MATHEMATICA Policy Research

Two-Year Effects of the Comprehensive Primary Care Initiative on Practice Transformation and Medicare Fee-for-Service Beneficiaries' Outcomes

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Citations

- **Based on second annual evaluation report to CMS: https://innovation.cms.gov/initiatives/comprehensive-primary-care-initiative/**
- **Selected findings reported in NEJM paper published April 13, 2016: http://www.nejm.org/doi/full/10.1056/NEJMsa1414953**

Overview of two-year results (10/12-9/14)

- **CPC provided substantial supports to practices**
- **Practices made headway with the hard work of transformation**
- **CPC practices made small improvements in patient experience for Medicare FFS beneficiaries**
- **Over the first 24 months, CPC reduced Medicare fee-for-service (FFS) expenditures by $11 per beneficiary per month (PBPM)**
  - **This is about 1.2% or $91.6 million in aggregate**
  - **This was not enough to cover the CPC care management fee paid for the research sample (about $18 PBPM)**
- **There were minimal effects on claims-based quality-of-care measures**
- **Among CPC practices, those that transformed more according to the practice survey had greater reductions in hospitalizations**
- **These results reflect the first two years of CPC, before we expected much change. Future reports will include the effects of CPC in 2015 and 2016.**

What is the Comprehensive Primary Care Initiative?

CPC

- **Four-year multipayer model launched by CMS with 39 public and private payers in October 2012**
- **At the end of the first quarter, 497 practices with ~2,100 clinicians in 7 regions, serving ~2.5 million patients**
- **CPC participation remained stable, with 37 payers and 479 practices at the end of year 2**
- **CPC tests advanced primary care in five areas:**

- **Guides practices' work via annual Milestones**

CPC provides substantial supports to practices for transformation

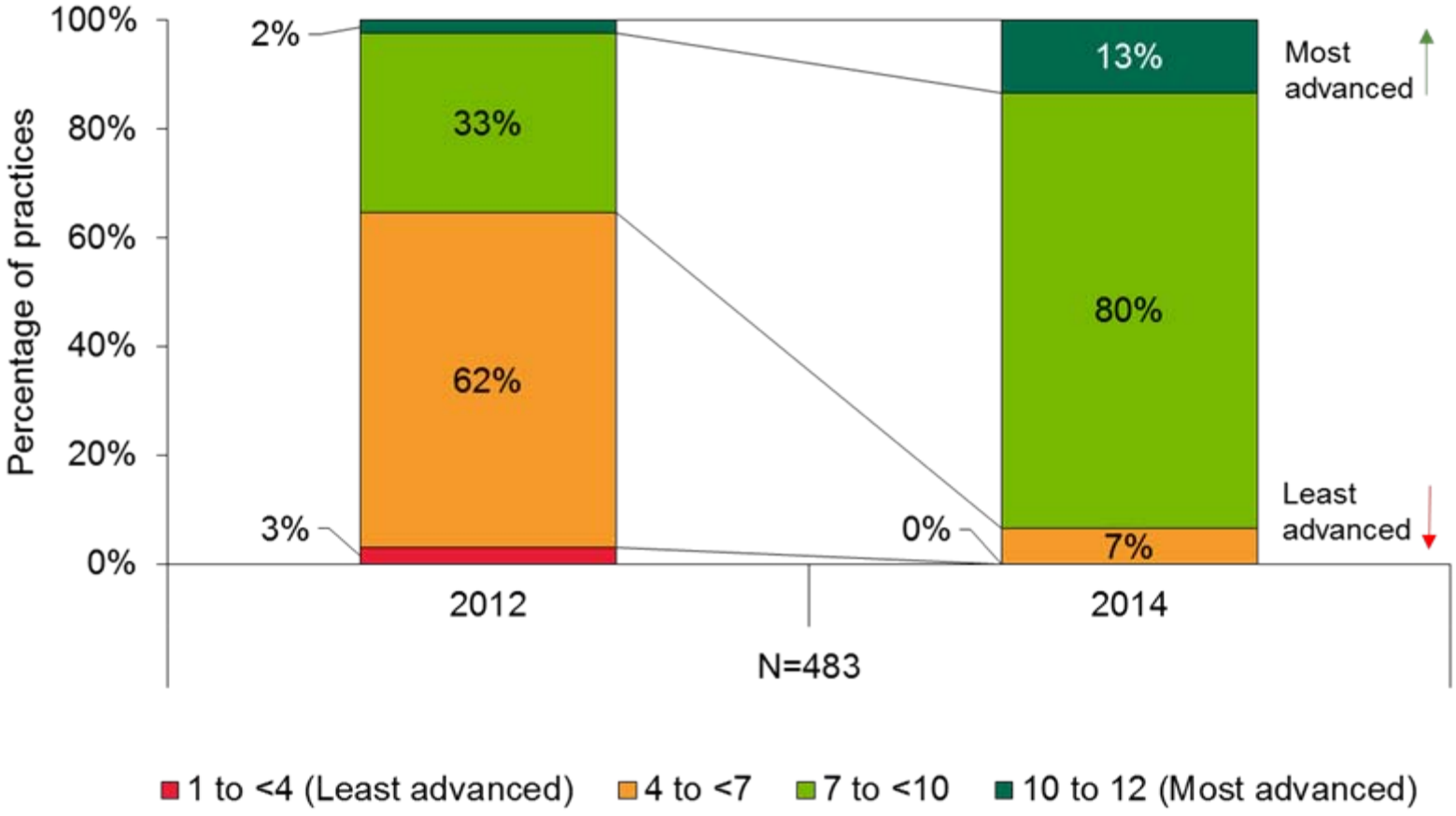
- **Significant financial support**
  - Medicare pays risk-based care management fees averaging $20 (range $8–$40) per beneficiary per month in the first two years; reduced to $15 in last two years.
  - Other payers pay lower fees
  - Across all payers, the median practice received $389,000 in care management fees over first two years
    - That is $115,000 per clinician, or 15% of practice revenue
  - Payers offer opportunities to share savings
- **Data feedback to guide practices' work**
  - Quarterly practice- and patient-level data from Medicare and many other payers on expenditures and utilization
  - Annual data on patient experience and practices' approach to care delivery
  - Region and practice-level reports
- **Learning activities led by Regional Learning Faculty**
  - Webinars, in-person meetings, peer networking, and individualized practice coaching

