

Sunshine in the Black Box of Pharmacy Benefits Management

Florida Medicaid Pharmacy Claims Analysis



January 30, 2020

3  AXIS
Advisors

Prepared for the Florida
Pharmacy Association (FPA)
and American Pharmacy
Cooperative Inc. (APCI)

1 ABOUT THIS REPORT

The Florida Pharmacy Association (FPA) and American Pharmacy Cooperative, Inc. (APCI) commissioned 3 Axis Advisors LLC to study the Florida Medicaid program with the initial intention of understanding the impact of **spread pricing** on Florida's small community pharmacy providers. Our prior work has found strong evidence of spread pricing in Medicaid programs in New York, Illinois, and Michigan, while state government work in Ohio, Kentucky, Georgia, Virginia, and Maryland has definitively quantified spread in their state's Medicaid programs as well.^{1, 2, 3, 4, 5, 6, 7, 8} While we did not have all of the data required to perform an audit to completely pinpoint spread pricing in Florida Medicaid, it was the hope of FPA and APCI that we could perform a transparent assessment of spread in Florida, with the goal of providing any evidence to the state for it to research further.

As we started to gather data, we realized that Florida - owing to its laudable commitment to transparency - offered a unique opportunity to go well beyond spread pricing in our data analysis. The more than 350 million deidentified claims obtained through a Freedom of Information Act Request to the **Agency for Health Care Administration (AHCA)** gave us the most robust dataset to study how all funds related to outpatient prescription drugs flow through Medicaid. This dataset gave us the ability to definitively see what each **managed care organization (MCO)** reported paying for each drug - **National Drug Code (NDC)** - to each pharmacy - **National Provider Identifier (NPI)**. We could, for the first time, fully analyze and disclose to the public *the state's view* of who was collecting the funds that it was entrusting its MCOs to distribute to the pharmacy providers serving its Medicaid patients. Realizing this, we accepted this project with FPA and APCI with the agreement that the project would have a completely open-ended scope. Limiting the scope of our work to only an analysis of spread pricing would be a disservice to the learnings that could be gleaned from such a robust dataset and would be inconsistent with our mission of bringing better transparency to the very opaque manner in which the U.S. prescription drug supply chain operates.

One problem we immediately encountered was that due to spread pricing, we understood that the state's databases did not necessarily reflect the rates at which Florida's pharmacies were being reimbursed. As such, we invested a significant amount of time and effort to [collect deidentified claims data](#) from more than 100 small community pharmacies across Florida. The goal of this work was primarily to validate the state's claims data - to learn how biased it was due to spread pricing. We are grateful to the many pharmacy owners that worked with us to provide data to help validate the state's claims data. Without their help, we would have not been able to obtain as complete of a picture of how funds flow within Florida Medicaid managed care.

This report includes many terms uniquely used within the drug supply chain that may be foreign to the general public. We have done our best to highlight all such terms in **bold-orange** font and provide definitions in the [Glossary](#). In addition, all [green underlined text](#) are hyperlinks, which the reader can click in an electronic version of this report for easier navigation from one section to another.

Lastly, this report includes the most robust [Methodology section](#) we have written to date. It attempts to present you with all the information you would need to replicate the analysis performed in this report, including all assumptions, transformations, and flows created to assemble our finished databases. It is our sincere hope that this level of transparency will help all parties interested in the inner workings of the U.S. drug supply chain find better fact-based answers to their questions.

2 EXECUTIVE SUMMARY

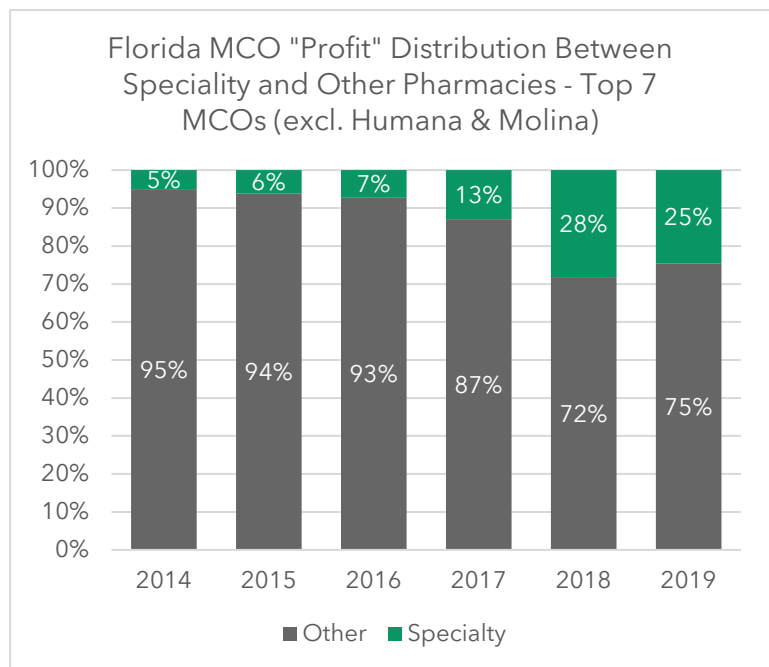
As is the case with any entity, a pharmacy incurs a cost to do business. In pharmacy, this is called the **cost of dispensing (COD)**. The Center for Medicare and Medicaid Services (CMS) requires all states to conduct a COD analysis for their pharmacy providers and reimburse them this amount for each Medicaid **fee-for-service (FFS)** claim on top of the cost to acquire the drug as measured by **National Average Drug Acquisition Cost (NADAC)** or a state's own **Actual Acquisition Cost (AAC)**. Florida has determined the COD incurred by pharmacies in the state to be \$10.24 per claim.⁹ Our analysis of Florida's claims data [confirms that the state is reporting FFS costs on generic drug claims](#) that includes this **professional dispensing fee**. As such, Florida's claims data suggests that Florida pharmacy providers are being reimbursed at a level that covers their COD in the state's FFS program.

However, CMS' required FFS pharmacy reimbursement methodology does not apply to Medicaid **managed care**. In managed care, the state makes **capitated payments** to MCOs, who then often hire **Pharmacy Benefit Managers (PBMs)** to administer the pharmacy benefit on their behalf. PBMs then set claim payments for pharmacies based on proprietary rate lists that are not subject to CMS' reimbursement requirements. The lack of any standards for provider payments within managed care has allowed Florida's MCOs and PBMs to place substantial pressure on pharmacy margins in Medicaid managed care - our analysis of Florida's [top seven MCOs](#) (excluding those that exhibited [clear data errors](#) or [pricing spread](#)) found that pharmacies were paid a weighted average of just \$2.72 per claim in 2018 - enough to cover just 27 cents on the dollar spent to maintain pharmacy operations. This was down from \$7.70 per claim in 2014.

Figure 2-1 Florida MCO Profit Distribution Between Specialty & Other Pharmacies - Top 7 MCO (excl. Humana & Molina)

But some pharmacies were spared from the substantial pressure on Medicaid managed care margins. As shown in **Figure 2-1**, the state's largest specialty pharmacies collected 28% of the available "profit" paid to all providers in Florida Medicaid managed care in 2018, up from just 5% in 2014. This was despite dispensing only 0.4% of all managed care claims.

It's critical to note that the Specialty group shown in **Figure 2-1** includes only five pharmacy groups: Acaria, Accredo, Briova, Exactus, and Perform Specialty. All five of these groups are either directly affiliated with one of Florida's MCOs or a PBM contracted to manage benefits for a Florida MCO. If we remove the margin



paid out to these "affiliated" pharmacies, the rest of Florida pharmacies were left with a weighted average [\\$1.97 per claim](#) as payment for their services to Florida's Medicaid population.

Ultimately, our work in this report was to study the mechanism by which MCOs and PBMs are allocating the very limited amount of margin to providers across the state. The FFS mechanism is very simple - purely driven by the number of claims. But what about managed care? Throughout this

report, we highlight many examples of how MCOs and PBMs appear to be using their control in managed care to incrementally shift dollars to their affiliated companies. The examples include:

- The [near-complete displacement of Walgreens pharmacies by CVS pharmacies in both Staywell/WellCare and Sunshine/Centene](#) during the time when CVS Caremark was providing PBM services to both MCOs
- The extraction of an estimated [\\$8.27 per claim in pricing spread by CVS Caremark off generic Molina claims dispensed at Small Pharmacies in 2018](#), resulting in Small Pharmacies receiving a net loss per Molina generic drug claim of \$1.08
- [Dramatic overpricing of selected high-utilization drugs by Sunshine/Centene](#) (which receives PBM services in part from CVS Caremark) when dispensed at CVS pharmacies (**Figure 2-2**)
- [Overpricing of specialty drugs when they are dispensed at “affiliated” pharmacies](#)
- Mispricing by some PBMs (on behalf of their MCOs) of selected generic dermatological creams (most notably [generic Dovonex - man-made Vitamin D cream](#)), which resulted in abnormally high dispensing and expense on such drugs in Florida Medicaid managed care
 - The growth in byzantine **effective rate contracts** between PBMs and pharmacies, combined with the lack of standard industry brand/generic definitions, creates the possibility that [a hidden form a spread can be collected from such pricing distortions](#)

Figure 2-2: Sunshine/Centene Reported 2018 Aripiprazole Unit Cost by Pharmacy Group

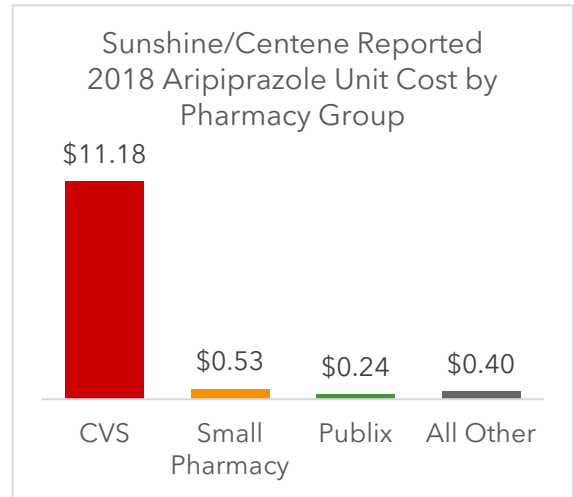
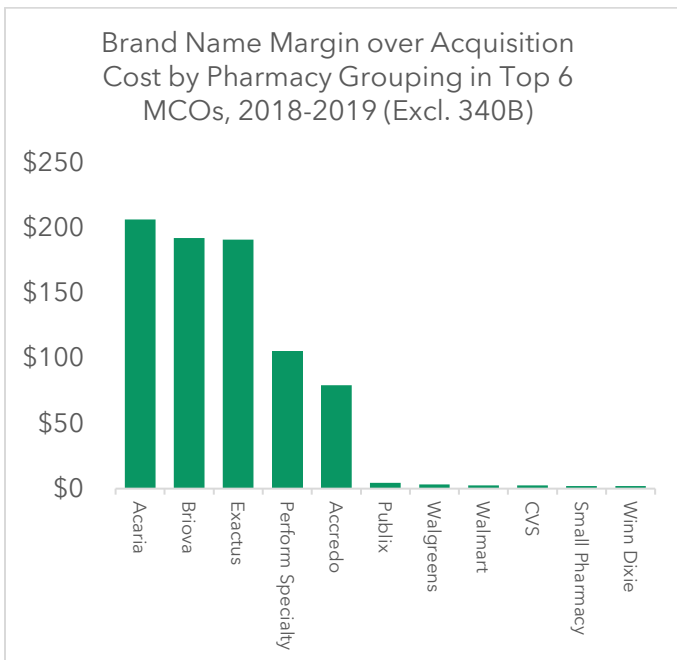


Figure 2-3: Brand Name Margin over Acquisition Cost, by Pharmacy Grouping in Top 6 MCOs, 2018-2019 (Excl. 340B)



While the benefits of such distortions are, in the aggregate, clear when it comes to affiliated specialty pharmacies (**Figure 2-3**), it is more challenging to see such benefits, in the aggregate, for the most dominant player in Florida managed care, CVS Health, who in 2018 filled 45% of all managed care prescriptions and also provided PBM services (in full or in part) for at least [46% of all managed care prescriptions](#). As this report will show, CVS appears to be overpaying itself on some plans (through mechanisms shown in **Figure 2-2**) but [underpaying itself relative to competitors in other plans](#) (e.g. Staywell/WellCare). There is no way with this dataset, in our view, to perfectly reverse engineer the company’s complex pricing strategy across all of Florida managed care. However, we do believe that we have provided irrefutable evidence in this report that whatever strategy is in place is far from equitable for different drugs, MCOs, and

pharmacies. **In our view, any pricing/payment strategy that is not equitable on all three dimensions risks having providers prioritize certain patients with certain disease states over others based on the arbitrary profitability an MCO (or its PBM) applies to the treatment.**

In addition to a granular analysis of relative claims pricing by MCO, pharmacy, and drug, this study also broadly raises questions on how well incentives are aligned between MCOs and the state. It shows how [aggregate MCO administrative expenses have not declined as managed care has grown in Florida](#). This admittedly could be circumstantial evidence, or it could be the fallout of **Medical Loss Ratio (MLR)** requirements. These MLR requirements were intended to ensure that a minimum percentage of capitation revenue is spent on services but can be looked at from a different angle as granting MCOs a fixed percentage of revenue to allocate to overhead expenses. This could create the warped MCO incentive for higher capitation revenues to be able to generate and capture higher administrative fees.

We also provide data that calls into question a [MCO's incentive to effectively manage drug utilization](#) to the state's **Single Preferred Drug List (SPDL)**. MCOs are ultimately paid capitated rates based on pre-rebate dollars, while states ultimately are the beneficiaries from significant statutory and supplemental rebates. We illustrate that the lowest **net cost** drug for a given indication is not necessarily the lowest **gross cost** drug. Without being held accountable to dispensing the lowest net cost drug option for the state, MCOs may instead dispense the lowest gross cost drug, increasing net costs for Florida, and the federal government, which is paying for 61.96% of Florida's Medicaid program.¹⁰

Lastly, with regards to spread pricing (the initial impetus for this study), of the top six MCOs that we analyzed (between 2017 and 2019), we only found clear signs of pricing spread in Molina in 2017 and 2018, which abruptly disappeared at the start of 2019. The other large MCOs not only did not show signs of spread, but showed AHCA claims payments that were [almost identical](#) to claim-level pharmacy reimbursements collected from more than 100 small community pharmacies across the state. This is quite different from the experience of Ohio, Kentucky, Georgia, Virginia, and Maryland, which have found considerable pricing spread in their Medicaid managed care programs. We urge the state to audit the program to confirm or refute our findings.

Overall, our five-month exploration of Florida Medicaid claims data, which has produced this 200+ page document, leaves us with the following realization: The evolution of the drug supply chain, which has undergone substantial vertical integration in recent years, puts the vertically integrated companies that control Medicaid benefits in the best position to thrive. Meanwhile, players across the supply chain that are not vertically integrated are put at a disadvantage. As such, an increasingly consolidated supply chain may be able to, in the near-term, deliver a less expensive "product" due to numerous service-line cross-subsidies. Florida has displayed this with its [razor thin MCO pharmacy margins](#). But what is the long-term cost of this to the state? Is it in the best interest of Medicaid to hand over prescription drug management to insurance companies that also own the PBM and pharmacy functions, without closely monitoring their interactions? Or should we return to the original benefit of the managed care model - where each function can, in an unconflicted manner, act as a check and balance on the other, forming a market-driven "invisible hand" that can competitively drive down costs without sacrificing service quality?

Our Florida claims analysis sheds light on some glaring structural concerns embedded at the core of all state managed care programs. We hope it is helpful in advancing the national dialogue towards creating the most pro-competitive Medicaid delivery system that creates the best value for our taxpayer dollars at the lowest long-term risk to our states and their beneficiaries.

3 KEY FINDINGS

This report is organized into seven sections, as follows:

- Analysis of Florida Medicaid Capitation Rate Payments
- Formulary Analysis
- Generic Drug Spending Analysis
- Brand Drug Spending Analysis
- Pharmacy Reimbursement Analysis
- Overall Drug Spending / Reimbursement Trends
- Methodology

The following sub-sections present the summary and key takeaways from each of the first six sections.

3.1 ANALYSIS OF FLORIDA MEDICAID CAPITATION RATE PAYMENTS

Managed care organizations (MCOs) - the companies hired by states to manage its Medicaid benefit - function like insurance companies. They receive premium payments from the state, called "**capitation payments**," that they use to pay for services for Medicaid beneficiaries and cover administrative expenses. The greater the gap between capitated payments and overall expenses, the more profit available for shareholders (for those MCOs that are for-profit entities).

While the direct aim of this study is to analyze Florida Medicaid pharmacy claims data, we added a high-level review of capitation rate payments to provide the reader with context on how managed care receives the funds that it then uses to pay for medical services and drug claims.

Our findings are:

- Total Florida Medicaid capitation payments are over \$12 billion per year
 - Pharmacy Services account for 20-25% of MCO expenditures per year
- Audited Florida Medicaid Financial Statements demonstrate that Florida MCOs are working for minimal net operating margin
 - In aggregate, Florida's MCOs have produced negative operating margin in two of the last four years (2015-2018)
- Administrative expenses have grown in line with MCO capitation revenue
 - Administrative expenses have remained fixed at ~11% of revenue, showing no improvement in **operating leverage** over this period
- Data from other states demonstrate the potential profitability of pharmacy services to MCOs
 - Additional information is necessary to understand the extent to which such profitability exists within the Florida Medicaid program for MCOs
- The lack of identified managed care operating margin creates the risk, in our view, that vertically integrated MCOs may attempt to generate profit from their participation in Florida Medicaid through other less-monitored parts of the supply chain (i.e. PBM or Pharmacy)

3.2 FORMULARY ANALYSIS

When it comes to prescription drug coverage, one of the most important decisions any payer must make is what drugs to cover and what drugs not to cover. Medicaid is unique in that it must cover **all** drugs produced by drug manufacturers that are willing to participate in the **Medicaid Drug Rebate Program (MDRP)**.

However, states have flexibility in determining which drugs to “prefer.” A drug specified as non-preferred may have more barriers to being dispensed, such as requiring a **prior authorization (PA)** or step therapy before its usage, whereas a preferred drug does not typically have such barriers.

Florida Medicaid has set one **Single Preferred Drug List (SPDL)** for all pharmacy benefit managers (PBMs) and administrators to follow. Ostensibly, this SPDL has been set by the state to optimize the cost / benefit of providing drug benefits to its Medicaid members. By putting an SPDL in place, Florida has for all intents and purposes, taken formulary management away from its MCOs, instead asking simply for formulary execution.

The aim of this section was to determine how well managed care organizations and their PBMs were executing on the state’s PDL.

Our key findings are:

- Medicaid is unique in that it receives minimum statutory rebates for most drug products available in the U.S., and it can negotiate additional rebates with manufacturers for preferential status.
 - Federal Medicaid rebate amounts increase automatically whenever a drug’s price rises faster than the rate of inflation
 - In 2017, Medicaid rebates reduced prescription costs 55% in the aggregate nationwide; 58% in the aggregate in Florida
 - Use of non-rebateable products represented 8% of MCO utilization in 2018 potentially adding costs to the program
- Florida Medicaid has a single PDL across all MCOs, which can help reduce overall net costs while maximizing rebate collections for AHCA
 - Plans who deviate from AHCA-mandated formulary coverage risk adding costs to Medicaid operations at both the state and federal level
 - In H1 2019, MCOs’ ability to conform to the state’s *Brand Drug Preferred List* varied with plans utilizing between 4-17% of the non-preferred products
 - Further research is needed to fully quantify the impact of non-preferred product utilization in Florida Medicaid, both in terms of patient access and Florida Medicaid financials

3.3 GENERIC DRUG SPENDING ANALYSIS

To provide an incentive for drugmakers to invest in research and development of new medications, brand-name drugmakers are awarded patent protection and marketing exclusivity terms for a drug for a limited time. When such rights expire, inexpensive generic “copies” of brand drugs come to market. In 2018, Florida Medicaid reported a weighted average cost per claim for generic drugs of

just \$16.41. This cost was just 3% of the \$526.66 weighted average cost per claim of brand-name drugs, before rebates. Given the magnitude of cost savings available through generic drug utilization, it should come as no surprise that nearly 83% of all Florida Medicaid drug claims over the past five years were for generic drugs.

However, our research to date has uncovered significant pricing distortions on generic drugs. While the aggregate generic price is undoubtedly low relative to brands, mechanisms are in place within the supply chain to inflate the price a payer is charged for **some** generic drugs when compared to their actual acquisition cost. These hidden mechanisms can create incentives in the supply chain to dispense certain drugs over others, which is tantamount to serving some patients over others.

The focus of our analysis in this section was to determine if (and to what extent) generic drug pricing was being distorted by PBMs, on behalf of their MCO clients. Furthermore, this section aims to explain and illustrate how such practices can lead to unintended consequences and costs.

Our key findings are:

- Managed care has collectively cut its reported generic drug **Margin over NADAC**^a to \$3 per claim in 2018, and \$2.78 per claim in 2019
 - This is more than \$7 below the \$10.24 per claim professional dispensing fee set by Florida in its Medicaid fee-for-service (FFS) program - a fee that, per CMS, should capture all “reasonable expenses” incurred by a pharmacy to dispense a claim¹¹
- The available Margin over NADAC to compensate pharmacies for services was heavily skewed based on the type of drug the pharmacy dispensed
 - 48% of all generic drug Margin over NADAC was paid out on generic drugs comprising only 1.5% of overall claims
- We found three drivers behind which pharmacies gained access to the most profitable generic drugs. The section provides several examples of each driver directly from Florida’s claims data:
 - **Differential drug pricing:** PBMs set prices differently for different pharmacies, in some cases, creating an advantage for **affiliated pharmacies**
 - **Following pricing signals:** PBMs priced some drugs very high relative to acquisition cost, creating an incentive for unaffiliated pharmacies to over-dispense such drugs
 - **Specialty pharmacy steering:** MCOs and PBMs often require that generic specialty drugs be dispensed at their affiliated pharmacies, and report payments to these pharmacies far exceeding their cost to dispense
- We created a “payer/pharmacy matrix” to show how payments for generic drugs vary across MCOs and between pharmacies within the same MCO:
 - As an example, in 2018, Sunshine/Centene (managed in part by CVS Caremark) reported the cost of generic Abilify (on a per unit basis) to be \$11.18, \$0.53, and \$0.24 at CVS, Small Pharmacies, and Publix, respectively
 - Similarly, it reported generic Nexium to cost (on a per unit basis) \$3.72, \$0.38, and \$0.24 at CVS, Small Pharmacies, and Publix, respectively
 - Conversely, it reported levothyroxine sodium tablet to cost \$0.05, \$0.42, and \$0.43 at CVS, Small Pharmacies, and Publix, respectively

^a Margin over NADAC is our proxy for claim “profit.” It is the total reported MCO claim payment less the claim’s National Average Drug Acquisition Cost. See [“Margin over NADAC,” and other key terms and definitions](#) for a detailed discussion on this metric.

- As PBMs look to transition away from **spread pricing** without sacrificing profitability, payers will have to more closely monitor post-transaction claw backs related to **effective rate** contracts between PBMs and pharmacies. Without accounting for these claw backs, Florida Medicaid will not have a complete picture of how Medicaid dollars are being managed and distributed across the drug supply chain, which risks adding costs to the program.

3.4 BRAND DRUG SPENDING ANALYSIS

While only comprising 17% of Florida Medicaid’s claims, brand-name (i.e. trademarked) drugs are responsible for the overwhelming majority of gross Medicaid pharmacy spending. As an example, in 2018, Florida Medicaid spent over \$2.5 billion on brand-name drugs, out of a total drug spend of just over \$2.9 billion. In 2018, the weighted average brand-drug gross cost per claim in Florida Medicaid was \$526.66, up 20% from 2015.

With such high gross ingredient costs on brand-name drugs, pharmacies are required to make an increasing investment to keep such drugs on their shelves. This is because retail pharmacies purchase brand drugs from their wholesalers at slight discounts to their growing list prices. In other words, retail pharmacies are completely blind to the substantial rebates collected by the state on brand drugs driven by the MDRP.

It follows that to continue to have any economic incentive to dispense brand drugs, Florida pharmacies must make a reasonable rate of return on brand drug claims. The focus on our analysis in this section was to analyze the magnitude and direction of the pharmacy **Margin over Acquisition Cost** reported by Florida’s MCOs on brand-drug claims. To the extent that Florida sees value in dispensing brand drugs (which it should, given that some have lower net costs than equivalent generics, owing to sizable brand rebates^b), we conducted an analysis to identify the key drivers of Florida’s brand prescription spending.

Our key findings are:

- Based on a direct analysis of Medicaid’s MCO claims data, Margin over Acquisition Cost reported on brand drugs was (\$1.12) per prescription in 2019 down from \$18.00 in 2014
 - This suggests that, on average in 2019, pharmacies were incurring losses to dispense brand name drugs in Florida Medicaid managed care
- However, on further inspection, we noticed that roughly 10% of brand drug claims were priced at substantial (30%+) discounts to the drug’s **Average Wholesale Price (AWP)**
 - These are more than likely **340B** claims - highly discounted drugs that manufacturers are required to provide to eligible health care organizations
 - Reported 340B costs likely do not reflect the price paid to the pharmacy and, as a result, must be removed from analysis geared towards a better understanding of pharmacy profitability
- After removing estimated 340B claims, we calculate Margin over Acquisition Cost reported on brand drugs was \$7.07 per claim in 2019, down from \$20.94 in 2014

^b Florida demonstrates importance of some of these products by maintaining a *Brand Preferred Over Generic* list, see [Brand vs. Generic Compliance](#) for more a more detailed discussion.

- This translates to a 1.2% gross profit margin for the pharmacy in 2019, assuming full pass through of reported costs
- All top six Florida MCOs have materially cut Margin over Acquisition Cost over the past four years
- However, this overstates payments to retail pharmacies that do not have the ability to dispense the most lucrative specialty drugs
 - Claims dispensed at retail pharmacy groups (e.g. CVS, Publix, Walmart) are being reported at a weighted average Margin over Acquisition Cost between \$2 and 4 per claim within Florida’s MCOs
- Meanwhile, claims dispensed at affiliated or specialty pharmacies (e.g. Acaria, Exactus, Briova, Accredo) are being reported with a weighted average Margin over Acquisition Cost of up to \$200 per claim within Florida’s MCOs
 - Some MCOs (Sunshine/Centene, Staywell/WellCare, United) directly own these pharmacies (Acaria, Exactus, and Briova, respectively) while others direct claims to a specialty pharmacy owned by Express Scripts (Accredo).
- We surprisingly found a disparity between per claim costs reported at these “affiliated” specialty pharmacies versus those reported outside these pharmacies
 - Expensive brand-drug claims (those that cost \$2,000 or more per claim) were, in aggregate, slightly more expensive when dispensed at an affiliated specialty pharmacy
 - This relative mispricing holds when looking at individual drugs like Humira
 - Molina is the only top six Florida MCO that does not show this dynamic, but notably is using a specialty pharmacy (Accredo) that has no affiliation with itself or its PBM (CVS Caremark)

3.5 PHARMACY REIMBURSEMENT ANALYSIS

Up to this point in this study, all analysis has been of pharmacy claims data from the **AHCA claims database**. This data reflects the reported claim payments from Florida’s MCOs to their PBMs, not necessarily the reimbursements to Florida’s pharmacy providers. The difference between the two is called spread pricing, and as found in Ohio, New York, Kentucky, Michigan, Illinois, Georgia, and Maryland, can be a considerable source of PBM profit within state Medicaid programs.

The goal of the analysis performed in this section was to ascertain to what extent spread pricing is occurring in Florida Medicaid managed care. To accomplish this, we collect deidentified claims data from more than 100 small community pharmacies in the state and compared this data to the claims data in AHCA’s database.

Our key findings are:

- Of the claims we collected from pharmacies, we were able to match more than 350,000 within AHCA’s database
 - We matched at least 22,000 claims for each of the top six MCOs, with the most being Staywell/WellCare, with 107,000 claims matched
- In 2017 and 2018, there was an **exact match** in the weighted average cost per unit reported by pharmacies and by AHCA for all matched claims reported by five of the top six MCOs

- Molina was the only MCO with a difference in unit cost between the two databases – AHCA’s reported units were \$0.18 per unit, or 50%, higher than pharmacy-reported reimbursements for matched generic claims. Applying this percentage to Molina’s total 2018 oral solid drug spending gets us to an estimate of just over \$10 million in 2018 PBM spread
- In 2019, Molina’s pricing spread appears to have disappeared, suggesting that all six of Florida’s top MCOs have shifted to a non-spread model
 - Our analysis strongly suggests that there was likely very little spread pricing (if any) in Florida Medicaid in 2019
- However, the analysis also lends credence to the notion that the warped payments reported in AHCA’s claims data (detailed in the prior two sections on [Generic](#) and [Brand](#) drugs) largely reflects actual pharmacy experience within Florida Medicaid’s program

3.6 OVERALL DRUG SPENDING/REIMBURSEMENT TRENDS

With the requisite knowledge regarding brand and generic pricing trends within Florida’s MCOs, along with the knowledge that spread pricing does not appear to be impactful to five of the top six MCOs, we can construct an aggregate view of pharmacy profitability in Florida Medicaid.

Our key findings in this section are:

- Overall margins available for Florida’s pharmacy providers offered by Florida’s top six MCOs have materially declined from a high of \$7.43 per claim in 2014 to a low of \$3.45 per claim in 2019
- While the Florida’s Medicaid profit “pie” is in the aggregate, undoubtedly shrinking, it is also getting redistributed to the pharmacies that handle of the bulk of Medicaid’s vastly more expensive specialty drugs
 - Despite only accounting for 0.4% of the prescription claim volume, specialty pharmacies affiliated with MCOs and/or PBMs captured 28% of the available pharmacy dispensing margin in 2018
- There are inherent risks within such a concentrated system. Recent mergers amongst the largest MCOs within Florida Medicaid (Staywell/WellCare and Sunshine/Centene) could risk worsening the financial picture for Florida’s [Small Pharmacies](#) going forward
 - In 2018, Staywell/WellCare was the best MCO payer for Florida pharmacies whereas Sunshine/Centene was the worst
 - If we apply 2019 Sunshine/Centene payment rates to Staywell/WellCare’s pharmacy claims in the first half of 2019, it removes \$11.4 million in margin from Small Pharmacies in less than six months.
 - This would bring WellCare’s MCO-leading Small Pharmacy margin down from \$9.69 per claim to a loss of \$1.49 per claim
- In an environment characterized by razor thin (and declining) margins, the only legitimate controllable variable for pharmacies to improve their economics is to bring on incremental volume or cut cost by reducing staffing and abandoning under-profitable service offerings
 - This benefits growing population centers where volume can be more readily concentrated, whereas rural areas could risk losing access to pharmacy providers given their more limited ability to grow volume

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7 ANALYSIS OF FLORIDA MEDICAID CAPITATION RATE PAYMENTS

States typically pay Medicaid **managed care organizations (MCOs)** for a package of benefits through fixed periodic payments. These payments, called **capitation payments** or “rates,” are typically made on a **per member per month (PMPM)** basis. MCOs use this money to manage their operations, make payments to providers, and to generate profits for the plan.¹²

Section 1902(a)(30)(A) of the Social Security Act requires that state Medicaid agencies who utilize MCOs, and make payments to them via a capitation rate, do so in a manner that: avoids payment for unnecessary utilization, are sufficient to enlist enough providers, and are consistent with efficiency, economy, and quality. In addition, the Omnibus Budget Reconciliation Act of 1981 requires that capitation payments be made on an actuarially sound basis. States retain some flexibility for setting payment rates for these risk-based plans. At the bare minimum, states are required to incorporate the following as part of their rate setting process per CMS:¹³

- base utilization and cost data for the applicable Medicaid population;
- adjustments to smooth data and to account for factors such as medical trend inflation, incomplete data, and utilization;
- rate groupings specific to eligibility category, age, gender, locality/region, and (optionally) diagnosis or health status; and
- other mechanisms and assumptions that are appropriate for individuals with specialized needs, using risk adjustment, risk sharing, or other appropriate cost-neutral methods.

States are required to document their rate-setting methodology and the base utilization data used to set rates in order for CMS to oversee their actuarial soundness. Annually, CMS releases the *Medicaid Managed Care Rate Development Guide* to assist states with developing their rates to ensure compliance.¹⁴

In Florida, MCO operations began in 2006 via a demonstration program called the Florida Medicaid Pilot (also known as the Florida Medicaid Reform). The initial pilot was for low-income children, pregnant women and parents, and aged and disabled individuals. What started as a pilot in two counties expanded to three more counties in 2007 and then to all counties by 2011, at which time it was renamed the Statewide Medicaid Managed Care (SMMC). Two years later (in June 2013), the Federal government approved Florida’s request to move nearly all eligible Medicaid beneficiaries into SMMC starting in 2014 via a phased in approach. This approach started with expanded long-term care services and then expanded the Managed Medical Assistance (MMA) program that was previously in a five-county pilot.¹⁵

7.1 ANALYSIS OF FLORIDA MCO FINANCIAL SUMMARIES

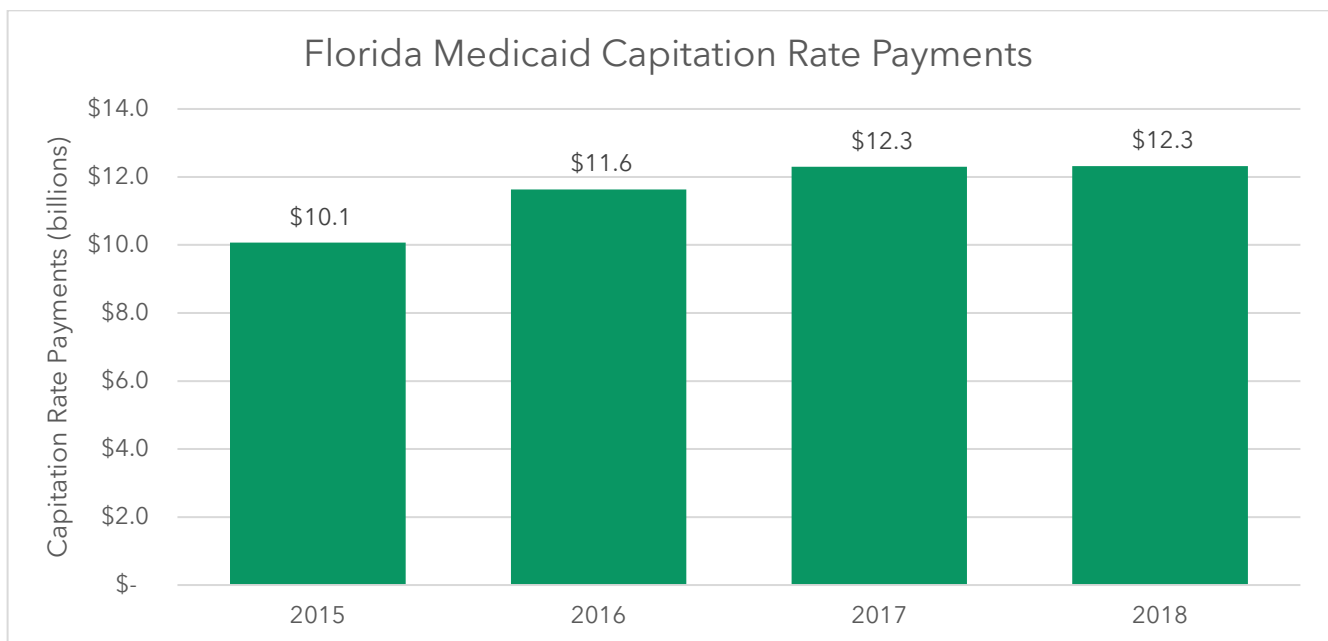
As part of our analysis of the Florida Medicaid program, we obtained five years’ worth of financial summaries and audits for Florida Medicaid’s MCOs. Specifically, we received from AHCA:

- Five years (2014-2018) of MMA (Managed Medical Assistance) and LTC (Long Term Care) Financial Summaries for all of Florida’s MCOs;
- 26 ASR (Achieved Savings Rebate) audit result letters; and
- One Dental Financial Summary.

These documents, hereafter referred to as the **Financial Summaries**, provide information related to the total revenue MCOs receive, the total cost incurred to deliver services (referred to as **managed medical assistance or MMA services**), and the costs to administer the benefit (operating income or margin). These financial documents were a logical starting point for our analysis, as they provide an aggregate view of the first input into the entire MCO system (revenue), the goods purchased by AHCA (MMA services), and an assessment of the incentive to do business (operating margin). While obvious, it bears noting that MCOs must have revenues at or above operating costs to continue operations and to continue to provide services. Furthermore, those MCOs that are for-profit need to generate margin above this break-even point to generate satisfactory returns for their investors.

We will start our review of the Financial Summaries with an assessment of MCOs' received revenue. As outlined in the documents, total revenue earned by the plan is a function of "capitation revenue, amounts due to/from the plan as a result of nursing home rate reconciliation and other plan-related revenue from sources other than those previously mentioned."¹⁶ In **Figure 7-1**, we sourced the statewide total revenues, hereafter referred to as capitation rate payments, for all MCOs between 2015 and 2018. As anticipated, given the expansion of services and Medicaid population growth delivered by Florida Medicaid, we see that in the four-year period, capitation rate payments for the plans have grown by 22% from \$10.1 billion in 2015 to \$12.3 billion in 2018.

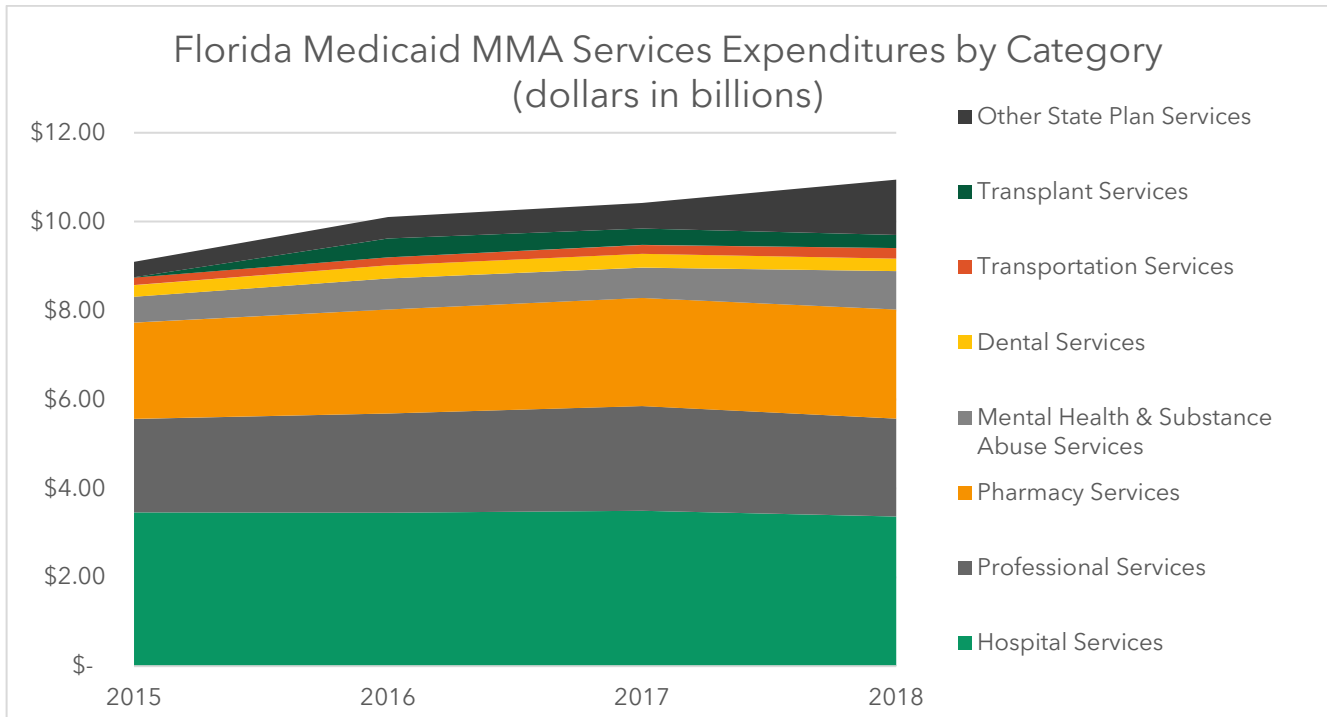
Figure 7-1: Florida Medicaid Capitation Rate Payments



Source: 3 Axis Advisors analysis of data obtained from AHCA-provided MMA Financial Summaries

Next, we wanted to understand what services were purchased with the provided capitated rate payments and how that changed over time. To perform this analysis, we took the MMA service groups provided in the Financial Summaries and presented them in a stacked area chart to trend MMA expenditures over time. As can be seen in **Figure 7-2** (on next page), the primary services purchased by AHCA through the MCOs, in terms of aggregate expenditures, are *Hospital, Professional, and Pharmacy Services*, with *Other State Plan Services* becoming an emerging cost driver in 2018.

Figure 7-2: Florida Medicaid MMA Services Expenditures by Category



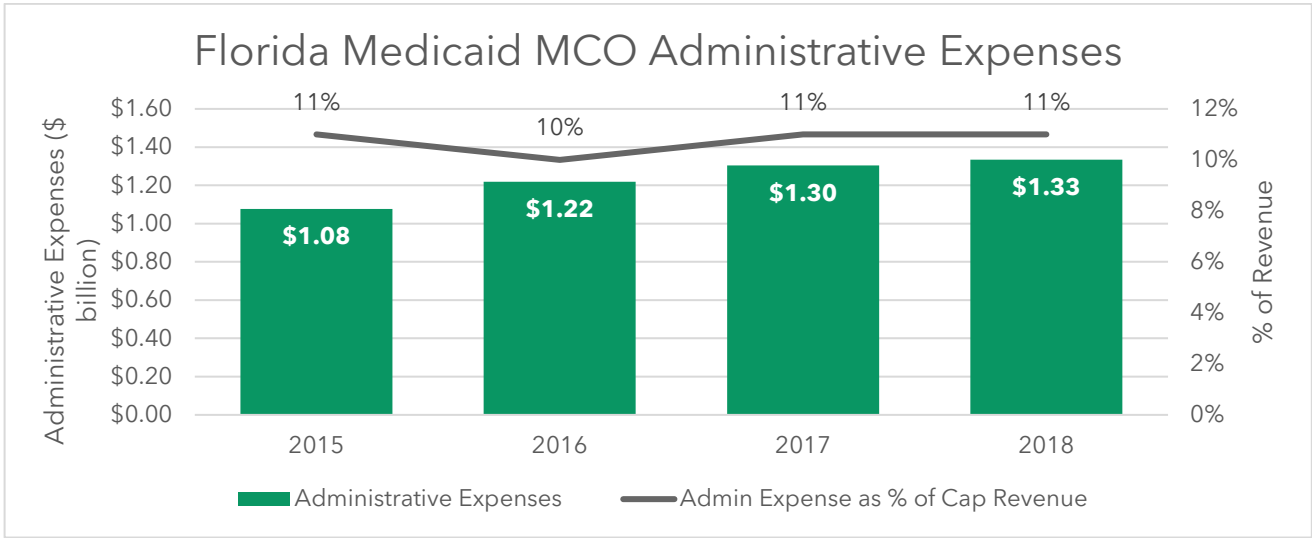
Source: 3 Axis Advisors analysis of data obtained from AHCA-provided MMA Financial Summaries

Consistently, *Hospital Services* represent \$2 out of every \$5 spent in MMA services by Florida’s MCOs. *Professional* and *Pharmacy Services* each account for approximately \$1 out of every \$5 in MMA services expended per year. Perhaps unsurprisingly, given that they represent 80% of costs, trends around these three service lines can be very impactful to the overall Florida Medicaid experience of capitated rate revenue. As the cost of services rise, so too must capitation rate revenues to match these added costs and keep the rates fiscally sound. In the most recently available source for review (Milliman’s September 2016-2017 Rate report), inpatient hospital services were identified as the primary driver of the overall 4.5% increase in that year-over-year capitation rate revenue, with pharmacy services identified as the second leading cause for rate increases.¹⁷

Interestingly, looking forward for Florida Medicaid, we see significant growth in terms of MMA expenditures in the *Other State Plan Services* category. It is unclear from the reviewed records why *Other State Plan Services* grew so rapidly from 2017 to 2018 (115% growth; \$666 million in added expenses). By definition, these are services related to “amounts paid for Home Health, Private Duty Nursing, Personal Care, Hospice, Durable Medical Equipment (DME) and other State Plan Services not specifically listed.”¹⁸ While outside the scope of review for this analysis, we have identified this key incremental cost driver to help illustrate that insofar as MCOs are impacted by changes in costs to deliver services in one MMA service category, such incremental costs may cascade and affect their operations in another category of service.

In **Figure 7-3** (next page), we review the total amount spent on administrative expenses by MCOs between 2015 and 2018 (green bars), as well as MCO administrative expenses as a percentage of their aggregate reviewed capitation rate revenue from the Financial Summaries (grey line). MCO administrative expenses grew by 23% over the four-year period (+\$258 million), increasing in line with MCO revenue growth. Besides a dip to 10% in 2016, average administrative expenses as a percentage of revenue consistently were reported at 11%.

Figure 7-3: Florida Medicaid MCO Administrative Expenses

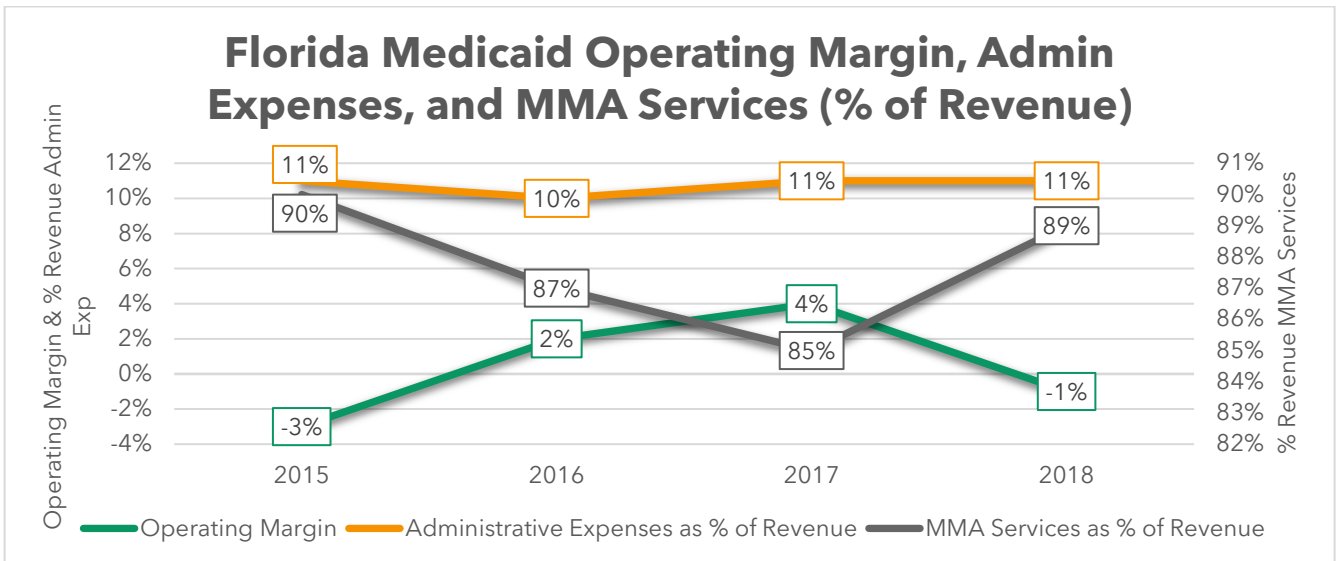


Source: 3 Axis Advisors analysis of data obtained from AHCA-provided MMA Financial Summaries

Operating margin measures the proportion of a plan's revenue that remains after paying for operating costs. It is directly tracked for all of Florida's MCOs as part of the Financial Summaries. Viable, sustainable, and growing entities must generate enough in profit to cover their fixed costs, expand operations, and generate increasing returns, which translates to growth in company valuation for its investors.

In **Figure 7-4**, we measure the aggregate operating margin for all of Florida's MCOs over the four-year period (green line - left axis) alongside the percentage of capitation rate revenue directed to MMA services (grey line - right axis) and administrative expenses (orange line - left axis). Notably, **in two of the four years we reviewed, aggregate margins for MCOs were negative**. Positive operating margin years only appear to be delivered in years where services - rather than administrative costs - were depressed as a percentage of capitation revenue.

Figure 7-4: Florida Medicaid Operating Margin, Admin Expenses, and MMA Services (% of Revenue)



Source: 3 Axis Advisors analysis of data obtained from AHCA-provided MMA Financial Summaries

We must preface the remainder of this section by reiterating that 3 Axis Advisors LLC does not have the requisite experience nor data to come to any concrete conclusions on the overall effectiveness and efficiency of Florida’s MCOs. However, much of the success in our work to date has been in our ability to look at health care data with an outsiders view, which allows us to ask “dumb” questions that industry insiders may take for granted as “just the way things work.” A prime example here is our question from our earliest research on why Medicaid’s publicly reported generic drug unit costs (available in the SDUD on Data.Medicaid.gov) often were wildly disconnected from acquisition cost (available in NADAC database on Data.Medicaid.gov). We initially suspected this was a simple question that most insiders would have simple answers to. They didn’t. It turned out to be large-scale signs of a PBM practice called **spread pricing**, which has since been widely criticized by both state and Federal officials.

That said, here are two “dumb” questions with regards to our cursory analysis of Florida managed care financials. We have also presented our hypotheses in response to these questions. This report does not aim to definitively prove our hypotheses. It simply aims to present facts that will motivate the state to find comprehensive answers to these questions:

- 1) What incentive is there for a profit-seeking entity to operate as an MCO in Florida when aggregate margins were in 2018, negative?
 - a. **Hypothesis:** We suspect that if MCOs were only limited to the profit reported within the audits, they would not have much of an incentive to continue to operate in Florida (except for the ability to capture growing administrative fees - our second question below). But as this report will detail, MCOs have several other mechanisms to generate profit from their participation in managed care - at least with regards to the prescription benefit. This mechanism for realizing profits in other parts of the supply chain (via pharmacy and/or PBM) is only becoming more concerning as MCOs launch and/or partner with affiliated PBMs and specialty pharmacies, between which the financial relations are largely hidden. We urge the state to perform a full audit on all revenue accruing to its MCO’s affiliated and contracted companies - not because we have any conviction that the aggregate revenue realized by the parent companies will be found to be excessive - but because such companies may be using their managed care arm as a “loss leader” and harvesting profits from other arms of their business to generate a reasonable aggregate rate of return for their investors. Additionally, we recommend an audit because we believe that the opaque ways in which such revenue is derived (e.g. formulary mismanagement, differential drug pricing, specialty pharmacy steering) may conflict with the state’s interests.

- 2) Why are administrative costs not declining as percentage of capitation revenue?
 - a. **Hypothesis:** In Elisabeth Rosenthal’s *New York Times* best-selling book, *An American Sickness*, Rosenthal provides us with an insight that may explain Florida’s rising MCO administrative fees:¹⁹

“The framers of the Affordable Care Act tried to curb insurers’ profits and their executives’ salaries, which were some of the highest in the U.S. health care industry, by requiring them to spend 80 to 85 percent of every premium dollar on patient care. Insurers fought bitterly against this provision. Its inclusion in the ACA was hailed as a victory for consumers... now that they suddenly have to use 80 to 85 percent rather than, say, 75 percent of premiums on patient care, insurers have a new perverse

motivation to tolerate such big payouts. In order to make sure their 15 percent take is still sufficient to maintain salaries and investor dividends, insurance executives have to increase the size of the pie. To cover shortfalls, premiums are increased the next year, passing costs on to the consumers. And 15 percent of a big sum is more than 15 percent of a smaller one.”

To be sure, our data in this section only spans four years of managed care performance. It may be completely circumstantial that we found evidence in Florida supporting Rosenthal’s claim. But, in our view, the economic logic underlying this warped incentive in health care insurance is sound. As such, we recommend further research of managed care Financial Summaries on a national scale to better understand to what extent this warped incentive could be driving up Medicaid health care costs.

Having indulged our “dumb” questions, let us return to the function of MCOs within Florida Medicaid. In our view, one of the reasons for states like Florida to engage with MCOs is for the purposes of risk mitigation. This is because MCOs are responsible for payment of all covered services that their enrollees receive. It is therefore possible that a MCO’s cost may exceed the total capitated payments received. If Florida Medicaid is the investor in the MCOs, it is effectively betting that **MCOs will bring efficiency in scale** with their operations more so than the state can achieve in doing it alone. By engaging with multiple MCOs, it is hoping that **competition within the marketplace will help lower their costs over time**, as efficient MCOs will be identified and used as part of the basis for capitation rate payment methodology (thereby lowering the state’s expenses through recognizing their efficiencies).

However, if these truly are Florida’s expectations of managed care, we offer two of Rosenthal’s top 10 “Economic Rules of the Dysfunctional Medical Market” for consideration:

Rule #7: Economies of scale don’t translate to lower prices. With their market power, big providers can simply demand more.

Rule #6: More competitors vying for business doesn’t mean better prices; it can drive prices up, not down.

Again, this report does not aim to prove or disprove these two rules. But it does offer evidence that supports both of them.

7.2 PHARMACY IMPACT TO CAPITATION RATES

In order to start to answer these questions, we need more information. Florida does not provide detail on capitation revenue by service line in its Financial Statements, which would help us understand more directly how pharmacy services are funded rather than how the entirety of MCOs in Florida are funded. However, other states have started to provide such detail, leading to our recognition that there are actually two types of pharmaceutical “pricing spread” within Medicaid managed care:

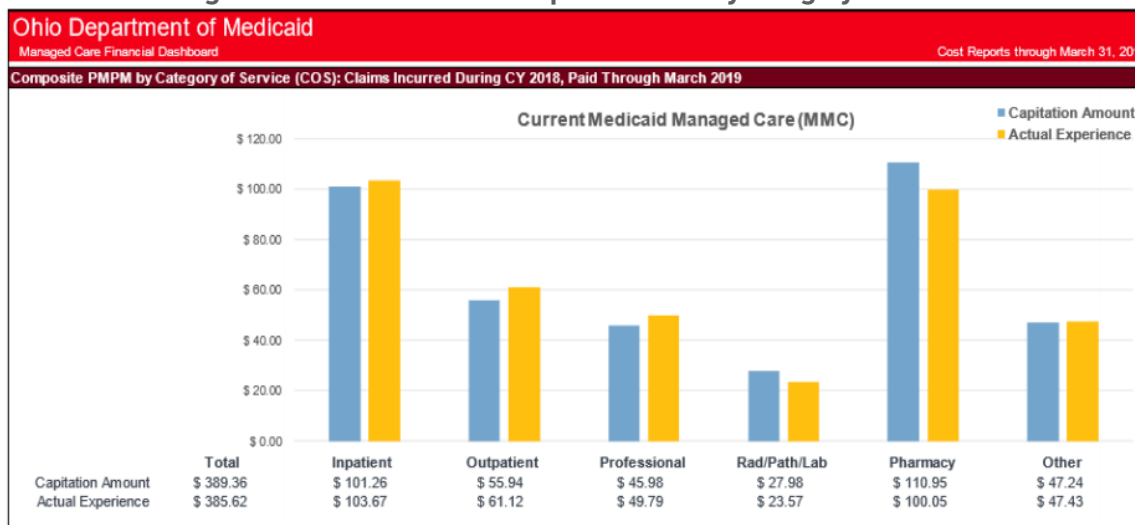
- First, there can be **PBM-to-Pharmacy spread**. This is the well-known and criticized spread pricing - the difference between what a PBM charges a plan sponsor and what it pays a pharmacy. Numerous states have now prohibited the practice, and it is also now on the

chopping block as part of Section 206 in Sens. Chuck Grassley and Ron Wyden's *Prescription Drug Pricing Reduction Act of 2019* and as part of Section 815 in Rep. Frank Pallone's *Elijah E. Cummings Lower Drug Costs Now Act*.^{20, 21}

- But what has been found is that there is a second level of spread, which we will call **MCO-to-PBM spread**. This is the difference between the capitation revenue paid to the MCO for pharmacy services and the pharmacy claims costs paid to its PBMs.

Recently, in an effort to add transparency into Medicaid pharmacy benefits management, the Ohio Medicaid program provided an assessment of capitation rates broken out by category of service rather than by rate cells.²² As can be seen in **Figure 7-5**, inpatient hospital services were a lower portion of allocated capitation rate dollars than pharmacy (Inpatient was \$101.26 out of \$389.36, or 26%, vs. pharmacy at \$110.95, or 28%).

Figure 7-5: Ohio Medicaid Composite PMPM by Category of Service



Source: Ohio Department of Medicaid presentation to Joint Medicaid Oversight Committee, Slide 55, September 19, 2019

What **Figure 7-5** really demonstrates is the profitability of pharmacy services for Ohio's MCOs. Pharmacy was one of only two categories of service (i.e. MMA services) where capitation rate payments exceeded actual experience, with pharmacy clearly being the primary profit center for Ohio's MCOs. Actual pharmacy experience was a full \$10 lower per member per month than the capitated rate was paid at (Capitation Rate Amount of \$110.95; Actual Experience of \$100.05). Aggregating this difference in pharmacy with the total number of eligible persons enrolled in Ohio's MCOs each month in 2018 (available on the Ohio Department of Medicaid's website²³) identifies \$327.8 million of allocated money not spent directly on pharmacy services (\$10.90 per person or over 10% of that budgeted for pharmacy in the capitation rate). This is a larger gap than the identified \$224 million in PBM spread uncovered in the widely publicized 2018 Ohio auditor's report of the state's Medicaid managed care pharmacy program.²⁴

As findings such as these may lead to some calls for changes to Florida Medicaid's pharmacy benefit, conversation around capitation revenue by service line will be more critical. Our biggest concern for Florida Medicaid is the unknown around how much the pharmacy benefit could be currently subsidizing other MCO service lines. Better visibility into revenue line-item detail will help inform how much capitation revenue is required to sustain robust Medicaid managed care competition if the program were to be stripped of the highly obfuscated, and potentially lucrative, pharmacy benefit.

8 FORMULARY ANALYSIS

In the current U.S. prescription drug supply chain, prescription drug rebates are a tool utilized by payers to offset prescription drug costs. Rebates are a form of price concession paid by drug manufacturers to insurers and PBMs. This functions as a form of a repayment for expenditures by the plan on one or more of the drug manufacturer's prescription products. Drug manufacturers generally limit rebates to those drugs that the plan sponsor places in preferred status on their formulary or **preferred drug list (PDL)**. Preferred drugs have fewer access barriers (i.e. no prior authorization) to therapeutically equivalent drugs marketed by a competing drug manufacturer(s), which results in a shift in market share to the preferred drugs. This can be especially valuable to drug manufacturers in highly competitive classes or where clinical guidelines are agnostic to which drug for a disease state produces the best outcome.

In Medicaid, prescription drug coverage^c is limited to those drugs which participate in **Medicaid Drug Rebate Program (MDRP)**.²⁵ Authorized by Section 1927 of the Social Security Act, the MDRP involves various agencies including: the Centers for Medicare & Medicaid Services (CMS) agency, state Medicaid agencies, and participating drug manufacturers. All fifty state Medicaid programs along with approximately 600 drug manufacturers currently participate in the optional MDRP. The program is administered through a national rebate agreement between drug manufacturers and the Secretary of the Department of Health and Human Services (HHS). This arrangement helps to offset the Federal and state costs of most outpatient prescription drugs dispensed to Medicaid patients. In exchange for state Medicaid coverage, the manufacturer pays a rebate on those drugs for which payment was made under the state plan. Regardless of whether a medication is preferred or not on a state Medicaid PDL, a **Federal rebate** will be owed. Conversely, because the manufacturer participates in the MDRP, there must be coverage of the product by Medicaid (i.e. the product can be limited to patients who meet certain criteria but cannot be excluded from any form of coverage). In addition to Federal rebates, most states have negotiated **supplemental rebates** with drug manufacturers.²⁶ These supplemental rebates function similar to other rebates in the drug supply chain, where Medicaid programs can receive additional price concessions from drug manufacturers over and above the Federal rebates for preferential status of the manufacturer's drug over a competitor's.

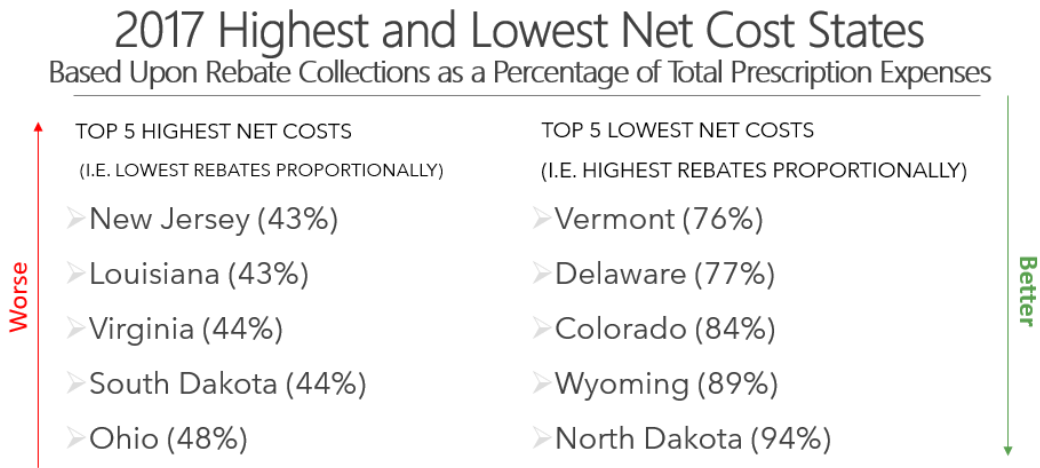
To assess the impact of these rebates on state spending, we examined data from the Medicaid and CHIP Payment and Access Commission (MACPAC), which is a non-partisan legislative branch agency that provides policy and data analysis and makes recommendations to Congress, the Secretary of the U.S. Department of Health and Human Services, and the states on a wide array of issues affecting Medicaid and the State Children's Health Insurance Program (CHIP).²⁷ For the most recent fiscal year available (2017), **Medicaid received \$34.9 billion in rebates, which works out to be 54.5% of its gross spending on prescription drugs** in the aggregate across all Medicaid programs according to data available through MACPAC.²⁸

As can be seen in **Figure 8-1** and **Figure 8-2** (both on the next pages), the amount that rebates can reduce prescription drug spending can vary significantly by state. **Figure 8-1** shows that the state with the lowest level of rebate as a percentage of total prescription spending was New Jersey (43%) while the state with the highest was North Dakota (94%). **Figure 8-2** shows this for all states - the

^c Note that prescription drug coverage is an optional benefit under Title XIX of the Social Security Act (SSA). States may optionally cover drugs outside of the MDRP but cannot claim Federal matching dollars to cover those expenses.

more gray area per bar, the better the state is doing at maximizing rebate collections for its prescription drug expenditures.

Figure 8-1: Highest and Lowest Medicaid Net Prescription Drug Cost States

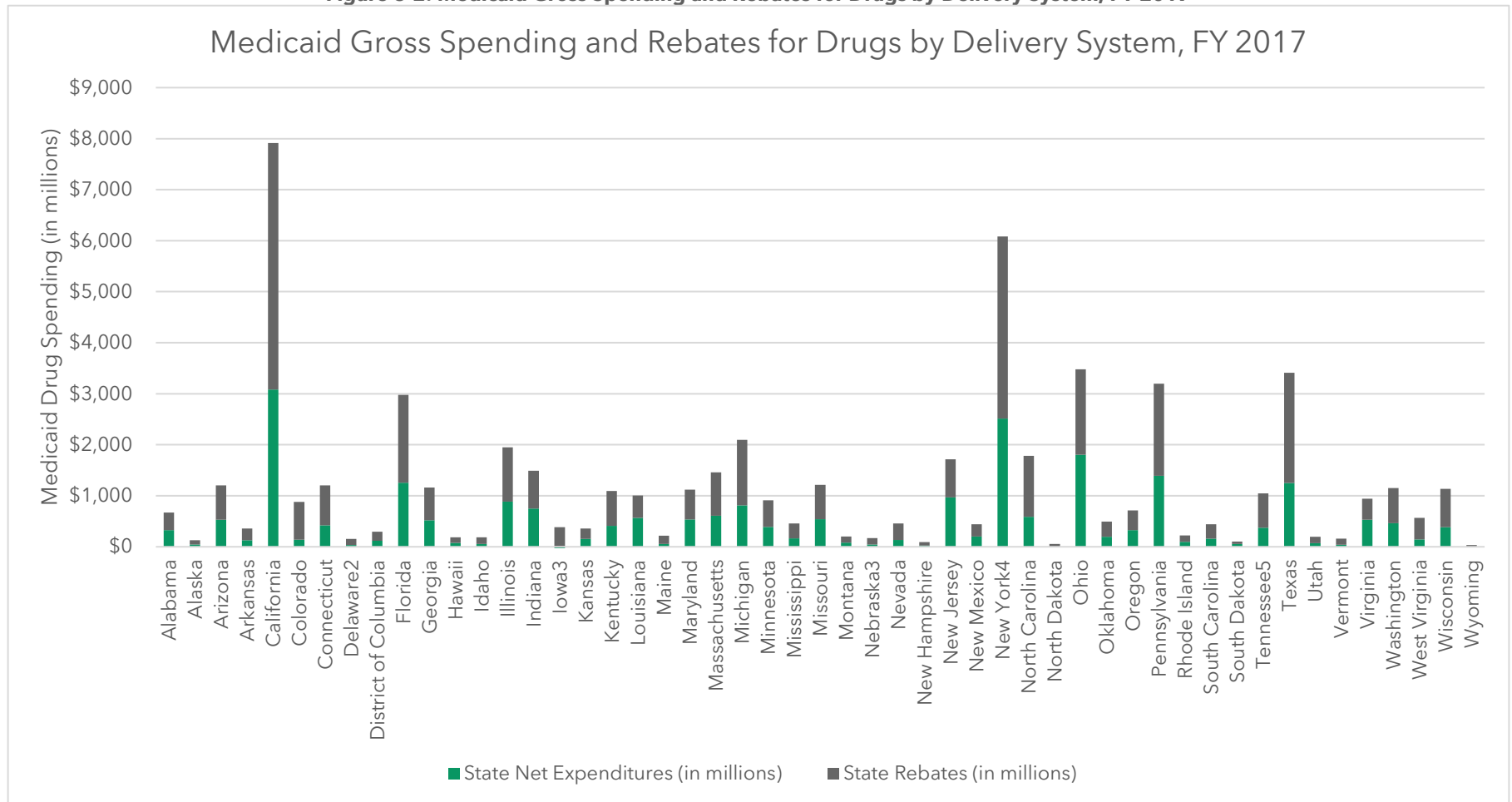


For every \$1 spent, New Jersey receives \$0.43 in the form of a drug manufacturer rebate to off-set their costs

For every \$1 spent, North Dakota receives \$0.94 in the form of a rebate

Source: 3 Axis Advisors analysis of Medicaid Gross Spending and Rebates for Drugs from MACPAC Exhibit 28

Figure 8-2: Medicaid Gross Spending and Rebates for Drugs by Delivery System, FY 2017



Source: 3 Axis Advisors analysis of Medicaid Gross Spending and Rebates for Drugs from MACPAC Exhibit 28

- 1) The national total does not equal the sum of the state totals due to the suppression of records. Records for drugs that were suppressed at the state level were not necessarily suppressed once the individual state data were rolled up into the national file. Although the amount of suppressed spending in the FY 2017 national file is not known, a comparison of totals from previous years may be instructive. A comparison of the updated FY 2014 files with data suppression to prior versions without data suppression indicates that about \$370 million, or 0.9 percent of gross spending, was suppressed in the FY 2014 data.
 - 2) Delaware reported all its spending under managed care as non-Medicaid spending. For this exhibit, we have reclassified this spending as Medicaid spending.
 - 3) Iowa and Nebraska recently carved the pharmacy benefit into managed care, implemented a new managed care program, or expanded its managed care program. This change creates a large difference between gross spending and rebate collections for fee-for-service and managed care, resulting in anomalous rebate amounts at the delivery system level.
 - 4) New York made large prior period adjustments to both fee-for-service and managed care rebates that ultimately result in a shift in rebates from managed care to fee-for-service. The state reports a positive managed care rebate amount due to prior period adjustments.
 - 5) Tennessee generally carves out prescription drugs from the managed care program. State managed care spending may reflect physician-administered drugs; however, rebates for these managed care expenditures are not reported separately in the CMS-64 data and appear to be reported with the fee-for-service rebates.
- Source: MACPAC, 2018, analysis of Medicaid state drug rebate utilization data as of July 20, 2018 and CMS-64 FMR net expenditure data as of July 20, 2018.

These state-to-state variations are useful, as they demonstrate the impact a variety of different approaches states take in managing their prescription benefits can have on the financial operations of the pharmacy program. This information helps highlight programs who manage pharmacy benefits to the lowest possible net costs and therefore save taxpayers the most money, versus those programs who could still improve.

Because Federal rebates can significantly offset claim costs and because Federal rebates are confidential, one approach states take to manage prescription drug benefits in managed care is through a uniform or **single preferred drug list** (sometimes referred to as a universal formulary or SPDL). Florida is one state that does this. Florida Rule 59G-4.250 specifies that for all prescribed drug services, Florida Medicaid managed care plans must comply with the provisions of the Florida Medicaid Prescribed Drug Services Coverage Policy.²⁹ Included within these provisions are that coverage of prescribed drugs should be in accordance with the PDL as reviewed by the Medicaid Pharmaceutical and Therapeutics Committee and are adopted by the Agency for Health Care Administration (AHCA).³⁰ However, because of Federal rules for drug coverage for manufacturers participating in the MDRP, there must exist a means to access non-preferred drugs on the SPDL or formulary. As a result, providers who seek to deviate from the preferred options must obtain authorization from a PBM - not the state directly - prior to dispensing a drug when indicated on the PDL. This functionality that a PBM is expected to provide is therefore critical if the lowest net cost is to be achieved as it much ensure proper formulary compliance.

The PDL can be an effective tool in ensuring clinically efficient prescription drug management. A single PDL for both MCOs and FFS helps Florida Medicaid providers by reducing administrative burden through simplifying the prescribing and prior authorization processes, can support population health initiatives by AHCA through ensuring uniform drug management of disease states, can reduce operational costs through obtaining rebates on preferred drugs, and can minimize member disruption during transitions of care throughout the healthcare system.³¹ However, a loosely enforced PDL risks adding cost to the state via lower rebate collections (which yields higher net drug costs) and potentially poorer patient outcomes due to unexpected administrative barriers.

8.1 VARIATION IN USE OF COVERED OUTPATIENT DRUGS IN FL FFS MEDICAID VS. FL MCO MEDICAID

In 2017, Florida Medicaid’s aggregate rebate percent of drug spending was 58% (\$1.7 billion). This was better than the national average, as shown in **Table 8-1**. This may speak to some of the benefits that a SPDL can have on states seeking to manage and maximize their rebates, as not all states with MCOs utilize a SPDL. **Table 8-1** also demonstrates that the amount of rebate collected can vary significantly by delivery system, with FFS yielding greater rebate collections than MCOs both in Florida and nationwide.

Table 8-1: Florida Medicaid Federal Rebate % of Drug Spend

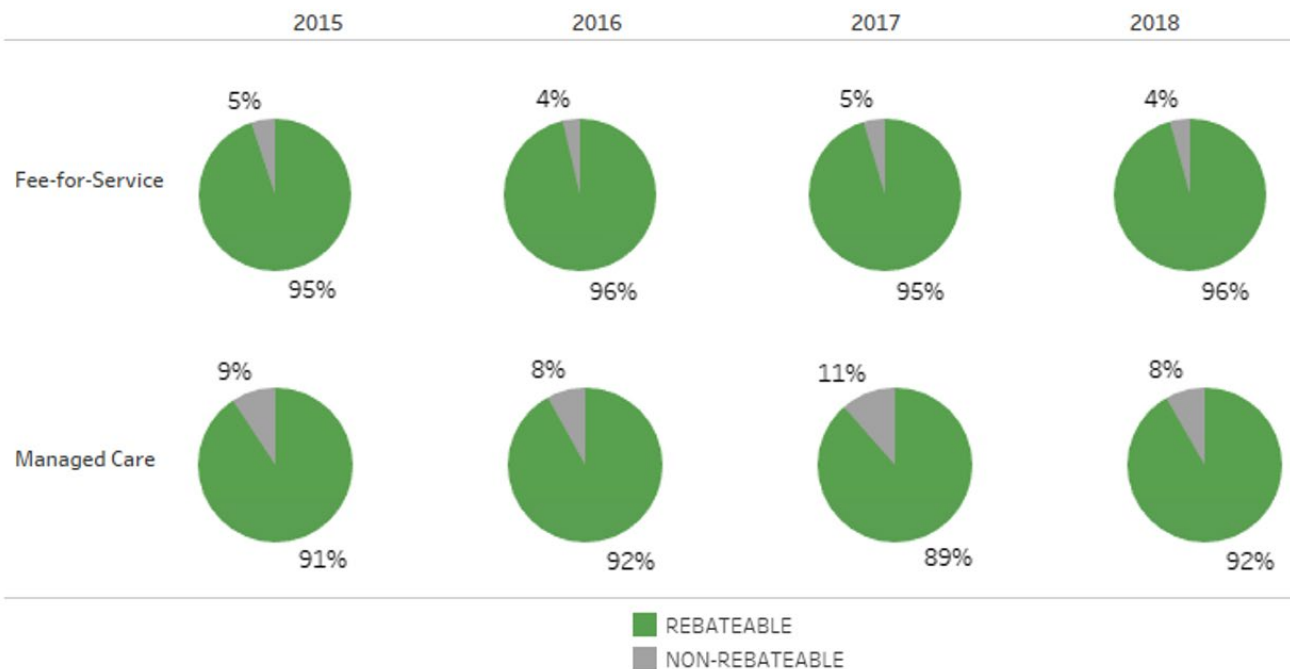
FY 2017	Net Rebate Achieved	MCO Rebate Achieved	FFS Rebate Achieved
Florida	58%	57%	62%
National Average	55%	40%	70%

Source: 3 Axis Advisors analysis of MACPAC Exhibit 28

One of the reasons for the difference in rebate dollars received proportional to pharmacy dollars expended is the simple use of **a rebateable drug vs. a non-rebateable drug**. Although approximately 600 drug manufacturers participate in the Federal rebate program, there are still those that do not. Drugs dispensed by Medicaid from such non-participating manufacturers are non-rebateable. Additionally, utilizing non-pharmacy products (i.e. wound dressing kits, durable medical equipment, etc.) via the pharmacy benefit also lowers rebate collections as a proportion of pharmacy expenses, as these were expenses potentially expected and capitated for in other rate cells (i.e. *Provider Administered or Other MMA Services*).

Fortunately, CMS makes available on data.medicaid.gov a list of products participating in the Federal rebate program at the NDC level.³² Utilizing this list, we are able to analyze within the Florida Medicaid program the success in utilizing rebateable products over time between services delivered through managed care organizations (MCOs) vs. the fee-for-service (FFS) benefit. In **Figure 8-3**, we see consistently that Florida FFS appeared to utilize fewer non-rebateable products than Florida MCOs. For example, in 2017 (the year we have aggregate Federal rebate data from MACPAC) 5% of pharmacy claims in FFS were for non-rebateable products vs. 11% in MCOs.

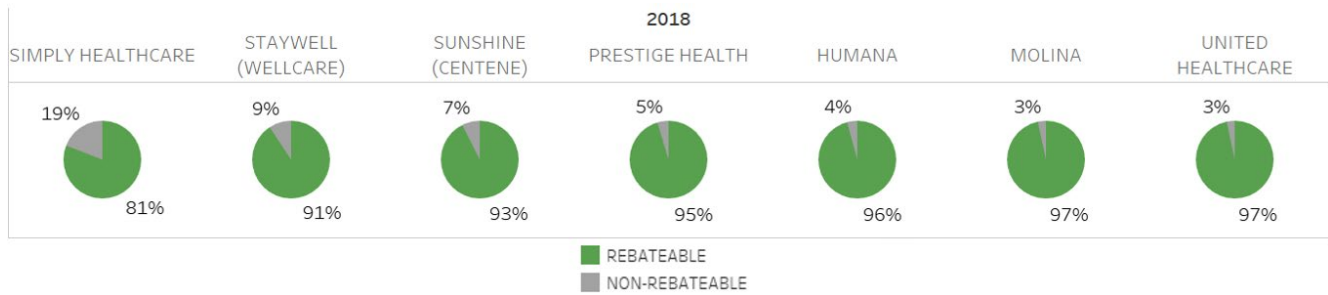
Figure 8-3: Comparison of the Use of Federally Rebateable Products within Florida Medicaid Delivery System (Percent of Claims)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Drug Products in the Medicaid Drug Rebate Program data obtained from Data.Medicaid.gov

Assessing Florida Medicaid’s top seven MCOs, that is those that represent 89% of all drug spending within Florida MCOs, during this four-year period (see [Appendix A](#)), we see a large amount of variation between each plans’ ability to successfully utilize federally rebateable drugs. As seen in **Figure 8-4** (next page), three plans matched or even exceeded FFS’ rebateable drug usage rate in 2018 (Humana, Molina, United Healthcare), while the rest underperformed FFS - in some cases by a significant margin. For example, we found that 19% of Simply Healthcare’s utilization to be associated with non-rebateable products.

