

# An Evaluation of the Impact of Rite Aid Pharmacy Closures on Member Adherence, Out-of-Pocket Spending, and Access to Pharmacies

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#### Background

- In 2023, Rite Aid Pharmacy filed for Chapter 11 bankruptcy, announcing the closure of hundreds of stores nationwide, including more than 200 stores in Michigan
- Serving as a pharmacy in the preferred network to Blue Cross Blue Shield of Michigan (BCBSM) and Blue Care Network (BCN) Medicare members, Rite Aid Pharmacy closures caused disruption in access to medications
- Reduced pharmacy access may impact medication adherence, increase out-of-pocket (OOP) costs if members transition to out of network pharmacies, and delay medication access
- CMS evaluates Medicare Part D plans using Star ratings, which include medication adherence measures for diabetes (DIA), hypertension (HTN), and cholesterol (CHO) medications
- In addition to these direct impacts, there is concern that members impacted by these closures may reside in or near pharmacy deserts, limiting access to medications

## Objective

To assess the impact of Rite Aid Pharmacy closures on Star adherence measures, OOP spending, and changes in pharmacy utilization

### Methods

- Retrospective cohort study evaluating 21,782 Medicare Advantage Prescription Drug (MAPD) plan member's pharmacy claim data from 1/1/2024 to 12/31/2024
- Inclusion Criteria
  - Members who indexed in at least one medication adherence Star measure (DIA, CHO, or HTN) in the 11/2024 Acumen report
  - Members must have had their most recent fill of a Star adherence medication at a Rite Aid location, confirmed by 06/2024 data
  - Members must have maintained eligibility in the plan through 12/31/2024
- US Census Data was utilized to determine whether members were based in rural or urban zip codes
- Adherence is defined as a proportion of the days covered (PDC) greater than or equal to 80%, captured at year end
- A member-level propensity score matched control group was developed with support from a proprietary vendor
- Data was analyzed using descriptive and chi-squared analysis

Timeline of Rite Aid Closures and Claims Analysis Window

**09/05/2023:**Initial Rite Aid Pharmacy
Closures Begin in MI

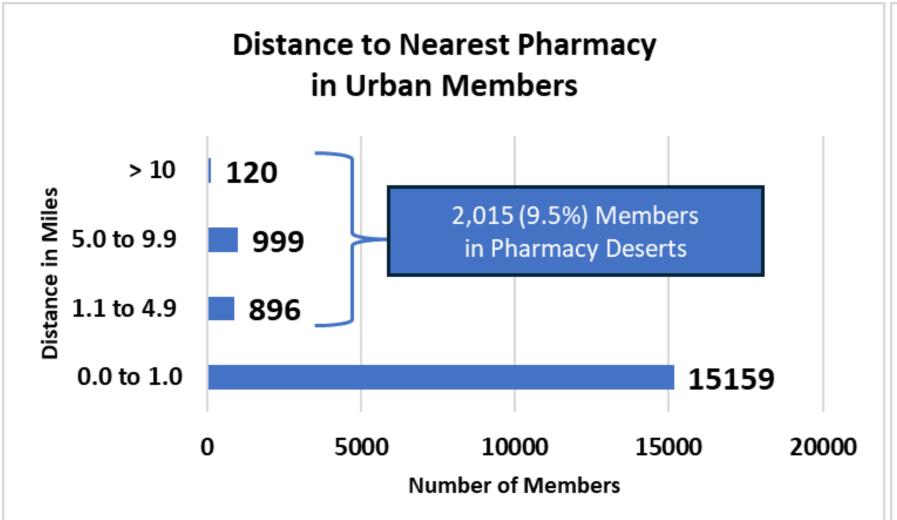
**06/25/2024:**Onset of Widespread Rite
Aid Closures Across MI

