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1

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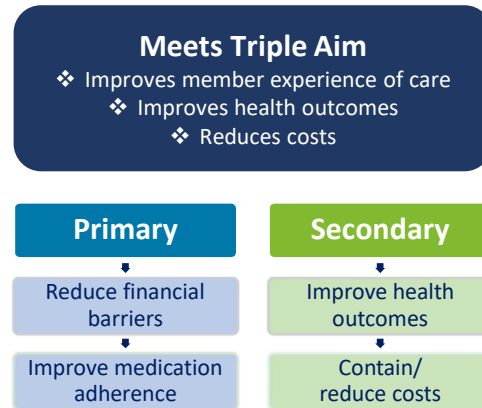
Improvement in Medication Adherence for Members Enrolled in a Zero Dollar Copay Program is Sensitive to Socioeconomic Status: A Blue Cross Blue Shield of Louisiana Perspective

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2

Zero Dollar Copay (ZDC) Program

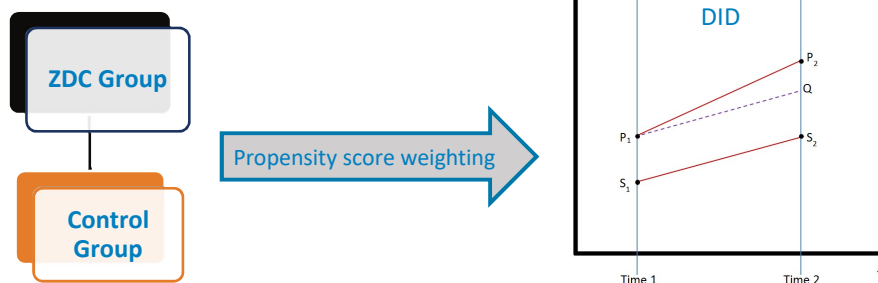
- Incentive-based medication program
- Offers \$0 copays for generic drugs
- Covers 110+ drugs from 34 therapeutic classes related to certain chronic conditions:
 - Diabetes
 - Heart disease
 - Hypertension
 - Lung conditions (e.g. asthma)
 - Mental health conditions



3

Methodology

Using a propensity score weighted difference-in-difference (DID) model allows adjustments for baseline characteristics and trend factors.



Propensity score weighting factors included age, sex, region, risk, Quality Blue program participation, Disease Management program engagement level, conditions, baseline emergency department (ED) visits and hospitalizations, and pharmacy and medical per member per month (PMPM) expenditures.



4

Medication Adherence Rates

- Adherence rates in the ZDC group increased for most drug classes compared to the control group. The largest DIDs were for diuretics (8.4%), anti-diabetics (6.2%), and calcium channel blockers (6.1%).

- $\text{Adherence Rate} = \frac{\text{Members with Proportion of Days Covered (PDC)} \geq 80\%}{\text{All Members}}$

Drug Group	Control Group			ZDC Group			DID
	Baseline	Evaluation	Change	Baseline	Evaluation	Change	
Diuretics	73%	66%	-7.7%	71%	72%	0.8%	8.4%
Antidiabetics	71%	66%	-4.4%	70%	71%	1.8%	6.2%
Calcium Channel Blockers	80%	75%	-5.6%	80%	81%	0.5%	6.1%
Beta Blockers	76%	73%	-3.2%	77%	79%	2.2%	5.4%
Antidepressants	74%	70%	-4.1%	76%	76%	0.3%	4.4%
Antiasthmatic and Bronchodilator Agents	32%	30%	-2.7%	29%	30%	1.6%	4.3%
Antihypertensives	78%	77%	-0.8%	78%	79%	1.8%	2.6%
Antihyperlipidemics	74%	75%	0.8%	75%	77%	2.1%	1.3%
Hematological Agents - Misc.	80%	76%	-3.7%	82%	79%	-3.7%	0.0%

Drug groups excluded due to small sample size: antianginal agents, antiarrhythmics, anticoagulants, psychotherapeutic and miscellaneous neurological agents.

5

Drug Subclass (group)		Control			ZDC		
		low (\$0-\$39k)	mid (\$40k-\$99k)	high (\$100k+)	low (\$0-\$39k)	mid (\$40k-\$99k)	high (\$100k+)
Grand Total	PDC Change	-2.4%	-0.7%	-1.4%	1.2%	0.8%	0.5%
HMG CoA Reductase Inhibitors	PDC Change	-0.9%	1.4%	0.3%	0.0%	2.7%	0.5%
Biguanides	PDC Change	-3.7%	-1.8%	-1.3%	1.6%	1.9%	1.2%
ACE Inhibitors	PDC Change	0.0%	1.6%	-1.5%	2.7%	1.7%	0.7%
Beta Blockers Cardio-Selective	PDC Change	-3.0%	-0.7%	-3.4%	2.2%	2.9%	0.4%
Calcium Channel Blockers	PDC Change	-6.5%	-1.2%	-2.1%	-0.5%	-0.1%	0.1%
Other Subclasses	PDC Change	-2.1%	-1.3%	-1.7%	1.4%	-0.3%	0.4%

PDC calculated at GPI 6 (Drug Subclass) level.

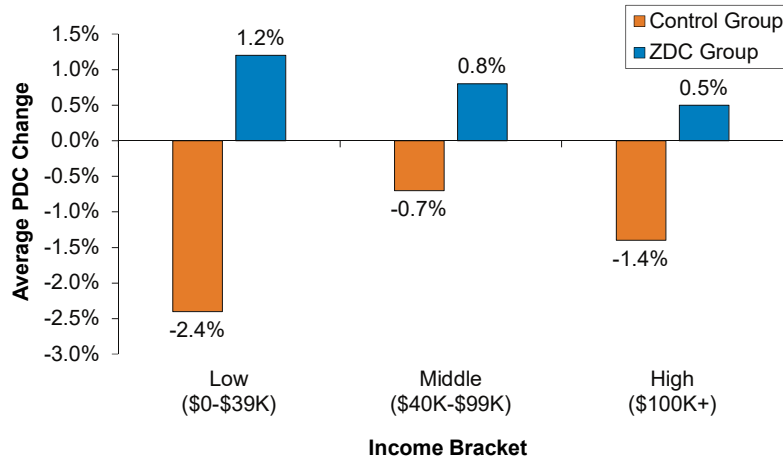
Changes by Household Income Level

Low-income members improved more in medication adherence through proportion of days covered (PDC) compared to members with higher incomes.



6

Medication Adherence by Income Level



- Across all income levels, average medication adherence rates increased for ZDC Group members.
- Members in the lowest income bracket (between \$0 and \$39,000) showed the greatest improvement in medication adherence compared to other income groups.

PDC was calculated at GPI 6 (drug subclass) level. Populations for the low-, middle-, and high-income brackets were 306, 644, and 558, respectively, for the control group and 978, 2177, and 2462, respectively, for the ZDC group.



7

Summary of Program Impacts

Medical PMPM -13%	Pharmacy PMPM +9%
Medication Adherence +4.3%	ER Visits -18%
Outpatient PMPM -38%	Professional PMPM -12%

Note: Results are presented in percentage form for confidentiality purposes. No substantial reduction of inpatient admissions were observed in the study period, March 2017 to March 2019.



8



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