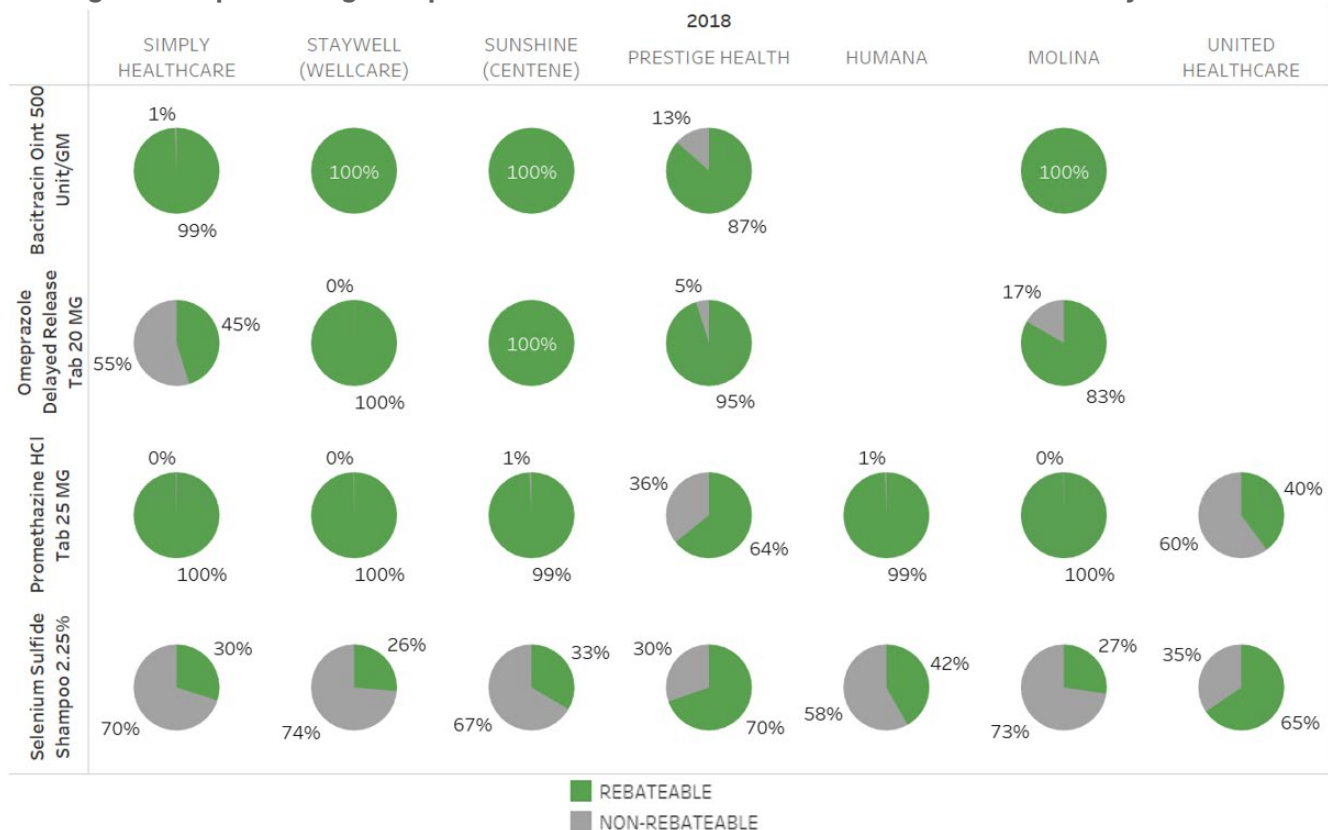
Figure 8-4: Comparison of the Use of Federally Rebateable Products within Top 7 MCOs, 2018 (Percent of Claims)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Drug Products in the Medicaid Drug Rebate Program data obtained from Data.Medicaid.gov

Digging even deeper, we can see specific instances within the same product (i.e. active ingredient, strength, dosage form) where a rebateable option existed but a non-rebateable product was utilized within each of the top seven Florida Medicaid plans. As can be seen in **Figure 8-5**, depending on the product in question, even the most successful plan in the aggregate may make individual coverage decisions, which can be costly for the state due to the loss of a rebate dollars.

Figure 8-5: Specific Drug Examples of Rebateable vs. Non-Rebateable Product Utilization by Plan, 2018



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span Price Rx for drug definitions and Drug Products in the Medicaid Drug Rebate Program data obtained from Data.Medicaid.gov

Whereas Prestige Health and United Healthcare are some of the most successful MCOs overall at utilizing rebateable drugs, they are the only two that appear to have non-rebateable drug utilization with the prescription drug of promethazine tablet 25 mg. Alternatively, a plan like Staywell/WellCare,

which performs poorly in the aggregate (one in five prescriptions non-rebateable), ensured that nearly 100% of the bacitracin ointment 500 units/gm products utilized were rebateable. We recognize that these specific examples represent an enriched set of examples as they were chosen specifically to demonstrate the variability that exists within an individual product level. However, this seems the fairest comparison amongst the plans, as not all benefits will be structured the same. For example, a plan may manage certain **durable medical equipment (DME)** in the pharmacy benefit that another plan does not, reducing their aggregate rebate percentage utilization in a way that is difficult to account for without greater details on plan design from the MCO. These examples also highlight the risks that states must address when setting capitation payments for MCOs to ensure and avoid duplicate payments for the same service. By way of example, consider that if durable medical equipment is provided in a separate line-item via capitation rates, the state needs to ensure DME delivered via the pharmacy program is not used to trend future pharmacy payments.

Whether benchmarking a Florida MCO to the state-run FFS program, to other MCOs, or comparing at an individual product level, all views demonstrate that it is possible to do better. Note there is little evidence that in the aggregate, a plan is doing significantly better in use of rebateable products as compared to the FFS program, but substantial evidence that individual plans are doing worse. This has important implications to the program, as each time a non-rebateable product is utilized, it:

- 1) risks prescription drug coverage outside of Federal rule
- 2) increases both state and Federal costs to run Medicaid programs

To perform a very rough assessment of the impact of non-rebateable use, consider that in 2017, 2% of total MCO expenditures were in non-rebateable products (approximately \$51.7 million). Given that the aggregate rebate percentage was 58% for this year in Florida, this equates to potentially \$30 million rebate dollars that Florida and the Federal Government were unable to collect simply because the drug manufacturer did not participate in the rebate program (58% of \$51.9 million).^d This is in comparison to FFS where less than 1% of total FFS expenditures were in non-rebateable products (approximately \$270,000).

Outside of simple coverage determinations with regards to drug manufacturer (i.e. labeler) participation in the Federal drug rebate program, the other primary driver in the delta between a state's rebate collections is the types of drugs utilized - both in terms of therapeutic drug classes (the conditions the drugs are intended to treat) and use of preferred products in place of non-preferred products (that is those products that have been determined to have the best value for their costs to Florida Medicaid via the SPDL). States like Florida that have a SPDL have made efforts to ensure uniform coverage of drugs in a manner to maximize these rebates, which can clearly have significant financial implications to the state. However, policy only goes so far in ensuring that the intention is realized. Texas recently made an assessment regarding an MCOs' ability to conform to a SPDL that raise concerns that this risk exists in Florida's program beyond those identified via rebateable product utilization.³³

^dA range for this estimate is between \$7 and \$51.9 million (lowest rebate percent is associated with generics at 13% vs. a maximum rebate about of 100% of AMP for brand name medications).

8.2 TEXAS MEDICAID EXPERIENCE WITH FORMULARY COMPLIANCE BY MCO

On July 19, 2019, the Office of the Inspector General (OIG) for the Texas Health and Human Services Commission released a report titled *Audit of Texas Medicaid and CHIP Pharmacy Benefit Services Delivered by Molina and Its PBM Caremark*.³⁴ The objective of this audit was to determine whether pharmacy services delivered by Molina and its subcontracted PBM, CVS Caremark, were in compliance with criteria of Texas' Medicaid programs, which included a single PDL. This report found that during the audit period of September 1, 2015 through November 30, 2017, an average of **8.3%** of covered drugs on selected Molina Medicaid PDLs did not match the proper coverage status on Texas' single PDL. Consequently, the audit found that members were impacted as per **Table 8-2** below:

Table 8-2: Caremark's Rejections for Medicaid and CHIP Formulary Drugs per Texas Medicaid OIG Audit

	Total During Audit Scope (September 1, 2015 - November 30, 2017)
Number of Claims Rejections Inappropriately	26,999
Individual Members Affected	8,272
Average Rejections Per Affected Member	3.26

Source: Audit of Texas Medicaid and CHIP Pharmacy Benefit Services Delivered by Molina and its PBM Caremark

The Texas OIG report identifies that the impact of these discrepancies summarized in **Table 8-2** is significant. Specifically, the variation in coverage may result in members experiencing a delay in access to, or denial of, valid and appropriate drugs and supplies. The Texas OIG report goes on to identify that costs to the Texas Medicaid program may have been increased due to missed rebate opportunities when a non-preferred drug (i.e. a drug not on the PDL) was utilized in place of a preferred one (i.e. a drug on the PDL). Though the Texas OIG report does not mention it specifically, it is also possible that MCOs were able to profit off of the difference between capitation rate payments, which are priced assuming MCO expenditures on one drug (i.e. a preferred brand), and claims experience, which could be for an alternative drug (i.e. a non-preferred generic).

To demonstrate, consider the following simplified, hypothetical example detailed in **Figure 8-6** (page 33):

- I. Florida Medicaid is preparing capitation rates for pharmacy services in MCOs for next year (SFY 2021)
- II. As part of this process, Florida Medicaid estimates that approximately 100 individuals will need to be treated for a given disease next year
- III. Florida Medicaid determines that the drug product that will be used to treat these people will be a brand name prescription called **Drug A** based upon the formulary coverage they (Florida Medicaid) have set in the state, and then they pay the MCOs sufficient funds to cover **Drug A** for these persons
 - a. **Drug A** is approximately \$350 per prescription and should be taken continuously once each month. Therefore, in order to ensure MCOs have enough money to pay out claims for **Drug A**, Florida Medicaid sets aside \$420,000 in capitated rates to provide this product to these members over the following year^e

^e *Capitation Rate Payment for Drug A = (Cost per Rx * # of Members * Number of Months in Year)*

$\$420,000 = (\$350 * 100 * 12)$

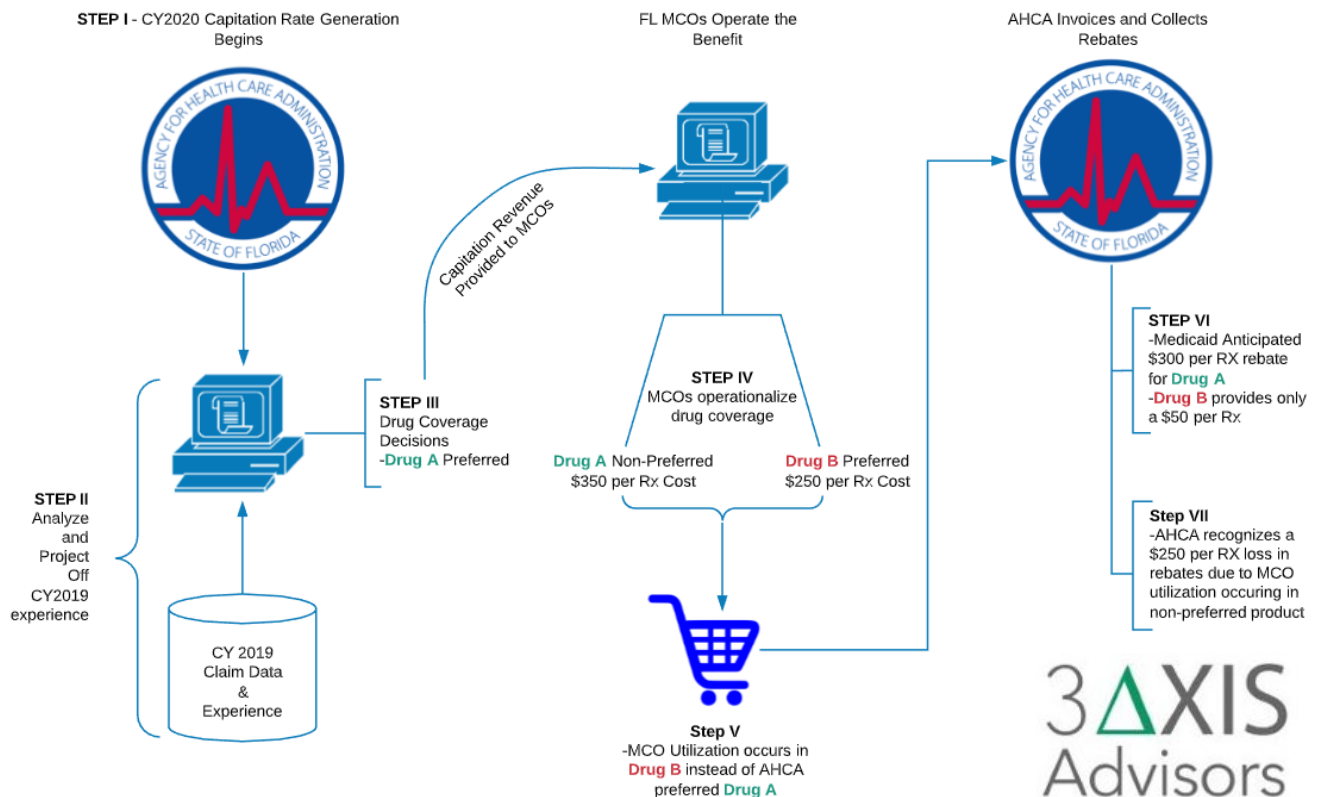
- IV. During CY2020, MCOs utilize an alternative to **Drug A** due to its lower cost for them to acquire. **Drug B**, the alternative, costs \$250 per prescription. MCOs can capture the difference between what was provided via capitation rate and what was paid out as a source of profit. Assuming they provide treatment with the **Drug B** to all 100 patients, this tactic results in \$120,000 in profit for the MCOs based upon the difference between what was capitated and what was realized.

In case you're wondering, yes, this is part of the reason why Florida's MCOs are audited and why we reviewed those documents. And on its surface, this is clearly a desired function of MCOs; to utilize the resources given to them for more efficiency and lower costs. However, this can be particularly problematic in Medicaid as it relates to prescription drugs. This is because of a variety of factors but principle amongst them is Federal rebates. When MCOs dispense drugs outside of the SPDL it adds costs to Medicaid rather than produces savings. To explain, we will need to finish our hypothetical example by identifying the Federal rebates associated with the drugs:

- V. MCO coverage decision resulted in all 100 members receiving **Drug B**
- VI. Medicaid had selected **Drug A** over **Drug B** on the formulary, as Medicaid anticipated a \$300 per prescription rebate for **Drug A**.
 - a. This is six times the rebate Medicaid will receive for **Drug B** (which is only \$50 per prescription).
 - b. This makes the net cost for **Drug A** for Florida Medicaid \$50 vs. a net cost of \$200 for **Drug B**.
 - i. Note that Medicaid recognized that **Drug B** would be less expensive to acquire in the pharmacy marketplace for the MCOs but sought to address this by ensuring that the capitated rate to MCOs was sufficient to cover the added expenses of **Drug A**.
- VII. Medicaid was willing to "pay more" on the front end, because they anticipated receiving \$360,000 in back-end rebates for **Drug A**. It is critical to note that in Medicaid, there is essentially no cost impact to the patient for being required to take the brand, as Medicaid co-pays are de minimis. But in SFY 2021, Medicaid will only receive \$60,000 in rebates due to the MCOs' use of **Drug B**; a shortfall of \$300,000 in revenue for the program.
 - a. Note it would have been cheaper if Medicaid would have directly paid a \$120,000 bonus (the savings that MCOs realize with **Drug B** in place of **Drug A**) to the MCOs for following the SPDL, as it would have still saved \$180,000 due to **Drug A**'s rebates.

Note that additional funds will likely be provided on top of the amount estimated to provide the service to cover administrative expenses incurred by the MCO

Figure 8-6: Example Capitation Rate Scenario



Source: 3 Axis Advisors visualization

It may be tempting to dismiss this hypothetical example as fantasy, but it's a very real problem for Medicaid. The aggregate rebate numbers for Medicaid inform us that discounts of 50% or more are possible. As we will see later in this report, if we replace **Drug A** with Advair or Suboxone and **Drug B** with their generic alternatives, it is clear that some formulary compliance issues are occurring within managed care with potential financial impacts to Florida Medicaid similar to those demonstrated here.

8.3 ASSESSMENT OF FLORIDA MCO PDL COMPLIANCE

Because of the importance of PDL compliance, as demonstrated by the Texas OIG report and the MACPAC rebate data, we conducted an analysis of potential discrepancies in PDL compliance within Florida Medicaid. *Note that this is not an audit of the pharmacy program, rather an assessment of whether a potential issue exists that should be further explored.* To perform this analysis, first a review was conducted to determine the therapeutic drug categories with the highest expenditures and utilization in Florida Medicaid over time. A **therapeutic category** is a group of drugs used in the management of a same or similar disease state. By performing this assessment, we are better able to narrow in on a drug category that will be meaningful to the program both in terms of potential member impact (due to large utilization) and costs to Florida Medicaid (due to the amount of money that is expended by MCOs in the therapeutic category). **Table 8-3** (on next page) identifies the top 10 therapeutic categories in Florida Medicaid from 2012 to 2018 based upon MCO expenditures. The top 10 therapeutic categories by cost represent approximately 71% of all expenditures within Florida Medicaid in our analysis.

Table 8-3: Top 10 Therapeutic Categories by Cost within Florida MCOs, 2012 to 2018

Therapeutic Class	Total MCO Payment	% of Total MCO Expenditures
ANTIVIRALS	\$2,228,813,532	19%
ANTIASTHMATIC AND BRONCHODILATOR AGENTS	\$1,267,354,972	11%
ANTIDIABETICS	\$895,534,613	7%
ANTIPSYCHOTICS/ANTIMANIC AGENTS	\$999,374,644	8%
ADHD/ANTI-NARCOLEPSY/ANTI-OBESITY/ANOREXIANTS	\$948,171,009	8%
ENDOCRINE AND METABOLIC AGENTS - MISC.	\$456,736,581	4%
ANALGESICS - ANTI-INFLAMMATORY	\$457,222,699	4%
ANTINEOPLASTICS AND ADJUNCTIVE THERAPIES	\$452,400,953	4%
ANTICONVULSANTS	\$443,964,333	4%
PSYCHOTHERAPEUTIC AND NEUROLOGICAL AGENTS - MISC.	\$262,109,129	2%

Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug categories

Table 8-4 identifies the top 10 therapeutic categories in Florida Medicaid from 2012 to 2018 based upon MCO prescription claim volume. The top 10 therapeutic categories by cost represent approximately 38% of all prescriptions within Florida Medicaid.

Table 8-4: Top 10 Therapeutic Categories by Claim Utilization within Florida MCOs, 2012 to 2018

Therapeutic Class	Total MCO Rx Count	% of Total MCO Utilization
ANTIASTHMATIC AND BRONCHODILATOR AGENTS	12,705,946	9%
ADHD/ANTI-NARCOLEPSY/ANTI-OBESITY/ANOREXIANTS	5,367,162	4%
ANTIDIABETICS	5,229,664	4%
ANTIVIRALS	2,178,147	1%
DERMATOLOGICALS	8,252,605	6%
ANTIPSYCHOTICS/ANTIMANIC AGENTS	4,173,231	3%
CONTRACEPTIVES	2,339,328	2%
ANTICONVULSANTS	7,147,917	5%
OPHTHALMIC AGENTS	2,311,879	2%
NASAL AGENTS - SYSTEMIC AND TOPICAL	2,749,814	2%

Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug categories

Six of the top 10 categories appear on both the cost and utilization list: Antiasthmatic and Bronchodilators, ADHD/Anti-narcolepsy/Anti-obesity/Anorexiant, Antidiabetics, Antivirals, Antipsychotics/Antimanic Agents, and Anticonvulsants. It is worth noting that the top 10 categories are the same within the top seven MCOs as the overall aggregate, with some slight ordinal changes.

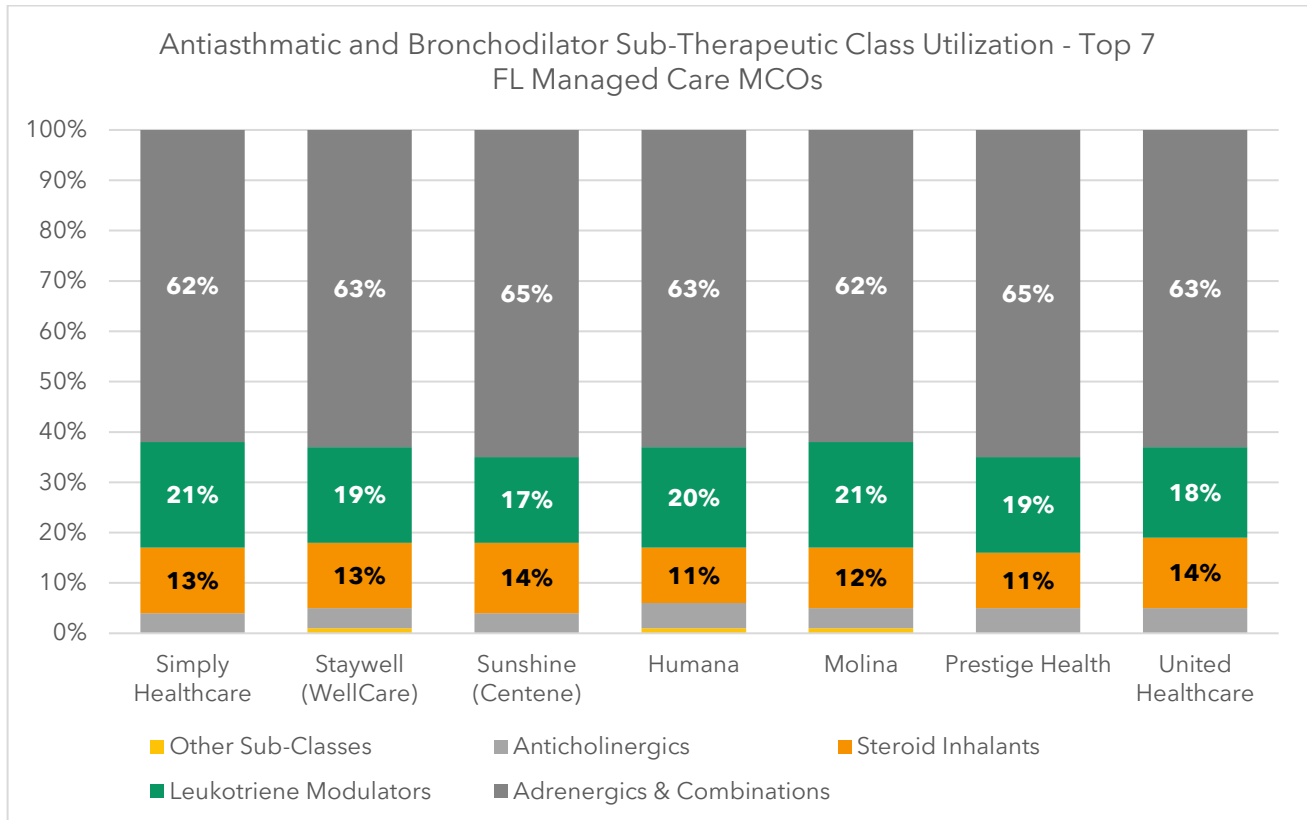
8.4 ASSESSMENT OF FLORIDA MCO PDL COMPLIANCE – ANTI-ASTHMATIC AND BRONCHODILATOR AGENTS

According to **Table 8-3** and **Table 8-4**, within the Florida Medicaid program, the most utilized therapeutic category is Antiasthmatic and Bronchodilator Agents. Unsurprisingly, given its utilization, it is also the second highest therapeutic category in terms of expenditures. This makes it an ideal category to investigate formulary compliance given that its aggregate utilization and costs in Florida Medicaid means that variations from the PDL are likely to be significant both in terms of disruption to patients and/or providers, as well as impactful to financial operations of the Florida Medicaid program. Furthermore, approach to treatment with Antiasthmatic and Bronchodilator agents is likely

to be uniform across MCO or provider, as the category is managed as part of AHCA’s SPDL. There are excellent guidelines that inform the care of patients with respiratory conditions such as asthma and chronic obstructive pulmonary disease or COPD (amongst other respiratory conditions product in this category would be used to treat), and it is especially relevant given the high rates of hospitalizations that occur in relation to these diseases.³⁵

In the aggregate, as seen in **Figure 8-7**, across the top seven MCOs (which account for 89% of Florida MCO costs and utilization), we see similar exposure to the subclasses for Antiasthmatic and Bronchodilator Agents.

Figure 8-7: Antiasthmatic and Bronchodilator Sub-Therapeutic Class Utilization within Top 7 MCOs, 2012-2018



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug categories

This similar level of exposure is significant, as it provides each plan a similar opportunity to use the preferred products on the SPDL relative to the non-preferred products. However, when we focus on individual agents relative to their preferred status, we find significant differences between the plans’ performance on managing utilization to the SPDL.

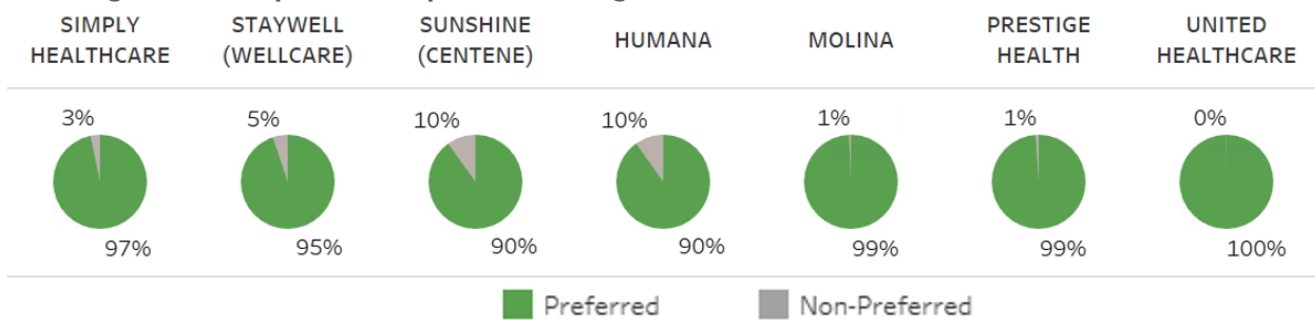
8.4.1 Fluticasone-Salmeterol Inhalation (Advair®)

As previously discussed, AHCA has a single PDL. This formulary is designed to ensure adequate and standardized access to treatment options for Florida Medicaid members regardless of which plan is managing their services. Furthermore, it eases provider burden, as they are able to prescribe therapies that they are familiar with across each plan, and it helps the state stretch scarce Federal and states dollars by selecting products for coverage that are of greatest value (i.e. produce best clinical results at the lowest net costs). Because of the way Medicaid is financed, this can include

covering a brand name drug in place of a generic, as sometimes, it will have a lower net cost. As will be seen in Florida, and was seen in Texas, there is evidence of Florida MCOs covering generics outside of the uniform PDL and potentially at a significant cost to the Florida Medicaid program if those generics have a higher net cost than the state-preferred brands.

Under the AHCA SPDL, the preferred fluticasone-salmeterol product is brand name Advair. This is a product used to treat respiratory conditions such as asthma or chronic obstructive pulmonary disease (COPD). Advair has preferential status on the AHCA formulary over generic fluticasone-salmeterol products, as specifically identified on Florida’s PDL supplement *Brand Drug Preferred List*.³⁶ As shown below in **Figure 8-8**, up to 10% of prescriptions are being utilized outside of the AHCA-dictated formulary related to fluticasone-salmeterol in the first six months of 2019. While this may not have direct adverse clinical outcomes, as patients receive an alternative fluticasone-salmeterol product, it may create administrative burdens for prescribers looking to prescribe in accordance with the SPDL. This in turn may result in treatment delays and create availability issues as pharmacy inventories are prepared to dispense one form of the drug, given AHCA’s set preference, but must order and carry a separate version as well. In addition to these administrative burdens, the alternative forms of fluticasone-salmeterol can have significant cost implications for Florida Medicaid based upon the rebates associated with each product.

Figure 8-8: Comparison of Top 7 MCOs Management of Fluticasone / Salmeterol Products - H1 2019



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug categories

8.4.1.1 Federal Rebate Amounts

To assess the impact of this coverage divergence, we must first explore the Medicaid Drug Rebate Program (MDRP) to a greater extent. As previously mentioned, for drug payments to be made under state Medicaid programs, drug manufacturers must enter into an agreement with the HHS secretary for their drug to be covered by state Medicaid programs. These rebates are paid by drug manufacturers on a quarterly basis to states and are shared between the states and the Federal government to offset the overall cost of prescription drugs under the Medicaid program.

The amount of rebate due for each unit of a drug is based on statutory formulas.³⁷ In general, these can be summarized as a 23.1% discount off of **average manufacturer price (AMP)** per unit for innovator (brand name) drugs, adjusted by the **Consumer Price Index-Urban (CPI-U)** based on launch date and current quarter AMP, or 13% of the AMP per unit for non-innovator (generic) drugs. The adjustment for CPI-U penalizes drug manufacturers for raising their drug price faster than the rate of inflation by increasing their rebate obligations. There is; however, a maximum for the total rebate amount that can be obtained from a drug manufacturer via the Federal rebate formula

regardless of the overall CPI-U penalty. That limit is at 100% of the drug's average manufacturer price.

The CMS Medicaid Drug Rebate (MDR) system performs the **unit rebate amount (URA)** calculation using the drug manufacturer's provided pricing. The specific methodology used is determined by law and varies depending upon how the drug is classified, as previously alluded to (i.e. Single source vs. non-innovator, etc.). CMS provides this URA information to states to facilitate invoicing drug manufacturers for their Federal rebate amounts. However, drug manufacturers remain responsible for accurately reporting AMP and **Best Price** information so that CMS can correctly calculate the URA and so states can properly invoice drug manufacturers for owed rebates.

To better illustrate the consequences of appropriate formulary management in terms of Federal rebate collections, we will look more closely at the URA calculation for Single source ("S" drug category) or Innovator multiple source ("I" drug category) drugs as it relates to the observations related to fluticasone-salmeterol products.

8.4.1.2 Unit Rebate Amount (URA) Calculation for Single Source (S) or Innovator (I) Multiple Source Drugs³⁸

The formula for "S" or "I" drugs within the MDR is as follows:

Total Federal Rebate Calculation

$$= \text{Basic Rebate Amount} + \text{Additional Rebate Amount}^f$$

The formula for the basic rebate amount above is as follows:

Basic Rebate Calculation

$$= \text{Quarterly AMP} * 23.1\% \text{ or } \text{Quarterly AMP} - \text{Quarterly BP}$$

-Value is initially rounded to 7 places followed by rounding to 4 places

The formula for the additional rebate amount above is as follows:

Additional Rebate Calculation

$$= \frac{\text{Baseline AMP}}{\text{Baseline CPI} - U} * \text{Quarterly CPI} - U$$

-Value is rounded to 7 places

A drug's baseline average manufacturer price (AMP), baseline Consumer Price Index for all Urban Users (CPI-U), and quarterly CPI-U values vary depending upon the drug's market date and launch price. The current definitions for these terms are as follows:

- **Baseline AMP** - The AMP for the first quarter after the drug's market date
- **Baseline CPI-U** - The CPI-U for the month prior to the first quarter after the drug's market date
- **Quarterly CPI-U** - The CPI-U value of the month prior to the quarter being calculated

We will need a broader understanding of AMP and CPI-U to demonstrate the rebate impact for non-formulary compliance within Medicaid.

^f Note, no additional rebate due if the calculated amount is equal to or greater than the quarter's AMP

8.4.1.3 Understanding the Consumer Price Index Urban (CPI-U) Value

Collected by the Bureau of Labor Statistics, the CPI-U measures the change in prices paid by consumers for goods and services for two population groups: all urban consumers, and urban wage earners and clerical workers. The all urban consumer group represents about 93% of the total U.S. population. It is based on the expenditures for almost all goods and services by the residents in this area. More specifically, the prices are measured for food, clothing, shelter, fuels, transportation, doctors' and dentists' services, drugs, and other goods and services that people buy for day-to-day living. Prices are collected monthly or every other month in some circumstances. Not included in the CPI-U are the spending patterns of people living in rural non-metropolitan areas, farming families, people in the Armed Forces, and those in institutions, such as prisons and mental hospitals.³⁹

The CPI-U value is used as an integral part of the computation of the unit rebate amounts for innovator drugs, as it is used as a benchmark for whether drug prices are rising faster than other goods and services most people obtain. When a given drug's price rises faster than the overall inflation for other goods, the drug manufacturer is penalized via the additional rebate calculation thereby lowering drug costs for the state and Federal government within Medicaid at a rate proportional to the amount over baseline inflation.

8.4.1.4 Estimating the Unit Rebate Amount (URA) for Advair Diskus 250/50

In order to estimate the Federal rebates for Advair Diskus 250/50, the most common strength of Advair utilized in Florida Medicaid, we needed to obtain (or estimate) the following information:

- Baseline AMP for Advair 250/50
- Quarterly AMP for Advair 250/50
- Best Price for Advair 250/50
- Baseline CPI-U
- Quarterly CPI-U

It is not possible to obtain AMP or Best Price information for Advair 250/50 in the public domain. However, this does not limit our ability to *estimate* Federal rebate collections for Advair. This is because the Office of the Inspector General (OIG) for the Department of Health and Human Services (HHS) has previously investigated the relationship between published prices (i.e. **average wholesale price - AWP**) to AMP in Medicaid in a report titled *Medicaid Drug Price Comparisons: Average Manufacturer Price to Published Prices*.⁴⁰ This report concluded that in the aggregate, AMP is 4% lower than WAC for single source brands. Although this report is over a decade old (2005), it is the best piece of information in the public domain we have to estimate AMP. Accordingly, for the purposes of this estimate, all pieces of the Federal rebate calculation that refer to AMP will refer to an estimate of AMP at 96% of the WAC for the product (baseline and quarterly). We will not be able to account for Best Price as part of our estimate. Conversely, CPI-U information is readily obtainable in the public domain with information going back to 1913. As Advair Diskus 250/50 is a product that launched in February 2001, we have all pieces of information to perform an estimate of Federal rebate obligations using an estimate of AMP and CPI-U (baseline and quarterly).

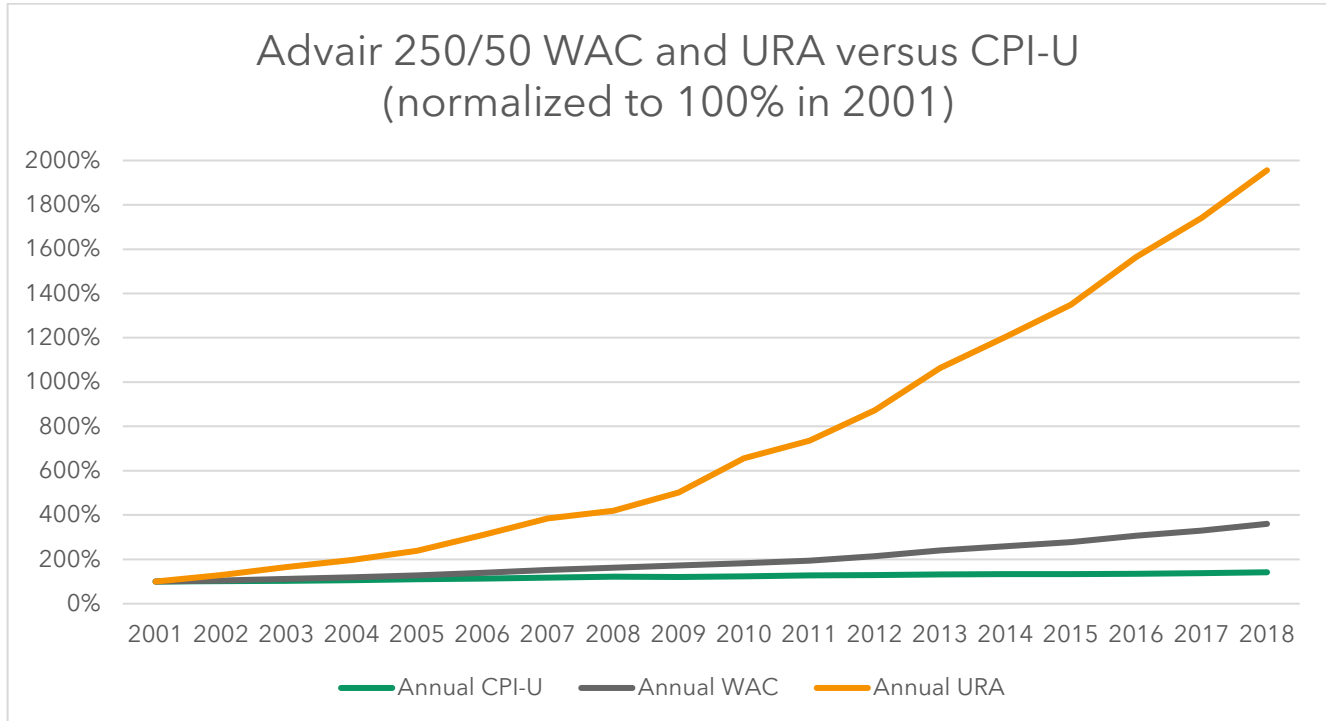
Putting our estimates together for AMP with the calculated CPI penalties, the quarter-over-quarter and year-over-year changes in AMP, CPI-U, and URA for Advair 250/50 from its launch in February 2001 until the end of Q4 2018 are as follows:

- The CPI-U has risen 142%;

- The WAC price per unit of Advair 250/50 has risen 360%; and
- The estimated Federal rebate amounts due have risen 1,956% (See **Figure 8-9**)!

This demonstrates the penalty nature of Federal rebates in Medicaid. Because rebates are both a percentage of the price (i.e. 23.1% of AMP) and increase proportionally to the rate of price increases over baseline inflation (i.e. additional rebate amount; CPI-U penalty), Medicaid programs are largely insulated and protected from drug manufacturer price increases. At the end of this 18-year period, the estimated net price off the list price (WAC) for Advair is estimated at \$1.30 per unit (December 2018). This is 13% lower than the initial estimated net price of \$1.55 (February 2001).

Figure 8-9: Advair 250/50 WAC and URA versus CPI-U (normalized to 100% in 2001)



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug pricing

Putting this trend into context, we can compare the impact this has on pricing and net costs for the various fluticasone-salmeterol products. In **Table 8-5**, we can see that the generic products offer a savings of \$151 per pharmacy claim; however, because the rebates for the brand are so significant, the generic is \$178 more costly in the net after factoring in the estimated Federal rebate.

Table 8-5: Differences in Net Costs of Fluticasone-Salmeterol 250/50 Products (H1 2019)

	Advair 250/50	Fluticasone-Salmeterol 250/50
Avg 2019 Cost per Claim	\$369	\$218
Estimated Federal Rebate	\$362	\$33
Net Cost to Medicaid	\$7	\$185
On FL PDL	Yes	No

Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug pricing and derived URA estimates

Because Medicaid’s net cost for Advair today is below its net cost on Advair’s launch date, the newly introduced generics are a higher net cost to the state than the brands after rebate (despite their claim cost savings). This helps explain why Florida Medicaid would prefer the brand name to the generic

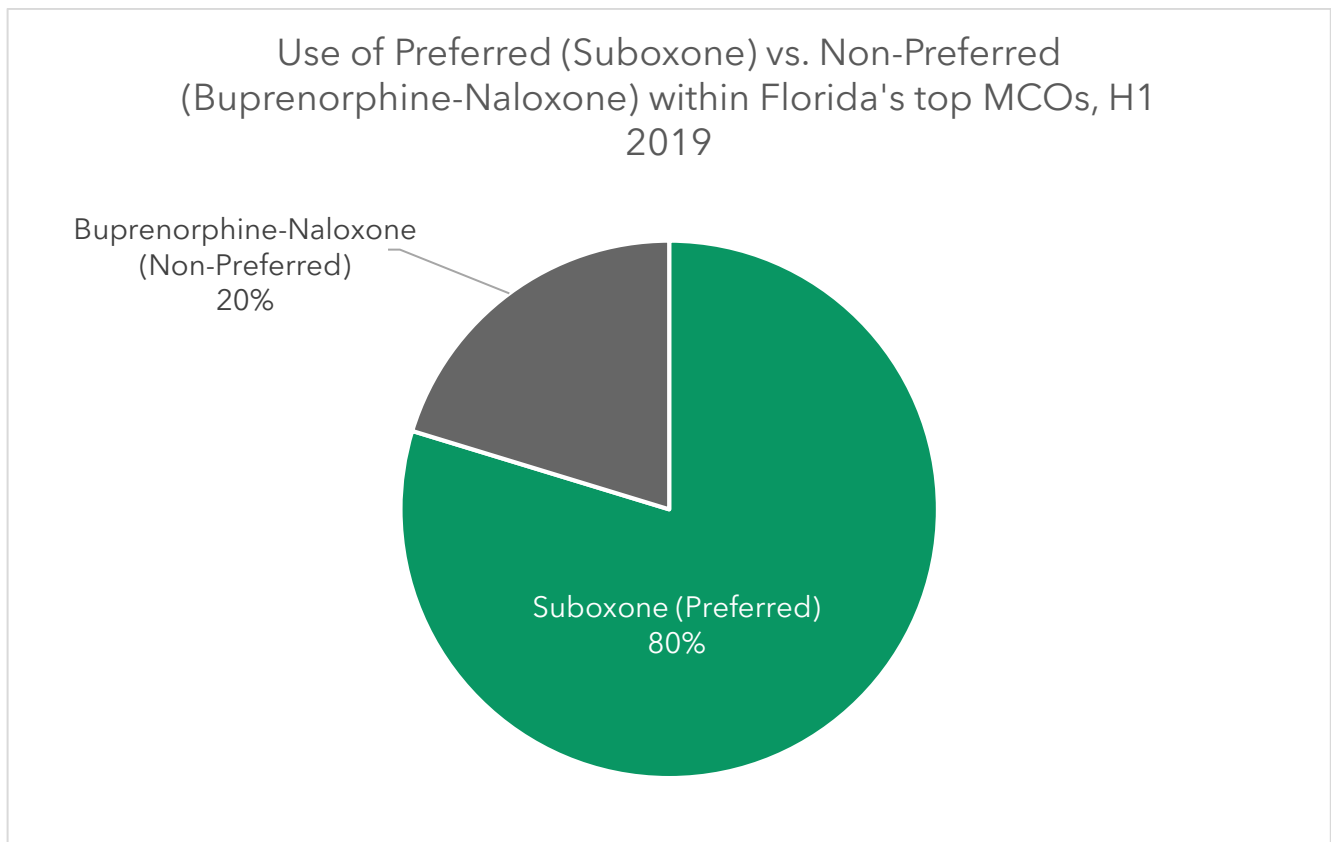
on their SPDL and why it may be difficult for MCOs to identify the rationale for this preference, as few (if any) other payers can realize the discounts Medicaid programs can due to Federal rebates. This single observation potentially raises the cost to the state and Federal government due to lost rebate revenue.

Aggregating these net pricing differences to the generic Advair claims which appear dispensed outside of the SPDL, considering both the savings on the claim but the loss of rebates, these claims would appear to carry a cost of \$200,000 to the state in the first six months of 2019. While this number may not appear significant, it represents increased cost for these products of nearly 100% to the entire Florida Medicaid program, because the brand is effectively free. This is only one of 100+ potential examples within Florida's *Brand Drug Preferred List*.

8.4.1.5 Advair Diskus is not unique

Non-preferred generic utilization is not unique to the Advair products and may in fact be worse in other areas. To demonstrate, consider the most utilized therapy in 2018 to treat opioid dependence within Florida Medicaid, Suboxone and its generic buprenorphine-naloxone. These are another group of products on the *Brand Drug Preferred List*, and as can be seen in **Figure 8-10**, one out of every five prescriptions in 2019 (or 2,197 out of 10,830 total prescriptions) are for the non-preferred generic product within Florida's top MCOs.

Figure 8-10: Use of Preferred vs. Non-Preferred Buprenorphine-Naloxone Products within Florida's top MCOs, H1 2019



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug pricing and clinical definitions

Utilizing the same methodology for Advair, we can see that the impact of this non-preferred generic utilization is approximately \$45 per prescription in added costs. As can be seen in **Table 8-6**, this is despite the generic having an approximately \$100 lower acquisition cost on the claim. Based upon the number of generic prescriptions for this product, this results in approximately \$100,000 in added cost to the program for this one product over the six-month time frame.

Table 8-6: Differences in Net Costs of Buprenorphine-Naloxone 8-2 mg Products (H1 2019)

	Suboxone 8-2 mg	Buprenorphine-Naloxone 8-2 mg
Avg 2019 Cost per Claim	\$389	\$280
Estimated Federal Rebate	\$199	\$45
Net Cost to Medicaid	\$190	\$235
On FL PDL	Yes	No

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug pricing and derived URA estimates

As will be seen later (See [Estimating Financial Impact of Non-Preferred Product Utilization in H1 2019](#)), this is likely an under-stated estimate of the financial impact to Florida Medicaid (i.e. a Supplemental rebate for Suboxone may exist that makes it more financially advantageous to prefer the brand), but it is no less informative. As both Advair and Suboxone examples demonstrate, the drug rebate program within Medicaid is designed in such a way to ensure that state Medicaid programs receive a number of brand name drugs for rates that are significantly cheaper than if they were obtained in the typical commercial marketplace. State SPDL's are designed to ensure that the state is maximizing these available efficiencies. If MCOs and their PBMs work around the directives of the SPDL, it can cost the state millions of dollars in wasteful expenditures.

8.4.1.6 Limitations of URA Estimate

One of the limitations of our analysis is the inability to assess Best Price. Best Price represents a sale of a drug at a lower price to any other purchaser (i.e. non-Medicaid). This mandate guarantees that Medicaid automatically receives that price concession as well. The inability to assess this adds a limitation to our analysis as it is possible that our rebate estimate is understated by any variation that may exist between AMP and Best Price. This makes our estimate more conservative in scale.

A similar limitation to this analysis exists in our inability to assess any supplemental rebates that may be provided above and beyond the calculated Federal rebate. Similar to Best Price, supplemental rebates are price concessions beyond the AMP-based calculation for rebates that states receive when they directly contract with a manufacturer. Supplemental rebates do not impact any Best Price concession, so one's state experience on a given product may vary significantly from another if one has a supplemental rebate agreement that the other lacks. As supplemental rebates are almost exclusively associated with brand name medications, the inability to assess this means that our estimates of the brand name rebate obligations would be underestimated, which in turn would make our estimate more conservative, as we would be undervaluing the rebate associated with the brand product relative to the generic.

Another limitation of our analysis is the estimate of AMP. While AMP is statutorily defined, and its calculation is based on actual sales transactions between wholesalers for drugs distributed to the retail class of trade net of customary prompt pay discounts, it is not a published price in the public domain. Drug manufacturers must report AMP data for all Medicaid-covered drugs to the Centers for Medicare & Medicaid Services (CMS) quarterly as a requirement of the Medicaid Drug Rebate Program.⁴¹ Our estimate of AMP is based upon an Office of Inspector General (OIG) report from

2005 that identified the aggregate difference between AMP and WAC as 4%. Ideally, we would have a more recent evaluation to base our analysis on. As demonstrated, drug prices change significantly over time (i.e. Advair 250/50 WAC increased 360% from 2001 to 2018). We do not know if there is a gap that has developed over time between the AMP and WAC that impacts our assessment. However, we believe this estimate to still be accurate based upon a retail price survey conducted by Myers and Stauffer, LC, for CMS. The survey provides a view into the purchase prices for drugs by retail pharmacies.⁴² Included in this survey is a National Average Drug Acquisition Cost (NADAC) equivalency metric which analyzes the NADAC pricing relationship to compendia drug pricing values such as WAC. As can be seen in **Figure 8-11**, the relationship between a brand name drug's actual acquisition cost and its WAC seems fixed at 4%, even today. As a result, it seems reasonable, in our view, to retain an AMP estimate at 96% of WAC.

Figure 8-11: Myers and Stauffer NADAC Equivalency Metrics for Brand Name Drugs

Quarter Ending	Brand Legend Drugs			
	WAC Mean	WAC Median	AWP Mean	AWP Median
September 2018	-4.3%	-4.0%	-20.3%	-20.0%
December 2018	-4.3%	-4.0%	-20.3%	-20.0%
March 2019	-4.6%	-4.0%	-20.6%	-20.0%
June 2019	-4.4%	-4.0%	-20.4%	-20.0%
September 2019	-4.1%	-4.0%	-20.2%	-20.0%

Source: Myers & Stauffer NADAC Equivalency Metrics on Medicaid.gov

The final limitation that we will discuss related to our Federal rebate estimate is the impact of AMP distortions. In its final rule implementing provisions of the Affordable Care Act that apply to the Medicaid Drug Rebate Program, CMS directed primary manufacturers to include in their calculation of AMP the sale of authorized generic drugs to secondary manufacturers in some circumstances.⁴³ The Office of the Inspector General (OIG) has analyzed the impact of the inclusion of authorized generic transactions in AMP calculations. Their report, published in April of 2019, identifies that Medicaid received 46% less in rebates than it otherwise would have for the nine brand name drugs analyzed, amounting to \$595 million per calendar year.⁴⁴ While this specific example is largely a historical concern, as more recent rules (October 2019) have excluded this specific distortion,⁴⁵ other AMP distortions may still exist, and it is impossible for us to quantify these distortions except to note that if AMP is suppressed, our estimates of rebates would become overstated.

8.5 BRAND VS. GENERIC COMPLIANCE

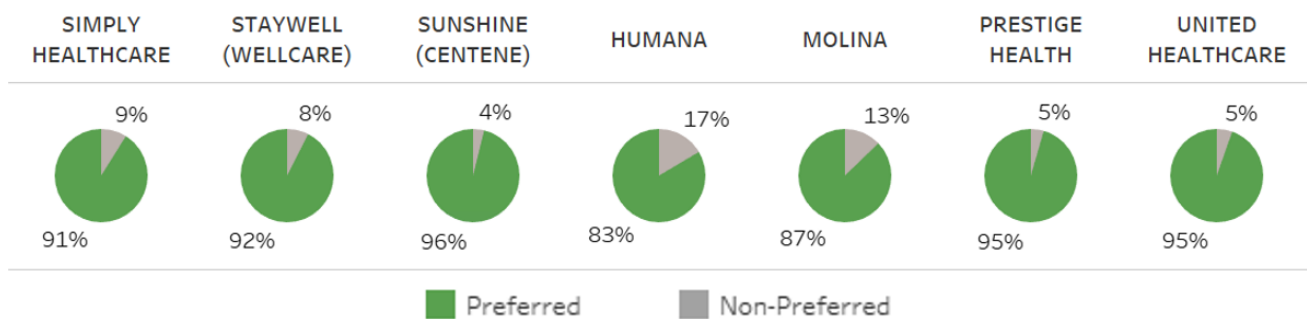
As part of Florida's single PDL, AHCA maintains a list of products titled the *Brand Drug Preferred List*. Drugs on this list have both brand and generic formulations, with the brand being preferred over the generics. The rationale for this is because unlike other payers, **generics may be more costly in the net to Florida Medicaid than the brand**, as demonstrated in the Advair 250/50 or Suboxone 8-2 mg examples in the prior section. When prescribed to Florida Medicaid recipients, the brand name formulation can be dispensed preferentially over the generic to generate savings. At the time of this report, the *Brand Drug Preferred List* was last updated on August 2019.⁴⁶ Previous versions were not available for review. While ideally, we would have a history of all lists, it is reasonable to presume that all drugs on the current list have always been preferred over their generic counterparts. This is because until generic competition occurs to drive generics' acquisition price down lower - as occurs over time with generic competition - the brand will remain less expensive net of rebates. Consequently, a brand on the current list is there because enough competition does not yet exist to

lower the generic price below the net cost of the brand. Based upon this presumption, it is possible to assess the overall compliance of Florida’s MCOs to the *Brand Drug Preferred List*.

To conduct this analysis, we created a list of all product codes (i.e. **national drug codes - NDCs**) for the brand name products on AHCA’s *Brand Drug Preferred List* through a name search off the pdf document. We then found the corresponding competitor products (i.e. generics) for these brand name products utilizing the Medi-Span drug reference file. Following a review to ensure all products were appropriately captured, we had 271 preferred brand NDCs and 745 non-preferred generic NDCs for a total of 1,016 products in this analysis. All brand name medications on the *Brand Drug Preferred List* were assigned a preferred status, whereas the corresponding products were assigned a non-preferred status. We were then able to quickly analyze across all Florida Medicaid plans the amount of preferred brand name products utilized relative to the corresponding generic for all products on this list.

To assess the success of preferred brand name product management, we compared all products utilized on this list by their preferred and non-preferred status within the top seven MCOs (those seven plans that represent 89% of all drug spending within Florida MCOs). As shown in **Figure 8-12**, there is significant variability in an individual MCO’s ability to manage to the *Brand Drug Preferred List*, with a range of 4% to 17% of non-preferred utilization.

Figure 8-12: Comparison of Brand Preferred Over Generic Prescription Utilization by Plan, H1 2019



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug categorization and AHCA Preferred Brand List

Aggregating each of the top seven MCOs together, approximately one in 10 non-preferred generics were utilized in place of the brands in 2019. This suggests that the Texas PDL non-compliance revelations with the OIG Molina and CVS Caremark audit were not isolated industry incidents, and that Florida is suffering from similar challenges of maximizing the net savings provided by the state’s brand-over-generic directives.

8.5.1 Estimating Financial Impact of MCO Non-Preferred Product Utilization in H1 2019

The inevitable question becomes, what is the estimated fiscal impact to Florida Medicaid for the non-preferred product utilization? The truth is that it is incredibly difficult to assess, as we do not have access to all the underlying data (i.e. URA, Best Price, Supplemental Rebates, etc.). At its most basic level, for a brand to be financially advantageous to prefer over a generic, the brand must offer a significant net discount relative to the generic. This can be particularly challenging in states like Florida with very low generic drug costs (see [Generic Drug Analysis](#)). To demonstrate this, we wanted to assess the aggregate price concession generic drugs are delivering within Florida Medicaid.

Knowing the generic price concession will help us quantify the level of brand name price concession necessary to prefer the brand over generic.

The most readily available pricing benchmark that exists for both brand and generic medication is **Average Wholesale Price (AWP)**.⁴⁷ While AWP is far from a good metric for actual cost to acquire generic drugs - and consequently the price that payers should pay for the drug - AWP is the benchmark most often used by PBMs to set pricing guarantees for their clients and provider networks. As a result, we feel comfortable relying upon the AWP to have some level of comparative prices readily available for both brand and generics. What we find in **Table 8-7** is that in H1 2019, Florida Medicaid managed care collectively priced generic drugs at a 90% discount to their aggregate AWP.

Table 8-7: Generic AWP Effective Rate in H1 2019 (Generics with AWP)

H1 2019 Generic Products with an AWP	
Total Amount Paid for Products	\$1,272,709,868
Total AWP for Products	\$126,996,441
Effective Rate (% Difference Total AWP & Total Amount Paid)	90%

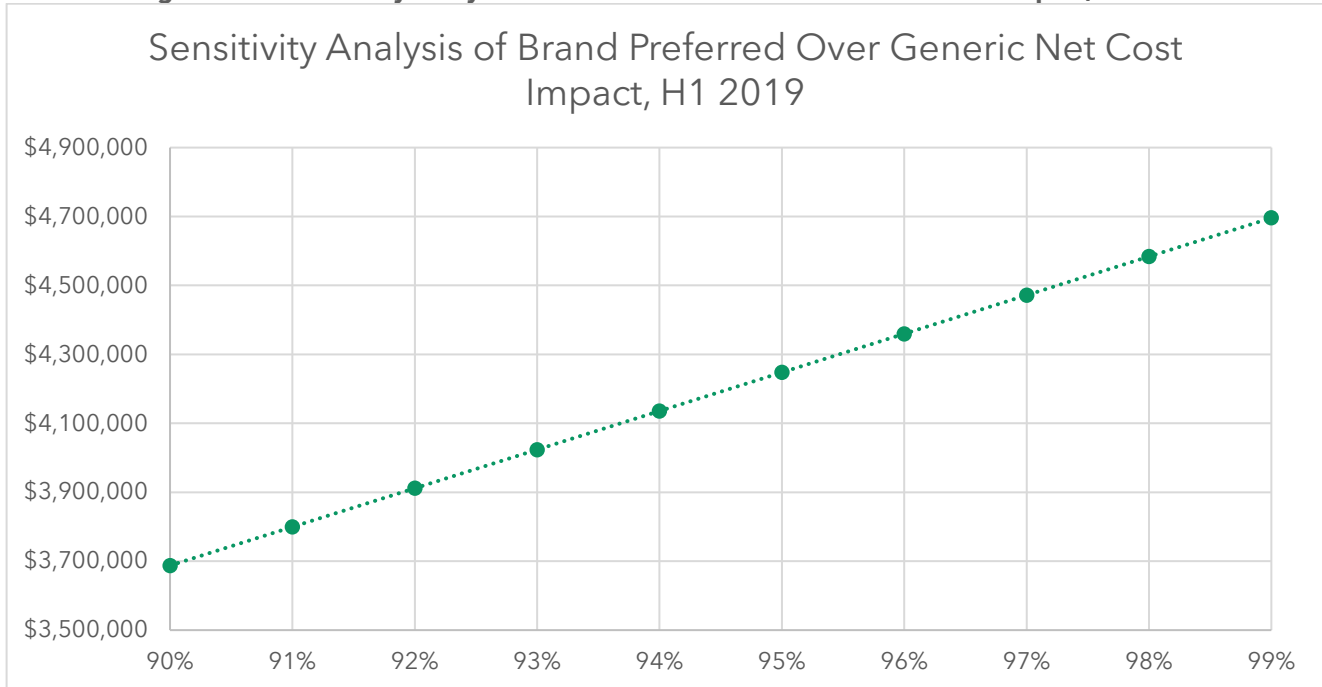
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug categorization and AWP price

While **Table 8-7** demonstrates how poor of a benchmark AWP is for generic medications; it also informs us that the overall price concessions realized for brand name medications must be beyond 90% in order for them to be preferred over their generic counterparts. Indeed, testing this further for just the group of generic products on the *Brand Drug Preferred List* does not change the AWP effective rate for those generic products; it is still 90%. This means that for those brand medications to be preferred over their generic counterparts, they must be delivering a greater than 90% discount off their respective AWP after all price concessions (i.e. Federal rebates, supplemental rebates, etc.).

Equipped with this information, we can now perform a sensitivity analysis to estimate the financial impact of the use of the non-preferred generics within Florida Medicaid. A **sensitivity analysis** determines how different values, in our case rebate amounts, affect a particular dependent variable, in this case net cost to Florida Medicaid, under a given set of assumptions.

To perform this estimate, we gathered the total amount paid by Florida MCOs, the total AWP cost, and the number of units for each product dispensed for products on the *Brand Drug Preferred List* and their associated generics. From there, we can get baseline estimates of rebates utilizing our URA estimate as previously discussed (See [Estimating the Unit Rebate Amount \(URA\) for Advair Diskus 250/50](#)). Because generic URA estimates are fixed at 13% of AMP, this gives us a fixed estimate of net cost for all the non-preferred generic products. This means that we have a singular variable that we can test via our sensitivity analysis, that is the URA of the brand product. Given the discounts observed with generic drugs, we begin our sensitivity analysis on brand products assuming a 90% discount, stepping up by 1% each level to a maximum of 99%. The results of this sensitivity analysis can be seen in **Figure 8-13** (next page) and identify \$4 million (Range: \$3.7 to \$4.7 million) in net impact to Florida Medicaid on the non-preferred (i.e. generic) product utilization in the first half of 2019 (H1 2019) alone.

Figure 8-13: Sensitivity Analysis of Brand Preferred Over Generic Net Cost Impact, H1 2019



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug categorization and price as well as AHCA Preferred Brand List

Using this same sensitivity analysis, we value the total *Brand Drug Preferred List* program at approximately \$60-80 million per year, meaning the ~\$4 million H1 2019 figure from **Figure 8-13**, after annualizing, represents 10%+ in lost value within the program. Looking to external research, Florida Medicaid’s fee-for-service pharmacy benefits administrator Magellan estimated that nationwide brand-over-generic programs were worth \$330 million in savings for State Medicaid programs in 2017.⁴⁸ This suggests that a disproportionate amount of savings could come from large managed care states with SPDLs, like Florida. Magellan did not provide an estimate of how much savings is being squandered across the country through sub-optimal adherence to states’ SPDLs.

While brand and generic differences are the quickest and easiest to aggregate and assess, they represent less than 2% of the over 60,000 unique NDCs within the data where potential additional discrepancies may exist. Supplemental rebates in other classes may increase the impact of formulary deviations, particularly given that the current AHCA SPDL is nearly 200 pages in length.⁴⁹

Therefore, our recommendation is that a deeper analysis be conducted into PDL formulary compliance within Florida Medicaid, similar to that undertaken by Texas. This should be conducted based upon actual URA amounts for each product, versus an aggregate estimate, as well as the formulary status for all products in all PDL managed classes, and not limited to just simple brand-over-generic status.

8.6 HUMANA QUANTITY DISPENSED PER CLAIM ANALYSIS

In **Figure 8-11** (page 42), we see that Humana, one of the largest MCOs by expenses within Florida Medicaid (~10% of expenditures), also happens to be the leader in terms of number of units deviating from the *Brand Drug Preferred List*. Investigating this further, we found an abnormality within the underlying data for claims associated with the Humana MCO - namely that utilization of

their products is double, when measured at the quantity dispensed per prescription, across **all** prescriptions within their MCO. As can be seen in **Table 8-8**, for the top five most utilized products within Florida Medicaid in the first half of 2019 across the various plans, Humana consistently has greater utilization of product per prescription (double the rate). We would not anticipate one plan would be such an outlier in this regard, as approach to treatment with a prescription drug (in terms of dosing) should be the same by a doctor regardless of the MCO associated with the patient.

Table 8-8: Differences in Average Quantity per Prescription by FL MCO, Top 5 Products in H1 2019

Plan Grouping	Albuterol Nebulization Solution 0.083%	Amoxicillin Susp 400 mg/ 5mL	Cetirizine 1 mg/ mL Solution	Fluticasone 50 mcg Nasal Spray	Gabapentin 300 mg Capsule
Humana	318	315	254	32	156
All Other MCOs Avg.	166	160	130	16	79
<i>Better Health</i>	188	157	130	16	73
<i>Children's Medical Services</i>	189	177	159	16	101
<i>Florida Community Care</i>	165	155	127	16	77
<i>Prestige Health</i>	170	151	126	16	80
<i>Sunshine / Centene</i>	155	157	125	16	78
<i>Miami Children</i>	140	153	126	16	77
<i>Coventry</i>	168	148	105	16	66
<i>United Healthcare</i>	178	153	122	16	82
<i>Staywell / WellCare</i>	156	154	129	16	79
<i>Simply Healthcare</i>	153	157	129	16	70
<i>Molina</i>	152	151	110	16	76
<i>Magellan</i>	173	209	172	16	83

Source: 3 Axis Advisors analysis of FL Claims Database

This observation is confirmed when we compare Humana claim-level utilization within the Florida Medicaid claims dataset as provided by AHCA to the observations of Humana utilization from actual Florida pharmacies. As we will discuss in greater detail later in this report (See [Pharmacy Reimbursement Analysis](#)), we obtained pharmacy claims data from over 100 Florida community pharmacies for the purposes of comparing Medicaid claims data to real-world pharmacy experience. While the primary purpose of the data comparison between these datasets was to assess PBM pricing spreads, we were able to utilize these datasets to better understand this dosing abnormality. As can be seen in **Table 8-9** (on next page), in areas where we have direct pharmacy data for claims associated with the Florida Humana Medicaid plan, we observed a disconnect between the reported units in the AHCA-provided claims dataset and that of the actual pharmacy that dispensed the medication. Again, we found nearly double the reported units in Medicaid to those that were actually dispensed by the pharmacies (See [Pharmacy Reimbursement Analysis](#) for greater details on how this comparison was generated). We did not; however, find that the reported cost per prescription was different - only the reported units.

Table 8-9: Differences in Average Quantity per Prescription for Humana, Medicaid Claim Data vs. Pharmacy Claim Data, Top 5 Products in H1 2019

Data Source	Montelukast Tablet 10 mg	Tamsulosin Capsule 0.4 mg	Symbicort Inhaler 160-4.5 mcg	Polyethylene Glycol 3350 Powder	Losartan Tablet 50 mg
Medicaid Claim Data	59	60	16	910	58
Pharmacy Claim Data	30	30	8	455	29

Source: 3 Axis Advisors analysis of FL Pharmacy Claims Database

These unit discrepancies undermine all analysis of Humana MCO unit costs derived from the AHCA-provided claims data, which is predicated on correctly reported units per prescription (calculations such as cost per unit, or lost rebate revenue derived from units of non-preferred products). These discrepancies were not observed within any of the other MCOs and strongly suggests an underlying data issue with the Humana MCO claims in AHCA claims data as provided to us via our public records request. **Consequently, as our analyses are highly dependent upon underlying utilization, we will exclude Humana from further analysis of the Florida Medicaid program.**

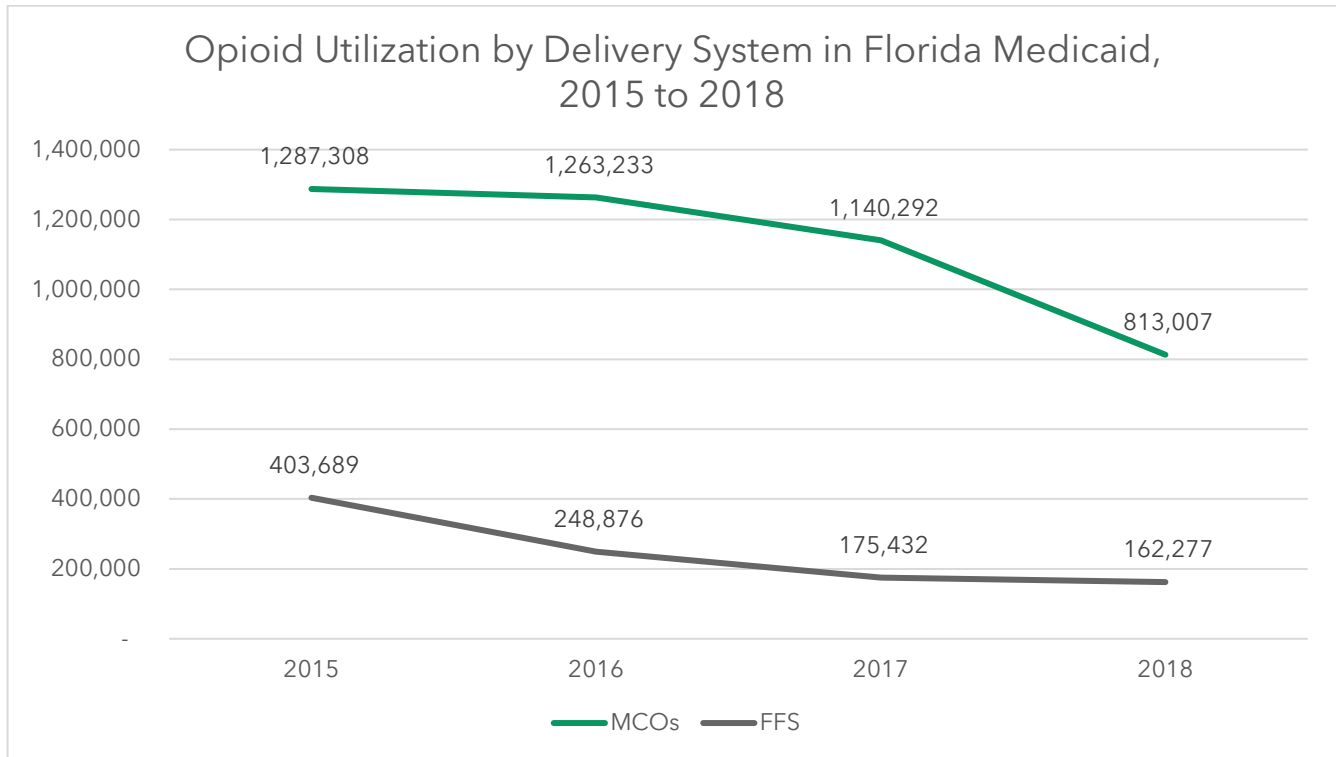
We highly recommend additional follow-up surrounding the operations of the Humana program, as it does represent nearly 10% of Florida Medicaid expenditures, clearly making it material to Florida Medicaid. If the Humana claims data presented to us was presented to other parties, such as drug manufacturers via quarterly rebate invoices, this over-allocation of units would result in significant over-collection of rebates. Similarly, if measuring clinical measures, such as morphine equivalent opioid doses, as we will do in the next section, Humana would *appear* to be over-exposing members to higher opioid doses per prescription than other Florida Medicaid plans. We cannot directly account for these observations and so will have to exclude them from further analysis.

8.7 OPIOID ANALYSIS

There is more significance to formulary management than simple financials. As identified earlier, one of the benefits of a SPDL outside of targeting lowest net cost therapies is the ability to pursue clinical outcomes across all plans in a uniform manner. Arguably the greatest clinical challenge associated with the prescription drug use Florida has faced over the last decade is the opioid crisis. Data from the Florida Department of Health’s Bureau of Vital Statistics indicates Florida’s unintentional and undetermined drug overdose deaths more than doubled from 2014 to 2016.⁵⁰ In 2017, Florida providers wrote 60.9 opioid prescriptions for every 100 persons, compared to the average U.S. rate of 58.7 prescriptions for an age-adjusted rate of drug overdose deaths of 23.7 per 100,000.⁵¹ In addition to mortality, the use of opioids can have significant secondary impacts on health, such as the development of infectious diseases from injectable drug use (IDU). This can add costs to the Florida Medicaid pharmacy program in other ways, as these infections need treated with therapies directed towards HIV or Hepatitis C (which may be acquired through IDU). In 2016, among Florida’s male population, 5.2% of new HIV cases were attributed to IDU or male-to-male contact, and 8.6% of new HIV cases were attributed to IDU in females.⁵² Costs are added if Florida Medicaid must cover the cost of these treatments as well as the initial opioid prescriptions dispensed.

Florida Medicaid has undertaken several initiatives designed to combat opioid over-utilization. Principal among these are limits placed on opioid medications when processing pharmacy claims. The *Opioid Edit Resource* published by AHCA identifies dozens of edits across the various opioid drugs which may be prescribed within the program.⁵³ These edits have clearly been useful in reducing the use of opioid medications within the Florida Medicaid program; however, there have been differences in the rate of opioid declines based upon delivery system. As demonstrated in **Figure 8-14**, the number of opioid prescriptions has declined by 28% in managed care from 2015 to 2018 vs. a 60% decline in the fee-for-service program:

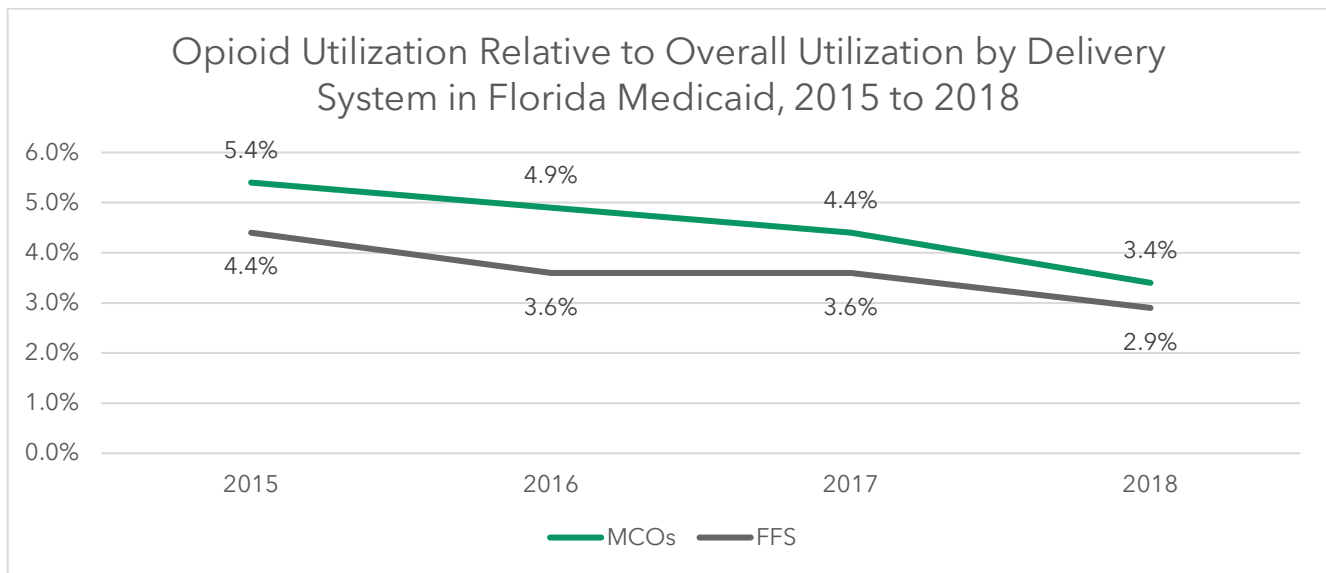
Figure 8-14: Opioid Utilization by Delivery System in Florida Medicaid, 2015 to 2018



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug categorization

Of course, Florida MCOs are a significantly larger component of the overall Medicaid program than the FFS program. As **Figure 8-15** (next page) demonstrates, when tracking the number of opioid prescriptions utilized as a percentage of the overall utilization of all prescription products, both MCOs and FFS are roughly equivalent in exposure to opioid prescriptions relative to other therapeutic drug categories (a half a percentage difference between FFS and MCOs).

Figure 8-15: Opioid Utilization Relative to Overall Utilization by Delivery System in Florida Medicaid, 2015 to 2018



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug categorization

While this observation is encouraging - as it demonstrates reductions in availability of opioid prescriptions relative to other therapeutic categories - it does not speak directly to any measure of clinical outcomes. For example, this observation could mask broader exposure to opioid medications if the dose of each prescription rose while the number of prescriptions declined (meaning that while the number of prescriptions may decline, the number of opioids available to be taken over time could have risen if the quantity per prescription increased at a greater rate over time).

One of the edits employed by Florida Medicaid to manage opioids is a daily **morphine milligram equivalent (MME)** limit of 90 MME. Such opioid dosing edits are useful, as they create a baseline between the various opioid products that exist to ensure similar management of opioid dosing regardless of product utilized (i.e. a comparison of dosing between the opioid product of hydrocodone 5 mg can be made to the opioid product of hydromorphone 4 mg based upon the MME of each). Given that over a dozen unique opioid products exist, MME eases comparisons of opioid dosing for medical professionals by creating a baseline to compare one to another. Additionally, studies have found a relationship between MME opioid dose and risk for adverse outcomes, including death. For example, in one study, patients receiving 100 MME per day or more had an 8.9-fold increase in overdose risk compared to those receiving less than 100 MME.⁵⁴ We lack days' supply information to perform an assessment of MME per day, such as was used in this study; however we can assess the amount of MMEs provided on average for each prescription over time. This can be done via the following calculation:

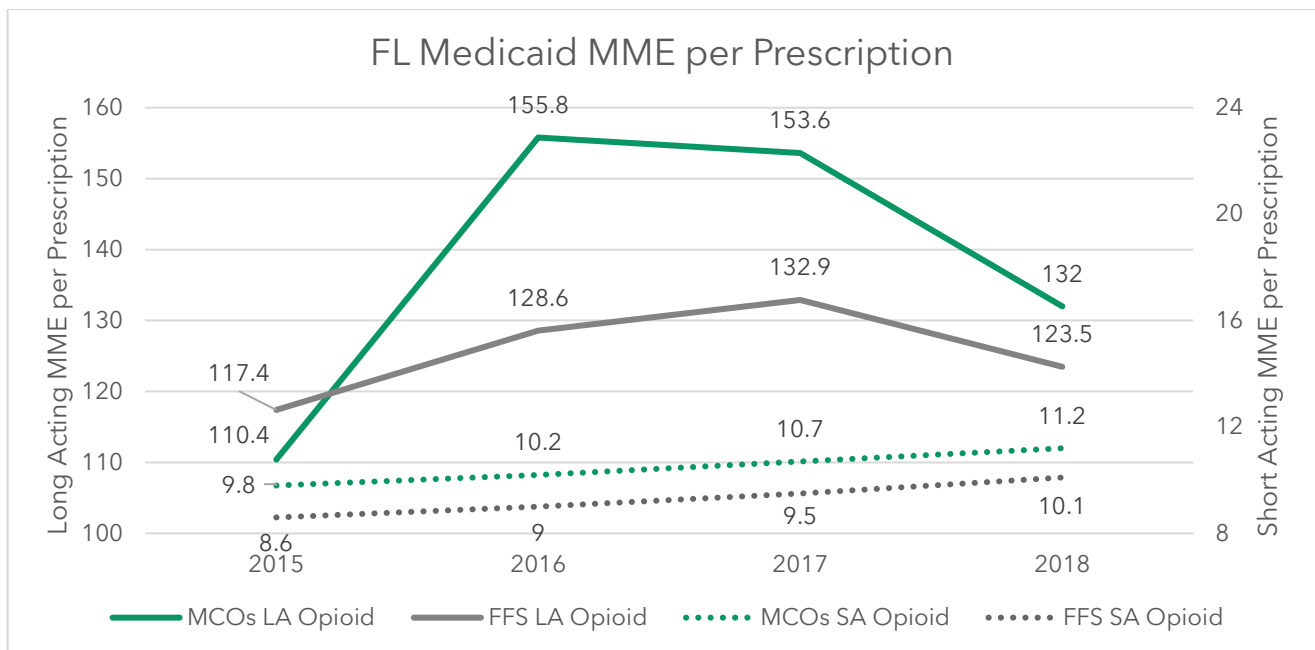
$$MME = \frac{\sum (\text{Number of Units of Drug} * \text{CDC MME Conversion Factor for Drug})}{\sum \text{Number of Prescriptions of Drug}}$$

By calculating this for each opioid product within each program and weighting the results by the number of each type of opioid medication dispensed, we are able to make an assessment of opioid exposure accounting for the different potencies of the various opioid medications. This per prescription view will demonstrate the variation that exists by delivery system to the amount of

equivalent opioid doses on average an individual opioid prescription contains. In the above offered MME calculation, we will utilize the Centers for Disease Control and Prevention (CDC) MME conversions for each opioid product, as the list is provided at the national drug code (NDC) level, making it relatively easy for us to stitch into our Medicaid claims database. Note that according to Florida Medicaid’s response to the annual CMS Drug Utilization Review (DUR) survey, they utilize the CDC MME conversion table in their claim edits.⁵⁵ This allows for an assessment of dosing based upon both units (utilization) as well as the type of opioids utilization (drug mix).

In **Figure 8-16**, we graph the aggregated average MME per prescription by delivery system and type of opioid, long-acting (solid line / left-axis) vs. short-acting (dashed line / right-axis). The figure demonstrates the change in dosing achieved per prescription on average by delivery system and type of opioid. As opioid prescriptions have declined over time, dosing on long-acting opioids have been impacted to a greater degree than dosing on short-acting opioids and in opposite directions. Average dosing per short-acting opioid prescription is actually trending up over time for both delivery systems, though the average opioid dose per prescription remains higher in MCOs relative to FFS.

