report from the RSNAT model indicate that prior authorization successfully reduced RSNAT service utilization and expenditures and total Medicare expenditures for end-stage renal disease (ESRD) beneficiaries. The model is associated with an approximately $171 million reduction in RSNAT service expenditures for ESRD beneficiaries and a corresponding decrease in total Medicare fee-for service expenditures. No decline in quality was observed as measured by emergency department visits, emergency ambulance utilization, unplanned inpatient admissions, and death.

The Repetitive Scheduled Non-Emergent Ambulance Transport Model interim evaluation report can be accessed here.

Webpage: Medicare Prior Authorization Model of Repetitive Scheduled Non-Emergent Ambulance Transport Webpage

Million Hearts®: Cardiovascular Disease Risk Reduction Model

Model Announcement Date: May 2015

Model Performance Period: January 2017 – December 2021

Model Participants: Health care organizations

Geographic Scope: The model supports participant organizations in 46 states, as well as the District of Columbia and Puerto Rico

Model Description: The Million Hearts® Cardiovascular Disease Risk Reduction Model (MH Model) is a five-year model test of a performance-based payment model designed to prevent heart attacks and strokes. The MH Model is a randomized controlled trial that promotes improved cardiovascular disease outcomes and reduced utilization through evidence-based care including atherosclerotic disease (ASCVD) risk calculation, stratification, and risk management.

The MH Model incentivizes practices to calculate risk for all eligible Medicare beneficiaries by using the American College of Cardiology/American Heart Association (ACC/AHA) Atherosclerotic Cardiovascular Disease (ASCVD) ten-year pooled cohort risk calculator and to develop risk modification plans based on beneficiary risk profiles. Half of all selected applicants were randomly assigned to the intervention group, with the remaining selected applicants assigned to the control group.

Intervention practices will be paid a one-time $10 per beneficiary fee to calculate beneficiaries' ASCVD risk scores and to engage patients in shared decision-making. Payments in year one include an additional $10 per beneficiary per month Cardiovascular Care Management (CVD CM) payment for risk management for the highest risk patients. During Years Two through Five, practices will be able to receive a monthly CVD CM payment of up to $10 based upon the reduction of their high-risk beneficiary ASCVD risk scores.

Control practices will not be asked to implement ASCVD risk calculation; however, they will be asked to submit clinical data on Medicare beneficiaries for comparison to intervention practices. Data collection will occur in Years one, two, and three. Practices will be paid a $20 per beneficiary payment (based on the estimated costs of preparing and transmitting the required data) for each reporting cycle.

The MH Model supports participant organizations in 46 states plus Washington D.C. and Puerto Rico, and included 13,893 providers as of December 2017. As of the close of the first performance period (data submitted January-June 2017), 164,564 beneficiaries were validated and aligned to participating physician practices. All model participants receive clinical practice improvement activities (CPIA) credit towards their Merit-Based Incentive Payment System (MIPS) requirements.

Evaluation Status/Results: The evaluation will assess the model's impact on health care quality, utilization, and costs. The primary outcomes of interest will be the reduction of heart attack, strokes, and transient ischemic attack; the reduction in cardiovascular risk; and the impact of the model on total cost of care for Medicare fee-for-service beneficiaries. To maximize comparability among intervention and control practices with respect to practice characteristics and interest in model participating, the evaluation is using a randomized controlled design of eligible practices.

Webpage: Million Hearts Cardiovascular Disease Risk Reduction Model Webpage

Next Generation Accountable Care Organization Model

Model Announcement Date: March 10, 2015

Model Performance Period: January 2016 – December 2020

Model Participants: Medicare ACOs

Geographic Scope: 33 states and the District of Columbia

Model Description: The Next Generation ACO (NGACO) Model builds upon experience from the Pioneer ACO Model and the Shared Savings Program.

NGACO Model participants have the opportunity to take on greater levels of financial risk than ACOs in other current initiatives. While the ACOs in this model are at greater financial risk they also have a greater opportunity to share in the model's savings.

The ACOs are able to select from flexible payment options that support ACO investments in care improvement infrastructure and clinical process workflows by providing regular cash flow payments to allow ACOs to make those investments.

Like the Pioneer ACO Model, the NGACO Model allows beneficiaries to choose to be aligned to the ACO, and tests beneficiary incentives for seeking care at Next Generation ACO providers and suppliers. The NGACO Model includes benefit enhancements designed to provide ACOs with greater flexibility in care delivery, including a programmatic waiver of the requirement for a three-day inpatient hospital stay prior to admission to a Skilled Nursing Facility (SNF). The NGACO Model's benefit enhancements also include the option to use telehealth in circumstances not otherwise permitted under Medicare, including providing coverage for teledermatology and teleophthalmology services furnished using asynchronous store and forward technologies, and to use post-discharge home visit services for care coordination. Beginning in 2019, the NGACO Model's benefit enhancements will also include a waiver to permit certain cost sharing support arrangements for Part B services, a waiver to allow the use of gift cards to incentivize certain beneficiaries to participate in chronic disease management programs, and a waiver increasing the availability of in-home care to beneficiaries at risk of hospitalization. The quality measures and reporting requirements used in the NGACO model closely follow those used in the Shared Savings Program.

The NGACO model began its third performance year on January 1, 2018. The model will continue for an additional two years in 2019 and 2020, with a revised financial methodology and the additional benefit enhancements described above.

There were 51 ACOs made up of approximately 61,000 health care providers participating in the NGACO model for 2018. These ACOs serve about two million beneficiaries across 33 states and the District of Columbia. The NGACO model is an Advanced APM under the Quality Payment Program.

Evaluation Status/Results: The evaluation of the first performance year estimated a Medicare spending impact for the cohort of ACOs that began participating in the NGACO Model in 2016 of $209.70 per beneficiary per year (PBPY) savings (or $18.20 per beneficiary per month (PBPM)). This impact corresponds with approximately $100.09 million in gross Medicare savings, or a 1.7 percent decline in spending relative to anticipated spending in the NGACO aligned beneficiary population. The savings impact of the model reflects declines or lower growth in spending in SNF settings, and may also reflect spending reductions in other post-acute care settings, hospital inpatient and hospital outpatient settings. When the spending impact is adjusted for CMS shared savings payments and other adjustments, the total Medicare spending impact of the model is an estimated $62 million in net savings, or a 1.1 percent decline. The PBPY impact on Medicare spending varied across ACOs from a savings of $913 PBPY to a loss of $450 PBPY.

Non-hospital evaluation and management visits declined by 179.4 visits per 1000 beneficiaries per year (1.5 percent decline). Use of annual wellness visits (AWVs) among NGACO beneficiaries increased, with 20.4 additional beneficiaries per 1,000 having more AWVs than the comparison, reflecting improved access to primary care services. ACOs reported using AWVs to engage beneficiaries in the management of their care, and to educate them about the ACO.

Relative to Medicare FFS comparison populations, quality of care results for the first performance year of the NGACO Model (2016) did not find substantive changes in quality of care outcomes as measured using inpatient hospital readmissions, ambulatory care sensitive admissions, and other outcomes. The evaluation of the NGACO Model remains ongoing with additional evaluation reports to be released as the evaluation continues.

The Next Generation ACO Model Year One evaluation report can be accessed here.

Webpage: Next Generation ACO Model Webpage

Oncology Care Model

Model Announcement Date: February 2015

Model Performance Period: July 2016 – June 2021

Model Participants: Physician group practices

Geographic Scope: As of March 1, 2018, there are 187 physician group practices participating in the model, representing approximately 20 percent of oncologists nationally, and 14 third party payers.

Model Description: The Oncology Care Model (OCM) aims to provide higher quality, more highly coordinated oncology care at lower cost to Medicare. The OCM launched on July 1, 2016 and will run for five performance years.

The CMS Innovation Center designed the model in collaboration with stakeholders from the medical, consumer and business communities who believed an alternative model for oncology care would better support beneficiaries and clinicians' work with their patients. Under OCM, practices may receive performance-based payments for episodes of care surrounding chemotherapy administration to Medicare patients with cancer.

OCM incentivizes participating physician practices to comprehensively and appropriately address the complex care needs of Medicare beneficiaries receiving chemotherapy treatment, and heighten the focus on furnishing services that improve the patient experience and/or health outcomes.

OCM episodes of care span six months following the initiation of chemotherapy treatment for cancer. OCM incorporates a two-part payment system for participating practices. The first is a monthly per-beneficiary-per-month payment for the duration of the episode, referred to as the OCM Monthly Enhanced Oncology Services (MEOS) payment. The $160 MEOS payment helps pay for the OCM practices' costs related to increased care coordination and access for Medicare FFS beneficiaries receiving chemotherapy services. The second part of the payment system is a performance-based payment that practices may be eligible to receive if they are able to lower the total cost of care, while delivering high-quality care for beneficiaries during the episode.

To calculate the performance-based payment, all Medicare Part A and Part B expenditures as well as certain Part D expenditures during the episode are included in the total cost of care, which will be compared against a risk-adjusted benchmark to calculate Medicare savings.

As of March 1, 2018, there are 187 physician practices and 14 third party payers participating in OCM. These numbers have changed since the CMS Innovation Center launched the model. The model started with 17 participating payers, but one of the third-party payers has since left the model and three of the third party payers consolidated their participation and now participate as one. The model has had fairly consistent practice participation.

The participating practices are heterogeneous, in terms of practice size and ownership. The OCM practices are currently distributed among 34 states. The OCM two-sided Risk Arrangement track is an Advanced APM under the Quality Payment Program.

Evaluation Status/Results: The first report from the evaluation covers the baseline period, focusing on the timeframe prior to the launch of the model in July 2016 with the goal of providing information on the foundational elements and design of the evaluation. OCM practices and matched comparison practices were alike in the baseline period (January 2014 – December 2015). As examples, we note similarities in average total Medicare cost per episode of care, average market characteristics and trends, and the number of comorbidities for beneficiaries receiving care from OCM practices and comparison practices. The most consistent differences we identified between intervention and comparison practices were for end-of-life measures, including that OCM practices had greater use of aggressive treatment at the end of life. Future evaluation reports will provide quantitative and qualitative results for the model.[23]

The Oncology Care Model evaluation report on the baseline period can be accessed here.

Webpage: Oncology Care Model Webpage

Part D Enhanced Medication Therapy Management Model

Model Announcement Date: September 25, 2015

Model Performance Period: January 2017 – December 2021

Model Participants: Part D standalone basic Prescription Drug Plans (PDPs)

Geographic Scope: The model is being tested in five Part D Regions that comprise 11 states: Region Seven (Virginia), Region 11 (Florida), Region 21 (Louisiana), Region 25 (Iowa,

[23] The Second Annual Report: Performance Period One from the Oncology Care Model was released after the period of reporting, in December 2018.

Minnesota, Montana, Nebraska, North Dakota, South Dakota, and Wyoming), and Region 28 (Arizona).

Model Description: The Part D Enhanced Medication Therapy Management (MTM) Model is an opportunity for PDPs in selected regions to offer innovative MTM programs aimed at improving the quality of care while also reducing costs.

The Enhanced MTM Model tests whether providing selected plans with regulatory flexibility to design and implement innovative programs and aligning financial incentives can more effectively achieve key goals for MTM programs, including:

- Improving compliance with medication protocols, including high-cost drugs, ensuring that beneficiaries get the medications they need, and that those medications are used properly;
- Reducing medication-related problems, such as duplicative or harmful prescription drugs, or suboptimal treatments;
- Increasing patients' knowledge of their medications to achieve their or their prescribers' goals of therapy; and
- Improving communication among prescribers, pharmacists, caregivers, and patients.