How are practices changing the way they deliver care?

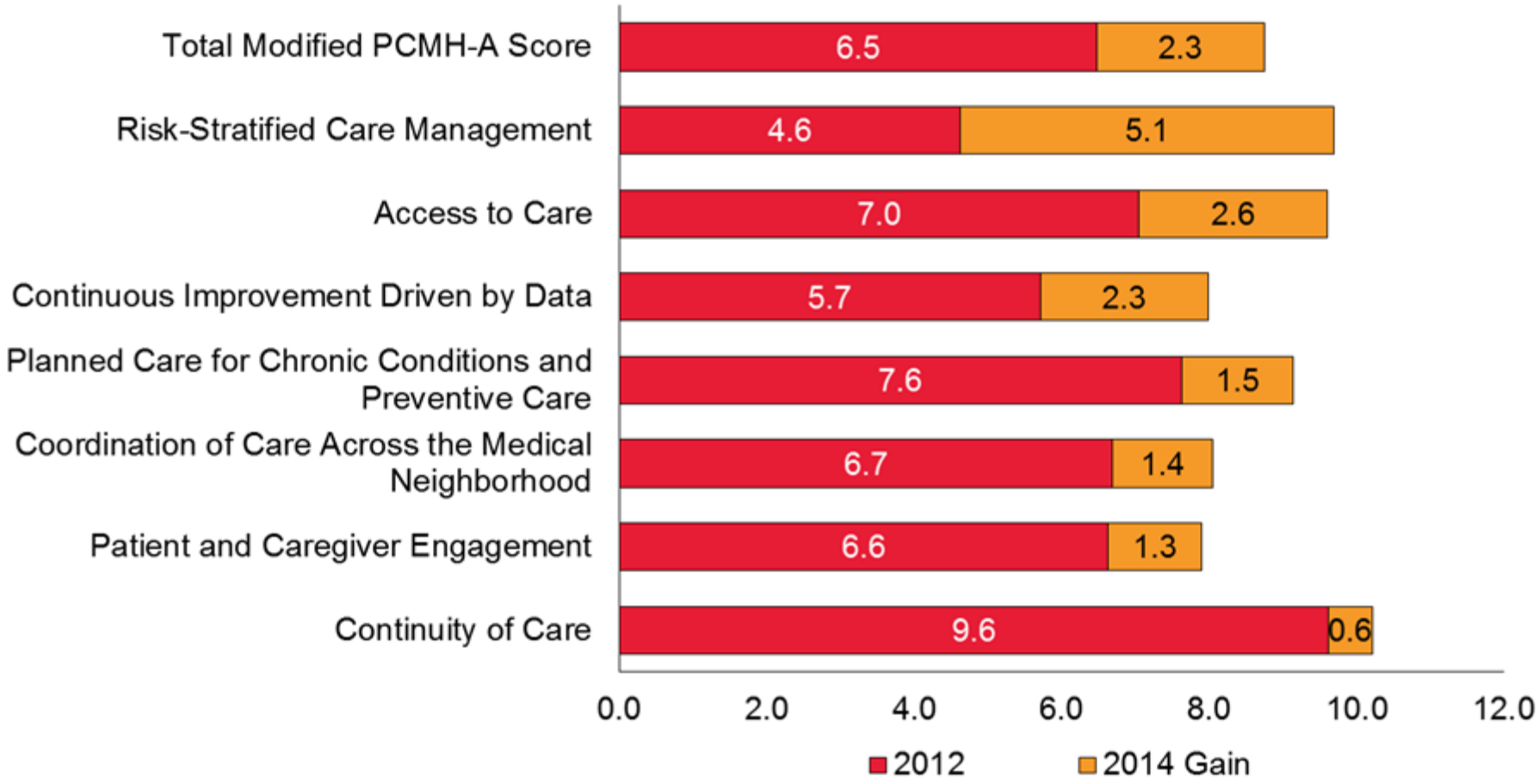
CPC is changing how practices deliver care

- **In PY 2014, practices made substantial and difficult transformations to change care delivery**
  - **Practices made meaningful progress on Milestone implementation**
  - **Year 2 built on Year 1 efforts to understand CPC and set up staffing, care processes, and workflows**
  - **This led to improvement in self-reported measures of various aspects of care delivery, overall and in each region, during the first two years of CPC**

Practices' scores on modified PCMH-A improved substantially from 2012 to 2014



Average modified PCMH-A scores in 2012 and gain in 2014, overall and by domain



Note: PCMH-A scores in each domain range from 1 (least advanced) to 12 (most advanced).

Practices made largest strides in risk-stratified care management and enhanced access

- **Largest area of improvement was in delivering risk-stratified care management**
  - **Before CPC, most practices were not systematically risk-stratifying their patients**
  - **After two years, nearly all were risk-stratifying and have hired or changed the roles of nurses or other staff to help with care management**
    - **Having a care manager was a new team role for many practices; some have struggled with learning to use them effectively**

Practices made largest strides in risk-stratified care management and enhanced access

- **Second largest area of improvement was enhanced access**
  - Efforts focused on improving patient portal uptake (PY 2014), wait times for appointments, and phone access, and providing after-hours access to clinicians in the office or by email or phone
  - Clinicians had 24/7 access to patient's information via electronic health records