Figure 8-16: Florida Medicaid MME per Prescription



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug categorization and CDC MME Equivalency Metrics for opioid dosing conversions

The downward trend of long-acting opioid doses should be expected when we consider that Florida Medicaid interventions related to opioids appear largely centered on minimizing chronic opioid utilization. Nonetheless, this view may identify that FFS has been more successful than MCOs at managing opioid dosing, as despite similar aggregate exposure to opioids (see **Figure 8-15**) in both systems, average exposure to opioid doses contained within an opioid prescription appears lower in FFS relative to MCOs. This may mean FFS is providing the clinical outcome Florida Medicaid is seeking to a greater degree than the MCOs despite similar plan design between the programs (i.e. SPDL, any shared opioid edits). This is because lower opioid doses are associated with lower risk for adverse outcomes, including overdose death. Further investigation into these observations is warranted as other factors may explain these dosing observations, such as differences in patient

populations between FFS and MCOs. If MCOs are more likely to treat patients with painful conditions requiring higher opioid doses, these observations may be a function of appropriate medical management.

8.8 PRIOR AUTHORIZATIONS

While the view of opioids may be influenced by the underlying eligibility differences between FFS and MCO, one possible explanation for this observation could be the difference in how MCOs and FFS manage their clinical edits. For example, a **prior authorization (PA)** is often required to exceed a dose limit, such as what might apply to an opioid prescription. Some states perform PA functions directly themselves or via a set fixed-fee contract (examples include Illinois, Ohio, or West Virginia in components of their Medicaid programs). This means that costs of PAs for these programs are largely fixed relative to plans that pay on a per PA basis. We do not have knowledge of whether Florida MCOs are paying a fixed fee for PA services or not; however, the most common PA payment mechanism currently is a \$50 per PA based upon our industry checks.

To put this in perspective, if the MCO or PBM employee that is performing the PAs is able to complete 10 PAs per hour, they will complete 80 PAs per day assuming an eight-hour shift. This generates \$4,000 in PA revenue per day or \$1 million annually (assuming five work days per week, 50 weeks worked per year). Given the average pharmacist salary in the state of Florida is \$128,000 per year, almost 10 full-time pharmacists could be directly employed at this \$50 per PA rate.⁵⁶ Of course this would mean that those 10 full-time pharmacist would be no more productive than the singular person currently performing PAs at the \$50 per PA rate. This may help explain why certain programs, especially at scale, elect to manage PA functions directly or via fixed contract arrangements rather than on a per PA basis.

We highlight this because it may create an incentive that works against Florida's clinical goals. Because PA services may be a direct cost, this may incentivize MCOs to reduce formulary clinical edits as a cost saving measure. This is because failure to build a formulary that triggers a dose check reduces the number of PA requests sent in requesting to exceed the limit. Fewer PAs reduces plan operational costs as costs are directly tied to the number of PA requests recieved.

As information regarding prior authorization costs and operations are beyond the scope of this report, our suggestion would be that AHCA further investigate formulary compliance as well as PA functions within MCOs. While undoubtedly significant time is spent developing an appropriate formulary for all Florida Medicaid participants, we failed to find any existing reports or assessments by AHCA to monitor formulary compliance across the MCOs. Similarly, no reports were found that measured clinical successes around formulary operations (i.e. percent of preferred agents utilized, number of PA requests received, timeliness of PA responses, appropriateness of PA determinations, etc). These reports would likely add value to Florida's ongoing monitoring of MCO operations.

9 GENERIC DRUG ANALYSIS

9.1 “MARGIN OVER NADAC,” AND OTHER KEY TERMS AND DEFINITIONS

Throughout our analysis of Florida Medicaid managed care generic drugs costs, we heavily use a term called **Margin over NADAC**.

Before we define this term, we need to define NADAC. NADAC stands for **National Average Drug Acquisition Cost**. NADAC is compiled by Myers and Stauffer on behalf of the Centers for Medicare and Medicaid Services (CMS) and made available to the public on Data.Medicaid.gov. It is based on a voluntary nationwide survey of retail community pharmacy wholesaler invoice costs, conducted once a month. According to CMS, Myers and Stauffer surveys roughly 2,500 pharmacies each month and receives responses from 450 to 600 pharmacies.⁵⁷ As a result, it provides an objective measure of retail community acquisition costs, that is the invoice price they pay to acquire their generic drugs.⁹

Two of the key limitations of NADAC are:

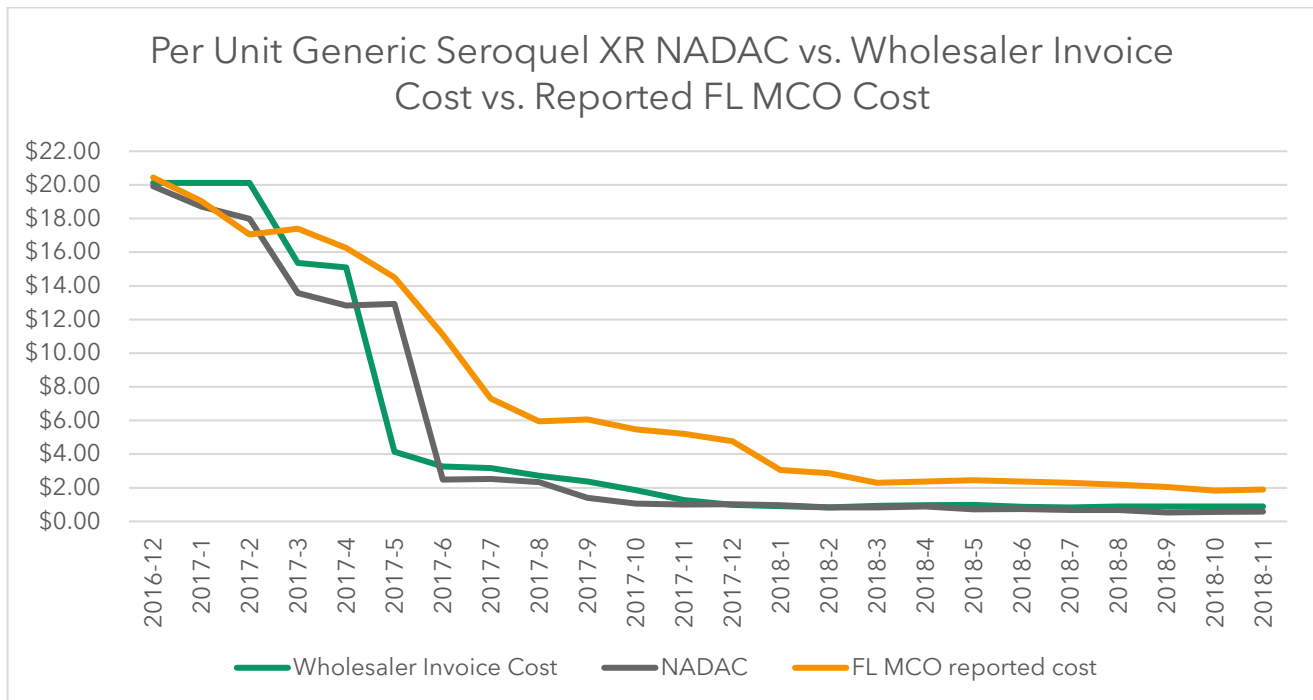
- 1) The survey is voluntary (i.e. pharmacies can choose whether or not to participate).
- 2) The survey only captures invoice prices, meaning it is blind to the off-invoice discounts that pharmacies can receive from their wholesalers.

Section 206 in Sens. Chuck Grassley and Ron Wyden’s Prescription Drug Pricing Reduction Act of 2019 and Section 815 in Rep. Frank Pallone’s Elijah E. Cummings Lower Drug Costs Now Act aim to mitigate these two limitations by mandating pharmacy reporting into the NADAC survey and requiring reporting of off-invoice rebates collected by pharmacies. It also contemplates the creation of separate NADACs for chain and independent retail pharmacies to account for the differences in their acquisition costs.⁵⁸ ⁵⁹ If passed in their current forms, we expect these specific changes to result in significant savings on ingredient costs for programs anchoring ingredient costs to NADAC.

However, notwithstanding NADAC’s current limitations, it is still, in our view, the best proxy for prescription drug acquisition cost available to the public. We have performed extensive work comparing NADAC to retail pharmacy invoice costs and have confirmed that, on a normal mix of generic drugs, NADAC trends closely with pharmacy invoice costs. It does an excellent job of capturing market-based deflation that, as shown in **Figure 9-1** (next page), often occurs very suddenly and sharply in highly competitive multi-source generic drugs. In contrast, as we will exhaustively detail in this section, reported MCO costs do not necessarily trend in line with market-based acquisition costs, oftentimes preventing the savings that the generic drug marketplace is designed to provide from reaching the state.

⁹ NADAC does not account for off-invoice (i.e. rebates) discounts retail community pharmacies may receive for their drug purchases from their wholesaler

Figure 9-1: Generic Seroquel XR NADAC vs. wholesaler invoice cost vs. reported FL MCO cost



Source: 3 Axis Advisors analysis of FL claims data leveraging prices from Medi-Span PriceRx and NADAC obtained from Data.Medicaid.gov

As such, NADAC is very handy when looking to assess the reasonableness of payer reimbursements (for Florida Medicaid managed care, “Amt Op Paid”). We clearly cannot compare the reimbursement of one generic drug to another, because acquisition costs of generic drugs vary widely. But if we deduct a claim’s NADAC from the reported amount paid, we are able to put all claims payments on a level playing field, allowing us to compare the reasonableness of the reported MCO claim payment across drugs, payers, and pharmacy providers.

This is what Margin over NADAC aims to do. To calculate Margin over NADAC, we deduct the total NADAC for each claim (calculated by multiplying the surveyed NADAC per unit - [adjusted to correct for survey lag](#) - by the total number of dispensed units in the claim) from the total amount reported paid by the MCO for the same claim (i.e. “Amt Op Paid”). We built this calculation into our database and used Tableau to aggregate as needed for all analysis performed in this section.

It is critical to note that Margin over NADAC in this section is exclusively calculated based on Florida’s reported claim-level payments. It measures either how much the state is directly paying above NADAC (in fee-for-service) or how much above NADAC the state’s MCOs paid its PBM for the claim (in managed care). In the latter case, **this may or may not be reflective of how much the pharmacy provider received for the claim**. To the extent that any of Florida’s MCOs have entered into spread pricing contracts with their PBMs, the MCO’s reported payment to its PBM for a given claim could be different from the PBM’s payment to the pharmacy that dispensed the claim. The focus of the [Pharmacy Reimbursement Analysis](#) section is to compare pharmacy reimbursement data collected from more than 100 pharmacies across the state with Florida’s reported managed care encounter claims data to understand to what extent and magnitude spread pricing practices are in place in each of Florida’s six largest MCOs.^h

^h Humana has been excluded from the analysis in this section due to what we believe to be overstated units reported in AHCA’s claims data. Please see [Humana quantity dispensed per claim analysis](#) for more detail.

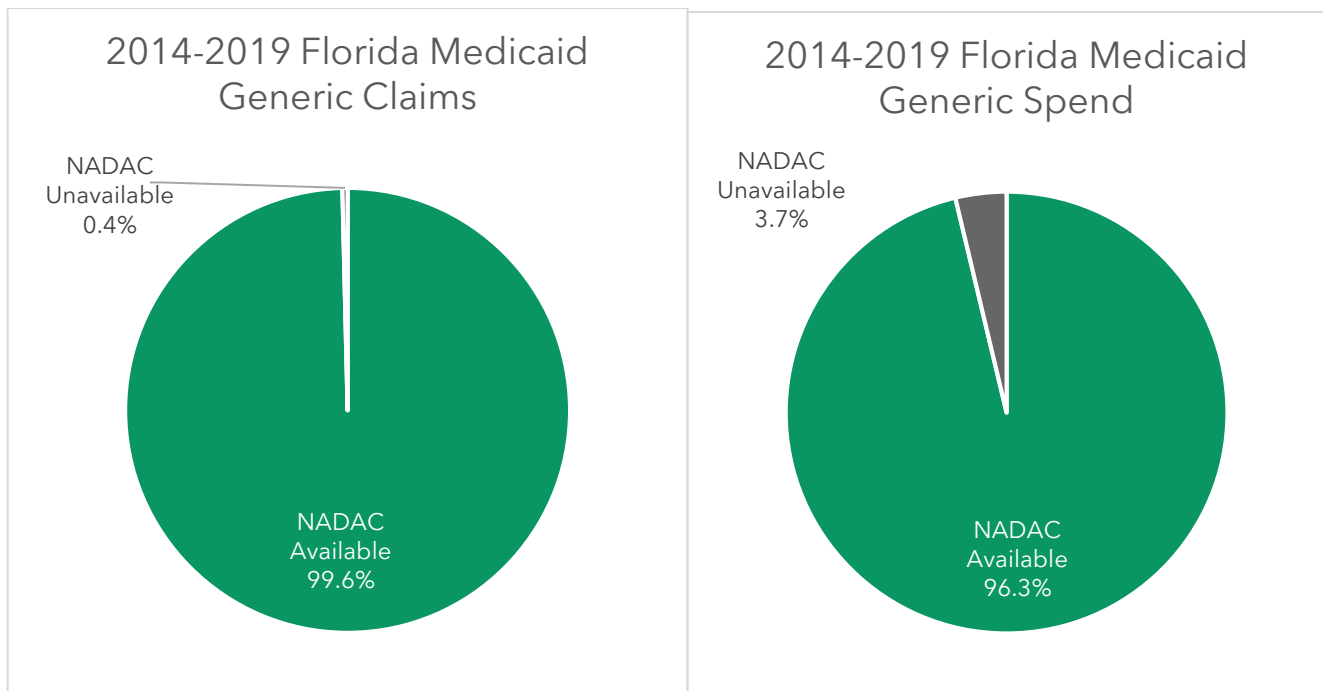
9.2 NADAC COVERAGE OF FLORIDA MEDICAID GENERIC DRUGS

One of the limitations to NADAC mentioned in the prior section is that it is a voluntary survey that is responded to each month by 450 to 600 pharmacies. It follows then that NADAC can only “see” costs for drugs that are dispensed by the pharmacies that respond to the survey. A 2017 study of nationwide Medicaid claims conducted by Myers and Stauffer found this to not be much of a problem for generic drugs in Medicaid in its totality. It found that NADAC was available for 97% of all Medicaid generic claim submissions.⁶⁰ In other words, NADAC has already been found to have excellent coverage of all generic drugs dispensed in the retail pharmacy setting.

However, it is possible that if a payer’s drug mix is heavier on more obscure generic drugs that are dispensed outside of a retail pharmacy setting, a NADAC-based margin analysis could drop out a meaningful number of generic drugs.

As such, our first task was to assess the level of NADAC coverage we had for Florida’s Medicaid generic claims. **Figure 9-2** shows that Florida’s NADAC claim and spending coverage is even better than Myers and Stauffer’s published nationwide numbers. Between 2014 (when NADAC first became available) and 2019, only 0.4% of all Florida Medicaid generic claims did not have a NADAC, representing just 3.7% of cumulative generic spending.ⁱ That is only \$83 million of over \$2.2 billion in reported spending on generic drugs in Florida Medicaid. In summary, the NADAC-based margin analysis we have performed in this section captures the overwhelming majority of Florida’s generic dispensing volume and spending.

Figure 9-2: NADAC Coverage in Florida Medicaid Generic Claims (2014-2019)



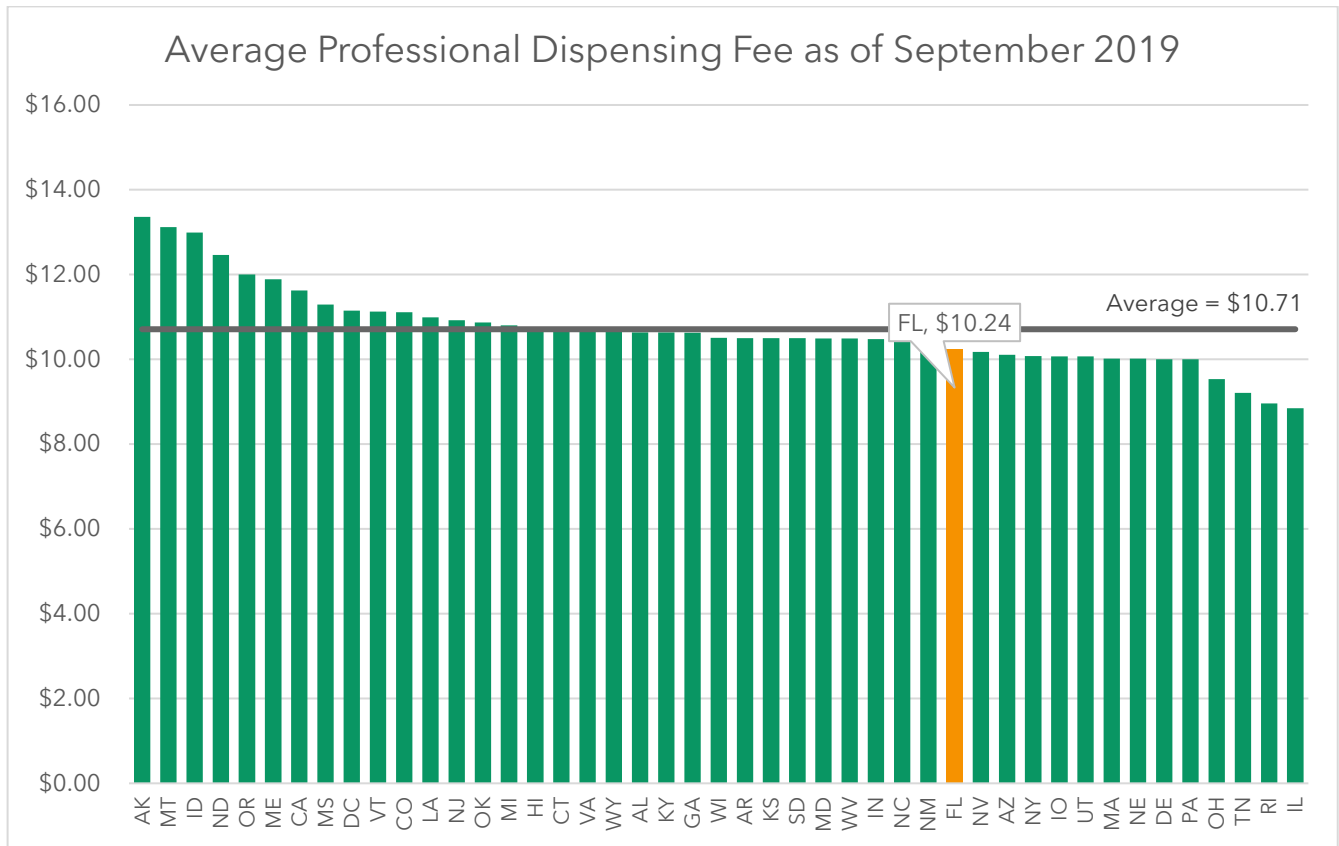
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

ⁱ Medi-Span Brand Name Code = G; Drug Application Type (FDA) = ANDA; Missing Quantity Dispense = 1; Zero Combined Reimbursement = 1

9.3 COMPARING FEE-FOR-SERVICE TO MANAGED CARE

With the key definitions out of the way, we can now dive into our generic analysis. We started with a validation exercise to ensure that our Margin over NADAC calculation passed the “sniff test.” To validate this calculated field, we aggregated all generic claims over time for Florida Medicaid fee-for-service (FFS), which in 2018 (as per CMS requirements enacted in 2017) was switched to a NADAC-based ingredient cost, plus a survey-based professional dispensing fee. As demonstrated in **Figure 9-3**, Florida’s pharmacy dispensing fee has been set at \$10.24 per claim, just under the \$10.71 national average.⁶¹

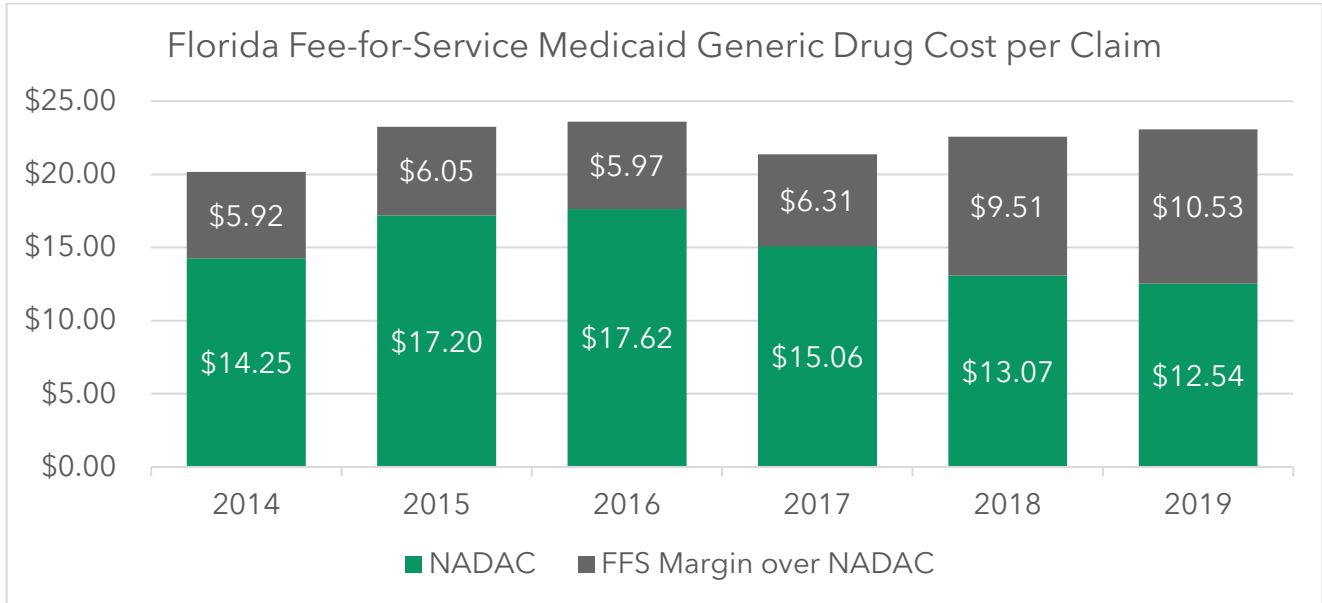
Figure 9-3: Professional Dispensing Fees by State as of September 2019



Source: 3 Axis Advisors analysis of professional dispensing fees from Medicaid.gov

Figure 9-4 (on next page) shows the aggregate fee-for-service cost per claim by year, separated into the NADAC ingredient cost and the Margin over NADAC, which starting in 2018 should be a close proxy for the \$10.24 per claim professional dispensing fee. In 2014 through 2017, after aggregating all Florida generic claims, we arrived at a weighted average Margin over NADAC of just over \$6 per claim in each year and a weighted average NADAC of just over \$16 per claim. In 2018 and 2019, the Margin over NADAC increased to \$9.51 and \$10.53, respectively. The proximity of both numbers to Florida’s \$10.24 per claim professional dispensing fee gave us more comfort in both: 1) the aggregate quality of Florida’s generic claims data, and 2) the methodology we used to prepare the data. Note some deviation from a perfect match to \$10.24 above NADAC is anticipated, as Florida Medicaid’s FFS reimbursement methodology will capture lower submitted provider costs and adjust payment accordingly (i.e. lesser of billed amount or allowable maximum of NADAC).

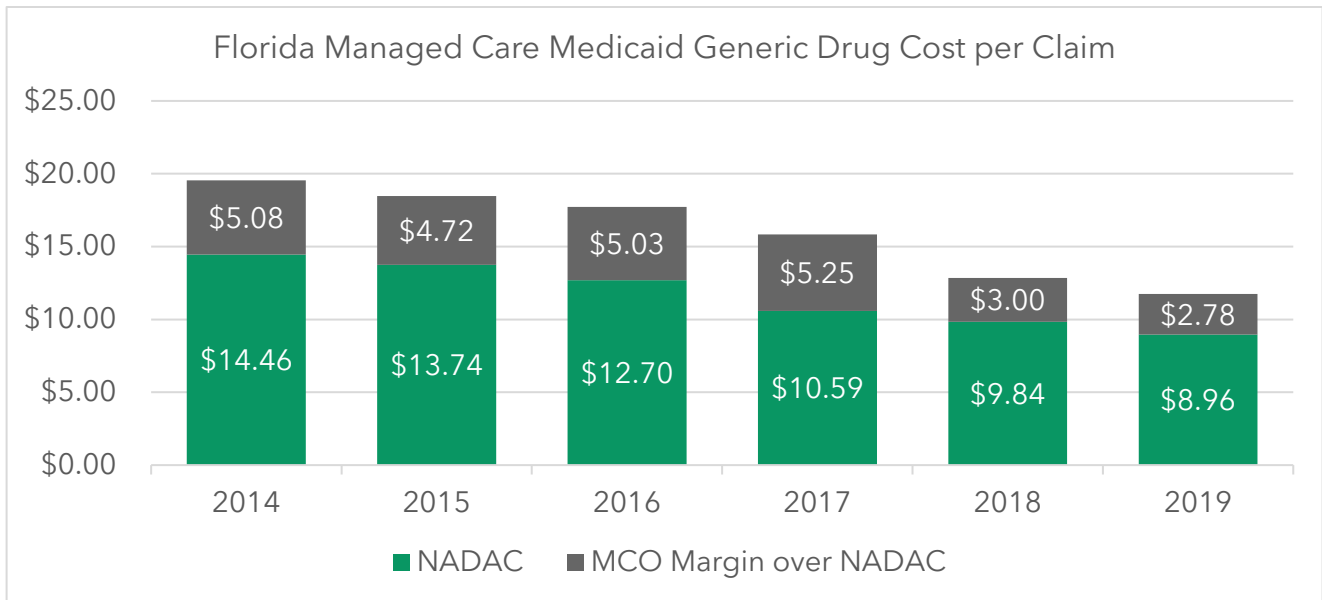
Figure 9-4: Florida Fee-for-Service Medicaid Generic Drug Cost per Claim



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Figure 9-5 shows the breakdown of weighted average NADAC ingredient cost and Margin over NADAC for Florida Medicaid managed care. In 2014, the combination of these two cost components was \$19.54 per claim for managed care, very close to \$20.17 per claim in fee-for-service. However, over the next five years, generic costs in managed care dropped 40% to just \$11.74 per claim, while generic costs in fee-for-service rose 14% to \$23.07 per claim. As a reminder, all MCO analysis performed in this section excludes Humana claims due to the significant reported unit inconsistencies discussed earlier in this report. For more on these findings, please refer to the [Humana quantity dispensed per claim analysis](#) section.

Figure 9-5: Florida Managed Care Medicaid Generic Drug Cost per Claim

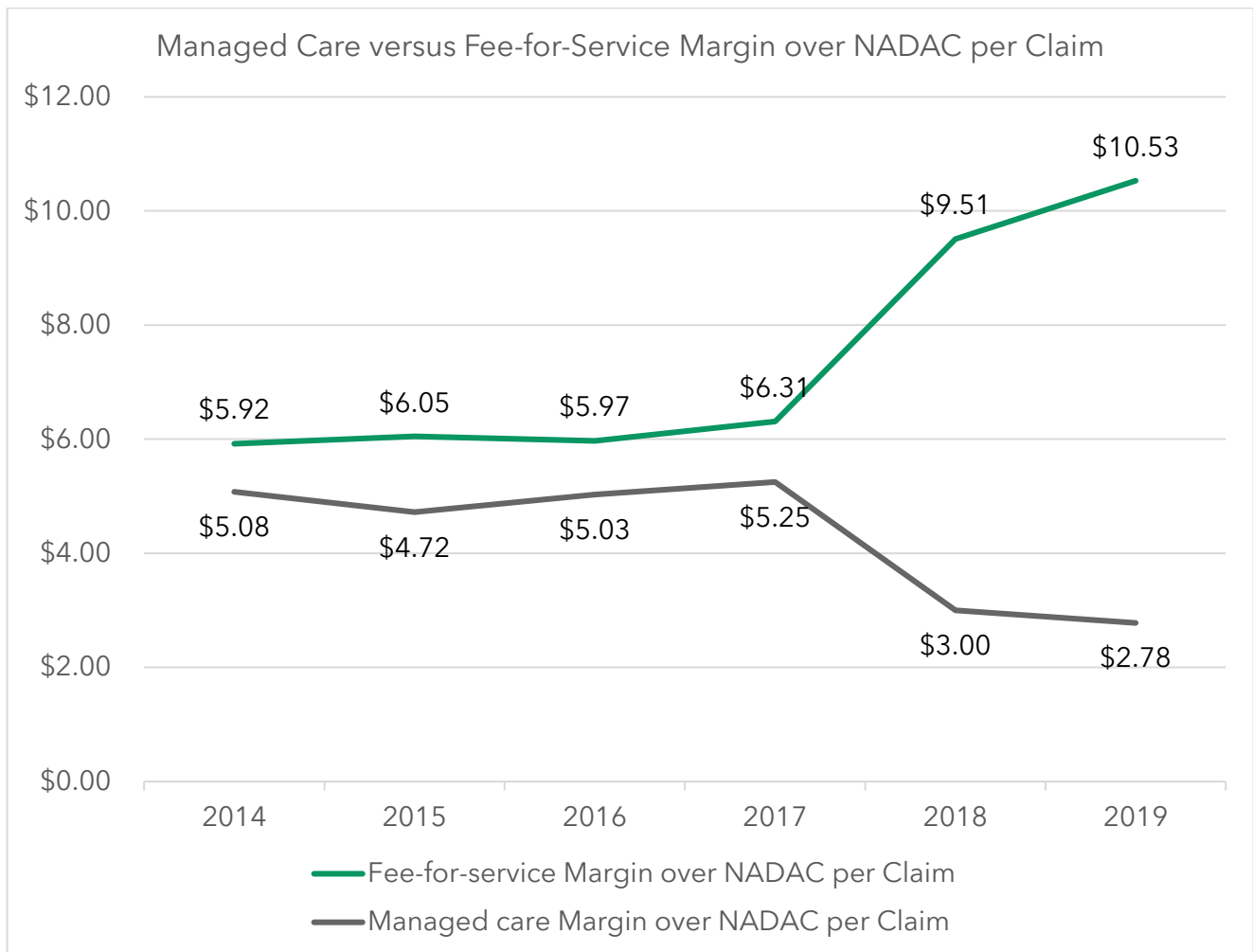


Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

There are two factors responsible for the divergence in generic costs between the two programs. First, managed care has a less expensive generic drug mix. Managed care’s weighted average 2019 NADAC per claim was \$8.96 while fee-for-service was \$12.54. Given that Florida Medicaid has had a **Single Preferred Drug List (PDL)** in place since 2014, this variable should not be readily controllable.

The more significant difference between the two programs is in Margin over NADAC, as shown in **Figure 9-6**. While fee-for-service was required to increase its professional dispensing fee to a level that would cover a pharmacy’s surveyed operating cost, no such requirement was ever put in place in managed care. As such, managed care has collectively decreased pharmacy Margin over NADAC to \$2.78 per claim - less than 20% of the average Florida community pharmacy’s cost to dispense.

Figure 9-6: Managed Care versus Fee-for-Service "Margin" Per Generic Claim



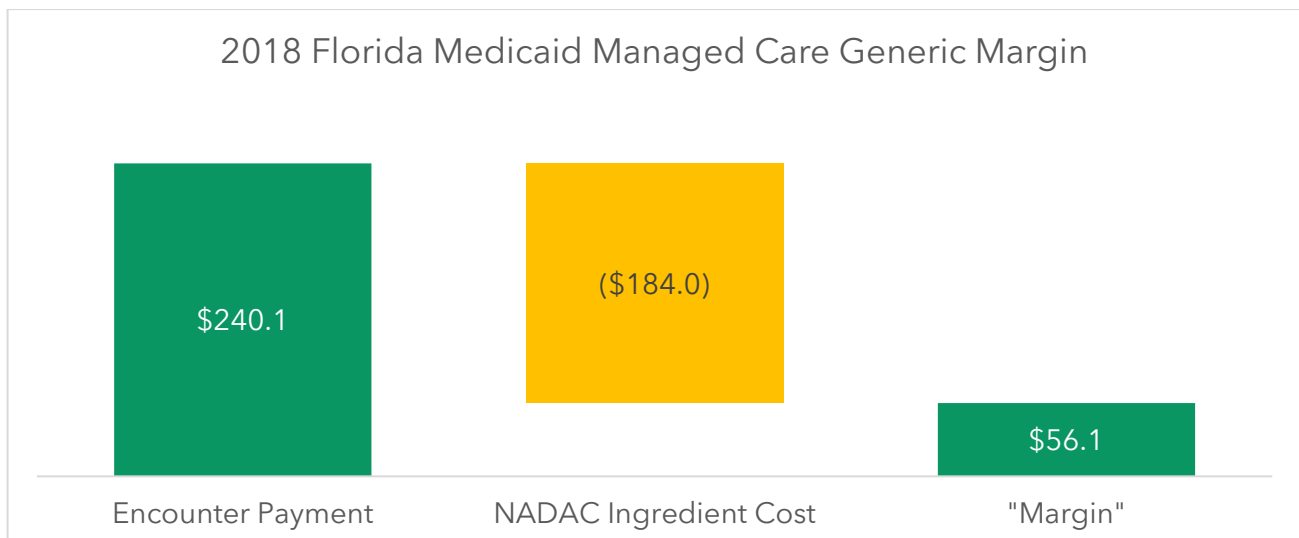
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

9.4 \$56 MILLION OF MARGIN OVER NADAC

Returning to **Figure 9-6**, Florida Medicaid managed care reported a generic drug Margin over NADAC of \$3.00 per claim overall in 2018. Multiplying this by the total generic claims in 2018 gets

us to \$56.1 million in overall Margin over NADAC. In other words, managed care had a \$56.1 million “pie” to divvy up as margin across the state’s 4,500+ pharmacy providers (**Figure 9-7**).

Figure 9-7: 2018 Florida Medicaid Managed Care Generic Margin



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

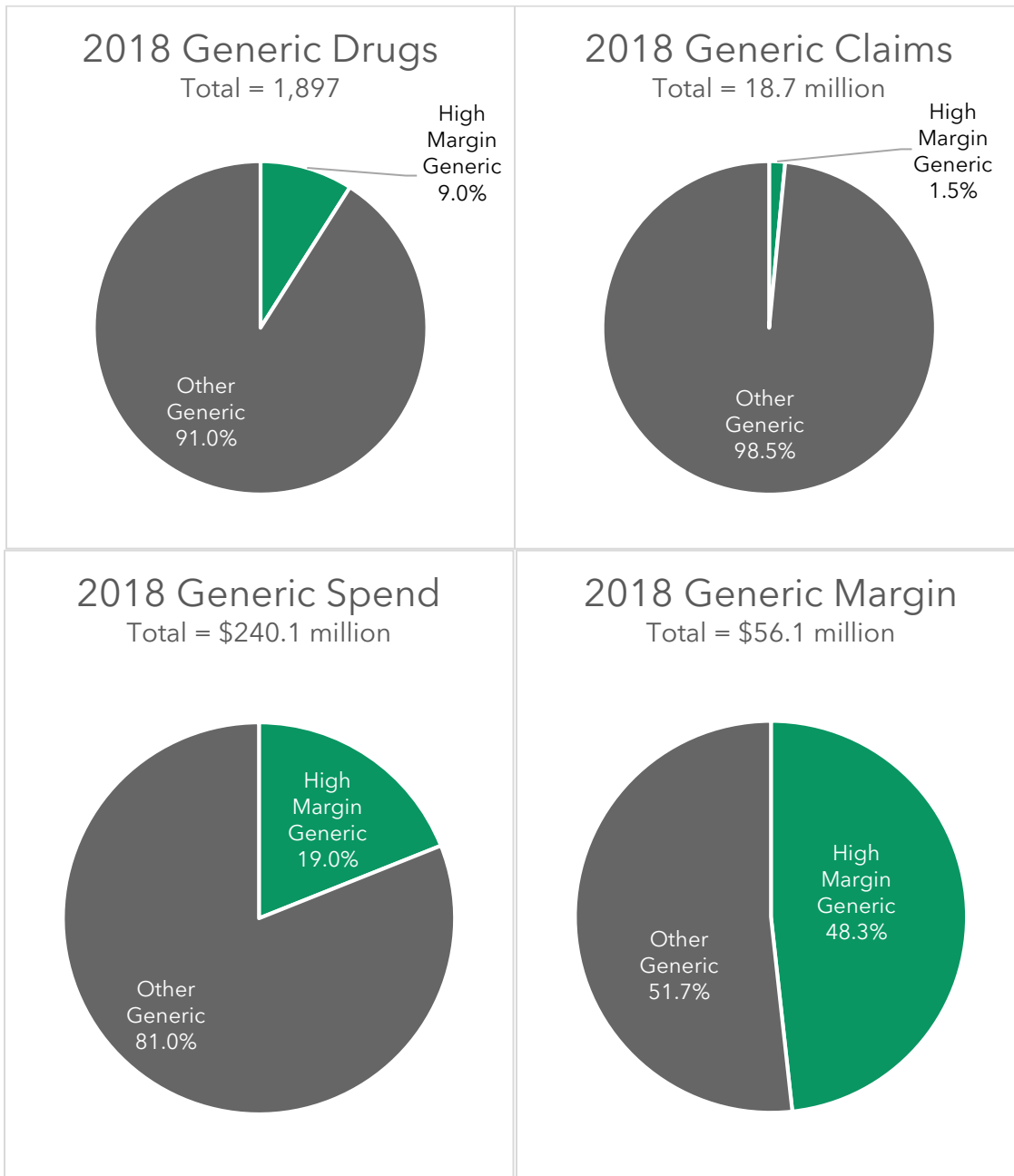
We reiterate that managed care is not required to price generic drugs based on an acquisition cost benchmark. Generic drugs are typically priced based on what are called “MAC lists.” While MAC stands for **Maximum Allowable Cost**, it need not have any relation or relevance to a drug’s actual acquisition cost. Rather the term “MAC” has, over time, morphed to represent a PBM’s proprietary pricing list, which may or may not have some relation to actual pharmacy acquisition costs. PBMs can manage hundreds of MAC lists at any given time. There can be different MAC lists for different network providers and different MAC lists for different payer clients. MAC prices can change without any change in real acquisition cost or remain the same despite large changes in real acquisition cost. In a spread pricing model (where PBMs pay a pharmacy one rate, but bill a plan sponsor an entirely different, higher rate), PBMs manage a different MAC list for the payer/client from the pharmacy provider, arbitraging their unilaterally set and controlled pricing differences to collect “spread” profit in lieu of (or in addition to) administrative fees. Ultimately, the extent to which such pricing differences are exploited are driven by nuanced differences between a PBM’s contract with an MCO and a PBM’s contract(s) with pharmacy provider(s). The more leeway the PBM has within its contracts, the higher the likelihood their payer will see pricing distortions (relative to actual drug costs) in its program.

9.5 NEARLY 50% OF THE PIE “PAID OUT” ON JUST 171 “HIGH MARGIN” DRUGS

Next, we will test these suppositions on 2018 Florida Medicaid managed care data. If PBM MAC lists were strictly anchored to acquisition cost, we would logically expect nearly all generic claims dispensed in the state to show a margin of \$3 per claim. The margin would be completely indifferent to the type of drug and/or the pharmacy at which the claim was dispensed. The margin would still not be sufficient to cover pharmacy dispensing costs, but it would at least be distributed fairly across all providers and all drugs, removing the incentive to dispense some drugs over others, or worse off, serve some patients over others.

Unfortunately, this is not what we found in Florida Medicaid managed care. As shown in **Figure 9-8**, we instead found that in 2018, Florida managed care collectively reported payments of \$27.1 million (48% of total) on only 171 **high margin generic drugs** (9% of total generic drugs). We define a “high margin” generic drug as any drug that was collectively priced by Florida Medicaid managed care with a Margin over NADAC of \$25 per prescription or more. Overall, the claims dispensed on these 171 drugs comprised only 1.5% of total managed care generic claims in 2018.

Figure 9-8: 2018 High Margin Generics, Percent of Overall Generics, Claims, Spend, Margin



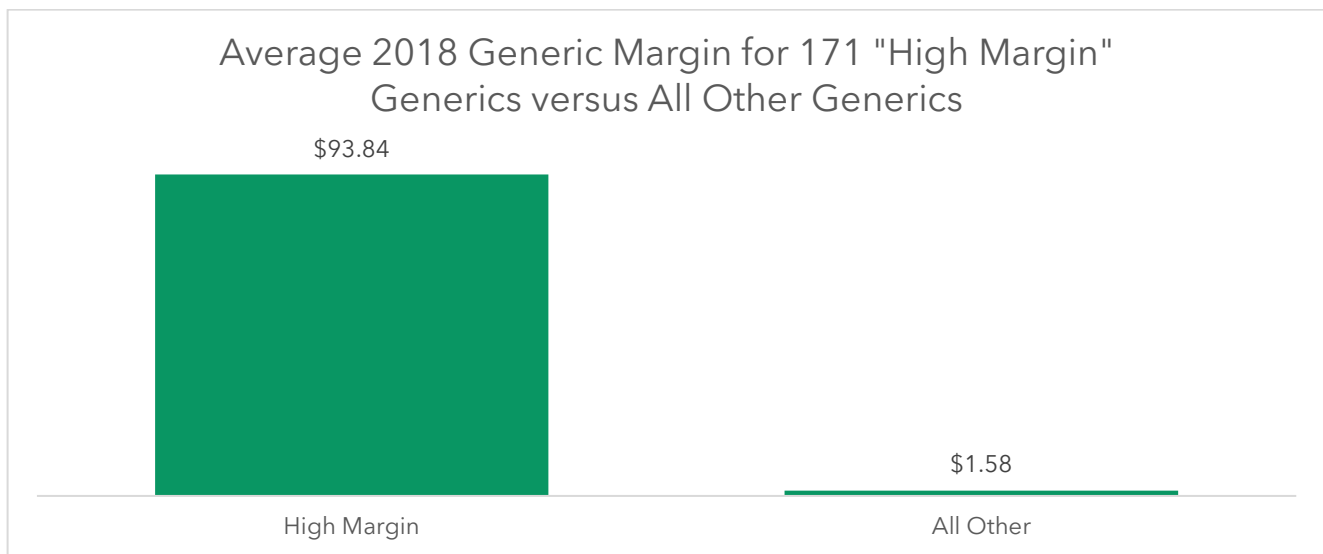
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

To the extent such pricing distortions are passed through to pharmacy providers (which based on the work we present in the [Pharmacy Reimbursement Analysis](#) section, strongly appears to be the

case for most of Florida’s largest MCOs), this considerable skewness in margin segments the winners and losers in Florida not by the quality of care, but simply by drug mix. The pharmacy provider has a strong incentive to dispense generic drugs that arbitrarily pay high margins and avoid generic drugs that arbitrarily pay low (or negative) margins - and the patients that take them.

Figure 9-9 makes this warped incentive abundantly clear, in our view. In 2018, the average Margin over NADAC reported to the state by managed care on the 171 high margin generics was \$93.84 per claim. On all other generics, it was \$1.58. As a reminder, “All Other” generics comprised more than 98% of generic claims to Medicaid managed care members. So, it follows that managed care collectively shared a weighted average Margin over NADAC of \$1.58 per claim on the overwhelming majority of its generic claims. This put pharmacies that did not naturally have access to the chosen 171 high margin generic drugs at a severe marketplace disadvantage, and as we will show in the [Following the pricing signals](#) section, may have provided the incentive for other providers to shift their volume to the few drugs that paid out enormously well.

Figure 9-9: Average 2018 Generic Margin for 171 "High Margin" Generics versus All Other Generics



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Table 9-1 (next page) drills down further to understand the nature of the 171 high margin generic drugs. Of the more than \$27 million in Margin over NADAC reported on the 171 drugs, \$23.3 million was reported on just 66 drugs within five classes, listed in descending order by Margin over NADAC:

- Antipsychotics / Antimanic Agents
- Dermatologicals
- Antineoplastics and Adjunctive Therapies
- Miscellaneous Therapeutic Classes (primarily drugs for organ transplants)
- Antivirals

This means that in 2018, managed care collectively reported roughly 40% of the program’s entire generic drug margin over NADAC (again, \$57.1 million) on just 66 generic drugs within these five classes. In our view, these are unlikely the classes that would deliberately receive the most incentive (i.e. margin) to encourage dispensation. While cancer therapies (antineoplastics), antivirals, and

antipsychotics are likely aligned with Florida’s population health initiatives, we suspect that dermatological conditions rank below treatment for opioid abuse disorder or children’s health initiatives.

Table 9-1: 2018 Florida Medicaid managed care High Margin Generics by Group

GPI 2 - Group	Distinct Count of GPI-14s	Total Amount Paid (\$)	Total Margin over NADAC Paid (\$)	Total Margin over NADAC Paid per Claim (\$)	Notable Driver / Distortion
ANTIPSYCHOTICS/ ANTIMANIC AGENTS	22	15,415,831	10,364,694	61.46	Differential Generic Pricing
DERMATOLOGICALS	20	13,685,614	8,273,594	206.87	Following the Pricing Signals
ANTINEOPLASTICS AND ADJUNCTIVE THERAPIES	3	2,835,223	2,170,654	3,201.55	Specialty Pharmacy Steering
MISCELLANEOUS THERAPEUTIC CLASSES	6	2,104,171	1,368,133	64.04	Differential Generic Pricing
ANTIVIRALS	15	2,177,331	1,096,266	171.51	Differential Generic Pricing Specialty Pharmacy Steering
All Others	105	9,280,875	3,801,023	73.89	
Total	171	45,499,046	27,074,364	93.84	

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

As we studied these five classes, we uncovered three “key drivers” we believe responsible for the preponderance of the Margin over NADAC reported for the 66 generic drugs. We have labeled them:

- 1) Differential Generic Pricing**
- 2) Following the Pricing Signals**
- 3) Specialty Pharmacy Steering**

The remainder of this section discusses these three key distortions.

9.6 DIFFERENTIAL GENERIC PRICING

We define **Differential Generic Pricing** as when an MCO/PBM charges or reimburses different rates for filling the same drug at different pharmacies. As we researched the more than \$10 million in drug supply chain margin Florida managed care collectively paid for 22 different generic Antipsychotics and Antimanic Agents, we noticed that such a practice appears to be in place within Florida Medicaid managed care. Differential Generic Pricing is also driving disproportionate margin to selected pharmacies on selected generic drugs within the Miscellaneous Therapeutic and Antiviral Classes.

The remainder of this section walks through how we identified Differential Generic Pricing and where it is most prevalent within Florida Medicaid managed care.

9.6.1 Generic Abilify

Of the \$10.4 million in total Margin over NADAC paid out on the high margin generic drugs in the Antipsychotics and Antimanic Agents Class in 2018, \$7.9 million was on generic Abilify (aripiprazole) tablets – **that’s 14% of all of the available generic Margin over NADAC in Florida Medicaid managed care on one drug.** So clearly it makes the most sense to start our analysis with aripiprazole tablets.

Generic Abilify (aripiprazole) is one of the top dispensed generic antipsychotic medications in Florida Medicaid. As shown in **Table 9-2**, between 2016 and June 11, 2019, we found 442,446 aripiprazole claims dispensed within Florida Medicaid (19.9% of its class by volume), putting the drug third within the antipsychotic class behind generic Seroquel (quetiapine fumarate) and generic Risperdal (risperidone). However, due to its much higher cost, it comprised just over 58% of overall Florida Medicaid spending on all generic Antipsychotic and Antimanic Agents.

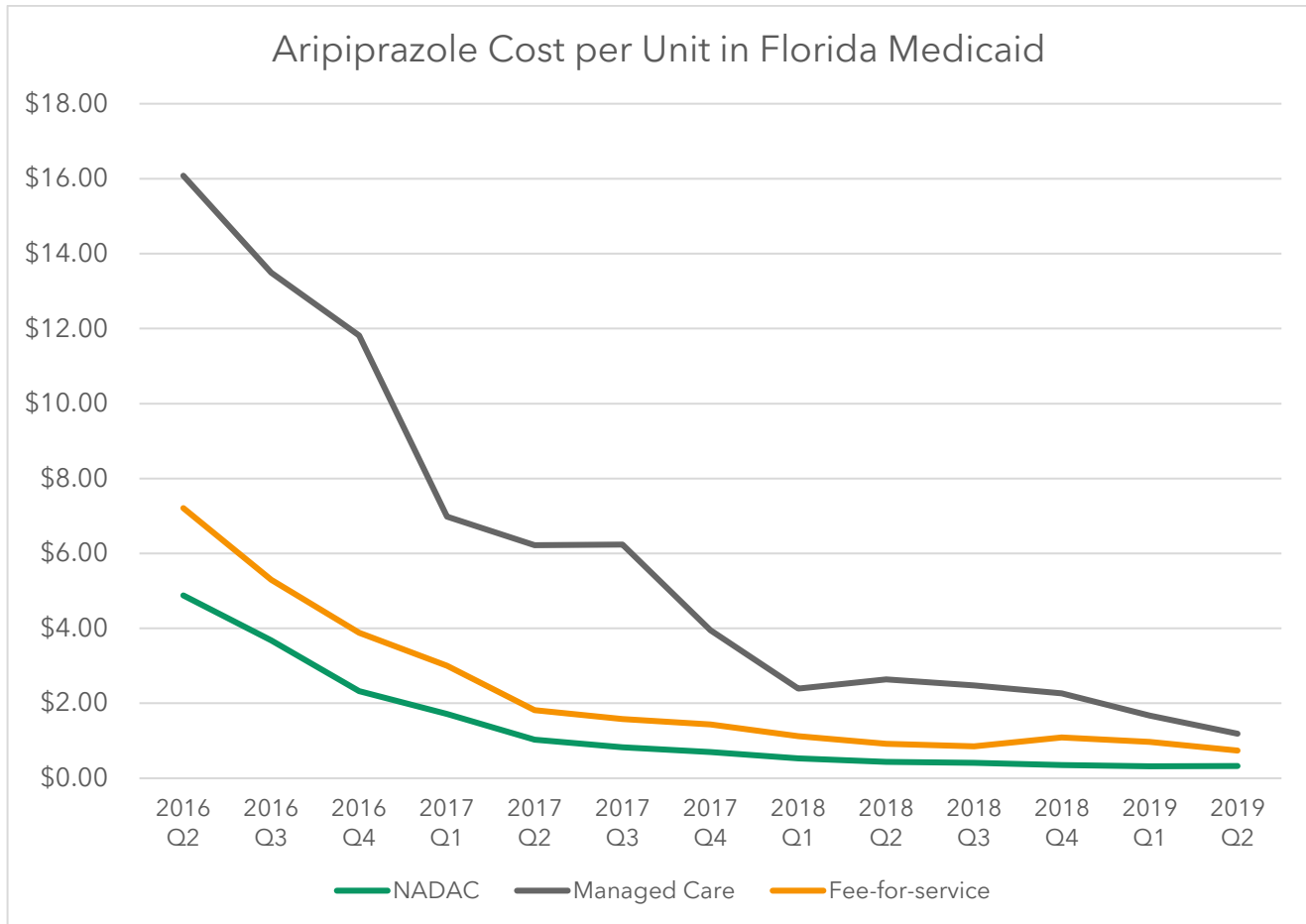
Table 9-2: 2016 to 2019-YTD Florida Medicaid MCO Dispensing of Generic Antipsychotic and Antimanic Agents

GPI 10 - Generic Name	Number of Claims	% of Total	Amount Paid	% of Total	Amount Paid per Claim
Quetiapine Fumarate	572,042	27.96%	\$14,401,642	11.98%	\$25.18
Risperidone	451,301	22.06%	\$5,048,693	4.20%	\$11.19
Aripiprazole	407,828	19.93%	\$69,910,275	58.14%	\$171.42
Olanzapine	199,007	9.73%	\$4,981,464	4.14%	\$25.03
Haloperidol	103,107	5.04%	\$3,182,224	2.65%	\$30.86
Ziprasidone HCl	92,961	4.54%	\$4,645,929	3.86%	\$49.98
Lithium Carbonate	58,870	2.88%	\$470,265	0.39%	\$7.99
Clozapine	36,367	1.78%	\$2,531,518	2.11%	\$69.61
Perphenazine	24,155	1.18%	\$1,519,054	1.26%	\$62.89
Prochlorperazine Maleate	23,329	1.14%	\$141,102	0.12%	\$6.05
Chlorpromazine HCl	22,662	1.11%	\$8,147,553	6.78%	\$359.52
Haloperidol Decanoate	13,502	0.66%	\$877,493	0.73%	\$64.99
Trifluoperazine HCl	12,449	0.61%	\$416,796	0.35%	\$33.48
Fluphenazine Decanoate	8,684	0.42%	\$949,748	0.79%	\$109.37
Fluphenazine HCl	5,187	0.25%	\$74,111	0.06%	\$14.29
Paliperidone	3,785	0.18%	\$2,391,502	1.99%	\$631.84
Thiothixene	3,731	0.18%	\$294,806	0.25%	\$79.02
Loxapine Succinate	3,629	0.18%	\$139,308	0.12%	\$38.39
Thioridazine HCl	2,472	0.12%	\$81,984	0.07%	\$33.17
Haloperidol Lactate	790	0.04%	\$11,851	0.01%	\$15.00
Prochlorperazine	251	0.01%	\$30,722	0.03%	\$122.40

Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions

However, Florida Medicaid’s spending on aripiprazole has been coming down over time, driven by dramatic pressure on aripiprazole’s acquisition cost as the drug has matured, which has brought significant competition to market. As shown in **Figure 9-10**, aripiprazole’s NADAC has collapsed from \$4.88 per unit in Q2 2016 to \$0.33 per unit in Q2 2019 - a 93% decline. Fee-for-service payment per unit (the orange line) has trended closely with NADAC, falling to \$0.74 in Q2 2019 from \$7.21 in Q2 2016. Managed care payment per unit has also declined markedly - from \$16.08 per unit in Q2 2016 to \$1.19 in Q2 2019 - although it’s lagged both fee-for-service and NADAC in passing through the benefits of generic deflation on this drug.

Figure 9-10: Aripiprazole Cost per Unit in Florida Medicaid



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

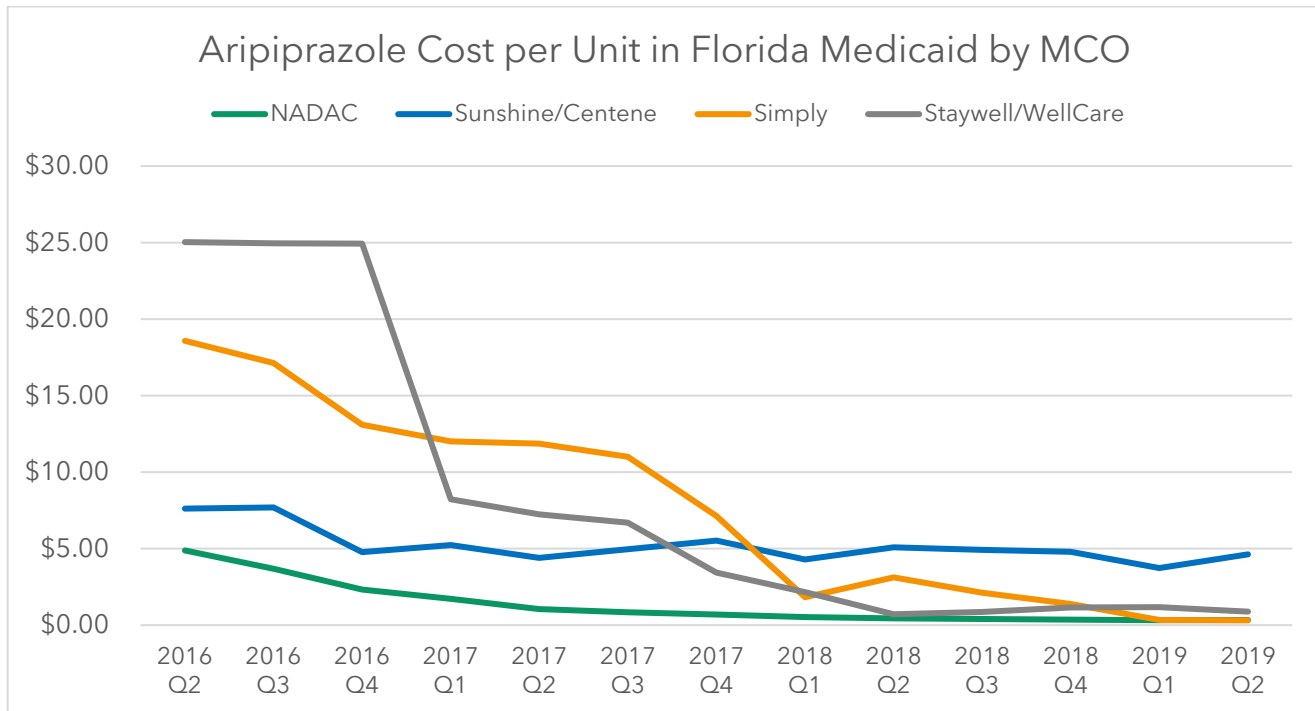
In our prior Medicaid studies, **Figure 9-10** was as deep as we could drill when we performed temporal drug-level relative pricing analysis. With claims-level detail in Florida, we can now go much deeper to understand the drivers of this relative mispricing.

As such, we drilled into two additional dimensions of managed care - who paid for the claim (the MCO), and where did the claim get filled (the pharmacy) to help tease out the drivers of this mispricing.

We started at the plan level and compared the aripiprazole unit costs reported by the three largest payers for this drug in Florida Medicaid managed care - Centene/Sunshine, Simply, and Staywell/WellCare. As shown in **Figure 9-11** (next page), the three different MCOs reported vastly

different costs for the same drug each quarter, a phenomenon driven by the lack of any requirement that MAC rates set by PBMs on behalf of MCOs have any relevance to a market-based acquisition cost. Early in the life of this generic, Staywell/WellCare and Simply were vastly overpricing aripiprazole relative to its cost - with Staywell/WellCare's unit costs eclipsing \$25 in 2016. But both MCOs have slowly but surely brought their MAC rates on this now-mature drug down to a number more resembling its cost. Of note, Simply reported a Q2 2019 unit cost of \$0.34, one penny above aripiprazole's NADAC per unit.

Figure 9-11: Aripiprazole Cost per Unit in Florida Medicaid by MCO



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

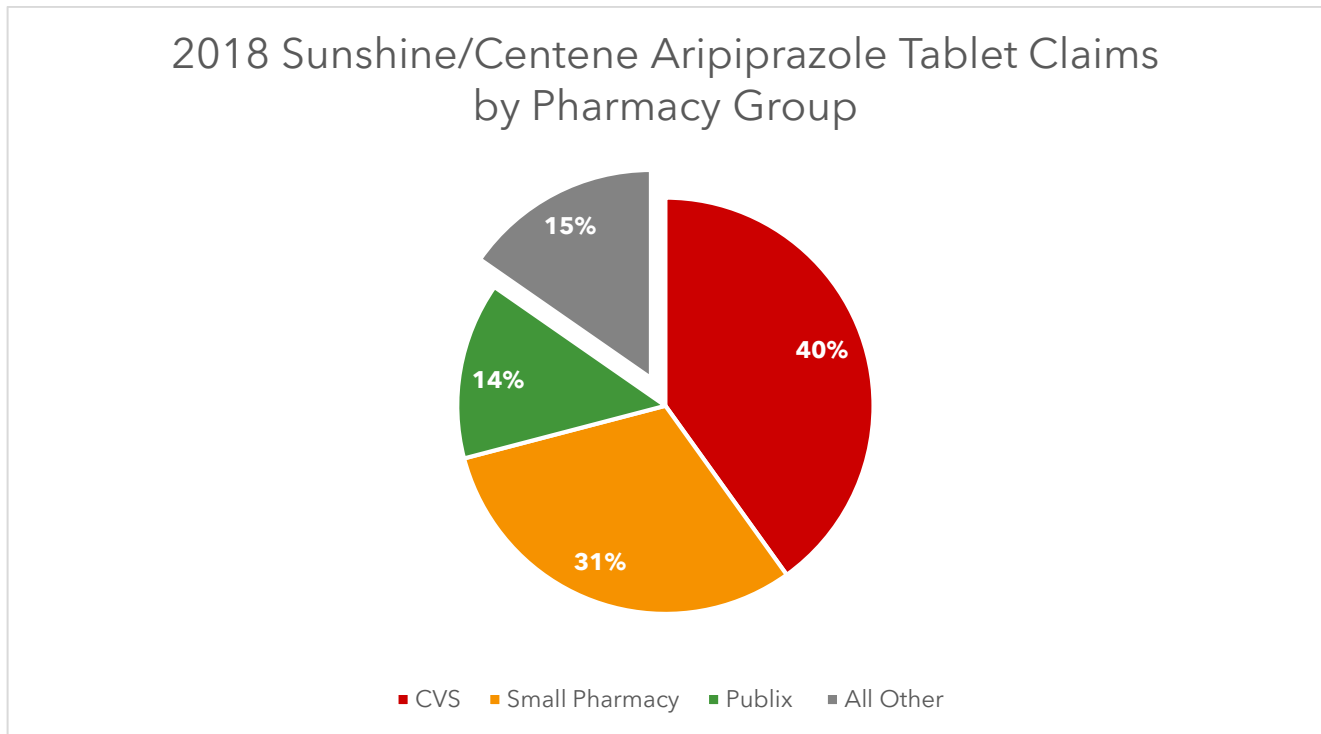
Meanwhile, Sunshine/Centene's pricing history for aripiprazole tells a completely different story. In Q2 2016, Sunshine reported a highly competitive \$7.62 unit cost for aripiprazole tablets - similar to fee-for-service's reported aripiprazole tablet unit cost. Over the next year and a half, Sunshine's aripiprazole unit cost declined, but not to the extent of its top two peers.

Then came 2018. Between Q4 2017 and Q4 2018, Simply and Staywell/WellCare cut their aripiprazole unit cost by 80% and 66%, respectively. Meanwhile, Sunshine/Centene's reported unit cost only dropped 13%, from \$5.52 to \$4.80. Fast-forward to our latest quarter of data (Q2 2019), and Sunshine/Centene's unit cost remains stubbornly high at \$4.63, 14x higher than aripiprazole's NADAC. Between Q4 2016 and Q2 2019, Sunshine/Centene has only reported a 3% decline in cost on aripiprazole (\$4.78 to \$4.63) despite an 86% decline in the drug's NADAC (\$2.33 to \$0.33).

We then drilled into Sunshine/Centene claims to see which pharmacies they were being dispensed at. As shown in **Figure 9-12** (on next page), in 2018, Sunshine/Centene reported 23,008 aripiprazole tablet claims (all strengths). Of that total, 9,224 (40%) were dispensed at a CVS pharmacy, 7,095 (31%) at a "Small Pharmacy" (mostly comprised of independent or small chain retail pharmacies, but also including small long-term care, specialty, institutional, compounding, nuclear, and clinic

pharmacies - see [Pharmacy Provider Transformations](#) with the [Methodology](#) section of this report for a detailed discussion on pharmacy NPI groupings and definitions), and 3,161 (14%) at a Publix pharmacy.

Figure 9-12: 2018 Sunshine/Centene Aripiprazole Tablet Claims by Pharmacy Group

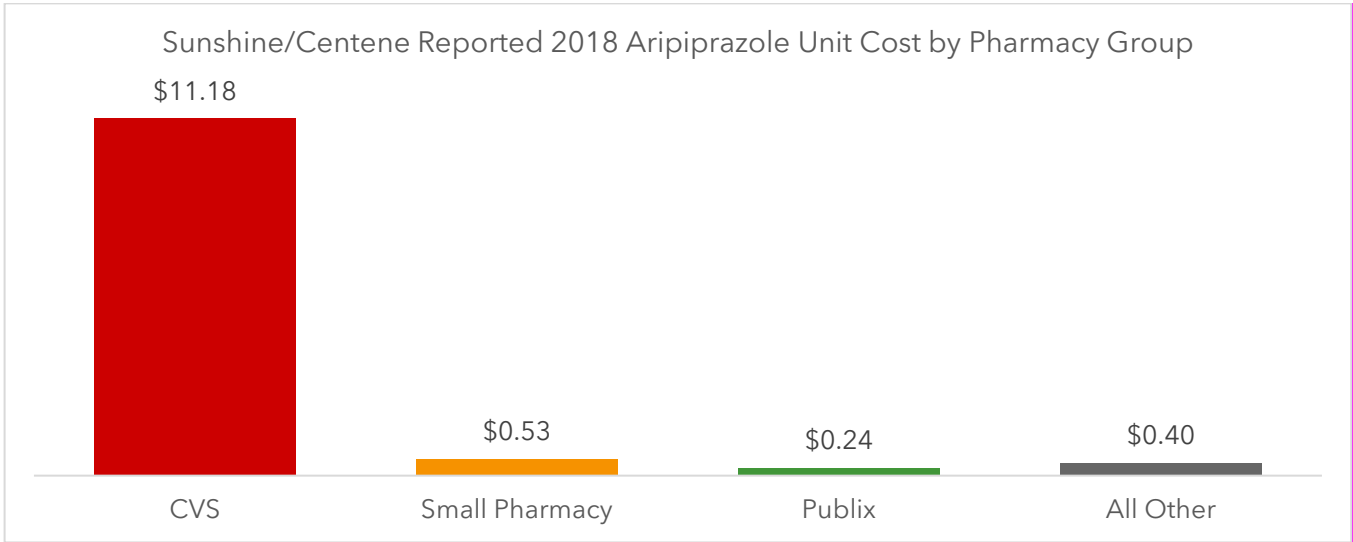


Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions

In total, these three pharmacy groups comprised 85% of all Sunshine/Centene aripiprazole claims in 2018. However, as shown in **Figure 9-13** (on next page), we found that this generic drug was reported to have a significantly different cost in 2018 depending on where it was dispensed. When the claim was dispensed at a CVS pharmacy, Sunshine/Centene reported a 2018 weighted average unit cost across all aripiprazole strengths of \$11.18. However, for the aripiprazole claims dispensed at a Publix pharmacy, this number fell to a paltry \$0.24 per unit (well below aripiprazole’s 2018 \$0.40 per unit weighted average NADAC). Publix was not the outlier - whether the claim was dispensed at an independent / small-chain retail pharmacy (again, the majority of the “Small Pharmacy” group) or one of the pharmacy groups outside the top three (e.g. Walmart, Winn Dixie), it was reported with a unit cost resembling NADAC. CVS is the only pharmacy group that, according to Florida claims data, was paid a sizable premium to retail acquisition cost for aripiprazole tablets.^j

^j All analysis in this section leverages AHCA claims data to understand reported cost for drugs dispensed at different pharmacies. Reported AHCA costs may not necessarily represent payments to pharmacies. See [Pharmacy Reimbursement Analysis](#) for a comparison of AHCA costs and pharmacy reimbursements.

Figure 9-13: Sunshine/Centene Reported 2018 Aripiprazole Unit Cost by Pharmacy Group



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions

To better visualize this dynamic, we geocoded all Florida pharmacies and joined locations to all National Provider Identifiers (NPIs) in the Medicaid claims database within the state. We then filtered the map to include only claims for aripiprazole 5 mg tablets paid for by Sunshine/Centene (we chose one common strength to remove possible cost differences across strengths). We color coded the pharmacies by pharmacy group and set the size of each pharmacy’s bubble based on the total reported payment per unit. **Figure 9-14** shows the resulting satellite map for a half-mile stretch within Palm Coast, FL, which happens to include a CVS pharmacy, a Publix pharmacy, and an independent pharmacy (Palm Coast Pharmacy). As shown below, Sunshine/Centene reported an aripiprazole 5 mg tablet cost per unit of: \$10.48 at CVS, \$0.30 at Publix, and \$0.46 at Palm Coast Pharmacy.

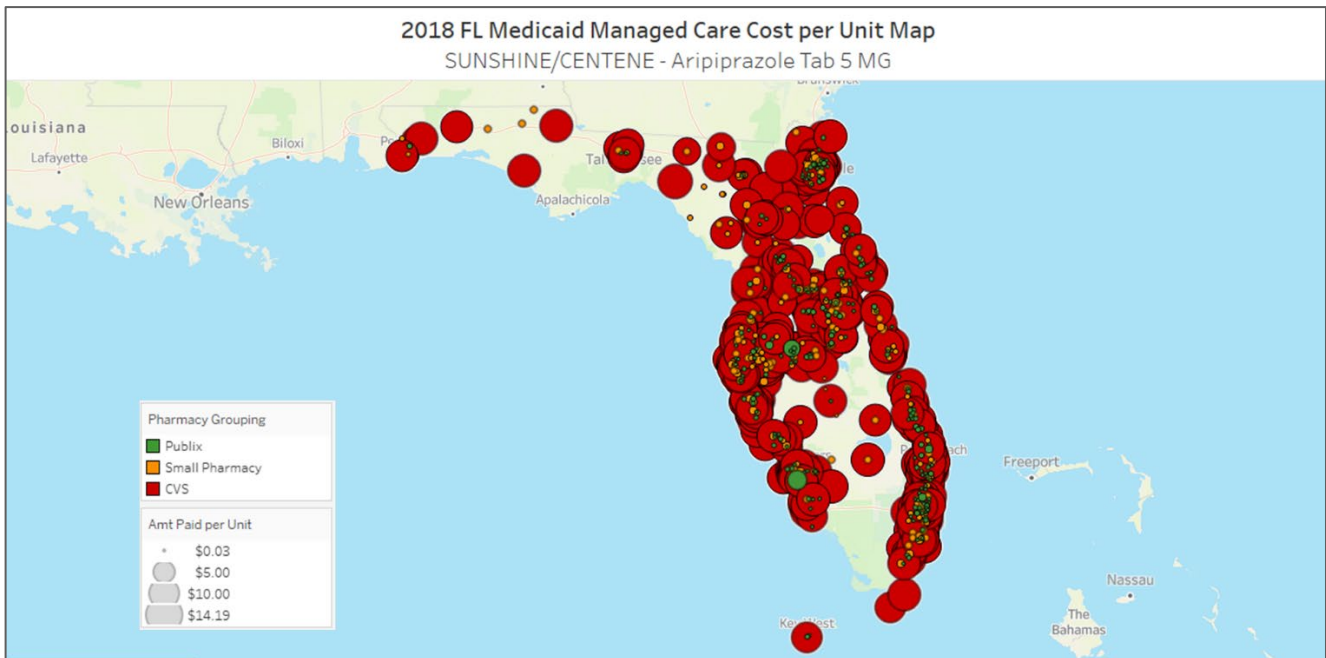
Figure 9-14: 2018 Sunshine/Centene Aripiprazole Tab 5 MG Cost per Unit - Palm Coast, FL



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions

Figure 9-15 shows that the pricing discrepancy seen in Palm Coast is also seen across Florida.

Figure 9-15: Figure 14: 2018 Sunshine/Centene Aripiprazole Tab 5 MG Cost per Unit (Map)



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions

Overall, Centene reported paying all Florida pharmacies a total of \$3.3 million for all strengths of aripiprazole tablets. The same tablets carried a NADAC ingredient cost of just \$285,002. As such, there was nearly \$3 million of profit to spread across its providers. As shown in **Table 9-3**, the Sunshine/Centene pricing disparity ended up driving 99.9% of the available profit on aripiprazole to claims dispensed at a CVS pharmacy. Please note that we do not have the data to assess whether CVS pharmacies received this disproportionate profit or if it was retained by Sunshine/Centene’s contracted PBMs (Caremark - owned by CVS Health - and/or Envolve - owned by Centene).

Table 9-3: 2018 Aripiprazole Sunshine/Centene Margin over NADAC by Pharmacy Group

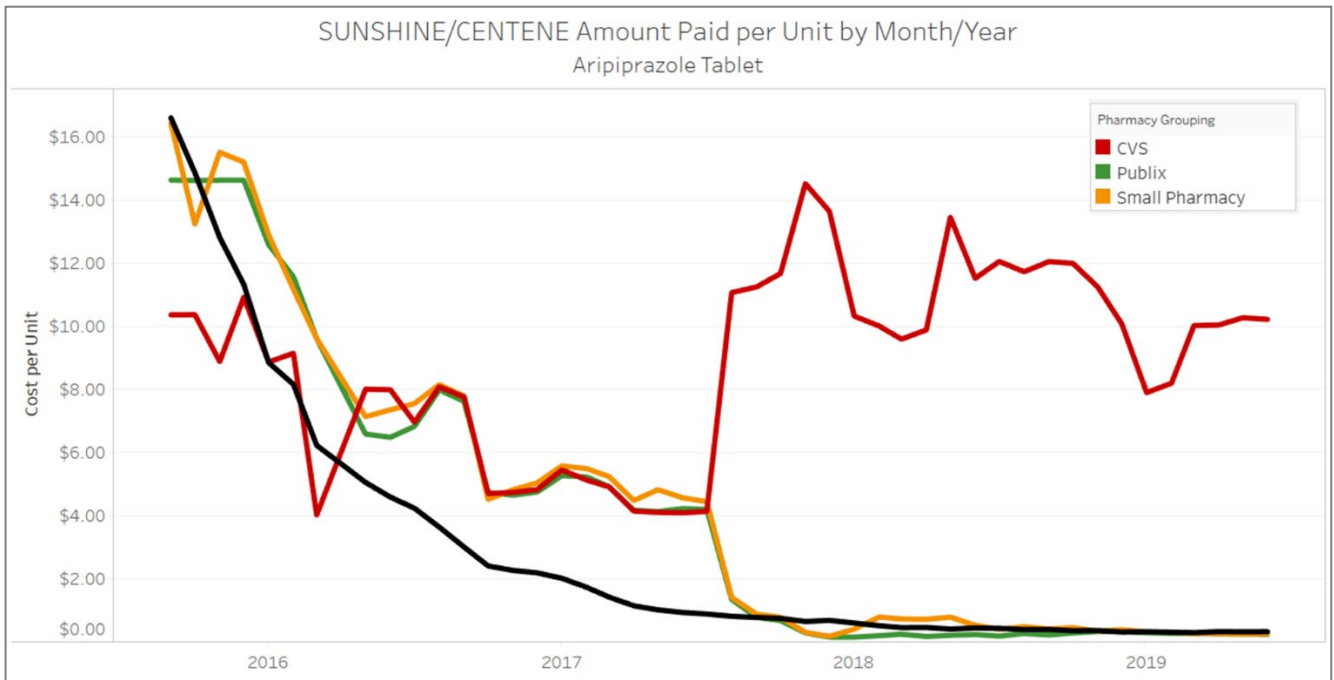
	Amount Paid	NADAC	Margin Paid	% of Total	Margin Paid per Claim	Claims	% of Total
CVS	\$3,081,985	(\$113,983)	\$2,968,002	99.9%	\$321.77	9,224	40.1%
Small Pharmacy	\$108,879	(\$89,017)	\$19,862	0.7%	\$2.80	7,095	30.8%
Publix	\$23,249	(\$38,479)	(\$15,230)	-0.5%	(\$4.82)	3,161	13.7%
All Others	\$40,814	(\$43,523)	(\$2,709)	-0.1%	(\$0.77)	3,528	15.3%
Overall	\$3,254,927	(\$285,002)	\$2,969,925	100.0%	\$129.08	23,008	100.0%

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Interestingly, Sunshine/Centene’s differential pricing strategy, at least as it applies to aripiprazole, has only been in place since August 2017. **Figure 9-16** (on next page) shows that early in the life of this generic drug (2015 and early 2016), Sunshine/Centene was reporting lower unit costs at CVS pharmacies relative to Publix and Small Pharmacies. In late-2016, Sunshine/Centene apparently synched up its MAC lists, resulting in all three lines trending on top of each other, meaning all three

pharmacy groupings were likely seeing similar paid amounts. Then in August 2017, at the same time CVS Caremark joined Envolve as a partner PBM responsible for managing drug benefits for Sunshine/Centene,⁶² unit costs at CVS pharmacies shot up, while unit costs at the other two pharmacy groups plummeted below NADAC, opening a ~\$10 per unit gap that continues to persist through the end of our study period.

Figure 9-16: Sunshine/Centene Amount Paid per Unit by Month/Year - Aripiprazole Tablet

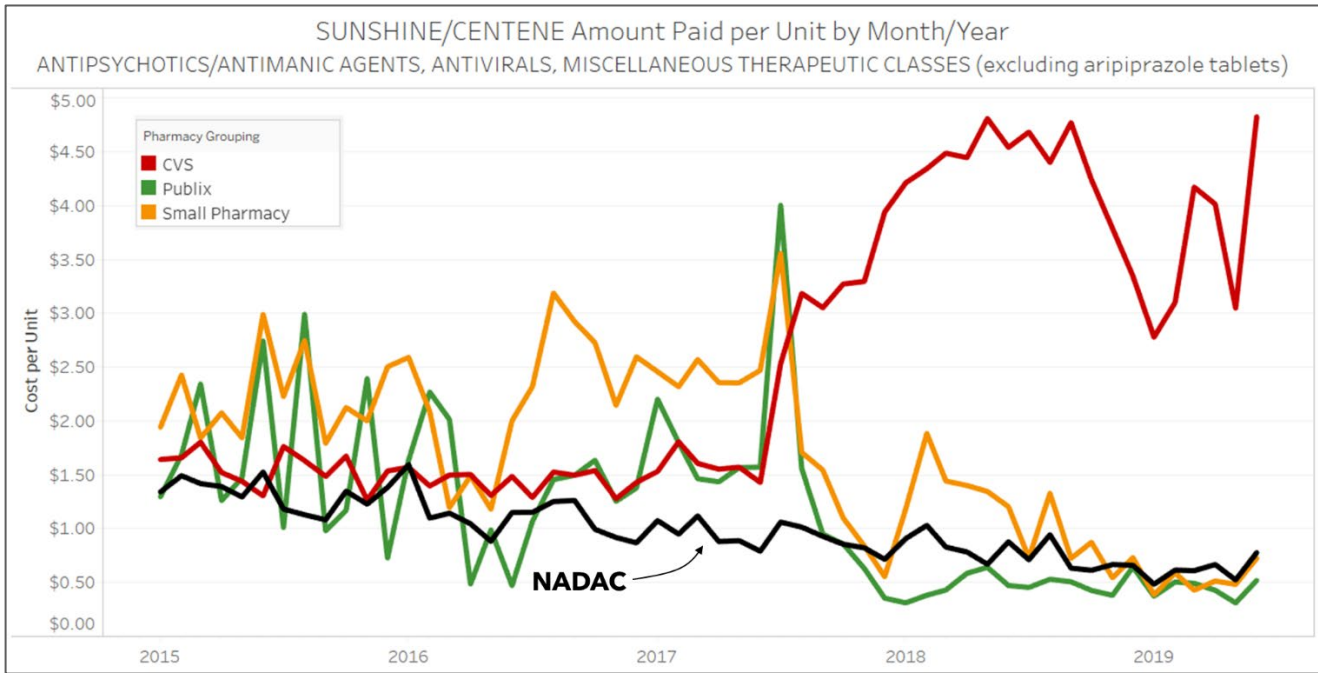


Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

9.6.2 Aripiprazole is not an outlier

Within these three classes, aripiprazole is not an outlier as far as Sunshine/Centene’s differential pricing for CVS pharmacies. **Figure 9-17** (on next page) shows the aggregated cost per unit reported by Sunshine/Centene on the other high margin generic drugs included in the Antipsychotics / Antimanic Agents, Miscellaneous Therapeutic Classes, and Antivirals drug classes.