CMS grants participating PDPs a waiver of existing MTM regulations that define both the target population and the MTM services that can be provided in order to enable plans to target barriers to optimal medication usage at an individual level. Services provided under the model are funded through a separate payment to plans, outside of the standard bid/premium structure. Plans that are successful at reducing their members' medical expenditures are eligible for a performance incentive in the form of a reduction in enrollee premiums for a future model year. In addition, the Part D Enhanced MTM Model provides participating plans with access to Medicare Parts A and B claims data in order to facilitate effective targeting of beneficiaries at high risk of medication-related issues.

In 2017 and 2018, six Part D Sponsors participated in the model, enrolling over 1.7 million beneficiaries in 22 participating plan benefit packages. The Part D Enhanced MTM model is currently being tested and is scheduled to run until December 31st, 2021.

Evaluation Status/Results: The evaluation will examine the impact of the Part D Enhanced MTM Model within the framework of better care, improved health, and lower costs. Specifically, the evaluation will examine whether the provision of care management and/or care coordination services by basic standalone PDPs leads to improvements in beneficiary health status and lower overall Medicare program costs.

Webpage: Part D Enhanced MTM Model Webpage

Pioneer Accountable Care Organization Model

Model Announcement Date: May 2011

Model Performance Period: January 2012 – December 2016

Model Participants: Medicare ACOs

Geographic Scope: In 2016, the final year of the model, approximately 270,000 Medicare beneficiaries were aligned to Pioneer ACOs in six states (Arizona, California, Massachusetts, Michigan, Minnesota, and New York).

Model Description: The CMS Innovation Center launched the Pioneer Accountable Care Organization (Pioneer ACO) Model in 2012 with 32 ACOs. The model was designed for health care organizations and health care providers that were already experienced in coordinating care for patients across care settings.

The model tested payment arrangements that hold health care providers accountable for cost, quality, and patient experience outcomes for a defined population of beneficiaries. It used a shared savings payment methodology with generally higher levels of shared savings and risk compared to the Shared Savings Program. The Pioneer ACO Model also assessed the ability of hospital and physician organizations experienced in care and risk management to achieve savings for Medicare while sustaining or improving the quality of care for beneficiaries.

The Pioneer ACO Model ended on December 31, 2016. Eight Pioneer ACOs finished the final performance year of the model. Over the course of the model, fourteen Pioneer ACOs moved to participating in the Shared Savings Program or the Next Generation ACO Model. The Pioneer ACO Model ended prior to the beginning of the Quality Payment Program.

Evaluation Status/Results: The evaluation of the Pioneer ACO Model found spending reductions for Pioneer ACO-aligned beneficiaries relative to fee-for-service (FFS) beneficiaries in their respective markets after the first two performance years of the model with no detectable decrements in quality of care.

In May 2015, the CMS Chief Actuary certified and the Secretary determined that the Pioneer ACO Model, as it was tested in the first two years, was the first CMS Innovation Center model to meet the statutory requirements for expansion by the Secretary. Elements of the model have been incorporated into Track three of the Shared Savings Program through rulemaking.

The results from the first two years of the model that were the basis for the certification were detailed in the 2016 CMS Innovation Center Report to Congress located here. In brief, the evaluation found approximately $385 million in lower spending relative to other FFS Medicare beneficiaries in ACO markets with no apparent differences in quality based on an examination of the first two years of the model.

Following certification, the evaluation of the third model year concentrated on examining activities undertaken by the Pioneer ACOs that were associated with more successful outcomes and factors that helped facilitate movement towards increased financial risk. Key observations include the importance of the SNF three-day rule waiver as a care management tool, variations in the degree to which the Pioneer ACOs were able to successfully carry out strategies for increasing beneficiary and provider engagement and alignment, and the importance of the ACOs being able to leverage their parent organization's existing IT capabilities and managed care experiences.

The Pioneer ACO final evaluation report can be accessed here. The CMS Chief Actuary's certification can be accessed here.

To access earlier evaluation reports please visit the model's webpage at the link above.

Webpage: Pioneer ACO Model Webpage

State Innovation Models Initiative

Model Announcement Date: July 2012 (Round One); May 2014 (Round Two)

Model Performance Period: April 2013 – September 2016 **(**Round One); February 2015 – January 2019 (Round Two). In addition, some states in Round Two have received no cost extensions and their end date will go beyond January 31, 2019.

Model Participants: State Medicaid Agencies

Geographic Scope: In total, SIM funding has been provided to 34 states, three territories and the District of Columbia, representing over 60 percent of the US population.

Model Description: The State Innovation Models (SIM) initiative is testing the ability of state governments to use their policy and regulatory levers to accelerate health care payment and delivery transformation efforts in their states. The goal is to move the majority of care for the state population from volume to value-based, multi-payer delivery systems that improve the quality of care and the health of the population. SIM also seeks to lower health care costs by engaging stakeholders and employing enabling strategies such as health information technology and exchange, new workforce models, data analytics, and alignment of quality metrics. The CMS Innovation Center provides funding and technical assistance to states to design and test their State Health Innovation Plans.

SIM consists of two rounds of funding, and two types of awards in each round: Model Design Awards and Model Test Awards. SIM Round One began in April 2013, providing $30 million to 19 Design states and $240 million to six Test states. SIM Round Two was launched in February 2015, providing $45 million in design funding to 17 states, three territories, and the District of Columbia, as well as over $600 million in funding to 11 Test states, all of which were initially Round One Design states. Unlike other CMS Innovation Center models, SIM is not testing a

specific delivery system or payment model. Rather, SIM focuses on developing the infrastructure necessary to enhance coordination and communication across the care continuum.

To achieve this goal, the CMS Innovation Center partners with several other CMS components (Center for Medicaid and CHIP Services, Center for Clinical Standards and Quality, and the Center for Medicare), as well as other federal agencies (Office of the National Coordinator for Health Information Technology, Centers for Disease Control and Prevention, Substance Abuse and Mental Health Services Administration, and the Health Resources & Services Administration) to align and leverage other Federal delivery system reform programs and opportunities within the context of each state's health care landscape.

All Round One Design and Test states have completed their period of performance. The Round Two Design States have all completed their SIM design period of performance and submitted their State Health System Innovation Plans in 2016. Seven SIM Round 2 Test states will complete their model test period in 2019 and four are expected to complete the final performance year of their award in 2020.

SIM has developed robust reporting and learning systems that track and catalog all technical assistance requests and resources while providing several opportunities for states to learn and implement best practices adopted by other states into their own delivery system environment. Further, each state must perform a self-evaluation which requires the state to consistently assess progress on achieving its milestones and revising its innovation plan based on data and stakeholder input.

Several Round Two Test states, are developing proposals for Medicare participation in their state-based delivery and payment models in accordance with updated guidance for Medicare Alignment in Multi-Payer Models under the State Innovation Models Initiative announced by the CMS Innovation Center in October 2017. In order for the CMS Innovation Center to consider Medicare participation in the model, it must be patient-centered, broad-based, transformative, accountable for the total cost of care, feasible to implement and able to be evaluated. The CMS Innovation Center also requires that these proposals align with the requirements of Medicare Access and Chip Reauthorization Act of 2015 and the Department of Health & Human Services' Delivery System Reform goals.

Evaluation Status/Results: Results from the Round One final report on Model Design and Pre-Test states demonstrate that states are appropriate and necessary leaders of health care transformation. However, a state's reach is limited and partnership is needed to successfully design and implement health care transformation. Early and meaningful engagement of stakeholders allows states time to develop and provide feedback on multiple iterations on their plans. A short timeframe can keep participants focused and engaged, but it can also preclude consideration of novel or controversial ideas, development of detailed plans, and consensus from key stakeholders.

The fourth annual report for the evaluation of Round One Model Test states found that although care coordination improved for most of the SIM value-based payment models, these improvements

generally did not result in fewer emergency department visits or hospitalizations, lower Medicaid expenditures, or improved quality of care for Medicaid patients served by VPM-participating providers during the early SIM test period. The exceptions were in Vermont and Arkansas. In Vermont, there were statistically significant declines in emergency department visits (by about 3 percent or 4.5 fewer visits) and total Medicaid expenditures (by $16.51 per member per month [PMPM]) among beneficiaries in the Shared Savings Program, relative to an in-state comparison group, in the first two years of implementation. In Arkansas, inpatient admissions declined by 35 percent (5.6 fewer admissions per 1,000 beneficiaries) among Medicaid beneficiaries in the Patient-Centered Medical Home (PCMH) relative to an in-state comparison group, resulting in a 46 percent relative decline in inpatient Medicaid expenditures (-$21 PMPM). However, total Medicaid expenditures did not change for Medicaid beneficiaries in the Arkansas PCMH after one Test year.

The report also found that SIM helped expand the reach of VPMs to more than half of the Medicaid population under Arkansas's, Oregon's, and Vermont's PCMH models, and Minnesota's and Oregon's ACO models. Arkansas and Vermont have achieved significant commercial payer alignment, but no SIM-related VPM has reached more than 40 percent of its commercially insured population.

Providers credited SIM investments in health information exchanges, technical assistance on practice transformation, use of team-based care, and improvements in quality reporting as relating to improved care coordination. States also made progress in integrating behavioral health with primary care and in establishing stakeholder relationships and collaborations across health care sectors.

The evaluation of Round Two Model Design states used the State Health System Innovation Plan (SHSIP) and supporting documents to assess proposed state-led health care transformation. States proposed a variety of delivery system and payment reforms including patient-centered medical homes (PCMH), health homes for medically complex patients, accountable care organizations, and episodes of care. Enabling strategies to enact proposed reforms centered on health information exchange infrastructure and connectivity, workforce development, and quality measure alignment. States naturally concentrated on their respective Medicaid populations to begin their efforts. Five states plan to use PCMH and heath home initiatives on high-cost utilizers with chronic conditions. Fifteen states are proposing to improve behavioral health care with new programs or improving integration and care coordination of primary and behavioral health care. States proposed a variety of policy levers to implement all or part of their SHSIPs including State Plan Amendments (SPAs) Medicaid 1115 waivers, state legislation and contractual requirements in managed care or regional care organizations.

The Round Two Model Test second annual report provides qualitative findings to date. For example, participation requirements can be an inducement (*e.g.* providing incentives) or a detriment (*e.g.*, standards deemed to high) to recruiting practices into delivery and payment reforms. In addition, lower financial risk encourages model participation, but discourages alignment to payers beyond Medicaid. Purchasing power is an effective lever including requiring

alternative payment model (APM) adoption in Medicaid managed care contracts and/or state employee health plans. States are using levers at their disposal to engage commercial payers, but these are not working quickly. Further, states have encountered problems in accounting for different markets and their contexts (*e.g.* rural versus urban payers).

The report found that states have been able to leverage Medicaid managed care and state employee health insurance contracts as a policy lever to encourage adoption of APMs. Further, the evaluation finds that lower financial risk encourages provider participation in APMs. However, the providers' aversion to risk decreases alignment with payers beyond Medicaid. To date, most states are relying on a voluntary approach for commercial payers to adopt APMs.

States have invested heavily in health information technology (IT). Progress and strategies include investment in health information exchanges; expansion of admission, discharge, and transfer systems; all-payer claims database investment; electronic health record system expansion to support behavioral health integration; using electronic clinical quality measures to support APM adoption; and statewide health provider directories.

