Enhanced Primary Care

*The CDPHP® Medical Home*

# Practice and Payment Reform

## *Year Four Program Review*

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# Background

# Who is CDPHP?

## Capital District Physicians' Health Plan, Inc. (CDPHP®)

- New York's Capital Region
- Not-for-profit
- Network model
- Physician-founded and guided for over 30 years
- More than 385,000 members

# The Primary Care Problem – Mid 2000s

## Problem #1: Shrinking primary care resources

- Fewer medical students choosing primary care

## Problem #2: PCP dissatisfaction with work-life balance

- Poor outlook for income advancement
- Pressure to see more patients per day
- Challenges to serve patients to the best of their ability

# The PCMH Solution

## Enhanced Primary Care

**PCMH Model initiative developed in 2008**

**Goal #1**

**Goal #2**

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### Goal #1

### Practice Reform

- Ensure members establish and maintain an ongoing relationship with a PCP
- Provide members with integrated and comprehensive patient-centered healthcare in a timely and efficient manner
- Reduce patient churn and allow PCPs to spend more time with needier patients

### Goal #2

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### Goal #2

### Payment Reform

- Replace FFS payments for attributed patients with a value-driven model derived from the PCP's influence on all care
- Use a unique risk-based global payment model that could increase PCP compensation by as much as 25% over traditional FFS
- Include performance bonuses based on achieving targeted quality metrics, increasing potential compensation to 40% over FFS

# The PCMH Solution

## Enhanced Primary Care

**PCMH Model initiative developed in 2008**

**This payment approach specifically addresses one of the common problems facing providers in medical homes: PCP compensation**

### Goal #1

### Practice Ref

Ensure members establish and maintain an ongoing relationship with a PCP

Provide members integrated and comprehensive patient-centered healthcare in a timely and efficient manner

Reduce patient churn and allow PCPs to spend more time with needier patients

### Goal #2

### Payment Reform

payments for attributed patients with a value driven payment model derived from the PCP's influence on all care

Use a unique risk-based comprehensive global payment model that could increase PCP compensation by as much as 25% over traditional FFS payments

Include performance bonuses based on achieving targeted quality metrics increasing potential compensation to 40% over FFS

# Global Payment Model + Bonus

Prospectively compensates PCPs based on each patient's level of primary care need:


Allows PCP practices to transform without the risk of lost revenue

Members should receive more efficient, higher quality care with lower overall costs

# EPC Pilot Program

**Launch**

- **EPC pilot launched in 2008:**
  - 3 primary care practices
  - 15 practitioners
  - 12,000 CDPHP member-patients.

**Transform**

- **Each practice participated in 12-month transformation program that included:**
  - Weekly engagement with a transformation agent
  - Quarterly collaborative meetings supporting the work to achieve the National Committee for Quality Assurance (NCQA) PCMH recognition

**Payment**

- After 12-month transformation program, practices began receiving prospective risk-adjusted global payments in lieu of FFS for attributed member-patients

# Pilot Program Results

Growth in total costs for attributed members at all three practices was **33% lower** than members receiving care at other comparable practices in the region, while increasing PCP compensation

The practices made year-over-year improvements in several Healthcare Effectiveness Data and Information Set (HEDIS) quality metrics

**CDPHP decided to initiate a full EPC program**

# Pilot to Implementation

## Pilot Program

- Ended in 2011

## EPC Program Implementation

- **Began with 21 additional primary care practices**
  - Spent a year in transformation engagement and PCMH education
  - Entered EPC payment model in 2012
- **New practices entered the program annually. By 2015, EPC included**:
  - 193 provider practices
  - 836 clinicians
  - 242,000+ CDPHP members

# Research Objective

**Assess the impact of EPC four years into the initiative. Has the program…**

- … generated savings in total cost of care?
- … modified health care utilization?
- … improved key quality metrics?