Figure 9-17: Sunshine/Centene Amount Paid per Unit by Month/Year - Antipsychotics/Antimanic Agents, Antivirals, Miscellaneous Therapeutic Classes (excl. aripiprazole tablets)

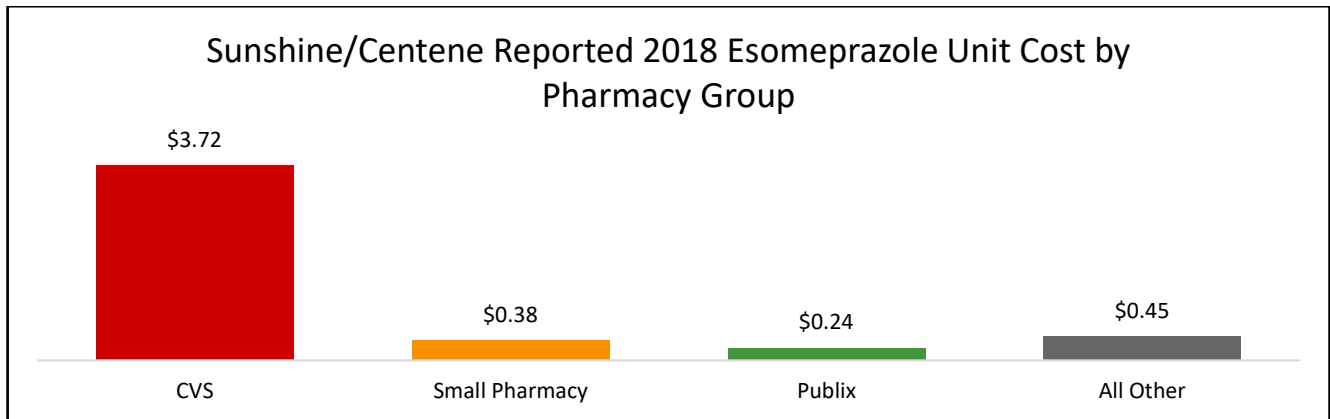


Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

9.6.2.1 Generic Nexium shows similar trend

The data also shows that generic Nexium (esomeprazole) also saw similar payment trends within Sunshine/Centene. **Figure 9-18** highlights the disparate margins paid out by Sunshine/Centene via their PBM, CVS Caremark, to reimburse different pharmacy providers throughout their network. While Publix, Small Pharmacies, and All Other pharmacies saw average rates of less than 50 cents per pill, claims paid to CVS Pharmacies yielded rates of \$3.72 per pill.^k

Figure 9-18: Sunshine/Centene Reported 2018 Esomeprazole Unit Cost by Pharmacy Group

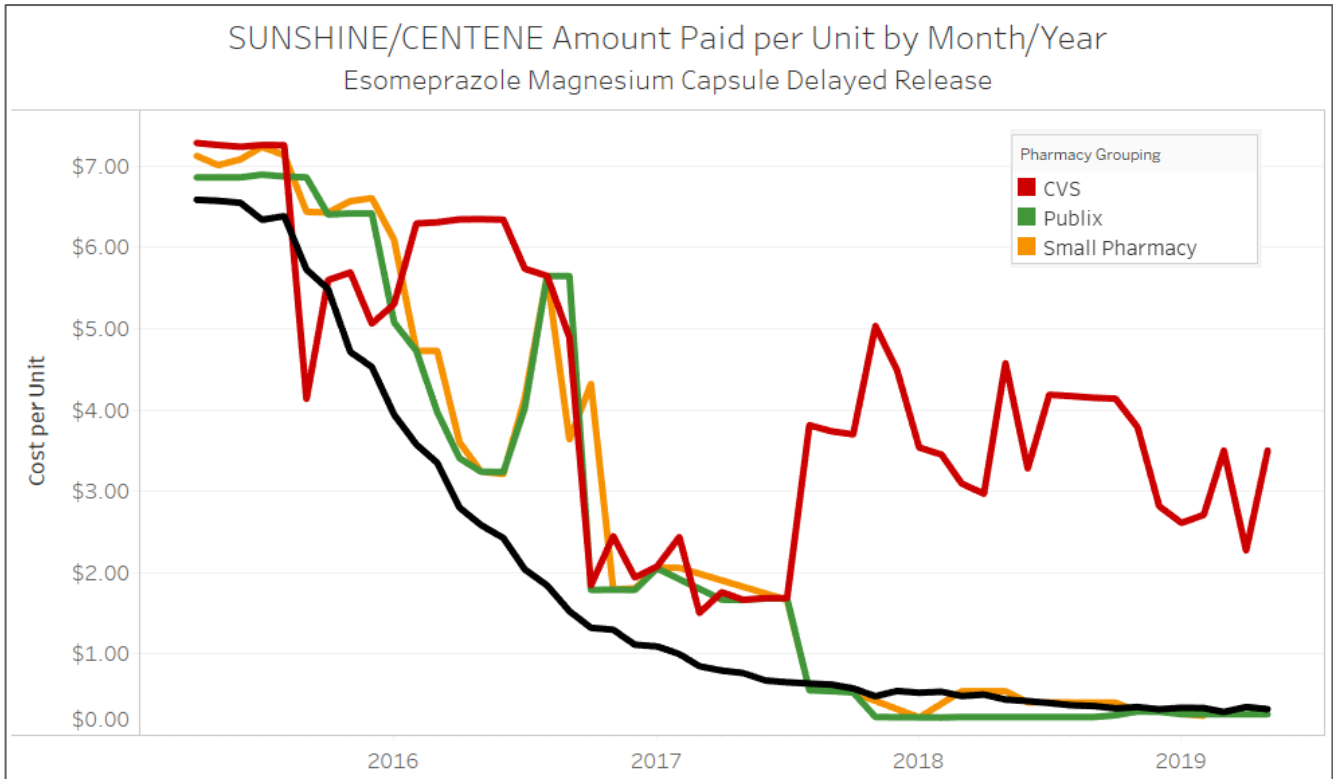


Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions

^k All analysis in this section leverages AHCA claims data to understand reported cost for drugs dispensed at different pharmacies. Reported AHCA costs may not necessarily represent payments to pharmacies. See [Pharmacy Reimbursement Analysis](#) for a comparison of AHCA costs and pharmacy reimbursements.

As you can see in **Figure 9-19**, we saw the similar divergence in pharmacy Margin over NADAC for generic Nexium that we saw for generic Abilify. Just as CVS Caremark came on board to provide PBM services to Sunshine/Centene in August 2017, the rates reported on generic Nexium prescriptions filled through CVS pharmacies spiked. Again, we observe that this occurred while the rates paid out on generic Nexium prescriptions through Publix and Small Pharmacies plummeted.

Figure 9-19: Sunshine/Centene Amount Paid per Unit by Month/Year - Esomeprazole Capsule



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions

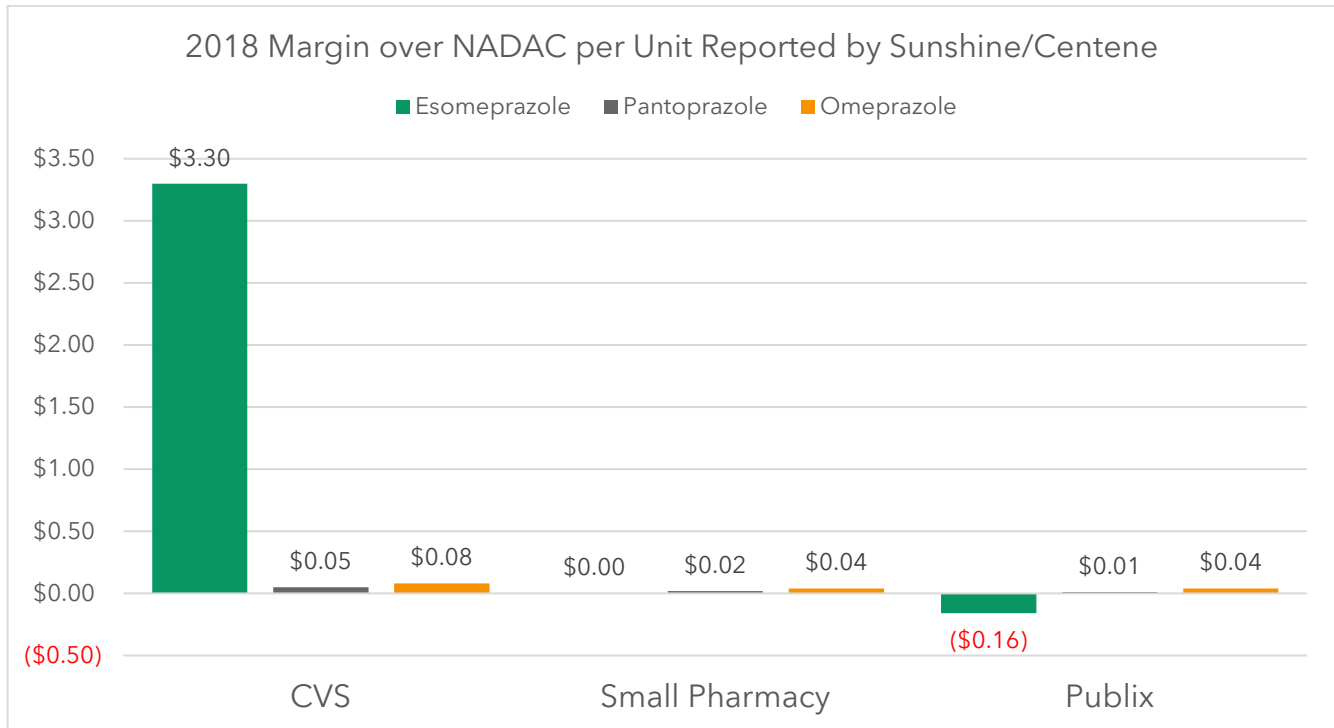
This differential pricing on generic Nexium is of particular interest to us, as our most recent project prior to this Florida report was a deep-dive into the supply chain dynamics that were driving high levels of utilization of Nexium in the Medicare Part D program. That report, entitled, “Purple Haze: How a little purple pill called Nexium exposes big problems in the U.S. drug supply chain,” explored the various misaligned incentives that led to billions in dollars of spending on a drug that was significantly more expensive than its predecessor Prilosec, while offering negligible added benefits in terms of clinical outcomes.⁶³

While the report was not intended to prove or disprove the value proposition of Nexium, we spent ample time questioning whether or not members of the prescription drug supply chain are adequately incentivized to curb utilization of unnecessary medications or those with questionable added utility to the marketplace. The data within our prior work suggests that they aren’t.

These new findings in Florida add a compelling new wrinkle into the question of whether or not MCOs/PBMs, and their affiliated pharmacies specifically, can be agnostic to the coverage and dispensing of a drug that could be so significantly profitable to their overall, vertically-integrated companies.

Figure 9-20 highlights exactly how conflicted CVS Health as a combined Insurer/PBM/Pharmacy can be, when it comes to the possible margins that can potentially be extracted with the coverage and dispensing of generic Nexium versus its comparable alternative, generic Prilosec.

Figure 9-20: 2018 Margin over NADAC per Unit Reported by Sunshine/Centene on generic Nexium and generic Prilosec



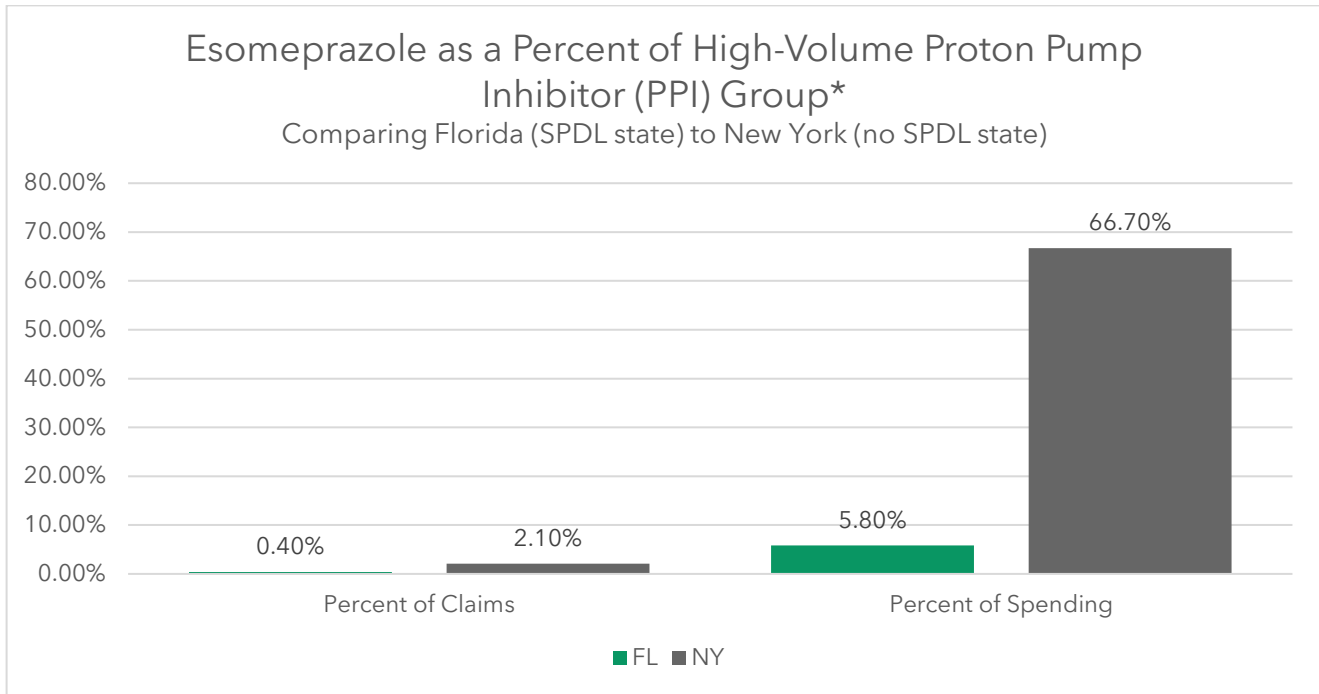
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

The good news for Florida is that they have raised the access barrier to esomeprazole capsules in Medicaid by making esomeprazole “non-preferred” on the state’s SPDL, opting to “prefer” less expensive generic proton pump inhibitors (PPIs) such as omeprazole and pantoprazole. Due to these barriers, CVS only dispensed 93 esomeprazole claims in 2018 on Sunshine/Centene, compared to 19,924 combined claims for omeprazole and pantoprazole - despite the identified economic incentive to dispense esomeprazole shown in **Figure 9-20**.

The question that remains is why CVS Caremark bothered to apply differential pricing to this drug in Florida without being able to benefit from it. We can only theorize that this Florida data could be offering a glimpse into pricing between Centene and CVS in other states that do not have SPDLs, where MCOs and PBMs have more leeway to dispense drugs that are most economically attractive.

To assess this, we compared the percentage of esomeprazole claims relative to the total esomeprazole, omeprazole, and pantoprazole claims in Florida managed care to that of New York, the largest managed care program without a SPDL in place. As shown in **Figure 9-21** (next page), managed care in New York dispensed esomeprazole at a rate that was more than 5x that of Florida (2.1% vs. 0.4%). However, due to the sizable distortion in esomeprazole pricing, these 2.1% of claims in New York were responsible for 66.7% of all spending on this group of PPIs.

Figure 9-21: Esomeprazole as a Percent of High-Volume Proton Pump Inhibitor (PPI) Group



* omeprazole, pantoprazole, and esomeprazole

Source: State Drug Utilization Data (SDUD)

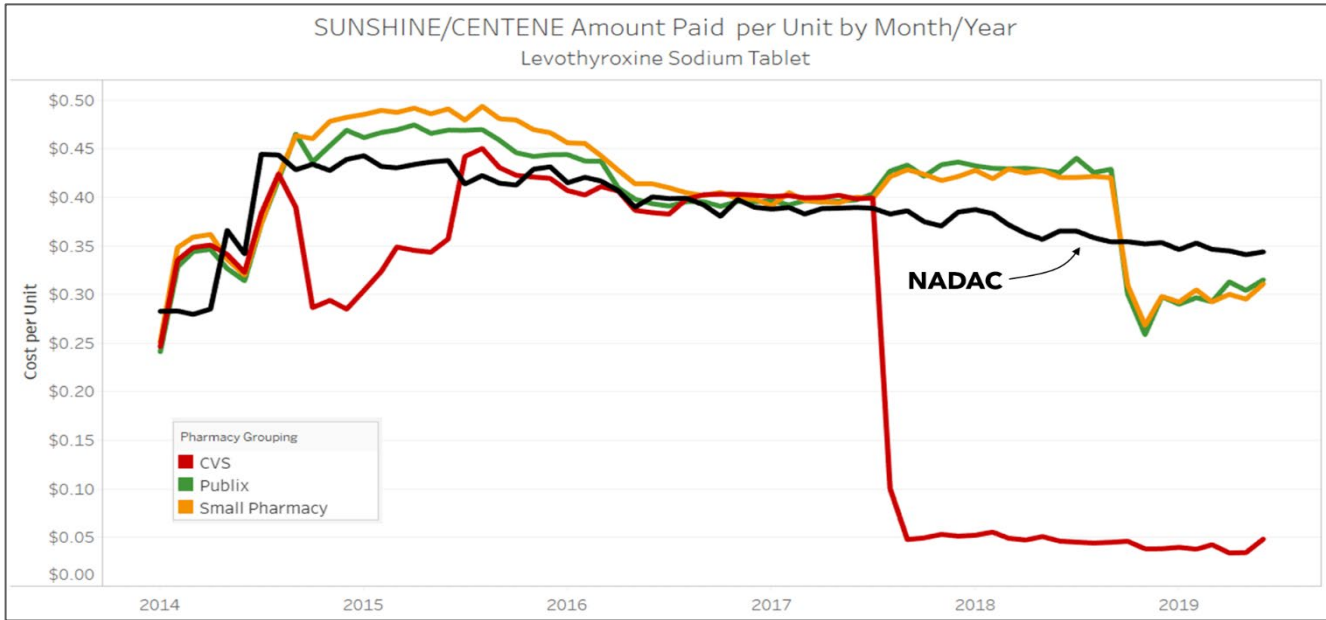
At the very least, this analysis shows the benefit that an SPDL can bring, especially in a managed care environment where potentially conflicted PBMs are permitted to set prices for generic drugs.

9.6.3 Some Sunshine generic drugs are significantly underpriced when dispensed at a CVS

Interestingly, when we look across the generic drugs in the “low margin” category (paid in aggregate at less than \$25 per claim), in some cases, we find the exact opposite behavior in Sunshine/Centene’s data. **Figure 9-22** (on next page) shows Sunshine/Centene’s reported historical unit cost for levothyroxine sodium tablet at the same three pharmacy groups. As the chart clearly illustrates, reported costs at CVS were slashed by Sunshine when Caremark took over PBM services in August 2017 - Sunshine reported a cost of just \$0.05 per tablet for claims dispensed at CVS versus \$0.42 and \$0.43 for claims dispensed at Small Pharmacies and Publix pharmacies, respectively. The NADAC at the time was \$0.38 per tablet. It wasn’t until October 2018 that Sunshine/Centene adjusted reported unit costs at non-CVS pharmacies, bringing them down below cost, but still well above reported CVS unit costs.

We have no visibility into CVS’ true acquisition cost of generic drugs. CVS acquires generic drugs through a joint venture with Cardinal Health called Red Oak. According to Red Oak’s website, it is “one of the largest generic drug sourcers in the U.S.”⁶⁴ We suspect that such purchasing power allows CVS to recognize considerable discounts to NADAC on at least some of its generic drugs, which could explain its willingness to accept such low unit reimbursements on selected medications, especially if they are offset by exceedingly high reimbursements on other medications.

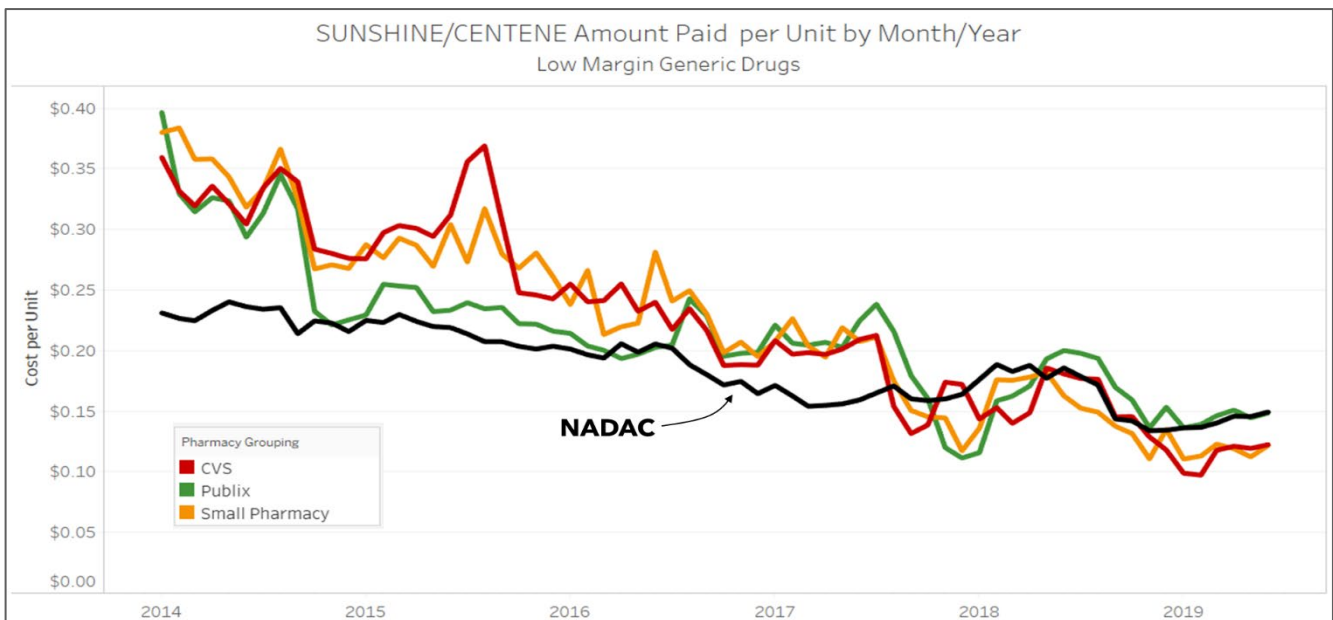
Figure 9-22: Sunshine/Centene Amount Paid per Unit by Month/Year - Levothyroxine Sodium Tablet



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Given the gaping difference that we found in Sunshine/Centene levothyroxine pricing by pharmacy group, we decided to check aggregated unit costs for all low margin generic drugs to see if we would find the same discrepancy. **Figure 9-23** shows that while Sunshine/Centene is underpaying CVS pharmacies relative to NADAC, the magnitude of the underpayment does not appear to be substantively different than what Publix and Small Pharmacies are receiving. In other words, this levothyroxine example appears to be an outlier.

Figure 9-23: Sunshine/Centene Amount Paid per Unit by Month/Year - Low Margin Generic Drugs



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

9.6.4 94% of all 2018 Sunshine/Centene generic margin over NADAC reported at CVS

Putting it all together, Sunshine/Centene reported \$33.3 million in payments on 2.8 million generic claims in 2018. Of that, Sunshine/Centene reported \$17.7 million (53% of total) in payments on 1.4 million generic claims (50% of total) dispensed at a CVS pharmacy. The fact that both percentages are similar is likely reassuring to those looking at a surface level analysis of Sunshine/Centene's reported payments - it signals that reimbursements to their primary pharmacy provider are in line with their market share.

However, as shown in **Table 9-4**, adding NADAC (or for that matter any market-based acquisition cost) to the analysis paints a different picture. It shows that Sunshine/Centene priced generic drugs in aggregate to create just \$3.1 million in Margin over NADAC - and \$2.9 million (94%) was reported at a CVS pharmacy. Another \$1.0 million (34%) went to Acaria, Centene's [wholly owned specialty pharmacy](#). Meanwhile, Sunshine/Centene's reported generic prices at Winn Dixie, Publix, and Walmart translated to meaningful losses relative to NADAC.

Table 9-4: Sunshine/Centene 2018 Reported Pharmacy Payments on Generic Drugs

Pharmacy Grouping	Claims	Amount Paid (\$)	Margin over NADAC (\$)	Margin over NADAC per Claim
CVS	1,344,695	17,593,192	2,953,702	\$2.20
Acaria	978	1,267,457	837,279	\$856.11
Small Pharmacy	621,690	7,237,481	665,406	\$1.07
Briova	585	62,435	38,750	\$66.24
Walgreens	2,079	29,638	8,737	\$4.20
All Other	47,325	579,589	-61,402	(\$1.30)
Winn Dixie	82,090	794,944	-160,464	(\$1.95)
Publix	328,415	3,389,474	-647,336	(\$1.97)
Walmart	277,215	2,009,531	-680,400	(\$2.45)
Grand Total	2,705,072	32,963,740	2,954,272	\$1.09

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

In our view, this analysis (at the very least) highlights that managed care has tremendous latitude within its role in Florida Medicaid to shift reimbursements, and as a result, profit, where it wants it to go. The key enabler is that managed care has the freedom to set MAC rates without any requirement that MAC rates bear any resemblance to the provider's acquisition cost, and as illustrated in this section, maintain different MAC lists for different pharmacy providers.

This is especially concerning considering the increased vertical integration of the prescription drug supply chain, where MCOs and PBMs now have competing interests in the pharmacy marketplace via their own **affiliated pharmacies**. This latitude provides MCOs and PBMs the ability to use state-provided funds as a means to push disproportionate margins back to their own affiliated companies, while compromising the viability of their pharmacy competitors. Vertically integrated companies in

this space have historically maintained that they have strict firewalls between the price-setting and price-taking arms of their businesses. ⁶⁵ But it's important to note that the price-setting sides of these companies don't have to necessarily talk with the price-taking side in order to know what will benefit them overall.

9.7 FOLLOWING THE PRICING SIGNALS

One of the other consequences of the current subjective generic drug pricing model is that it can lead to excessive dispensing of drugs that are arbitrarily priced at levels well above pharmacy acquisition costs. In short, if businesses are provided with an excessive economic incentive to dispense a given drug, they will try to figure out a way to dispense it. When it comes to a handful of dermatological generic drugs, it appears that this is exactly what is happening in Florida Medicaid.

We first got a sense of this by drilling into the \$665,000 in Margin over NADAC reported by Sunshine/Centene on claims dispensed at the Small Pharmacy grouping. While netting out to only \$1.07 in margin per claim, this was still well in excess of Publix, Walmart, and other sizable non-affiliated pharmacy groups. As we studied the data, we noticed that the preponderance of Small Pharmacy Margin over NADAC was derived from dermatological generic drugs. So, we removed the dermatological class from **Table 9-4** to produce **Table 9-5** below.

Table 9-5: Sunshine/Centene 2018 Reported Pharmacy Payments on Generic Drugs (excl. all dermatological drugs)

Pharmacy Grouping	Claims	Amount Paid (\$)	Margin over NADAC (\$)	Margin over NADAC per Claim
CVS	1,248,374	16,782,479	3,828,643	\$3.07
ACARIA	965	1,266,071	836,665	\$867.01
BRIOVA	585	62434.54	38750	\$66.24
WALGREENS	2054	29315.89	8657	\$4.21
All Other	46,372	559,082	-65,510	(\$1.41)
WINN DIXIE	77,943	724,370	-165,311	(\$2.12)
Small Pharmacy	595,934	5,438,672	-221,144	(\$0.37)
WALMART	257,603	1,793,462	-579,853	(\$2.25)
PUBLIX	305,872	3,042,288	-638,379	(\$2.09)
Grand Total	2,535,702	29,698,174	3,042,518	\$1.20

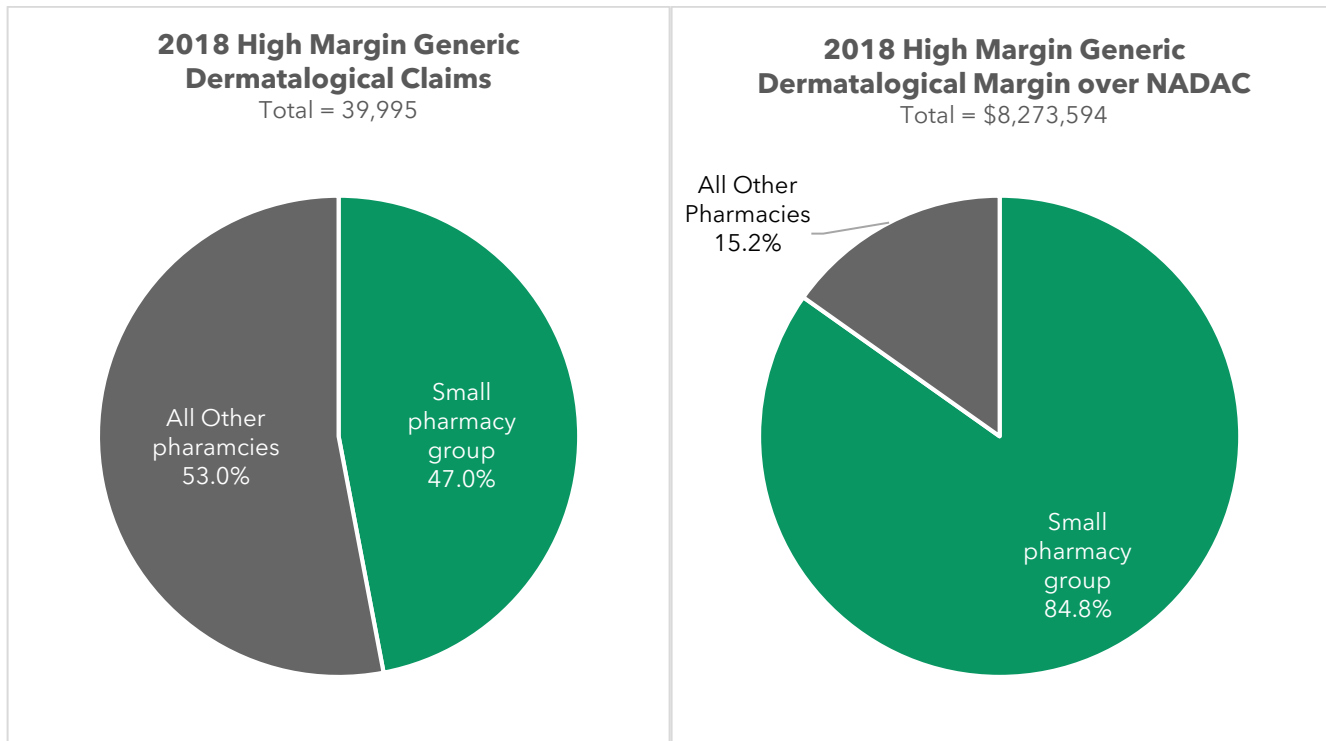
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Removing this one class of drugs from the Small Pharmacy group turned what was an aggregate \$665k gain into a \$221k loss. Stated bluntly, more than all the profit reported at Small Pharmacies was paid out on this one drug class. Meanwhile, CVS' Margin over NADAC **increased** after removing this class, suggesting they are taking losses on dermatological drugs, relative to all other generic drugs.

What is going on with this drug class?

To answer this question, we stepped back from Sunshine/Centene to analyze high margin generic dermatological generic drugs across all of Florida Medicaid managed care. As seen in **Figure 9-24**, it turns out that Small Pharmacies dispensed 44.9% of all the high margin generic dermatological claims, but “collected” 84.8% of the total Margin over NADAC available on this group of drugs. In other words, this class of generic drugs appears to disproportionately benefit Small Pharmacies in Florida Medicaid managed care, beyond what we observed within Sunshine/Centene.

Figure 9-24: 2018 High Margin Generic Dermatological Claims and Margin over NADAC



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

But aggregates can be misleading. Of the 1,609 Small Pharmacies that dispensed a paid Florida managed care claim in 2018, 759 (47%) did not dispense a single high margin generic dermatological drug in 2018. Of the remaining 850 Small Pharmacies, a **staggering 72% of the more than \$7 million in Margin over NADAC on the high margin dermatological drugs dispensed at a Small Pharmacy group was reported on claims at just 10 pharmacies**. These 10 pharmacies are listed in **Table 9-6** (on next page).

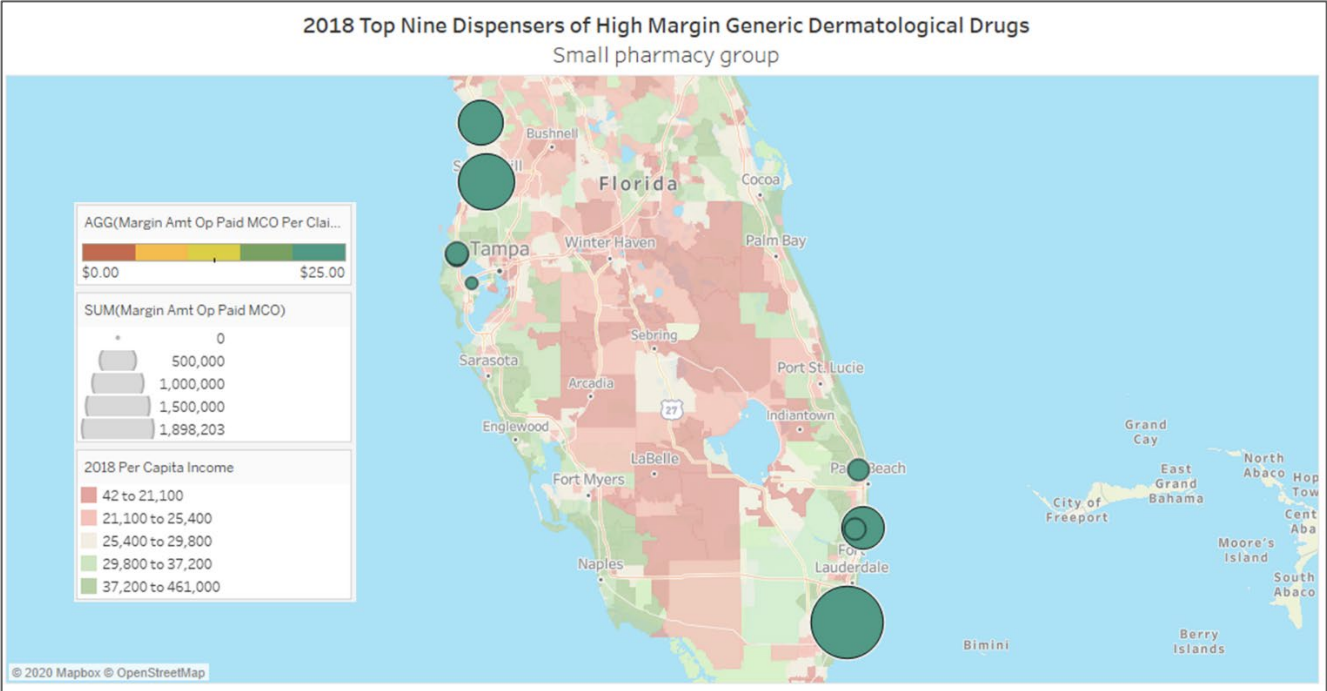
Table 9-6: Top 10 Small Pharmacy group dispensers of high margin generic dermatological drugs in 2018

Provider NPI	Pharmacy Name	Claims	Amount Paid	Margin over NADAC	Margin over NADAC per Claim
1346596863	MEDZDIRECT INC	1,895	\$2,831,673	\$1,836,507	\$969.13
1073921128	ARCHANGEL ONE, LLC.	1,040	\$1,508,702	\$1,121,376	\$1,078.25
1356719074	ALL HEART PHARMACY, INC.	1,092	\$964,508	\$654,980	\$599.80
1992180897	CHRIST PHARMACY INC.	1,116	\$658,180	\$490,723	\$439.72
1144429523	EXPERT CARE PHARMACY	305	\$348,287	\$215,952	\$708.04
1902290471	TENTHINO LLC	220	\$218,250	\$168,219	\$764.63
1245336916	MOTTO PHARMACY	524	\$258,729	\$164,520	\$313.97
1881990265	ST. MINA AND POPE KYRILLOS LLC	156	\$213,585	\$158,050	\$1,013.14
1184941247	TOTAL CARE PHARMACY	258	\$287,561	\$153,167	\$593.67
1700275716	PREMIER ACT ENTERPRISES	119	\$76,730	\$54,653	\$459.27
Top 10 Dispensers of High Margin Generic Dermatological Drugs in 2018		6,725	\$7,385,860	\$5,018,147	\$746.19

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Figure 9-25 (on next page) shows the locations of these top 10 Medicaid managed care dispensers of high margin generic dermatological drugs. Only nine are shown, as Expert Care Pharmacy no longer has an active NPI. Note that the size of each bubble corresponds to the pharmacy's **total** 2018 Margin over NADAC, while the color corresponds to its Margin over NADAC per claim. Notice that all nine pharmacies are colored dark green, which corresponds to an overall weighted average generic margin of more than \$20 per claim - thanks in large part to heavy dispensing of high margin generic dermatological drugs.

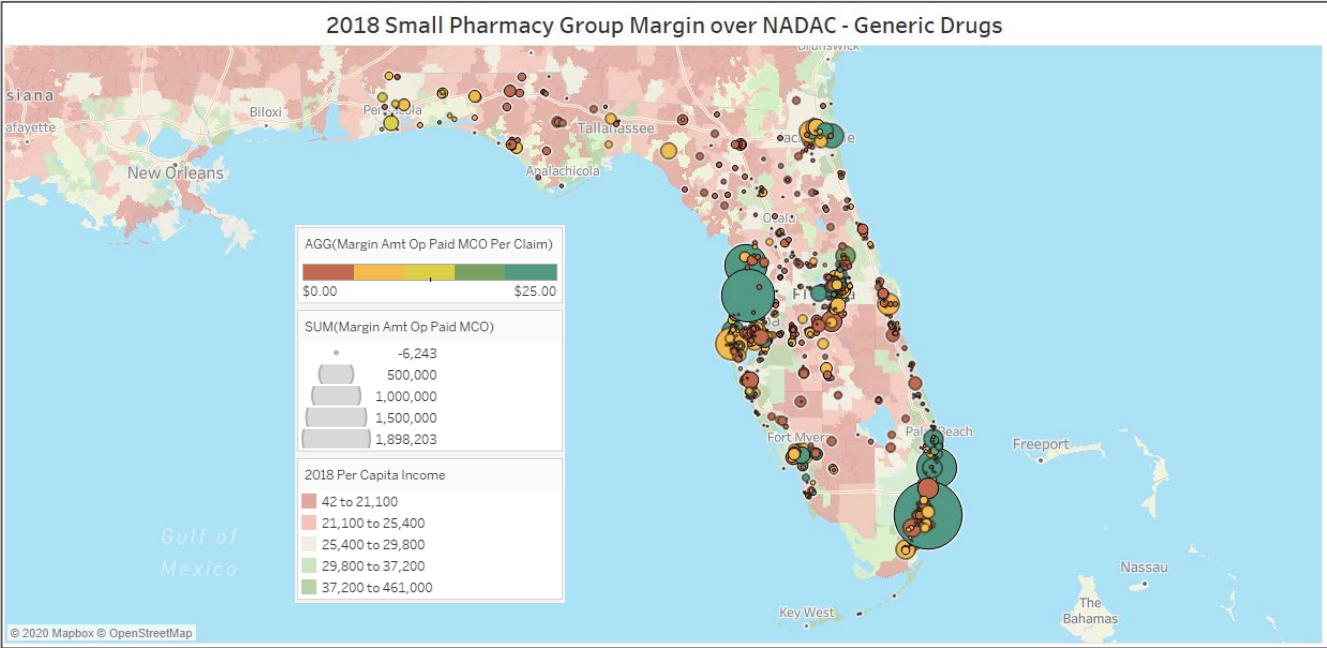
Figure 9-25: 2018 Top Nine Dispensers of High Margin Generic Dermatological Drugs



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

In the next map (Figure 9-26), we’ve zoomed out to the entire state and mapped the rest of the Small Pharmacy group. We’ve retained the same scale for the size of the bubble and color legend to represent each pharmacy’s margin per claim.

Figure 9-26: 2018 Small Pharmacy Group Margin over NADAC - Generic Drugs



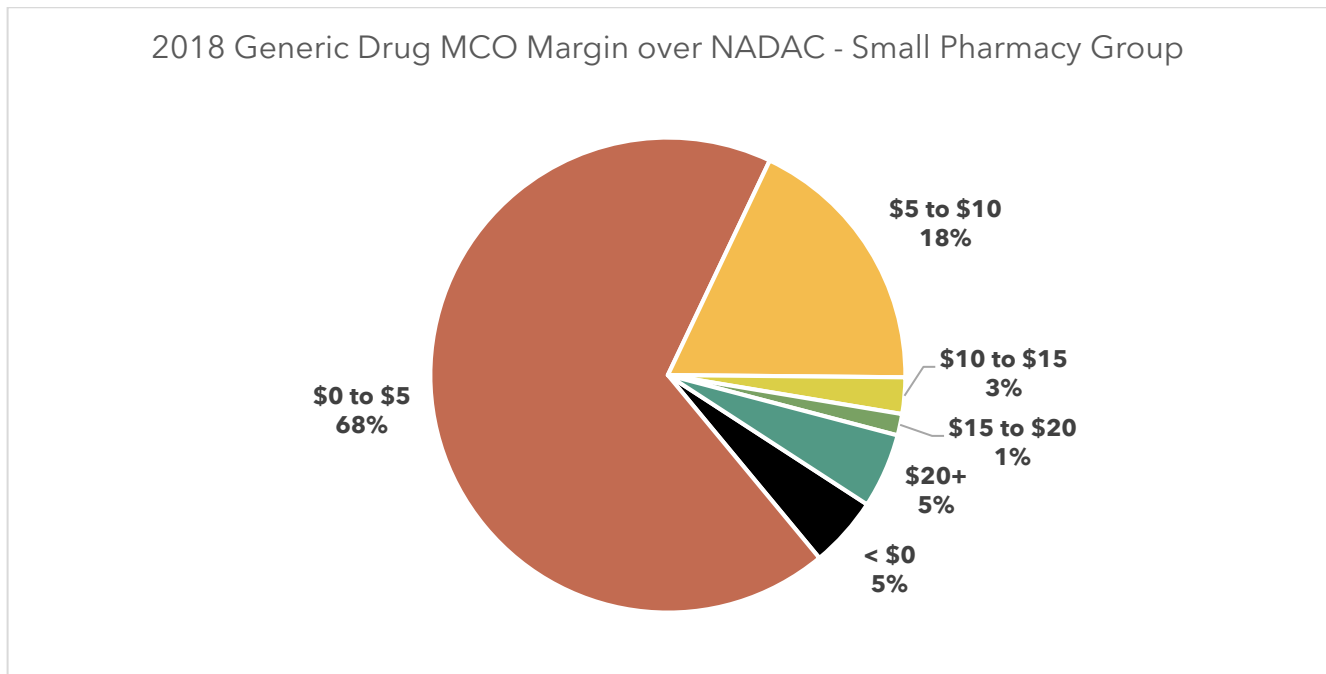
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

There are a few key takeaways from **Figure 9-26**:

1. Most independent and small chain pharmacies are netting under \$5 per prescription, which is less than half of the cost the state has said it takes to break even when filling a prescription.
2. However, a select few pharmacies are netting profits that are considerably higher than the majority of independent and small chain pharmacies. And those more profitable pharmacies are benefitting significantly from overpayments on a select number of dermatological products that many other pharmacies did not end up dispensing.
3. The population focus of Medicaid is that of low-income and under-resourced patients. The Florida Medicaid data shows that a disproportionate amount of financial resources is being distributed to areas of the state that least need those resources, while low-income area pharmacies are overly disadvantaged by the subjective doling out of pharmacy margins by MCOs and their PBMs. **We strongly recommend that the state monitor payments to pharmacies in low-income and rural areas to ensure they are enough to maintain operations.** In our view, insufficient payments to these operators, if it results in closure of the pharmacy, brings disproportionate financial risk to the state, as it would create pharmacy deserts, which could lead to elevated medical spend due to poor medication adherence. A study by Oregon State University in 2016 supports this notion, as it found that lack of pharmacy access can result in some patients needlessly returning to the hospital due to disease state complications.⁶⁶

Figure 9-27 illustrates the takeaway #1 more clearly. Nearly three-quarters of all Small Pharmacies had a reported Margin over NADAC of \$5 or less on generic drugs in managed care in 2018.

Figure 9-27: 2018 MCO Margin over NADAC - Small Pharmacies Group



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

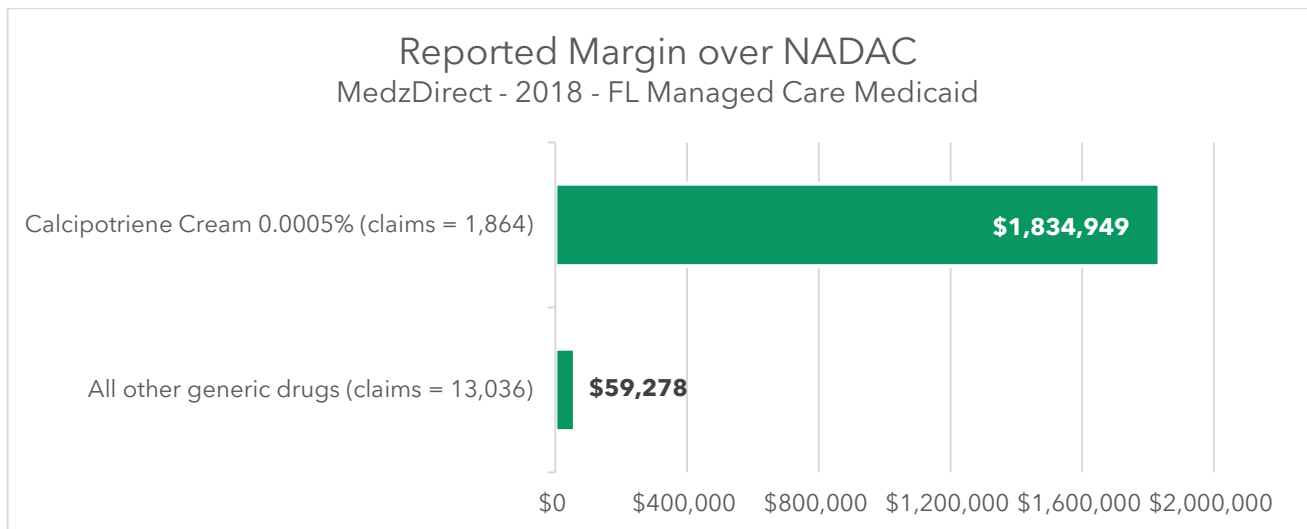
9.7.1 MedzDirect

The number one pharmacy on the 2018 top 10 high margin generic dermatological drug dispensing list is MedzDirect, a “full-service retail pharmacy” located in North Miami. MCOs collectively reported 1,895 high margin generic dermatological claims dispensed at this one retail location in 2018, at a cost of \$2.8 million, and a Margin over NADAC of \$1.8 million.

In 2018, managed care collectively reported a total of 14,900 generic claims dispensed at MedzDirect, with a total profit Margin over NADAC of \$1.9 million. As shown in **Figure 9-28**, all but \$59,278 of that overall margin actually came from just one generic dermatological drug - generic Dovonex (calcipotriene cream 0.005%), a “man-made form of Vitamin D.”⁶⁷ Medicaid managed care reported payment to MedzDirect on a staggering 1,864 calcipotriene claims in 2018 (over five claims per day). This was 25% of all the calcipotriene claims in the state reported by managed care in 2018.



Figure 9-28: 2018 FL Medicaid Managed Care Margin over NADAC - MedzDirect



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

MedzDirect also appeared to be dispensing considerably more units per claim than is normal, at least relative to other Florida pharmacies dispensing this drug in Medicaid (**Table 9-7**, on next page). Calcipotriene is available in two package sizes - a 60-gram tube and a 120-gram tube. The most common quantity dispensed per claim (the “mode”) by Florida pharmacies in Medicaid managed care is one 60-gram tube. The average and median are slightly higher than this, both at 105-grams. Meanwhile, MedzDirect dispensed 294-grams per claim in Florida Medicaid managed care in 2018. In other words, each MedzDirect Medicaid managed care patient received, on average, just under five 60-gram tubes, or two and a half 120-gram tubes. This was a major contributing factor to the \$1.8 million in margin reported for MedzDirect on calcipotriene cream.

Table 9-7: 2018 FL Medicaid Managed Care Grams per Calcipotriene Cream 0.005% Claim

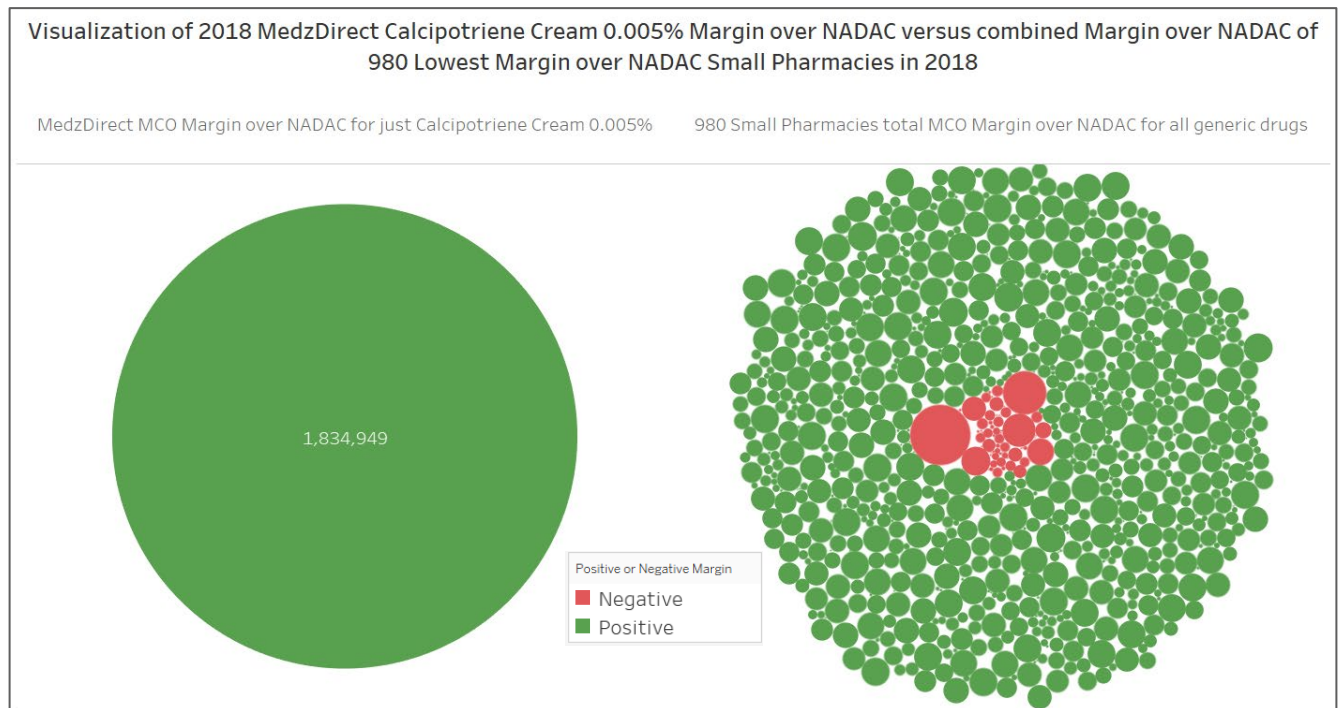
Florida Medicaid Managed Care (2018)	Grams per Claim
Average - all pharmacies	105
Median - all pharmacies	105
Mode - all pharmacies	60
Standard Deviation - all pharmacies	56
MedzDirect	294

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

To provide a sense for how imbalanced such a payment truly is, we ranked all Small Pharmacies (independent and small chain) by overall 2018 generic Margin over NADAC from high to low. We then started counting - from the bottom up - to see how many pharmacies we needed to group together to get to a Margin over NADAC on generic drugs of \$1,834,949. The answer: it took the aggregated reported managed care profit on all generic drug claims from **980 Small Pharmacies to equal the reported profit for MedzDirect on just one drug (Figure 9-29).**

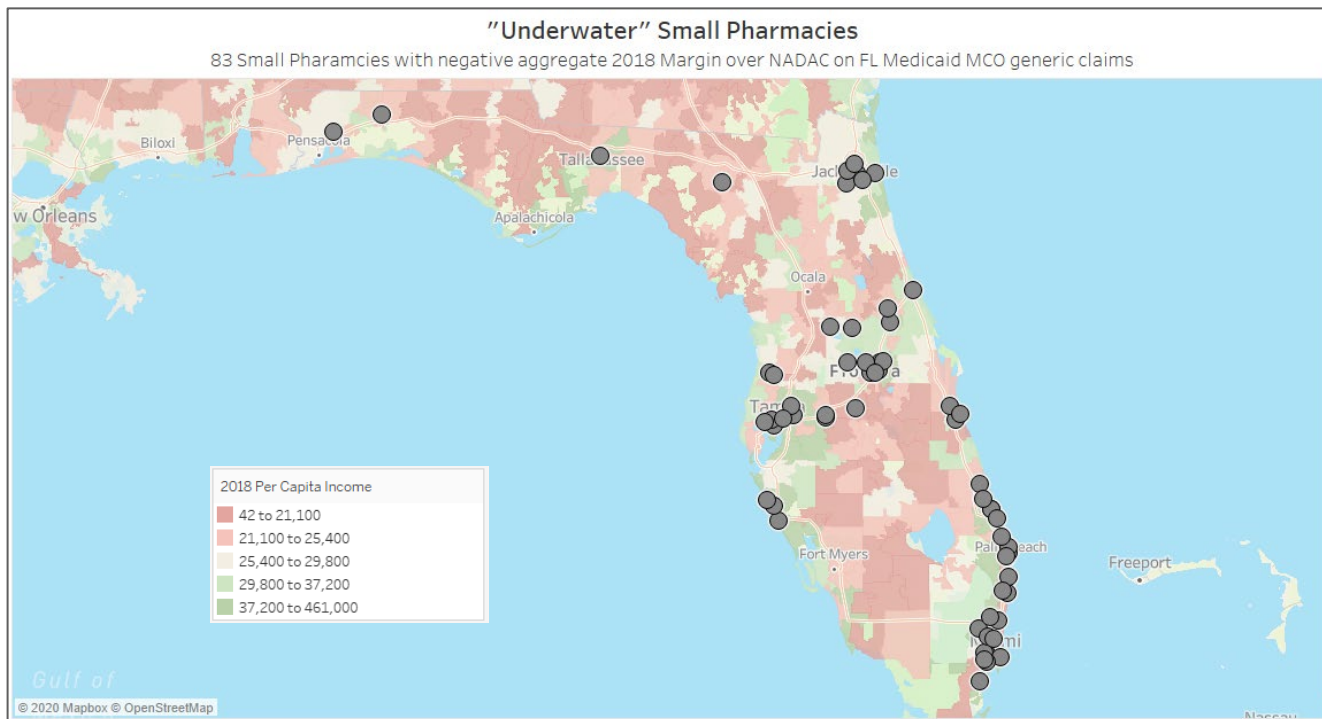
The reported total generic drug payments to 83 of these pharmacies didn't even add up to their total acquisition costs. These "underwater" pharmacies are mapped out in **Figure 9-30** (on next page).

Figure 9-29: Visualization of 2018 MedzDirect Calcipotriene Cream 0.005% Margin over NADAC versus Combined Margin over NADAC on all generic drug claims of 980 Lowest Profit Small Pharmacies



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Figure 9-30: 2018 Underwater Small Pharmacies

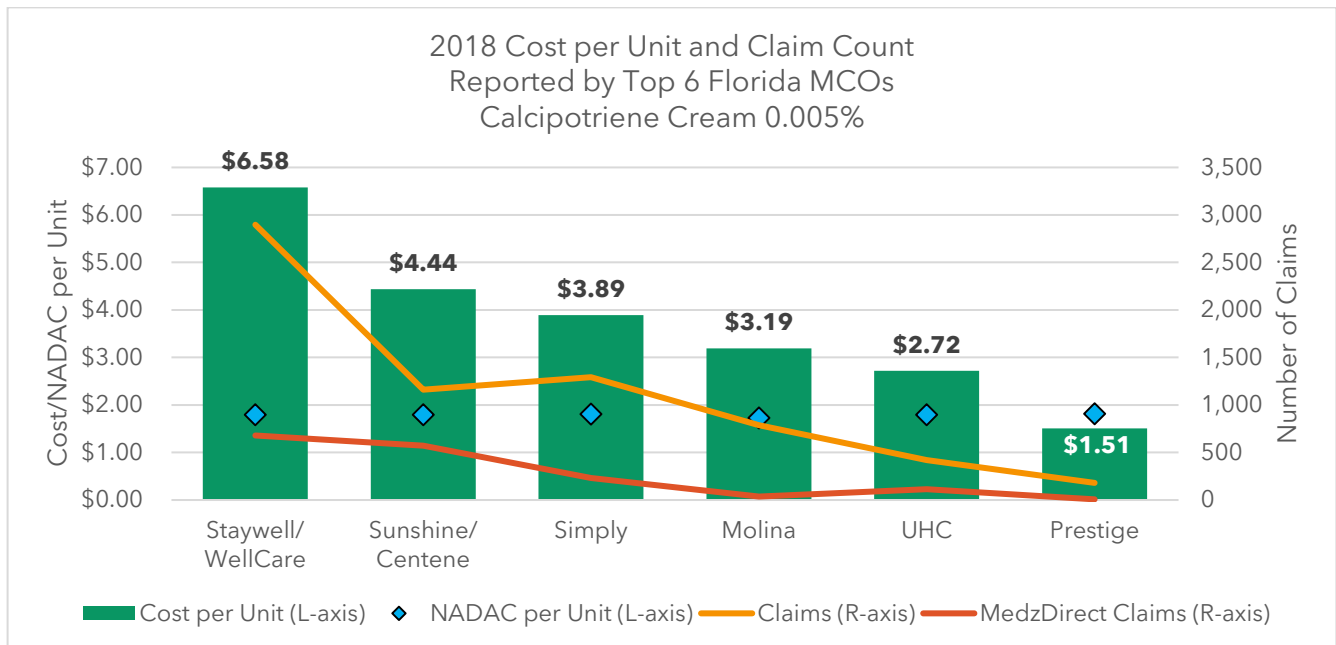


Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

9.7.2 MedzDirect appears to have followed managed care pricing signals in 2018

Ultimately, we see MedzDirect and its relatively high calcipotriene dispensing as an extreme example of the sort of over-utilization and “margin chasing” that can occur in a system where prices/reimbursements are disconnected from actual drug acquisition cost. In this case, PBMs representing a handful of Florida’s largest MCOs priced this drug well above its acquisition cost, sending a clear economic signal to Florida pharmacies to dispense it. So, it should not come as a surprise that some pharmacies did exactly this, as they had a very strong incentive to do so. **Figure 9-31** (on next page) shows this clearly. This figure shows the cost per unit reported by each MCO to the state (green bars) for calcipotriene cream 0.005% versus the total claims dispensed (yellow line). Unsurprisingly, there is a strong correlation between utilization and reported cost - the more an MCO’s PBM is willing to pay for a drug, the greater incentive there is to dispense it.

Figure 9-31: 2018 Calcipotriene Cream 0.005% Cost per Unit and Claim Count for Top 6 FL Medicaid MCOs



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

To be clear, we are not condoning nor condemning MedzDirect’s dispensing behavior in this section. We believe all providers should be responsible for explaining and justifying their drug utilization; as well as the prescribers who may be disproportionately prescribing these types of products. Rather, our point is simply to present this as a case study illustrating the importance of incentives within a prescription management program. Managed care provided pharmacies the incentive to dispense this drug and ended up collectively paying \$4.2 million more for calcipotriene than it would have had it all been dispensed in fee-for-service. This actually underestimates the savings had this drug been carved out of managed care, as in 2018, the proportion of calcipotriene claims in managed care was double that of fee-for-service (0.041% of all MCO generic claims vs. 0.020% of all FFS claims). Applying FFS’ proportional dispensing rate to managed care would reduce its expense on calcipotriene by another \$1.2 million – bringing the total amount of approximated excess spend on this one drug up to \$5.6 million in just one year.

9.7.2.1 “Fish guarantees”

To be fair, managed care organizations are likely not the entities making decisions on how to price a drug like calcipotriene. This responsibility falls to the PBM. As already discussed, PBMs maintain proprietary “MAC” pricing lists for generic drugs that ostensibly are designed to (but are not in any way required to) track acquisition cost. Typically, the PBM will provide the MCO (or any payer/client) a guarantee on aggregate “generic” drug pricing as a discount to the cumulative average wholesale price (AWP) of all generic drugs dispensed over some time period.

For illustration purposes, let’s assume this guaranteed discount was 80%. This means that the PBM will guarantee an aggregate 80% discount off AWP to a payer (i.e. MCO) for all “generic” drugs dispensed to the MCO’s members. For simplicity sake, let’s say the MCO had three generic claims in the guarantee period. The AWP of each of these hypothetical claims was \$100. As such, the total

AWP for all “generic” claims was \$300. An 80% discount to this number is \$60, which is the guaranteed cost to the client for its “generic” drug dispensation.

The problem with this guarantee lies in the reason why we put quotes around “generic” in the last two paragraphs. A “generic” drug is typically defined very loosely by the PBM in its contract with a payer. This provides the PBM with flexibility to include drugs in the guarantee from which it will benefit and carve out ones that will be unfavorable to its guarantee. PBM contracting expert Linda Cahn calls such guarantees “Fish Guarantees,” channeling an analogy of a grocery store where all “fish” are available at some low price per pound, but the grocer reserves the right to determine what is a fish and what is not a fish. She bluntly concludes that such an agreement is worthless to the payer.⁶⁸

Figure 9-32: “Fish Guarantees” (by Linda Cahn)

Why Contract Definitions Are So Important

Analogy: Suppose a grocery store has the following “Fish Guarantee”:

“All Fish* guaranteed to be no more than \$7.95 or less per pound”

*** Grocery reserves the right to exclude certain fish from Fish Guarantee in grocery’s discretion**

- What would the guarantee be worth? (Answer: Nothing)
- If the grocery “improved” its guarantee to \$5.95 per pound, would you reduce your fish costs? (Answer: Obviously not)
- As long as the key term - “Fish” - is badly defined (allowing the grocery to move fish in and out of the guarantee), the guarantee is worthless
- The same problem exists with PBM contracts: The 3 key terms – “Brand Drug”, “Generic Drug” & “Specialty Drug” – are all typically badly defined



Source: Ohio Joint Medicaid Oversight Committee Presentation by Linda Cahn, Esq., November 21, 2019, Slide 28

We suspect that such Fish Guarantees are behind the elevated calcipotriene pricing at Staywell/WellCare relative to its MCO peers. While we do not have the requisite data to prove this, we can provide a roadmap for Florida Medicaid and/or Staywell/WellCare (to the extent they may not be already aware of this) on how to determine if this is the case.

Within any full claims database, there is field called “Basis for Reimbursement.” It is a numerical field that helps identify “how the reimbursement amount was calculated (by the PBM) for Ingredient Cost Paid.” **Table 9-8** (on next page) shows the definition for all Basis for Reimbursement determination codes.

Table 9-8: Basis for Reimbursement Determination

Code	Meaning
0	Not Specified
1	Used to indicate when reimbursement is equal to the amount billed by the provider for the prescription item.
2	Used to indicate when reimbursement is based upon the average wholesale price for the prescription item.
3	Used to indicate when reimbursement is based on a discounted average wholesale price for the prescription item.
4	Indicates when the ingredient cost reimbursed to the provider is based upon the submitted Usual and Customary Price.
5	Used to indicate that the processor has compared submitted U&C to the cost plus the fee (May be either their negotiated value for cost plus fee, or the submitted cost and fee), and is paying the lower of the amounts.
6	Indicates when the ingredient cost reimbursed to the provider is based upon a payer's Maximum Allowable Cost list. (when MAC Basis of Cost was submitted)
7	Indicates when the ingredient cost reimbursed to the provider is based upon a payer's Maximum Allowable Cost list. (when other than MAC Basis of Cost was submitted)
8	Price based upon contractual agreement between trading partners.
9	Used to indicate when reimbursement is based upon the actual cost of the item.
10	The average sales price (ASP) is a cost basis required by and reported to CMS for pricing Medicare Part B drugs.
11	The average price paid to manufacturers by wholesalers for drugs distributed to the retail class of trade; calculated net of chargebacks, discounts, rebates, and other benefits tied to the purchase of the drug product, regardless of whether these incentives are paid to the wholesaler or the retailer.
12	Price available under Section 340B of the Public Health Service Act of 1992 including sub-ceiling purchases authorized by Section 340B (a)(10) and those made through the Prime Vendor Program (Section 340B(a)(8)). Applicable only to submissions to fee for service Medicaid programs when required by law or regulation.
13	A cost as defined in Title XIX, Section 1927 of the Social Security Act.
14	Indicates reimbursement was based on the Other Payer-Patient Responsibility Amount (352-NQ).
15	Indicates reimbursement was based on the Patient Pay Amount (505-F5).
16	Indicates reimbursement was based on the Coupon Value Amount (487-NE) submitted or coupon amount determined by the processor.
17	Indicates the reimbursement was based on the cost calculated by the pharmacy for the drug for this special patient.
18	Represents the manufacturer's published catalog or list price for a drug product to non-wholesalers. Direct Price does not represent actual transaction prices and does not include prompt pay or other discounts, rebates or reductions.
19	State mandated level of reimbursement for Workers' Compensation or Property and Casualty prescription services.

Source: Agency for Healthcare Research and Quality <https://ushik.ahrq.gov/ViewItemDetails?itemKey=126138000>

For generic drugs, the most common basis for reimbursement code (in our experience) is "6". As shown above, this means that the drug's ingredient cost has been determined based on the payer's Maximum Allowable Cost (MAC). But not all generic drugs are adjudicated based on MAC. If the PBM chooses to exclude the "generic" from its MAC list, it may instead be adjudicated using a basis for reimbursement of "2" (AWP), "3" (discount to AWP), "4" (Usual and Customary, a.k.a. the provider's billed amount), or any other ingredient cost basis.

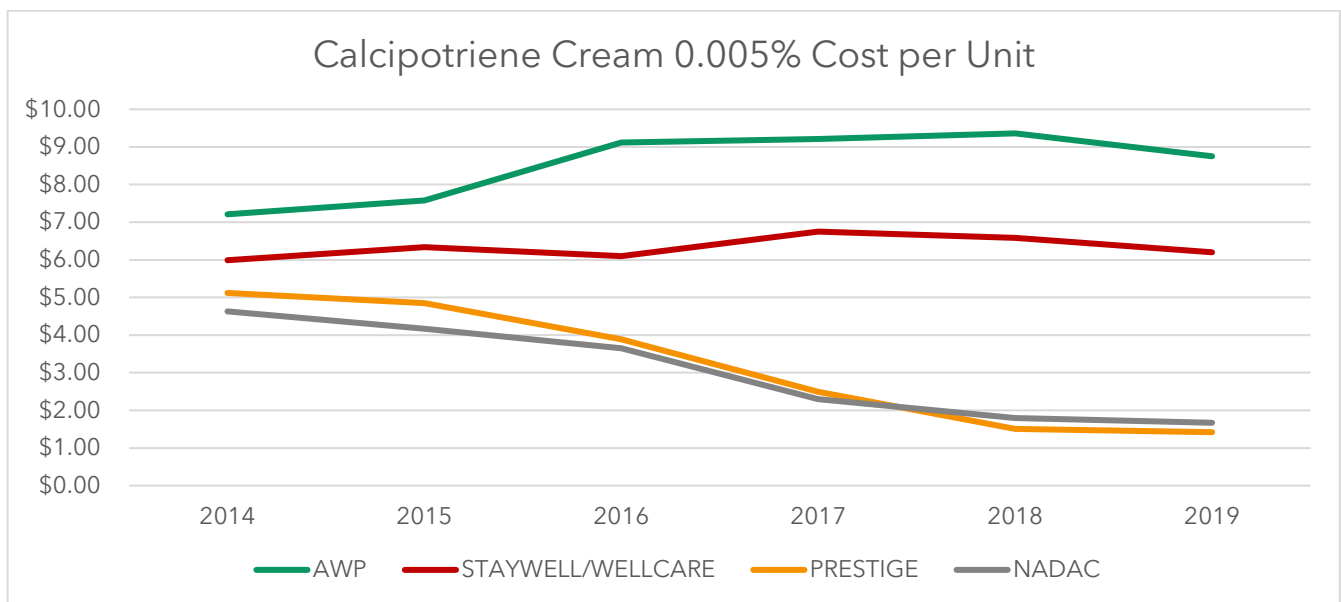
While every contract is different, in our experience, if a multi-source generic drug is not "MAC-ed," we have seen it default to pay the provider a 20% discount to AWP (basis of reimbursement = 3).

This is not a rule of thumb; it is simply a number we have commonly seen in our analyses of payer contracts.

Using this admittedly anecdotal datapoint, we can start to form a thesis around the discrepancy in pricing of calcipotriene. It's possible that Staywell/WellCare's PBM (CVS Caremark) chose to leave calcipotriene off its MAC list, instead reimbursing to providers at discount to AWP, whereas PBMs for other plans included calcipotriene on their MAC lists, instead reimbursing providers at an ingredient cost that was more likely to approximate true acquisition cost.

To study this, we compared the reported cost of calcipotriene at Staywell/WellCare (highest 2018 cost) and Prestige (lowest 2018 cost) over our full study period. **Figure 9-33** shows the weighted average calcipotriene cream 0.005% unit cost reported by Staywell/WellCare and Prestige, in comparison to the drug's AWP per unit and NADAC per unit. This chart makes it very clear that PerformRx (Prestige's PBM) and CVS Caremark (Staywell/WellCare's PBM) had very different approaches to pricing calcipotriene for their MCO clients. PerformRx appears to have set MAC pricing very close to acquisition cost (as measured by NADAC), while CVS Caremark largely ignored acquisition cost in its price setting for Staywell/WellCare, instead apparently pricing at a discount to an inflated and stale manufacturer-set AWP.

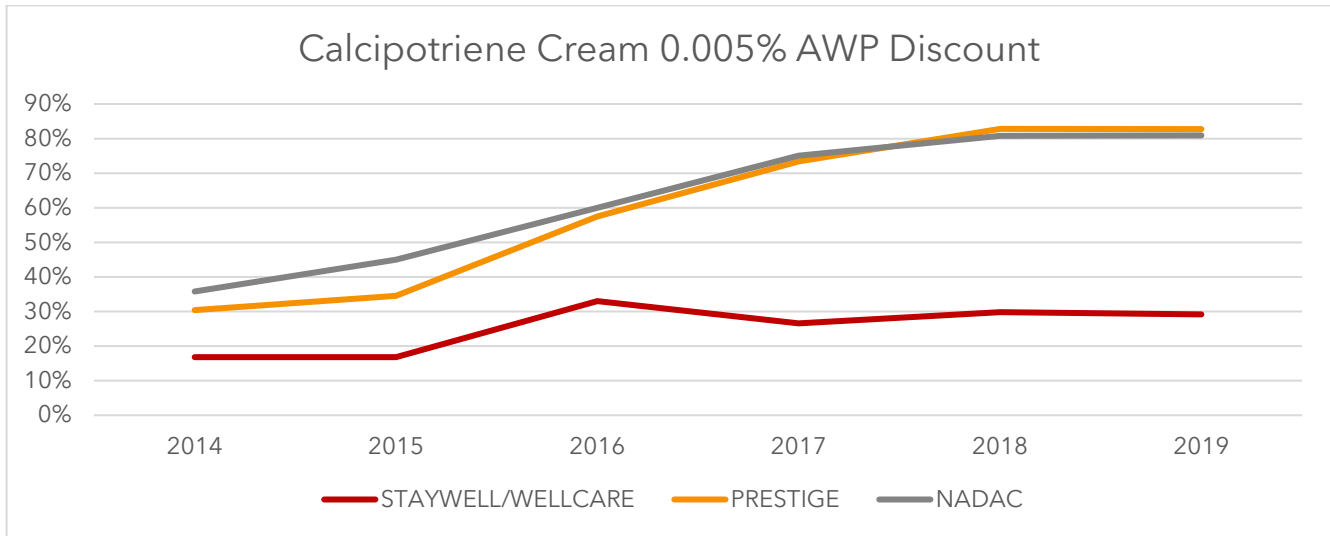
Figure 9-33: Calcipotriene Cream 0.005% Cost per Unit Staywell vs. Prestige (2014-2019)



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions

This dynamic can be seen even more clearly if we instead look at calcipotriene AWP discounts rather than unit costs. **Figure 9-34** (on next page) shows that Prestige's realized discount to AWP has trended up in line with the drug's true cost into the 80%+ range. Meanwhile, Staywell/WellCare's discount has been bouncing between 27% and 33% for the last four years.

Figure 9-34: Calcipotriene Cream 0.005% AWP Discount Staywell vs. Prestige (2014-2019)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

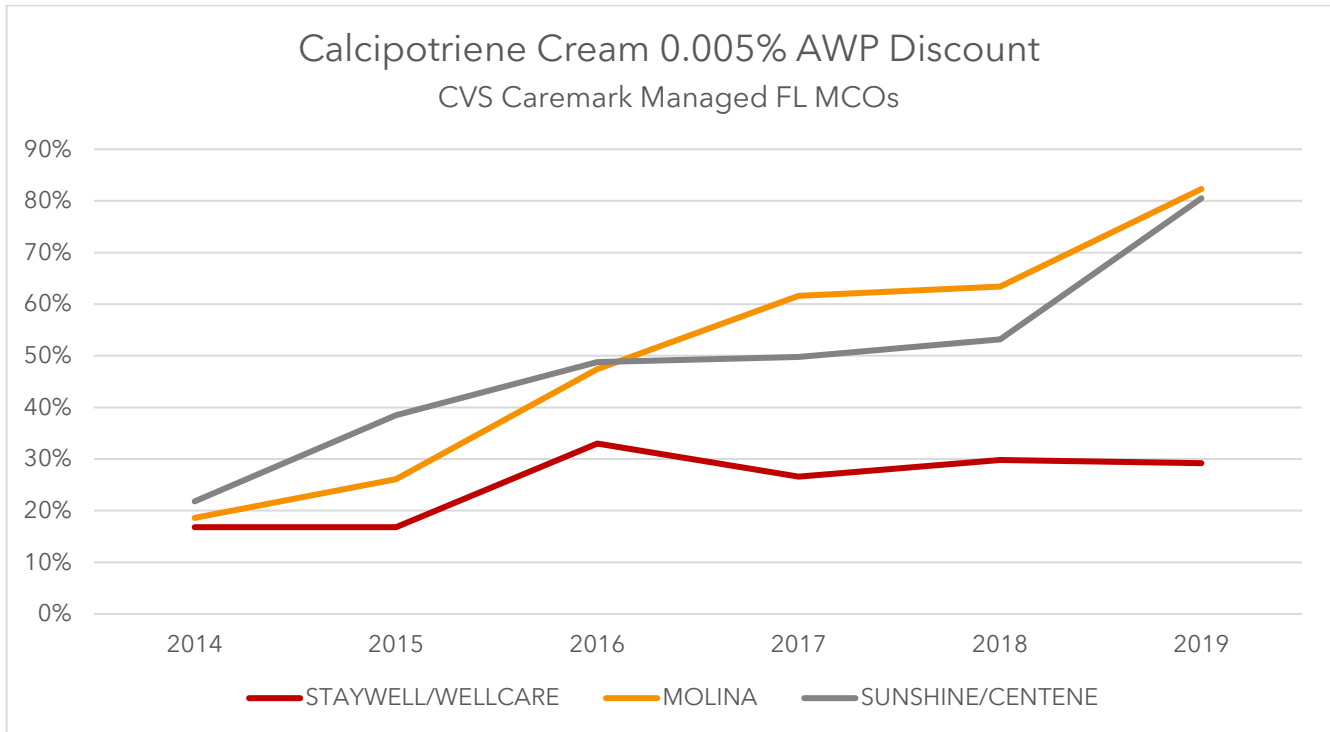
These two figures strongly point to the flexibility and leeway PBMs have in defining drugs within their contracts with payers. PerformRx is setting the price for this drug as it would any multi-source generic drug, setting a MAC rate that approximates true pharmacy acquisition cost. Meanwhile, Staywell/WellCare via CVS Caremark is pricing this drug **as if it were a brand-name drug**, charging the payer a relatively weak discount off AWP. Meanwhile, we suspect that if this pricing behavior is being directed by Caremark, they likely take no financial risk in doing this as they likely carve out any drugs that are not on their MAC list from its generic pricing guarantees to the payer.

The biggest short-term loser here is Staywell/WellCare, which pays brand name rates for a generic drug. Longer-term, these inflated rates then get passed on to the state in the form of higher capitation rates.

Interestingly, we found that Caremark doesn't even price this drug the same for all clients. In other words, it may be classified (and reimbursed) as a "brand" for some clients, and a "generic" for others.

Figure 9-35 (on next page) illustrates this dynamic. We compared the AWP discounts on calcipotriene for the three largest Florida MCOs that use CVS Caremark (either in part or fully) as their PBM - Staywell/WellCare, Molina, and Sunshine/Centene. As the following figure shows, Molina and Sunshine/Centene were charged vastly different rates for this drug relative to Staywell/WellCare, with reported discounts to AWP exceeding 80% versus Staywell/WellCare's 30%. In short, Caremark appears to be considering this drug a generic for Molina and Sunshine/Centene, and a brand for Staywell/WellCare, at least as far as the pricing shows. But regardless of how it's occurring, it is clear from the data that if CVS Caremark is in fact setting the prices for all three plans, they are showing differential treatment between the them.