Lessons learned in Health IT include setbacks due to lack of interoperability; too much reliance on Health IT to drive provider participation in APMs; and data quality and completeness. Practice transformation and workforce development remain a focal point for states. Community health worker (CHW) investment is a critical strategy used in several states. Other strategies include the integration of physical health services in behavioral health clinics and supporting providers through telehealth. Challenges include adequate funding for CHWs, reimbursement for telehealth costs, and behavioral health provider shortages.

The State Innovation Models Initiative Round One, Model Design and Pre-Test States final evaluation report can be accessed here.

The State Innovation Models Initiative Round One, Model Test States Year Four evaluation report can be accessed here.

The State Innovation Models Initiative Round Two, Model Design final evaluation report can be accessed here.

The State Innovation Models Initiative Round Two, Model Test States Year Two evaluation report can be accessed here.

To access earlier evaluation reports please visit the model's webpage at the link below.

Webpage: State Innovation Models Initiative Webpage

Strong Start for Mothers and Newborns

Model Announcement Date: February 8, 2012

Model Performance Period: February 2013 – February 2017

Model Participants: Health care organizations including birth centers, medical centers, and clinics

Geographic Scope: Over 200 health care sites in 32 states, as well as Puerto Rico and the District of Columbia

Model Description: In February 2012, the CMS Innovation Center announced the Strong Start for Mothers and Newborns (Strong Start) initiative, an initiative that aimed to reduce preterm births and improve outcomes for newborns and pregnant women. The Strong Start initiative included two strategies.

Strong Start Strategy One was a public-private partnership and awareness campaign to reduce the rate of early elective deliveries prior to 39 weeks for all populations. The Strong Start Strategy One campaign period of performance concluded in December 2014.

Strong Start Strategy Two was an effort to test and evaluate whether enhanced prenatal care for women enrolled in Medicaid or CHIP (Children's Health Insurance Program) could reduce the rate of preterm births, improve the health outcomes of pregnant women and newborns, and decrease the anticipated total cost of medical care during pregnancy, delivery, and over the first year of the child's life.

There were three enhanced prenatal care approaches, and most participating awardees offered only one care approach. When an awardee offered two or more approaches, women could enroll in only one of the following:

1. **Group Care**: Incorporated peer to peer interaction in a facilitated setting with three components: Health Assessment, Education (Nutrition, Exercise, Stress reduction) and Psycho-social support.
2. **Birth Centers**: Offered a comprehensive prenatal care approach that was facilitated by midwives as well as a team of health professionals, including peer counselors. Services included collaborative practice, intensive case management, counseling and psycho-social support.
3. **Maternity Care Homes**: Offered enhanced prenatal care that included psychosocial support, education and health promotion, in addition to traditional prenatal care. Services provided were intended to expand access to care, improve care coordination and provide a broader array of health services.

An additional component of Strong Start Strategy Two is the evaluation of enhanced prenatal care through home visiting, as part of the evaluation of two home visiting models under the Maternal, Infant and Early Childhood Home Visiting program, Nurse Family Partnership and Healthy Families America, in partnership with the Health Resources & Services Administration (HRSA) and Administration for Children & Families (ACF).

CMS awarded 27 cooperative agreements on February 15, 2013 to over 200 health care sites in 32 states, as well as Puerto Rico and the District of Columbia. Strong Start Strategy Two began its fourth performance year in February 2016. Model participants stopped enrolling women in late 2016 and ended all operations in the first quarter of 2017.

Each awardee proposed to enroll between 1,500 and 3,000 pregnant women, and at the end of December 2016, approximately 46,000 women had been provided services. (Average per awardee = 1,700 enrollees)

Evaluation Status/Results: Evaluation results from the Year Four report on the Strong Start Strategy Two participants indicate that Strong Start has achieved some positive results relative to national benchmarks. In particular, rates of cesarean are lower and rates of vaginal birth after cesarean (VBAC) are higher among Strong Start participants than in the national population. Strong Start VBAC rates exceed Healthy People 2020 goals. Beneficiaries express overwhelming satisfaction with the prenatal care received under Strong Start Strategy Two.

Among the three Strong Start models (no outside comparison group), a regression controlling for medical demographic and social risks shows participants receiving care in the birth center and group care models have statistically significant lower rates of preterm birth and low birth weight infants than participants enrolled in maternity care home model. Birth center participants also have statistically significant lower rates of cesarean section.

State Medicaid programs can use these results (and results from the final evaluation report) when considering how to improve care for pregnant women in their states.

The Strong Start for Mothers and Newborns Strategy Two Year Four evaluation reports (two volumes) can be accessed at the following links: Volume One and Volume Two [24]

To access earlier evaluation reports please visit the model's webpage at the link below.

Webpage: Strong Start for Mothers and Newborns Webpage

[24] The Strong Start for Mothers and Newborns Strategy Two final evaluation reports were released after the period of reporting, in November 2018, and can be accessed here: Volume One and Volume Two.

Transforming Clinical Practice Initiative

Model Announcement Date: October 23, 2014

Model Performance Period: August 2015 – September 2019

Model Participants: Practice Transformation Networks (PTNs) and Support and Alignment Networks (SANs)

Geographic Scope: Nationwide

Model Description: TCPI was designed to help clinicians achieve large-scale practice transformation. The initiative was designed to support more than 140,000 clinician practices in sharing, adapting, and further developing their comprehensive quality improvement strategies.

The primary goals of the TCPI are to:

- Support more than 140,000 primary and specialty care clinicians enrolled in PTNs and SANs to achieve practice transformation, and provide education on the implications of the Quality Payment Program for clinicians.
- Build an evidence base on practice transformation so that effective solutions can be scaled. To achieve this, TCPI is designed to develop, capture, and report a standard set of measures, aligned with the overall goals of MACRA and the Quality Payment Program. Best practices and lessons learned will be shared to support practice transformation and practice transitions into alternative payment models.
- Improve health outcomes, reduce unnecessary hospitalizations, and reduce overutilization of other services for five million Medicare, Medicaid, and CHIP beneficiaries and other patients; and
- Sustain efficient care delivery for Medicare, Medicaid, and CHIP beneficiaries by preparing at least 75 percent of practices that complete the TCPI phases of transformation to move into APMs.

TCPI embodies the CMS Innovation Center's commitment to provide health care providers with the tools they need to meet the demands of a complex, changing health care system through large-scale investment in a collaborative peer-based learning initiative. TCPI was designed to ensure that clinicians who participate will be part of leading and creating positive change for the entire health care system.

Practice Transformation Networks:

TCPI's Practice Transformation Networks (PTNs) are peer-based learning networks designed to coach, mentor, and assist clinicians in developing core competencies specific to practice transformation. This approach allows clinician practices to become actively engaged in the transformation and ensures collaboration among a broad community of practices that creates,

promotes, and sustains learning and improvement across the health care system. In total, 29 organizations were awarded cooperative agreements to serve as PTNs. This list can be accessed here.

Support and Alignment Networks:

TCPI's Support and Alignment Networks (SANs) will provide a system for workforce development utilizing national and regional professional associations and public-private partnerships that are currently working in practice transformation efforts. Utilizing existing and emerging tools (*i.e.*, continuing medical education, maintenance of certification, core competency development) these networks will help ensure sustainability of these efforts. In addition, SANs will support the recruitment of clinician practices serving small, rural, and medically underserved communities and play an active role in the alignment of new learning. A total of 10 organizations were awarded cooperative agreements to serve as SANs. That list can be found here.

Support and Alignment Networks 2.0:

On September 29, 2016, CMS announced the recipients of two Support and Alignment Networks (SAN 2.0) cooperative agreements. To accelerate practice transformation strategies, SAN 2.0 awardees spread transformation knowledge to participating clinicians to achieve the TCPI goals:

- Improving the quality of care delivered;
- Rapidly transitioning practices through the phases of transformation in preparation for participation in and alignment with APMs; and
- Reducing total cost of care.

Through this initiative, the SAN 2.0 awardees identify, enroll, and provide tailored technical assistance to advanced practices in an effort to reduce Medicare, Medicaid, and CHIP program expenditures by transitioning practices through the phases of transformation and enhancing the quality, efficiency, and coordination of care.

Evaluation Status/Results: This model is administered by the Center for Clinical Standards and Quality (CCSQ). CCSQ anticipates releasing comprehensive evaluation results for the Transforming Clinical Practice Initiative following the conclusion of the model test in Fall 2019, and will provide these results on the Innovation Center website once finalized.

Webpage: Transforming Clinical Practice Initiative Webpage

4. Beneficiaries and Individuals Included in CMS Innovation Center Activities

CMS estimates that over 26,636,000 Medicare and Medicaid beneficiaries and individuals with private insurance in multi-payer model tests have been impacted by, have received care, or will

soon be receiving care from more than 967,800 health care providers participating in the CMS Innovation Center payment and service delivery models and initiatives described in Sections Three and Four of this Report to Congress.

The number of beneficiaries and individuals estimated to be included in each CMS Innovation Center model test and initiative is listed in Table One, below. The table also describes the range of impact of each model test and initiative, breaking down the aggregate number of beneficiaries and individuals in terms of the numbers specifically covered by Medicare Fee-for-Service, Medicare Advantage, Medicaid and the Children's Health Insurance Program (CHIP), Medicare and Medicaid (for those who are dually eligible), private insurance, and those either uninsured or not covered by any of the aforementioned payers.

Table One: *Estimated number of beneficiaries and individuals currently or previously included in models or other initiatives implemented under section 1115A of the Social Security Act. A comprehensive listing of all models and initiatives currently administered by the CMS Innovation Center is contained in the Appendix.*

Beneficiaries and Individuals Included in CMS Innovation Center Models and Initiatives **(Estimate as of September 30, 2018)**		
INITIATIVE	**TOTAL BENEFICIARIES AND INDIVIDUALS IMPACTED**	**RANGE OF IMPACT[25]**
Accountable Health Communities	8,350[26]	This model includes: • Medicare FFS beneficiaries • Dually eligible beneficiaries • Medicaid beneficiaries[27]
ACO Investment Model	507,905	This model includes: • Medicare FFS beneficiaries, including dually eligible beneficiaries[28]

[25] Certain exclusions to beneficiary eligibility for inclusion in these models may apply. Specific information can be obtained by visiting respective CMS Innovation Center web pages.
[26] Represents proportion of high-risk beneficiaries eligible for the model from a total of 41,181 beneficiaries screened.
[27] The Accountable Health Communities model is still in an early implementation phase. A breakdown of participants by type of coverage is not yet available.
[28] In the ACO Investment Model, dually eligible beneficiaries were not tracked as a separate category.

Beneficiaries and Individuals Included in CMS Innovation Center Models and Initiatives

(Estimate as of September 30, 2018)

INITIATIVE	TOTAL BENEFICIARIES AND INDIVIDUALS IMPACTED	RANGE OF IMPACT[25]
Bundled Payments for Care Improvement (Models One-Four)	666,504[29]	This model includes: • Medicare FFS beneficiaries
Bundled Payments for Care Improvement Advanced	Data Not Yet Available	
Comprehensive Care for Joint Replacement Model	157,585	This model includes: • Medicare FFS beneficiaries
Comprehensive ESRD Care Model	58,391	This model includes: • Medicare FFS beneficiaries
Comprehensive Primary Care Initiative	3,053,659	This multi-payer model ended on December 31, 2016 and included: • Medicare FFS beneficiaries (284,472) • Dually eligible beneficiaries (36,241) • Medicaid beneficiaries (79,074) • Individuals with private insurance and those who were either uninsured or not covered by any of the aforementioned payers (2,653,872)
Comprehensive Primary Care Plus Model	2,048,882	This multi-payer model includes: • Medicare FFS beneficiaries (1,831,076) • Dually eligible Medicare-Medicaid beneficiaries (217,806)

[29] Represents total number of episodes initiated.