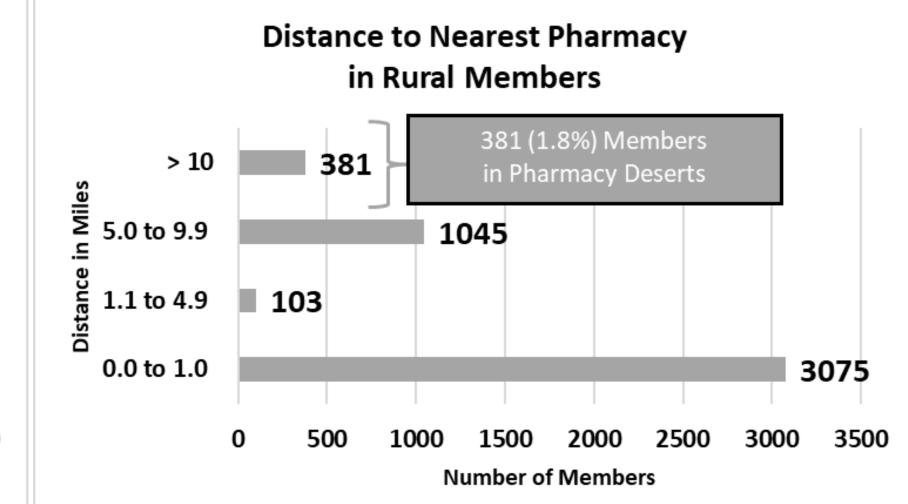
# 01/01/2024:12/31/2024:Start of Claims DataEnd of Claims DataCollection PeriodCollection Period

## Results

| Table 1: Member Demograp   | hics                        |                               |            |                   |                |       |       |                   |  |
|----------------------------|-----------------------------|-------------------------------|------------|-------------------|----------------|-------|-------|-------------------|--|
|                            | Rite Aid Cohort             |                               |            |                   | Control Cohort |       |       |                   |  |
|                            |                             | n:                            | =21782 (%  | 5)                | n=27147 (%)    |       |       |                   |  |
| Mean Age in Years ± SD     |                             |                               | 75 ± 7.7   |                   | 75 ± 7.5       |       |       |                   |  |
| Gender                     |                             |                               |            |                   |                |       |       |                   |  |
| Male                       |                             | 10                            | 747 (49.39 | %)                | 13631 (50.2%)  |       |       |                   |  |
| Female                     |                             | 11                            | 035 (50.79 | %)                | 13516 (49.8%)  |       |       |                   |  |
| Line of Business (LOB)     |                             |                               |            |                   |                |       |       |                   |  |
| BCN                        | 5158 (23.7%)                |                               |            |                   | 6661 (24.5%)   |       |       |                   |  |
| BCBSM                      | 16,624 (76.3%)              |                               |            |                   | 20,469 (75.4%) |       |       |                   |  |
| Adherence (ADH) Gaps By Lo | Adherence (ADH) Gaps By LOB |                               |            |                   |                |       |       |                   |  |
|                            | DIA                         | HTN                           | СНО        | Total Gaps by LOB | DIA            | HTN   | СНО   | Total Gaps by LOB |  |
| BCN                        | 1049                        | 3326                          | 3961       | 8336              | 927            | 3085  | 3764  | 7776              |  |
| BCBSM                      | 3407                        | 10,379                        | 12,201     | 25,987            | 3048           | 9662  | 11309 | 24019             |  |
| Total Gaps by Measure      | 4456                        | 4456 13705 16162 <b>34323</b> |            |                   |                | 12747 | 15073 | 31795             |  |
| Geographic Distribution    |                             |                               |            |                   |                |       |       |                   |  |
| Urban Zip Code             | 17174 (78.85%)              |                               |            |                   | 21900 (80.67%) |       |       |                   |  |
| Rural Zip Code             | 4604 (21.15%)               |                               |            |                   | 5247 (19.33%)  |       |       |                   |  |

Figure 1. (Left): Member's Distance to Nearest Pharmacy in Urban Zip Codes; (Right): Distance to Nearest Pharmacy in Rural Zip Codes





| Table 2: Adherence Rates by Geography |                       |                       |          |  |  |  |  |
|---------------------------------------|-----------------------|-----------------------|----------|--|--|--|--|
| ADH Gap                               | Urban Zip<br>ADH Rate | Rural Zip<br>ADH Rate | P Value  |  |  |  |  |
| DIA                                   | 79.52%                | 81.11%                | p = 0.35 |  |  |  |  |
| HTN                                   | 85.25%                | 84.68%                | p = 0.41 |  |  |  |  |
| СНО                                   | 81.46%                | 83.86%                | p < 0.05 |  |  |  |  |

| able 3: Closure Impact on OOP Costs |         |                               |                    |                  |  |  |  |  |  |
|-------------------------------------|---------|-------------------------------|--------------------|------------------|--|--|--|--|--|
| ADH Gap Pre-Closur OOP Cost         |         | Average Post-Closure OOP Cost | % Increase in Cost | P Value          |  |  |  |  |  |
| DIA                                 | \$36.00 | \$36.78                       | 2.14%              | <i>p</i> < 0.001 |  |  |  |  |  |
| HTN                                 | \$1.23  | \$2.00                        | 47.68%             | <i>p</i> < 0.001 |  |  |  |  |  |
| СНО                                 | \$1.18  | \$1.87                        | 45.25%             | <i>p</i> < 0.001 |  |  |  |  |  |