Figure 9-35: Calcipotriene Cream 0.005% AWP Discount for CVS Caremark Top Managed Plans (2014-2019)



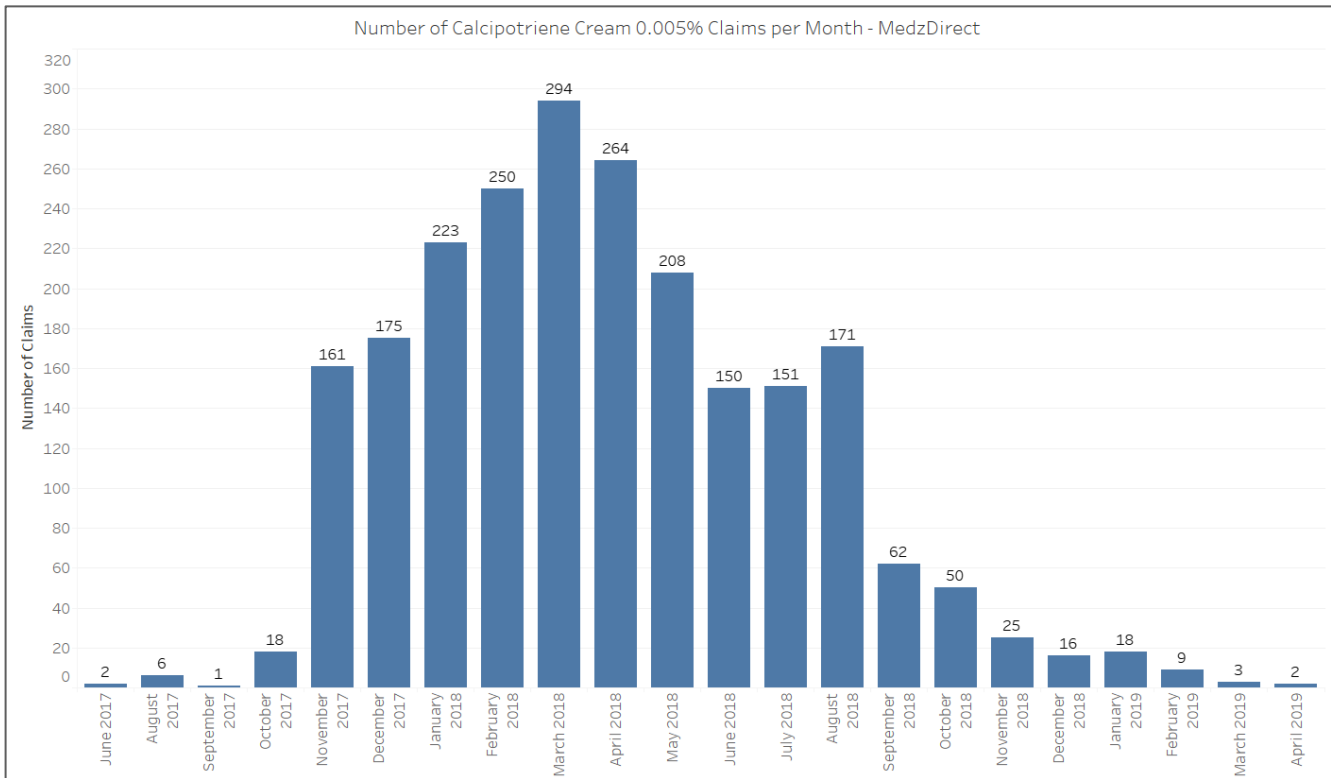
Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions AWP Price

If nothing else, this deep dive into calcipotriene pricing should crystallize the subjectivity of drug definitions and flexibility of PBM pricing mechanisms. Ironically, drug definitions (i.e. brand or generic) are completely objective and neatly classified by databases such as Medi-Span. In other words, it is not at all technically difficult to standardize drug definitions and payment methodology. The only reason, in our view, why such things remain subjective is because it is in the best financial interest of the drug supply chain to do so. Meanwhile, the knock-on effects of such behavior are inflated unit costs for drugs in Medicaid, which begets higher costs driven by poor utilization management, as providers like MedzDirect can discover and ostensibly profit off such pricing arbitrages.

9.7.3 Is the calcipotriene game over?

Interestingly, as shown in **Figure 9-36** (on next page), in late-2018, MedzDirect’s dispensing of calcipotriene materially declined. Fast forward to 2019, and it has all but ceased.

Figure 9-36: Number of Calcipotriene Cream 0.005% Claims per Month - MedzDirect



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions

Unfortunately, with the information and data at our disposal, we cannot be certain why MedzDirect stopped dispensing this drug. One potential contributing factor is shown in **Figure 9-35** on the prior page. The chart shows that Sunshine/Centene’s reported AWP discount shot up in 2019, meaning that its payment came down considerably. However, the chart also shows that Staywell/WellCare’s rates were unchanged. With Staywell/WellCare being the largest payer on this drug, the incentive to dispense it should have still been intact.

One theory that we urge the state to research is the potential impact of **generic effective rate (GER)** pharmacy contracts. In a GER contract, which are rapidly rising in prevalence across community pharmacies, the PBM guarantees a **pharmacy group** an overall annual payment based on generic drugs at a set discount to the aggregate AWP for all generic claims dispensed in a **payer network**. The pharmacy group could consist of hundreds (or even thousands) of different pharmacies, and the payer network could consist of multiple different Medicaid and commercial payers.

For illustration purposes, let’s say the GER guarantee is “AWP minus 85%.” This means that the PBM must end up paying the group an 85% discount to the aggregate AWP of all claims across the network. It follows that if the total AWP for all generic claims across the network is \$10,000, the guaranteed payment to the pharmacy group would be \$1,500.

The complicating factor here is that the PBM does not necessarily have to set rates paid to pharmacies at the point of sale at an 85% discount to AWP. It could set the rates completely independent from this guarantee, and then **“true up”** the difference afterwards.

Let’s return to the discount that Staywell/WellCare via CVS Caremark set for calcipotriene cream in 2019. As shown in **Figure 9-35** (page 88), it reported a 29% discount to AWP. To simplify our

hypothetical example, let's assume that the \$10,000 in aggregate AWP was all for just one drug - calcipotriene cream. At a 29% discount, the pharmacy group would receive \$7,100 in payments on the initial transactions. But recall, the pharmacy group's agreement with the PBM guarantees them only \$1,500. So, the PBM may then be entitled to claw back \$5,600 from the pharmacy group - the difference between the 29% discount initially paid, and the 85% discount guaranteed.

We must be very clear that we cannot be certain that a potential GER claw back is responsible for the decline in calcipotriene dispensing at MedzDirect. **However, our channel checks have confirmed that calcipotriene was included in Caremark's GER for at least one large pharmacy network in Florida.** Regardless, let's continue to work through this example for MedzDirect, as our prior research work in other states like Michigan has shown an increase in the prevalence of GER contracts in pharmacy.⁶⁹ Let's assume that MedzDirect was in an AWP minus 85% GER across all its MCO business. It's total reported reimbursement on calcipotriene cream - which recall, netted the pharmacy a \$1.8 million profit on the drug - was at a 47% discount to its AWP. As such, MedzDirect would clearly be getting significantly overpaid relative to its agreement and would have to accrue for substantial retroactive claw backs to get back down to its 85% GER guarantee.

If this illustrative scenario were all true, MedzDirect and/or its pharmacy network would have owed PBMs more than \$2 million in true up payments at the end of year, wiping out all the company's point-of-sale profits, and then some.

As explicit spread pricing contracts start to become less common (owing to the nationwide pressure on this PBM tactic), we are very concerned that GER will take spread's place. CVS Caremark specifically has stated that as spread pricing is eliminated from state Medicaid programs, PBMs are likely to find new ways to make its desired margins. At the January 2020 J.P. Morgan Healthcare Conference, CVS Health Chief Financial Officer Eva Boratto said in regards to spread pricing, "We will continue to offer it - it's our client's choice. What we'll want to do is look for new models that meet their needs but allow us to deliver our returns."⁷⁰

We believe that our findings on calcipotriene in Florida Medicaid suggest that GER is one of those "new models" that can help deliver such "returns." While the example provided in this section is hypothetical, it illustrates the problems with a GER contract from the state's perspective. To our knowledge, the state is not collecting data on the PBM/MCO's trueup payments from pharmacies and then netting them out as part of the capitation rate setting process. It may not even be possible to do such a thing given how PBMs construct payer networks spanning both Medicaid and commercial plans, making it exceedingly difficult to untangle the payments. In other words, spread pricing, which proved to be difficult enough for states to identify, can simply transition to GER, which is a much more creative and obfuscated way for the supply chain to retain profit off of prescription drugs and could be impossible for states to pin down. **We strongly encourage Florida Medicaid to investigate this drug further to better understand to what extent GER is being used to hide spread pricing.**

This same dynamic is in place in Medicare Part D, except CMS requires plans to report all **Direct and Indirect Remuneration (DIR)** - all monies received by the plan sponsor not captured at the point-of-sale. DIR includes rebates and true ups paid by pharmacies to PBMs and Plans. CMS then requires that Plans use and project these offsets to arrive at more accurate premium payments in future years. GER is fundamentally no different from DIR, except it is completely hidden from the final payer (the state) at this time. As GER pharmacy contracts become the norm, states must figure out how to capture these "rebate" dollars, otherwise they are simply providing another hidden source of profit to the entities to which it has outsourced management of its Medicaid pharmacy benefit.

9.7.4 Four simple steps to PBM profit (in a post-spread world)

As PBMs look to maintain margins in a world without spread, we figured it would be helpful to try to simplify exactly how this could happen. As such, we have boiled down the process to four steps that could allow PBMs to retain spread-like profit on drug transactions without directly using traditional “spread pricing.” The four steps below hinge on the flexibility that PBMs have to determine which drugs are included or excluded from its pricing guarantees (i.e. “fish guarantees”), and that there is nothing preventing the PBM from maintaining one set of included/excluded drugs for payers and a different one for pharmacies.

STEP 1

Carve out Drug A from PBM generic pricing guarantee to payer

STEP 2

Charge payer inflated “brand-like” pricing for Drug A

STEP 3

Pass through same inflated amount charged to payer in STEP 2 to the pharmacy, but do not carve out Drug A from PBM generic pricing guarantee to pharmacy

STEP 4

Claw back overpayment to pharmacy later

We provide these four steps as a warning to payers that requiring transparent, pass-through contracts between MCOs and PBMs will not lead to the elimination of pricing spread. Payers must also demand that PBMs define generic drugs (and brand/specialty) in their contract *exactly* the same as they are defining generics in their pharmacy contracts. The PBM should have no flexibility to decide what they will include in the guarantee and what they will exclude. This must be set on both sides by an unbiased third party. If the PBM has the ability to determine what drugs are and are not subjected to their “fish” guarantees, there is nothing preventing them from using such latitude to “deliver (their) returns.”

We strongly urge the state – and any payer reading this – to investigate how much flexibility its PBMs have in setting what drugs are subjected to guarantees and ensuring the same methodology is used between its PBMs and pharmacy providers. If the state cannot accomplish this, it must at the very least require PBMs to report all payments to/from its pharmacy network after the point-of-sale on transactions to its Medicaid beneficiaries to ensure it has a complete picture of how Medicaid dollars are being managed, and distributed, across the drug supply chain.

9.7.5 Noble pharmacy names, noble (point-of-sale) margins

Calcipotriene is not the only generic dermatological drug that is being priced by some Florida MCOs at “brand-name” levels, attracting questionable utilization among a small group of Florida pharmacy providers.

As shown on **Table 9-1** on page 61, there was a total of \$8.3 million in Margin over NADAC reported by MCOs on high margin generic dermatological drugs. As shown in **Table 9-9** (on next page), \$4.4 million of that was calcipotriene. But there were three other drugs that added up to \$3.7 million –

generic Temovate (clobetasol propionate cream 0.05%), generic Lidoderm (lidocaine patch 5%), and generic Voltaren (diclofenac sodium gel 3%). All three have been available as generics for at least six years, have meaningful competition across labelers, and significant in-class competition. In other words, **there is nothing uniquely special about these drugs, yet they are priced within Medicaid managed care as if they are quite special.**

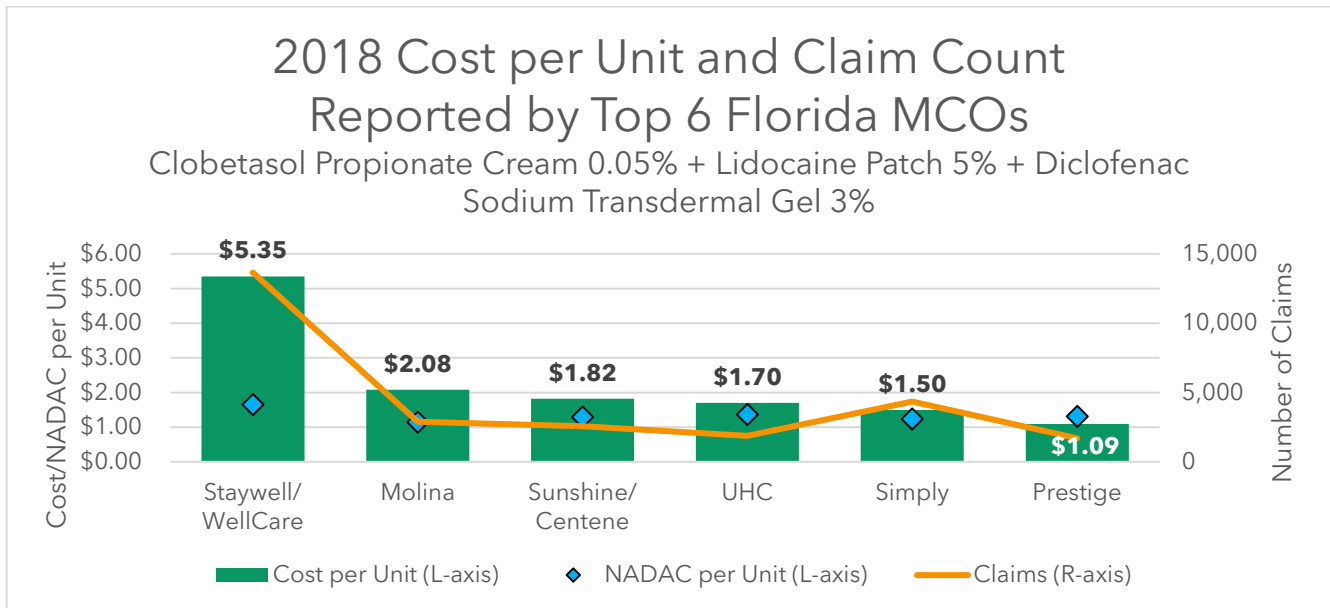
Table 9-9: Top 4 High Margin Generic Dermatological Drugs in FL Medicaid Managed Care by 2018 Margin over NADAC

	2018 FL Medicaid Managed Care Margin over NADAC	2018 FL Medicaid Managed Care Margin over NADAC per Claim	Generic First Available	Number of Labelers as of August 2019
Calcipotriene Cream 0.005%	\$4,336,767	\$597.27	8/1/2012	3
Clobetasol Propionate Cream 0.05%	\$2,035,466	\$110.22	9/15/1996	13
Lidocaine Patch 5%	\$1,357,212	\$139.96	9/15/2013	4
Diclofenac Sodium Transdermal Gel 3%	\$339,230	\$299.41	11/21/2013	7
Total	\$8,068,674	\$220.71		

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Figure 9-37 (on next page) shows the weighted average unit cost reported by Florida’s top six MCOs in 2018 for clobetasol, lidocaine, and diclofenac, along with the total number of claims dispensed for these three drugs by MCO. In the case of these three drugs, 47% of all claims were reported by Staywell/WellCare with a weighted average \$5.35 cost per unit. This cost was 2.6x times higher than the next highest cost MCO, Molina.

Figure 9-37: 2018 Clobetasol, Lidocaine, and Diclofenac Cost per Unit and Claim Count for Top 6 FL Medicaid MCOs



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

To reiterate, pricing drugs at elevated levels relative to cost sends the incentive to pharmacies to dispense these drugs, as they will produce disproportionate profit. As such, it should come as no surprise that the second, third, and fourth most profitable dispensers of high margin generic dermatological drugs (Archangel One, All Heart Pharmacy, and Christ Pharmacy) appear to have focused their efforts on dispensing as many of these top four most excessively priced generics on Staywell/WellCare. As you can see in **Table 9-10**, overall, 18% of their generic claims were dispensed for these four generic dermatological drugs, generating nearly \$2.1 million, or 91% of their overall generic margin over NADAC.

Table 9-10: 2018 FL Medicaid Managed Care Margin over NADAC at Archangel One, All Heart, and Christ Pharmacies

2018	Top 4 High Margin Generic Dermatological Drugs - Staywell/WellCare			All Other Generic Drug Claims - All MCOs		
	Claims	Margin	Margin per Claim	Claims	Margin	Margin per Claim
ARCHANGEL ONE, LLC.	905	\$1,052,954	\$1,163.49	8,484	\$90,121	\$10.62
ALL HEART PHARMACY, INC.	876	\$555,564	\$634.21	232	\$99,453	\$428.68
CHRIST PHARMACY INC.	1,114	\$490,812	\$440.59	4,624	\$16,160	\$3.49
Total	2,895	\$2,099,330	\$725.16	13,340	\$205,734	\$15.42
% Total	18%	91%	N/A	82%	9%	N/A

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

We must reiterate that all data we are working with for this analysis comes directly from Florida AHCA. As such, it reflects the amount reported by the MCO to the state for each claim, not necessarily the amount paid to the pharmacy. However, at least two states (Kentucky and Georgia) have found that WellCare historically has not used a spread pricing model in its Medicaid managed care program. Instead it “bills the state the same amount it pays the pharmacists.”⁷¹ We also evaluated this on a dataset comprised of reimbursement data from more than 100 small pharmacies in Florida, and could not find spread on any Staywell/WellCare claims (see [Pharmacy Reimbursement Analysis](#)). As such, based on our analysis, we believe it is reasonable to assume that these are the rates being paid to these pharmacies, and as referenced with MedzDirect and calcipotriene cream, it is also possible that that reported margins could have been clawed back by the PBM long after the transactions were complete, shifting excess profits back from the pharmacy to the PBM. We believe further state inquiry into this issue is warranted.

Figure 9-38 (next page) and **Figure 9-39** (page 96) present another view of how striking of an impact these four generic drugs had on overall costs at Small Pharmacies. Both figures present a matrix showing what claims are being dispensed where and how much they cost.

Looking first at **Figure 9-38** (on next page), each of the top six Florida managed care plans are listed across the columns, while the major pharmacy groups are listed down the rows. The intersection of the column and row shows the percentage of generic claims reported by the managed care payer at each pharmacy group, as well as the reported generic Margin over NADAC paid by that payer to the pharmacy group (assuming pass-through). Take Molina, the first column in the matrix - 62% of Molina’s generic claims were dispensed at a CVS pharmacy at a weighted average reported Margin over NADAC of \$5.74 per claim. Move down within the same column and you’ll find that 20% of Molina’s generic claims were dispensed at a Small Pharmacy group at a weighted average Margin over NADAC of \$7.19 per claim. Incidentally, Molina was the only MCO in 2018 that we clearly found to have “spread” between reported MCO costs and pharmacy reimbursements (see [Pharmacy Reimbursement Analysis](#)), so these numbers are not reflective of precise pharmacy payments for Molina. Based on our analysis, we are more inclined to believe that the matrix does represent what pharmacies received for the other top five MCOs shown in the matrix. Nonetheless, the primary purpose of this view is to show the **state’s reported discrepancies** from plan to plan and pharmacy to pharmacy.

Figure 9-38: FL Medicaid MCO Payer/Pharmacy Matrix - All 2018 Generic Drugs

Pharmacy Grouping (group)	2018 Generic Drugs											
	MOLINA		PRESTIGE HEALTH		SIMPLY HEALTHCARE		STAYWELL/WELLCARE		SUNSHINE/CENTENE		UHC	
	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim
CVS	62%	\$5.74	1%	\$2.87	59%	(\$0.69)	58%	(\$0.42)	50%	\$2.20	5%	\$4.74
Publix	2%	\$6.08	11%	\$0.19	4%	(\$1.96)	0%	\$5.08	12%	(\$1.97)	0%	\$2.91
Small Pharmacy	20%	\$7.19	27%	\$0.58	27%	\$5.48	23%	\$9.74	23%	\$1.08	20%	\$1.61
Walgreens	0%	\$5.73	44%	\$0.43	0%	(\$3.00)	0%	\$2.20	0%	\$4.25	64%	\$4.23
Walmart	11%	\$5.62	11%	\$0.60	7%	\$4.24	11%	(\$0.83)	10%	(\$2.64)	10%	(\$0.14)
Winn Dixie	4%	\$5.29	4%	\$0.24	0%	(\$0.58)	4%	\$3.97	3%	(\$1.94)	0%	\$0.67
Other	1%	\$15.56	2%	\$0.32	2%	\$6.42	3%	\$8.37	2%	(\$1.29)	1%	\$2.64
Grand Total	100%	\$6.14	100%	\$0.47	100%	\$1.45	100%	\$2.33	100%	\$0.77	100%	\$3.26

NOTE: Excludes all pharmacy groups with less than 1% of overall Medicaid MCO 2018 claim volume

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Now take note of the red box. This shows that Staywell/WellCare is paying over \$9.74 per claim on the 23% of its generic claims dispensed at the Small Pharmacy group - by far and away surpassing its payments to other pharmacy groups.

But as we have already established, CVS Caremark is setting prices for several rather pedestrian dermatological generics at nosebleed rates for Staywell/WellCare, providing the incentive for pharmacies to chase volume and margin on these drugs. And as we have established, that is exactly what some pharmacy providers are excessively doing, generating disproportionate profit off what amounts to just four generic dermatological drugs.

Figure 9-39 (on next page) removes only the 10 Small pharmacies listed back in **Table 9-6** (page 77) from the matrix. First look at Prestige’s numbers for the Small Pharmacy group - they are identical. We’ve shown that Prestige set aggressively low MAC rates on these four drugs, thereby providing a disincentive to for Small Pharmacies to dispense them. As such, removing these pharmacies from the matrix had a negligible impact on Prestige’s overall payments.

Staywell/WellCare shows a completely different picture. When we remove these 10 pharmacies, the entire weighted average margin reported for the more than 1,600 remaining Small Pharmacies drops by more than \$3.50 per claim to \$6.22.

We see the same dynamic at Sunshine/Centene (albeit less extreme), where after removing these 10 pharmacies, overall generic drug Margin over NADAC reported at Small Pharmacies fell from \$1.08 per claim to \$0.06 per claim.

Clearly, such a payment model provides a very warped incentive to pharmacies to spend time and effort optimizing drug mix rather than caring for patients, especially in light of the fact that on average, Small Pharmacies are being reimbursed at their invoice acquisition costs for all generic drugs dispensed through Sunshine/Centene (when removing those 10 outlier pharmacies).

Figure 9-39: FL Medicaid MCO Payer/Pharmacy Matrix - 2018 Generic Drugs (excl. Top Ten Small Pharmacy group dispensers of high margin dermatological drugs in 2018)

Pharmacy Grouping (group)	2018 Generic Drugs											
	excluding Top 10 Small Pharmacy group dispensers of high margin generic dermatological drugs in 2018											
	MOLINA		PRESTIGE HEALTH		SIMPLY HEALTHCARE		STAYWELL/WELLCARE		SUNSHINE/CENTENE		UHC	
% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	
CVS	62%	\$5.74	1%	\$2.87	59%	(\$0.69)	58%	(\$0.42)	50%	\$2.20	5%	\$4.74
Publix	2%	\$6.08	11%	\$0.19	4%	(\$1.96)	0%	\$5.08	12%	(\$1.97)	0%	\$2.91
Small Pharmacy	20%	\$7.04	27%	\$0.58	27%	\$4.92	23%	\$6.22	23%	\$0.06	19%	\$1.48
Walgreens	0%	\$5.73	44%	\$0.43	0%	(\$3.00)	0%	\$2.20	0%	\$4.25	64%	\$4.23
Walmart	11%	\$5.62	11%	\$0.60	7%	\$4.24	11%	(\$0.83)	10%	(\$2.64)	10%	(\$0.14)
Winn Dixie	4%	\$5.29	4%	\$0.24	0%	(\$0.58)	4%	\$3.97	3%	(\$1.94)	0%	\$0.67
Other	1%	\$15.56	2%	\$0.32	2%	\$6.42	3%	\$8.37	2%	(\$1.29)	1%	\$2.64
Grand Total	100%	\$6.11	100%	\$0.47	100%	\$1.29	100%	\$1.50	100%	\$0.53	100%	\$3.24

NOTE: Excludes all pharmacy groups with less than 1% of overall Medicaid MCO 2018 claim volume

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Figure 9-40 (on next page) looks at the payer/pharmacy matrix through a slightly different angle, removing the top four high margin dermatological drugs (listed in **Table 9-9** on page 92) instead of the top 10 Small Pharmacy dispensers of high margin dermatological generics. Staywell/WellCare Small Pharmacy Margin over NADAC drops even further to \$4.92 per claim. Altogether, Staywell/WellCare reported dispensing 1,555 different generic drugs at Small Pharmacies in 2018. **The four dermatological drugs discussed in this section were responsible for nearly half of the overall generic drug profit paid to Florida’s Small Pharmacies through Staywell/WellCare in 2018.**

Figure 9-40: FL Medicaid MCO Payer/Pharmacy Matrix - 2018 Generic Drugs (excl. Top 4 High Margin Generic Dermatological Drugs)

2018 Generic Drugs excluding top four 2018 high margin generic dermatological drugs												
Pharmacy Grouping (group)	MOLINA		PRESTIGE HEALTH		SIMPLY HEALTHCARE		STAYWELL/WELLCARE		SUNSHINE/CENTENE		UHC	
	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim
CVS	62%	\$5.69	1%	\$2.87	59%	(\$0.65)	58%	(\$0.59)	50%	\$2.23	5%	\$4.68
Publix	2%	\$6.07	11%	\$0.19	4%	(\$1.93)	0%	\$5.07	12%	(\$2.01)	0%	\$2.91
Small Pharmacy	20%	\$6.81	27%	\$0.59	27%	\$4.74	23%	\$4.92	23%	(\$0.13)	20%	\$1.38
Walgreens	0%	\$5.73	44%	\$0.44	0%	(\$3.00)	0%	\$2.02	0%	\$4.25	64%	\$4.22
Walmart	11%	\$5.56	11%	\$0.62	7%	\$4.25	11%	(\$1.03)	10%	(\$2.61)	10%	(\$0.10)
Winn Dixie	4%	\$5.26	4%	\$0.25	0%	(\$0.55)	4%	\$3.68	3%	(\$1.95)	0%	\$0.67
Other	1%	\$13.90	2%	\$0.33	2%	\$6.22	3%	\$5.04	2%	(\$1.31)	1%	\$2.63
Grand Total	100%	\$6.00	100%	\$0.48	100%	\$1.27	100%	\$0.98	100%	\$0.50	100%	\$3.22

NOTE: Excludes all pharmacy groups with less than 1% of overall Medicaid MCO 2018 claim volume

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

9.8 SPECIALTY PHARMACY STEERING

Now that we have introduced the payer/pharmacy matrix, we can better illustrate the third and final identified generic distortion – specialty pharmacy steering.

Returning to **Table 9-1** on page 61, we noted that specialty pharmacy steering was the main driver of the inflated pricing reported on the high margin generic drugs in the Antineoplastics and Adjunctive Therapies class. **Table 9-11** shows the three high margin generic drugs that together were reported by MCOs with a cost of nearly \$3 million above NADAC, which works out to a staggering \$2,827 per claim over NADAC.

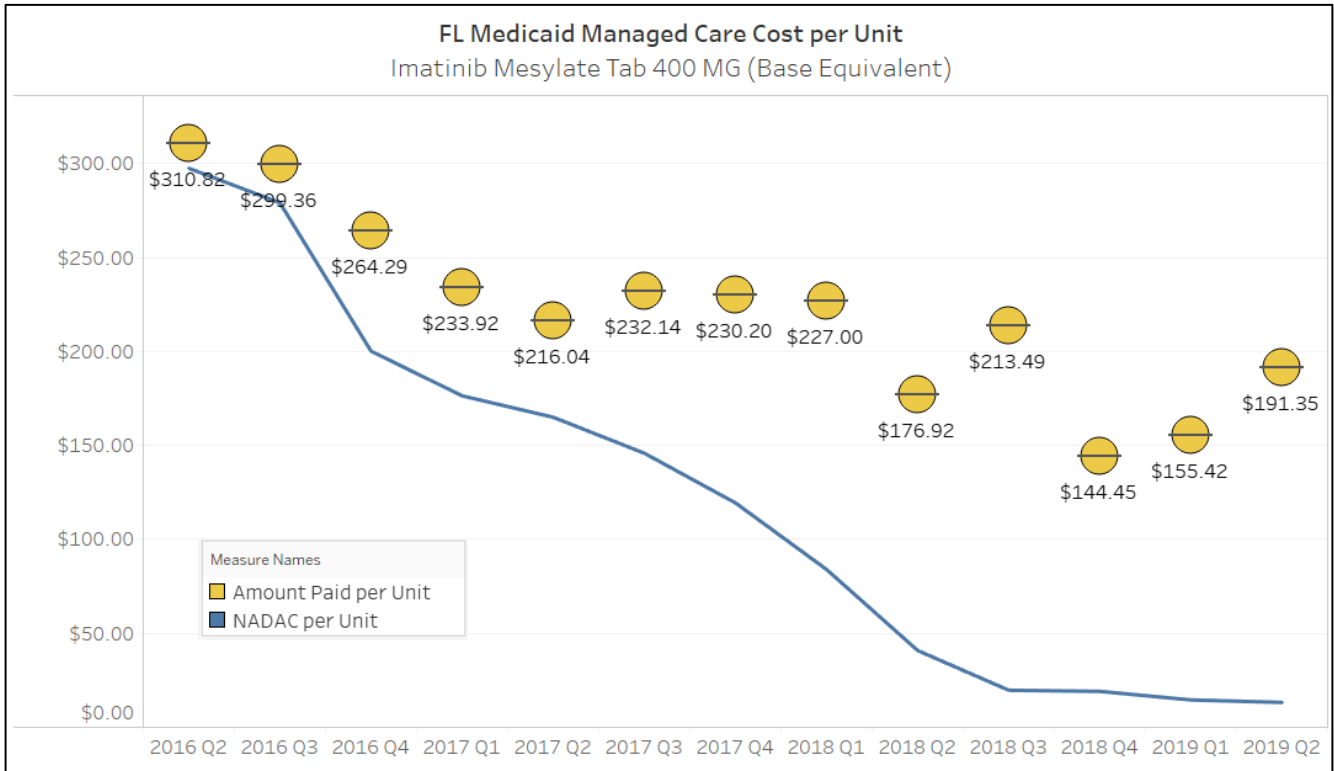
Table 9-11: 2018 FL Medicaid Dispensing of High Margin Generic Antineoplastics and Adjunctive Therapy Drugs

GPI 14 - Name	Claims	Amount Paid	Amount Paid per Claim	Margin over NADAC	Margin over NADAC per Claim
Imatinib Mesylate Tab 400 MG	370	\$2,050,247	\$5,541.21	\$1,673,106	\$4,521.91
Capecitabine Tab 500 MG	204	\$363,893	\$1,783.79	\$255,881	\$1,254.32
Imatinib Mesylate Tab 100 MG	104	\$421,084	\$4,048.88	\$241,667	\$2,323.72
Grand Total	678	\$2,835,223	\$4,181.75	\$2,170,654	\$3,201.55

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Table 9-11 makes it very clear that excess payments on this drug class is really driven by one drug – the 400 mg strength of generic Gleevec (imatinib mesylate tab 400 mg). **Florida MCOs (and their PBMs) collectively priced this drug at over \$3,200 per claim above its cost.** **Figure 9-41** shows the evolution of Florida’s managed care pricing for this drug over time, compared to its acquisition cost. In Q2 2016, imatinib mesylate tab 400 mg carried a NADAC per unit of more than \$297. By Q2 2019, that had cratered to just over \$13 per unit, showing the power that a competitive generic marketplace can wield to lower drug costs. Meanwhile, Florida’s MCOs collectively still reported a cost north of \$190 per unit in Q2 2019 – a markup of approximately \$177 per tablet.

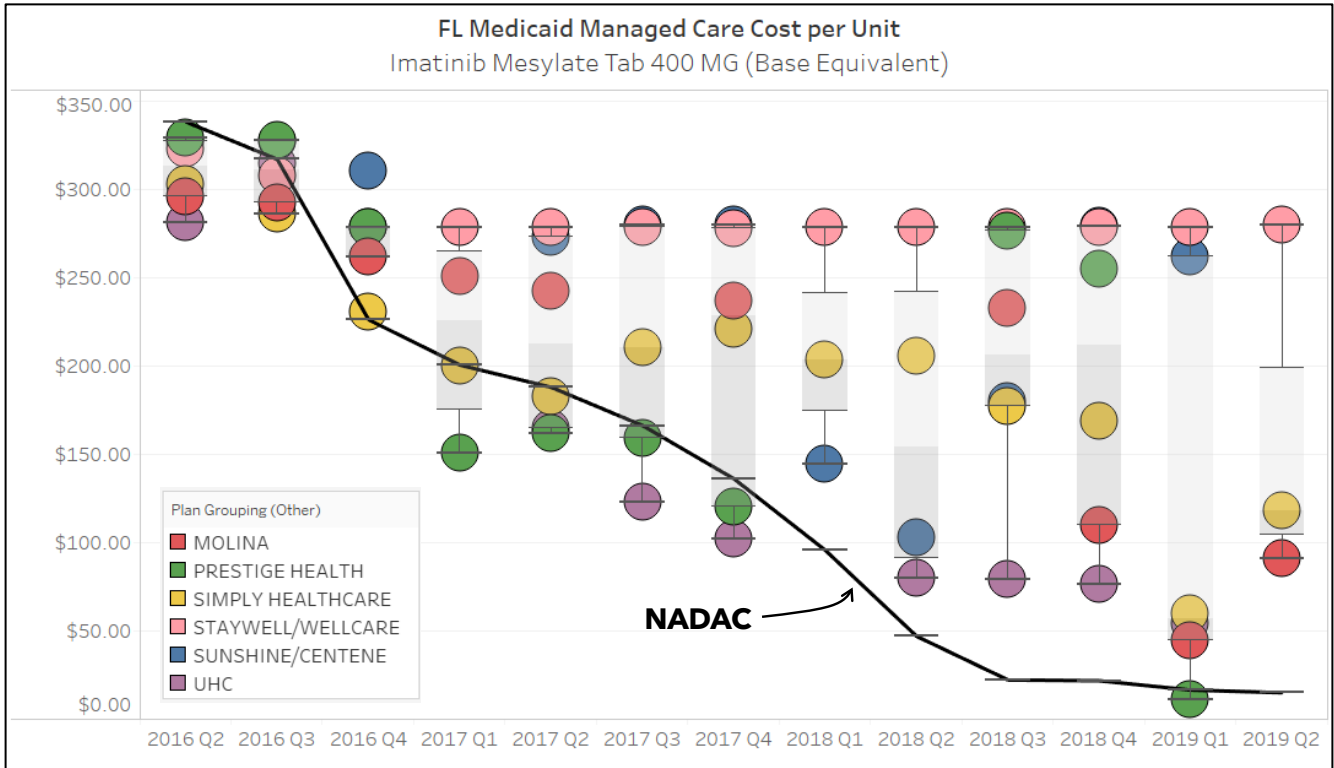
Figure 9-41: FL Medicaid MCO Cost per Unit - Imatinib Mesylate Tab 400 MG



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

We can get more clarity on who is responsible for this price distortion by drilling down to the MCO level. **Figure 9-42** (on next page) shows pricing reported by the top six MCOs for imatinib mesylate tab 400 mg over the same period. The only difference between **Figure 9-41** and **Figure 9-42** is that we’ve split the yellow dots in **Figure 9-41** into dots representing each plan in **Figure 9-42**.

Figure 9-42: FL Medicaid Managed Care Cost per Unit by Top 6 MCO - Imatinib Mesylate Tab 400 MG



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

It appears that United Healthcare (purple bubbles) and, sometimes, Prestige (green bubbles) are the only MCOs out of the top six that are attempting to price generic Gleevec at a level resembling NADAC. The rest of the group has done a very poor job passing through the extreme deflationary savings that the state should have realized on this generic drug.

The most egregious example of this is Staywell/WellCare, who since Q4 2016 has shockingly reported an almost perfectly stable per unit cost for imatinib mesylate tab 400 mg. While CVS Caremark (WellCare’s PBM) was likely the entity setting this price, WellCare disproportionately benefitted from the mispricing, as Exactus (WellCare’s wholly owned specialty pharmacy) dispensed 84% of all Staywell/WellCare claims at a weighted average Margin over NADAC of a whopping **\$5,832 per claim** as seen in **Figure 9-43** (on next page).

Figure 9-43: FL Medicaid MCO Payer/Pharmacy Matrix - 2017-2019 Imatinib Mesylate Tab 400 MG

Imatinib Mesylate Tab 400 MG (Base Equivalent) - 2017, 2018, 2019																		
Pharmacy Grouping (group)	MOLINA			PRESTIGE HEALTH			SIMPLY HEALTHCARE			STAYWELL/WELLCARE			SUNSHINE/CENTENE			UHC		
	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim
Acaria												42	95%	\$4,399				
Accredo	216	93%	\$3,435				77	46%	\$2,540									
Briova							3	2%	\$1,625						34	89%	\$1,003	
CVS	17	7%	\$2,185				47	28%	\$2,707	8	4%	\$3,640						
Exactus										177	84%	\$5,832						
Perform Specialty				11	44%	\$1,817												
Small Pharmacy				13	52%	(\$161)	36	22%	\$3,744	25	12%	\$5,262	1	2%	\$4,172	4	11%	\$1,013
Walgreens							2	1%	\$1,762									
Walmart				1	4%	(\$126)				1	0%	\$2,983						
All Other							1	1%	(\$53)				1	2%	\$3,520			
Grand Total	233	100%	\$3,344	25	100%	\$711	166	100%	\$2,807	211	100%	\$5,668	44	100%	\$4,374	38	100%	\$1,004

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

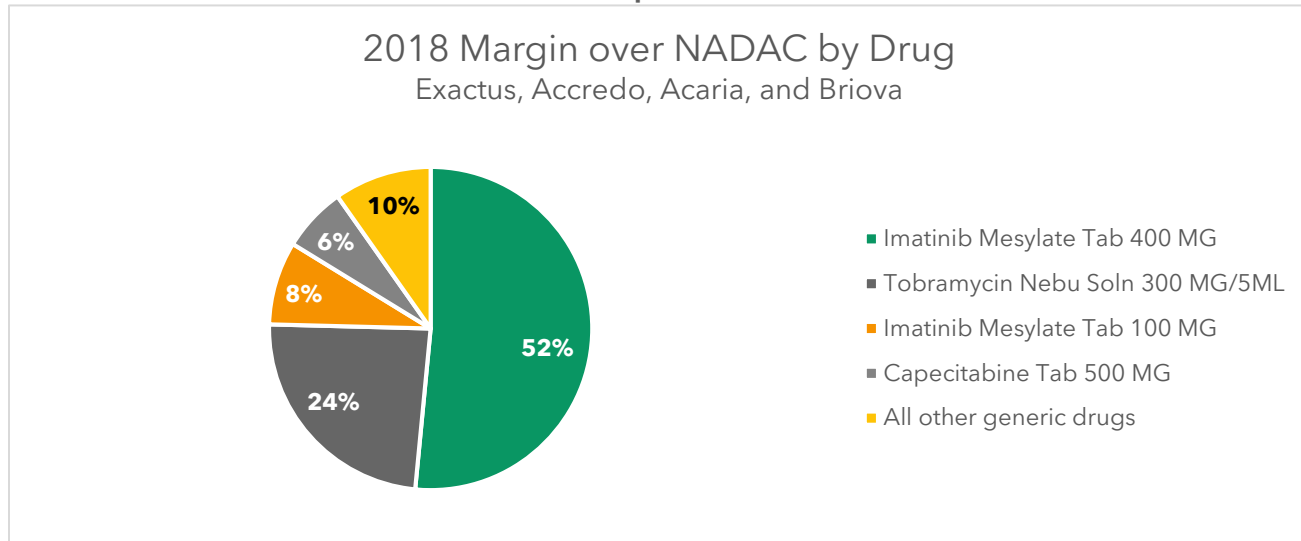
Note that this dynamic is not unique to WellCare. The beauty of the matrix in the previous figures is that it makes it very easy to spot relationships between plans and specialty pharmacy providers. In some cases, the plan is directly affiliated with the provider. In other cases, the plan may be agreeing to or allowing its PBM to channel a disproportionate number of claims to its affiliated specialty pharmacy.

- **For Sunshine/Centene:** 95% of all generic Gleevec 400 mg claims were filled at Acaria, Centene's wholly owned specialty pharmacy, at a Margin over NADAC of \$4,399 per claim
- **For UHC:** 89% of all generic Gleevec 400 mg claims were filled at Briova, United/Optum's wholly owned specialty pharmacy, at a Margin over NADAC of \$1,003 per claim
- **For Molina:** 93% of all generic Gleevec 400 mg claims were filled at Accredo, Express Scripts' wholly owned specialty pharmacy, at a Margin over NADAC of \$3,435 per claim
- **For Simply:** 46% of all generic Gleevec 400 mg claims were filled at Accredo, Express Scripts' wholly owned specialty pharmacy, at a Margin over NADAC of \$2,540 per claim
- **For Prestige:** 44% of all generic Gleevec 400 mg claims were filled at Perform Specialty, Prestige's preferred specialty pharmacy partner, at a Margin over NADAC of \$1,817 per claim

9.8.1 Lots of margin from just a few generic drugs

Overall, the four most prominent specialty-only pharmacy groups in Florida Medicaid - Exactus, Accredo, Acaria, and Briova - brought in a reported \$2.66 million in Margin over NADAC on generic drugs. Of that, 52% came from imatinib mesylate 400 mg tablets. So, this analysis is not "cherry picking," and imatinib is not a proverbial "cherry" - **imatinib mesylate alone is the primary driver of Margin over NADAC on specialty generic drugs in the Florida Medicaid managed care program.** Just three other drugs (tobramycin nebulizer solution, imatinib mesylate tab 100 mg, and capecitabine tab 500 mg) were responsible for another 38% of the Margin over NADAC reported on claims at these pharmacies (**Figure 9-44**, next page).

Figure 9-44: 2018 FL Medicaid Managed Care Generic Drug Margin over NADAC - Exactus, Acaria, Accredo, and Briova pharmacies



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Looking at the payer/pharmacy matrix for tobramycin (Figure 9-45), we see a similar same pattern of steering. Between 2017 and 2019, most claims on this drug went through Accredo on Molina and Simply; or Acaria on Sunshine/Centene. Once again, we see differential MAC pricing at Sunshine/Centene, this time vastly overpaying through its specialty pharmacy relative to the very few tobramycin claims filled at Publix or Small Pharmacies.

Figure 9-45: FL Medicaid MCO Payer/Pharmacy Matrix - 2017-2019 Tobramycin Nebu Soln 300 MG/5ML

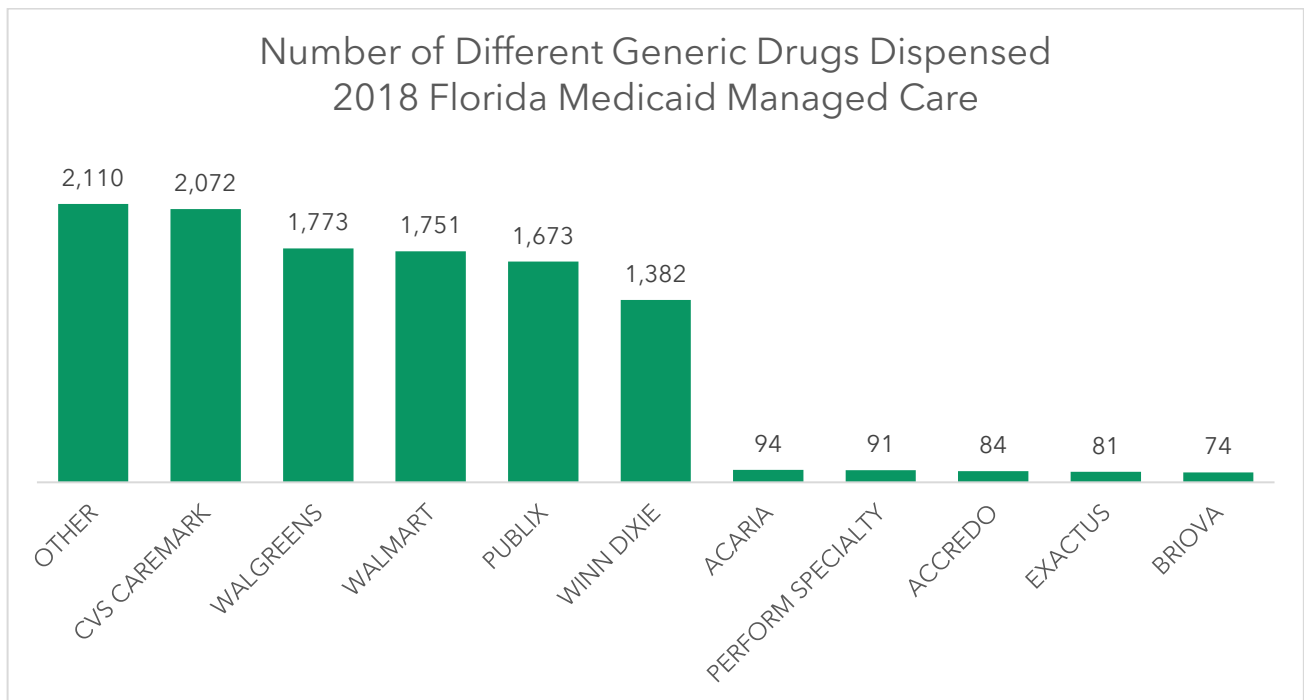
Pharmacy Grouping (group)	MOLINA			PRESTIGE HEALTH			SIMPLY HEALTHCARE			STAYWELL/WELLCARE			SUNSHINE/CENTENE			UHC		
	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim	Claim Count	% Total Claims	Margin over NADAC per Claim
Acaria												176	96%	\$4,251				
Accredo	109	95%	\$738				62	78%	\$2,045	9	11%	\$3,551						
Briova							1	1%	(\$3,212)						2	10%	\$496	
CVS	5	4%	\$582															
Exactus										26	33%	\$4,149						
Perform Specialty				19	76%	(\$557)												
Small Pharmacy	1	1%	(\$1,352)	2	8%	(\$1,740)	6	8%	(\$758)	26	33%	\$3,542	6	3%	(\$670)	18	86%	(\$1,537)
Walgreens				4	16%	(\$185)	1	1%	(\$1,318)	1	1%	\$3,564						
All Other							10	13%	\$1,284	16	20%	\$3,658				1	5%	\$1,719
Publix										1	1%	\$4,093	1	1%	\$108			
Grand Total	115	100%	\$713	25	100%	(\$592)	80	100%	\$1,632	79	100%	\$3,774	183	100%	\$4,067	21	100%	(\$1,189)

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

9.8.2 The canary in the coal mine

Currently, there are a very limited number of specialty generic drugs in the marketplace. Overall, the concept of a specialty drug is barely older than a decade, so by definition, most specialty drugs are still available as brand versions only. To illustrate this, **Figure 9-46** shows the total number of different generic drugs dispensed by each pharmacy group in Florida Medicaid managed care in 2018. The chart shows that a large retail chain like CVS is dispensing more than 2,100 different generic drugs (an example of one “drug” would be imatinib mesylate tab 400 mg - i.e. the unique combination of an active ingredient, dosage form, and strength). Walgreens, Walmart, and Publix are between 1,700 and 1,800 unique generic drugs. Against that backdrop, the five specialty-only pharmacy groups in Florida Medicaid (Acaria, Accredo, Briova, Exactus, and Perform Specialty) are all under 100.

Figure 9-46: Number of Different Generic Drugs Dispensed - 2018 Florida Medicaid Managed Care



Source: 3 Axis Advisors analysis of FL Claims Database leveraging Medi-Span PriceRx for drug definitions

But as more brand name specialty drugs (which we’ll discuss in the next section) lose patent exclusivity in the coming years, there is growing risk that the extreme pricing manipulation and steering we have identified on imatinib mesylate could become more commonplace.

As such, we strongly urge the state to either better monitor its Medicaid claims data for preferential price setting and steering or altogether move to an acquisition cost-based model to mitigate the risk of a dramatic rise in price exploitation on specialty generic drugs.

10 BRAND DRUG ANALYSIS

In the United States, approximately 2% of the gross domestic product (GDP), or over \$300 billion annually, is expended on prescription drugs.⁷² Medicaid prescription drug spending is over 20% of this, accounting for roughly \$64 billion annually.⁷³ Prescription drug spending is anticipated to continue to increase over the coming years due to a variety of factors. According to the American Academy of Actuaries, there are four primary drivers for growth in prescription drug expenses. They are:⁷⁴

- Utilization (the amount of prescription drugs used as well as the dose of those drugs)
- Unit Costs (the price per unit of drug)
- Drug Mix (the types of drugs utilized)
- Specialty Drugs (highly complex and costly drugs)

Brand name medications play a significant role in prescription drug costs given their higher unit costs relative to generics. Brand drugs are often introduced at prices higher than the currently available therapies and are more likely to experience price increases over time, driving up their costs to a greater extent over time. Brand name specialty drugs are one of the fastest growing cost areas of pharmaceutical spending and have higher prices than traditional brand name medications.⁷⁵ As a result, the introduction of more of these specialty pharmacy medications is contributing significantly to unit cost inflation, especially in instances where the new specialty product replaces previous generic treatment options.⁷⁶

For any health plan, the management of brand name medications is integral for controlling costs and managing the prescription benefit. Florida Medicaid is no exception. A better understanding of the dynamics of brand name spending within the Florida Medicaid program is therefore critical for an overall assessment of program operation over the reviewed time frame of this analysis.

10.1 DEFINING A BRAND NAME DRUG

In order to conduct an analysis of brand name medications, we must first define a brand name drug. Despite what you may think, there is no one uniform recognized source for defining a brand name drug. Linda Cahn, a nationally recognized expert on pharmacy benefits, provided the following potential definition of a brand name drug during testimony to Ohio's Joint Medicaid Oversight Committee in November 2019⁷⁷:

Figure 10-1: Sample Definition of a Brand Name Drug

Example of a Strong “Brand Drug” Definition

Brand Drug(s) - The term “Brand Drug(s)” shall mean the following: The Multisource Code field in Medi-Span contains an “M” (co-branded product), or an “N” (single source brand), or an “O” (originator brand) (except where the Claim is submitted with a DAW Code of “3”, “4”, “5” or “6”, in which case it shall be considered a Generic Drug). Claims with a Multisource Code of “O” and with a DAW Codes of “0”, “1”, “2”, “7”, “8” or “9” shall be considered a Brand Drug. The Parties agree that when a drug is identified as a Brand Drug, it shall be considered a Brand Drug for all purposes by PBM, including but not limited to adjudicating the Claim, reimbursing the relevant pharmacy, invoicing CLIENT, determining the Copayment or Coinsurance to be paid by the Plan Beneficiary, calculating the satisfaction of Average Annual Guarantees as further described in Article __ of the Agreement, calculating the satisfaction of Financial Benefit Guarantees as further described in Article __ of the Agreement, and calculating the satisfaction of generic fill rates (if any).

Source: Ohio Joint Medicaid Oversight Committee

[http://jmoc.state.oh.us/assets/meetings/Presentation%20to%20JMOC%20by%20Linda%20Cahn%20\(FINAL%2011-2-19\).pdf](http://jmoc.state.oh.us/assets/meetings/Presentation%20to%20JMOC%20by%20Linda%20Cahn%20(FINAL%2011-2-19).pdf)

This definition is unfortunately unable to be utilized based upon the data fields we have within our Florida Medicaid claim data. The intention in defining a brand name medication is to identify those products that are protected by patents with the company that manufactures it and for which a billion or more dollars have been invested in developing and testing.⁷⁸ These development costs are often utilized as part of the rationale for higher brand name drug prices. Unfortunately, definitions like the one proposed above are normally required in contracts to protect plan sponsors from exploitive practices of drug channel participants. For our analysis, we relied upon the Medi-Span definition for trade name drugs along with limiting products to those marketed under a New Drug Application (NDA) or Biologic License Application (BLA) to identify brand name medications. With this definition out of the way, we can provide a quick overview of how brand name medications are typically acquired within the drug channel.

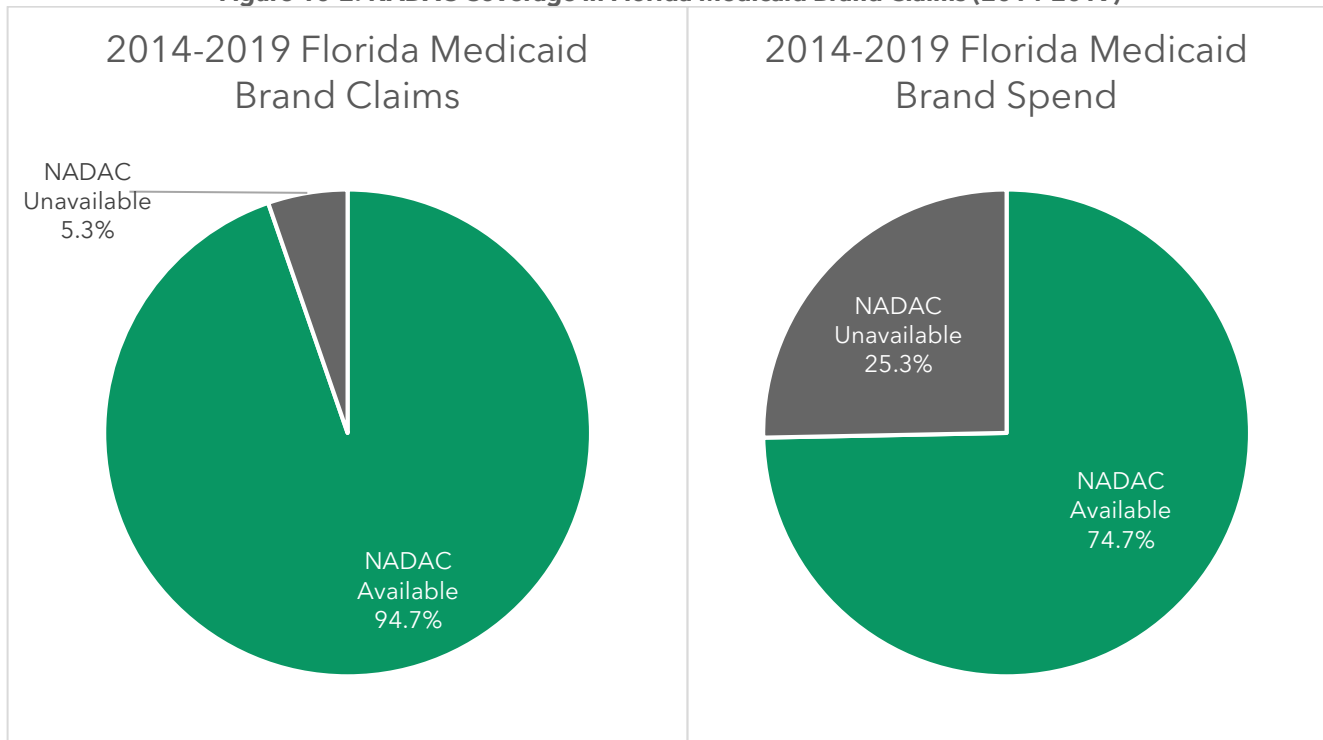
10.2 BRAND NAME PRICING OVERVIEW

List prices for brand name medications are set by pharmaceutical manufacturers and represent the baseline for payments between the insurer and pharmacy provider. However, manufacturers offer rebates to members of the drug supply chain (pharmacy benefit managers, wholesalers, etc.) to lower the actual net price paid by these parties on their products. Rebates vary by product, manufacturer, PBM, and payer (i.e. Medicaid vs. Commercial). Rebates are returned retrospectively after the point of sale based on volume of drug purchases.⁷⁹ As previously discussed, drug companies are required (mandated rebate) to provide at least a 23% rebate on innovator (brand name) drugs and biologics used by Medicaid beneficiaries in order for their product to be covered.⁸⁰ Rebates can complicate assessments of cost in Medicaid and other payer marketplaces, as they

occur after the pharmacy transaction. Further complicating matters, the total concessions that drug manufacturers offer off their list prices are proprietary, complex, and routinely gobbled up by the supply chain rather than being passed through in their entirety to patients and plan sponsors.

To examine brand name pricing deeper, we first need a reliable benchmark to compare the price paid by a payer to the price to acquire drug. For generic medications, we utilized NADAC (See [Section 9.1](#) for more information on NADAC). This has proven a highly reliable metric with good coverage for generic medications over this analysis and previous analyses in this report. For brand name drugs, there is less coverage with NADAC (meaning a higher portion of brand name drugs lack a NADAC price to compare to). In the aggregate, roughly one in 20 brand name prescriptions within Florida Medicaid lack a comparable NADAC price, as demonstrated in **Figure 10-2**.

Figure 10-2: NADAC Coverage in Florida Medicaid Brand Claims (2014-2019)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

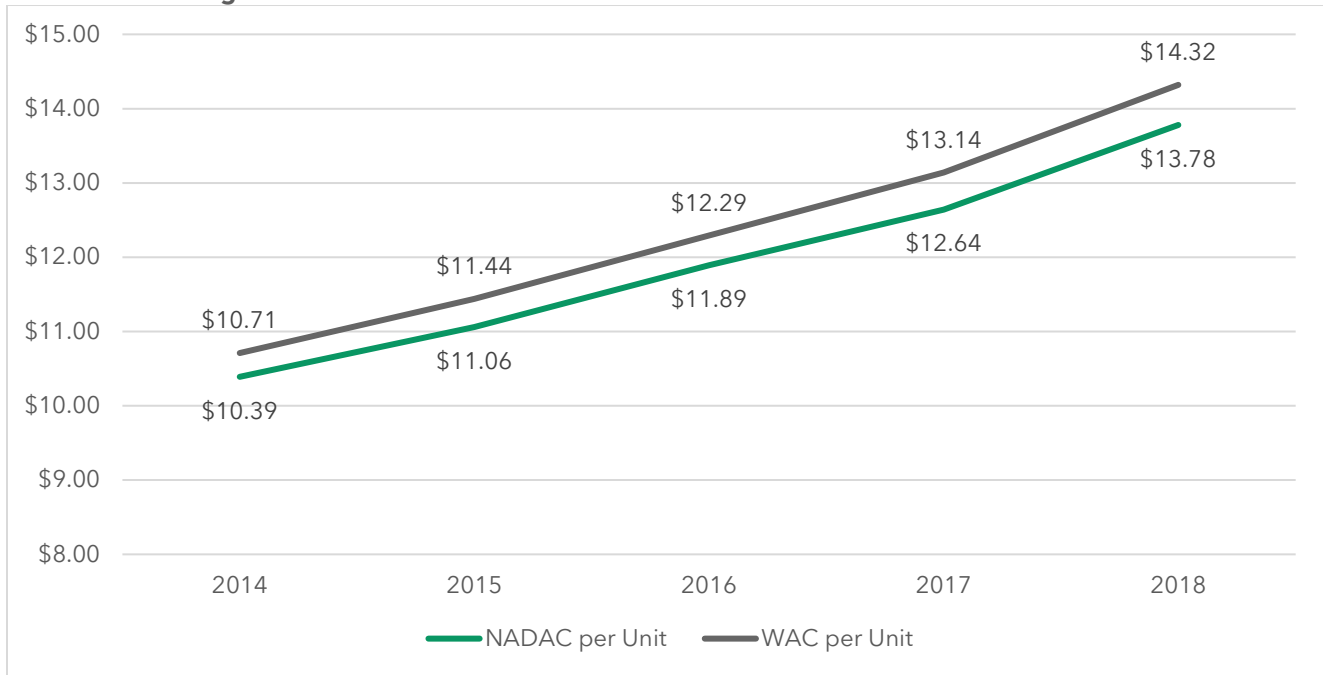
Figure 10-2 also demonstrates that when a NADAC is unavailable, the underlying drug product is significantly more expensive (i.e. 5.3% of claims comprise 25.3% of expense). As such, even though NADAC has been surveyed six of the eight years in our study period, it still fails to address a significant portion of brand name expenditures; expenditures we do not want to lose, as their absence would limit the scope of our analysis.

However, unlike generic drugs, brand name drug pharmacy acquisition costs have a higher correlation to their list price. **Wholesale Acquisition Cost (WAC)** is one list price benchmark, and arguably the most reliable for brand name drugs. This is because WAC represents the list price for a drug to a wholesaler or other direct purchases (not including discounts or rebates). Moreover, WAC is a price that is statutorily defined in Federal code, making manipulation of the price more difficult.⁸¹

⁸² To demonstrate the largely fixed relationship between NADAC and WAC, we analyzed the differences in price per unit of products with both a WAC and NADAC relative to each other for brand name medications within Florida Medicaid. As can be seen in **Figure 10-3** (on next page),

there is a clear, and very strong, correlation between the weighted average NADAC price per unit for brand name medications within Florida Medicaid and the corresponding WAC price per unit for those same brand name medications.

Figure 10-3: Florida Medicaid Brand Name Medications with a NADAC and WAC



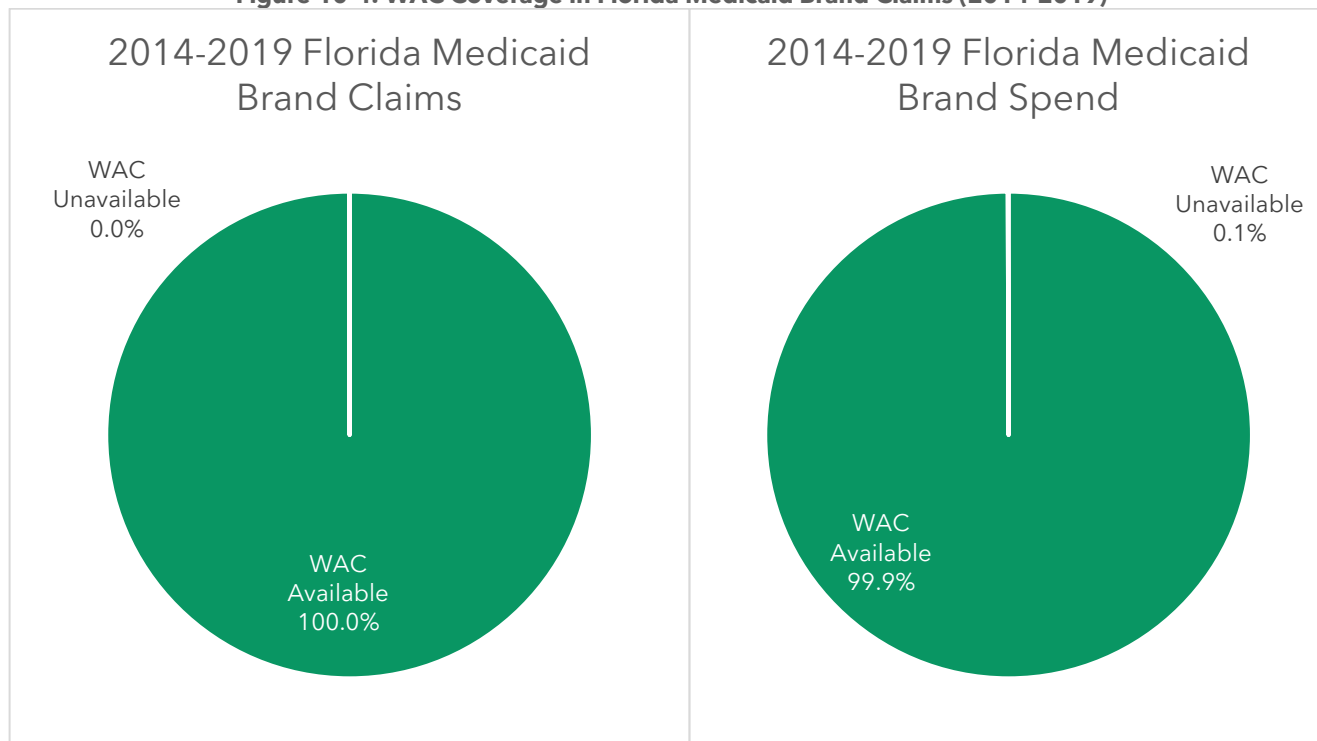
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

Figure 10-3 demonstrates that for all brand name medications with both a NADAC and WAC, the aggregate discount from WAC to reach the NADAC over the five-year period from 2014 to 2018 is 4%.

Unsurprisingly, this observation mirrors the relationship between NADAC and WAC reported by Myers and Stauffer, LC. (as a reminder, the group responsible for generating the NADAC price for CMS). Myers and Stauffer have published equivalency metrics for brand name drugs relative to their acquisition costs that identify a NADAC equivalency for brand name drugs relative to WAC is approximately 4%.⁸³

When analyzing coverage of Florida Medicaid’s brand name prescriptions to their available WAC prices, we find improved coverage in comparison to NADAC. As shown in **Figure 10-4** (on next page), very few brand name claims lack a WAC price within our claims data.

Figure 10-4: WAC Coverage in Florida Medicaid Brand Claims (2014-2019)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and WAC prices

Whether measured against the mean or median, there is clearly a strong correlation to actual acquisition cost and WAC for brand name drugs. As such, we believe that a 4% discount to WAC is a reasonable estimate of the cost to acquire a brand name medication within the supply chain when a NADAC is unavailable to otherwise price the claim's ingredient cost.

We should note that very few contractual relationships between a PBM and payer are based upon a WAC price guarantee. Rather, the most utilized payment benchmark between a PBM and a payer is based upon Average Wholesaler Price (AWP). AWP was initially intended to be an estimate of the price retail pharmacies pay for drugs from their wholesaler distributor, but now is a poor, grossly overstated proxy for pharmacy acquisition cost. It is not statutorily defined, may be unavailable directly from the drug's manufacturer, and is often a calculated price published by companies such as Medi-Span, First Databank, Gold Standard Drug Database, or others. For most brand drugs, there is a fixed relationship between its AWP and its WAC ($AWP = 1.2 \times WAC$). No such relationship between AWP and WAC exists for generic drugs.⁸⁴

Given that we have established strong correlations between a brand name medication's WAC price and its actual acquisition cost (as measured by NADAC), it is therefore possible to derive an estimate for actual acquisition cost for brand name medications within Florida Medicaid for a broader population of brand name medications than NADAC alone would offer us. The estimate of actual acquisition cost for brand name medications for the remainder of this report shall be:

- The NADAC unit price for the NDC; or
- 96% of the WAC unit price for the NDC in cases where there is no available NADAC

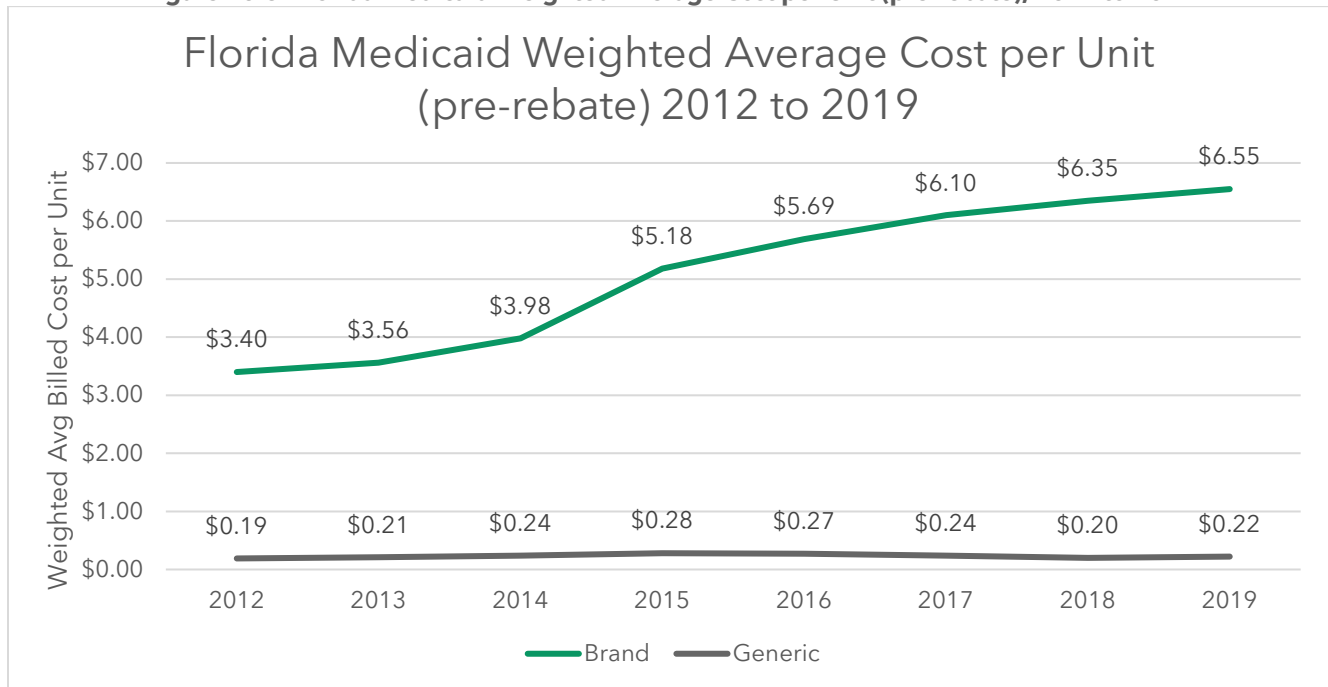
Note that this is slight modification from the estimate above acquisition cost used within the generic section (WAC - 4% cannot be used as a proxy for generic acquisition costs, as there is no set relationship between WAC and NADAC), but will allow us to analyze and assess more brand name

prescriptions and expenditures than we would otherwise be able to do utilizing NADAC alone. As a result, we will refer to this benchmark as **Margin over Acquisition Cost** when comparing MCO payments to this estimate of acquisition cost for brand name medications.

10.3 OVERVIEW OF FLORIDA MEDICAID BRAND NAME SPENDING

Before we begin our assessment of brand name Margin over Acquisition Cost, we want to first provide a high-level overview of the impact of brand name medication utilization within Florida Medicaid. In the aggregate, brand name medications cost considerably more than generic medications, before any rebate considerations are made. Consequently, their use is a larger impact to Florida Medicaid’s front-end drug spend than generic medications. As can be seen in **Figures 10-5**, the weighted average cost of a brand name medication is nearly 30 times that of a generic medication. Furthermore, brand costs have risen 93% per prescription from 2012 to 2019, while generics have increased 16%.

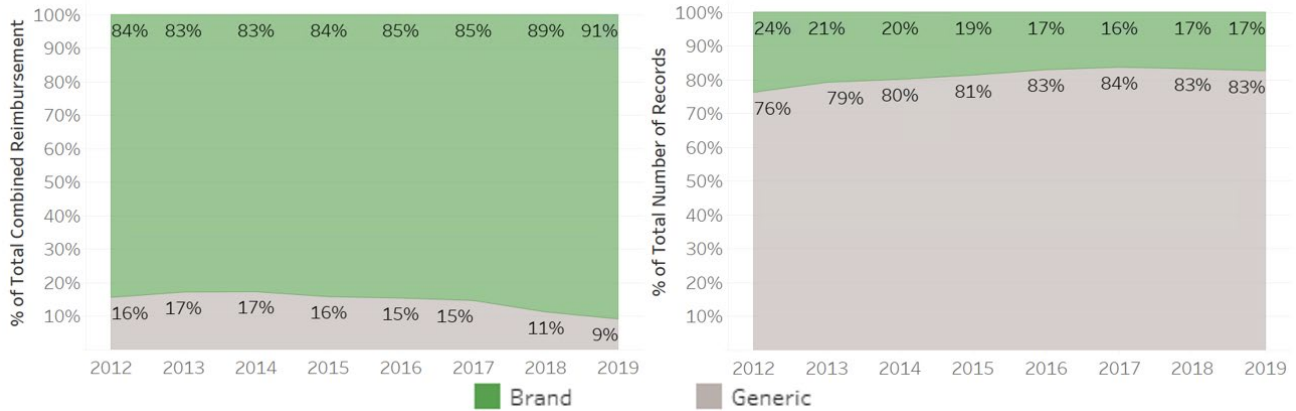
Figure 10-5: Florida Medicaid Weighted Average Cost per Unit (pre-rebate), 2012 to 2019



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions

Figure 10-5 makes clear that a significant gap exists between brand and generic medication claim costs. As such, management of brand name expenditures is likely critical for the overall financial health of the Florida Medicaid program. To demonstrate this, we analyzed brand versus generic spending and utilization within Florida Medicaid over time. We found that brand name medications account for an ever-decreasing number of claims (utilization) but an ever-greater portion of drug expenditures (cost) as seen in **Figure 10-6** (on next page).

Figure 10-6: Florida Medicaid Cost vs. Utilization for Brand and Generic Medications, 2012 to 2019



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions

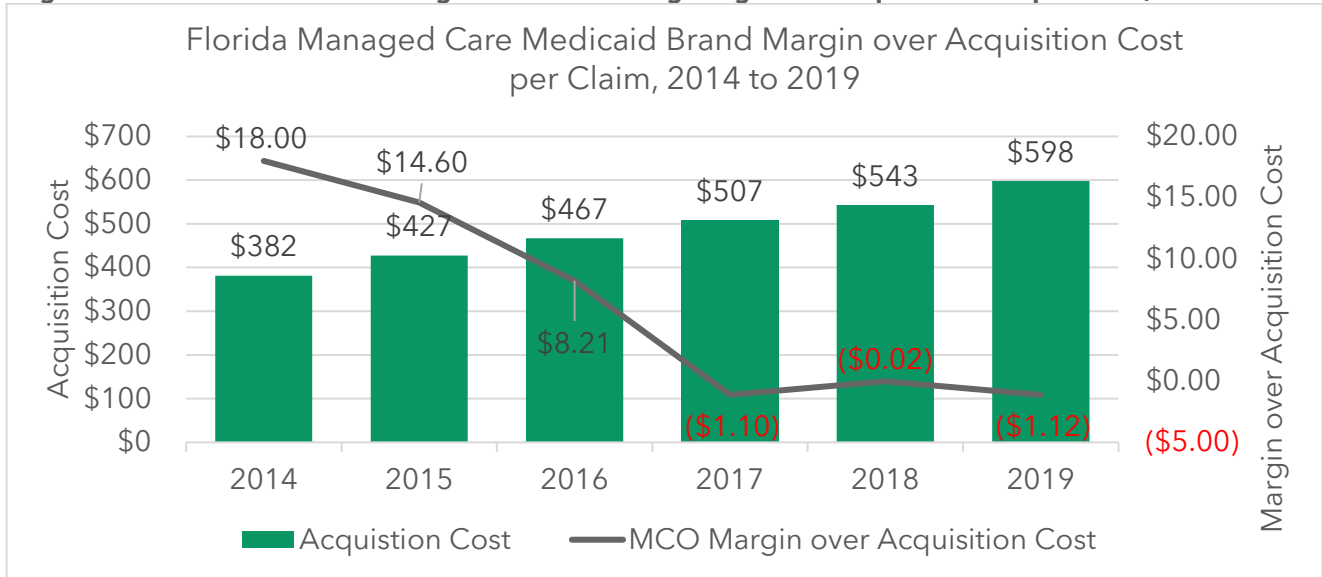
Brand medications have consistently represented 24% or less of utilization but drive 83% or more of prescription drug costs. Brand name medications have gone from a high of 24% of utilization in 2012 to a low of 17% of utilization in 2019 (a 7% decline). However, despite their declining utilization over this same time frame, the portion of drug expenditures attributed to brand name medications has risen by 7% (from 84% in 2013 to 91% in 2019).

Now that we better understand the role of brand name medications as a principal cost driver for prescription drug expenditures in Florida Medicaid, we are now better prepared to review brand name prescription expenditures relative to their acquisition costs.

10.4 COMPARING BRAND REIMBURSEMENT TO BRAND ACQUISITION COST

As we did in [Section 9.4](#) with generic medications, we will begin our analysis of brand name medications by assessing the Margin over Acquisition Cost for brands. **Figure 10-7** (on next page) shows the aggregate cost per claim by year, separated into the estimated acquisition cost (NADAC or 96% of WAC when NADAC is unavailable) and the Margin over Acquisition Cost for Florida’s MCOs.

Figure 10-7: Florida Medicaid Managed Care Brand Drug Margin over Acquisition Cost per Claim, 2014 to 2019



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

In 2014 through 2016, after aggregating all Florida brand claims, we arrived at a weighted average Margin over Acquisition Cost of approximately \$10 per claim in each year and a weighted average acquisition cost of approximately \$425 per brand name medication. In all subsequent years to 2016, brand name medications offer little to negative aggregated margin for pharmacy providers per claim. Understanding that brand name margin in 2017 and beyond equates to pharmacy providers losing potentially millions of dollars per year to dispense millions of brand name medications based upon cost to acquire the underlying drug (to say nothing of operational costs) calls into question the validity of our estimate of brand name acquisition costs. Can pharmacy providers really be losing millions of dollars to dispense millions of brand name medications, as they would appear to be doing in 2017 and beyond? Especially when generic margins are not enough to cover operational costs as well? We were skeptical, especially after observing a meaningful contingent of claims with reported AHCA unit costs at substantial discounts to WAC - completely out of line with even the most aggressive assumption of brand name pharmacy acquisition cost.

In short, we suspected that these deeply discounted claims that were pulling down the aggregate unit costs shown in **Figure 10-7** were **340B claims**. As such, we needed to develop a way to remove these claims to be able to properly assess brand drug Margin over Acquisition Cost.