Beneficiaries and Individuals Included in CMS Innovation Center Models and Initiatives

(Estimate as of September 30, 2018)

INITIATIVE	TOTAL BENEFICIARIES AND INDIVIDUALS IMPACTED	RANGE OF IMPACT[25]
Health Care Innovation Awards Round Two	242,008	This model ended on September 1, 2017 and included: • Medicare FFS beneficiaries (12,545) • Dually eligible beneficiaries (54,957) • Medicaid beneficiaries (155,337) • Medicare Advantage beneficiaries (3,486) • CHIP beneficiaries (113) • Individuals with private insurance (15,570)
Health Care Payment Learning and Action Network	Not Applicable[30]	
Home Health Value-Based Purchasing Model	Not Applicable[31]	
Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents Phase Two	26,463	This model includes: • Medicare FFS beneficiaries (4,051) • Dually eligible beneficiaries (22,412)
Integrated Care for Kids Model	Data Not Yet Available[32]	

[30] This is a national quality improvement initiative that has only indirect effects on beneficiaries.
[31] This is a model being conducted in nine Model states without direct beneficiary impact.
[32] Model is pre-operational.

Beneficiaries and Individuals Included in CMS Innovation Center Models and Initiatives

(Estimate as of September 30, 2018)

INITIATIVE	TOTAL BENEFICIARIES AND INDIVIDUALS IMPACTED	RANGE OF IMPACT[25]
Maryland All-Payer Model	6,478,035	This multi-payer model includes: • Medicare FFS beneficiaries (881,775) • Medicaid beneficiaries (1,580,403) • Dually eligible beneficiaries (168,300) • Individuals with private insurance (3,847,557)
Maryland Total Cost of Care Model	Data Not Yet Available[33]	
Medicaid Innovation Accelerator Program	Not Applicable[34]	
Medicare ACO Track 1+ Model	1,123,907	This model includes: • Medicare FFS beneficiaries (995,651) • Dually eligible beneficiaries (128,256)
Medicare Advantage Value-Based Insurance Design Model	92,000	This model includes: • Medicare Advantage beneficiaries
Medicare Care Choices Model	3,098	This model includes: • Medicare FFS beneficiaries • Dually eligible beneficiaries
Medicare Diabetes Prevention Program Expanded Model	Data Not Yet Available[35]	
Medicare Prior Authorization Models: Non-Emergent Hyperbaric Oxygen Therapy	1,391	This model includes: • Medicare FFS beneficiaries

[33] Model is pre-operational.
[34] This is a national quality improvement initiative that has only indirect effects on beneficiaries.
[35] Model will not begin reporting data until 2019.

Beneficiaries and Individuals Included in CMS Innovation Center Models and Initiatives **(Estimate as of September 30, 2018)**		
INITIATIVE	**TOTAL BENEFICIARIES AND INDIVIDUALS IMPACTED**	**RANGE OF IMPACT[25]**
Medicare Prior Authorization Models: Repetitive Scheduled Non-Emergent Ambulance Transport Model	9,711	This model includes: • Medicare FFS beneficiaries
Medicare-Medicaid Financial Alignment Initiative and State Demonstrations to Integrate Care for Dual Eligible Individuals	411,000	This model includes: • Dually eligible beneficiaries
Million Hearts®: Cardiovascular Disease Risk Reduction Model	246,522	This model includes: • Medicare FFS beneficiaries (208,591) • Dually eligible beneficiaries (37,931)
Next Generation ACO Model	1,511,047	This model includes: • Medicare FFS beneficiaries • Dually eligible beneficiaries
Oncology Care Model	130,000	This model includes: • Medicare FFS beneficiaries (117,000) • Dually eligible beneficiaries (13,000)
Part D Enhanced Medication Therapy Management Model	938,531	This model includes: • Medicare FFS beneficiaries
Pennsylvania Rural Health Model	Data Not Yet Available[36]	

[36] Participation by rural hospitals in the Pennsylvania Rural Health Model begins in 2019.

Beneficiaries and Individuals Included in CMS Innovation Center Models and Initiatives **(Estimate as of September 30, 2018)**		
INITIATIVE	**TOTAL BENEFICIARIES AND INDIVIDUALS IMPACTED**	**RANGE OF IMPACT[25]**
Pioneer ACO Model	269,528	This model ended on December 31, 2016 and included: • Medicare FFS beneficiaries • Dually eligible beneficiaries
State Innovation Models Round Two	8,534,416[37]	This model includes: • Medicaid beneficiaries (4,213,402) • Medicare Advantage beneficiaries and individuals with private insurance (1,927,952) • Individuals with private insurance and those who were either uninsured or not covered by any of the aforementioned payers (2,332,163) • State employees (60,899)
Strong Start for Mothers and Newborns, Strategy Two	7,591	This model ended on February 14, 2017 and included: • Medicaid beneficiaries • CHIP beneficiaries
Transforming Clinical Practice Initiative	Not Applicable[38]	
Vermont All-Payer ACO Model	109,869	This multi-payer model includes: • Medicare FFS beneficiaries (36,815) • Medicaid beneficiaries (42,342) • Individuals with private insurance (30,712)

[37] This estimate was compiled using state-reported data from states participating in Round Two of the State Innovation Models Initiative Model Test Awards.
[38] This is a national quality improvement initiative that has only indirect effects on beneficiaries.

Beneficiaries and Individuals Included in CMS Innovation Center Models and Initiatives (Estimate as of September 30, 2018)		
INITIATIVE	**TOTAL BENEFICIARIES AND INDIVIDUALS IMPACTED**	**RANGE OF IMPACT[25]**
Subtotal One	Medicare Fee-For-Service	8,504,017
Subtotal Two	Medicare Advantage	2,023,438
Subtotal Three	Medicaid and CHIP	6,078,262
Subtotal Four	Medicare-Medicaid Dually Eligible	1,089,903
Subtotal Five	Private Insurance and Those Who were Either Uninsured or Not Covered by Any of the Aforementioned Payers	8,940,773
ESTIMATED TOTAL	All Beneficiaries and Individuals	26,636,393[39]

5. Payments Made on Behalf of Beneficiaries and Individuals Included in Models

Table Two is a cumulative account of the estimated payments made from the inception of the CMS Innovation Center to September 30, 2018 on behalf of beneficiaries included in model tests and initiatives authorized under section 1115A of the Social Security Act.

In addition to payments made to model and initiative participants under section 1115A of the Act, the table includes payments under Title XVIII or XIX and CMS Innovation Center funds obligated to support the design, implementation, and evaluation of model tests and initiatives developed under section 1115A.

The table represents cumulative obligations less any recoveries of obligated funds over the Fiscal Year 2010-2018 period for the following: current model tests and initiatives; those that were

[39] The CMS Innovation Center counts beneficiaries and individuals by model test. In specific circumstances, it is possible that a beneficiary or individual might participate in multiple model tests.

originally housed in the CMS Innovation Center but are now funded under different authorities and implemented by different CMS components; those that have ended; and those that have been announced but not implemented.

Not included in the table are payments made for services on behalf of beneficiaries in accordance with existing payment provisions, except as waived solely for purposes of testing a model.

Note that for model tests and initiatives that have concluded, the cumulative estimated payments reported in this table can decline over time. This decrease is a result of prior year funding recoveries per end-of-year CMS accounting reconciliations.

Table Two: *As of September 30, 2018, estimates of payments made to model participants (including health care providers, states, conveners, ACOs, and others), including payments under Title XVIII or XIX and CMS Innovation Center funds obligated to support activities initiated under Section 1115A.*

Please note: this table 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.

Estimated Payments for 1115A Model Tests and Initiatives,[40]

Fiscal Years 2010-2018

INITIATIVE	CMS Innovation Center payments made to model and initiative participants under section 1115A of the Act[41]	Payments under Title XVIII or XIX made for services on behalf of beneficiaries[42]	Other CMS Innovation Center funds under section 1115A obligated to support design, implementation, and evaluation[43]
Accountable Health Communities	$45,436,010	Not Applicable	$14,411,200
ACO Investment Model	$96,694,886	$45,819,946	$13,766,305
Advance Payment ACO Model	$67,801,572	$181,166,101	$5,885,707
Beneficiary Engagement and Incentives Model[44]	Not Applicable	Not Applicable	$8,934,945
Bundled Payments for Care Improvement (Models One-Four)	Not Applicable	Data Not Yet Available	$102,684,908

40 This table excludes administrative costs that are not associated with specific models or initiatives.

41 The column titled "CMS Innovation Center payments made to model participants under section 1115A of the Act" reflects payments made to participants in the testing of models, such as health care providers, states, conveners, ACOs, and others. These payments are paid through CMS Innovation Center funds as provided under section 1115A of the Social Security Act. These payments were made by September 30, 2018.

42 The column titled "Payments under Title XVIII or XIX made for services on behalf of beneficiaries" 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.

43 The column titled "Other CMS Innovation Center funds under section 1115A obligated to support model design, implementation, and evaluation" 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 in the column titled "CMS Innovation Center payments made to model participants under section 1115A of the Act."

44 The Beneficiary Engagement and Incentives Model was announced during the current reporting period, but rescinded prior to implementation.

Estimated Payments for 1115A Model Tests and Initiatives,[40]

Fiscal Years 2010-2018

INITIATIVE	CMS Innovation Center payments made to model and initiative participants under section 1115A of the Act[41]	Payments under Title XVIII or XIX made for services on behalf of beneficiaries[42]	Other CMS Innovation Center funds under section 1115A obligated to support design, implementation, and evaluation[43]
Bundled Payments for Care Improvement Advanced	Not Applicable	No Payments Made During Period of Report	$13,532,895
Comprehensive Care for Joint Replacement Model	$19,047	$37,470,378	$33,939,402
Comprehensive ESRD Care Model	Not Applicable	$51,151,304	$90,161,926
Comprehensive Primary Care Initiative	$294,969,491	$23,815,990	$99,848,518
Comprehensive Primary Care Plus Model	Not Applicable	$978,690,092	$209,842,914
Episode Payment Models and Cardiac Rehabilitation Incentive Payment Model[45]	Not Applicable	Not Applicable	$6,373,644
Federally Qualified Health Center Advanced Primary Care Practice Demonstration[46]	$45,967,680	Not Applicable	$24,032,862
Health Care Innovation Awards Round One	$826,787,683	Not Applicable	$95,619,375

[45] The Episode Payment Models and Cardiac Rehabilitation Incentive Payment Model were developed during the current reporting period, but were rescinded.

[46] The Federally Qualified Health Center (FQHC) Advanced Primary Care Practice (APCP) Demonstration concluded on October 31, 2014.