# Data and Methods

# Methodology

## Conducted a series of difference-in-difference analyses to assess the impact of EPC on:

- Total cost of care
- Health care utilization
- Provider quality

## Used two different populations

- Members ➔ Cost-Use
- Providers ➔ Quality

# Cost-Use Analysis

**Analysis Cohort**

- 2011-2015 CDPHP provider, member, and claims data
- **Case-Control** design with **Member-Month** as unit of observation

**Cohort Assignment**

- **Identified all PCPs** participating and assigned to appropriate cohort based on year entering program
- **Linked members by month-year to PCPs** based on internal CDPHP attribution logic
- **Excluded a subset of members from the analysis**: (1) not enrolled in the Commercial, Medicaid, and Medicare lines of business; (2) under age 18; (3) attributed PCP is a pediatrician; and (4) at least one month of unusually high total costs
- In 2015, there were ~106,000 members within EPC (case cohorts), and ~110,000 members not in EPC (control cohort)

**Cohort Balancing**

- Each EPC cohort was independently **balanced via iterative proportional fitting** against the non-EPC cohort
- **Balancing completed each month within each cohort**. Balancing variables include: (1) member age, (2) sex, (3) county of residence, (4) insurance product, (5) risk score, (6) number of comorbidities, (7) enrolled in a family plan, and (8) indication of having a pharmacy benefit

# Quality Analysis

**Analysis Cohort**

- 2011-2015 CDPHP annual HEDIS data
- **Case-Control** design with **Provider-Year** as unit of observation

**Cohort Assignment**

- **Identified all PCPs** participating and assigned to appropriate cohort based on year entering program
- In 2015, there were 453 providers within EPC (case cohorts) and approximately 700 providers not in EPC (control cohort)

**Cohort Balancing**

- Each EPC cohort was independently **balanced via iterative proportional fitting** against the non-EPC cohort
- **Balancing completed each year within each cohort**. Balancing variables include: (1) provider sex, (2) specialty, (3) age, (4) number of members seen per month, (5) claim volume per month, (6) claim dollar amount, (7) distribution of attributed members across lines of business, and (8) attributed members' average risk score

# Difference-in-Difference

$$Y = \alpha + \beta_1 C + \beta_2 T + \beta_3 CT$$

*C = Case Indicator*

*T = Time Indicator*

*CT = Case-Time Interaction*

## Difference-in-Difference

- OLS Regression
- The coefficient of the interaction ($\beta_3$) is the difference-in-difference result
- Separate analyses were done for each cohort for each annual change.
- Results proportionally combined across cohorts for each annual change to produce a final estimate

## Cost-Use Analysis

- Evaluated 19 Cost-Use variables
  - Total Cost of Care
  - PCP costs and visits
  - Specialist costs and visits
  - IP costs and stays
  - OP costs and visits
  - ED costs and visits
  - UC costs and visits
  - Laboratory costs and services
  - Radiology costs and services
  - Rx costs and fills

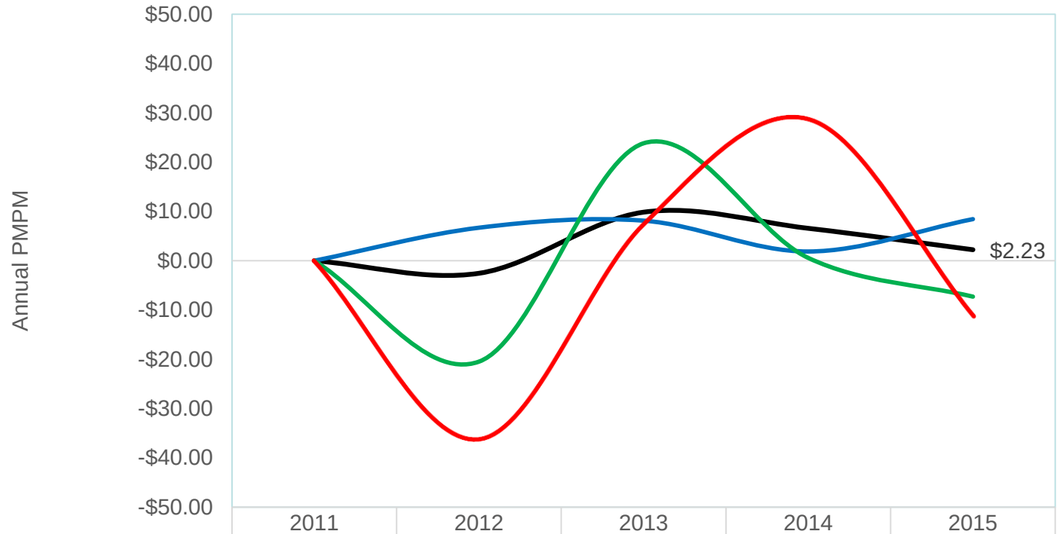
## Quality Analysis

- Evaluated a composite HEDIS rate (ranging from 0 to 100) based on 27 HEDIS measures reported annually over the entire study period
  - Thirteen measures directly influenced the provider's EPC bonus
  - Fourteen measures were unrelated to the providers' compensation but were included to assess whether providers perform better not only on measures that factor directly into their bonus but on a broader quality assessment