As expected at this stage, practices still face implementation challenges

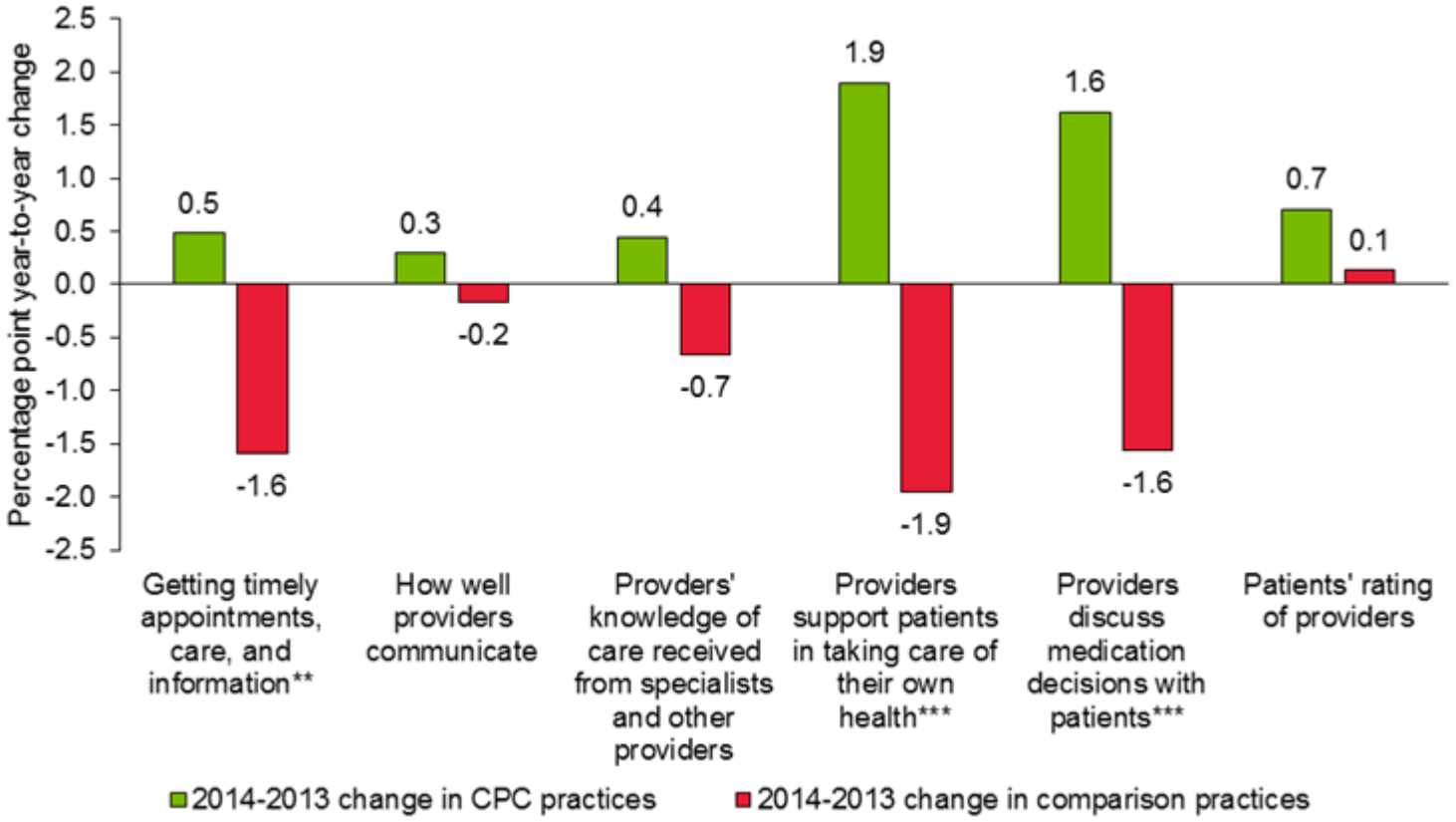
- **Addressing and reporting on Milestones is overwhelming**
  - **Practices report risk-stratified care management and care coordination across medical neighborhood are most clinically beneficial Milestones**
- **Small practices face challenges in funding care managers and health information technology**
- **System-affiliated practices tend to have more resources, but:**

  Less practice site autonomy → less clinician and staff buy-in
- **Limitations of current EHR functionalities challenge efficient reporting of clinical quality measures, and creation and modification of care plans**
- **Poor interoperability—a national problem—limits health information exchange between providers**
- **Shared decision making continues to be a challenge, but teamwork helps**

How has experience of care changed for attributed Medicare FFS beneficiaries in CPC practices?