Estimated Payments for 1115A Model Tests and Initiatives,[40]

Fiscal Years 2010-2018

INITIATIVE	CMS Innovation Center payments made to model and initiative participants under section 1115A of the Act[41]	Payments under Title XVIII or XIX made for services on behalf of beneficiaries[42]	Other CMS Innovation Center funds under section 1115A obligated to support design, implementation, and evaluation[43]
Health Care Innovation Awards Round Two	$332,119,976	Not Applicable	$55,000,816
Health Care Payment Learning and Action Network[47]	Not Applicable	Not Applicable	$23,227,056
Home Health Value-Based Purchasing Model	Not Applicable	Not Applicable	$24,863,133
Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents (Two Phases Counted as Two Models)	$158,203,144	Phase One: Not Applicable Phase Two: $13, 220,144	$35,373,451
Integrated Care for Kids Model	Payments Not Yet Made	Not Applicable	Obligations Not Yet Made
Maryland All-Payer Model	Not Applicable	Not Applicable	$21,197,715
Maryland Total Cost of Care Model	Not Applicable	Data Not Yet Available	$2,956,277
Maternal Opioid Misuse Model	Payments Not Yet Made	Not Applicable	Obligations Not Yet Made

[47] The Health Care Payment Learning and Action Network is a learning collaborative, and does not directly serve beneficiaries.

Estimated Payments for 1115A Model Tests and Initiatives,[40]

Fiscal Years 2010-2018

INITIATIVE	CMS Innovation Center payments made to model and initiative participants under section 1115A of the Act[41]	Payments under Title XVIII or XIX made for services on behalf of beneficiaries[42]	Other CMS Innovation Center funds under section 1115A obligated to support design, implementation, and evaluation[43]
Medicaid Innovation Accelerator Program	Not Applicable	Not Applicable	$81,874,587
Medicare ACO Track 1+ Model	Not Applicable	Payments Not Yet Made	$13,523,781
Medicare Advantage Value-Based Insurance Design Model	Not Applicable	Not Applicable	$10,751,693
Medicare Care Choices Model	Not Applicable	Data Not Yet Available	$19,476,032
Medicare Diabetes Prevention Program Expanded Model	Not Applicable	Not Applicable	$5,966,594
Medicare Part B Drugs Payment Model	Not Applicable	Not Applicable	$2,414,260
Medicare Prior Authorization Model: Non-Emergent Hyperbaric Oxygen Therapy	Not Applicable	Not Applicable	$6,341,804
Medicare Prior Authorization Model: Repetitive Scheduled Non-Emergent Ambulance Transport Model	Not Applicable	Not Applicable	$31,606,824

Estimated Payments for 1115A Model Tests and Initiatives,[40]

Fiscal Years 2010-2018

INITIATIVE	CMS Innovation Center payments made to model and initiative participants under section 1115A of the Act[41]	Payments under Title XVIII or XIX made for services on behalf of beneficiaries[42]	Other CMS Innovation Center funds under section 1115A obligated to support design, implementation, and evaluation[43]
Medicare-Medicaid Financial Alignment Initiative and State Demonstration to Integrate Care for Dual Eligible Individuals	$90,875,280	$36,500,000	$184,652,471
Million Hearts® Initiative[48]	Not Applicable	Not Applicable	Not Applicable
Million Hearts®: Cardiovascular Disease Risk Reduction Model	$2,420,920	Data Not Yet Available	$29,559,143
Next Generation ACO Model	$15,343,025	$434,619,080	$77,718,951
Oncology Care Model	Data Not Yet Available	$13,319,081	$87,421,981
Part D Enhanced Medication Therapy Management Model	Not Applicable	$117,214,414	$18,026,313
Partnership for Patients[49]	$460,059,702	Not Applicable	$110,763,842
Pennsylvania Rural Health Model	$10,000,000	Not Applicable	$1,994,917

[48] The Million Hearts® Initiative is ongoing. However, prior to this period of report it was transitioned into the Center for Clinical Standards and Quality and is no longer funded under Section 1115A of the Social Security Act.

[49] Before the period of report, Partnership for Patients transitioned into the Hospital Innovation Improvement Network in the Center for Clinical Standards and Quality and was no longer supported by section 1115A funding.

Estimated Payments for 1115A Model Tests and Initiatives,[40] **Fiscal Years 2010-2018**			
INITIATIVE	CMS Innovation Center payments made to model and initiative participants under section 1115A of the Act[41]	Payments under Title XVIII or XIX made for services on behalf of beneficiaries[42]	Other CMS Innovation Center funds under section 1115A obligated to support design, implementation, and evaluation[43]
Pioneer ACO Model	$13,181	$319,090,315	$114,167,715
State Innovation Models Round One	$274,325,568	Not Applicable	$47,574,939
State Innovation Models Round Two	$594,024,651	Not Applicable	$46,215,323
Strong Start for Mothers and Newborns, Strategy One and Two	$45,332,063	Not Applicable	$48,927,722
Transforming Clinical Practice Initiative	$572,667,114	Not Applicable	$65,648,733
Vermont All-Payer ACO Model	$9,499,549	$5,832,570	$7,363,551
ESTIMATED TOTALS:	$3,942,560,543	$2,244,689,271	$1,893,635,225

6. Results and Recommendations

A. Results from Evaluations

The CMS Innovation Center conducts summative evaluations of models, generally reporting on an annual basis. Results from numerous models have been summarized with their respective model descriptions in this report. As they become available, additional evaluation results will be included in future Reports to Congress, and will inform recommendations regarding model expansions or legislative action.

In addition to evaluating the results of individual model tests, where appropriate the CMS Innovation Center also attempts to systematically review and synthesize evaluation results across multiple models with shared or similar programmatic elements, in order to identify shared lessons learned that may inform future model design or policy making. The key conclusions of several such analyses are summarized below.

Primary Care

The Innovation Center conducted a meta-analysis and systematic review[50] of findings from six CMS Innovation Center primary care initiatives, namely: the Comprehensive Primary Care (CPC) Initiative; the Federally Qualified Health Center (FQHC) Demonstration; Independence at Home (IAH) Demonstration; the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration; State Innovation Models (SIM), Round One; and Health Care Innovation Award (HCIA) awards that CMS identified as focused on primary care redesign.

Key findings from this review included:

Initiative practices generally made large strides towards becoming Patient-Centered Medical Homes (PCMHs) or advanced primary care practices. Across initiatives, evaluators indicated that practices increased their transformation scores by over 60 percent during the initiatives.

- However, collectively, model impacts on the core outcomes (Medicare expenditures before fees, outpatient ED visits, hospital admissions, and 30-day readmissions) did not differ from comparison groups.
- That said, certain subgroups and practice types experienced more favorable outcomes. Pooled data from four initiatives indicated that collectively the initiatives decreased the growth in Medicare expenditures (before accounting for fees associated with these initiatives) among beneficiaries with greater health needs. In addition, the pooled analysis found that the initiatives had a greater impact among smaller (less than six practitioners) or primary care-only practices.
- Certain design features of primary care initiatives were tied to higher performance. Specifically: 1) provision and receipt of technical assistance (TA) can promote better performance; 2) practices need sufficient financial support to allow hiring of new staff; and 3) feedback reports can improve performance, but only to the extent practices actually use the data, which varied widely across initiatives.
- Readiness for practice transformation among initiative participants varied: some internal supports – including a practice champion and high-functioning health IT – appeared to greatly aid transformation.

[50] The results of this study are available here.

Episode Payment Models

The CMS Innovation Center conducted a meta-analysis and systematic review of its episode payment models (EPMs), [51] including the Bundled Payment for Care Improvement (BPCI) models, the Comprehensive Care for Joint Replacement (CJR) model, and the Oncology Care Model (OCM). Key findings from this review included:

- EPMs have shown reductions in utilization and episode costs, with no impact on quality or functional status outcomes. Cost reductions have mainly been driven by reductions in post-acute care utilization.
- Despite decreased utilization and lower expenditures, typically CMS has faced challenges in setting target prices, discounts, and risk-sharing sharing arrangements in a way that achieves net savings to Medicare (CJR is the exception).
- EPMs that have shown the greatest success use simple attribution methods and focus on easily identifiable beneficiaries (*e.g.*, those with a hospitalization) with predictable care needs.
- Optimal target price setting uses benchmark prices, leverages risk adjustment, and has the flexibility to re-base to account for market trends and new policies, while appealing to participants as they assess the clinical and business cases for participating in voluntary models.

State-Based Model Tests and Initiatives

The CMS Innovation Center conducted a meta-analysis and systematic review of its state-based model tests and initiatives, [52] including partnerships with 17 Test states through the State Innovation Models (SIM) initiative (Rounds One and Two) and multi-payer models, inclusive of Medicare, with Maryland, Vermont, and Pennsylvania. Across these initiatives, CMS provided support to states in the form of infrastructure investments, technical assistance, and waivers of Medicare and Medicaid program requirements, which allowed states to engage in a range of delivery system and payment reforms across a state's population. Such reforms included models within Medicaid, state employee, and commercial populations such as accountable care organizations (ACOs), patient-centered medical homes (PCMH), and episodes of care.

[51] This was an internal review of episode payment models using four publicly available evaluation reports (BPCI Model One final report, BPCI Models Two-Four Year Four report, OCM baseline period report, and CJR Year One report) as well as operational lessons learned.

[52] This was an internal review of models where the state was a participant or awardee using three publicly available evaluation reports (SIM Round One Model Test States Year Four report, SIM Round Two Model Test States Year Two report, and Maryland All-Payer Model Year Three report) as well as operational lessons learned. A subsequent systematic review was conducted of 12 Innovation Center models using all 47 publicly available evaluation reports from these models. A report from that study was published after the period of reporting for this report and can be accessed here.

Key findings from this review included:

- Multi-payer state-based initiatives, particularly when Medicare is participating, accelerate practice transformation and have the strongest impacts on utilization and spending. Some quality of care measures (*e.g.*, cancer screenings, medication adherence) improved, especially where there is alignment across multiple CMS programs and models. Also, patient satisfaction and access to care improved in models that encouraged patient-centered care using connections across care settings. However, improvements in care delivery do not always translate into improved patient satisfaction. Consumers had mixed responses regarding team-based care, behavioral health integration with primary care, and clinicians following clinical guidelines.
- CMS waivers of otherwise applicable requirements to enable Medicare and Medicaid participation in state-based initiatives require extensive time and resources to negotiate (resources many states do not have). Once they are in place, however, they can have a broad population reach and the associated change in care delivery can have a more direct effect on patient outcomes and expenditures relative to interventions that build infrastructure support and provider training, which may take longer to impact patient health outcomes.
- Voluntary state initiatives that started with Medicaid alone have resulted in the slowest impact on health outcomes, which may have been inhibited by a lack of multi-payer participation to align provider incentives. Delays in Medicaid claims can limit the amount of post-intervention data available and therefore the ability to examine long-term changes in health outcomes. As a result, evaluation of these model tests may miss changes that take longer to occur, particularly considering that it can take time to change patient and provider behavior patterns. However, where state models were evaluated with at least two years of post-intervention data, it appeared that models with alignment across among multiple payers may have transformed faster than models with only one payer involved.
- Participation in CMS Innovation Center state-based models has helped health care providers transition from fee-for-service to alternative payment models, including population-based payment models.
- State partnerships that leverage CMS investments in infrastructure and technical assistance have been used to encourage health care providers, particularly those within small practices, to gain the experience and resources needed before they were ready to take on more risk.

Because most model tests require, at a minimum, four years to test and formally evaluate, many of the payment and service delivery models and initiatives that the CMS Innovation Center has announced have not completed their respective periods of performance. Recent model tests and initiatives are still in the early stages of implementation. Therefore, the findings from summative evaluations to assess the impact of several new payment and service delivery models are not available. Caution is urged in the interpretation of preliminary findings based on limited data from the early stages of model implementation.