# Principal Findings

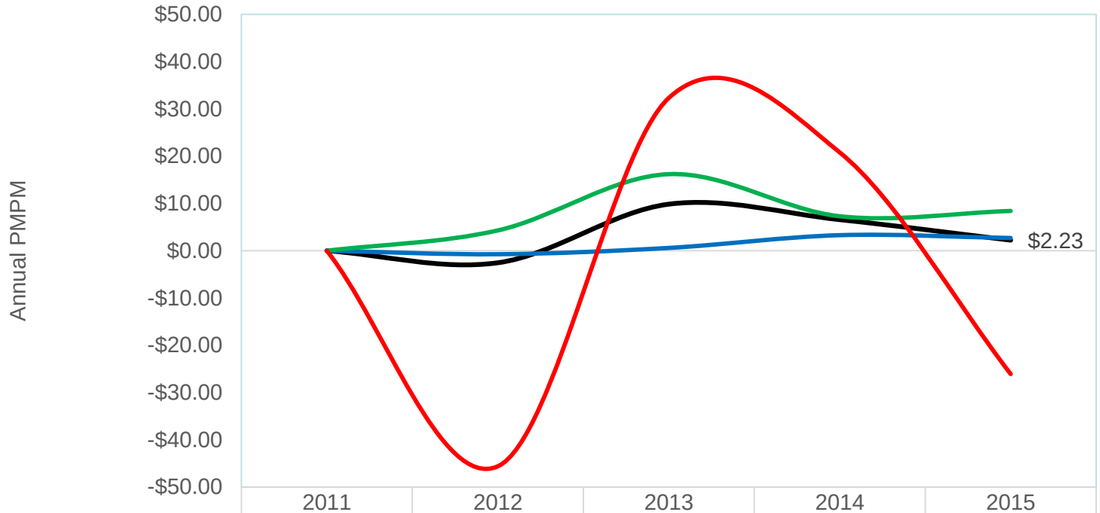
# EPC PMPM Savings Trends

## Line of Business




| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| All | $0.00 | -$2.55 | $9.85 | $6.57 | $2.23 |
| Commercial | $0.00 | $6.70 | $8.13 | $1.87 | $8.44 |
| Medicaid | $0.00 | -$20.48 | $23.83 | $0.57 | -$7.29 |
| Medicare | $0.00 | -$36.18 | $7.39 | $28.62 | -$11.28 |

## Health Status




| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| All | $0.00 | -$2.55 | $9.85 | $6.57 | $2.23 |
| Healthiest 50% | $0.00 | -$0.74 | $0.59 | $3.29 | $2.69 |
| Sickest 50%-10% | $0.00 | $4.29 | $16.20 | $7.29 | $8.41 |
| Sickest 10% | $0.00 | -$45.61 | $32.31 | $20.80 | -$26.08 |

Decline in annual savings from $9.85 in 2013 to $6.57 in 2014 to $2.23 in 2015

$2.23 PMPM savings in 2015 = ~$2.8M

Drivers of decline ➔ Medicare, Medicaid, and Sickest 10%

# EPC Cumulative Savings

## Cumulative Cost Savings, 2012-2015 ($million)

| Lines of Business | Primary Care Health Risk | | | |
|---|---|---|---|---|
| | All | Healthiest 50% | Sickest 50%-10% | Sickest 10% |
| All | $19.6 | $3.9 | $14.7 | $1.0 |
| Commercial | $16.0 | $2.7 | $11.3 | $2.0 |
| Medicaid | $0.5 | $-0.7 | $1.0 | $0.2 |
| Medicare | $3.1 | $1.9 | $2.4 | $-1.2 |

- Generated savings of $19.6M since inception in 2012
- 82% of savings within Commercial line of business
- 75% of savings among Sickest 50%-10% of members

