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# Impact of Medicare Advantage Prescription Drug Plan Star Ratings on Enrollment Before and After Implementation of Quality-Related Bonus Payments in 2012

## **Abstract**

The five-star quality rating of Medicare Advantage Prescription Drug Plans had no direct impact on same-year enrollment. But after the introduction of a bonus payment for highly-rated plans, which had to be invested in additional benefits and /or reducing premiums, subsequent year enrollment in these plans increased.

## **Keywords**

health insurance, medicare, pharmaceuticals

## **Disciplines**

Health and Medical Administration | Health Services Administration | Health Services Research

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## Impact of Medicare Advantage Prescription Drug Plan Star Ratings on Enrollment Before and After Implementation of Quality-Related Bonus Payments in 2012

Pengxiang Li and Jalpa A. Doshi

PLOS ONE, May 2016

**KEY FINDINGS:** The five-star quality rating of Medicare Advantage Prescription Drug Plans had no direct impact on same-year enrollment. But after the introduction of a bonus payment for highly-rated plans, which had to be invested in additional benefits and /or reducing premiums, subsequent year enrollment in these plans increased.

### THE QUESTION

To help beneficiaries make more informed enrollment decisions about Medicare Advantage Prescription Drug Plans (MAPDs), the Centers for Medicare & Medicaid Services (CMS) introduced a five-star rating system in 2007, and publishes these quality ratings annually. Initial reports on the influence of star ratings on plan enrollment have been mixed. In 2012, CMS also began awarding quality bonus payments (QBPs) to plans with three or more stars. The QBPs had to be reinvested to improve plan benefits and/or reduce premiums in the subsequent year.

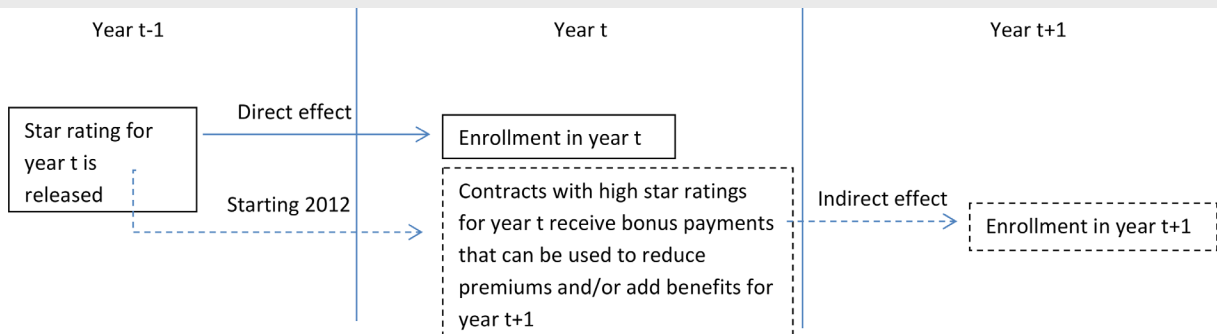
In PLOS ONE, LDI Senior Fellows Pengxiang Li and Jalpa Doshi examine the impact of the MAPD star ratings before and after 2012, when they became tied to bonus payments.

Does an increase in a plan’s star rating have a direct impact on concurrent year plan enrollment? What’s the indirect impact (via bonus payments) of star ratings on subsequent year plan enrollment?

### THE FINDINGS

Before the introduction of QBPs, an increase in a plan’s star rating had little effect on the plan’s enrollment, both in the concurrent and subsequent year. After the introduction of the bonus payment in 2012, an increase in a star rating resulted in an increase in enrollment, but only in the subsequent year. This was likely due to the reinvestment of QBPs to provide lower premiums and/or additional member benefits in the following year. There was still no direct impact on concurrent year enrollment.

Hypothesized Direct and Indirect Relationships Between MAPD Contract Star Ratings and Enrollment.



Source: PLOS ONE, May 5, 2016; DOI:10.1371/journal.pone.0154357.s002

## THE IMPLICATIONS

This is the first longitudinal study to examine the impact of CMS star ratings on MAPD enrollment, and how QBPs affected that impact. The plans that receive a QBP are required to improve member benefits or to reduce premiums, which other research has suggested is an important determinant of a consumer's plan selection. This reinvestment of the bonus, and what it likely did to attract consumers, meant a significant indirect impact of the star rating system.

The authors comment:

Although star ratings do not seem to be serving their intended function in regard to directly aiding plan selection, the associated financial incentives have increased their utility. It is notable that an increase in a contract's star rating led to a significant increase in enrollment in the subsequent year. These lagged effects may be due to features of the rating program's incentive system.

One limitation of the study was the unavailability of other information that may be relevant to enrollees' decision-making, such as plan reputation, specific benefits, and volume or effectiveness of marketing efforts.

## THE STUDY

Using a longitudinal design, the authors analyzed 3,866 MAPD program contract-years using primarily 2009 to 2015 CMS Part C and Part D Performance Data and Medicare Advantage/Part D Contract and Enrollment Data. The data were divided into a pre-QBP period from 2009-2011 and a post-QBP period from 2012-2015. Stand-alone prescription drug plans served as an external comparison group as they

were not eligible for the QBPs. The authors compared the effects of star ratings in the pre-QBP period and the post-QBP period. The analysis controlled for the type of plan, how long it had been part of the program, and the kind of beneficiaries that each plan served. Enrollment data were based on January enrollment.

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Li P, Doshi JA. [Impact of Medicare Advantage Prescription Drug Plan Star Ratings on Enrollment Before and After Implementation of Quality-Related Bonus Payments in 2012](#). DOI:10.1371/journal.pone.0154357. s002. PLOS ONE, May 2016.

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