CPC improved patient experience slightly in three of six domains

CPC had small, statistically significant, favorable effects on percentage of Medicare FFS beneficiaries choosing the most favorable response for 3 of 6 composite measures, driven by small (< 2 percentage points) year-to-year improvements in CPC practices and small declines for comparison practices



*/**/*** Difference-in-differences estimates are statistically significant at the 0.10/0.05/0.01 levels. Sample includes more than 25,000 Medicare FFS beneficiaries in 496 CPC practices and nearly 9,000 in 792 comparison practices.

What is CPC's impact on Medicare FFS costs, service use, and quality in the initiative's first 24 months?

Methods

- **Analysis compares changes in outcomes between the year before CPC (baseline) and the first two years of CPC (10/12–9/14) for attributed Medicare FFS beneficiaries in CPC practices to changes over the same time for beneficiaries attributed to similar matched comparison practices**
- **Regressions control for patients' and practices' characteristics before CPC**
- **Analysis includes 432,080 Medicare beneficiaries attributed to CPC practices and 890,110 beneficiaries attributed to matched comparison practices during the first two years of CPC**

CPC had limited effects on claims-based quality-of-care measures

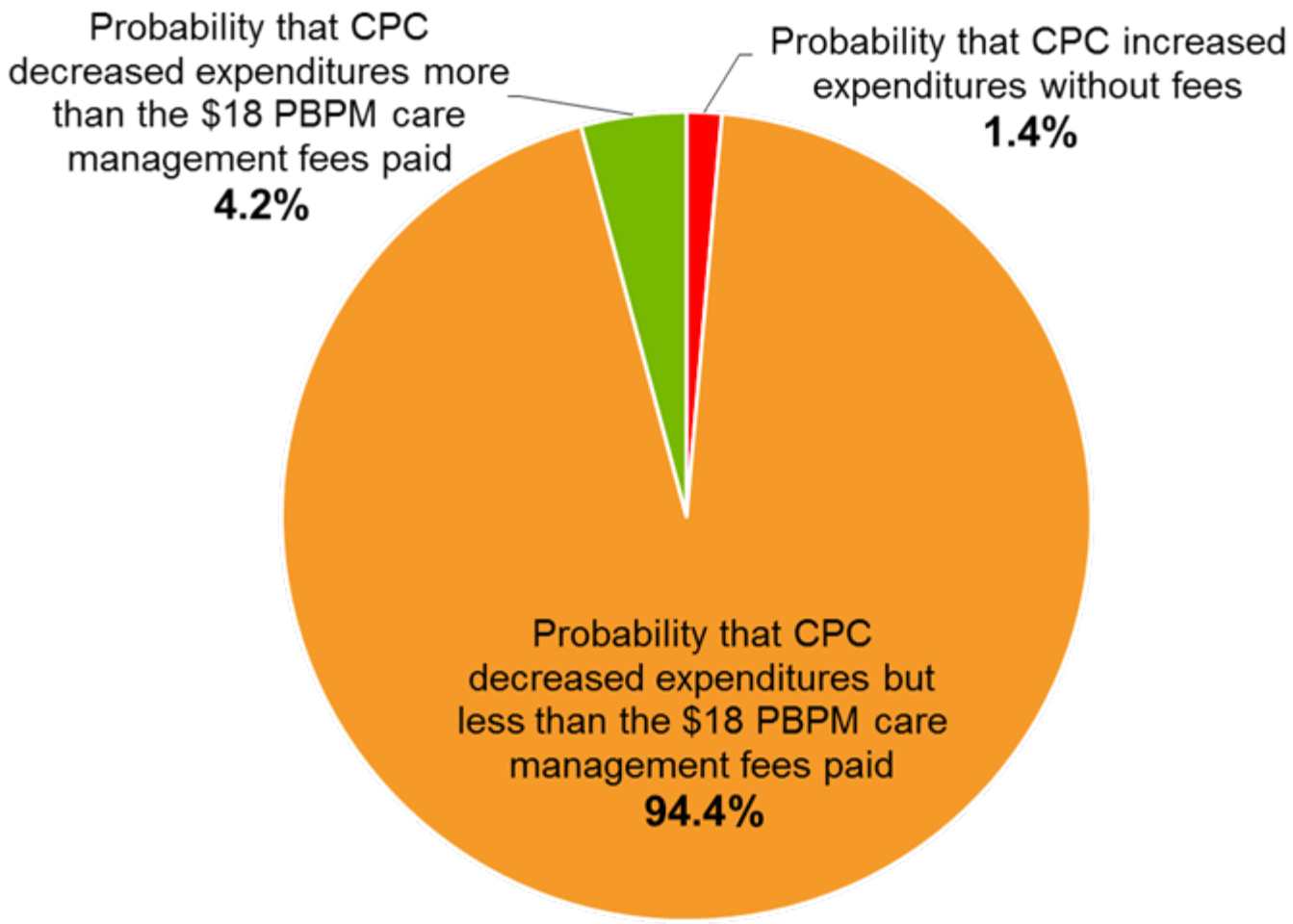
- **In general, small and statistically insignificant effects on:**
  - **Diabetes process-of-care measures**
  - **Continuity-of-care measures**
  - **Transitional care (likelihood of 14-day follow-up visit to hospitalization)**
  - **Ambulatory care-sensitive condition admissions and 30-day unplanned readmissions**
- **Exception: Small and statistically significant improvements in two summary measures of diabetes quality of care**
  - **0.6 percentage point reduction in the proportion of all beneficiaries with diabetes not receiving any of the four recommended tests**
  - **3 percentage points increase in the proportion of high-risk beneficiaries with diabetes who received all four recommended tests**
    - Also, around 2 to 3 percentage points improvement in two individual diabetes measures (eye exam and urine protein testing) among high-risk beneficiaries