10.5 THE 340B DRUG PRICING PROGRAM

Before we explain how we sought to remove these confounding 340B claims from our brand analysis, it is beneficial to have a brief background on the 340B drug pricing program. The 340B drug pricing program ("340B"), is intricately linked to Medicaid prescription drug benefits. The Medicaid Drug Rebate Program (MDRP) and 340B both require drug manufacturers to provide significant price concessions on their products via a contractual relationship with the HHS Secretary. Under Medicaid, these discounts are provided retroactively in the form of a rebate.⁸⁵ Under 340B, these discounts are realized prospectively, as drug manufacturers are required to sell drugs to participating providers, known as "**Covered Entities**," at a reduced price.⁸⁶

We have already discussed the nature of Medicaid rebates in significant detail in a prior section of this report (see [Formulary Analysis](#)) and will not duplicate that discussion here. With regards to 340B, the nature of the pricing concession provided to “Covered Entities” is known as the 340B-ceiling price. This is the price by which “Covered Entities” pay wholesalers or drug manufacturers to acquire their drugs and not the typical market acquisition cost (i.e. NADAC). The ceiling price is calculated as the drug’s AMP minus the URA - **the same process used to determine a drug’s rebate obligation under Medicaid**.⁸⁷ It should come as no surprise then that the purchasing discounts realized by “Covered Entities” within 340B can be as significant as those realized by Medicaid (given the same methodology to calculate the price concession between the two programs). However, as in the case with Medicaid rebates, the 340B pricing concessions can be difficult to quantify given the confidential nature of the 340B-ceiling price.

We demonstrated in our prior section on Medicaid rebates (see [Federal Rebate Amounts](#)) that the aggregate rebate discount in Medicaid is 54.5% in 2017 based upon the MACPAC data with variability between the state participants of the Medicaid program between 43.4% to 93.7%. With 340B, we can demonstrate the similarity of price concession in both aggregate and anecdotal numbers. In 2015, the Government Accountability Office (GAO) reported that 340B “Covered Entities” can save an estimated 20-50% off drug costs (in-line with those observed in Medicaid two years later). Similarly, based on one hospital’s reported savings through the program (i.e. one 340B “Covered Entity” participant), the amount of savings for drugs acquired via the 340B program equated to a 63% savings for that individual hospital.⁸⁸

Because price concessions by drug manufacturers are provided directly to the “Covered Entity” in the case of 340B, drug manufacturers are protected under the law from also paying a Medicaid drug rebate on a 340B claim. This should make logical sense, as on the one hand, a drug manufacturer may have to sell their product at a sizable discount to the provider (“Covered Entity”) and would otherwise have to give the same sizable rebate on the drug expense to Medicaid on that same claim. Preventing duplicate discounts is the main issue confronting state Medicaid programs with regards to 340B.⁸⁹

In recent years, changes to both 340B and the Medicaid Drug Rebate Program have made it more difficult for states and providers to determine whether a 340B drug was dispensed to a Medicaid beneficiary. Specifically, the expansion of rebates to Medicaid managed care plans and the growth of **contract pharmacies** that are dispensing 340B drugs have made preventing duplicate discounts more complex. Because Medicaid loses access to the rebate collections for these claims, and because “Covered Entities” are protected from the “real” cost to acquire these products (i.e. the cost they would pay to acquire if they were not a Covered Entity), Medicaid programs’ payment for 340B claims should be no greater than the 340B ceiling price for the product on the claim to ensure fiscal responsibility.

In Florida, AHCA has a 340B policy that seeks to do exactly this. Pharmacy providers billing for drugs purchased under the 340B program are required to submit claim identifiers, flagging their claim as a 340B claim. This requirement applies to all pharmacy claims regardless of whether the claim is transacted in fee-for-service or managed care. The specifics of these requirements were announced most recently in a Remittance Advice Provider Alert on August 22, 2018, and is accessible online on AHCA’s website.⁹⁰ Furthermore, according to 59G-4.251 Prescribed Drug Reimbursement Methodology, the price of 340B claims will be reimbursed at the actual cost to acquire, which should be submitted and not exceed the 340B ceiling price established by the Health Resources and Services Administration (HRSA)⁹¹ (Note, it is unclear if this requirement is unique to 340B claims within the FFS program or if this rule also applies to Florida’s MCOs). With this background

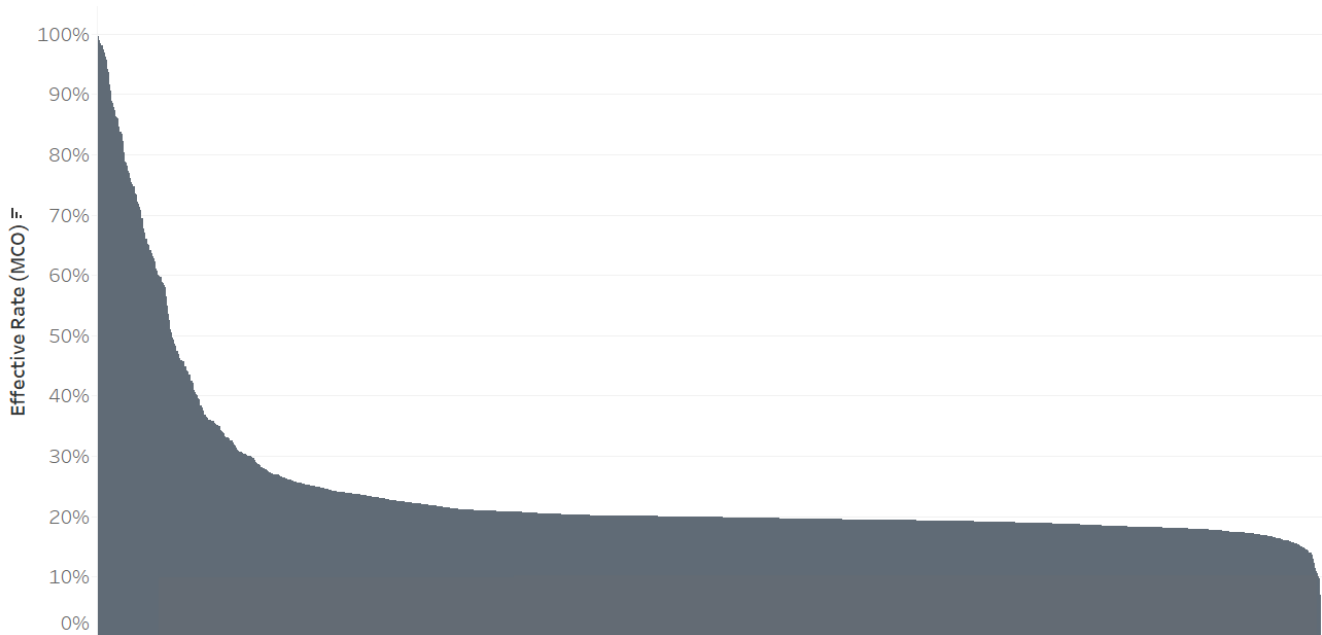
information, we can now discuss how we sought to identify 340B claims within the Florida Medicaid claim data, as our dataset did not include the 340B claim identifiers that are otherwise required to be utilized within the program and available to AHCA.

10.5.1 Methodology to Identify a 340B Claim

As identified in [Section 10.4](#), we observe a significant disconnect between the cost paid by Florida MCOs to a pharmacy provider for brand name medications and the acquisition cost for that brand name medication. To drill into this observation deeper, it is helpful to understand how brand name medications are typically acquired by pharmacy providers.

To dispense a brand name medication, a pharmacy must first acquire the product from a wholesaler (or in rare instances, directly from a manufacturer). The traditional outpatient pharmacy can acquire a brand name medication at a contracted rate with its wholesaler at AWP-20% (recall that this is the observed equivalency metric in the NADAC survey for Brand Name Medications). In **Figure 10-8**, we aggregate the AWP discount realized for all brand name medications by comparing the total payment on the claim by the MCO, divided by the total AWP cost for the brand name product in 2018, and graph each brand claim in rank order of the AWP discount realized on the claim from largest to smallest. What we can see is that approximately 7% of claims are realizing a reimbursement that is significantly below the market's general ability (AWP - 20%) to acquire a brand name medication, including a small number of claims that are effectively free (AWP - 100%).

Figure 10-8: Florida Medicaid Managed Care Oral Brand Drug AWP Discount per Claim, 2018



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

These significantly discounted claims help explain why our aggregate view of margin shows a negative value in terms of Margin over Acquisition Cost in 2017 and beyond. Interestingly, the number of claims identified here in Florida Medicaid align with estimates of 340B program size from industry experts like Dr. Adam Fein (namely 7%+ of the market).⁹² While this is an extrapolation that cannot be directly supported with the data we have available, we now have two signals that we may be on to something here:

1. Most brand name claims were, in fact, priced in a manner that would reflect the industry standard brand name acquisition price of AWP-20% (see **Figure 10-8**); and
2. The number of claims outside the identified industry standard (i.e. AWP-20%) accounts for roughly 7% of brand name claim volume

In order to continue our analysis of brand name medications, we must find a way to exclude these outlier claims. We did this by flagging any claim that delivered a discount greater than AWP-30%. This rate was chosen for a couple of reasons:

1. It represented a deflection point in **Figure 10-8** where the rate of AWP discount increased rapidly on a per claim basis; and
2. It would represent a pharmacy whose purchasing power is **four times** better than the rest of the market¹

Given that brand name products are those that typically lack market competition, it seems unlikely to us that even the giants of retail pharmacy like CVS or Walgreens would be able to negotiate brand discounts to this extent. To illustrate this point, let's say there are two pharmacies: one, a typical outpatient pharmacy as we've described who acquires brand name drugs from their wholesaler at AWP-20%; and a second 'Super' pharmacy that has an AWP-30% contracted rate for brand name medications. As can be seen in **Table 10-1**, such a pharmacy would achieve a margin at a rate that was 6x that of the typical outpatient pharmacy:

Table 10-1: Brand Name Drug Acquisition Example

	Typical Outpatient Pharmacy	'Super' Outpatient Pharmacy
AWP Cost for Brand Name Drug	\$100	\$100
Contracted AWP Purchase Discount with Wholesaler	20%	30%
Acquisition Cost	\$80	\$70
PBM Reimbursement (AWP - 18%)	\$82	\$82
Margin (PBM Reimbursement - Acquisition Cost)	\$2	\$12

Source: 3 Axis Advisors Brand Name Drug Acquisition Process Example

By flagging claims above a 30% discount, we feel we are leaving a healthy allowance for market forces of large vs. small pharmacies while also effectively identifying claims that would appear to reflect some level of post-rebate price concession within the claim payment (in our mind, most readily explainable as 340B, given Florida Medicaid's policies).

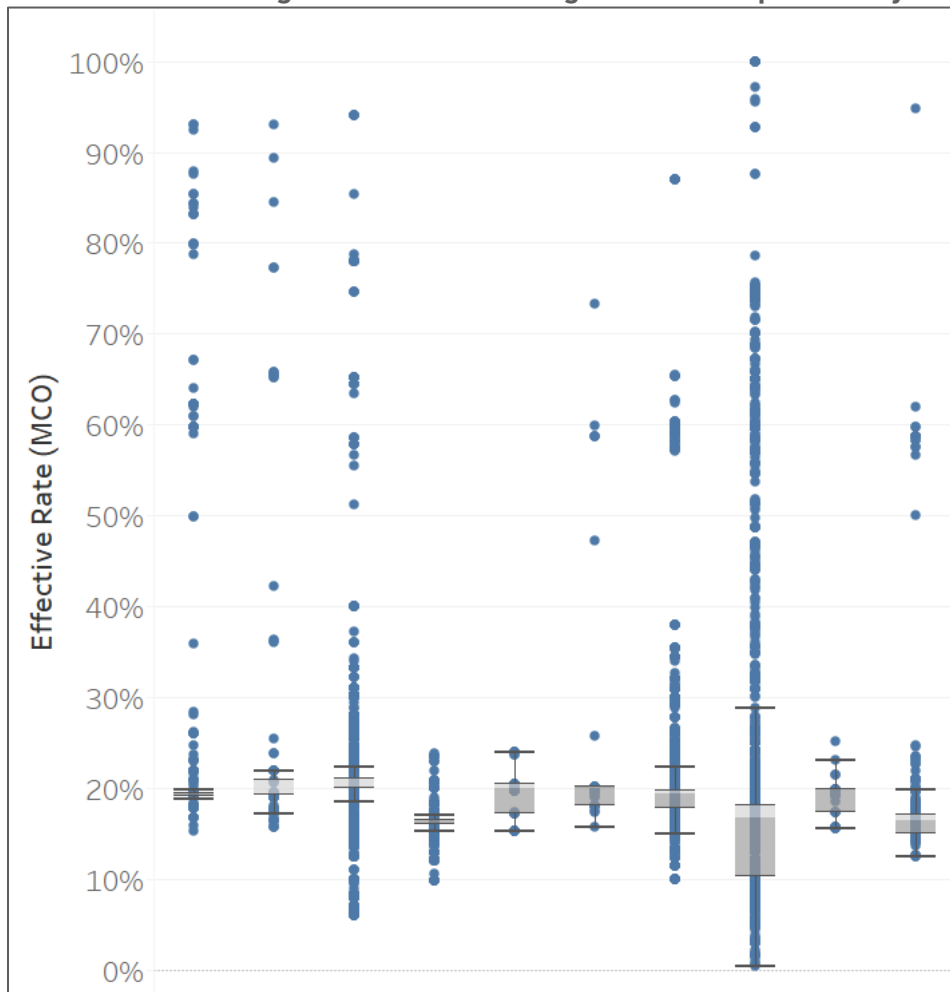
Our final "sniff-test" in this regard to 340B was to examine payments to individual pharmacies on their brand name prescriptions over a fixed time frame. Recognizing that if 340B was confounding our data in the way we believe it to be, we should see find some pharmacies with very little variability in their brand name drug pricing (i.e. those that are not pharmacies working for "Covered Entities"

¹ Pharmacies purchase brand drugs from wholesalers at discount to their WAC. A 20% discount to AWP for most brand-name drugs is equivalent to a 4% discount to WAC, which is the average retail pharmacy discount to WAC, based on publicly disclosed NADAC equivalency metrics. A 30% discount to AWP for most brand-name drugs is equivalent to a 16% discount to WAC. As such, it follows that AWP minus 30% is four times the discount of AWP minus 20%, on a WAC basis.

and do not have 340B claims), and others with high variability in their brand name drug pricing (due to having associated 340B claims, which are paying at a different rate from their otherwise contracted rate).

To assess this, we found the top five pharmacy dispensers of brand name medications in 2018 along with the bottom five pharmacy dispensers of brand name medications^m. What we found is that there were some pharmacies with an incredible range of reimbursements and others with tight grouping around brand name payments. In **Figure 10-9**, we modify what was done in **Figure 10-8** by putting all brand claims associated with each of these 10 pharmacies in one column apiece - each claim for a pharmacy is stacked on top of each other from smallest to largest AWP discount. The box-and-whisker plot gives us visual information regarding the median, upper, and lower percentile differences associated with brand name medications for these pharmacies. This final view gives us the comfort we need to proceed with our brand name analysis with an appropriate flag to remove 340B brand name medications (or other post-rebated / heavily discounted brand name claims). Only Florida Medicaid would have the ability to confirm the accuracy of our flag on the basis of the claim-level flags they receive on claims and retain in their databases, which were not shared with us.

Figure 10-9: Florida Medicaid Managed Care Oral Brand Drug AWP Discount per Claim by Pharmacy, 2018



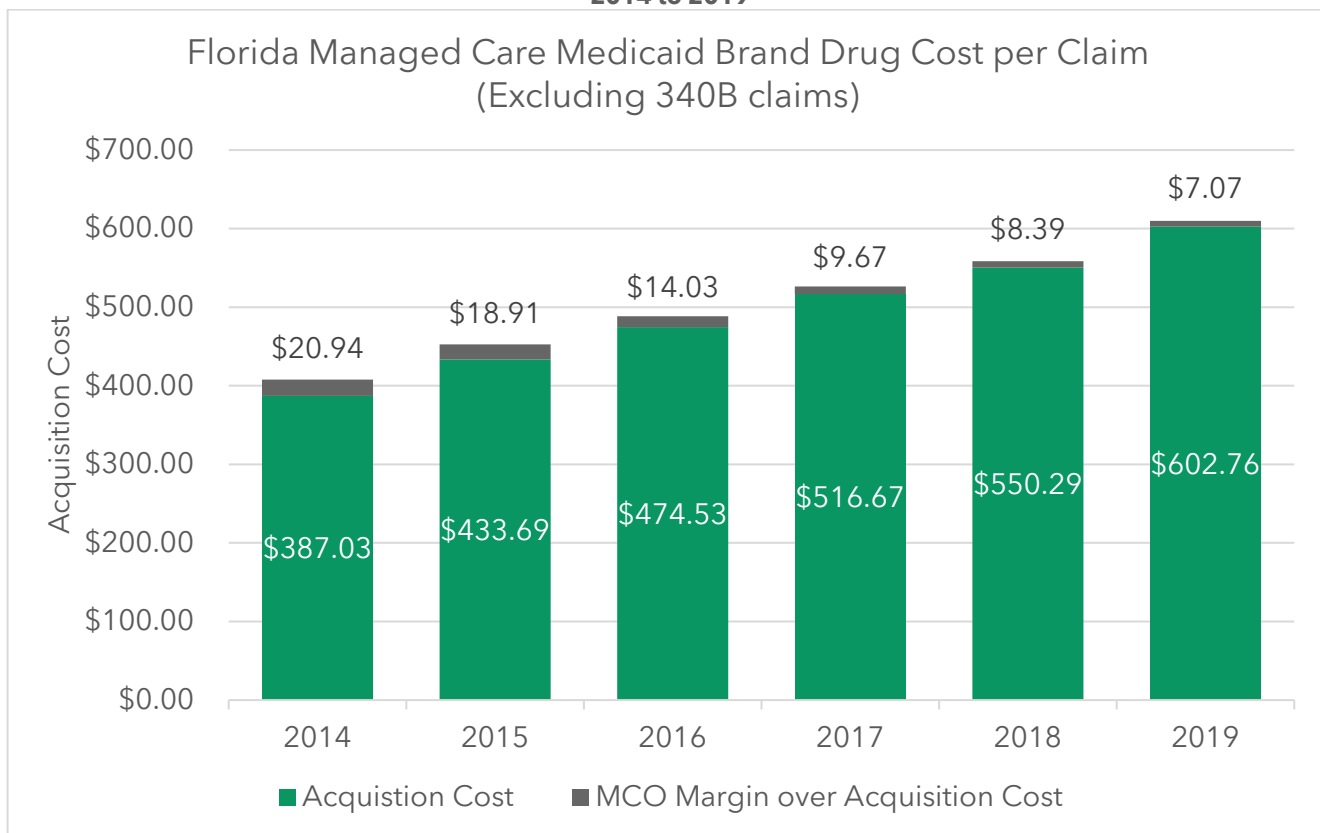
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

^m In order to have an appropriate amount of claims, we identified bottom 5 pharmacies on the basis of having at least 100 brand name prescriptions in 2018 (i.e. at least 2 dispensed per week)

10.6 COMPARING BRAND REIMBURSEMENT TO BRAND ACQUISITION COST (ABSENT 340B CLAIMS)

We can now revisit our earlier analysis of brand name prescription drug reimbursement within Florida Medicaid by removing 340B dispensed claims from our analysis. **Figure 10-10** shows the aggregate cost per claim by year, separated into the estimated acquisition cost (NADAC or 96% of WAC when NADAC is unavailable) and the Margin over Acquisition Cost for Florida’s MCOs absent our identified 340B claims. What we see is that in comparison to **Figure 10-7**, the aggregate ingredient cost for brand name medication did not change significantly. This infers that the underlying drug mix of individual brand name medications utilized did not change significantly; however, we are now able to identify positive brand name margins in each year of Florida MCO operations.

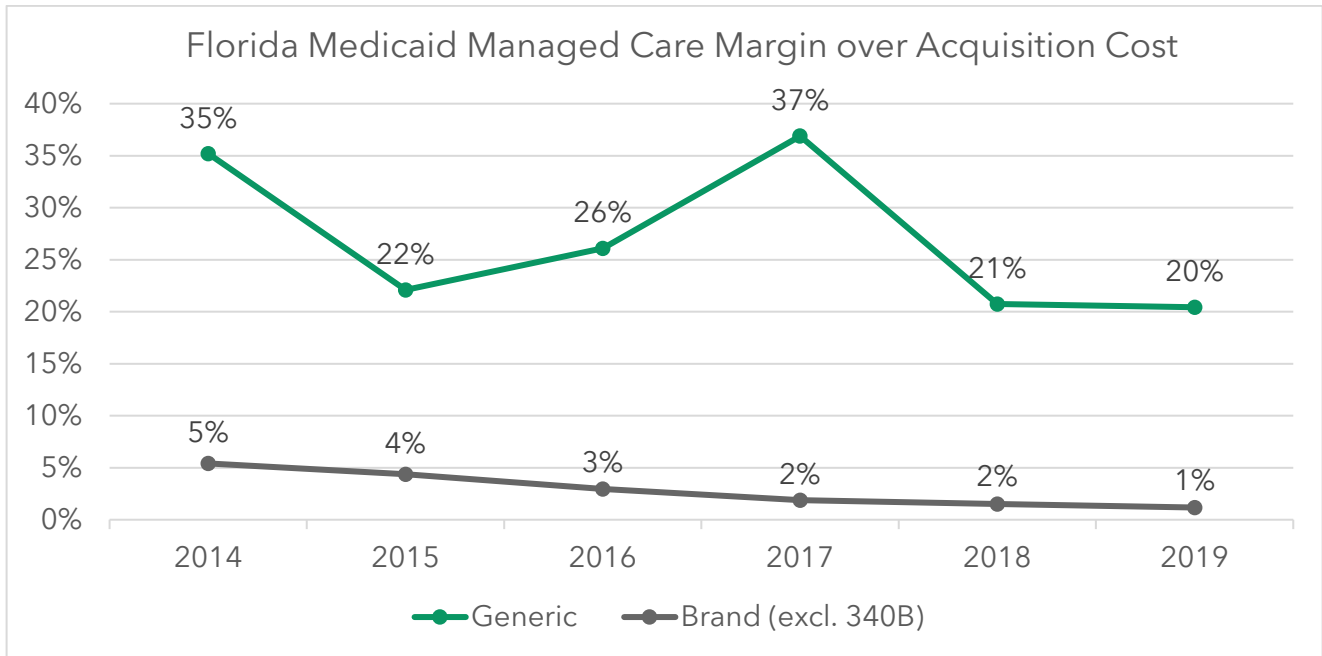
Figure 10-10: Florida Medicaid Managed Care Brand Drug Margin over Acquisition Cost per Claim (Excl. 340B), 2014 to 2019



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

Despite the fact that Margin over Acquisition Cost is now positive in all years, it is still extraordinarily low for brand name medications, particularly as a proportion of the underlying ingredient costs. To put this in perspective, we provided this same view of margin for generic drugs in an earlier section of this report (see **Figure 9-6**). Combining these visualizations allows us to put the gross margin as a percent of revenue received for a brand and generic claims over time side-by-side. In 2019, we observe that a brand name medication yielded an estimated margin above acquisition cost of 1% vs. a 20% margin over NADAC for generic medications as seen in **Figure 10-11** (on next page).

Figure 10-11: Florida MCO Margin over Acquisition Cost per Brand Claim (Excl. 340B) vs. Generic, 2014 to 2019



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

Again, it is difficult to believe that Margin over Acquisition Cost for brand name medications could be so low for pharmacy providers in Florida Medicaid, particularly when they are such a driver for overall Florida Medicaid expenditures. To investigate this further, we decided to drill down into the plan level for Florida’s largest MCOs to analyze margin on the same drug in the same time frame.

For our drug, we selected Lantus SoloStar on the basis that it was the eighth costliest brand name medication (pre-rebate) for Florida MCOs in 2018 (See **Table 10-2**, on next page) based upon aggregate brand name spending in non-340B claims, and because it has received significant coverage in the news, along with other insulin products, regarding list price increases over the last decade.^{93 94 95} Management of this medication within Medicaid is therefore of interest, as it is large enough to have significant impact to the overall financial operations of Florida Medicaid, while also experiencing large price increases that *may* make ongoing cost containment difficult.

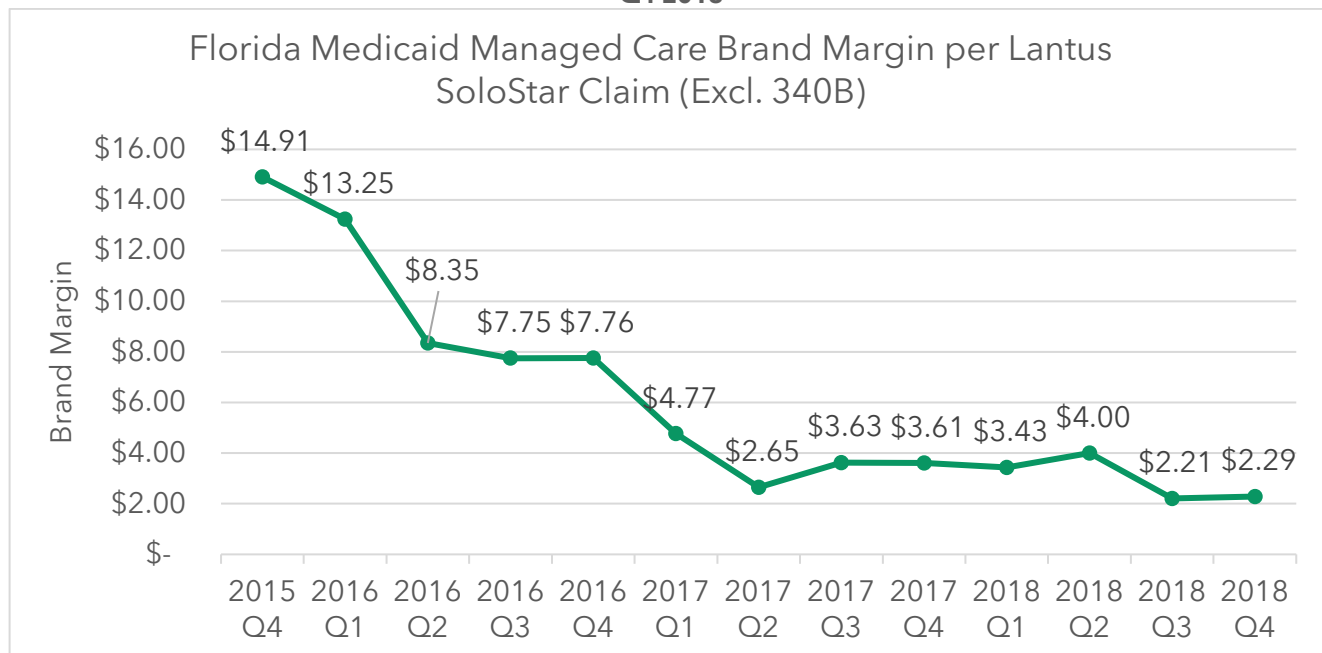
Table 10-2: Top 10 Brand Name Medication Expenditures in Florida Managed Care, 2018 (Excl. 340B Claims)

Medication	Total Expenditures	Avg Cost per Rx
Genvoya Tablet 150-150-200-10mg	\$64,322,030	\$2,832.07
Humira Pen Kit 40mg/0.8mL	\$42,863,272	\$5,438.12
ProAir Inhaler 108mcg	\$34,407,711	\$62.03
Tivicay Tablet 50mg	\$34,126,120	\$1,686.57
Descovy Tablet 200-25mg	\$33,664,355	\$1,615.99
Genotropin Solution 12mg	\$32,785,933	\$6,489.69
Triumeq 600-50-300mg	\$30,884,762	\$2,693.36
Lantus SoloStar Pen 100unit/mL	\$26,150,269	\$361.25
Symbicort Inhalation 160-4.5mcg	\$24,928,004	\$314.87
Mavyret Tablet 100-40mg	\$24,742,294	\$12,954.08

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

In **Figure 10-12**, we utilize our estimate of brand name margin to analyze the payments made by MCOs relative to their brand name costs for Lantus SoloStar from Q4 2015 to Q4 2018. Note that Lantus SoloStar is a product with a NADAC unit price, and so this view is not impacted by our estimate of acquisition cost based upon a percentage of WAC. We can see that the overall pharmacy margin for Lantus SoloStar in Florida’s top six MCOs has gone from a high of \$14.91 per prescription in Q4 2015 down to \$2.29 in Q4 2018 (84.6% decline). During this same time, the acquisition cost per unit of Lantus SoloStar has increased, on a NADAC unit cost basis from \$24.05 in Q4 2015 to \$25.89 in Q4 2018 (8% growth, pre-rebate). This means that as this drug has become more costly to acquire, adding carrying costs to the pharmacy provider, the margin has declined.

Figure 10-12: Florida Medicaid Managed Care Brand Margin per Lantus SoloStar Claim (Excl. 340B), Q4 2015 to Q4 2018

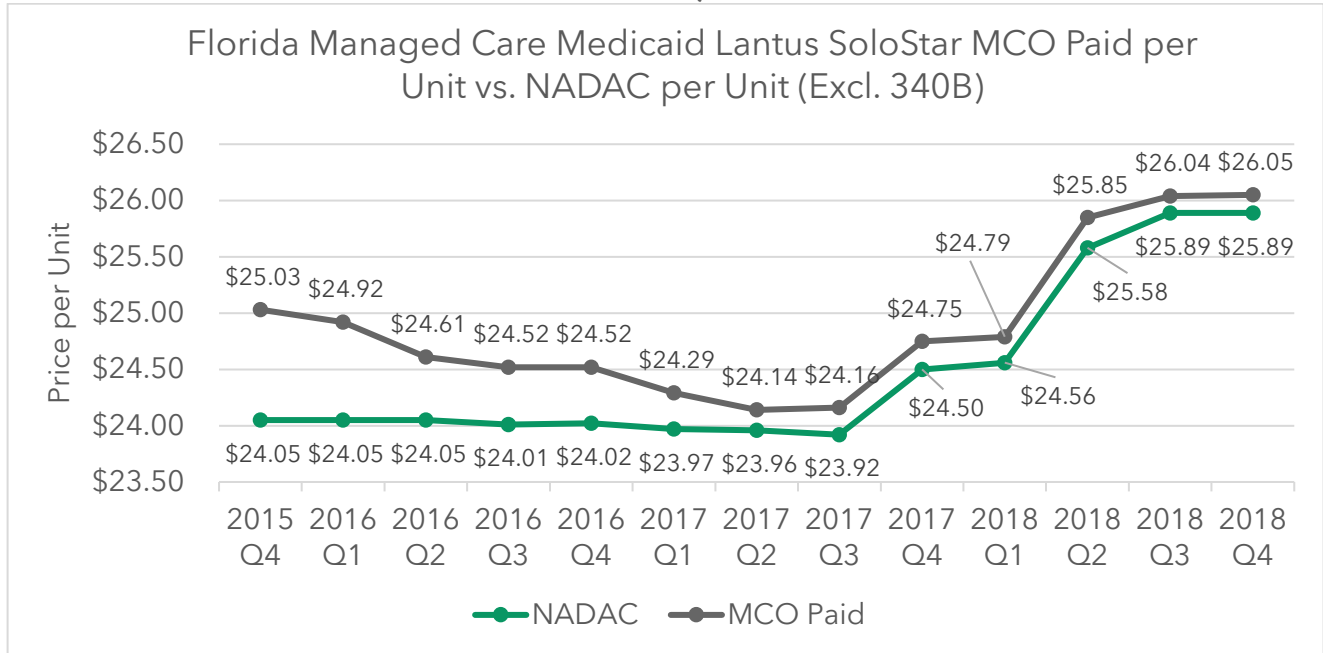


Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

The rationale for the loss in margin on Lantus SoloStar is explained when we examine reimbursement per unit of this product to the NADAC cost per unit over time. As can be seen in **Figure 10-13** (on next page), when we graph the amount MCOs paid per unit of Lantus SoloStar (grey line) to the

NADAC price per unit (green line) of Lantus SoloStar at the same time, the gap between the two lines narrows over time. As the gap between payment per unit and cost per unit have narrowed for Lantus SoloStar, we can explain the earlier observation of **Figure 10-12**; margins are identified as declining, because payment for the product more closely mirrors the acquisition cost over time.

Figure 10-13: Florida Managed Care Medicaid Lantus SoloStar MCO Paid Per Unit vs. NADAC per Unit (Excl. 340B)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

To understand if this aggregate Lantus SoloStar experience was a uniform experience across Florida Medicaid managed care, we decided to assess costs within each of Florida’s top six MCOs. In **Table 10-3** (next page), we duplicate the methods of **Figure 10-13** but alter our view of the data - each row represents the Margin over Acquisition Cost for Lantus SoloStar on claims associated with a particular MCO (rather than aggregated together). Because cost per claim can be influenced by the number of units dispensed per claim, we have included both a per claim and per unit view of the Lantus SoloStar experience in **Table 10-3** (on next page). What we find is that the experience today for a pharmacy provider appears relatively uniform across Florida’s MCOs. In all instances, plan payments and margin have declined over the three-year period from Q4 2015 to Q4 2018, although the rate and extent of decline is variable based upon where the plan was in Q4 2015.

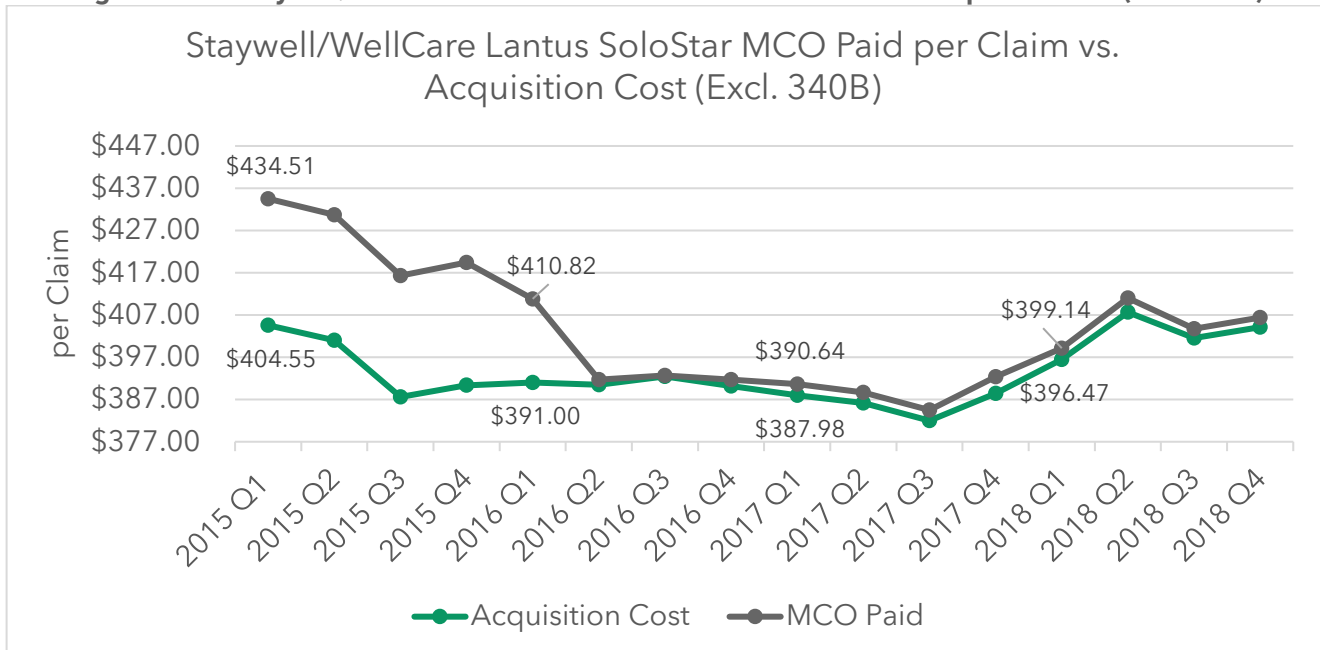
Table 10-3: Lantus SoloStar Expenses vs. Acquisition Cost in Florida Managed Care (Top 6 MCOs), by Claim and Per Unit, 2018 (Excl. 340B Claims)

MCO	Per Claim				Per Unit			
	MCO Amount Paid		Brand Margin Over Acquisition Cost		MCO Amount Paid		Brand Margin Over Acquisition Cost	
	Q4 2015	Q4 2018	Q4 2015	Q4 2018	Q4 2015	Q4 2018	Q4 2015	Q4 2018
Molina	\$375.66	\$353.95	\$8.39	(\$1.61)	\$24.61	\$25.80	\$0.55	(\$0.12)
Prestige Health	\$402.04	\$366.24	\$8.52	\$7.69	\$24.58	\$26.47	\$0.52	\$0.56
Simply Healthcare	\$364.83	\$329.78	\$4.38	(\$2.37)	\$24.35	\$25.73	\$0.29	(\$0.19)
Staywell / WellCare	\$419.43	\$406.36	\$29.06	\$2.24	\$25.85	\$26.06	\$1.79	\$0.14
Sunshine / Centene	\$378.10	\$347.46	\$12.04	\$6.41	\$24.85	\$26.40	\$0.79	\$0.49
United Healthcare	\$382.58	\$304.86	\$13.86	(\$0.86)	\$24.97	\$25.84	\$0.90	(\$0.07)

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

To demonstrate what this looks like, we can evaluate this trend over time for an individual plan. The biggest monetary decline experienced over this time was within the Staywell/WellCare plan, where brand Margin over Acquisition Cost declined \$1.65 per unit from Q4 2015 to Q4 2018. When we graph the amount that Staywell/WellCare paid per Lantus SoloStar claim to the acquisition cost for that claim, we can get a sense for how the experience for pharmacy providers within Florida Medicaid has changed over time. As can be seen in **Figure 10-14**, the decline in margin (the gap between what was paid and acquisition cost) happened rather abruptly within Staywell/WellCare (Q2 2016). This was a first full quarter after Staywell/WellCare transitioned its PBM services to CVS Caremark.⁹⁶

Figure 10-14: Staywell/WellCare Lantus SoloStar MCO Paid Per Claim vs. Acquisition Cost (Excl. 340B)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

All plans have shrunk the gap in payment above acquisition cost for Lantus SoloStar over time, with some now below the estimated cost to even acquire Lantus SoloStar in the first place. As MCOs and their PBMs are able to lower the payments on brand name medications to the acquisition cost, they

will likely deliver some savings to Florida Medicaid. Much like we saw in the generic section, these savings are being produced in a way that does not recognize the cost to operate a pharmacy (i.e. does not include a margin above cost to acquire in line with the professional dispensing fee as surveyed by the state). Operating under this structure, MCOs can cut the Margin over Acquisition Cost to or near \$0 to generate savings. While we cannot opine on the motivation to depress Margin over Acquisition Cost, we now have demonstrated that it exists within brand name medications as well as with generics in Florida Medicaid.

As with generics, there may be unintended consequences to Florida Medicaid by having the pharmacy provider network fund state savings on brand name medications. One such example we have already explored, but not yet linked to an underlying cause, may be tied to the rate of adherence to Florida’s *Brand Drug Preferred List*. Florida pharmacy providers are being sent the financial signal by MCOs and their PBMs to avoid dispensation of brand name medications because of poor rates of returns to their operations (margin) for each brand dispensation. This signal is in direct opposition to the state’s goals, as relayed through the SPDL and the *Brand Drug Preferred List*. To examine this further, it is useful to review the contractual payment relationships on brand name medications between payer (MCO), PBM, and pharmacy provider further.

10.6.1 Delivered Brand Name AWP Effective Rate

Average Wholesale Price (AWP) serves an important role in contract terms between PBMs and payers, as contract terms generally include a guarantee to deliver a set AWP discount for brand name medications. Similarly, AWP serves an important role between PBMs and pharmacies, insofar as pharmacy reimbursement for brand name medications is typically tied to an ingredient cost calculated reduction to AWP. To investigate this relationship further, we conducted an analysis to determine the aggregate AWP discount delivered to Florida Medicaid on brand name prescriptions by Florida’s MCOs. We have already established a reliable relationship between a brand name drug’s acquisition cost and AWP (roughly 20% discount); however, we are interested in assessing the proximity of payments for brand name drugs to the AWP reference price given that we have demonstrated that reimbursement on brand name medications in 2018 and 2019 is at or even below the cost to acquire those drugs. To identify the delivered discount, we used the following equation:

$$AWP\ Discount = 1 - \frac{\sum Total\ Claim\ Payment}{(\sum (Number\ of\ Units * AWP\ Price\ per\ Unit))}$$

Insofar as this discount is guaranteed, this can be viewed as a **brand effective rate (BER)** between the PBM and payer (MCO). To illustrate, let’s say a payer requested individual claim history from its PBM for all drugs dispensed to its beneficiaries. To make this example very straightforward, this hypothetical payer only has five claims. Oftentimes, the cost will be related to the acquisition cost of the drug, but unless expressly stated in the contract, the PBM is not required to link such cost to a market-based pricing benchmark.

Continuing with our example, let’s say the aggregate AWP of all drugs dispensed to the payer’s beneficiaries over some period was \$800. Let’s also assume that the payer’s contract with the PBM specifies that the PBM will deliver a BER of 17% (i.e. AWP -17%) for brand name drugs. As such, it follows that the cost that the payer will pay for this basket of brand drugs will be \$664.

As shown in **Table 10-4** (next page), the brand effective rate (BER) of any individual drug can vary widely. Despite this variability, the contractual commitment must hold over the payer’s entire brand mix during a given period.

Table 10-4: Brand Effective Rate (BER) Illustration

Drug	AWP	Acquisition Cost	BER
Drug A	\$200	\$140	30%
Drug B	\$100	\$80	20%
Drug C	\$100	\$80	20%
Drug D	\$300	\$284	5%
Drug E	\$150	\$80	47%
Overall	\$800	\$664	17%

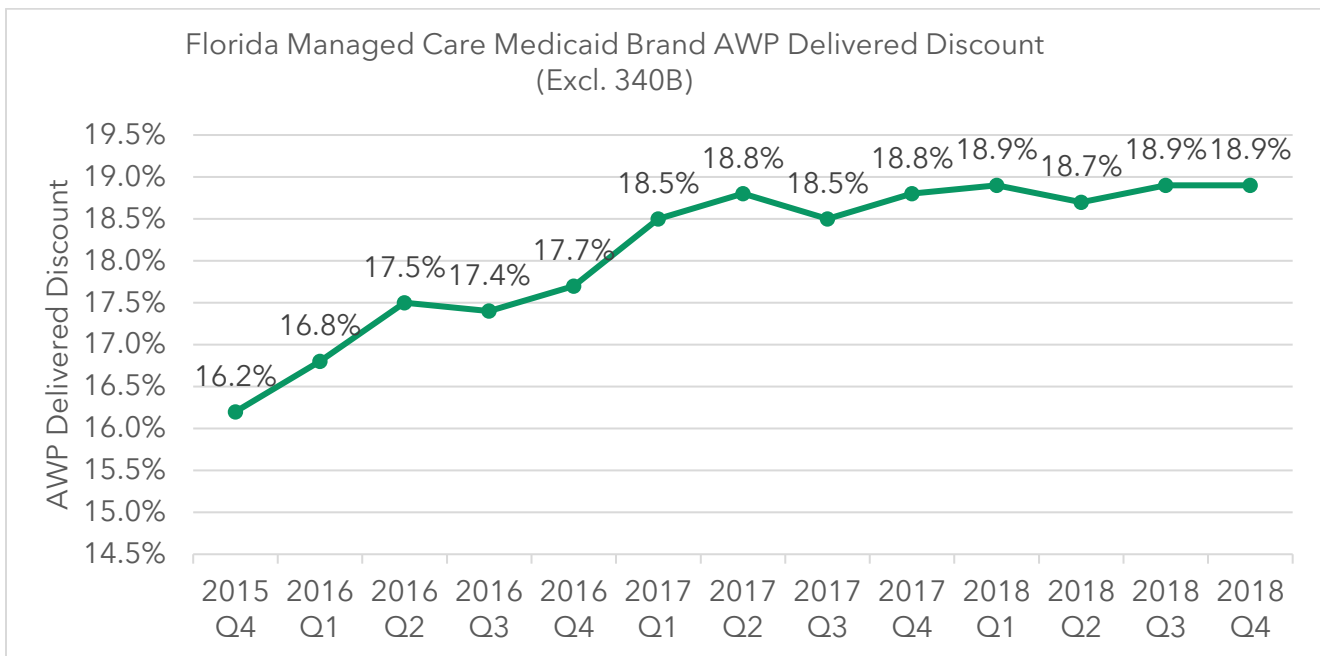
This demonstrates that as long as contracts with PBMs include BER language and commitments, actual realized drug prices are simply contingent on:

- The aggregate AWP; and
- The payer’s contracted discount to AWP

Again, unless it is expressly stated in the contract between a payer and a PBM, the price the payer pays for drugs may not be based upon actual drug costs along any layer within the supply chain. With this understanding, we will first assess the overall AWP discount delivered within Florida Medicaid managed care.

In **Figure 10-15**, we compare the aggregated spending on brand name medications for Florida’s brand name claims within Florida’s top six MCOs on non-340B claims to the total AWP price for those same claims. We then graphed the percentage difference between payment and AWP to see the aggregate AWP discount delivered on these claims. Unsurprisingly, we find that the current aggregate discount is at 19%, roughly equal to the estimated cost to dispense (AWP - 20%) and helping to explain our observation related to brand Margin over Acquisition Cost to acquire in Florida Medicaid.

Figure 10-15: Florida Medicaid Delivered AWP Discount, Top 6 MCOs, Brand Name Medications (Excl. 340B)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & AWP prices

By this measure, we can see that the delivered AWP discount to Florida within MCOs, in the aggregate, has grown by 2.7 points in three years for brand name medications. Understanding that there are a number of carriers within Florida’s MCOs, we can investigate the delivered savings further by evaluating the delivered AWP discounts by MCO (with a focus on the top six, which account for the vast majority of spend and utilization in the state). In **Table 10-5**, we find that all of Florida’s MCOs’ brand effective rates (BERs) have homogenized in 2018. While there was greater variability amongst the plans in 2015, now all plans are effectively delivering the same discount to AWP for brand name medications.

Table 10-5: Florida Medicaid Delivered AWP Discount, Top 6 MCOs, Brand Claims (Excl. 340B)

MCO	AWP Discount	
	2015 Q4	2018 Q4
Molina	17.6%	20.4%
Prestige Health	15.4%	18.0%
Simply Healthcare	18.2%	20.4%
Staywell / WellCare	13.6%	19.1%
Sunshine / Centene	16.5%	18.2%
United Healthcare	16.4%	19.5%

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & AWP Prices

In fairness, a limitation of this analysis may be that we are self-selecting for this view due to stripping out our identified 340B claims. This creates a homogenization of the rate given that we are effectively ensuring that only claims with an AWP discount rate below AWP - 30% are reviewed. However, as can be seen in **Table 10-6**, the impact of 340B claims does not really change the aggregate AWP discount, simply because 340B claims account for only 7% of claims. So, while they might have significant impacts to margin because of how little is reimbursed on those claims, 340B claims do not significantly impact the AWP discount delivered in the aggregate.

Table 10-6: Florida Medicaid Delivered AWP Discount, Top 6 MCOs, Brand Claims (Incl. 340B)

MCO	AWP Discount	
	2015 Q4	2018 Q4
Molina	19.5%	22.7%
Prestige Health	16.5%	19.4%
Simply Healthcare	19.1%	21.0%
Staywell / WellCare	14.4%	19.8%
Sunshine / Centene	17.5%	19.6%
United Healthcare	17.2%	19.9%

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & AWP prices

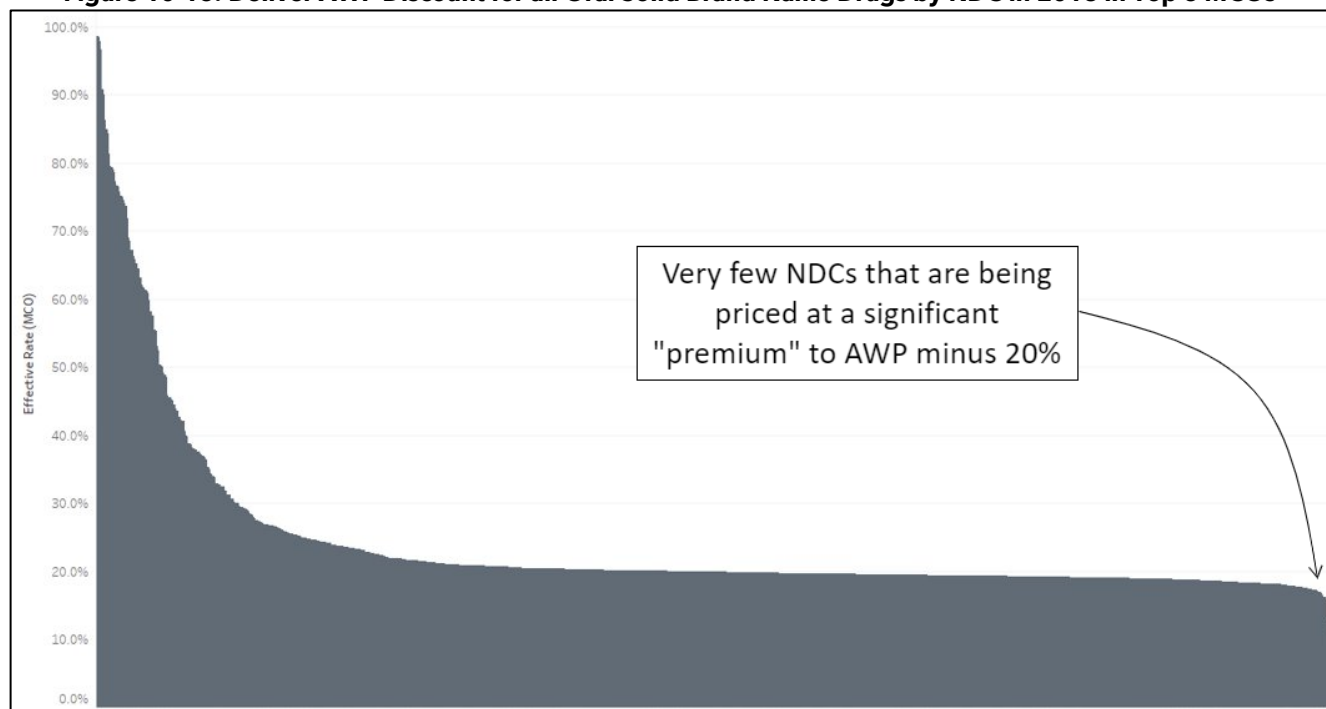
Table 10-6 is reassuring for us continuing to review brand Margin above Acquisition Costs by excluding our flagged 340B claims, as it demonstrates the impact to these claims is not overly significant to the aggregate view of brand AWP discount. For both Q4 2015 and Q4 2018, all plans gain approximately 1.5 points in AWP discount in a uniform manner.

Now that we have demonstrated that the system, in aggregate, does not offer much incentive to dispense brand name drugs and that all plans are near equal in their incentive structure around brand name medications (as measured in Q4 2018), we want to investigate whether there are other incentives around brand name drug dispensation. To do this, we will perform similar analyses to those conducted within our generic section and explore brand name pricing at the drug and pharmacy provider levels.

10.6.2 Brand Name Incentives Around Particular Brand Name Medications

As with the generic section, the question becomes, are there incentives around which particular brand name prescriptions are dispensed relative to one another (i.e. are all products at the same effective rate, or is there variability)? It would be anticipated that if a PBM (with either a payer or pharmacy) priced these medications at a fixed discount to AWP, there would be very little variability in dispensing costs on a brand name medication on a product by product basis. In **Figure 10-16**, we analyzed the AWP discount delivered across all oral solid brand name medications dispensed (on an NDC basis) in 2018 for Florida's top six MCOs. Because we are looking for incentives around individual brand name products, we included 340B claims in this view. In this view, products would be identified as "incentivized" if the AWP discount was significantly below the AWP-20% rate to acquire (as these would be products available for greater margin on the ingredient cost). While it cannot be directly seen in **Figure 10-16**, only 58 out of 1,481 NDCs (or 1,009 claims out of 319,480 brand name claims) were associated with an aggregate AWP discount below AWP-17% (the aggregate rate in Q4 2015).

Figure 10-16: Deliver AWP Discount for all Oral Solid Brand Name Drugs by NDC in 2018 in Top 6 MCOs



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & AWP prices

Consequently, there do not appear to be any major incentives around dispensation of a brand name product relative to others, as the claims with the lower AWP discount represent less than 1% of brand name claim volume in 2018.

10.6.3 Brand Name Incentives Around Pharmacy Provider

The final axis of brand name dispensation we will examine will be on the individual pharmacy provider level. By grouping pharmacy NPIs together based upon their affiliations (such as grouping all CVS, Walgreens, Publix, etc. pharmacies together), we were able to assess where brand name margin was directed within Florida Medicaid's program based upon pharmacy provider type (when available on a claim).

An important aspect in brand name prescription spending that we have yet to explore (in this section) is the role of affiliated pharmacies. An affiliated pharmacy is any pharmacy or group of pharmacies with preferential status designated by the payer or PBM. These most often occur because the pharmacy is owned by the same parent company as the payer/PBM (e.g. Express Scripts & Accredo or United Healthcare & Briova) or due to special designation by the payer/PBM to limit the network of pharmacy providers (e.g. Medicare Part D Preferred Pharmacy Networks or Staywell/WellCare directing all specialty drugs to Exactus, a pharmacy outside their PBM partner). **Table 10-7** summarizes the relationships between Florida’s top six MCOs, their PBMs, and any designated specialty pharmacy at the MCO and/or PBM level:

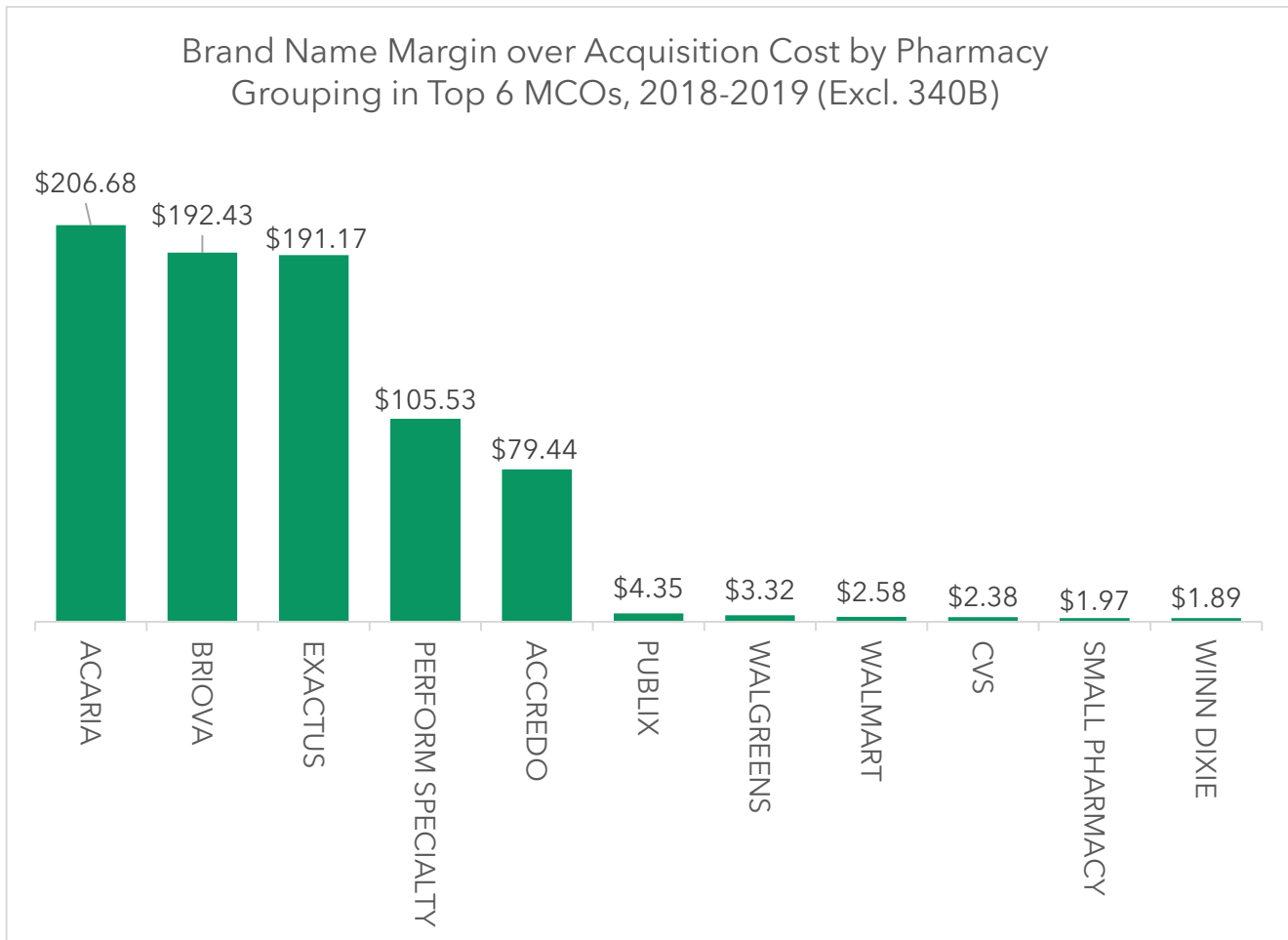
Table 10-7: 2018 MCO Plan Relationship to PBM and Specialty Pharmacy

MCO PLAN	PBM	PREFERRED SPECIALTY PHARMACY
STAYWELL/WELLCARE	CAREMARK	EXACTUS (Owned by WellCare)
SIMPLY HEALTHCARE	EXPRESS SCRIPTS	ACCREDO (Owned by Express Scripts)
SUNSHINE/CENTENE	CAREMARK / ENVOLVE (Owned by Centene)	ACARIA HEALTH (Owned by Centene)
MOLINA	CAREMARK	ACCREDO (Owned by Express Scripts)
PRESTIGE HEALTHCARE	PERFORMRX	PERFORM SPECIALTY (Owned by PerformRx)
UNITED HEALTHCARE	OPTUM RX (Owned by United Healthcare)	BRIOVA (Owned by United Healthcare)

Source: 3 Axis Advisors analysis of FL Managed Care Payer Sheets

Equipped with this information, our first analysis was to review the margin above estimated cost to acquire on all brand name medications within Florida Medicaid’s top MCOs in 2018 and 2019 utilizing our logic to remove 340B claims from the analysis. What we found in **Figure 10-17** (on next page) was that affiliated pharmacies were significantly more profitable than their non-affiliated counterparts on a per-brand name claim basis, with Margin over Acquisition Cost per claim of at least \$75 vs. less than \$5 at non-affiliated pharmacies.

Figure 10-17: Brand Name Margin over Acquisition Cost by Pharmacy Grouping in Top 6 MCOs, 2018-2019 (Excl. 340B)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & WAC prices, and the NADAC database obtained from Data.Medicaid.gov

Clearly, chain and independent pharmacies are not generating significant Margins over Acquisition Costs on brand name medications as demonstrated with Publix, Walgreens, Walmart, CVS, Winn Dixie, and others. Only pharmacies affiliated with plans or PBMs are generating significant margins per claim on brand name medications. To put this into perspective, when it comes to dispensing brand name drugs, MCO/PBM-affiliated pharmacies are making 18x to 109x more profit over the cost of the drugs than the typical community pharmacy.

We understand that an explanation for this observation might be found in specialty pharmaceuticals. According to the American Academy of Actuaries, specialty pharmaceuticals are a primary driver of prescription drug costs.⁹⁷ Given specialty pharmaceuticals' role in cost, it may be understandable that MCOs and their PBM partners would like to manage these claims "in-house" via these affiliated relationships to better control costs and manage outcomes.

As a result, we wanted to analyze the ability of plans to control pharmacy costs for brand name prescription drugs within their preferred specialty pharmacies for this group of medications. Sadly, the pharmacy industry lacks a universally accepted definition of a "specialty drug" outside from recognizing that they are just generally recognized as high cost. Other characteristics that are often considered when defining a specialty pharmaceutical are the disease state that the product is used

to treat, complexity of dosing regimen for the medication, route of administration, and ongoing monitoring (i.e. lab work) required to be safely utilized.

To make this analysis as simple as practical for ourselves, we elected to look at steering to affiliated pharmacies based upon claim cost alone. We used \$2,000 per prescription as the measure for high cost (recognizing this would represent therapy with an annual cost over \$20,000 if utilized monthly).

Table 10-8 identifies the steering of these high cost claims amongst the plans as measured by number of prescriptions. As you can see, nearly all of the brand name prescriptions that are valued less than \$2,000 per prescription are being dispensed through non-affiliated pharmacies. Things significantly change for prescriptions that are more than \$2,000 per prescription.

Table 10-8: High Cost Brand Name Claim Capture by Affiliated Pharmacy, Top 6 MCO, 2018-19 (Excl. 340B)

2018-19 % Brand Name Prescriptions (Excl. 340B)	Over \$2,000 per Rx		Under \$2,000 per Rx	
	Affiliated Pharmacy	Non-Affiliated Pharmacy	Affiliated Pharmacy	Non-Affiliated Pharmacy
STAYWELL (WELLCARE)	53.0%	47.0%	0.4%	99.6%
SIMPLY HEALTHCARE	18.2%	81.8%	0.3%	99.7%
SUNSHINE (CENTENE)	60.2%	39.8%	0.6%	99.4%
MOLINA	31.2%	68.8%	0.2%	99.8%
PRESTIGE HEALTH	59.0%	41.0%	0.5%	99.5%
UNITED HEALTHCARE	44.9%	55.1%	0.2%	99.8%

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & AWP prices

Many of these affiliated pharmacies have fewer than five locations; however, were able to capture a disproportionate amount of high cost brand name prescription claims for their size due to their relationship with the plans they service. Furthermore, they were able to effectively avoid lower cost (and likely a lower opportunity to profit) brand name prescription claims as a percentage of their brand name claim volume. **Remarkably, claims over \$2,000 represent only 5% of brand claim volume in 2018-19 but 43% of brand name expenditures (192,000 out of 4.2 million brand name prescriptions; \$1 billion out of \$2.3 billion brand name expenditures) in 2018-19.**

Utilizing our estimate of brand name Margin over Acquisition Costs identifies that \$10.9 million dollars in brand name margin was captured by non-affiliated pharmacies (98% of all brand name utilization) vs. \$14.4 million dollars in brand name margin captured by affiliated pharmacies (2% of all brand name utilization) in 2018-2019.

To investigate the profitability component further, we compared the delivered AWP discounts within these same groupings by each of the MCOs in 2018-2019. As can be seen in **Table 10-9** (on next page), apart from Molina, all claims dispensed outside of the affiliated pharmacy were more heavily discounted than within; to the tune of roughly two points.

Table 10-9: Delivered AWP Discount for Brand Name Claims by Cost within Affiliated Pharmacy for the Top 6 MCOs, 2018-19 (Excl. 340B)

2018-19 Brand Name Prescriptions	Over \$2,000 per Rx		Under \$2,000 per Rx	
	Affiliated Pharmacy	Non-Affiliated Pharmacy	Brand Name Prescriptions (Excl. 340B)	Affiliated Pharmacy
STAYWELL (WELLCARE)	16.7%	19.2%	16.5%	19.5%
SIMPLY HEALTHCARE	17.9%	20.3%	19.2%	20.1%
SUNSHINE (CENTENE)	16.3%	18.0%	17.5%	18.5%
MOLINA	20.8%	18.5%	21.0%	20.2%
PRESTIGE HEALTH	17.8%	18.8%	17.7%	18.2%
UNITED HEALTHCARE	16.8%	18.5%	17.1%	19.9%

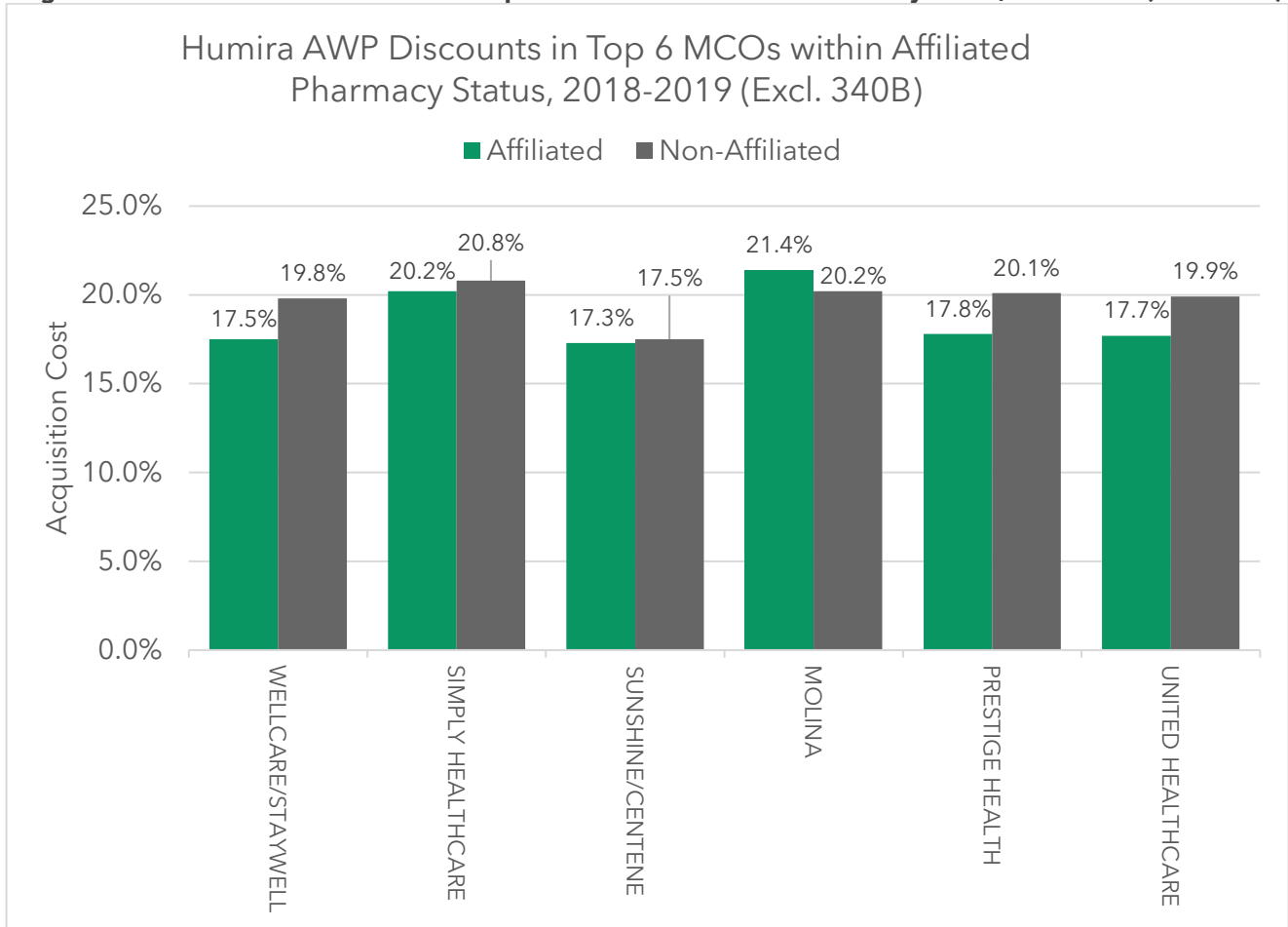
Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & AWP prices

This is an unexpected result, as affiliated pharmacies would be anticipated to have better integration within the claims systems of their affiliated plans owing to their affiliated status. We would also expect large affiliated pharmacy groups to realize better acquisition costs, allowing them to pass through better unit costs to the MCO. Essentially, for a number of reasons, affiliated pharmacies should have more competitive aggregate costs, but this data shows the exact opposite to be true. The one exception to this trend is Molina, who shows lower costs at its preferred specialty pharmacy, Accredo. Interestingly, Molina is unique among Florida’s largest MCOs in that neither it nor its PBM have any affiliation to its chosen specialty pharmacy – Accredo is owned by PBM Express Scripts, while Molina receives PBM services from CVS Caremark.

However, the aggregated view presented in **Table 10-9** fails to ensure that similar products are being compared. It is possible that the affiliated pharmacy is handling a different drug mix than the non-affiliated pharmacies resulting in these observations. To explore this further, we will revisit our list of costliest brand name medications (**Table 10-2**) and focus in on a singular brand name medication likely to be considered a specialty drug by all MCO participants, Humira.

Humira is a product with an average cost per claim of over \$5,000, used to suppress a component of the immune system to treat a host of different complex disease states. As can be seen in **Figure 10-18** (on next page), affiliated pharmacies were more expensive relative to non-affiliated pharmacies when pricing Humira (again, apart from Molina).

Figure 10-18: Humira AWP Discounts in Top 6 MCOs within Affiliated Pharmacy Status, 2018-2019 (Excl. 340B)

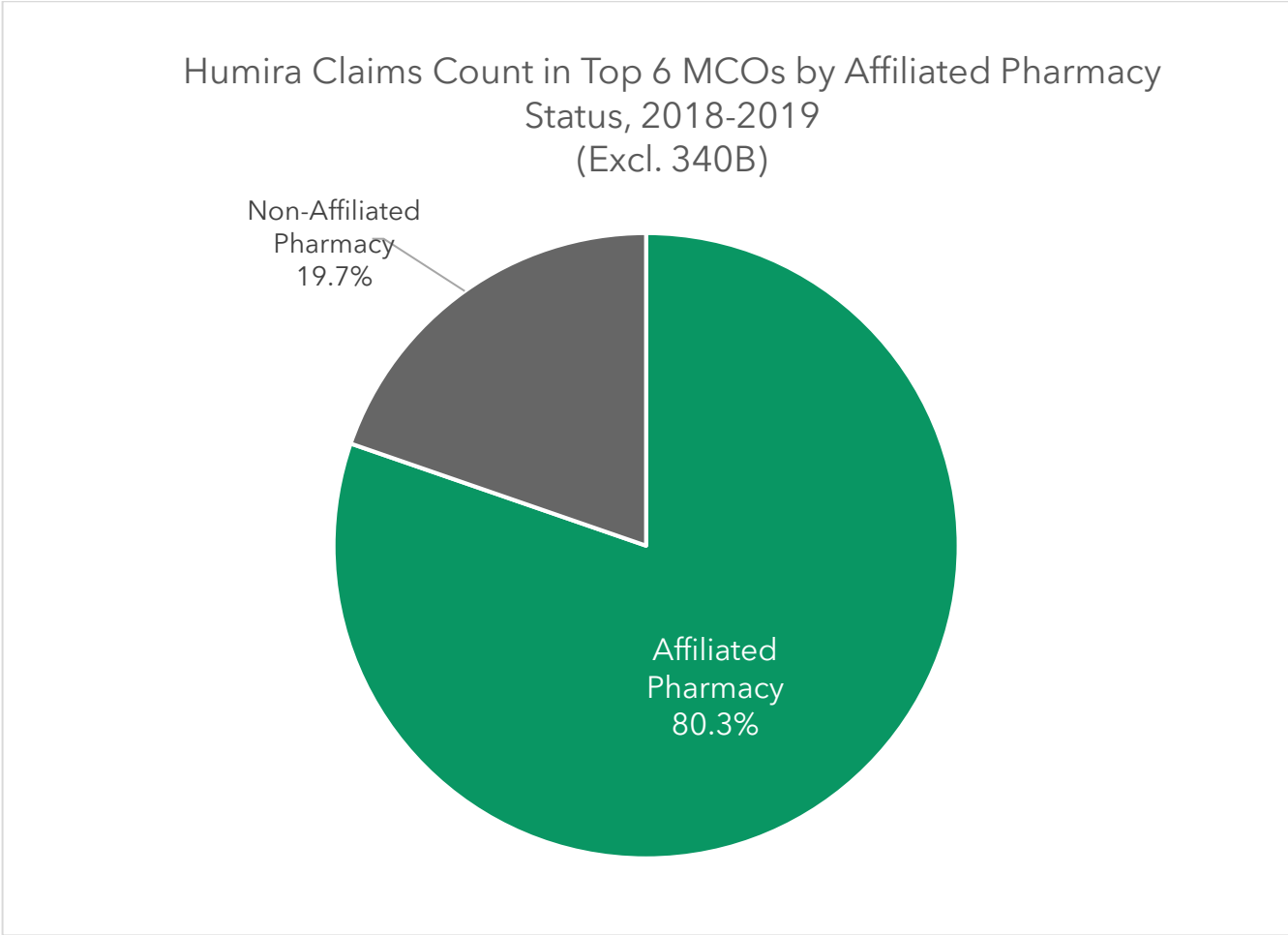


Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions & AWP prices

Here, Humira is demonstrative of the aggregate experience for brand name products. Despite aggregate low costs for brand name products, within the complexities of plan and pharmacy affiliations, we’ve identified a means where additional profits can still be generated through their affiliated plans. What **Figure 10-18** fails to capture though is the scope of this impact. Aggregated together, affiliated pharmacies deliver an AWP discount of 18.1% for Humira vs. an AWP discount of 20.2% at non-affiliated pharmacies.

We know from **Table 10-8** that plans and their PBMs are incredibly successful at directing certain claims to themselves. We can see in **Figure 10-19** that the volume of Humira claims in 2018 and 2019 is overwhelmingly directed to affiliated pharmacies. Only one in five prescriptions were dispensed outside of affiliated pharmacies even though they would likely have been cheaper if dispensed by the broader pharmacy network for Florida Medicaid.

Figure 10-19: Humira Claim Count in Top 6 MCOs by Affiliated Pharmacy Status, 2018-2019 (Excl. 340B)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions

What **Figure 10-19** helps us quantify is the financial impact of pharmacy affiliation. Over \$80 million dollars was expended by Florida Medicaid for Humira during 2018-2019 (pre-rebate). **If Florida Medicaid would have recognized the non-affiliated pharmacy AWP discount rate on the claims within the affiliated pharmacies, over \$1.5 million in savings would have been realized on just this one drug.** Framed differently, this speaks to some of the profits likely generated by these affiliated pharmacies. While the majority of brand name medications offer very little margin within Florida, here we have pharmacies affiliated with some of the largest national payers (i.e. Accredo and Express Scripts or Briova and United Healthcare), and therefore likely buying products at some of the best brand name rates available that are not passing on these savings to the end payer (i.e. the Florida Medicaid program).

Furthermore, because of their integration within drug supply chain, these collective participants (Payer / PBM / Affiliated Pharmacy) are able to lock-out market competition that would otherwise bring savings to Florida Medicaid. Humira was not recognized as a medication associated with a “signal” or incentive to dispense relative to other brand name medications because most utilization was at affiliated pharmacies (making the affiliated pharmacy price appear to be the “normal” cost to acquire the drug). Better information regarding designated specialty drugs within each of the MCOs would likely add clarity to this discussion relative to our \$2,000 per claim proximity.

11 PHARMACY REIMBURSEMENT ANALYSIS

At this point, we have established that Florida Medicaid managed care has aggressive pricing in place related to brand and generic drugs based upon payment measures to a reference price point for pharmacy acquisition costs like NADAC (or estimates of NADAC when not available for brand name medications). We have shown that over time, the gap between payments reported by MCOs for prescription drugs and the acquisition cost for those same drugs has shrunk, leaving little room for margin above these reference prices for many pharmacy providers.

Additionally, while aggregated pharmacy margins appear to be lean, buried in those top-line numbers is the fact that while most drugs yield low or negative margins, there are a small bucket of drugs that handsomely overpay pharmacy providers. Ultimately, such a system creates winners and losers based upon drug mix (that is, which drugs a pharmacy tends dispense). And since most pharmacies don't have ethical mechanisms for influencing their drug mix, for most pharmacies, profitability is a matter of chance rather than a reflection of quality or service. This ceases to be true for MCO/PBM-affiliated pharmacies, who have the unique ability to benefit from the freedom their parent corporations have to shift volume and margin in their direction.

We have also demonstrated that this disparity in drug mix for a pharmacy provider is largely outside their control (with a few exceptions), as Florida's MCOs and their PBM partners appear to direct the most profitable prescriptions to themselves and restrict the ability of the 4,500+ pharmacy network in Florida Medicaid to compete, lower costs, enhance quality/service, and protect access options for beneficiaries. We have further identified drugs that are cheaper to Florida Medicaid when delivered outside of the affiliated pharmacy network; however, have also demonstrated that very little volume of these drugs escapes the specialty pharmacy network of the MCOs.

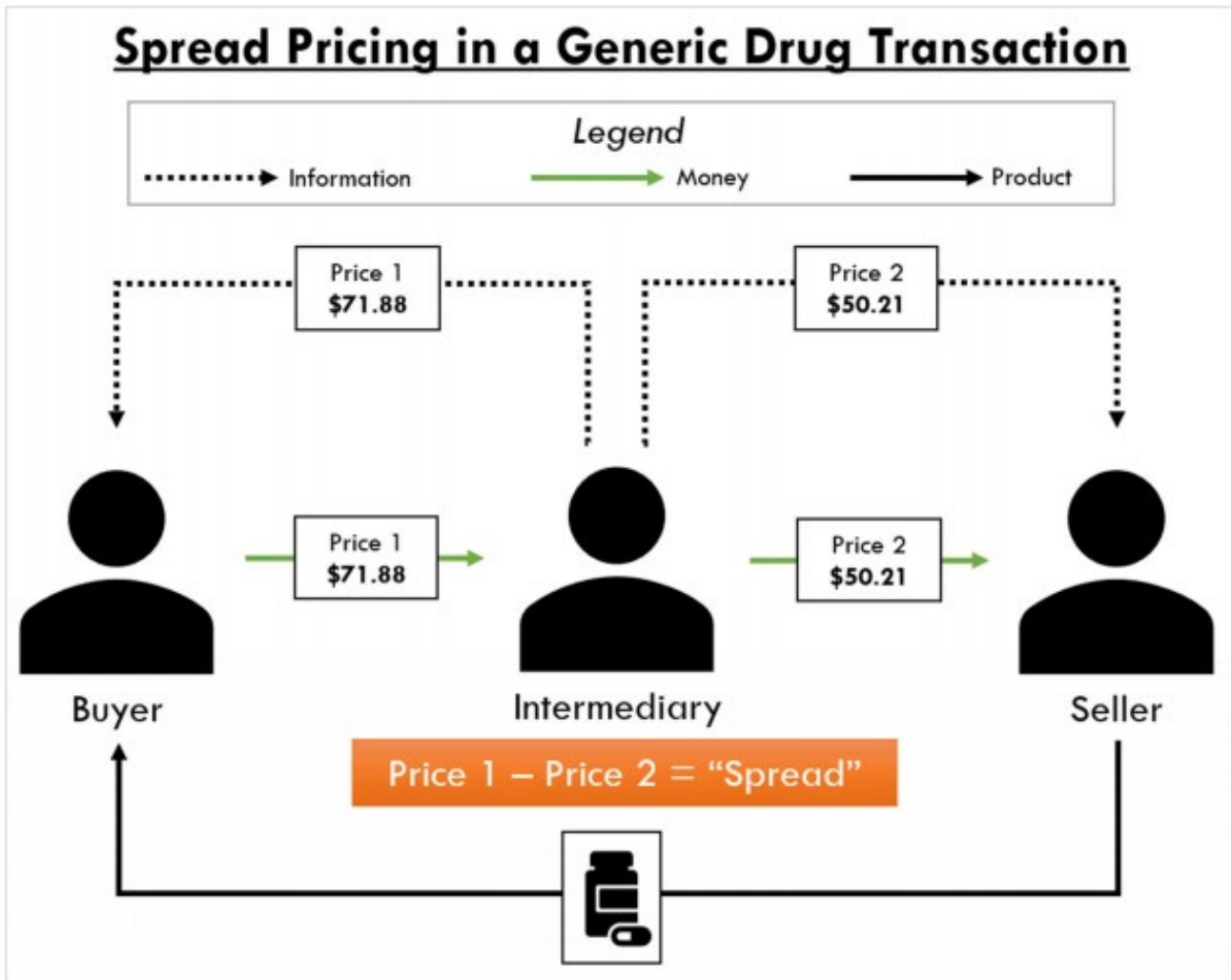
What we have not yet established is whether there is a gap between observed payments within Florida Medicaid and the actual reimbursements to pharmacy providers. One of the primary aspects this study sought to investigate was whether a gap existed between actual pharmacy reimbursement on claims and those reported to Florida Medicaid (this gap is sometimes referred to as "**spread pricing**"). This section will explore any observable differences between payments reported to Florida Medicaid by the MCOs and the actual claims experience of some of Florida's pharmacy providers.