# EPC Category Savings

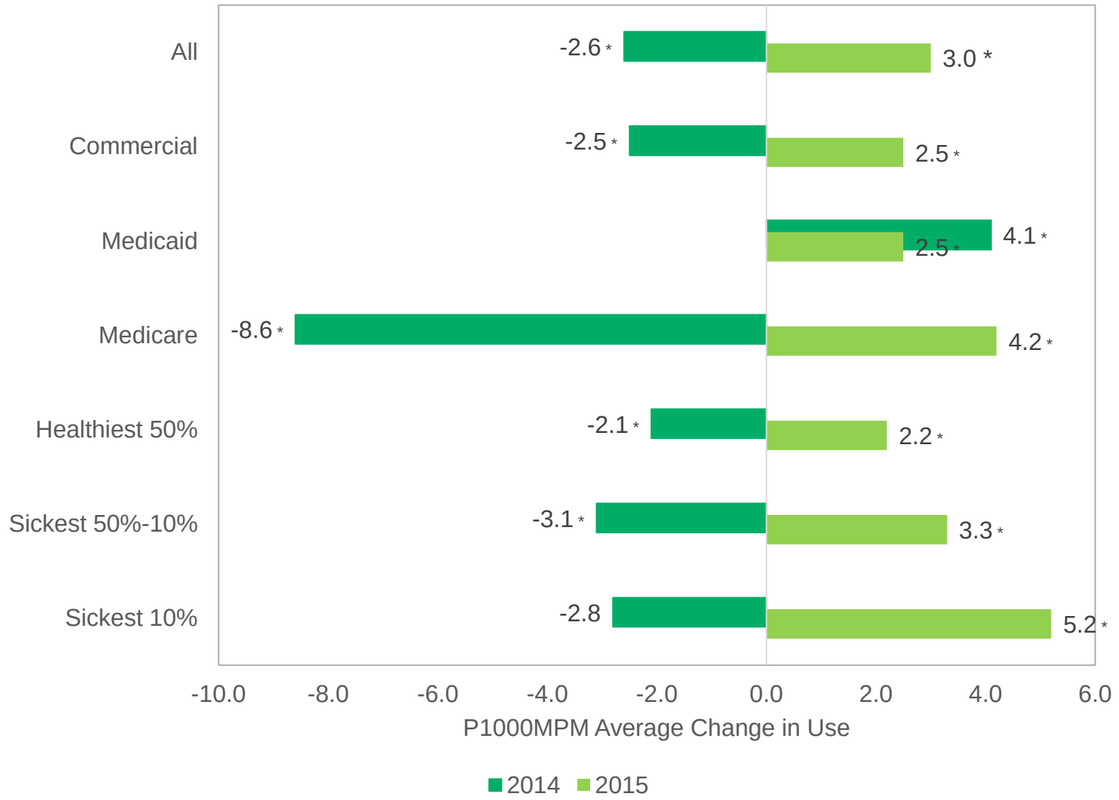
## PMPM Cost Savings by Service Category, 2015

| Total Cost of Care Service Category | All | Healthiest 50% | Sickest 50%-10% | Sickest 10% | Commercial | Medicaid | Medicare |
|---|---|---|---|---|---|---|---|
| Primary | $3.66 | $2.19 | $6.33 | $0.52 | $3.22 | $0.69 | $6.54 |
| Inpatient | $-4.01 | $-1.08 | $-4.25 | $-19.21 | $-9.62 | $2.80 | $10.93 |
| Specialist | $2.39 | $1.36 | $-1.90 | $26.10 | $2.10 | $2.67 | $1.67 |
| Emergency Room | $0.11 | $-0.27 | $0.06 | $2.34 | $0.04 | $0.72 | $-0.07 |
| Urgent Care | $-0.32 | $-0.02 | $0.04 | $-3.35 | $-0.10 | $-1.40 | $-0.18 |
| Outpatient | $0.35 | $-1.64 | $-4.75 | $32.13 | $3.05 | $-0.97 | $-7.62 |
| Laboratory | $-0.47 | $-0.18 | $-0.80 | $-0.62 | $-0.89 | $0.02 | $0.08 |
| Radiology | $-3.53 | $-0.48 | $-4.30 | $-16.40 | $-3.51 | $-0.23 | $-7.20 |
| Prescriptions | $-0.59 | $-3.09 | $1.93 | $2.27 | $-2.40 | $6.10 | $3.10 |

- Significantly increased PCP costs by $3.66 PMPM
- Significantly reduced Laboratory and Radiology costs
- Reduced IP and Rx costs, driven by significant reductions among Commercial members