As noted previously in this Report to Congress, a number of CMS Innovation Center models build upon lessons learned from earlier model tests and a growing evidence base in care delivery and payment research. These models include the Bundled Payments for Care Improvement Advanced Model (BPCI Advanced), Oncology Care Model (OCM), the ACO Investment Model, the Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents Phase Two, the Next Generation ACO Model, and the CPC+ Model. Such initiatives are designed to gather more focused, valid, and substantive data in support of specific innovations from prior model tests that showed promise of reducing cost and improving the quality of care.

Two models, the Pioneer ACO Model (as tested in its first two years) and the Health Care Innovation Awards Diabetes Prevention Program have been determined by the Secretary to be eligible for expansion.

Publicly Released Evaluation Reports

INITIATIVE	REPORT
ACO Investment Model	Year One evaluation report
Bundled Payments for Care Improvements (Four Models)	Model One: Year One and Final evaluation reports Models Two-Four: Year One, Year Two, Year Three, Year Four, and Year Five evaluation reports[53]
Comprehensive ESRD Care Model	Year One evaluation report
Comprehensive Care for Joint Replacement Model	Year One evaluation report
Comprehensive Primary Care Initiative	Year One, Year Two, Year Three, and Final evaluation reports

[53] The Year Five evaluation report for the Bundled Payments for Care Improvement Models Two-Four was released after the period of reporting, in October 2018.

Publicly Released Evaluation Reports	
INITIATIVE	**REPORT**
Federally Qualified Health Center Advanced Primary Care Practice Demonstration[54]	Year One, Year Two, and Final evaluation reports
Health Care Innovation Awards (Two Rounds Counted as Two Models)	Round One: Year One, Year Two, Year Three evaluation reports Round Two: Year One, Year Two, and Year Three evaluation reports
Home Health Value-Based Purchasing Model	Year One evaluation report
Initiative to Reduce Avoidable Hospitalizations Among Nursing Facility Residents (Two Phases Counted as Two Models)	Phase One: Year Three, Year Four, and Final evaluation reports Phase Two: Year One evaluation report
Maryland All-Payer Model	Year One, Year Two, and Year Three evaluation reports
Medicaid Innovation Accelerator Program	Interim evaluation report
Medicare Care Choices Model	Year One evaluation report

[54] The period of performance of the Federally Qualified Health Center Advanced Primary Care Practice Demonstration concluded prior to the period of reporting for this report; however, the final evaluation report was released in June 2017.

Publicly Released Evaluation Reports	
INITIATIVE	**REPORT**
Medicare-Medicaid Financial Alignment Initiative and State Demonstrations to Integrate Care for Dual Eligible Individuals	Early Implementation Report Washington demonstration: Final Year One and Preliminary Year Two Savings Report, First Evaluation Report, Final Year Two and Preliminary Year Three Savings Report and Second Evaluation Report [55] Massachusetts demonstration: First Evaluation Report Minnesota demonstration: First Evaluation Report and Second Evaluation Report[56] Colorado demonstration: Preliminary Year One Savings Report California demonstration: First Evaluation Report[45] Illinois demonstration: First Evaluation Report[45] Ohio demonstration: First Evaluation Report[57]
Medicare Prior Authorization Models	Repetitive Scheduled Non-Emergent Ambulance Transport Model: Interim Report Non-Emergent Hyperbaric Oxygen Therapy Model: Interim Report
Next Generation ACO Model	Year One evaluation report

[55] The Final Year Two and Preliminary Year Three Savings Report and the Second Evaluation Report for the Washington demonstration under the Medicare-Medicaid Financial Alignment Initiative were released after the period of reporting, in November 2018.
[56] The Second Evaluation Report from the Minnesota demonstration under the Medicare-Medicaid Financial Alignment Initiative was released after the period of reporting, in November 2018.
[57] The First Evaluation Reports from the California, Illinois, and Ohio demonstrations under the Medicare-Medicaid Financial Alignment Initiative were released after the period of reporting, in November 2018.

Publicly Released Evaluation Reports	
INITIATIVE	**REPORT**
Oncology Care Model	Baseline Period Report and Second Annual Report: Performance Period One[58]
Partnership for Patients[59]	First Evaluation Report Second Interim Evaluation Report [60]
Pioneer ACO Model	Year One, Year Two, Three-Day SNF Waiver, and Final evaluation reports
State Innovation Models Initiative (Two Rounds Counted as Two Models)	Model Design and Pre-Test States, Round One: Final Report Model Test, Round One: Year One, Year Two, Year Three, and Year Four evaluation reports Model Design States, Round Two: Final Report Model Test, Round Two: Year One and Year Two evaluation reports
The Strong Start for Mothers and Newborns Strategy Two	Year One, Year Two (Volume One and Volume Two), Year Three (Volume One and Volume Two), Year Four (Volume One and Volume Two), and Final (Volume One and Volume Two) evaluation reports

B. Recommendations for Legislative Action

This report conforms to the requirements of section 1115A(g) of the Act. Any legislative recommendations related to CMS programs, including the CMS Innovation Center, would typically be included in the President's budget request.

[58] The Second Annual Report: Performance Period One from the Oncology Care Model was released after the period of reporting, in December 2018.
[59] Before the period of report, Partnership for Patients transitioned into the Hospital Innovation Improvement Network in the Center for Clinical Standards and Quality, and was no longer supported by section 1115A funding.
[60] The second interim evaluation report for the Partnership for Patients was released in December 2016.

7. Conclusion

Since the last Report to Congress, the CMS Innovation Center, in accord with statute, has continued to develop and test a broad range of new payment and service delivery models to reduce program expenditures while preserving or enhancing the quality of care for Medicare, Medicaid, and CHIP beneficiaries. From October 1, 2016 to September 30, 2018, the CMS Innovation Center has announced or tested 36 models and initiatives intended to achieve better care, improve health outcomes, and reduce expenditures for Medicare, Medicaid, and CHIP beneficiaries.

The evaluation of model tests is driven by the CMS Innovation Center's Research and Rapid Cycle Evaluation Group (RREG), which reviews the program design, research methodology, and the evaluability of all proposed models. RREG oversees both intermediate and final evaluations of model tests, aimed respectively at improving model performance during the period of performance and at providing rigorous and valid summative assessments of a model's impact on the quality and cost of care.

Through the CMS Innovation Center New Direction RFI, CMS is using input from the public to chart a new path for the CMS Innovation Center. In particular, the CMS Innovation Center is exploring the development of innovative payment and service delivery models across the following eight focus areas:

1. Increased participation in Advanced Alternative Payment Models (APMs);
2. Consumer-Directed Care & Market-Based Innovation Models;
3. Physician Specialty Models;
4. Prescription Drug Models;
5. Medicare Advantage (MA) Innovation Models;
6. State-Based and Local Innovation, including Medicaid-focused Models;
7. Mental and Behavioral Health Models; and
8. Program Integrity.

The CMS Innovation Center is approaching model design with an emphasis on choice and competition in the market, provider choice and incentives, patient-centered care, benefit design and price transparency, transparent model design and evaluation, and small scale testing.

Health care payment and service delivery reform has also been supported by the creation of the Health Care Payment Learning and Action Network (LAN). Through the LAN, HHS is working with private payers, employers, consumers, health care providers, states and state Medicaid programs, and other partners to align development of alternative payment models to improve the quality and value of health care and to increase the use of alternative payment models in their programs. To date, more than 7,100 individual patients, public and private payers, purchasers, health care providers, consumers, and states have registered to participate in the LAN, including

more than 610 organizations. As of September 30, 2018, LAN activities have the potential to inform the ways in which health care providers provide value-based care to over 226 million Americans, approximately 77 percent of the lives covered by payers participating in the LAN.[61]

In addition, the CMS Innovation Center has played an important role in developing the proposed and final rules to implement key provisions of the Medicare Access and CHIP Reauthorization Act of 2015 through the Quality Payment Program. These provisions include, but are not limited to, streamlining multiple quality reporting programs into one new system known as the Merit-based Incentive Payment System (MIPS), providing incentives for sufficient participation in Advanced Alternative Payment Models (Advanced APMs) and Other Payer Advanced APMs, as well as developing the criteria for Physician-Focused Payment Models (PFPMs).

The CMS Innovation Center's portfolio of models and initiatives has attracted participation from a broad array of health care providers, states, payers, and other stakeholders, and serves Medicare, Medicaid, and CHIP beneficiaries in all 50 states, the District of Columbia, and Puerto Rico.

CMS estimates that 26,636,000 Medicare and Medicaid beneficiaries and individuals with private insurance in multi-payer model tests have been impacted by, have received care, or will soon be receiving care furnished by the more than 967,800 health care providers participating in CMS Innovation Center payment and service delivery models and initiatives.[62,63] For purposes of this report, CMS beneficiaries include individuals with coverage through Medicare FFS, Medicaid, dually eligible beneficiaries, CHIP, and Medicare Advantage.

In an effort to more fully represent the scope of CMS's work and multi-payer alignment, the CMS Innovation Center is reporting the number of CMS beneficiaries and individuals with private insurance impacted by CMS Innovation Center models and initiatives. This approach requires more explicitly listing the different types of payers supporting these models, as well as aggregating the populations served by all participating payers.

In addition, the Medicare Shared Savings Program (which is a statutorily mandated ACO program rather than a CMS Innovation Center model), serves over 7.7 million beneficiaries across more than 430 Medicare ACOs. Therefore, in total there are 25.7 million Americans served by CMS Innovation Center models and initiatives and the Shared Savings Program.[64]

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[61] 2018 HCP-LAN APM Measurement Methodology & Results Report, available here.

[62] The CMS Innovation Center counts beneficiaries and individuals by model test. In specific circumstances, it is possible that a beneficiary or individual might participate in multiple model tests.

[63] This does not include the number of beneficiaries indirectly affected by the Health Care Payment Learning and Action Network, the Home Health Value-Based Purchasing Model, the Medicaid Innovation Accelerator Program, and the Transforming Clinical Practice Initiative. Nor does it include beneficiaries served by demonstrations, which are not part of the mandated focus of this Report to Congress.

[64] The Shared Savings Program is a statutorily mandated ACO program administered by CMS, and is not a CMS Innovation Center model authorized under section 1115A of the Act. This number combines the number of beneficiaries assigned to ACOs participating in the Shared Savings Program with the number of beneficiaries and other individuals aligned with or attributed to entities participating in CMS Innovation Center models and other initiatives. Data on the Shared Savings Program can be accessed here.

Because a number of these models and initiatives involve multiple payers or focus on broad areas of quality improvement, millions of other Americans are benefiting from the CMS Innovation Center's activities. The efforts of the CMS Innovation Center represent important steps forward in the transformation of the health care system. Models underway and in development will help health care providers, payers, states, and other stakeholders achieve a system in which beneficiaries, and eventually all Americans, receive comprehensive, integrated care driven by evidence, performance, and improving outcomes.

Appendix One: Models, Initiatives, and Demonstrations Active during Period of Report

The table below lists all CMS Innovation Center models, initiatives, and demonstrations that were announced or had activity between October 1, 2016 and September 30, 2018. Note that some models, such as those that have/had multiple phases or rounds, may appear in this table as well as in the table in Appendix Two, which lists all previous CMS Innovation projects that did not have activity during this reporting period.