| Table 4: Impact of Closures and Pharmacy Access on Adherence |                             |                            |                      |                  |                           |                                  |                  |  |  |
|--|-----------------------------|----------------------------|----------------------|------------------|---------------------------|----------------------------------|------------------|--|--|
| ADH Gap  | Rite Aid Cohort<br>ADH Rate | Control Cohort<br>ADH Rate | % Difference in Rate | P Value          | Found a Pharmacy ADH Rate | Did Not Find a Pharmacy ADH Rate | P Value          |  |  |
| DIA  | 78.17%                      | 84.77%                     | -6.60%               | <i>p</i> < 0.001 | 87.20%                    | 13.93%                           | <i>p</i> < 0.001 |  |  |
| HTN  | 82.66%                      | 90.41%                     | -7.75%               | <i>p</i> < 0.001 | 91.33%                    | 24.20%                           | <i>p</i> < 0.001 |  |  |
| СНО  | 79.29%                      | 88.36%                     | -9.07%               | p < 0.001        | 88.83%                    | 19.93%                           | p < 0.001        |  |  |

| able 5: Impact of Pharmacy Network Status on Adherence Rates |                   |              |          |                   |                 |                  |                   |              |           |
|--|-------------------|--------------|----------|-------------------|-----------------|------------------|-------------------|--------------|-----------|
|  | DIA Adherence Gap |              |          | HTN Adherence Gap |                 |                  | CHO Adherence Gap |              |           |
|  | ADH               | % Difference | D Value  | ADH               | % Difference    | D Volus          | ADH               | % Difference | P Value   |
|  | Rate              | in Rate      | P Value  | Rate              | in Rate         | P Value          | Rate              | in Rate      | P value   |
| Switched to  | 97 210/           | 0.06%        | p = 0.97 | 91.76%            | 2.700/          | n < 0 001        | 89.19%            | 2.25%        | p < 0.001 |
| <b>Preferred</b>   | 87.21%            |              |          |                   |                 |                  |                   |              |           |
| Switched to  | 07.150/           |              |          | 90.000/           | 2.70%   p < 0.0 | <i>p</i> < 0.001 |                   |              |           |
| Standard   | 87.15%            |              |          | 89.06%            |                 |                  | 86.94%            |              |           |

#### Discussion

- Efforts towards promoting pharmacy access are often targeted towards rural areas, but there are more members in urban areas living in pharmacy deserts
- There is a relationship to uncover with pharmacy network status, proximity to pharmacy, and end of year adherence rates
- There is no statistical significance in DIA gap adherence rate whether members switched to a preferred or standard pharmacy
  - DIA branded medications are often more expensive than CHO and HTN medications
  - DIA traditionally has worse adherence than CHO and HTN measures
  - May be a result of the sample size
- As alternative methods to medication delivery, changes in policy, and reimbursement change occurs, pharmacy closures may continue to rise
- The research sheds light on the importance of health plan consideration in tier design, pharmacy network status, and future strategy implementation as closures occur

#### Conclusions

- The widespread Rite Aid Pharmacy closures worsened MAPD members' medication adherence and increased OOP costs
- Members who switched from Rite Aid Pharmacy to a standard pharmacy had lower adherence
- Future directions include
  - Exploring adherence rates based on distance based to pharmacy network status
  - Further stratifying the data in the DIA adherence gap to evaluate differences in adherence and OOP costs between branded and unbranded diabetes medications
- Limitations
  - Social determinants of health (SDOH) factors like access to transportation and health literacy were not accounted for
  - Limited time-frame, resulting in difficulty in capturing long-term adherence trends
  - The study was not designed to perform a detailed analysis on unattained members
  - Lack of refill could be attributed to discontinued medications, difficultly in obtaining pharmacy access, motivation

#### **REFERENCES**

Guadamuz, Jenny S et al. "Assessment of Pharmacy Closures in the United States From 2009 Through 2015." *JAMA internal medicine* vol. 180,1 (2020): 157-160. doi:10.1001/jamainternmed.2019.4588

#### **DISCLOSURES**

Noreen Jabiro, Amy Pallisco, Amy Alexander: Nothing to Disclose