# EPC Primary Care Visit Impact

## PCP Visit Rate Change, 2014-2015




Benchmark measure of utilization impact is PCP Visits

Anticipated general reduction in the rate, with an increase among more vulnerable populations

2014 and 2015 paint very different pictures

2014 - Reduced PCP visits by 2.6 P1000MPM

2015 - Increased PCP visits by 3.0 P1000MPM

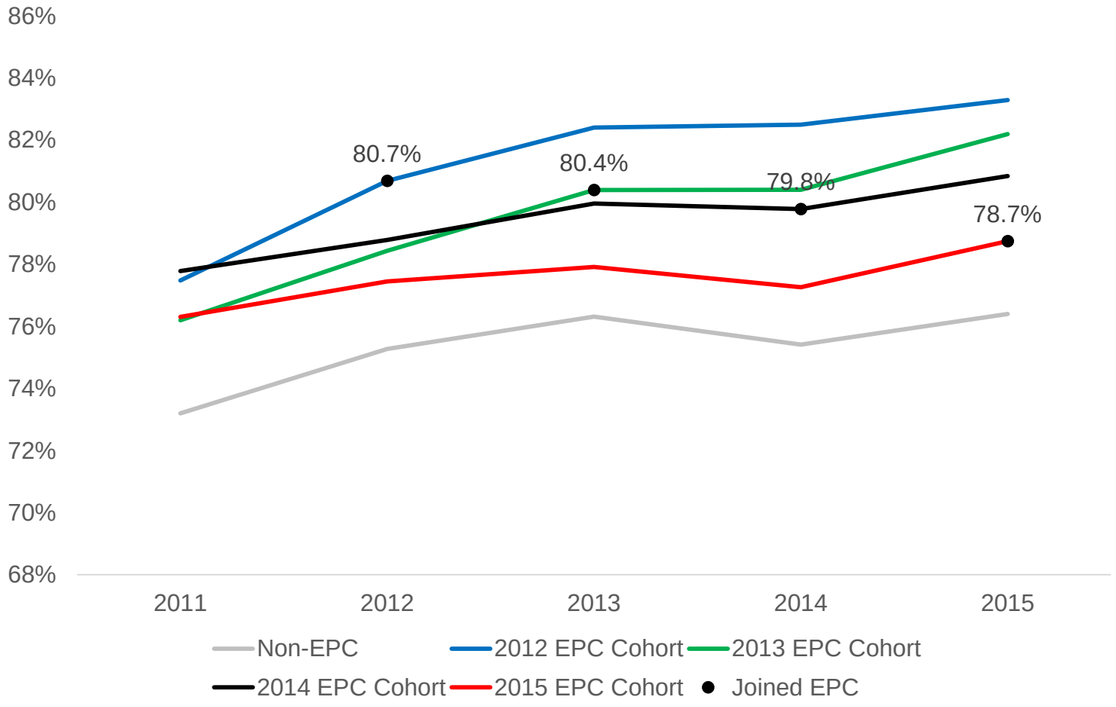
Combining 2014 and 2015 provides a clearer picture of the impact of EPC

PCPs are spending more time with vulnerable populations

No general reduction in the rate of PCP visits

# EPC Quality Impact

## Average Composite HEDIS Rate, 2011-2015




- Providers joining EPC had higher HEDIS rates than non-EPC providers both before and after joining
- Trend in composite score has declined over time as each cohort joins the program
  - 2012 cohort significantly higher than Non-EPC
  - 2015 statistically similar to Non-EPC
- 2015 cohort, with greatest improvement potential, improved the most during first year on EPC compared to Non-EPC
  - Providers in EPC longest show greatest improvement over time

# Conclusions & Implications

# Costs Reduced with Higher PCP Compensation

## EPC reduced total costs

- $2.8 million in 2015
- $19.6 million since inception

## PCPs received increased compensation

- Compensated $4.6 million more than expected in 2015
- Compensated almost $15 million more than expected since inception
- Received over $8 million in additional bonus payments for achieving specific quality thresholds since program inception

# Changed Provider Behavior

## PCPs spent more time with at-risk members

- Eliminated need to churn
- PCPs likely…
  - learned more about their patients
  - were better able to help their patients manage their health
  - were better able to coordinate the care their patients received
- Translated to the more efficient and effective use of the health system

## Improved PCP engagement ➔ improved member utilization in healthcare services beyond the PCP

- Fewer laboratory services
- Fewer radiology services
- Fewer prescriptions filled
- More specialist visits