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)

Initiative Name	Description	Announcement and Performance Period	Statutory Authority
Accountable Health Communities Model	Tests whether increased awareness of and access to services addressing health-related social needs will impact total health care costs and improve health for Medicare and Medicaid beneficiaries (including beneficiaries who are dually eligible) in targeted communities.	**Announcement:** January 2016 **Performance Period:** May 2017 to April 2022	Section 1115A of the Social Security Act
ACO Investment Model	Designed to encourage new ACOs to form in rural and underserved areas and to encourage current Medicare Shared Savings Program ACOs to transition to arrangements with greater financial risk.	**Announcement:** October 2014 **Performance Period:** April 2015 and up to 24 months or until termination of participation in the Shared Savings Program or ACO Investment Model, whichever is sooner	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Bundled Payments for Care Improvement (Four Models)	Evaluates four different episode payment models around inpatient hospitalization to incentivize care redesign Model One: Retrospective Acute Care Model Two: Retrospective Acute Care Episode & Post-Acute Care Model Three: Retrospective Post-Acute Care Model Four: Prospective Acute Care.	**Announcement:** August 2011 **Performance Period:** April 2013 to December 2016 (Model One) October 2013 to September 2018 (Models Two-Four)	Section 1115A of the Social Security Act
Bundled Payments for Care Improvement Advanced	Tests a new iteration of bundled payments for 32 Clinical Episodes and aims to align incentives among participating health care providers for reducing expenditures and improving quality of care for Medicare beneficiaries. The model qualifies as an Advanced Alternative Payment Model (APM) under the Quality Payment Program.	**Announcement:** January 2018 **Performance Period:** October 2018 to December 2023	Section 1115A of the Social Security Act
Comprehensive Care for Joint Replacement Model	Designed to support better and more efficient care for beneficiaries undergoing the most common inpatient surgeries for Medicare beneficiaries: hip and knee replacements.	**Announcement:** July 9, 2015 **Performance Period:** April 2016 to December 2020.	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Comprehensive ESRD Care Model	An initiative to identify, test, and evaluate new ways to improve care for Medicare beneficiaries with ESRD.	**Announcement:** April 2014 **Performance Period:** October 2015 to December 2020	Section 1115A of the Social Security Act
Comprehensive Primary Care Initiative	A multi-payer model that tested the effects of enhanced primary care services, including 24-hour access, care plans, and care coordination and payment reform.	**Announcement:** September 2011 **Performance Period:** October 2012 to December 2016	Section 1115A of the Social Security Act
Comprehensive Primary Care Plus Model	A multi-payer model that tests whether payment redesign improves the quality and efficiency of care, and reduces unnecessary health care utilization.	**Announcement:** April 2016 **Performance Period:** January 2017 to December 2022	Section 1115A of the Social Security Act
Health Care Innovation Awards Round Two	A second appeal for innovations with a focus on payment and system delivery reform in 4 categories for Medicare, Medicaid, and Children's Health Insurance Program (CHIP), particularly those with the highest health care needs.	**Announcement:** May 2013 **Performance Period:** September 2014 to September 2017	Section 1115A of the Social Security Act
Health Care Payment Learning and Action Network	A national learning collaborative to accelerate the adoption of APMs that includes private payers, purchasers, health care providers, consumers, and states.	**Announcement:** January 2015 **Performance Period:** N/A	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Home Health Value-Based Purchasing Model	Designed to test whether higher payment incentives can significantly change health care providers' behavior in a way that shifts Medicare-certified home health agencies (HHAs) from volume-based to value-based purchasing to improve quality of care.	**Announcement:** November 2015 **Performance Period:** January 2016 to December 2020	Section 1115A of the Social Security Act
Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents Phase Two	Phase Two tests whether three new payments for long-term care facilities and practitioners will further reduce avoidable hospitalizations, lower combined Medicare and Medicaid spending, and improve the quality of care received by facility residents.	**Announcement:** August 2015 (Phase Two) **Performance Period:** October 2016 to September 2020 (Phase Two)	Section 1115A of the Social Security Act
Integrated Care for Kids Model	A child-centered local service delivery and state payment model aimed at reducing expenditures and improving the quality of care for children covered by Medicaid and the Children's Health Insurance Program (CHIP) through prevention, early identification, and treatment of priority health concerns like behavioral health challenges and physical health needs. The model will offer states and local providers support to address these priorities through a framework of child-centered care integration across behavioral, physical, and other child providers.	**Announcement:** August 2018 **Anticipated Performance Period**: January 2020 to December 2026	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Maryland All-Payer Model	Designed to test whether an all payer system for hospital payment that is accountable for the total hospital cost of care on a per capita basis is an effective model for advancing better care, better health and reduced costs.	**Announcement:** January 2014 **Performance Period:** January 2014 to December 2018	Section 1115A of the Social Security Act
Maryland Total Cost of Care Model	The first CMS Innovation Center model to hold a state fully at risk for the Medicare total cost of care. Beginning January 1, 2019, the model will build upon Maryland's current All-Payer Model, which had set a limit on per capita hospital expenditures in the State. The model commits Maryland to save Medicare over $1 billion by 2023, and creates new opportunities for a range of nonhospital providers and suppliers to participate in this effort to limit Medicare spending across an entire state.	**Announcement:** June 2018 **Performance Period:** January 2019 to December 2026	Section 1115A of the Social Security Act
Medicaid Innovation Accelerator Program	Initiative providing states with technical assistance in such areas as data analytics, service delivery and financial modeling, quality measurement, and rapid cycle evaluation to accelerate the development and testing of state led payment and service delivery innovations.	**Announcement:** July 2014 **Performance Period:** July 2014 – Ongoing Testing	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Medicare ACO Track 1+ Model	Tests a payment design that incorporates more limited downside risk than is currently present in Tracks 2 or 3 of the Shared Savings Program. The Track 1+ Model is designed to encourage more practices, especially small practices, to advance to performance-based risk, and also allows hospitals, including small rural hospitals, to participate. This opportunity allowed clinicians to join an Advanced APM to improve care and potentially earn an incentive payment under the Quality Payment Program.	**Announcement:** December 2016 **Performance Period:** January 2018 to January 2023	Section 1115A of the Social Security Act
Medicare Advantage Value-based Insurance Design Model	Designed to test whether offering MA plans the flexibility to design and offer reduced cost sharing and/or additional supplemental benefits to enrollees with CMS specified chronic conditions will encourage consumption of clinically-nuanced high value services.	**Announcement:** November 2017 **Performance Period:** January 2017 to December 2021	Section 1115A of the Social Security Act
Medicare Care Choices Model	Designed to test whether Medicare (including dual-eligible) beneficiaries who meet Medicare (or Medicaid) hospice eligibility requirements will achieve patient centered goals if they receive hospice services with continuation of curative services and whether these changes will reduce Medicare expenditures.	**Announcement:** June 2014 **Performance Period:** January 2016 to December 2020	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Medicare Diabetes Prevention Program Expanded Model	An evidence-based intervention targeted to beneficiaries with prediabetes, who have blood sugar that is higher than normal but not yet in the diabetes range. The primary goal of the expanded model is to reduce incidence of diabetes by achieving at least a five percent average weight loss among participants.	**Announcement:** November 2017 **Performance Period:** April 2018 – ongoing testing	Section 1115A of the Social Security Act
Medicare Prior Authorization: Non-Emergent Hyperbaric Oxygen Therapy	A prior authorization model for repetitive scheduled non-emergent ambulance transport in Illinois, Michigan, and New Jersey to test whether prior authorization helps reduce expenditures, while maintaining or improving quality of care.	**Announcement:** May 2014 **Performance Period:** March 2015 to February 2018	Section 1115A of the Social Security Act
Medicare Prior Authorization: Repetitive Scheduled Non-Emergent Ambulance Transport Model	A prior authorization model for repetitive scheduled non-emergent ambulance transport in eight states and the District of Columbia to test whether prior authorization helps reduce expenditures, while maintaining or improving quality of care.	**Announcement:** May 2014 **Performance Period:** December 2014 to December 2019	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Medicare-Medicaid Financial Alignment Initiative and State Demonstrations to Integrate Care for Dual Eligible Individuals	Opportunity for states to partner with CMS to implement new integrated care and payment systems to better coordinate care for dually eligible beneficiaries.	**Announcement:** July 2011 **Performance Period:** Each demonstration has a unique start date. The first was Washington's MFFS model on July 1, 2013. All demonstrations are currently scheduled to end on either December 31, 2019 or 2020, with extensions under consideration in several states. In July 2015, CMS offered states the opportunity to extend each demonstration by two years.	Section 1115A of the Social Security Act
Million Hearts®: Cardiovascular Disease Risk Reduction Model	Designed to test whether financial incentives for health care providers to use the American College of Cardiology/American Heart Association (ACC/AHA) Atherosclerotic Cardiovascular Disease (ASCVD) risk calculator will promote CVD prevention, improved CVD outcomes, and accountability for costs among Medicare beneficiaries.	**Announcement:** May 2015 **Performance Period:** January 2017 to December 2021	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Next Generation ACO Model	An initiative for ACOs experienced in managing the health of populations of patients. It allows participating health care providers to assume higher levels of financial risk and reward than are available under the Shared Savings Program or were offered under the Pioneer ACO Model. The goal of the Model is to test whether strong financial incentives for ACOs can improve health outcomes and lower expenditures.	**Announcement:** March 2015 **Performance Period:** January 2016 to December 2020	Section 1115A of the Social Security Act
Oncology Care Model	Designed to test whether payment arrangements that include financial and performance accountability for episodes of care involving chemotherapy will incentivize physician group practices to provide higher quality, more coordinated oncology care at a lower cost to the Medicare Program.	**Announcement:** February 2015 **Performance Period:** July 2016 to June 2021	Section 1115A of the Social Security Act
Part D Enhanced Medication Therapy Management Model	Designed to test whether providing selected basic, standalone PDPs with regulatory flexibility to design and implement innovative programs and aligning financial incentives can more effectively achieve key goals for MTM programs.	**Announcement:** September 2015 **Performance Period:** January 2017 to December 2021	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Pennsylvania Rural Health Model	Designed to test whether the predictable nature of the global budgets will enable participating rural hospitals in Pennsylvania to invest in quality and preventive care, and to tailor the services they deliver to better meet the needs of their local communities.	**Announcement:** January 2017 **Performance Period:** January 2017 to December 2024	Section 1115A of the Social Security Act
Pioneer ACO Model	Gave experienced health care organizations accountability for quality and cost outcomes for their Medicare FFS patients. Doctors and hospitals who formed Pioneer ACOs could share in savings generated for Medicare if they met certain quality performance standards, or they could be required to pay a share of any losses generated.	**Announcement:** May 2011 **Performance Period:** January 2012 to December 2016	Section 1115A of the Social Security Act
State Innovation Models Initiative Round Two	Round Two provided financial, technical, and other support to up to an additional 32 states to develop or implement state health care innovation plans.	**Announcement:** May 2014 **Performance Period:** January 2015 to December 2018	Section 1115A of the Social Security Act
Strong Start for Mothers and Newborns Strategy Two	Strategy Two: Tests and evaluates a new model of enhanced prenatal care to reduce preterm births (less than 37 weeks) in women covered by Medicaid and CHIP.	**Announcement:** February 2012 **Performance Period:** February 2013 to February 2017 (Strategy Two)	Section 1115A of the Social Security Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Transforming Clinical Practice Initiative	Tests whether providing support to 140,000 clinician practices in sharing, adapting, and further developing comprehensive quality improvement strategies will lead to greater improvements in patient health outcomes and reduced Medicare, Medicaid, or CHIP program expenditures.	**Announcement:** October 2014 **Performance Period:** August 2015 to September 2019	Section 1115A of the Social Security Act
Vermont All-Payer ACO Model	Tests an alternative payment model in which the most significant payers throughout the entire state – Medicare, Medicaid, and commercial health care payers – incentivize health care value and quality, with a focus on health outcomes, under an aligned payment structure for the majority of health care providers throughout the state's care delivery system in order to transform health care for the entire state and its population. We expect that, beginning in 2019, the Vermont Medicare ACO Initiative will be considered an Advanced APM under the Quality Payment Program.	**Announcement:** October 2016 **Performance Period:** January 2017 to December 2022	Section 1115A of the Social Security Act
Community-Based Care Transitions Program (a part of the Partnership for Patients)	Aimed to reduce readmissions by improving transitions of high-risk Medicare beneficiaries from the inpatient hospital setting to home or other care settings.	**Announcement:** 2011 **Performance Period:** February 2012 to February 2017	Section 3026 of the Affordable Care Act