11.1 UNDERSTANDING SPREAD PRICING

Before we summarize our findings, we'll take a brief aside to discuss the mechanics of spread pricing. Without a prevailing and transparent market price governing any claim, two prices are created. Price 1 is the price charged to the payer (or MCO). This is some price that when lumped together with all other prices, will deliver on the PBM's committed discount to overall generic AWP. On the other side of the transaction is Price 2. This is the price paid out to the pharmacy provider, which the PBMs have proven can be pushed down to acquisition cost or even below (as is the case with Florida Medicaid). Add up the difference between all payments made at Price 1 and Price 2 across all drugs purchased by a payer/MCO, and that is spread - most of which typically occurs with generic drugs. In 2018, Ohio reported finding \$225 million in PBM spread in one year, \$208 million of which came from generic drugs (31.4% of gross generic cost).⁹⁸ Kentucky reported similar findings in their audit with an overall spread of \$124 million (13% gross drug cost) in one year despite only 57.6% of all claims being transacted in a spread model.⁹⁹ Maryland recently released their own audit and found \$72 million in spread, amounting to a sizable \$6.96 per prescription.¹⁰⁰

The operational flow of this process is best summarized in **Figure 11-1** below.

Figure 11-1: Spread Pricing in a Drug Transaction



Source: 3 Axis Advisors Illustration

11.2 COMBINING FLORIDA MEDICAID DATA WITH PHARMACY REIMBURSEMENTS

With this as context, we set out to analyze spread pricing within Florida Medicaid managed care. Given that we had observed such low Margin over Acquisition Cost in our previous sections, we suspected that any "spread" in Florida Medicaid would likely be small, if it were to exist at all, due to the general lack of financial real estate for which PBMs could extract it from. Fortunately, we already have the 'Price 1' to assess spread, which we derive from the pharmacy claims data provided by AHCA. This tells us what the MCOs in Florida, as well as Florida FFS, are reporting as unit costs on over 350 million pharmacy transactions dating back to 2012. To understand 'Price 2' (what the pharmacy actually received), we obtained claim-level detail on pharmacy transactions from over 100 Florida pharmacies going back to 2014 (over eight million pharmacy claims). Included in this data was date of service (or when the medication was dispensed), payment information (amount reimbursed by plan, as well as copayment required by patient), and identifiers to characterize who

is providing payment on the claim (i.e. insurer). Sorting through this data, we were able to identify pharmacy claims, and therefore payments, associated with Florida’s Medicaid program.

To conduct our analysis, we first aggregated all payments reported by Florida Medicaid by the year, month, MCO, and drug (NDC) on the claim. We then aggregated all payments reported by Florida pharmacies for claims associated with the Florida Medicaid programs as the payer by the year, month, MCO, and drug (NDC) on the claim. We connected the two datasets (Florida Medicaid experience and Florida pharmacy experience) together on a pharmacy (NPI), year, month, MCO, and drug (NDC) basis. This allowed us to directly compare an observed payment within Florida Medicaid at a pharmacy for a plan to the actual real-world, claim-level detail and experience for a specific pharmacy, for a specific drug, and for a specific plan at the same moment in time. See [Construction of Databases](#) for a full discussion on the methodology and process used to create this connection.

The first analysis we performed was to compare how good of a match we were able to obtain. It is important to understand that these are two disparate data sets with different means to identify the date of service and payer (MCO). Nonetheless, we were impressed that we were able to identify 54.4% of claims within the dataset that we consider a perfect match (the same number of prescriptions reported at the pharmacy in a given year and month for a specific plan at the same dispensed quantity). As shown in **Table 11-1**, the matching was superior in some of Florida’s MCOs relative to others, which is most readily attributable to our ability to successfully match the pharmacy claim payer identifiers (Rx BIN / Rx PCN / Rx Group) to the specific PBM of a specific MCO.

Table 11-1: Number of Prescription Claims ‘Matched’ by Plan, 2017-2019

Plan	Matched Record	Non-Matched Record
Staywell / WellCare	107,161 (56%)	84,625 (44%)
Simply Healthcare	25,201 (55%)	20,970 (45%)
Sunshine / Centene	27,222 (64%)	14,984 (36%)
Humana	3,394 (15%)	19,263 (85%)
Molina	20,433 (57%)	15,145 (43%)
Prestige Health	94,846 (50%)	96,668 (50%)
United Healthcare	22,422 (61%)	14,639 (39%)
Fee for Service	52,484 (64%)	29,261 (36%)

Source: 3 Axis Advisors analysis of FL Claims Database with FL Pharmacy Claim Database

One reason for the disparity in our ability to achieve “perfect” matches may be attributable to pharmacy software. Particularly for non-solid oral dosage forms (such as inhalers, liquids or topical products), where the pharmacy software may report quantities on a per package basis vs. Florida’s Medicaid system reporting quantity on a per billing unit basis. This disparity can impact both the ability to achieve a perfect match, as well as can make identification of price per unit challenging (as the number of units would be different per prescription per dataset). If this was a full-fledged state-coordinated audit, where the state could require disclosure of realized pharmacy payments directly from the MCOs or PBMs, we suspect that this match rate would be considerably higher, which is why we recommend further state analyses to validate these findings and to hopefully gather even more learnings than this report has provided.

With this dataset, for perfectly matching claims, we now have the ability to directly compare the payments to the pharmacy as reported to the payer (i.e. Florida Medicaid; ‘Price 1’) and those actually

made to the pharmacy ('Price 2'). This will enable us to perform our assessment of spread pricing within Florida Medicaid.

11.3 SPREAD PRICING ANALYSIS – GENERIC ORAL SOLID DRUGS

Based upon our claim set, we find that on a per claim basis payments reported to pharmacies by Florida’s MCOs overwhelmingly mirror those received by pharmacies in 2018 and beyond. As shown in **Table 11-2**, there is some evidence from a historical perspective that a gap did exist between reported (claim) and received (RX) payments, but that gap no longer appears to exist in the current Florida Medicaid program.

Table 11-2: ‘Spread’ Analysis by Plan for Oral Solid NDCs, 2017-2019

Plan	2017		2018		2019	
	Claim per Unit	RX Reimbursement per Unit	Claim per Unit	Reimbursement per Unit	Claim per Unit	RX Reimbursement per Unit
STAYWELL / WELLCARE	\$1.28	\$1.28	\$1.10	\$1.10	\$1.27	\$1.27
SIMPLY HEALTHCARE	\$3.29	\$3.29	\$2.13	\$2.13	\$2.10	\$2.10
SUNSHINE / CENTENE	\$1.87	\$1.87	\$1.26	\$1.26	\$1.84	\$1.84
MOLINA	\$1.31	\$1.17	\$1.26	\$1.11	\$0.67	\$0.67
PRESTIGE HEALTH	\$1.23	\$1.23	\$1.15	\$1.15	\$1.07	\$1.07
UNITED HEALTHCARE	\$1.72	\$1.72	\$1.52	\$1.52	\$1.33	\$1.33

Source: 3 Axis Advisors analysis of FL Claims Database and FL Pharmacy Database utilizing MediSpan clinical drug definitions

The approximate \$0.11 per unit spread in Molina in 2017 and 2019 translates to a \$7.05 per prescription spread (based upon the average number of units utilized). However, this overall view conceals the fact that spread pricing occurs principally within generic drugs. If we alter the view in **Table 11-2** to reflect just the generic claims, we can see in **Table 11-3** (on next page) that the extent of spread pricing, when it existed was greater than appears, in the aggregate.

Table 11-3: 'Spread' Analysis by Plan for Generic Oral Solid NDCs, 2017-2019

Plan	2017		2018		2019	
	Claim per Unit	RX Reimbursement per Unit	Claim per Unit	Reimbursement per Unit	Claim per Unit	RX Reimbursement per Unit
STAYWELL / WELLCARE	\$0.51	\$0.51	\$0.31	\$0.31	\$0.32	\$0.33
SIMPLY HEALTHCARE	\$0.45	\$0.45	\$0.19	\$0.19	\$0.16	\$0.16
SUNSHINE / CENTENE	\$0.32	\$0.32	\$0.21	\$0.21	\$0.16	\$0.16
MOLINA	\$0.35	\$0.18	\$0.36	\$0.18	\$0.13	\$0.13
PRESTIGE HEALTH	\$0.34	\$0.34	\$0.23	\$0.23	\$0.20	\$0.20
UNITED HEALTHCARE	\$0.10	\$0.10	\$0.20	\$0.20	\$0.25	\$0.26

Source: 3 Axis Advisors analysis of FL Claims Database and FL Pharmacy Claims Database utilizing MediSpan clinical drug definitions

Until recently, Molina would appear to have maintained a \$0.18 per unit gap between payments recognized at the pharmacy to payments reported to AHCA. This represents around 50% of added costs to the program with Molina utilization compared to the other top MCOs for the generic oral solid dosage forms we were able to analyze. Based upon the average number of units utilized per prescription within Molina at this time, this boosts the previously calculated amount to a \$8.64 spread per prescription. The observed gap between Molina prices that existed from 2017 to 2018 appears to have gone away in 2019.

To give an idea as to how “reasonable” this rate of spread is for Molina, we can go back to Ohio Medicaid’s PBM audit that spanned Q2 2017 to Q1 2018. During that time period, it was found that Molina’s PBM, CVS Caremark, retained a spread of \$5.58 per prescription.¹⁰¹ In this context, it would appear that the rate of spread for CVS Caremark through Molina in Florida was significantly higher.

Unlike Ohio; however, other MCOs do not appear to have been engaging in the practice of spread pricing during our observation window. In addition to Molina, United Healthcare and Centene both have Medicaid MCOs in Florida and Ohio. In Ohio, it was found that United Healthcare’s OptumRx was taking \$6.50 per prescription in spread, while in Florida, our pharmacy data shows zero existence of spread (at least relative to AHCA claims data). The same holds true for Centene, where in Ohio, it was found that Centene’s PBM, CVS Caremark was taking \$7.21 per prescription in spread and Centene’s own pharmacy benefits administrator Envolve Pharmacy Solutions was taking an additional \$4.39 per prescription in spread - totaling up to an overall \$11.60 per prescription in spread for Ohio’s Centene plan. Yet in Florida, the spread appears to be zero.

This also begs other questions, as to if CVS Caremark, OptumRx, and Envolve are willingly giving the state of Florida an exponentially better deal than they gave Ohio, or if there are other forms of PBM compensation that are being disproportionately targeted in lieu of spread (such as GER, as described in [Four simple steps to PBM profit \(in a post-spread world\)](#)).

We find it helpful to include NADAC into these views to understand how payments are aligning with actual cost to acquire the underlying drug therapy. By adding in aggregated NADAC cost per unit

for claims where a NADAC was available, we can see in **Table 11-4** that the gap between NADAC unit costs and reimbursements have declined over time:

Table 11-4: MCO ‘Spread’ for Oral Solid NDCs with a NADAC, 2017-2019

Year	Claim per Unit	RX Reimbursement per Unit	NADAC per Unit
GENERIC ONLY			
2017	\$0.37	\$0.35	\$0.22
2018	\$0.27	\$0.25	\$0.20
2019	\$0.28	\$0.28	\$0.17

Source: 3 Axis Advisors analysis of FL Claims Database and FL Pharmacy Claims Database utilizing MediSpan clinical drug definitions and CMS NADAC prices

11.4 HIGHLIGHTING SPECIFIC GENERIC DRUG EXAMPLES

In our earlier section on generic drugs, we spent a significant amount of time discussing generic Abilify (aripiprazole) and the payment dynamics amongst Florida’s top MCOs. As can be seen in this **Figure 11-2** (next page), large gaps existed within payments and acquisition costs that have largely resolved for each and every plan in 2019. With the exception of Molina, MCOs’ reported cost lined up with the reimbursement directly observed at pharmacies during 2017 and 2018, suggesting that the dynamics previously discussed (see [Generic Abilify](#)) related to those plans appears to reflect actual pharmacy experience. It should be noted that other mechanisms exist beyond spread pricing for payment claw backs to occur between pharmacy and PBM (i.e. GER, audits, etc.) that would need further investigated to definitively state they are not being utilized within Florida.

Turning to Molina, we see that the observed pharmacy reimbursements were several dollars per unit lower for aripiprazole than what they appear to be within the Florida claims data. This gap equated to approximately \$130 per prescription spread for 2017 and 2018 for aripiprazole in Molina not realized in Florida’s other MCOs. Expanding our view beyond aripiprazole, we can see that Molina’s spread pricing went beyond aripiprazole. In **Figure 11-3** (on next page), we observe an approximate \$1 per unit spread on the antidepressant duloxetine 30 mg (\$30 per prescription) in 2017. Similarly, we see a \$0.10 per unit spread (\$3 per prescription) with the anti-ulcer drug pantoprazole 40 mg in **Figure 11-4** (page 138). Finally, in **Figure 11-5** (page 138), we observe an approximate \$0.20 per unit spread (\$15 per prescription) with the opioid oxycodone 30 mg. These figures demonstrate that absent detailed oversight, the trends in Florida’s claims data may be significantly different from the operational experience of Florida’s pharmacies. This may make it difficult for Florida to appropriately leverage its 4,500+ pharmacy network to achieve the clinical and patient access goals it is seeking.

Figure 11-2: 'Spread' Pricing in Aripiprazole 10 mg

Plan	2017			2018			2019		
	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit
STAYWELL/ WELLCARE	\$4.69	\$4.69	\$0.73	\$0.97	\$0.97	\$0.37	\$0.94	\$0.94	\$0.31
ARIPIPRAZOLE Oral Tablet 10 MG SIMPLY HEALTHCARE	\$18.41	\$18.41	\$1.00	\$0.39	\$0.39	\$0.36	\$0.17	\$0.17	\$0.31
SUNSHINE/ CENTENE	\$3.61	\$3.61	\$1.11	\$0.43	\$0.43	\$0.38	\$0.23	\$0.23	\$0.31
MOLINA	\$5.82	\$1.31	\$0.93	\$4.74	\$0.47	\$0.39	\$0.28	\$0.28	\$0.31
PRESTIGE HEALTH	\$0.96	\$0.95	\$0.82	\$0.37	\$0.37	\$0.40	\$0.34	\$0.34	\$0.31
UNITED HEALTHCARE	\$0.45	\$0.31	\$0.60	\$2.05	\$2.05	\$0.35	\$1.98	\$1.95	\$0.31

Source: 3 Axis Advisors analysis of FL Claims Database utilizing MediSpan clinical drug definitions and CMS NADAC prices

Figure 11-3: 'Spread' Pricing in Duloxetine 30 mg

Plan	2017			2018			2019		
	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit
STAYWELL/ WELLCARE	\$4.01	\$4.01	\$0.27	\$0.17	\$0.17	\$0.20	\$0.15	\$0.16	\$0.18
DULOXETINE HCl Oral Capsule DR 30 MG SIMPLY HEALTHCARE	\$0.48	\$0.48	\$0.27	\$0.24	\$0.23	\$0.20	\$0.16	\$0.16	\$0.18
SUNSHINE/ CENTENE	\$0.35	\$0.35	\$0.28	\$0.15	\$0.14	\$0.20	\$0.13	\$0.13	\$0.19
MOLINA	\$1.40	\$0.20	\$0.26	\$1.22	\$0.13	\$0.21	\$0.16	\$0.16	\$0.20
PRESTIGE HEALTH	\$0.37	\$0.37	\$0.27	\$0.25	\$0.25	\$0.21	\$0.22	\$0.22	\$0.20
UNITED HEALTHCARE	\$0.25	\$0.25	\$0.27	\$0.65	\$0.65	\$0.20	\$0.68	\$0.68	\$0.19

Source: 3 Axis Advisors analysis of FL Claims Database utilizing MediSpan clinical drug definitions and CMS NADAC prices

Figure 11-4: 'Spread' Pricing in Pantoprazole 40 mg

Plan	2017			2018			2019			
	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	
Pantoprazole Sodium Oral Tablet DR 40 MG	STAYWELL/ WELLCARE	\$0.17	\$0.17	\$0.07	\$0.22	\$0.22	\$0.06	\$0.23	\$0.23	\$0.06
	SIMPLY HEALTHCARE	\$0.14	\$0.14	\$0.07	\$0.10	\$0.10	\$0.06	\$0.08	\$0.08	\$0.06
	SUNSHINE/ CENTENE	\$0.11	\$0.11	\$0.07	\$0.07	\$0.07	\$0.06	\$0.05	\$0.05	\$0.06
	MOLINA	\$0.19	\$0.07	\$0.07	\$0.16	\$0.07	\$0.06	\$0.05	\$0.05	\$0.06
	PRESTIGE HEALTH	\$0.20	\$0.19	\$0.07	\$0.10	\$0.10	\$0.06	\$0.09	\$0.09	\$0.06
	UNITED HEALTHCARE	\$0.12	\$0.10	\$0.07	\$0.16	\$0.16	\$0.06	\$0.20	\$0.21	\$0.06

Source: 3 Axis Advisors analysis of FL Claims Database utilizing MediSpan clinical drug definitions and CMS NADAC prices

Figure 11-5: 'Spread' Pricing in Oxycodone 30 mg

Plan	2017			2018			2019			
	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	Cost per Unit (Medicaid)	Cost per Unit (Pharmacy)	NADAC per Unit	
OXYCODONE HCl Oral Tablet 30 MG	STAYWELL/ WELLCARE	\$0.61	\$0.61	\$0.29	\$0.42	\$0.42	\$0.27	\$0.42	\$0.42	\$0.25
	SIMPLY HEALTHCARE	\$0.42	\$0.43	\$0.30	\$0.18	\$0.17	\$0.27	\$0.16	\$0.16	\$0.25
	SUNSHINE/ CENTENE	\$0.33	\$0.33	\$0.30	\$0.29	\$0.29	\$0.27	\$0.25	\$0.25	\$0.25
	MOLINA	\$0.53	\$0.27	\$0.29	\$0.44	\$0.29	\$0.27	\$0.28	\$0.28	\$0.26
	PRESTIGE HEALTH	\$0.31	\$0.30	\$0.29	\$0.25	\$0.25	\$0.27	\$0.34	\$0.34	\$0.26
	UNITED HEALTHCARE	\$0.20	\$0.20	\$0.30	\$0.29	\$0.29	\$0.28	\$0.32	\$0.32	\$0.25

Source: 3 Axis Advisors analysis of FL Claims Database utilizing MediSpan clinical drug definitions and CMS NADAC prices

Ultimately, as we observe spread pricing going away from within the small and independent pharmacies that provided our data for review, we have greater confidence in our previous observations with the vast majority of Florida MCO practices. The lack of spread in 5 of the 6 top MCOs suggests that the differential pricing tactics discussed earlier, such as [varying MAC rates for generics](#) or [different brand name pricing within specialty drugs](#), are truly accruing to the pharmacy. Given that we only have data from independent and small chain pharmacies, we would encourage Medicaid to go back and audit large chain and grocer pharmacies to validate these conclusions.

11.5 HOW SPREAD DISTORTS WHERE AHCA BELIEVES MOLINA’S DOLLARS ARE GOING

Returning to Molina, we can now assess how spread is distorting the pharmacy margins reported in AHCA’s claims data. **Figure 11-6** is a reprint of the payer/pharmacy matrix shown in **Figure 9-38** in the [Generic Drug Analysis](#) section, except with the Molina column highlighted. This figure clearly shows Molina to be the best payer on generic drugs in Florida in 2018, with a weighted average Margin over NADAC of \$6.14 per claim. This is more than 2.5 times higher than the second-best Medicaid MCO payer in the state – Staywell/WellCare.

Figure 11-6: FL Medicaid MCO Payer/Pharmacy Matrix - All 2018 Generic Drugs

Pharmacy Grouping (group)	2018 Generic Drugs											
	MOLINA		PRESTIGE HEALTH		SIMPLY HEALTHCARE		STAYWELL/WELLCARE		SUNSHINE/CENTENE		UHC	
	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim	% Total Claims	Margin over NADAC per Claim
CVS	62%	\$5.74	1%	\$2.87	59%	(\$0.69)	58%	(\$0.42)	50%	\$2.20	5%	\$4.74
Publix	2%	\$6.08	11%	\$0.19	4%	(\$1.96)	0%	\$5.08	12%	(\$1.97)	0%	\$2.91
Small Pharmacy	20%	\$7.19	27%	\$0.58	27%	\$5.48	23%	\$9.74	23%	\$1.08	20%	\$1.61
Walgreens	0%	\$5.73	44%	\$0.43	0%	(\$3.00)	0%	\$2.20	0%	\$4.25	64%	\$4.23
Walmart	11%	\$5.62	11%	\$0.60	7%	\$4.24	11%	(\$0.83)	10%	(\$2.64)	10%	(\$0.14)
Winn Dixie	4%	\$5.29	4%	\$0.24	0%	(\$0.58)	4%	\$3.97	3%	(\$1.94)	0%	\$0.67
Other	1%	\$15.56	2%	\$0.32	2%	\$6.42	3%	\$8.37	2%	(\$1.29)	1%	\$2.64
Grand Total	100%	\$6.14	100%	\$0.47	100%	\$1.45	100%	\$2.33	100%	\$0.77	100%	\$3.26

NOTE: Excludes all pharmacy groups with less than 1% of overall Medicaid MCO 2018 claim volume

Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

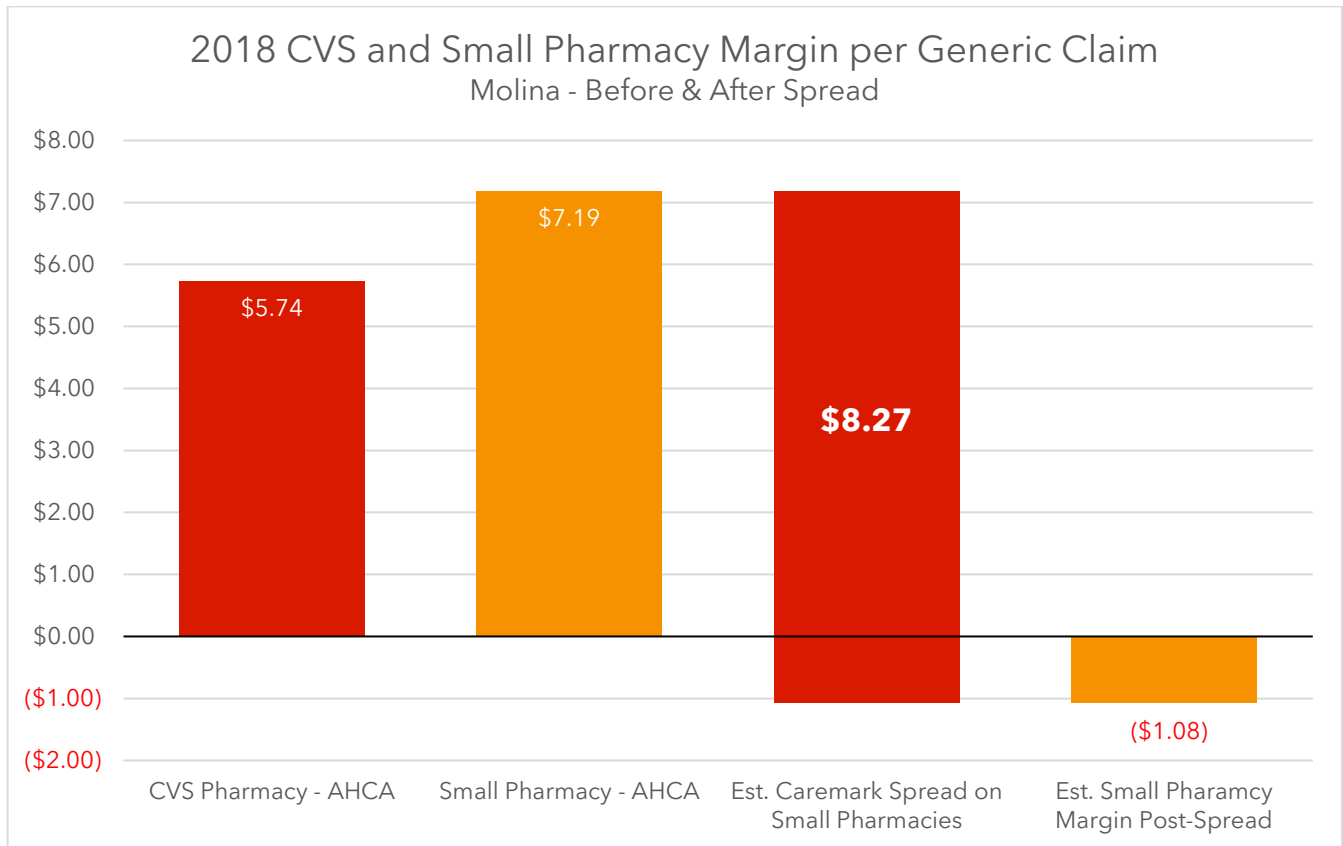
Note that CVS pharmacies’ weighted average Margin over NADAC for Molina was \$5.74 per claim, while the same metric for Small Pharmacies was \$7.19 per claim. So, from AHCA’s perspective (if they were to replicate our analysis), CVS Caremark – the PBM managing Molina’s prescription benefits – paid Small Pharmacies better than its own affiliated retail pharmacies.

However, based on our analysis in this section, we now are highly confident that Molina’s reported AHCA claims data include meaningful pricing spread. Back on page 135, **Table 11-3** shows Molina’s weighted average spread on all matched generic drugs to be \$0.18 per unit, or 50% of AHCA-reported cost per unit.

We can now use this 50% estimate to approximate the adjustment that must be made to Molina’s reported AHCA data to arrive at a better estimate of the Margin over NADAC that Florida’s Small Pharmacies actually received on generic drugs in 2018. If we apply a 50% haircut to the weighted

average AHCA-reported claim costs, we get a spread estimate of \$8.27 per claim (**Figure 11-7**)ⁿ - **more than offsetting all reported Margin over NADAC to Small Pharmacies.**

Figure 11-7: 2018 CVS and Small Pharmacy Margin per Generic Claim (Molina - Before & After Spread)



Source: 3 Axis Advisors analysis of FL Claims Database, leveraging Medi-Span PriceRx for drug definitions and the NADAC database obtained from Data.Medicaid.gov

It's critical to note that the \$8.27 per claim we estimate here is likely accruing to CVS Caremark. Whether or not CVS Caremark is assessing spread to its own CVS pharmacies is a moot point since all profit rolls up to its parent company, CVS Health. As such, a more accurate picture of what is going on is that CVS Health is retaining a weighted average Margin over NADAC of \$5.74 on generic claims dispensed at its company-owned locations AND then also retaining potentially more than \$8 on all generic Molina claims dispensed at Small Pharmacies.

We do not have pharmacy reimbursement data from Publix, Walmart, Winn Dixie, or any of the other non-CVS large chains or grocers. But note in **Figure 11-6** on the prior page that no large pharmacy group showed reported Margin over NADAC of more than \$8. If CVS Caremark is also assessing a similar level of spread on Molina claims at these pharmacies, it could be reasonable to conclude that CVS Health, through either its pharmacy or PBM arms, may have collected ALL generic profit available within Molina on generic drug claims in 2018.

ⁿ The weighted average AHCA cost per unit for generic drugs dispensed at Small Pharmacies, paid for by Molina in 2018 was \$0.29. 50% of \$0.29 is \$0.145. Small Pharmacies dispensed a weighted average of 57 units per claim in 2018 on generic claims paid by Molina. 57 x \$0.145 = \$8.27. The \$8.27 figure derived here is in line with the \$8.64 observed within the pharmacy claims data itself. This adds a degree of confidence to this estimate as it suggests a similar drug mix between the AHCA claims data and the pharmacy data.

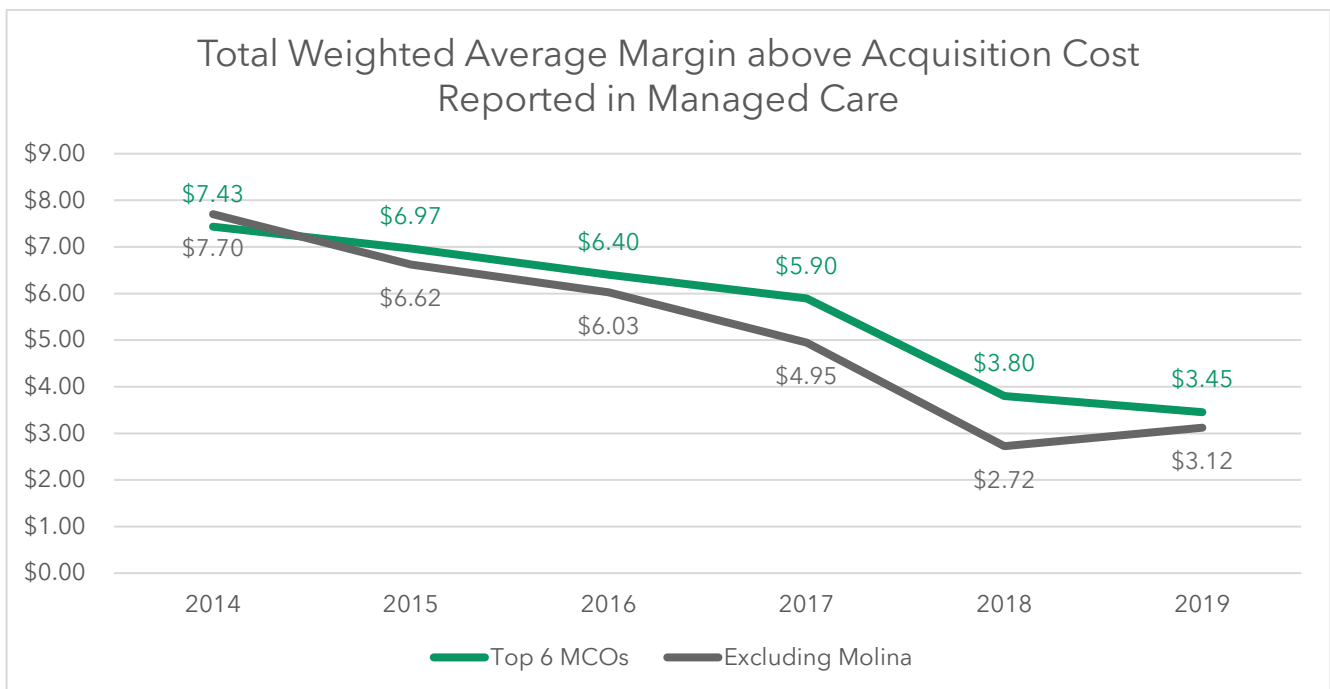
12 OVERALL DRUG SPENDING/REIMBURSEMENT TRENDS

12.1 DECLINING OVERALL MARGINS IN FLORIDA MEDICAID MANAGED CARE

We have now spent a considerable amount of time reviewing the dynamics of costs associated with generic and brand name drug spending within Florida Medicaid. These reviews have found very little opportunity for margin on either type of prescription drug. Taking a combined view of brand and generic payments above the underlying invoice cost to acquire the drug allows us to now review the overall spending and reimbursement trends for pharmacies holistically. To accomplish this, we combined the Margin over NADAC for generic medications (see [Margin over NADAC](#)) with the Margin over Acquisition Cost (see [Brand Name Pricing](#)) for brand name medications across all claims (excluding 340B) at a particular pharmacy. This gives us a reasonable measure of potential margin for a pharmacy that we can trend over time and analyze by the various factors we have identified as impactful to the Florida Medicaid pharmacy market.

As can be seen within **Figure 12-1**, when we combine these metrics together, we can see in the aggregate the overall margin available for Florida’s pharmacy providers offered by Florida’s top six MCOs has declined over time from a high of \$7.43 per claim in 2014 to a low of \$3.45 per claim in 2019 (green line). Removing Molina - which as we discovered in our analysis in the prior section had considerable spread on generic claims - gives us a better picture of how low margins truly dipped (grey line). The answer is \$2.72 per claim in 2018 - a paltry 4% gross margin (pre-rebates) and enough to cover just 27 cents on the dollar spent to maintain pharmacy operations.^o

Figure 12-1: Overall Pharmacy Margin Available within Florida’s top MCOs



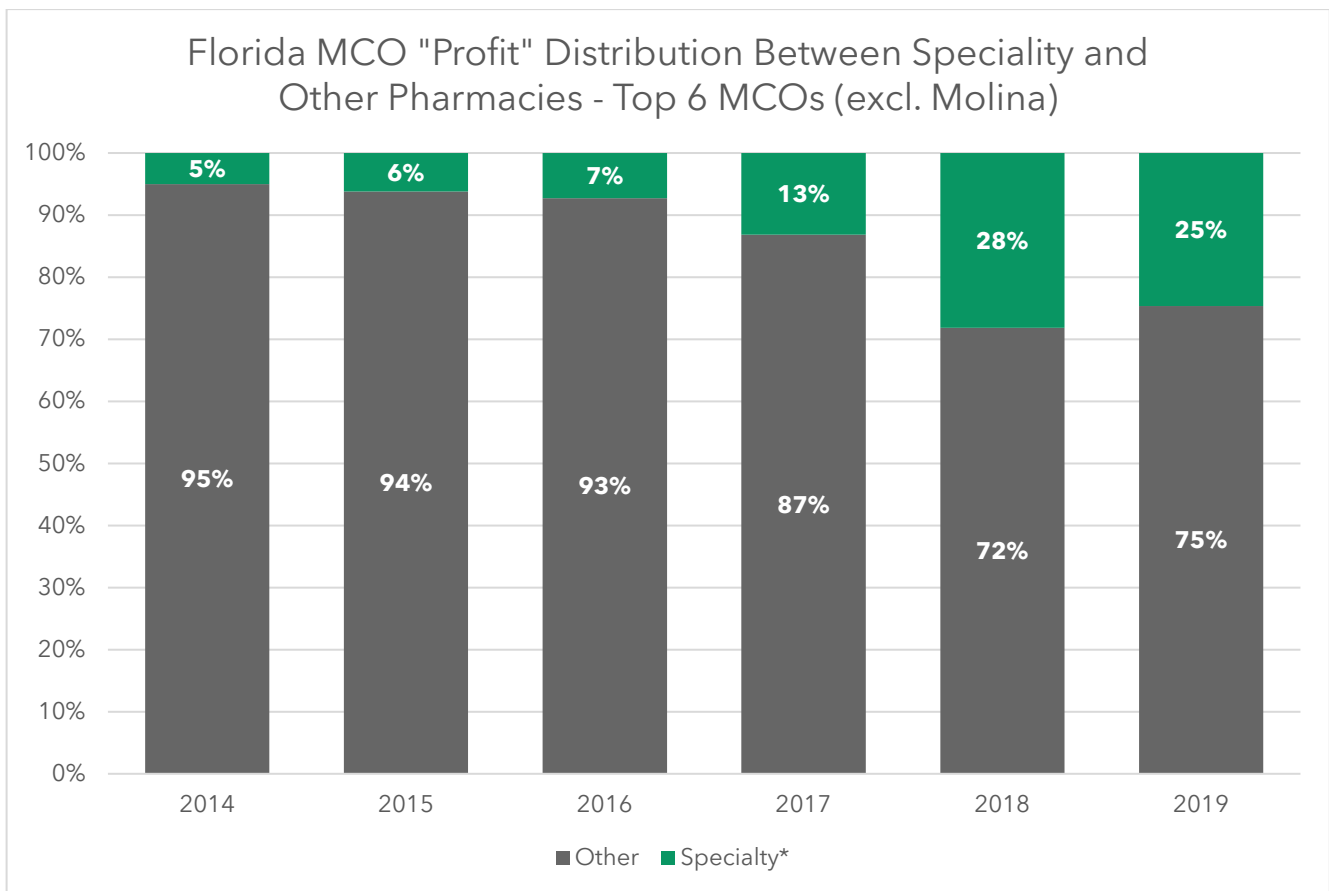
Source: 3 Axis Advisors analysis of FL Claims data, MediSpan pricing & clinical definitions data and CMS NADAC

^o \$2.72 / \$10.24 pharmacy cost to dispense = 27%

12.2 MARGIN IS DISPROPORTIONATELY PAID OUT TO (LARGELY AFFILIATED) SPECIALTY PHARMACIES

However, as has become very clear by this stage of our work, aggregates can be misleading. While the Florida's Medicaid profit "pie" is in the aggregate, undoubtedly shrinking, it is also getting redistributed to the pharmacies that handle of the bulk of Medicaid's vastly more expensive specialty drugs. **Figure 12-2** shows how the margin above estimated acquisition cost have shifted from traditional retail pharmacies to specialty pharmacies over time. Note that the specialty pharmacy series below includes only five Florida pharmacy groups: Acaria, Accredo, Briova, Exactus, and Perform Specialty. In 2018, these five pharmacy groups collected an estimated 28% of the available estimated margin above acquisition cost in Florida Medicaid managed care, despite only dispensing 0.4% of all claims.

Figure 12-2: Florida MCO "Profit" Distribution Between Specialty and Other Pharmacies - Top 6 MCOs (excl. Molina)

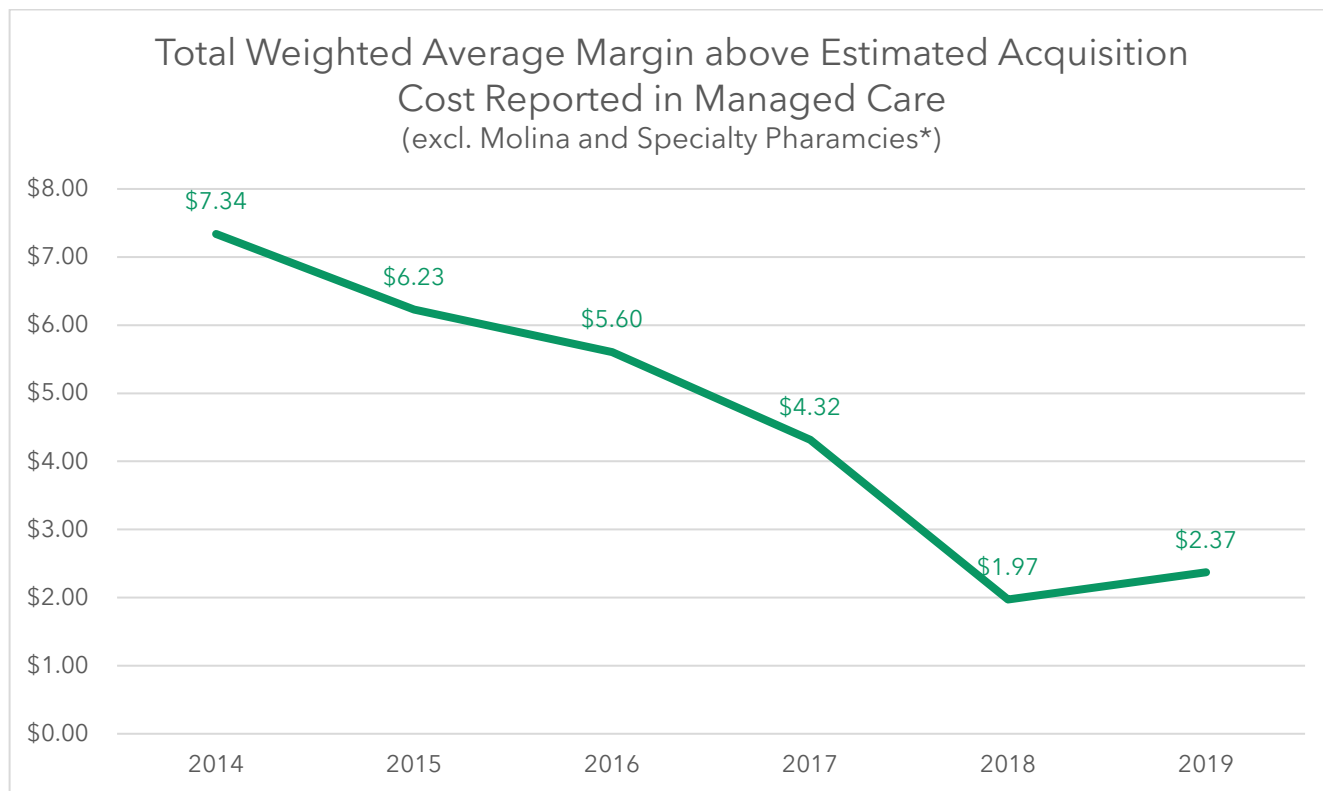


*Specialty Pharmacies include Acaria, Accredo, Briova, Exactus, and Perform Specialty

Source: 3 Axis Advisors analysis of FL Claims data, MediSpan pricing & clinical definitions data and CMS NADAC

If we take both 1) these five pharmacy groups, and 2) Molina (owing to its use of spread pricing), out of the aggregate margins, we get a more accurate picture of the claim-level profit available for Florida's traditional pharmacies - \$1.97 per claim in 2018 is all pharmacies had to show for their service to Florida Medicaid beneficiaries.

Figure 12-3: Total Weighted Average Margin above Estimated Acquisition Cost Reported in Managed Care (excl. Molina and Specialty Pharmacies)



*Specialty Pharmacies include Acaria, Accredo, Briova, Exactus, and Perform Specialty

Source: 3 Axis Advisors analysis of FL Claims data, MediSpan pricing & clinical definitions data and CMS NADAC

12.3 ASSESSING THE POTENTIAL IMPACT OF CENTENE’S ACQUISITION OF WELLCARE ON FLORIDA’S SMALL PHARMACIES

Again, **Figure 12-3** includes payments to all non-specialty pharmacies on these five MCOs. When looking at the Small Pharmacy group alone, weighted average margin per claim looks a bit better, registering **\$5.07** through the first six months of 2019. These relatively healthier aggregate Small Pharmacy margins are completely driven by Staywell/WellCare, which is the only Florida MCO that is reimbursing Small Pharmacies at a level approaching their cost to dispense.

However, there could be risk that Staywell/WellCare’s reimbursement practices may change. This is because WellCare has been acquired by 2019’s worst Florida MCO Small Pharmacy payer – Centene.⁹ Centene and WellCare announced the \$17.3 billion acquisition on March 27, 2019.¹⁰² The transaction closed on January 23, 2020 after divestitures of “WellCare’s Medicaid and Medicare Advantage plans in Missouri, WellCare’s Medicaid plan in Nebraska and Centene’s Medicaid and Medicare Advantage plans in Illinois.”^{103 104} The combination of these two MCOs – ranked 1st and 3rd in 2018 drug spending in Florida Medicaid managed care – will create one MCO in Florida that is responsible for more than one-third of all MCO drug spending.

⁹ 2019 weighted average generic drug Margin over NADAC for Staywell/WellCare and Sunshine/Centene was \$10.74 per claim and (\$1.58) per claim, respectively.

This raises the question on what will happen to Florida Medicaid MCO Small Pharmacy reimbursements if Centene applies its approach to pharmacy reimbursement to WellCare's claims. To assess this, we remodeled Staywell/WellCare's reported 2019 payments to Small Pharmacies based on Sunshine/Centene's actual 2019 (generic/brand) effective rates (i.e. discounts to AWP). As shown in **Table 12-1**, this primarily impacted generic margin as Sunshine/Centene's generic effective rate was nearly 10 points lower than that of Staywell/WellCare's (94.4% vs. 84.8%). Overall, remodeling Staywell/WellCare's claims in this manner removes \$11.4 million in margin from Small Pharmacies in less than six months. This would bring WellCare's MCO-leading Small Pharmacy margin down from \$9.69 to an estimated loss of (\$1.49).

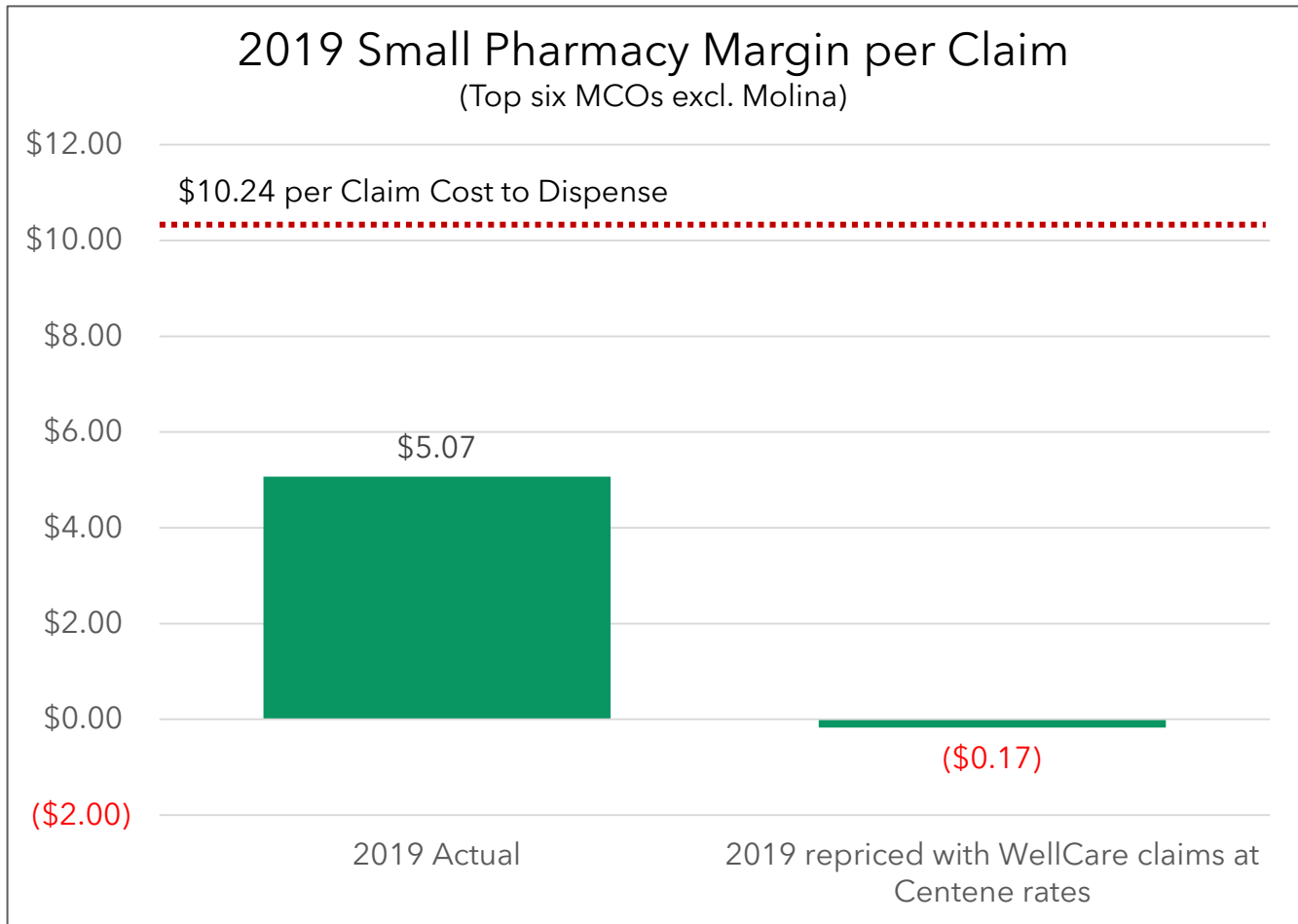
Table 12-1: Remodeling 2019 Staywell/WellCare payments to Small Pharmacies using Sunshine/Centene's effective rates

		BRAND (excl. 340B)	GENERIC	OVERALL
A	Total AWP	\$94,423,524	\$117,381,541	\$211,805,064
B	WellCare Actual AWP discount	19.4%	84.8%	55.6%
C	Centene Actual AWP discount	19.5%	94.4%	61.0%
D = A x (1-B)	WellCare Payment	\$76,105,360	\$17,841,994	\$93,947,354
E = A x (1-C)	Estimated New WellCare Payment (using Centene's rates)	\$76,010,937	\$6,573,366	\$82,584,303
F	Claims	\$153,220	\$863,393	\$1,016,613
G	Pharmacy Acquisition Cost	\$75,584,099	\$8,511,184	\$84,095,283
H = D - G	WellCare Margin	\$521,261	\$9,330,810	\$9,852,071
I = E - G	Estimated New WellCare Margin (using Centene's rates)	\$426,838	(\$1,937,818)	(\$1,510,980)
J = H / F	WellCare Margin per Claim	\$3.40	\$10.81	\$9.69
K = I / F	Estimated New WellCare Margin per Claim (using Centene's rates)	\$2.79	(\$2.24)	(\$1.49)
L = I - H	Change in Margin	(\$94,424)	(\$11,268,628)	(\$11,363,051)
M = L / F	Change in Margin per Claim	(\$0.62)	(\$13.05)	(\$11.18)

Source: 3 Axis Advisors analysis of FL Claims data, MediSpan pricing & clinical definitions data and CMS NADAC

Due to Staywell/WellCare's size, this reimbursement change - if it were to come to pass - would have a substantial impact on overall aggregate margins paid out to Small Pharmacies in Florida Medicaid managed care. As shown in **Figure 12-4** (on next page), if Staywell/WellCare were to adopt Sunshine/Centene's effective rates, it would drag down the overall weighted average Small Pharmacy margin from a profit of \$5.07 per claim to a loss of (\$0.17) per claim.

Figure 12-4: Actual vs. Modeled 2019 Small Pharmacy Margin per Claim (excl. Molina)



Source: 3 Axis Advisors analysis of FL Claims data, MediSpan pricing & clinical definitions data and CMS NADAC

12.4 VERY THIN MARGINS REQUIRE CHASING INCREMENTAL VOLUME

In an environment characterized by razor thin (and declining) margins, the only legitimate controllable variable for pharmacies to improve their economics is to bring on incremental volume. The key word here is **incremental**. Recall that Florida has determined that a Florida pharmacy must incur a cost, in aggregate, of \$10.24 per claim to cover its operations. This is a pharmacy's **absolute** cost to dispense. However, it is not a pharmacy's incremental cost to dispense. A pharmacy's incremental cost to dispense is the additional cost associated with filling one additional claim. There are some fully variable costs associated with filling a claim. Such expenses include a pill bottle, a label, printer ink, etc. - largely minimal expenses for a pharmacy. As such, if one additional claim can bring in a modest profit of \$2-3 above its acquisition cost, that one claim will be accretive to a pharmacy's economics.

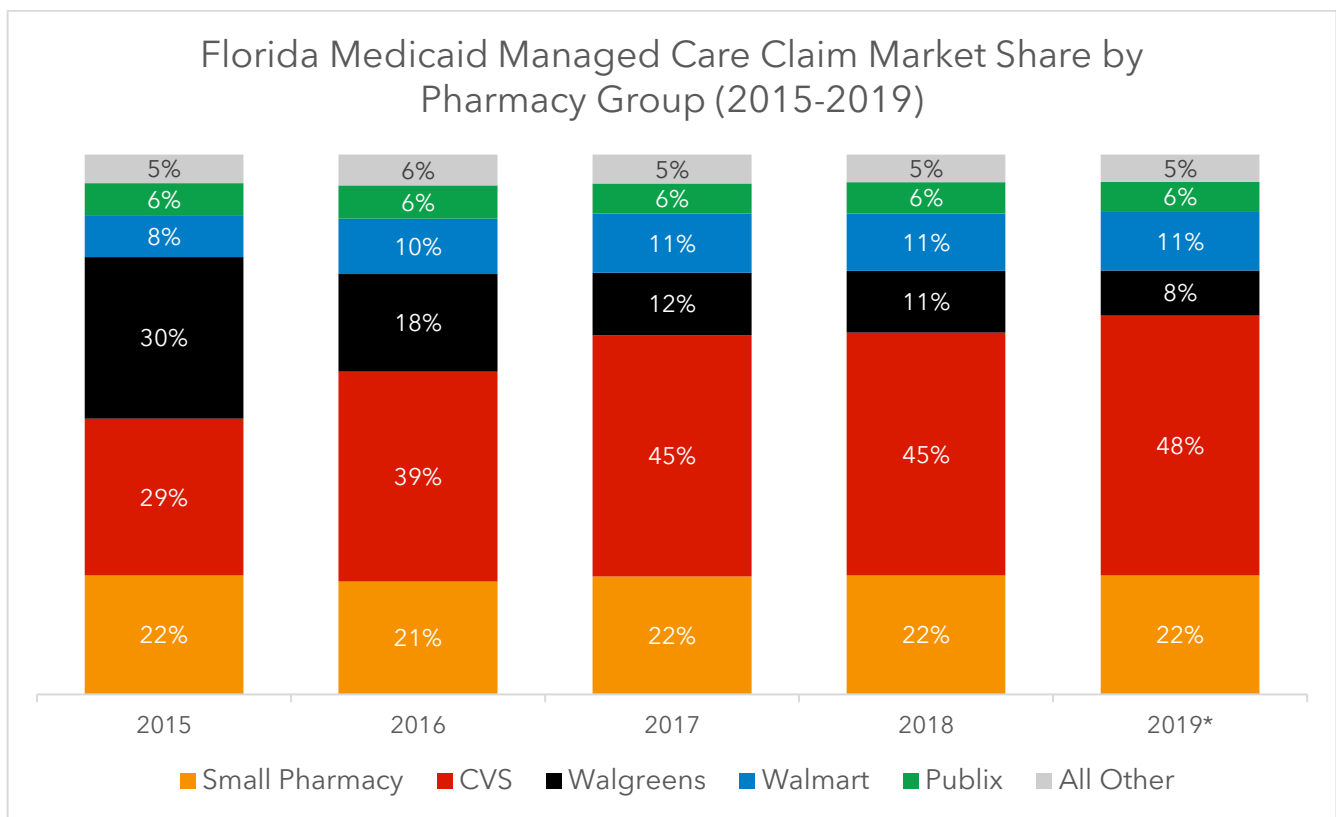
The larger expenses within a pharmacy are labor - pharmacists and technicians. One additional claim can undoubtedly be absorbed by existing staff in a pharmacy. As such, labor is, on a purely incremental basis, a fixed expense.

It follows then that each incremental claim brought into a pharmacy reduces its overall cost to dispense. But as one incremental claim a day, becomes one hundred a day (or more), labor becomes much more of a variable expense. Over-taxing pharmacists and technicians jeopardizes pharmacy service quality, or even worse, increases risk of errors, which can put lives at stake. At some point in time, a pharmacy will be forced to add resources to support claim growth, which will drive back up its cost to dispense.

But pharmacies can only act in a manner that improves their immediate economic prospects, and that's by looking at the incremental profitability of the very next claim. And in such a poor margin environment, "growing your way out" of economic hardship is the only near-term option for most pharmacies to turn to.

Unfortunately, Florida's Small Pharmacies have not been able to grow their way out of their dwindling margin dilemma - at least not through Medicaid managed care volume. As shown in **Figure 12-5**, between 2015 and 2019, Florida's Small Pharmacies (the orange series) have collectively maintained a 22% share of all MCO claims. Interestingly, besides Walmart (which increased its share modestly from 8% in 2015 to 11% in 2018), the only other pharmacy group that was able to grow its share was CVS, driven by a 51% increase in its Medicaid managed care claims volume between 2015 and 2018.

Figure 12-5: Florida Medicaid Managed Care Claim Market Share by Pharmacy Group (2015-2019)



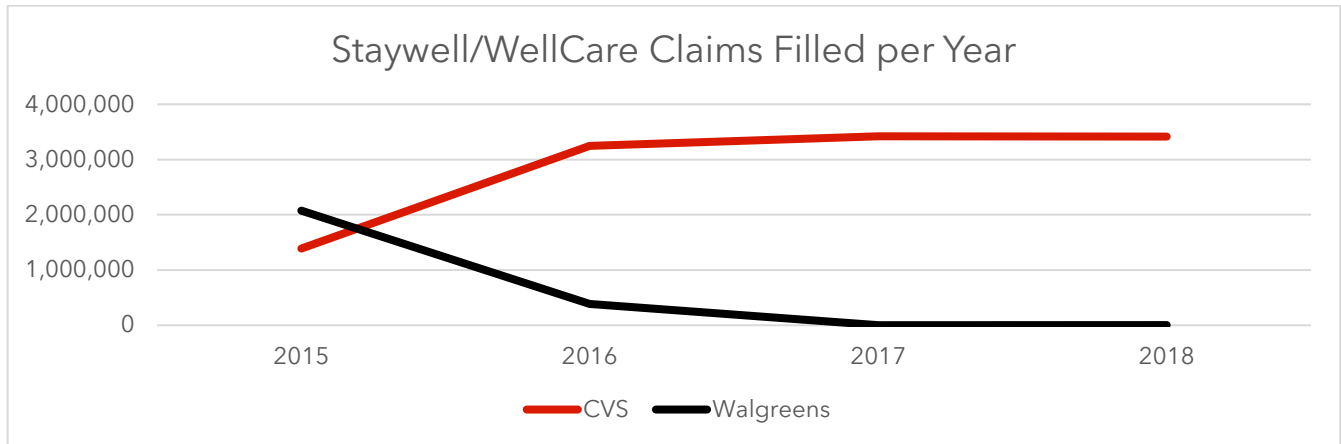
* Through June 11, 2019

Source: 3 Axis Advisors analysis of FL Claims data, MediSpan pricing & clinical definitions data and CMS NADAC

Besides CVS' rapid claims growth, the most interesting takeaway from **Figure 12-5**, in our view, is Walgreens' steep decline in market share. At its peak in 2015, Walgreens had 2,676 different pharmacies (471 more than CVS had in 2017, its peak year) that filled more than eight million Medicaid managed care claims. But in the coming years, as shown in **Figure 12-6** (on next page)

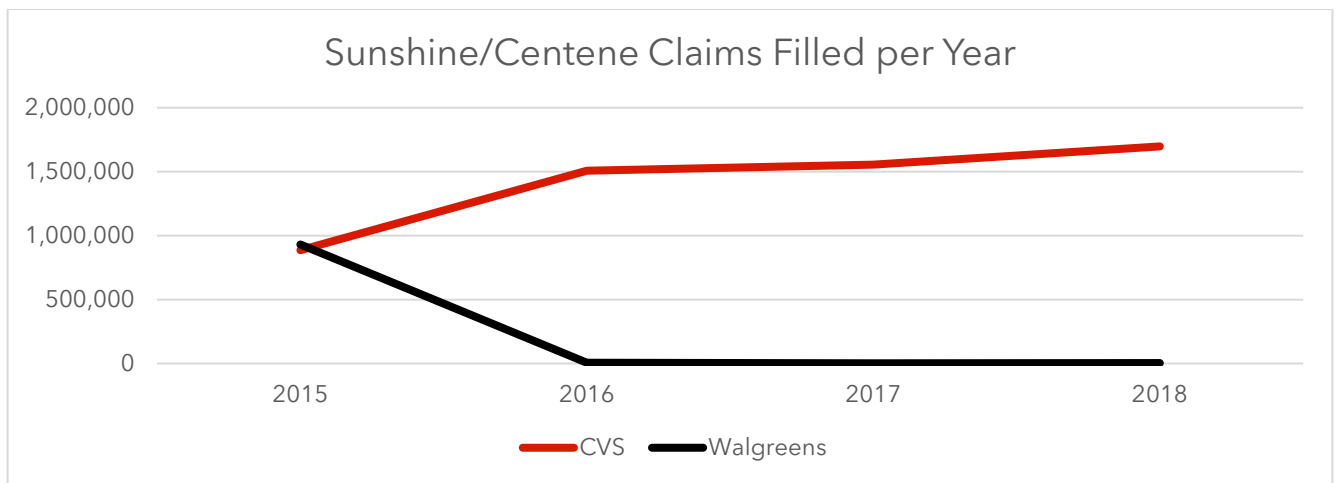
and **Figure 12-7**, Walgreens was almost fully displaced by CVS in two of the largest MCOs in Florida (Staywell/WellCare and Sunshine/Centene). As stated earlier, both of these MCOs retained PBM services from CVS Caremark. Of note is that the deflection point in the market shares of Walgreens and CVS for Staywell/WellCare claims (shown in **Figure 12-6**) happened at the same time Staywell/WellCare transitioned its PBM services to CVS Caremark on January 1, 2016.¹⁰⁵

Figure 12-6: Staywell/WellCare Claims Filled per Year (CVS v Walgreens)



Source: 3 Axis Advisors analysis of FL Claims data, MediSpan pricing & clinical definitions data and CMS NADAC

Figure 12-7: Sunshine/Centene Claims Filled per Year (CVS v. Walgreens)



Source: 3 Axis Advisors analysis of FL Claims data, MediSpan pricing & clinical definitions data and CMS NADAC

This stark contrast between the fortunes of the two nationwide pharmacy behemoths is a fitting place to end our analysis of Florida Medicaid managed care spending. To be clear, we do not know if Walgreens was directly driven out of these two MCOs by CVS Caremark in favor of CVS' own pharmacies, or if it simply decided not to participate in the program given its dwindling margins (controlled by its primary competitor) for unaffiliated providers. Either way, this clearly illustrates the same point the data has supported throughout this entire study - managed care is designed to benefit those that control it, rather than those that only serve it.

13 METHODOLOGY

13.1 DATA SOURCES

All analytics performed in this study were based on the combination of the following raw data sources:

1. CMS' State Drug Utilization Data (SDUD) database
2. CMS' National Average Drug Acquisition Cost (NADAC) database
3. Florida Medicaid Drug Utilization Data
4. Florida Pharmacy Reimbursement Data
5. Medi-Span PriceRx by Wolters Kluwer Clinical Drug Information Inc
6. NPPES NPI Registry Information
7. Geocodio Information
8. Centers for Disease Control and Prevention (CDC) Milligram Morphine Equivalencies (MMEs)

Details of the transformations regarding these data bases are provided below.

13.1.1 State Drug Utilization Database

State agencies responsible for Medicaid operations are responsible for reporting drug utilization for covered outpatient drug expenditures incurred by their programs to the Centers for Medicare and Medicaid Services (CMS). Utilization is reported on a quarterly basis and published on Medicaid.gov approximately four months after the close of each quarter. The database includes total dollars spent, units reimbursed, and prescriptions for each 11-digit National Drug Code (NDC) per quarter, by state and program type (i.e. Managed Care or Fee-for-Service). This data is used for comparison purposes to the Florida Medicaid Drug Utilization as part of our [Data Validation](#) section.

13.1.2 National Average Drug Acquisition Cost (NADAC) Database

NADAC was developed by the Centers for Medicare and Medicaid Services (CMS), "to provide a national reference file to assist State Medicaid programs in the pricing of Covered Outpatient Drug claims to reflect the actual acquisition cost (AAC) of drugs."¹⁰⁶ As such, NADAC's goal is to be the most comprehensive public measurement of market-based retail pharmacy acquisition cost.

NADAC is compiled by Myers & Stauffer on behalf of CMS. It is generated from a voluntary monthly invoice cost survey of 2,500 randomly selected retail pharmacies (with 450-600 respondents). After Myers & Stauffer completes its data processing and clean-up activities, it publishes the survey results at the National Drug Code (NDC) level on Medicaid.gov. As of October 2019, the NADAC database included prices for 25,141 different NDCs. As state Medicaid fee-for-service programs have shifted to an actual acquisition cost basis to comply with the Covered Outpatient Drug Rule (CMS-2345-FC), many states have utilized NADAC as the primary proxy for acquisition cost. As such, **we believe NADAC is the best publicly available pricing benchmark to approximate average pharmacy invoice costs.**⁹ We relied on the NADAC database extensively throughout this report as the best estimate for a drug's actual acquisition cost.

13.1.3 Florida Medicaid Drug Utilization Data (AHCA Claims Database)

With assistance of Florida independent pharmacy owners, Florida Pharmacy Association (FPA), and American Pharmacy Cooperative Inc. (APCI), 3 Axis Advisors obtained a complete record of de-

⁹ See [Appendix B: Assumptions, Limitations and Mitigating Factors for NADAC](#) limitations

identified Florida Medicaid pharmacy claims from 2012 until June 11, 2019, based upon a query run from Florida Medicaid Data Analytics in DSS Business Objects on 6-18-019. This data contained 359,322,365 records across 43 text files as outlined in the following overview:

Table 13-1: Florida Medicaid Drug Utilization Claims Overview

File Hierarchy	# Files	Record Count (Rows)
Pharm_2012	6	50,093,987
Pharm_2013	6	49,241,283
Pharm_2014	6	49,597,672
Pharm_2015	5	45,818,586
Pharm_2016	5	44,011,492
Pharm_2017	6	49,831,386
Pharm_2018	6	50,662,446
Pharm_2019	3	20,065,513

Source: AHCA Medicaid claims data

Each file was organized according to the following column and field descriptions:

Table 13-2: Florida Medicaid Drug Utilization Claim Field Descriptions

Field Name	Description
ID_PROVIDER_NPI	Provider National Provider Identifier (NPI) (Pharmacy)
ID_PROVIDER_MCAID	Provider Medicaid ID and Name (Pharmacy)
NUM_ICN	Unique FMMIS transaction # for claim
DTE_CY	Calendar year of the date of service
CDE_NDC	National Drug Code (NDC)
DSC_LN	Drug label name
CDE_DRUG_CLASS	Drug Class (O - Over-the-counter), F (prescription required)
CDE_DEA	DEA Code (0 - 5)
QTY_DISPENSE	Dispensed Quantity
AMT_REIMBURSED	Amount Paid to provider for FFS claims
AMT_OP_PAID	Amt paid to provider on Encounter claim (by Plan)
IND_CLAIM	E for Encounter, F for Fee-for-service
NAM_PROVIDER	Plan's name for Encounters (repeats pharmacy name on FFS)

Source: AHCA Medicaid claims data

This data was the source off all claims experience for Florida Medicaid drug utilization associated with the FFS program as well as the individual and aggregate MCO experience.

13.1.4 Florida Pharmacy Reimbursement Data

With the assistance of Florida independent pharmacy owners and American Pharmacy Cooperative Inc. (APCI), 3 Axis Advisors obtained de-identified pharmacy claims data from 112 Florida community pharmacies. This data contained 8,227,472 records from Medicaid and non-Medicaid payers in the following data format:

Table 13-3: Florida Pharmacies Claim Field Descriptions

Field Name	Description
NPI	Provider National Provider Identifier (NPI) (Pharmacy)
FILLDATE	Date of Service
RXNBR	Prescription Number
RF	Refill Number
NDC	National Drug Code (NDC)
QTY_DSP	Dispensed Quantity
P1_BIN	Primary Payer Bank Identification Number (BIN)
P1_PCN	Primary Processor Control Number (PCN)
P1_GROUP	Primary Payer Group Identification Number
P2_BIN	Secondary Payer Bank Identification Number (BIN)
P2_PCN	Secondary Payer Processor Control Number (PCN)
P2_GROUP	Secondary Group Identification Number
P1_PAID	Primary Payer Paid Amount
P2_PAID	Secondary Payer Paid Amount
PATPAID	Patient Paid Amount (Copayment)

Source: 3 Axis Advisors Column Headings

This was the source of data utilized to assess actual reimbursements to pharmacies and an assessment of “spread pricing” between claim payments and pharmacy reimbursements. The results of this analysis are reviewed in [Pharmacy Reimbursement Analysis](#).

No Personal Health Information (PHI) was collected as part of this study.

13.1.5 Medi-Span PriceRx by Wolters Kluwer Clinical Drug Information, Inc.

Medi-Span PriceRx is an online pricing and drug information portal developed by Wolters Kluwer Clinical Drug Information, Inc. (WKCDI). PriceRx offers one of the most extensive histories of drug manufacturer pricing, with NDC-level drug pricing dating back to the 1980s.¹⁰⁷ PriceRx was the source of the raw AWP & WAC data that we used to calculate aggregated quarterly AWPs for our analyses.

PriceRx also contains clinical information enabling identification of drug products by a hierarchical therapeutic classification system. This classification helps standardize drug lists and is the basis for all therapeutic category investigations. This classification system was used to identify brand vs. generic status, prescription drug status, and therapeutic drug classes among other clinical information.

13.1.6 NPPES NPI REGISTRY

The NPI Registry Public Search is a free directory of all active National Provider Identifier (NPI) records. Healthcare providers acquire their unique 10-digit NPIs to identify themselves in a standard way throughout their industry.

Individuals or organizations apply for NPIs through the CMS National Plan and Provider Enumeration System (NPPES). CMS provides a directory in a full download file, or through an Application Programming Interface (API) of NPIs. This was the source of address information (street, city, state, zip) for pharmacy providers.

13.1.7 GEOCODIO

Geocodio provides geocoding services enabling the assignment of coordinate values, specifically longitude and latitude values, to an address by comparing the descriptive location elements in the address to those present in the reference material. This was the source of mapping information, specifically longitude and latitude points, used for pharmacy providers.

13.2 DATA VALIDATION

13.2.1 Florida Medicaid Drug Utilization Data

On June 18, 2019, the Florida Medicaid Data Analytics team pulled 359,322,365 pharmacy claim records from 2012 to June 11, 2019 via DSS Business Objects (“DSS”). These records were provided to 3 Axis Advisors by a third party via 43 text files for the purpose of analyzing the details of the Florida Medicaid pharmacy program. The following field names and descriptions were provided in order to work with this data set:

Table 13-4: Florida Medicaid Drug Utilization Claim Field Descriptions

Field Name	Description
ID_PROVIDER_NPI	Provider NPI (Pharmacy)
ID_PROVIDER_MCAID	Provider Medicaid ID and Name (Pharmacy)
NUM_ICN	Unique FMMIS transaction # for claim
DTE_CY	Calendar year of the date of service
CDE_NDC	NDC Code
DSC_LN	Drug label name
CDE_DRUG_CLASS	Drug Class (O - Over-the-counter), F (prescription required)
CDE_DEA	DEA Code (0 - 5)
QTY_DISPENSE	Dispensed Quantity
AMT_REIMBURSED	Amount Paid to provider for FFS claims
AMT_OP_PAID	Amt paid to provider on Encounter claim (by Plan)
IND_CLAIM	E for Encounter, F for Fee-for-service
NAM_PROVIDER	Plan's name for Encounters (repeats pharmacy name on FFS)

Source: AHCA Medicaid claims data

3 Axis Advisors performed data validation queries to ensure the reliability of the data provided by the state. This included internal checks, such as verifying that there were no duplicated ICNs, as well as external data validation by comparing the DSS data to Florida Medicaid State Drug Utilization Data (SDUD) - available for public download at Data.Medicaid.gov.

3 Axis Advisors observed several concerns related to the internal and external data validation attempts:

13.2.1.1 Internal Data Concerns

Based upon the provided field descriptions, an **IND_CLAIM** of F denotes Fee-for-Service claims, which should have **AMT_REIMBURSED** populated to identify the payment rendered on the claim. However, as the following table (next page) demonstrates, the provided AHCA claims data includes \$502 million in expenditures in the **AMT_OP_PAID** when **IND_CLAIM** is set to F. We conceptually are looking to understand how spending within Fee-for-Service can appear in the **AMT_OP_PAID** field, as the data dictionary clearly states that this field is the “Amt paid to provider on Encounter claim (by Plan)”. Note, that the inverse does not occur (i.e. there are no expenditures in **AMT_REIMBURSED** when **IND_CLAIM** is set to E):

Table 13-5: Payment amounts associated with Medicaid Delivery system by Types of Claim and Payment

IND CLAIM TYPES			
E = Encounter		F = Fee for Service	
Amount OP Paid	Amt Reimbursed	Amt OP Paid	Amt Reimbursed
\$14,925,113,227	\$0.00	\$502,335,198	\$6,107,593,491

Source: 3 Axis Advisors analysis of AHCA Claims data

These OP Payment amounts are not limited to any specific year (based upon DTE_CY) and appear uniformly distributed throughout the claim history. This represents potentially 8% more in FFS expenditures, and it is unclear how to account for this in the analysis. Absent a satisfactory explanation for how to handle these claims we excluded the **AMT_OP_PAID** from any analysis performed on the AHCA claims dataset for Fee-for-Service.

13.2.1.2 External Data Concerns

In State Release #177, CMS noted the requirement for states to begin to reflect invoicing for MCO utilization using the date of service in Q3 2017. As a result, it should be possible to compare the provided AHCA claims data to SDUD data to assess for reasonableness of Florida’s reported claims data.

13.2.1.2.1 Reversed, Voided, or Cancelled Claims

Before conducting this comparison, we spent some time studying the ICN code assigned to each claim to help identify any claims that were voided, cancelled, or reversed. A common reason for this occurrence is when a patient, for whatever reason, elects not to pick up their prescription. To identify these types of claims, we parsed out each ICN based on the ICN separation logic found in *The Florida Medicaid Prescribed Drug Services Coverage, Limitations and Reimbursement Handbook* dated July 2014. According to this document, claims with a region code (i.e. first two digits of the ICN) of 50, 57, 59, or 69 are adjusted, voided or reversed. The following table shows that, for managed care, \$997.3 million dollars spent, and 10.3 million claims fall into one of these region codes. For Fee-for-Service, \$0 dollars spent, and 13.6 million claims fall into one of these region codes.

Table 13-6: Payment amounts associated with ICN Region Codes

Region Code	IND_Claim Type			
	Managed Care (E)		Fee-For-Service (F)	
	Total Payment	Rx Count	Total Payment	Rx Count
Adjustment, Void, Reversal (50, 57, 59, 69)	\$997,349,250	10,332,779	\$0	13,674,845
Paid Claims (All Others)	\$13,927,763,977	213,865,908	\$6,107,593,491	121,448,833
Total	\$14,925,113,227	224,198,687	\$6,107,593,491	135,123,678

Source: 3 Axis Advisors analysis of AHCA claims data

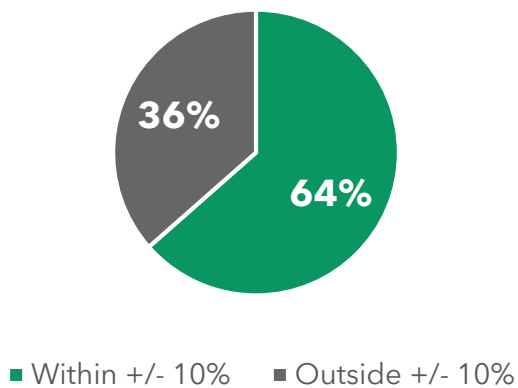
Because payments associated with the FFS program are \$0 we have at least one signal that appropriate claims were identified for removal based upon the region codes in the reviewed manual. All adjusted, voided, or reversed claims were removed from the analysis presented in this document. We also removed these claims from our more exhaustive study of Florida Medicaid claims data.

13.2.1.2.2 Gap Between AHCA claims data and SDUD Data

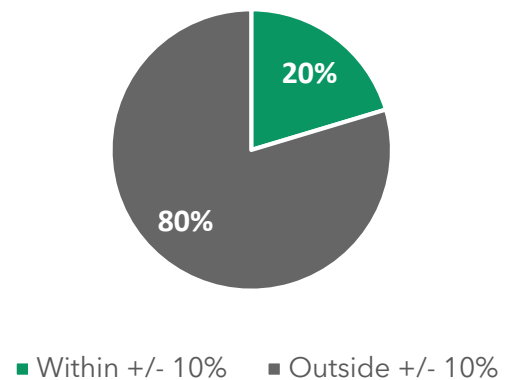
To perform the comparison between AHCA claims data and SDUD data for Florida Medicaid, we aggregated all prescription utilization in terms of payments, prescription count, and units reimbursed to the NDC and DTE_CY from 2012 to 2018 for both the AHCA claims data and SDUD data. We then compared these measures across the AHCA claim data set with that of the SDUD at the NDC level for 2018.

Overall, the AHCA claims data set included \$2.31 billion in spending on 31.5 million prescriptions in managed care in 2018. We performed the same aggregation for Florida Medicaid managed care spending and volume using the SDUD and instead found \$2.29 billion in total spend on 27.2 million prescriptions. These observations may be within an acceptable margin of error, and directionally make sense given the suppressed data in SDUD. However, when we drill down to the NDC level, we found discrepancies in terms of both payment and prescription count. As illustrated in the pie charts below, only 64% and 20% of all NDCs had a discrepancy between the two datasets (AHCA claims data in 2018 and SDUD in 2018) of less than 10% in spending and claim count, respectively.

MCO Payment Differential Distribution
Between AHCA Claim Data vs. SDUD, 2018



MCO Rx Count Differential Distribution
Between AHCA Claim Data vs. SDUD, 2018



Figures Based Upon DTE_CY Derived Year
Source: 3 Axis Advisors analysis of AHCA claims data and SDUD

13.2.1.2.3 Difference between DTE_CY and ICN-Derived Year

We tested these observations further by attempting to extract a separate year from the ICN. We again used the separation logic for the ICN found in *The Florida Medicaid Prescribed Drug Services Coverage, Limitations and Reimbursement Handbook* dated July 2014 - this time to extract the Julian Date from the ICN.