CPC reduced Medicare expenditures, but not enough to cover CPC fees in first 24 months

- CPC reduced Medicare expenditures without fees by $11 (1.2%) PBPM (90% confidence interval = −$21, −$1)
- Aggregate savings of $91.6 million during the first two years, before fees
  - Driven by CPC's slower growth in inpatient and skilled nursing facility expenditures
- Only statistically significant effect on Medicare service use: 3% fewer primary care visits
- Results were consistent across alternative specifications and sensitivity tests
- Similar magnitude of reduction in Medicare expenditures for high-risk beneficiaries (1%), but not statistically significant
- Effects did not vary with practice size (number of clinicians or number of attributed Medicare beneficiaries), medical home recognition, or high resource availability measure (6 or more clinicians or part of larger system)

Bayesian model estimates suggest high probability of gross savings but low probability of net savings

Effect on Medicare expenditures without fees during first 24 months



Were improvements in care delivery under CPC associated with reduced hospitalizations?

Methods to examine whether care improvements reduced hospitalizations

- **Sample dropped the smallest 25% of CPC practices (those with fewer than 330 Medicare FFS beneficiaries) to improve the precision of results**
- **Care improvements measured by the modified PCMH-A part of the annual practice survey**
- **Examined the relationship between changes in hospitalizations per 1,000 Medicare FFS beneficiaries (risk-adjusted for patient and region characteristics) and changes in modified PCMH-A scores over the first two years of CPC**

Larger improvements in care delivery led to larger reductions in hospitalization rates

- **Each 1.0-point increase in the overall modified PCMH-A score reduced the hospitalization rate by an additional 1.15% of the baseline mean**
  - No change in score → 2.6% decline in hospitalization rate
  - Average change in score (2.3 points) → 5.3% decline in hospitalization rate
  - Large change in score (4.5 points) → 7.8% decline in hospitalization rate
- **Practices improved in multiple domains of primary care concurrently, making it difficult to identify which domain(s) mattered most**

Future reports will cover the remaining two years

Implementation analysis

- What payment, data feedback, and learning supports are provided to practices?
- How do practices implement the Milestones and change primary care delivery?

Impact analysis

- What are CPC's effects on patient, clinician, and staff experiences?
- What are effects on claims-based measures of cost, service use, and quality of care for Medicare FFS beneficiaries?
- Are results sensitive to sample, comparison group, and models used?

Synthesis

- How does practice transformation improve outcomes?
- What are barriers and facilitators to improvements in care delivery and outcomes?
- What do the results of CPC mean for future primary care initiatives?