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Frontier Community Health Integration Program (F-CHIP)	Develops and tests new models of integrated, coordinated health care in the most sparsely-populated rural counties with the goal of improving health outcomes and reducing Medicare expenditures.	**Announcement:** August 2016 **Performance Period:** August 2016 to July 2019	Section 123 of the Medicare Improvements for Patients and Providers Act
Graduate Nurse Education Demonstration[65]	Designed to increase the nation's primary care workforce by supporting facilities that train Advanced Practice Registered Nurses (APRNs) through payments to eligible hospitals, helping them offset the costs of clinical training for APRN students.	**Announcement:** March 2012 **Performance Period:** July 2012 to July 2018	Section 5509 of the Affordable Care Act
Independence at Home Demonstration[66]	Home-based primary care for Medicare beneficiaries with multiple chronic conditions.	**Announcement:** December 2011 **Performance Period:** June 2012 to September 2017 and January 2019 to December 2020	Section 1866E of the Social Security Act
Intravenous Immune Globulin (IVIG) Demonstration	Evaluates the benefits of providing payment for items and services needed for the in-home administration of intravenous immune globulin for the treatment of primary immune deficiency disease.	**Announcement:** August 2014 **Performance Period:** October 2014 to December 2020	P.L. 112-242 Title I - Medicare IVIG Access Sec. 101

[65] A report to Congress on the Graduate Nurse Education Demonstration was submitted in October 2017, and can be accessed here.
[66] A report to Congress on the Independence at Home Demonstration was submitted in November 2018, and can be accessed here.

List of Models, Initiatives, and Demonstrations with Activity during the Period of Report (October 1, 2016 to September 30, 2018)			
Initiative Name	**Description**	**Announcement and Performance Period**	**Statutory Authority**
Medicaid Emergency Psychiatric Hospital Demonstration	Provides federal matching funds to States for emergency Medicaid admissions to private psychiatric hospitals for beneficiaries aged 21 to 64.	**Announcement:** August 2011 **Performance Period:** July 2012 to June 2015	Section 2707(e) of the Affordable Care Act
Medicare Pilot Program For Asbestos Related Disease (Libby, Montana)	Pilot program to provide innovative approaches to furnishing comprehensive, coordinated, and cost effective care, including benefits, items and services not normally covered by Medicare, for patients with asbestos related disease in Libby, Montana and limited surrounding areas.	**Announcement:** June 2011 **Performance Period:** Ongoing	Section 1881A of the Social Security Act (section 10323 of the Affordable Care Act)
Rural Community Hospital Demonstration[67]	Designed to test the feasibility and advisability of providing reasonable cost reimbursement for small rural hospitals.	**Announcement:** October 2004 **Performance Period:** 2004 to 2023[68]	Section 410A of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003

[67] A report to Congress on the Rural Community Hospital Demonstration was submitted in October 2018, and can be accessed here.

[68] CMS began conducting the Rural Community Hospital Demonstration in 2004. The demonstration was initiated as a five-year program under its original mandate, section 410A of the Medicare Modernization Act of 2003, and extended for an additional five-year period under sections 3123 and 10313 of the Affordable Care Act. Section 15003 of the 21st Century Cures Act, enacted December 13, 2016, requires another five-year extension period for the demonstration.

Appendix Two: Previous CMS Innovation Center Models

The table below lists CMS Innovation Center model tests and initiatives whose period of performance ended prior to October 1, 2016 and therefore did not have activity during this period of report (October 1, 2016 to September 30, 2018).

PREVIOUS CMS INNOVATION CENTER MODELS AND INITIATIVES			
Advance Payment ACO Model	Prepayment of expected shared savings to certain eligible ACOs to advance development of ACO infrastructure and care coordination.	**Announcement:** November 2011 **Performance Period:** April 2012 to December 2015	Section 1115A of the Social Security Act
Health Care Innovation Awards Round One	A broad appeal for innovations with a focus on developing the workforce for new care models.	**Announcement:** June 2012 **Performance Period:** July 2012 to June 2015	Section 1115A of the Social Security Act
Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents Phase One	Phase One was an initiative to improve the quality of care and reduce avoidable hospitalizations among long-stay nursing facility residents through cooperative agreements with independent organizations partnering with nursing facilities to test enhanced on-site services and supports.	**Announcement:** March 2012 **Performance Period:** September 2012 to September 2016 (actual start date varied by facility)	Section 1115A of the Social Security Act
Federally Qualified Health Center (FQHC) Advanced Primary Care Practice Demonstration	Care coordination payments to FQHCs in support of team-led care, improved access, and enhanced primary care services.	**Announcement:** November 2011 **Performance Period:** November 2011 to October 2014	Section 1115A of the Social Security Act

PREVIOUS CMS INNOVATION CENTER MODELS AND INITIATIVES			
Million Hearts®	National initiative to prevent one million heart attacks and strokes over five years; brings together communities, health systems, nonprofit organizations, federal agencies, and private-sector partners from across the country to fight heart disease and stroke; this initiative is not a payment and service delivery model for purposes of section 1115A, but rather is an initiative that was previously operated out of the CMS Innovation Center.	**Announcement:** September 2011 **Performance Period**: Ongoing, but no longer operated under CMS Innovation Center Authority, nor funded by Section 1115A of the Social Security Act[69]	Section 1115A of the Social Security Act
Partnership for Patients[70]	An initiative designed to make hospital care safer, more reliable, and less costly. In 2011, the Partnership was launched as a model test with ambitious targets of reducing preventable hospital-acquired conditions by 40 percent and 30-day readmissions by 20 percent over a three-year period of performance.	**Announcement:** April 2011 **Performance Period**: Round One: December 2011 to December 2014 Round Two: September 2015 to September 2016.	Section 1115A of the Social Security Act
State Innovation Models Initiative Round One	Round One provided financial, technical, and other support to states that are either prepared to test, or are committed to designing and testing new payment and service delivery models that have the potential to reduce health care costs in Medicare, Medicaid, and CHIP.	**Announcement:** July 2012 **Performance Period:** April 2013 to September 2016	

[69] The Million Hearts® Initiative is ongoing. However, prior to this period of report it was transitioned into the Center for Clinical Standards and Quality, and was no longer funded under Section 1115A of the Social Security Act.
[70] Prior to this period of report, Partnership for Patients transitioned into the Hospital Innovation Improvement Network in the Center for Clinical Standards and Quality, and was no longer supported by section 1115A funding.

PREVIOUS CMS INNOVATION CENTER MODELS AND INITIATIVES			
Strong Start for Mothers and Newborns Strategy One	Strategy One: Tested the effectiveness of shared learning and diffusion activities to reduce the rate of early elective deliveries among pregnant women.	**Announcement:** February 2012 **Performance Period:** December 2011 to December 2014	Section 1115A of the Social Security Act

Glossary of Acronyms

ACF	Administration for Children & Families
ACO	Accountable Care Organization
ACH	Acute Care Hospital
ACSC	Ambulatory Care Sensitive Conditions
AHA	American Heart Association
AHC	Accountable Health Communities Model
AIM	ACO Investment Model
APCP	Advanced Primary Care Practice Demonstration
APM	Alternative Payment Model
ASCVD	Atherosclerotic Cardiovascular Disease
AWV	Annual Wellness Visits
BPCI	Bundled Payments for Care Improvement
CAMH	CMS Alliance to Modernize Healthcare
CCSQ	Center for Clinical Standards and Quality
CDC	Centers for Disease Control and Prevention
CEC	Comprehensive ESRD Care
CEHRT	Certified EHR Technology
CHIP	Children's Health Insurance Program
CHW	Community Health Worker

CJR	Comprehensive Care for Joint Replacement
CMS	Centers for Medicare & Medicaid Services
CPC	Comprehensive Primary Care Initiative
CPC+	Comprehensive Primary Care Plus Model
CRP	Care Redesign Program
CVD CM	Cardiovascular Care Management
DPP	Y-USA Diabetes Prevention Program model test
ECCP	Enhanced Care and Coordination Provider
ED	Emergency Department
EED	Early Elective Deliveries
EPM	Episode Payment Model
ESRD	End Stage Renal Disease
FAQ	Frequently Asked Question
FFRDC	Federally Funded Research and Development Center
FFS	Fee-for-Service
FQHC	Federally Qualified Health Center
HHA	Home Health Agency
HHCAHPS	Home Health Care Consumer Assessment of Healthcare Providers and Systems
HHS	Department of Health & Human Services
IAP	Medicaid Innovation Accelerator Program
InCK	Integrated Care for Kids Model
IPI	International Pricing Index Model
IPPS	Inpatient Patient Prospective Payment System
IRF	Inpatient Rehabilitation Facilities
IT	Information Technology
LAN	Health Care Payment Learning and Action Network
LDO	Large Dialysis Organization
LEJR	Lower Extremity Joint Replacements
LTC	Long-Term Care
MA	Medicare Advantage

MAC	Medicare Administrative Contractor
MACRA	Medicare Access and Chip Reauthorization Act of 2015
MAO	Medicare Advantage Organization
MCCM	Medicare Care Choices Model
MEOS	Monthly Enhanced Oncology Services
MFFS	Managed Fee-for-Service
MIPS	Merit-Based Incentive Payment System
MOU	Memorandum of Understanding
MOM	Maternal Opioid Misuse Model
MDPCP	Maryland Primary Care Program
MSA	Metropolitan Statistical Area
MTM	Medication Therapy Management
NGACO	Next Generation ACO Model
Non-LDO	Non-Large Dialysis Organization
OASIS	Outcomes and Assessment Information Set
OCM	Oncology Care Model
OPPS	Outpatient Prospective Payment Systems
PBPM	Per-Beneficiary-Per-Month
PBPY	Per Beneficiary Per Year
PCMH	Patient-Centered Medical Home
PDPs	Prescription Drug Plans
PFPM	Physician-Focused Payment Model
PGP	Physician Group Practice
PTAC	Physician-Focused Payment Model Technical Advisory Committee
PTN	Practice Transformation Network
RFI	Request for Information
RSNAT	Medicare Prior Authorization Model: Repetitive Scheduled Non-Emergent Ambulance Transport
SAN	Support and Alignment Network
SHSIP	State Health System Innovation Plan
SIM	State Innovation Models

SNF	Skilled Nursing Facilities
SPA	State Plan Amendment
SUD	Substance Use Disorders
TCOC	Maryland Total Cost of Care Model
TCPI	Transforming Clinical Practice Initiative
TIA	Transient Ischemic Attack
TPS	Total Performance Score
VBID	Medicare Advantage Value-Based Insurance Design