

# Understanding the Part D Spending Dynamics of Heart Failure Patients

Commissioned by Novartis Pharmaceuticals Corporation

May 2017



Heart failure (HF) affects about one of eight Medicare beneficiaries and is usually accompanied by at least one comorbidity<sup>1</sup>. Understanding pharmacy spending by HF patients requires an evaluation of the complex interactions between members, payers, and manufacturers in Part D.

Part D spending by HF patients is higher than for other patients due to their condition and related comorbidities. The portions of spending attributable to the member, pharmaceutical manufacturer, Part D plan and federal government can vary dramatically depending on the member's annual spending due to the nature of the Part D benefit design (see Figure 1).

Given their higher overall medication spending, HF patients are more likely to pass through the initial coverage zone and reach the Part D “donut hole” (Coverage Gap) and Catastrophic spending zones than the average Part D member.

## STRUCTURE OF THE PART D BENEFIT

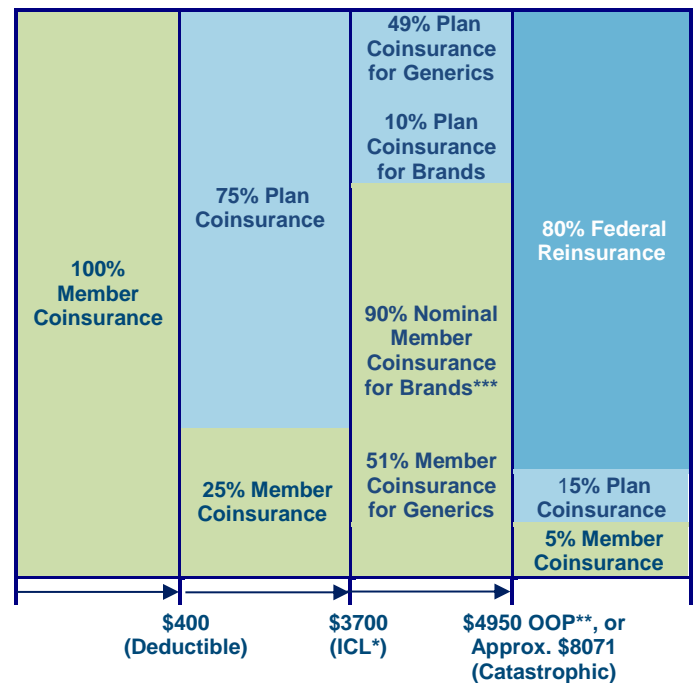
The Part D benefit spreads costs among the following stakeholders:

- The plan, which receives subsidies from CMS and member premiums,
- The patient, in the form of deductibles and copays/coinsurance,
- The pharmaceutical manufacturer, through discounts to non-low income members in the Coverage Gap, and
- The federal government, in the form of direct subsidies to plans, cost sharing subsidies for low income members, and reinsurance.

How much each of these stakeholders pays for a Part D script is determined by how much the member has previously spent on covered medications in the year (both in total and in the form of out-of-pocket expenses) and the member's income status. Cost sharing for a script varies depending on which coverage zone the patient finds themselves at the time the script is filled, and is mostly subsidized for

low income beneficiaries. The standard Part D coverage zones are shown in Figure 1.

FIGURE 1: THE 2017 MEDICARE PART D STANDARD BENEFIT



\*ICL = Initial Coverage Limit

\*\*OOP = Out of Pocket

\*\*\*For non-low income members, the 50% manufacturer's discount combined with the 2017 plan contribution of 10% results in 40% effective patient brand cost sharing in the gap.

We analyzed the pharmacy spend for HF patients and compared it to the average Part D member. Then, we estimated how often, and when, these members reach the Coverage Gap and Catastrophic coverage limits. The chart below shows our estimates for 2017.

**FIGURE 2: PORTION OF PART D MEMBERS REACHING THE GAP AND CATASTROPHIC COVERAGE ZONES ALL MEMBERS VS. HEART FAILURE PATIENTS – PROJECTED 2017**

Coverage Zone	All Part D Members			HF Part D Patients		
	% Members	Average Entry Month		% Members	Average Entry Month	
		Gap	Catastrophic		Gap	Catastrophic
<b>Non-Low Income – MAPD Plans</b>						
Below Gap	88%	--	--	64%	--	--
Gap	9%	September	--	25%	September	--
Catastrophic	3%	May	August	11%	May	September
<b>Non-Low Income – PDP Plans</b>						
Below Gap	82%	--	--	52%	--	--
Gap	13%	September	--	30%	September	--
Catastrophic	5%	May	August	18%	May	August
<b>Low Income – MAPD &amp; PDP Combined</b>						
Below Gap	66%	--	--	32%	--	--
Gap	15%	September	--	25%	September	--
Catastrophic	19%	May	August	43%	May	August

**IMPACT OF PART D STRUCTURE ON HEART FAILURE PATIENTS**

As shown in Figure 2, HF patients are more likely to reach the coverage gap and catastrophic zones than the average Part D member. In other words, more HF patients have high spending than the general Part D population. This dynamic is consistent for low income and non-low income HF patients and for enrollees in stand-alone Part D (PDP) or integrated medical and pharmacy (MAPD) plans.

In Figure 2, more low income HF beneficiaries are likely to reach the coverage gap and catastrophic zones than non-low income HF beneficiaries. Approximately two thirds of low income HF patients will have enough spending to reach the coverage gap, and well over half of these patients will accumulate enough nominal out of pocket expenses to exit the gap and enter the catastrophic zone. We note that, for these patients, the low income cost sharing subsidies cover most of the patient’s cost sharing.

**METHODOLOGY AND DATA SOURCES**

We analyzed the expenditures of Medicare beneficiaries with individual Part D coverage in Milliman’s proprietary databases (2016 Part D consolidated database and 2015 Medicare Advantage database) and trended their Part D spending to 2017. We identified HF patients using ICD diagnosis codes in linked medical claims and a medication marker if medical claims were unavailable. We created claims probability distributions (CPDs) of Part D spending for HF and all Part D beneficiaries. We used these CPDs to estimate the average number of patients reaching the gap and catastrophic coverage zones, and the average time spent in each.

The distributions were calculated separately for non-low income beneficiaries in MAPD and PDP plans, and low income beneficiaries.

**CAVEATS**

The distributions presented here represent national averages. Results for any particular plan may vary substantially from those presented here due to demographics, local practice patterns, and other factors. Certain types of benefit programs, such as the employer group waiver plans (EGWPs), can create different dynamics.

This report was commissioned by Novartis Pharmaceuticals Corporation. The findings reflect the research of the authors. Milliman does not endorse any product or organization.

**CONTACT**

If you have any questions or comments on this paper, please contact:

Gabriela Diequez  
[gabriela.diequez@milliman.com](mailto:gabriela.diequez@milliman.com) +1 646 473 3219

Bruce Pyenson  
[bruce.pyenson@milliman.com](mailto:bruce.pyenson@milliman.com) +1 646 473 3201

Mark Koransky  
[mark.koransky@milliman.com](mailto:mark.koransky@milliman.com) +1 646 473 3248

The American Academy of Actuaries requires that its members identify their credentials in communications. Diequez, Pyenson, and Koransky meet the Academy’s qualification requirements to issue this report.

<sup>1</sup> Centers for Medicare and Medicaid Services. *Chronic Conditions Charts: 2015. Chartbook: 2015 Edition.*