# Improved Quality of Care Delivery

## HEDIS scores increased at a faster rate compared to non-EPC providers

- Providers joining EPC have higher quality outcomes than non-EPC providers

## Providers joining the program in more recent years have greater potential for quality improvement

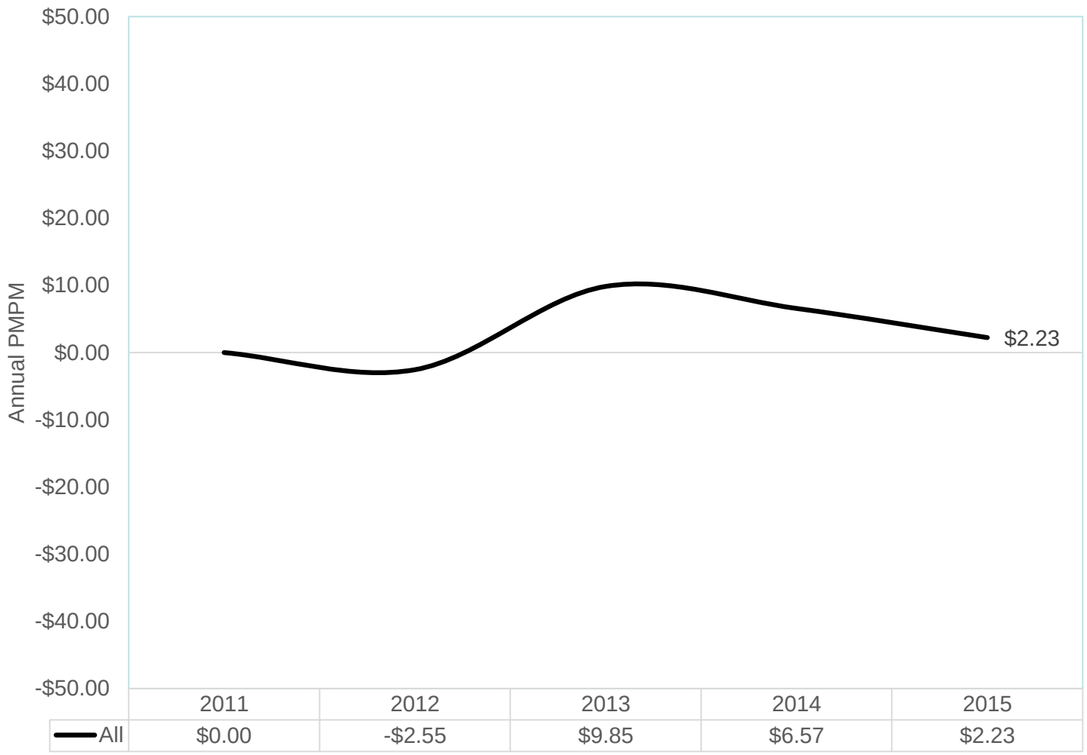
- More incentivized to improve quality performance to take advantage of payment design

# Are We Approaching a Savings Ceiling?

Yes.

- Increase in costs during the first year of the program (2012)
- Significant savings during the second year of the program (2013)
- Steady decline in annual savings through the third and fourth years (2014-2015)
- Preliminary analysis on 2016 is suggesting this steady decline is continuing

## EPC PMPM Annual Savings

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# Potential Reasons for Downward Trend

- When Providers Joined EPC
- Diminishing Returns
- Active Management of Patients with Previously Unaddressed Chronic Conditions
- Reaction to the CDPHP Attribution Methodology

# What is the Future of EPC?

## We assume these downward trends will continue

- **New interventions or payment designs** may be needed to mitigate or reverse the diminishing returns
  - A shared-savings program within certain specialties in conjunction with EPC may help reduce costs
  - Expansion to include specialists within an ACO type model
- **Implementing greater transparency** to providers and members might drive members towards more effective and efficient providers creating greater market competition that would drive costs down

# Conclusion

PCPs participating in EPC modified how they and their patients utilize the health care system

Three key successes of EPC

- **Increased PCP compensation** by almost $15M between 2011-2015
- Generated **Total Cost of Care savings** of almost $20M between 2011-2015
- **Improved the quality of health** for its members at a faster rate than among non-EPC providers

These savings were hard won, but the current financial carrot dangling in front of the PCPs is almost gone

# Thank You

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