Based on the ICN-derived date, overall Florida managed care spending increases to \$2.53 billion and claims increase to 35.7 million. The table on next page shows a comparison of overall 2018 spending and claims for the AHCA database using DTE_CY and the ICN-derived year in comparison to SDUD.

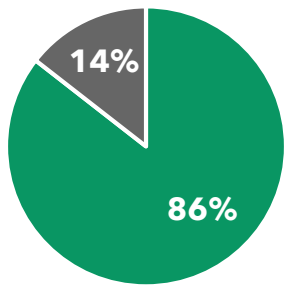
Table 13-7: Payment amounts and claim counts by DTE, ICN and SDUD year

AHCA DTE_CY 2018		AHCA ICN-derived 2018		SDUD 2018	
Total Payment	Rx Count	Total Payment	Rx Count	Total Payment	Rx Count
\$2,306,283,199	31,524,474	\$2,527,729,725	35,739,878	\$2,293,501,273	27,191,720

Source: 3 Axis Advisors analysis of AHCA claims data and SDUD

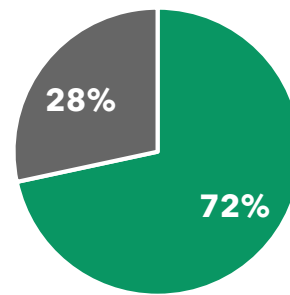
We then replicated the same NDC-level comparison between AHCA claims data and SDUD by spending and claims, using instead the year derived from the ICN. This significantly enhanced the matching to SDUD data in terms of payments and prescription counts, with 86% of payments and 72% of prescription counts being within +/-10%.

MCO Payment Differential Distribution Between AHCA Claim Data vs. SDUD, 2018



■ Within +/- 10% ■ Outside +/- 10%

MCO Rx Count Differential Distribution Between AHCA Claim Data vs. SDUD, 2018



■ Within +/- 10% ■ Outside +/- 10%

Figures Based Upon ICN Derived Year

Source: 3 Axis Advisors analysis of AHCA claims data and SDUD

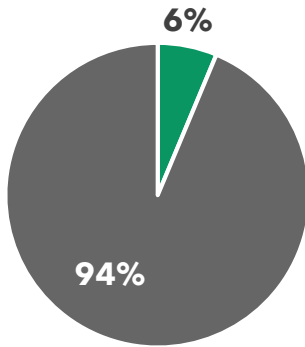
The accuracy of this observation introduces external data concerns. Overall, we found 17.3 million claims that have ICN derived years that differ from the provided DTE_CY year value within the entire AHCA claims data set (2012 to June 11, 2019).

13.2.2 Fee-For-Service Data Validation

Based upon the observations in Managed Care, we performed the same style of analysis with the FFS experience in Florida. To perform this analysis, we aggregated all prescription utilization in terms of payments, prescription count, and units reimbursed to the NDC and year from 2012 to 2018 for both the AHCA claims data and SDUD FFS claims. We then compared these measures across the Florida Medicaid dataset we were provided with that of the SDUD at the NDC level for year 2018.

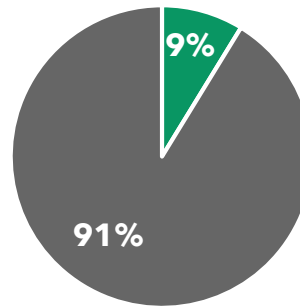
Payment amounts and number of prescriptions were higher in the provided Florida Medicaid utilization totaling \$486 million (excluding OP Payment amounts) across 5.4 million prescriptions in FFS 2018 compared to \$304 million across 1.5 million prescriptions in FL SDUD FFS. These observations are further apart than those in MCO and consequently, there appears to be greater discrepancies on an NDC basis in terms of both payment and prescription count for the remaining observations as illustrated on the next page.

FFS Payment Differential Distribution
Between AHCA Claim Data vs. SDUD, 2018



■ Within +/- 10% ■ Outside +/- 10%

FFS Rx Count Differential Distribution
Between AHCA CLaim Data vs. SDUD, 2018

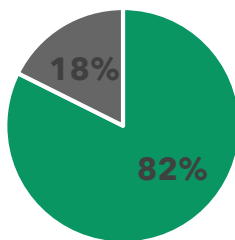


■ Within +/- 10% ■ Outside +/- 10%

Source: 3 Axis Advisors analysis of AHCA claims data and SDUD

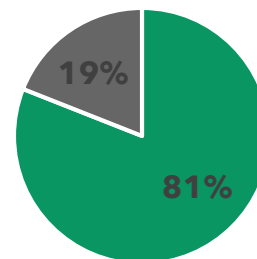
Again, we tested these observations further by attempting to extract a separate year from the ICN according to the separation logic for the ICN found in *The Florida Medicaid Prescribed Drug Services Coverage, Limitations and Reimbursement Handbook* dated July 2014. Utilizing the year derived from the ICN significantly enhanced the matching to SDUD data in terms of payments and prescription counts with 82% of payments and 81% of prescription counts being within +/-10%. However, these observations introduce and add additional merit to the internal data source concerns previously identified.

FFS Payment Differential Distribution
Between AHCA Claim Data vs. SDUD,
2018



■ Within +/- 10% ■ Outside +/- 10%

FFS Rx Count Differential Distribution
Between AHCA Claim Data vs. SDUD, 2018



■ Within +/- 10% ■ Outside +/- 10%

Figures Based Upon ICN Derived Year

Source: 3 Axis Advisors analysis of AHCA claims data and SDUD

13.2.2.1 Summary

This analysis strongly suggests that there are both internal and external data limitations within Florida's Medicaid datasets that we need to be cognizant of as we design the methodology for our more comprehensive Florida Medicaid study. Following discussion with Florida Medicaid, who identified the need to exclude region code 72 from encounter claims, we proceeded with the following assumptions as part of our data analysis:

1. The study relies upon ICN-derived dates instead of the "date of service" (i.e. DTE_CY) available within the DSS dataset
2. The study removes all region codes of 50, 57, 59, 69 and 72 to exclude claims that have been reversed, voided, or cancelled. The study includes all other claims, as there is no systematic way to know if a relationship exists between region code types
3. The study removes the **AMT_OP_PAID** from all analysis of Fee-for-Service Florida claims

13.3 DATA TRANSFORMATIONS

13.3.1 NADAC Lag

Our goal is for the comparison between payment by a plan/PBM and acquisition cost of the drug by the pharmacy to be as meaningful as possible. For generic drugs, based on CMS' survey methodology, we had to lag-correct the prices reported each week within CMS' NADAC file to bring them back to the right "pricing month" before we merged them together with the Florida Medicaid Utilization Data.¹⁰⁸ Brand drug prices are collected by CMS differently, so they do not have to be lag-corrected.

To lag-correct NADAC, we created a lookup table with every date when NADAC was updated ("As of Date") and assigned it a "pricing month." Absent leap years, NADAC is released every Wednesday to the public. Based on our studies, if this Wednesday falls on or after the 17th of any month, it reflects the prior month's survey prices. If it's before the 17th, it likely reflects pricing from two calendar months prior. We used this logic to assign the pricing month to the weekly NADAC generic prices, before joining it with the state drug utilization data.

13.3.2 Florida Medicaid Drug Utilization Data

All claims from Florida Medicaid were loaded into a MS SQL Server into a table representative for each year. This was done via built in SQL Server import function. From there, all tables were merged via a union operation as follows:

```
SELECT [ID_PROVIDER_NPI], [ID_PROVIDER_MCAID], [NUM_ICN], [DTE_CY], [CDE_NDC], [DSC_LN],
[CDE_DRUG_CLASS], [CDE_DEA], [QTY_DISPENSE], [AMT_REIMBURSED], [AMT_OP_PAID], [IND_CLAIM],
[NAM_PROVIDER]
INTO [CLAIMS].[dbo].[ALL_FL] FROM
(Select [ID_PROVIDER_NPI], [ID_PROVIDER_MCAID], [NUM_ICN], [DTE_CY], [CDE_NDC], [DSC_LN],
[CDE_DRUG_CLASS], [CDE_DEA], [QTY_DISPENSE], [AMT_REIMBURSED], [AMT_OP_PAID], [IND_CLAIM],
[NAM_PROVIDER]
FROM [Claims].[dbo].[Pharmacy_2012]
UNION ALL
Select [ID_PROVIDER_NPI], [ID_PROVIDER_MCAID], [NUM_ICN], [DTE_CY], [CDE_NDC], [DSC_LN],
[CDE_DRUG_CLASS], [CDE_DEA], [QTY_DISPENSE], [AMT_REIMBURSED], [AMT_OP_PAID], [IND_CLAIM],
[NAM_PROVIDER]
FROM [Claims].[dbo].[Pharmacy_2013]
UNION ALL
```

```

Select [ID_PROVIDER_NPI], [ID_PROVIDER_MCAID], [NUM_ICN], [DTE_CY], [CDE_NDC], [DSC_LN],
[CDE_DRUG_CLASS], [CDE_DEA], [QTY_DISPENSE], [AMT_REIMBURSED], [AMT_OP_PAID], [IND_CLAIM],
[NAM_PROVIDER]
FROM [Claims].[dbo].[Pharmacy_2014]
UNION ALL
Select [ID_PROVIDER_NPI], [ID_PROVIDER_MCAID], [NUM_ICN], [DTE_CY], [CDE_NDC], [DSC_LN],
[CDE_DRUG_CLASS], [CDE_DEA], [QTY_DISPENSE], [AMT_REIMBURSED], [AMT_OP_PAID], [IND_CLAIM],
[NAM_PROVIDER]
FROM [Claims].[dbo].[Pharmacy_2015]
UNION ALL
Select [ID_PROVIDER_NPI], [ID_PROVIDER_MCAID], [NUM_ICN], [DTE_CY], [CDE_NDC], [DSC_LN],
[CDE_DRUG_CLASS], [CDE_DEA], [QTY_DISPENSE], [AMT_REIMBURSED], [AMT_OP_PAID], [IND_CLAIM],
[NAM_PROVIDER]
FROM [Claims].[dbo].[Pharmacy_2016]
UNION ALL
Select [ID_PROVIDER_NPI], [ID_PROVIDER_MCAID], [NUM_ICN], [DTE_CY], [CDE_NDC], [DSC_LN],
[CDE_DRUG_CLASS], [CDE_DEA], [QTY_DISPENSE], [AMT_REIMBURSED], [AMT_OP_PAID], [IND_CLAIM],
[NAM_PROVIDER]
FROM [Claims].[dbo].[Pharmacy_2017]
UNION ALL
Select [ID_PROVIDER_NPI], [ID_PROVIDER_MCAID], [NUM_ICN], [DTE_CY], [CDE_NDC], [DSC_LN],
[CDE_DRUG_CLASS], [CDE_DEA], [QTY_DISPENSE], [AMT_REIMBURSED], [AMT_OP_PAID], [IND_CLAIM],
[NAM_PROVIDER]
FROM [Claims].[dbo].[Pharmacy_2018]
UNION ALL
Select [ID_PROVIDER_NPI], [ID_PROVIDER_MCAID], [NUM_ICN], [DTE_CY], [CDE_NDC], [DSC_LN],
[CDE_DRUG_CLASS], [CDE_DEA], [QTY_DISPENSE], [AMT_REIMBURSED], [AMT_OP_PAID], [IND_CLAIM],
[NAM_PROVIDER]
FROM [Claims].[dbo].[Pharmacy_2019]
) a

```

13.3.2.1 Pharmacy Provider Transformations

Because of the data format of the underlying data, the following transformation was done to the field **ID_PROVIDER_MCAID**[†] to separate the provider Medicaid ID and name (Pharmacy) for the contents of each row:

```
ALTER TABLE [Claims].[dbo].[ALL_FL] ADD MedicaidProviderID AS LTRIM(LEFT([ID_PROVIDER_MCAID],
CHARINDEX('-', [ID_PROVIDER_MCAID]) - 1));
```

--

```
ALTER TABLE [Claims].[dbo].[ ALL_FL] ADD PharmacyName AS
LTRIM(REPLACE(SUBSTRING([ID_PROVIDER_MCAID], CHARINDEX('-', [ID_PROVIDER_MCAID]),
LEN([ID_PROVIDER_MCAID])), '-', ''));
```

From here, pharmacy NPI information was directly linked to the [NPPES NPI Registry](#) for the purposes of obtaining address information for Florida's pharmacies on a simple NPI to NPI match. After obtaining the address fields for the pharmacies (i.e. street address, city, state, zip) within the claim data set, the NPI and address fields were loaded into the GEOCODIO website for the purposes of generating longitude and latitude values associated with the NPI. These were added to the database for Florida claims for the purposes of generating maps of Florida pharmacies.

[†] See [Florida Medicaid Drug Utilization Data](#) for detailed description of field names

We attempted to utilize the [NPPES NPI Registry](#) to group pharmacies under parent organizations and by pharmacy type (i.e. Healthcare Provider Taxonomy Code).¹⁰⁹ These efforts were unsuccessful for a number of reasons. First, up to 15 taxonomy codes may exist for any one provider, meaning that a single pharmacy may be one or more of some combination of: Veterans Affairs Pharmacy, Military Pharmacy, Indian Health Pharmacy, Military Pharmacy, Clinic Pharmacy, Community/ Retail Pharmacy, Compounding Pharmacy, Home Infusion Pharmacy, Institutional Pharmacy, Long-term Care (LTC) Pharmacy, Mail Order Pharmacy, Managed Care Pharmacy, Nuclear Pharmacy, Specialty Pharmacy or simply a pharmacy (without additional designation). Second, when testing the Parent Organizations within the registry we identified for a pharmacy chain like CVS, only 136 CVS out of the thousands of CVS pharmacies nationally identified what could be considered same parent organization (approximately 1%).

Consequently, we utilized the names provided for the Pharmacy Provider within the [Florida Medicaid Drug Utilization Data](#) to group pharmacies together by type. Our goal was to principally identify pharmacies associated with Florida’s MCOs and/or PBMs, as well as the pharmacies associated with large chains that operate within Florida (Publix, Walgreens, Walmart, etc.). From 2012 to June 11, 2019, the total number of unique pharmacy NPIs within the [Florida Medicaid Drug Utilization Data](#) was 12,265. This made identification of pharmacy possible via a PIVOT function where all pharmacy names were compared to the number of unique NPIs associated with their operations and then grouped into parent organizations by approximate name matches. This resulted in grouping the following number of pharmacy locations (unique NPIs) to the identified specific operates as per **Table 13-8:**

Table 13-8: Pharmacy Groupings and Associated Number of NPIs

Pharmacy Grouping	Number of Associated NPIs
Walgreens	3,832
CVS Caremark	2,793
Small Pharmacy	2,676
Walmart	1,144
Publix	832
Other	523
Winn Dixie	270
Rite Aid	143
Humana	23
Briova	16
Accredo	5
Express Scripts	3
Acaria	3
Perform Specialty	1
Exactus	1

Source: 3 Axis Advisors review of FL claims data

Every effort was made to ensure a pharmacy name was appropriately associated with the parent organization. This was most impactful for CVS Caremark; whose grouping includes their mail order and community pharmacy operations as well as their long-term care pharmacies incorporated under Omnicare. Small Pharmacies are comprised primarily of the following types of pharmacies:

- Community / Retail
- Compounding

- Institutional
- Clinics

For a complete list of pharmacy names associated with our identified small pharmacy groupings please refer to [Appendix C: Small Pharmacy & Other Pharmacy Groupings](#). Note that *Other* in **Table 13-8** represent pharmacies whose name were provided as *Other* within the AHCA claims data.

13.3.2.2 ICN Transformations

Based upon *The Florida Medicaid Prescribed Drug Services Coverage, Limitations and Reimbursement Handbook* dated July 2014¹¹⁰, the provided ICN may be separated as follows per **Figure 13-1**:

Figure 13-1: FL Manual ICN Descriptions

Field Title	Field Title Description
INTERNAL CONTROL NUMBER (ICN)	<p>The ICN is the unique identifying number assigned to each claim submitted. The ICN is the primary number used to identify the claim in the system. The format for the ICN is RYYYJJSSSSSS, in which:</p> <p>RR= Region YY=2 Digit Year (e.g. 10 for 2010) JJ=Julian Day SSSSSS=Sequence Number</p> <p>Applicable regions for pharmacy claims:</p> <p>10 Paper Claim 11 Paper Claim with Attachments 20 Electronic Claims without Attachments (designated for batch claims submitted electronically rather than through Point of Sale) 25 Point of Sale Claim 50 Adjustment, Non-Check Related 57 Void, Check Related 59 Point of Sale Reversal 69 Encounter Reversal 70 Encounters</p>

Source: AHCA Florida Medicaid Prescribed Drug Services Coverage, Limitations and Reimbursement Handbook

The following transformations were made to separate the region codes and Julian date from the ICN into standalone field and to convert the Julian date into the standard four-digit year, two-digit month and two-digit day format:

```
Alter Table [Claims].[dbo].[ALL_FL] ADD RegionCode As
Left(num_ICN,2);
```

--

```
ALTER TABLE [Claims].[dbo].[ALL_FL] ADD JULIANDATE AS SUBSTRING([NUM_ICN],3,5);
```

--

```
ALTER TABLE [Claims].[dbo].[ALL_FL] ADD YYYYMMDD AS DATEADD(day,
CAST(RIGHT(SUBSTRING([NUM_ICN],3,5),3) AS int)-1, CONVERT(date,LEFT(SUBSTRING([NUM_ICN],3,5),
2) + '0101', 112));
```

The resulting Julian date was used to link all time sensitive data values on an aggregate month and year basis to the Julian derived month and year.

13.3.2.3 NDC Transformations

In order to identify brand vs. generic, we utilized MediSpan clinical drug reference to identify the Brand Name Code (BNG) as well as the FDA application type. We used these two fields to define a brand claim as any NDC whose BNG code = "T" and FDA application type = "NDA" or "BLA". We defined generic as claims whose NDC had a BNG code = "G" and FDA application type = "ANDA".

13.3.2.4 Nam Provider Transformations

In order to identify the appropriate MCO on a claim we needed to reconcile the occasional text difference within the Nam_Provider field for MCO encounter claims (i.e. WELLCARE OF FLORIDA INC vs. WELLCARE OF FLORIDA, INC.). Without grouping like plans together they would appear as separate entities and make aggregate and per plan estimates wrong. Because the majority of this report focuses on the Top 6 MCOs the following table details the groupings of the listed Nam_Provider values to the Plan Group:

Table 13-9: Florida MCO Groupings

Plan Group	Nam Provider
WELLCARE / STAYWELL	STAYWELL/WELLCARE OF FLORIDA, INC
	WELLCARE OF FLORIDA INC
	WELLCARE OF FLORIDA, INC.
CENTENE / SUNSHINE	SUNSHINE STATE HEALTH PLAN INC
	SUNSHINE STATE HEALTH PLAN, INC
MOLINA	MOLINA HEALTH CARE OF FLORIDA INC
	MOLINA HEALTHCARE OF FLORIDA INC
	MOLINA HEALTHCARE, INC
PRESTIGE HEALTH	FLORIDA TRUE HEALTH INC LLC
	FLORIDA TRUE HEALTH, INC
	PRESTIGE HEALTH CHOICE
	PRESTIGE HEALTH CHOICE, LLC
SIMPLY HEALTHCARE	SIMPLY HEALTHCARE PLANS INC
	SIMPLY HEALTHCARE PLANS, INC
	SIMPLY HEALTHCARE PLANS, INC.
UNITED HEALTHCARE	UNITED HEALTH CARE PLANS
	UNITED HEALTHCARE OF FLORIDA
	UNITED HEALTHCARE OF FLORIDA INC
	UNITED HEALTHCARE OF FLORIDA, INC.

Source: 3 Axis Advisors FL Claims data

Note that all plans were grouped but the groupings associated with the other plans are not viewed as significant as they are grouped into Other MCOs.

13.3.3 Florida Medicaid Brand Preferred List August 2019

The pdf file for the Florida Medicaid *Brand Drug Preferred List* dated August 2019 was accessed from the AHCA website. This pdf document was converted into word to obtain text descriptions of

the preferred Brand name products for the purposes of identifying utilization associated with both the brand and generic products on this list. Because the document contained only text descriptions, the following transformation was performed to gather an approximate list of brand medications (NDCs) to analyze:

```

SELECT *
INTO FL_BRAND_PREFERRED
FROM [Medi-Span].[dbo].[SmallerDefinitionTable]
WHERE [Product Name] LIKE '%Advair%' OR
[Product Name] LIKE '%Aggrenox%' OR
[Product Name] LIKE '%AndroGel%' OR
[Product Name] LIKE '%Azactam%' OR
[Product Name] LIKE '%Bicnu%' OR
[Product Name] LIKE '%Biltricide%' OR
[Product Name] LIKE '%Butrans%' OR
[Product Name] LIKE '%Catapres%' OR
[Product Name] LIKE '%Cellcept%' OR
[Product Name] LIKE '%Cipro%' OR
[Product Name] LIKE '%Copaxone%' OR
[Product Name] LIKE '%Delzicol%' OR
[Product Name] LIKE '%Derma%' OR
[Product Name] LIKE '%Diclegis%' OR
[Product Name] LIKE '%Differin%' OR
[Product Name] LIKE '%E.E.S.%' OR
[Product Name] LIKE '%Elidel%' OR
[Product Name] LIKE '%Emend%' OR
[Product Name] LIKE '%Exelon%' OR
[Product Name] LIKE '%Finacea%' OR
[Product Name] LIKE '%Focalin%' OR
[Product Name] LIKE '%Gleevec%' OR
[Product Name] LIKE '%Glyset%' OR
[Product Name] LIKE '%Humalog%' OR
[Product Name] LIKE '%Kitabis%' OR
[Product Name] LIKE '%Lamictal%' OR
[Product Name] LIKE '%Lescol%' OR
[Product Name] LIKE '%Letairis%' OR
[Product Name] LIKE '%Lialda%' OR
[Product Name] LIKE '%Lotemax%' OR
[Product Name] LIKE '%Lyrica%' OR
[Product Name] LIKE '%Mephyton%' OR
[Product Name] LIKE '%Micardis%' OR
[Product Name] LIKE '%Natroba%' OR
[Product Name] LIKE '%Norvir%' OR
[Product Name] LIKE '%Prevacid%' OR
[Product Name] LIKE '%Proair%' OR
[Product Name] LIKE '%Proventil%' OR
[Product Name] LIKE '%Protopic%' OR
[Product Name] LIKE '%Ranexa%' OR
[Product Name] LIKE '%Rapamune%' OR
[Product Name] LIKE '%Relpax%' OR
[Product Name] LIKE '%Renvela%' OR
[Product Name] LIKE '%Retin-A%' OR
[Product Name] LIKE '%Rozerem%' OR
[Product Name] LIKE '%Suboxone%' OR
[Product Name] LIKE '%Suprax%' OR
[Product Name] LIKE '%Symbyax%' OR
[Product Name] LIKE '%Tamiflu%' OR
[Product Name] LIKE '%Tasmar%' OR
[Product Name] LIKE '%Tikosyn%' OR
[Product Name] LIKE '%Tobi%' OR
[Product Name] LIKE '%Tobradex%' OR
[Product Name] LIKE '%Tracleer%' OR
[Product Name] LIKE '%Transderm%' OR
[Product Name] LIKE '%Tribenzor%' OR
[Product Name] LIKE '%Trizivir%' OR
[Product Name] LIKE '%Vagifem%' OR
[Product Name] LIKE '%Valstar%' OR
[Product Name] LIKE '%Vesicare%' OR
[Product Name] LIKE '%Voltaren%' OR
[Product Name] LIKE '%Xeloda%' OR
[Product Name] LIKE '%Xopenex%' OR
[Product Name] LIKE '%Zavesca%' OR
[Product Name] LIKE '%Zovirax%' OR
[Product Name] LIKE '%Zytiga%'

```

Because this list only identified partial matches to written names on the *Brand Drug Preferred List* to the listed product name within Medi-Span, QA was conducted to ensure the partial matches were appropriately aligned to the Florida Medicaid *Brand Drug Preferred List*. Those rows found not to match the list were removed. A smaller database was then constructed to allow for easy identification of brand name medications that AHCA preferred over generic alternatives utilizing Medi-Span's proprietary GPI logic. All GPI 14 values for identified brand name NDCs were used to collect all products, both brand and generic into a singular product list.

```

WITH CTE As (
SELECT a.[GPI 14 - Name], a.[NDC UPC HRI Unformatted], a.[Product Name], b.[GPI Unformatted]
FROM [Medi-Span].[dbo].[FL_Brand_PREFERRED] a
JOIN Medi-Span.dbo.Definitions b on a.[NDC UPC HRI Unformatted]=b.[NDC UPC HRI Unformatted])

SELECT c.[Brand Name Code (BNC)]
, c.[GPI 14 - Name]
, c.[NDC UPC HRI Unformatted]
, c.[Product Name]
, c.[GPI Unformatted]
INTO FL_BRAND_PREFERRED_With_G_NDCs
FROM Medi-Span.dbo.Definitions c
JOIN CTE on cte.[GPI Unformatted]=c.[GPI Unformatted]

```

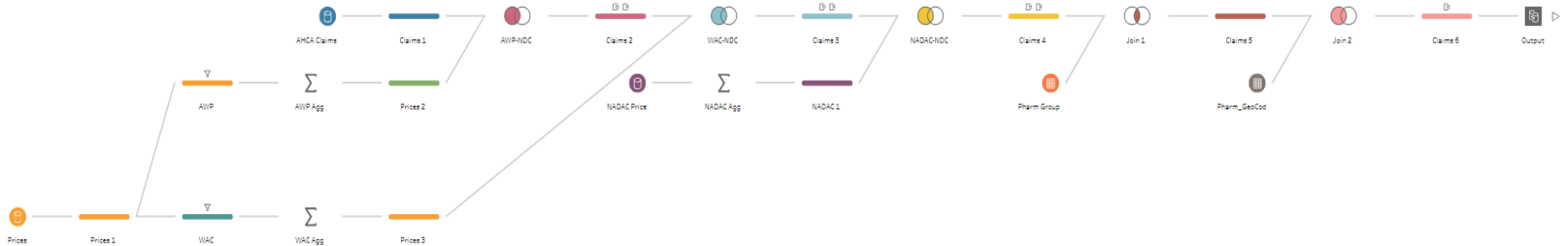
This database was then used to identify and flag individual claim records (i.e. ICNs) whose NDCs on the claim matched a product within this database for the year 2017, 2018, and 2019 for the purposes of conducting the analysis found in [Brand vs. Generic Compliance](#).

13.4 CONSTRUCTION OF DATABASES

This section details how we constructed the databases that we used to assess the Florida Medicaid pharmacy program.

The first step was to construct a database of Florida Medicaid claims joined with our Medi-Span definitions and prices (AWP & WAC). We then connected NADAC pricing information to the Florida Medicaid claims data. From here we added identified pharmacy groups along with the latitude and longitude information to enable mapping functions within Tableau. We used Tableau Prep to stitch together these various data sources (CMS' NADAC database, Florida Medicaid Drug Utilization Data, Medi-Span, etc), constructing the flow as illustrated in **Figure 13-2** (next pages).

Figure 13-2: AHCA Claims Flow adding Clinical Drug Information and Prices



Element	Type	Description	Element	Type	Description
AHCA Claims	<i>Database</i>	Database of Pharmacy claims from AHCA with ICN and Pharmacy Provider Transformations	NADAC Price	<i>Database</i>	Database of lagged CMS NADAC Prices
Prices	<i>Database</i>	Database of MediSpan AWP and WAC Prices as well as Clinical Definitions	NADAC Agg	<i>Aggregate</i>	Calculates the Avg NADAC price by NDC in a month-year
AWP	<i>Step</i>	Keeps only AWP Price Information	NADAC-NDC	<i>Left Join</i>	Joins NADAC price to NDC of the claim on the month-year
WAC	<i>Step</i>	Keeps only WAC Price Information	Claims 4	<i>Step</i>	Calculates Total AWP price for claim based upon units associated dispensed Removes duplicated fields
AWP Agg	<i>Aggregate</i>	Calculates Average AWP price by NDC in a month-year	Pharm Group	<i>Database</i>	Database of FL Pharmacy Grouped into pharmacy types
WAC Agg	<i>Aggregate</i>	Calculates Average WAC price by NDC in a month-year	Join 1	<i>Inner Join</i>	Joins Pharmacy Group to NPI on the claim
AWP-NDC	<i>Left Join</i>	Joins AWP price to NDC of the claim on the month-year	Pharm_GeoCod	<i>Database</i>	Database of FL Pharmacies with identified address and geocode information

Element	Type	Description	Element	Type	Description
WAC-NDC	<i>Left Join</i>	Joins WAC price to NDC of the claim on the month-year	Join 2	<i>Left Join</i>	Joins Latitude and Longitude to the NPI on the claim
Claims 2	<i>Step</i>	Calculates Total AWP price for claim based upon units associated dispensed Removes duplicated fields	Claims 6	<i>Step</i>	Calculations performed to margin over acquisition costs per claim, FL MCO Groupings, and 340B identification
Claims 3	<i>Step</i>	Calculates Total WAC price for claim based upon units associated dispensed Removes duplicated fields	Output	<i>Output</i>	Generates Tableau Hyper File

Source: 3 Axis Advisors Tableau Flow of AHCA Claims Data, MediSpan Clinical Drug Information & Price as well as CMS NADAC prices

The next database we constructed was the database to assess “spread pricing” within the Florida Medicaid managed care program. To do this, we first needed to clean up the received pharmacy claims and limit those for analysis to those associated with the Florida Medicaid program. To do this, we obtained a list of BIN / PCN / GROUPs associated with Florida’s Medicaid program from Florida pharmacies and confirmed these lists with those available from each of Florida’s NCPDP Payer Sheet and Pharmacy Provider Manual. See **Table 13-10** for details on the top seven MCOs and the FFS program:

Table 13-10: Florida MCO Payer Sheet and Pharmacy Manual Summaries

Plan Name	PBM	Specialty Pharmacy	Rx Bin	Rx PCN	Rx Group
Centene ^s	US Script / RxAdvance PBM/ Envolve / CVS	AcariaHealth/Envolve	008019		
Humana ^t	Humana Pharmacy Solutions		610649	03190000	
Molina ^u	Caremark	Caremark and Accredo	004336	ADV	
Prestige Healthcare ^v	PerformRx	Perform Specialty	600428	07550000	
Simply Healthcare (Anthem)	Express Scripts	Accredo	003858	MA	WK3A
Simply Healthcare (Anthem) ^w	IngenioRx	Ingenio	020107	CH	WK3A
United Healthcare	Optum	Briova			
WellCare ^x	Caremark	Exactus	004336	MCAIDADV	RX8888
WellCare	Caremark	Exactus	004336	MCAIDADV	RX8887
WellCare	Caremark	Exactus	004336	MCAIDADV	RX8775
WellCare	Catamaran (2015)		603286	01410000	806257
WellCare	Catamaran (2015)		603286	01410000	816257
WellCare	Catamaran (2015)		603286	01410000	816257
FFS ^y	Magellan		013352	P035013352	FLMEDICAID

Source: 3 Axis Advisors review of MCO NCPDP Payer Sheets and Pharmacy Provider Manuals

^s https://www.sunshinehealth.com/content/dam/centene/Sunshine/pdfs/SH_MMA-Member-Handbook_EN_Online.pdf

^t <http://apps.humana.com/marketing/documents.asp?file=2295826>

^u https://www.molinahealthcare.com/providers/mi/medicaid/manual/PDF/6_Pharmacy.pdf

^v <https://www.prestigehealthchoice.com/member/eng/gettingstarted/idcards.aspx>

^w https://provider.simplyhealthcareplans.com/docs/FLFL_SMH_CHA_HurricaneDorianProviderNotice.pdf

^x

https://www.wellcare.com/~/_media/PDFs/Florida/Provider/Medicaid/2019/FL_CAID_PROV_Quick_Reference_Guide_ENG_2_2019.ashx

https://www.wellcare.com/~/_media/PDFs/Florida/Provider/Medicaid/2019/FL_CAID_PROV_Quick_Reference_Guide_ENG_2_2019.ashx

^y https://ahca.myflorida.com/medicaid/prescribed_drug/pdf/Florida_D0_Payer_Spec_Final.pdf

From this information, the following transformation was undertaken of the provided claims data to better identify claims associated with the Florida Medicaid program. The following SQL code was utilized to perform this transformation (Note this includes BIN beyond the top seven MCOs and FFS):

```
WITH CTE AS (
SELECT *
FROM [Claims].[dbo].[ClaimsFlorida]
WHERE BINNbr='003858' OR BINNbr='004336' OR BINNbr='008019' OR BINNbr='013352' OR
BINNbr='016523' OR BINNbr='016523' OR BINNbr='021027' Or BINNbr='600428' Or BINNbr='603286' OR
BINNbr='610494' Or BINNbr='610591')

Select CTE.*, b.[GPI 2 - Group],b.[GPI 4 - Class],b.[GPI 6 - Subclass],b.[GPI 14 -
Name],b.[Brand Name Code (BNC)], b.[Rx OTC (Rx)]
INTO FL_BINMATCH
From CTE
JOIN Medi-Span.dbo.MEDDefTable b on Cte.SvcID=b.[NDC UPC HRI Unformatted]
```

An initial review was conducted of these identified claims. This review included identifying potential outliers of claims based upon compliance with broader rules. For example, CMS limits the costs a Medicaid recipient can be exposed to out of pocket. CMS self-describes the Federal requirements as follows: "Cost sharing for most Medicaid services is limited to nominal or minimal amounts. The maximum copayment that Medicaid may charge is based on what the state pays for that service, as described in the following table. These amounts are updated annually to account for increasing medical care costs."¹¹¹ These requirements, as summarized in **Table 13-11**, allow for an assessment of BIN / PCN/ GroupID that would appear related to Florida Medicaid programs as the current identification process was incomplete (and potentially included commercial, Medicare, and other payers).

Table 13-11: Federal Copay Limits for Medicaid programs

FFS Services and Supplies: Drugs	Eligible Populations by Family Income		
	<100% FPL	101-150% FPL	>150% FPL
Preferred Drugs	\$4	\$4	\$4
Non-Preferred drugs	\$8	\$8	20% of cost the agency pays
Maximum Nominal Deductible and Managed Care Copayment Amounts			
Deductible	\$2.65		
Managed Care Copayment	\$4		

Source: CMS Cost Sharing Information for Medicaid Programs

Note, this presumes that all plans follow Federal requirements. This may be an assumption worth further investigation based upon other sections of this report. We do not have individual patient identifiers, nor do we have a way to identify their underlying eligibility group for a patient, to make such an assessment on the underlying accuracy of copayments (i.e. limited data requires this assumption be made).

A review of the identified claims first finds that not all plans in Florida Medicaid had claims available for review. This is expected given the Florida claim data reviewed spanned from 2012 to June 11, 2019 vs. the pharmacy claim data being limited to 2017 to June 11th, 2019; however, even within 2017-2018, not all participating plans had claims available for review from the pharmacies. This may be attributable to the [regionality of Florida's MCO programs](#). Another important finding of this initial review is that not all claims appeared to comply with a uniform standard of an exact BIN/PCN/Group

match. For example, within the FFS program the following combinations were found as paid claims within the data set:

Table 13-12: Results of BIN / PCN / Group ID Identification for Florida Medicaid Plans

Prescription Bank Identification Number (Rx Bin)	Processor Control Number (PCN)	Group ID
13352		FLMEDICAID
13352	1	FLMEDICAID
13352	322	
13352	322	FLMEDICAID
13352	26336342	
13352	26336342	FLMEDICAID
13352	35013352	
13352	35013352	FLMEDICAID
13352	9035013352	FLMEDICAID
13352	DRFLPROD	
13352	DRFLPROD	FLMEDICAID
13352	FLM	FLMEDICAID
13352	MCAIDADV	FLMEDICAID
13352	P035013350	FLMEDICAID
13352	P035013352	
13352	P035013352	FLMEDICAID
13352	P035013352	FLMEDICAID
13352	P035013352	RX8888
13352	P035013552	FLMEDICAID
13352	P?35?13352	FLMEDICAID
13352	PO35013352	FLMEDICAID
13352	T035013352	FLMEDICAID

Source: 3 Axis Advisors analysis of pharmacy claims data

Of the 22 combinations of BIN/PCN/ Group, only three (in red) would appear to clearly not be Florida Medicaid. All others would either appear to have a clear group match or an approximate PCN match. A detailed review was conducted for each of the plans with available data. In the interest of creating an accurate dataset with the best amount of matching, the following transformation was done to identify all claims with each plan available for review:

```

SELECT *
INTO CLEAN_FL_CLAIMS
FROM [Claims].[dbo].[ClaimsFlorida]
WHERE (BINNbr='003858' AND GroupID='WK3A') /*Simply Healthcare*/
OR (BINNbr='003858' AND GroupID='WKMA') /*Simply Healthcare*/
OR (BINNbr='004336' AND ProcessorCtrlNbr='MCAIDADV' AND GroupID='RX8888') /*Staywell
[Wellcare]*/
OR (BINNbr='004336' AND ProcessorCtrlNbr='MCAIDADV' AND GroupID='RX8887') /*Staywell
[Wellcare]*/
OR (BINNbr='004336' AND ProcessorCtrlNbr='MCAIDADV' AND GroupID='RX8775') /*Staywell
[Wellcare]*/
OR (BINNbr='610649' AND ProcessorCtrlNbr='03190000') /*Humana*/
OR (BINNbr='610649' AND ProcessorCtrlNbr='03191500') /*Humana*/
OR (BINNbr='004336' AND GroupID='RX0794') /*Molina*/
OR (BINNbr='600428') /*Prestige*/

```



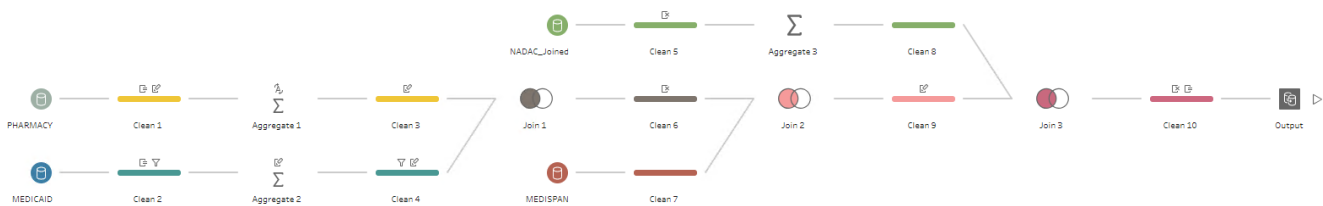
```

OR (BINNbr='610494' AND GroupID LIKE '%ACUFL%') /*United Healthcare*/
OR (BINNbr='013352' AND ProcessorCtrINbr LIKE '%35013352%' AND GroupID='FLMEDICAID') /*FFS*/
OR (BINNbr='013352' AND GroupID='FLMEDICAID') /*FFS*/
OR (BINNbr='008019') /*Sunshine [Centene]*/
OR (BINNbr='004336' AND GroupID='RX5441') /*Sunshine [Centene]*/

```

From this transformed dataset, we used Tableau Prep to stitch together these various data sources (CMS' NADAC) database, Medi-Span PriceRx, Florida Medicaid Drug Utilization Data, Florida Pharmacy Claim Drug Utilization Data) to aggregate pharmacy claim payments to the payments within the Florida Medicaid claims data via constructing the flow as illustrated in **Figure 13-3**.

Figure 13-3: AHCA Claims Flow adding Clinical Drug Information and Prices



Element	Type	Description	Element	Type	Description
Pharmacy	Database	Database of Pharmacy claims	Medi-Span	Database	Database of clinical drug information from Medi-Span
Medicaid	Database	Database of Florida Medicaid Claims	Clean 5	Step	Removes 9 fields from the NADAC file from CMS (NDC description, pharmacy type indicator, OTC, explanation code, classification for rate setting, corresponding generic drug NADAC per Unit, Corresponding Generic Drug effective date, As of date, day)
Clean 1	Step	Creates plan names from BIN / PCN/ Group combinations	Clean 6	Step	Removes duplicated Plan ID and NPI fields
Clean 2	Step	Keeps only the top 7 MCOs; only claims with proper payment amounts and exclude region codes associated with reversals	Clean 7	Step	No alterations
Aggregate 1	Aggregate	Calculates the average reimbursement per NDC by plan,	Aggregate 3	Aggregate	Calculates the average NADAC price per unit by year and month

Element	Type	Description	Element	Type	Description
		year, month and pharmacy NPI			
Aggregate 2	<i>Aggregate</i>	Calculates the average reimbursement per NDC by plan, year, month and pharmacy NPI	Join 2	<i>Left Join</i>	Joins the combined Pharmacy and Florida claims to Medi-Span clinical drug information
Clean 3	<i>Step</i>	Renames fields to identify origin as Pharmacy claims database	Clean 8	<i>Step</i>	No alterations
Clean 4	<i>Step</i>	Renames fields to identify origin as Medicaid claims	Clean 9	<i>Step</i>	No alterations
NADAC_Joined	<i>Database</i>	Database of NADAC price per unit	Join 3	<i>Left Join</i>	Joins the combined Pharmacy, Florida and Medi-Span database with the NADAC price per unit database on NDC, Year, Month
Join 1	<i>Left Join</i>	Joins together Pharmacy and Florida Claim payments on Plan, Year, Month, NDC and pharmacy NPI	Clean 10	<i>Step</i>	Calculates the NADAC price for claims based upon Florida or Pharmacy claim utilization

Source: 3 Axis Advisors Tableau Flow of AHCA Claims Data, FL Pharmacy Claims Data, MediSpan Clinical Drug Information & Price as well as CMS NADAC prices

This resulted in a database containing 110 unique pharmacies with 974,031 prescriptions dispensed. Of these pharmacy claims, 793,941, 81.5%, were for generic drugs. Claims in this database spanned from 2014 to 2019 with the majority of claims (876,199, or 90%, being in 2017, 2018 and 2019). The combined yearly average during these three years was 292,066.

14 ABOUT 3 AXIS ADVISORS LLC

3 Axis Advisors LLC is an elite, highly specialized consultancy that partners with private and government sector organizations to solve complex, systemic problems and propel industry reform through data-driven advocacy. With a primary focus on identifying and analyzing U.S. drug supply chain inefficiencies and cost drivers, 3 Axis Advisors LLC offers unparalleled expertise in project design, data aggregation and analysis, government affairs and media relations. 3 Axis Advisors LLC arms clients with independent data analysis needed to spur change and innovation within their respective industries. Co-founders Eric Pachman and Antonio Ciaccia were instrumental in exposing the drug pricing distortions and supply chain inefficiencies embedded in Ohio's Medicaid managed care program. They are also the co-founders of 46brooklyn Research, a non-profit organization dedicated to improving the transparency and accessibility of drug pricing data for the American public. To learn more about 3 Axis Advisors LLC, visit www.3axisadvisors.com.

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15 ACKNOWLEDGEMENTS

Until now, most of our firm's pharmacy-oriented analyses have been through deep-dives into relatively limited datasets. While those analyses were sound, informative, and insightful, this Florida project provided us with a welcome opportunity to go beyond the study of spread pricing, generic effective rates, pharmacy profitability, and big-picture pricing distortions. As insanely thrilling as all of that sounds, we would be lying if we said that we weren't interested in finding even more detailed datasets in order to provide even more detailed analyses.

With that in mind, we believe it is imperative to acknowledge and applaud Florida's state officials for their incredible dedication to open records and public transparency. In many regards, Florida's sunshine laws are among the best in the country. But even with favorable transparency laws, it also takes dedicated agency officials to actually follow through on those legal responsibilities. In that vein, we must also applaud Florida's Agency for Health Care Administration (AHCA) for their responsiveness, cooperation, and communication in regards to our requests.

We would also like to thank our home state of Ohio for first creating the culture of inquiry into the dynamics and details into pharmacy benefits and the prescription drug supply chain as a whole. If not for the work of the Columbus Dispatch, Attorney General Dave Yost, and several state lawmakers, these types of analyses would arguably not exist, and the status quo would frustratingly persist.

Additionally, we would like to thank the many pharmacies across the state of Florida who have voluntarily turned over pharmacy claims data to help us better understand the dynamics at play in the Florida Medicaid program.

16 GLOSSARY OF KEY TERMS

- **340b Claims**

Pharmacies claims purchased at significant discounts under the program created by the Veterans Health Care Act of 1992 (i.e. 340B program). The law provides access to purchase drugs at reduced prices for certain healthcare entities called Covered Entities

- **Actual Acquisition Cost (AAC)**

The purchase price of a drug paid by a provider net of all discounts, rebates, chargebacks or other adjustments to the price of the drug, not including professional dispensing fees

- **Affiliated Pharmacies**

Pharmacies officially attached or connected to a Pharmacy Benefit Manager (PBM) or Managed Care Organization (MCO) often given preferred status to dispense selected medications (i.e. specialty prescriptions)

- **Agency for Health Care Administration (AHCA)**

Florida government agency responsible for the administration of Florida's Medicaid program, licensure and regulation of Florida's health facilities, and for providing information to the public about the quality of care they receive

- **AHCA claims database**

The over 350 million pharmacy claims and encounters provided by the Florida Agency for Health Care Administration (AHCA) for the purposes of conducting this analysis

- **Average Manufacturer Price (AMP)**

The average price paid by wholesalers for drugs distributed to the retail class of trade, net of customary prompt pay discounts. Note AMP is statutorily defined, and its calculation is based on actual sales transactions

- **Average Wholesale Price (AWP)**

A prescription drug pricing benchmark that estimates the average price paid by a retailer to buy a prescription drug product from a pharmacy wholesaler. Note AWP is not a true representation of the actual market price to acquire prescription drug products

- **Best Price**

The lowest price available from the manufacturer during the rebate period to any wholesaler, retailer, provider, health maintenance organization, nonprofit entity, or governmental entity within the United States, excluding—

(I) any prices charged on or after October 1, 1992, to the Indian Health Service, the Department of Veterans Affairs, a State home receiving funds under section 1741 of title 38, United States Code[229], the Department of Defense, the Public Health Service, or a covered entity described in subsection (a)(5)(B) (including inpatient prices charged to hospitals described in section 340B(a)(4)(L) of the Public Health Service Act[230]);

(II) any prices charged under the Federal Supply Schedule of the General Services Administration;

(III) any prices used under a State pharmaceutical assistance program;

(IV) any depot prices and single award contract prices, as defined by the Secretary, of any agency of the Federal Government;

(V) the prices negotiated from drug manufacturers for covered discount card drugs under an endorsed discount card program under section 1860D-31; and

(VI) any prices charged which are negotiated by a prescription drug plan under part D of title XVIII, by an MA-PD plan under part C of such title with respect to covered part D drugs or by a qualified retiree prescription drug plan (as defined in section 1860D-22(a)(2)) with respect to such drugs on behalf of individuals entitled to benefits under part A or enrolled under part B of such title, or any discounts provided by manufacturers under the Medicare coverage gap discount program under section 1860D-14A

- **Brand Effective Rate (BER)**

The relative rate of the full cost (reimbursement plus copay) of all brand drugs over a certain time frame as a percentage of the total weighted average AWP for those same brand drugs over the same time frame

- **Capitated Rate payments (aka capitation payments or capitated rates)**

A payment arrangement for health care service that pays a set amount for each enrolled person assigned to them, per period of time, whether or not that person seeks care. Also known as capitation payments

- **Consumer Price Index-Urban (CPI-U)**

A measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services

- **Contract Pharmacies**

Pharmacies who Covered Entities within the 340B make agreements with to dispense drugs purchased through the program on their behalf

- **Cost of dispensing (COD)**

The calculated amount of pharmacy costs incurred to ensure that possession of an appropriately covered outpatient drug is transferred to a Medicaid beneficiary. As per 42 CFR § 447.502, pharmacy costs included in this calculated amount include, but are not limited to, reasonable costs associated with a pharmacist's time in checking the computer for information about an individual's coverage, performing drug utilization review and preferred drug list review activities, measurement or mixing of the covered outpatient drug, filling the container, beneficiary counseling, physically providing the completed prescription to the Medicaid beneficiary, delivery, special packaging, and overhead associated with maintaining the facility and equipment necessary to operate the pharmacy

- **Covered Entities**

Covered entities are specified healthcare organizations able to purchase drugs at a significant discount within the 340B program created as part of the Veterans Health Care Act of 1992.

Covered Entities include:

- Disproportionate share hospitals (DSHs)
- Children's hospitals and cancer hospitals exempt from the Medicare prospective payment system
- Sole community hospitals
- Rural referral centers
- Critical access hospitals (CAHs)
- Federally qualified health centers (FQHCs)
- State-operated AIDS drug assistance programs
- The Ryan White Comprehensive AIDS Resources Emergency (CARE) Act clinics and programs
- Tuberculosis clinics
- Black lung clinics
- Title X family planning clinics
- Sexually transmitted disease clinics
- Hemophilia treatment centers
- Urban Indian clinics
- Native Hawaiian health centers

- **Differential Generic Pricing**

The observed difference in pricing of the same generic prescription drug between two different pharmacy providers

- **Direct And Indirect Remuneration (DIR)**

A term used in Medicare Part D to identify price concessions that impact gross prescription drug costs not captured at the point of sale. They include but are not necessarily limited to

discounts, chargebacks or rebates, cash discounts, free goods contingent on a purchase agreement, upfront payments, coupons, goods in kind, free or reduced-price services, grants, or other price concessions or similar benefits from manufacturers, pharmacies or similar entity

- **Durable Medical Equipment (DME)**

Devices that can withstand repeated use and whose use is primarily and customarily to serve a medical purpose.

- **Effective rate contracts**

A contract where the full cost (reimbursement plus copay) of all drugs over a certain time frame must equal a certain percentage discount to a reference price, such as AWP. Usually the effective rate varies by the type of drug (i.e. brand vs. generic)

- **Federal Rebate**

The amount reimbursed for qualifying prescription drug claims within Medicaid by drug manufacturers who participate in the Medicaid Drug Rebate Program (MDRP)

- **Fee-for-Service (FFS)**

Medical and/or pharmacy claims where the state pays providers directly for the delivered healthcare service

- **Financial Summaries**

Audited financial reports submitted by Florida's managed care organizations (MCO) detailing their operations within Florida Medicaid based upon Florida's Agency for Health Care Administration (AHCA) provided instructions

- **Generic Effective Rate (GER)**

The relative rate of the full cost (reimbursement plus copay) of all generic drugs over a certain time frame as a percentage of the total weighted average AWP for those same brand drugs over the same time frame. Note reimbursement within certain prescription drug networks may be based upon a GER contract

- **Gross Cost**

The entire acquisition cost of a product or service. In prescription drugs this is often the transactional price paid for the drug at the point-of-sale

- **High Margin Generic Drugs**

Any generic drug that was collectively priced by Florida Medicaid managed care with a Margin over NADAC of \$25 per prescription or more

- **Managed care organizations (MCOs)**

Managed Care is a health care delivery system organized to manage cost, utilization, and quality. Medicaid MCOs provides for the delivery of Medicaid health benefits and additional services through contracted arrangements between themselves and state Medicaid agencies and accept a set per member per month (capitation) payment for these services

- **Managed Medical Assistance (MMA) services**

A term for the grouped services Florida contracts with managed care organizations (MCOs) to deliver within its Medicaid program. These include: Hospital, Professional, Maternity, Mental Health & Substance Abuse, Dental, Transportation, Pharmacy and Other State Plan Services

- **Margin over Acquisition Cost**

The amount of reimbursement provided by a health insurance carrier for a prescription drug relative to the acquisition cost for the prescription drug based upon its national drug code. In this report, for brand name medications this was calculated based upon the NADAC for the NDC or 96% of the WAC cost for the NDC if a NADAC was unavailable

- **Margin over NADAC**
The amount of reimbursement provided by a health insurance carrier for a prescription drug relative to the NADAC based cost for the prescription drug based upon its national drug code (NDC)
- **Maximum Allowable Cost (MAC)**
A payer or pharmacy benefit manager (PBM)-generated list of products that includes the upper limit that the payer will reimburse for a prescription drug product
- **MCO-to-PBM spread**
The difference between the capitation revenue paid to the MCO for pharmacy services and the pharmacy claims costs paid to its PBMs
- **Medicaid Drug Rebate Program (MDRP)**
A program that includes Centers for Medicare & Medicaid Services (CMS), state Medicaid agencies, and participating drug manufacturers that helps to offset the Federal and state costs of most outpatient prescription drugs dispensed to Medicaid patients via a prescription drug rebate
- **Medical Loss Ratio (MLR)**
A measure of the percentage of premium dollars that a health plan spends on healthcare costs versus administrative costs
- **Morphine Milligram Equivalent (MME)**
A value assigned to prescription opioid drugs to represent their relative potency to the reference opioid morphine
- **National Average Drug Acquisition Cost (NADAC)**
A national prescription drug pricing benchmark that is reflective of the prices paid by retail community pharmacies to acquire prescription and over-the-counter covered outpatient drugs
- **National Drug Codes - NDCs**
A unique, three-part segmented number published by the Food and Drug Administration (FDA) used to identify for drugs within the US Drug Supply chain
- **National Provider Identifier (NPI).**
A unique identification number for healthcare providers
- **Net Cost**
The realized cost of a good or service after the gross cost is reduced by any benefits gained from acquiring the good or service. In prescription drugs, this is the cost of the drug after accounting for any rebates or other price concessions associated with the purchase of the drug
- **Operating Leverage**
The degree to which revenue growth translates to net income growth
- **Payer Network**
The list of designated pharmacies available from which beneficiaries may obtain medications
- **PBM-to-Pharmacy spread**
The difference between the payments made by a pharmacy benefit manager (PBM) to the pharmacy for a prescription and the charge to the payer for the same claim
- **Per member Per month (PMPM)**
The dollar amount paid to a provider of healthcare service each month for each person for whom the provider is responsible for providing services
- **Pharmacy Group**
Pharmacies classed together based upon our [Pharmacy Transformations](#)

- **Preferred Drug List (PDL)**
The list of specific medications within a prescription drug benefit that a payer has indicated are preferred relative to other medications in their therapeutic classification based upon their clinical significance and overall efficiencies
- **Prior authorization (PA)**
The act of seeking approval for certain medical and prescription drug plans from the health insurance carrier before they are paid for
- **Professional Dispensing Fee (PDF)**
Pharmacy costs associated with ensuring that the possession of the appropriate outpatient drug is transferred to a Medicaid beneficiary. These costs include, but are not limited to, the following:
 - Costs associated with checking the computer about an individual's coverage
 - Performing Drug Utilization Review and Preferred Drug List Review activities
 - Measurement or mixing of the drug
 - Filling the container
 - Beneficiary counseling
 - Physically providing the completed prescription to the Medicaid beneficiary
 - Delivery, special packaging and overhead associated with maintaining the facility and
 - Equipment necessary to operate the pharmacy
 (See 42 CFR § 447.502)¹¹²
- **Sensitivity Analysis**
A review to determine how different values affect a particular dependent variable under a given set of assumptions
- **Single Preferred Drug List (SPDL)**
A preferred drug list (PDL) that uniformly applies to all programs, such as the various managed care organizations, within a state Medicaid program
- **Spread Pricing**
The difference between the payments made by a pharmacy benefit manager (PBM) to the pharmacy for a prescription and the charge to the payer for the same claim
- **Supplemental Rebates**
A contractual relationship between a Medicaid program and a drug manufacturer or other intermediary that generates additional rebates above beyond those mandated under the Medicaid Drug Rebate Program (MDRP)
- **Therapeutic category**
A group of drugs used in the management of a same or similar disease state
- **True Up**
A process to resolve any differences between a contractual reimbursement rate in a given agreement and the actual experienced reimbursement provided
- **Unit Rebate Amount (URA)**
The amount of money owed by a drug manufacturer to state Medicaid agencies per unit of drug dispensed.
- **Wholesale Acquisition Cost (WAC)**
The list price paid by a wholesaler, distributor and other direct accounts for drugs purchased from the wholesaler's supplier

17 APPENDIX A: FLORIDA MEDICAID MCO OVERVIEW (2018)

To facilitate a high-level understanding of MCO operations within Florida Medicaid, **Table 17-1** provides a summary of total payments and number of prescription records during the last full year of claims data (2018):

Table 17-1: Florida MCO Total Payments and Prescription Volume (2018)

Plan Grouping	Amount Paid by Plan	% of all MCO Payments	# of Prescriptions	% of all MCOs Rx's
Staywell / WellCare	\$554,731,100	23%	7,034,458	23%
Simply Healthcare	\$437,925,538	18%	5,312,181	17%
Sunshine / Centene	\$303,201,611	12%	4,075,739	13%
Molina*	\$257,343,078	11%	3,163,550	10%
Prestige Health	\$219,192,731	9%	2,858,993	9%
Humana**	\$217,480,281	9%	2,763,124	9%
United Healthcare	\$191,882,778	8%	2,371,330	8%
Other	\$262,674,708	11%	2,876,117	9%
<i>AHF MCO of Florida Inc.</i>	\$37,406,001	2%	74,216	<1%
<i>Better Health</i>	\$47,844,438	2%	612,383	2%
<i>Coventry</i>	\$36,944,042	2%	491,420	2%
<i>Florida Community Care</i>	\$27,409,232	1%	271,842	1%
<i>Magellan</i>	\$112,691,720	5%	1,421,691	5%
<i>Miami Children</i>	\$379,275	<1%	4,565	<1%
Total	\$2,444,431,824.73	100%	30,455,492	100%

* Our analysis of pharmacy reimbursement data indicates that AHCA claims data for Molina include meaningful pricing spread. As such, Molina claims have been excluded from the "Top 7 MCOs" for analysis of estimated payments to pharmacies

** Excluded from top MCOs due to Qty dispensed issues within claim data; see [Humana quantity dispensed per claim analysis](#)

Source: 3 Axis Advisors analysis of Florida Medicaid Drug Utilization Data

Throughout the report we will reference the MCOs in **bold** in **Table 17-1** as the top MCOs within Florida Medicaid as they comprise approximately 90% of the spend and utilization.

18 APPENDIX B: ASSUMPTIONS, LIMITATIONS AND MITIGATING FACTORS

18.1 LIMITATIONS OF NADAC

NADAC's main limitation is that it does not include off-invoice rebates that pharmacies may receive from wholesalers. Rebates lower the net cost to the pharmacy for many drugs and tend to be a percent discount off the invoice cost if a pharmacy meets various generic purchasing targets with its primary wholesaler or pays its wholesaler bill on-time. As such, NADAC should not be viewed as a reflection of pharmacy **net** costs - these will vary depending on pharmacy size and wholesaler contract terms. Anecdotally, rebates on generic drug purchases can reach up to 30-40% of invoice cost for larger pharmacies, but this value is partly offset by wholesaler requirements that prevent the pharmacy from shopping with other wholesalers for the best invoice price. In other words, **there is nothing preventing the wholesaler from increasing the pharmacy's invoice cost to partly offset the rebate, resulting in an invoice cost that is above NADAC.** Smaller pharmacies, pharmacies that choose to shop more aggressively for better invoice costs, or pharmacies that are predominantly buying from smaller wholesalers may receive rebates that are considerably lower than 30-40%, or there may be no rebates at all. All told, 3 Axis Advisors' qualitative research suggests that net average pharmacy acquisition cost is some discount to NADAC, but not as large as 30-40%. We believe that the restrictions placed on pharmacies by wholesalers, combined with above-NADAC invoice costs, are offsetting some portion of the rebate.

A secondary limitation of NADAC is that the survey of retail pharmacies that it is based on is voluntary. Myers & Stauffer randomly selects and surveys ~2,500 pharmacies a month. Of this group, 450-600 pharmacies per month provide their acquisition costs, which become the basis for NADAC. Of course, to the extent that there are NDCs that have not been purchased by the 450-600 pharmacies that respond to the survey, NADAC will not capture these NDCs. In April 2017, CMS assessed the materiality of this limitation. They found that NADACs were calculated for approximately 96% of all Medicaid claim submissions - 87% of brand claims, and 97% of generic claims.¹¹³ This significant level of NDC coverage for generic drugs mitigates the risk introduced by the voluntary nature of the survey, in our view.

18.2 LIMITATIONS OF BRAND DRUG PREFERRED LIST

The *Brand Drug Preferred List* on Florida Medicaid's website is for August 2019. There are no historical files for review. It was presumed that any medication that appears on this list has always been brand name preferred. This is believed to be a reasonable assumption based upon the manner with which Medicaid programs receive rebates. Because brand name medications can incur inflationary rebate penalties, the net cost of therapy for a brand name medication may remain cheaper for Medicaid programs for some time after the launch of a generic product until the acquisition cost is significantly lowered. With few exceptions, generic price declines over time are durable. Insofar as this assumption is concerned, it is possible that our analysis overestimates the impact of non-preferred generic medications if they were at one time previously allowed. Similarly, the analysis underestimates the impact of non-preferred generic medications if the list contained more entries in historical time frames.

18.3 LIMITATIONS OF FLORIDA MEDICAID DRUG UTILIZATION DATA

Although we were provided with a clear data dictionary for how to utilize and interpret the provided pharmacy claims data from AHCA, we unfortunately found inconsistencies between the definitions provided and the experience realized within the data. For example, the data contains clear definitions related to claim type (i.e. MCO vs. FFS) and identifies specific fields associated with each claim type (i.e. AMT OP PAID for MCO); however, we find payments associated with FFS claim types attributed to payments made by MCOs (i.e. AMT OP PAID).² This should not be possible for a claim within the FFS delivery system. These observations create data concerns within our report.

In order to resolve the identified [data discrepancies](#), we made transformations to the data which included:

- Removal of FFS claims with MCO payments
- Removal of select claims based upon ICN-derived region codes
- Use of ICN-derived dates

Each of these transformations creates an associated limitation within our report.

18.3.1 Removal of FFS claims with MCO payments

By removing FFS claims with MCO payments we reduce the number of FFS claims for review. In so far as these are real claims experience for the FFS program this risk underrepresenting claim and payment trends within the FFS program. Absent a clear rationale for their existence of a clear means to account for the true **total** payments associated with these claims they were removed.

18.3.2 Removal of select claims based upon ICN-derived region codes

By removing claims associated with reversals or voids (i.e. region codes) we risk retaining within the claims data the “original” fill the reversal is associated with. As payments associated with these claims are either \$0 or a positive value it is not possible to self-identify the claims to ensure they are cancelled out. Furthermore, the provided data dictionary by AHCA is not helpful in this regard as it would not appear that these claims should exist. We elected to proceed with the analysis understanding that any retained “original” claims would still be useful as they would represent what payment associated with that claim would have been (had it not subsequently been reversed). This does mean that overall estimates for MCOs may be slightly inflated if “original” claims due exist within the dataset but should have minimal impacts on measures per claim or per unit basis.

18.3.3 Use of ICN-derived dates

Because we found external data concerns between the provided AHCA claims data and the data available with CMS we elected to use ICN-derived dates in place of the provided calendar year date (DTE_Yr). This allowed for a more nuanced review of trends over time for the AHCA claims data. Because the delta between ICN-derived year and DTE provided year was minimal the per claim impact of this observation would be small as it is unlikely to apply on any given claim. We also utilized the month provided by the ICN to identify the month associated with the NDC’s NADAC and other pricing benchmarks. As month was not an originally provided within the AHCA data dictionary it is not possible for us to assess the potential impact of this transformation except to identify a potential limitation exists whenever the month derived substantially differs from the actual month of the claim.

² Additional discussion around data validation can be found in [Data Validation](#)

19 APPENDIX C: SMALL PHARMACY & OTHER PHARMACY GROUPINGS

19.1 LIST OF SMALL PHARMACIES

1RX CENTRAL PHARMACY AND 1ST AMERICA INFUSION SERVICES, LLC	AB PHARMACY	ADVENTIST HEALTH SYSTEM SUNBELT INC	AMBERT MEDICAL CARE CENTER CORP
1ST CHOICE PHARMACY 1ST COMMUNITY PHARMACY, LLC	AB SPECIALTY PHARMACY, INC	ADVENTIST HEALTH SYSTEM/SUNBELT INC	AMBIENT HEALTHCARE OF CENTRAL FLORIDA, INC.
5 STAR PHARMACY AND SURGICAL	ABERDEEN PHARMACY	FLORIDA HOSPIT	AMERICAN DOLLAR PHARMACY
5M PHARMA LLC	ABSOLUTE HEALTHCARE LLC AMJAD	ADVENTIST HEALTH SYSTEM/SUNBELT, INC	AMERICA'S PHARMACY LLC
17TH STREET DISCOUNT PHARMACY	ABYS PHARMACY & DISCOUNT, INC	ADVENTIST HEALTH SYSTEMS	AMERICAN CARE OF CENTRAL FLORIDA, INC
21ST CENTURY ONCOLOGY, LLC	AC NATIONAL PHARMACY, INC	AETNA SPECIALTY PHARMACY LLC	AMERICAN CARE OF NORTH FLORIDA, INC.
41 PHARMACY DISCOUNT INC	ACCORDI CLINICAL PHARMACY	AGAPE COMMUNITY HEALTH CENTER, INC	AMERICAN CARE OF SOUTH FLORIDA, INC
49TH STREET PHARMACY 67TH AVENUE PHARMACY	ACCESSHEALTH PLUS	AGAPE PHARMACY	AMERICAN CARE OF SOUTH FLORIDA, INC.
305 RX, LLC	ACE MEDICAL	AGEVITAL PHARMACY, LLC	AMERICAN DISCOUNT PHARMACY, CORP
955 WASHINGTON HOLDINGS LLC	EQUIPMENT GROUP CORP	AGHAPY INVESTMENTS, LLC	AMERICAN DOLLAR PHARMACY CORP
1492 PHARMA GROUP CORP	ACOLGY PRESCRIPTION COMPOUNDING, INC	AGHAPY SPIRIT	AMERICAN INFUSION LLC
2189 GGC LLC	ACP MEDICAL SUPPLY CORP	AGIOS CORP	AMERICAN OUTCOMES MANAGEMENT, LP
#1 RX LIBERTY PHARMACY DISCOUNT CORP.	ACRO PHARMACEUTICAL SERVICES LLC	AGNES RX INC	AMERICAN PHARMACEUTICAL SERVICES INC
A & A MED SOLUTIONS LLC.	ACTION MEDICINE #51205	AHF PHARMACY	AMERICAN PHARMACEUTICAL SERVICES INC.
A & B PHARMACEUTICAL SERVICES, INC.	ACV COMMUNITY SERVICES LLC ALANA	AHM MANAGEMENT INC	AMERICAN PHARMACY, INC
A & E OF TAMPA BAY, LLC	ADAMS PHARMACY, INC.	AKRU INC	AMERICAS PHARMACY LLC.
A & E PHARMACY INC	ADEL CONSULTING INC	AKSHAR PHARMA LLC	AMERIMEDZ II
A & M PHARMACY, LLC	ADELFA PHARMACY	ALBE PHARMACY, INC	AMICITIA PHARMA, LLC
A & W DRUGS, INC.	ADOM HEALTHCARE LLC	ALBERT CANAS MD & ASSOCIATES PA	AMJ RX INC
A CHEM RX, LLC	ADRIANA DEGURRERO	ALBERT CANAS MD PA	AMOCARE HEALTH SERVICES
A MED HEALTH CARE	ADVANCE CARE RX LLC	ALDER PHARMACY LLC	AMOP PHARMACY INC
A PLUS PHARMACY	ADVANCE PHARMACY SERVICE	ALEXANDER	AMOS R MENENDEZ
A PLUS PHARMACY & MEDICAL SUPPLY LLC	ADVANCE PHARMACY SERVICE LLC	LOPEZALVAR	ANA MARIA CASTILLO RPH PA
A TO Z PHARMCY INC.	ADVANCE PHARMACY SOLUTION LLC	ALEXANDER PHARMACY	ANANT LLC
A1 PHARMACY	ADVANCED CARE SCRIPTS, INC.	ALFREDO	ANBA KARAS, LLC.
A1 PHARMACY INC.	ADVANCED MEDICAL PHARMACY, INC	GONZALEZVERGARA	ANDERSONS THRIFT DRUGS, INC.
A. LILIKO'I PHARMACY	ADVANCED PHARMACY	ALL HEART PHARMACY, INC.	ANDERSONSCOKELEE, INC
A.J. CARGO EXPRESS, INC.	ADVANCED PHARMACY FLORIDA, LLC	ALL WELL PHARMACY INC	ANDREWS DRUGS PERRY
A&J RX, LLC	ADVANCED RX LLC	ALLEN DRUGS INC	ANDREWS LABORATORIES AND PHARMACEUTICALS INC
A&R PHARMACY, INC.	ADVANCED RX PHARMACY 026	ALLEN MEDICAL SVCS., INC	ANGEL'S MEDICAL COMPANY
AADESH RX LLC	ADVANCERX PHARMACY INC	ALLGEN 3 LLC	ANGELITO FARMACIA DISCOUNT, INC
AAKASH HEALTHCARE, LLC	ADVENTIST HEALTH SYSTEM SUNBELT HEALTHCARE	ALLGEN LLC	
AAKASH LLC	ADVENTIST HEALTH SYSTEM SUNBELT HEALTHCARE CORP.	ALLMED SERVICES OF FLORIDA, INC	
AAP GROUP INC	ADVENTIST HEALTH SYSTEM SUNBELT INC	ALLZ WELL PHARMACY, LLC	
AARAV PHARMACY LLC		ALOE DRUG & MEDICAL SUPPLIES, INC	
AARNA HOSPITALITY LLC		ALPHA PHARMACY, INC	
AARNA INC		ALPHA TOUCH PHARMACY INC	
AARRIC INC		ALPHAOMEGA PHARMACY, L.L.C.	
		AMARILIS VANQUEZ	
		AMATO MANAGEMENT, LLC	

ANGELS PHARMACY I INC	ASHWINI HEALTHCARE, LLC	BAPTIST PHARMACY CHILDREN'S	BELLE GLADE DRUGS, LLC
ANGELS PHARMACY II LLC	ASHWINI PHARMACY, LLC	BAPTIST PHARMACY LANE	BELLEVIEW COMMUNITY PHARMACY, LLC
ANGELS PHARMACY III LLC	ASIAN SENIOR HOME CARE, INC	BAPTIST PHARMACY NASSAU	BELLEVIEW COMMUNITY PHARMACY, LLC.
ANM PHARMACY INC	ASPIRE HEALTH	BAPTIST PHARMACY PAVILION	BELLEVUE PHARMACY BENAK INC
ANM PHARMACY INC.	PARTNERS INC	BAPTIST PHARMACY SAN MARCO	BENJAMIN KREMER
ANM PHARMACY, INC	ASPIRE RX	BARBEE PHARMACY MARKET	BENNETTS HOMETOWN PHARMACY
ANNALICE LLC	ASSURED RX LLC.	BARCLAY PHARMACY INC	BENSON PHARMACY, INC
ANNS PHARMACY & DISCOUNT, INC	ASTER DISCOUNT PHARMACY, INC	BARNES DRUG STORE OF VALDOSTA, INC.	BENZER FL 3 LLC
ANOVORX GROUP, LLC	AT HOME INFUSION SERVICES LLC	BARNES HEALTHCARE OF FL	BENZER FL 4 LLC
ANP GROUP LLC	ATENDA SPECIALTY INFUSION PHARMACY	BARNES HEALTHCARE OF FL LLC	BENZER FL 5 LLC
ANTHONY 2016 LLC	ATHENS REGIONAL PHARMACY	BARNES HEALTHCARE OF FLORIDA, LLC	BENZER FL 6 LLC
ANTHONY'S DRUGS, INC	ATKINSONS MART RX CT	BARNES HEALTHCARE OF FLORIDA, LLC	BENZER FL 7 LLC
ANTILLEAN RX CENTERS LLC	ATKINSONS MART, INC	BARNES HEALTHCARE OF FLORIDA, LLC	BENZER FL 8 LLC
ANTONIO PHARMACY	ATLANTIC PH LLC	BARNES HEALTHCARE OF FLORIDA, LLC	BENZER FL 9 LLC
ANV GROUP LLC	ATLANTIC PHARMACY & COMPOUNDIN	BARON'S PHARMACY	BENZER FL 10 LLC
ANV GROUP, LLC.	ATLANTIS PHARMACY RX LLC	BARRANCAS PHARMACY INC	BENZER FL 11 LLC
APAA LLC	AU MEDICAL CENTER RETAIL	BARTLES PHARMACY INC	BENZER FL 12 LLC
APB & J CORPORATION	AURORA PHARMACY 060 WEST ALLIS	BASIL S ITANI	BENZER FL 13 LLC
APEX PHARMACY INC	AV PHARMA LLC	BAY COUNTY HEALTH SYSTEM, LLC	BENZER FL 14 LLC
APEXX PHARMACY, LLC	AVA KEROLOS LLC	BAY HARBOR DRUGS	BENZER FL 15 LLC
APME PHARMACY AND DISCOUNT	AVALON PARK PHARMACY CORP	BAY LIFE PHARMACY INC	BENZER FL 17 LLC
APNAR PHARMACY & SUPERMARKET INC.	AVELLA OF DEER VALLEY, INC.	BAY MED CENTER PHARMACY	BENZER FL 26 LLC
APOLLO CARE PHARMACY LLC	AVELLA OF ORLANDO, INC.	PHARMACY	BENZER FL 39 INC
APOLLO HEALTH SERVICES LLC	AVELLA OF TAMPA, LLC	BAY PHARMACY	BENZER FL 40, INC
APOPKA CARE PHARMACY	AVENTUS PHARMACY LLC	BAY PHARMACY, INC	BENZER PHARMACY FL 1 LLC
APOTHECARY DEVELOPMENT CORP.	AVENUE PHARMACY INC	BAY PINES VAMC PHARMACY	BENZER PHARMACY FL 2 LLC
APOTHECARY PHARMACY LLC	AVENUE PHARMACY, INC	PHARMACY	BERAJA PHARMACY
APPLE PHARMACY	AVIVA CARE PHARMACY, LLC	BAY RX PHARMACY	BEST CARE PHARMACY INC
ARA MEDICAL SERVICES INC	AVS PHARMA LLC	BAY STREET PHARMACY	BEST CARE PHARMACY INC.
ARACELI QUEVEDO	AXCESS PHARMACY	BAYCARE BEHAVIORAL HEALTH, INC	BEST HEALTH PHARMACY INC
ARBOR PHARMACY	AXELACARE HEALTH SOLUTIONS LLC	BAYCARE HOME CARE INC	BETHESDA HOSPITAL
ARCHANGEL ONE, LLC.	AZALIAS PHAR. & DISC.	BAYCARE HOME CARE, INC	BETTER HEALTH PHARMACY INC
ARETE PHARMACY NETWORK	AZOF ENTERPRISES INC	BAYCARE HOME CARE, INC.	BHANU VISVALINGAM
ARETE PHARMACY NETWORK 712	B AND S DRUGS, INC.	BAYFRONT MEDICAL CENTER INC.	BHAVE ENTERPRISE INC
ARIA PHARMACY	B. G.'S PHARMACY	BAYGREEN PHARMACY LLC	BI COUNTY MEDICAL SUPPLY
SERVICES, LLC	B&W REXALL DRUGS	BAYLIFE PHARMACY, INC.	BI COUNTY PHARMACY II
ARIANA PHARMACY INC	BABASA INC	BAYRIDGE RX	BI LO PHARMACY 563
ARIGUANABO PHARMACY	BAHJAT GHANEM	BAYSHORE PHARMACY, INC	BI LO PHARMACY 5092
ARMANDO E ACEVEDO	BAINBRIDGE PHARMACY INC.	BAYSIDE LAKES PHARMACY LLC	BI LO PHARMACY 5200
ARNAV INC	BAKER COUNTY MEDICAL SERVICES, INC.	BAYVIEW CTR FOR MENTAL HEALTH INC	BI LO PHARMACY 5430
ARSANYS	BALAJI PHARMA LLC	BBAJ LLC	BILGIN INC.
ARTH LLC	BALANCEMED LLC	BEACHES PHARMACY	BILLINGS CLINIC ATRIUM PHARMACY
ARTHURS ORIGINAL PHARMACY	BALDEVBHAI KN INC	BEATRIZ G MARTIN INCORPORATED	BILLS PILLS INC
ARYAN RETAIL LLC	BALLS REXALL DRUGS	BELAVINASH	BILLS PRESCRIPTION CTR.
ASAP PHARMACY INC	BANNER ELK PHARMACY	BELEN & BELEN PHARMACIES INC	BIOLOGICS, INC
ASC PHARMACY INC	BANYAN COMMUNITY HEALTH CENTER, INC.	BELLAMAR PHARMACY INC	BIOMED FLORIDA INC.
ASC PHARMACY, INC.	BAPTIST PHARMACY BEACHES		BIOPLUS SPECIALTY PHARMACY SRVS
ASCEND SPECIALTY RX			BIRD GALLOWAY HEALTH LLC
ASF PHARMACY, INC			BISHT LLC
ASHFAQ S FATMI			BITTINGS APOTHECARY
ASHTON DRUGS			BJS PHARMACY

BLACK AND WHITE PHARMACY CORP
 BLACKS DRUG STORE INC
 BLAKE PHARMACY LLC
 BLANDING HEALTH MART PHARMACY, LLC
 BLOUNTSTOWN DRUGS, INC.
 BLUE SKY DISCOUNT PHARMACY
 BLUE STAR PHARMACY, INC
 BOBO DRUGS, INC.
 BOCA PHARMACY
 BOCA PHARMACY SERVICES INC
 BOCA RATON PHARMACY, INC
 BONANZA STATE PHARMACY & DISCOUNT CORP
 BOND COMMUNITY HEALTH CENTER, INC
 BOND DRUG COMOPANY OF IL LLC
 BOND DRUG COMPANY OF IL INC
 BOND DRUG COMPANY OF IL LLC
 BOOTH ENTERPRISES INC
 BOOTS LLC
 BOYNTON PHARMACY
 BRADENTON FAMILY PHARMACY
 BRADYS PHARMACY INC
 BRASHEARS VITAL CARE
 BRASHEARS VITAL CARE CORP
 BRAVO DRUGS
 BRAVO DRUGS TWO INC
 BREVARD HEALTH ALLIANCE INC
 BREVARD PHARMACY
 BREVARD PHARMACY LLC
 BROADWAY DISCOUNT PHARMACY LLC
 BRONSON PHARMACY INC
 BROWARD CO. HEALTH UNIT
 BROWARD INFUSION GROUP
 BROWNING'S PHARMACY
 BROWNING'S PHARMACY AND HEALTH CARE, INC.
 BSH HEALTH INC
 BTN PHARMACY LLC
 BTV PHARMACY
 BUDGET DRUGS
 BUDGET DRUGS (AKA CONO DRUGS)
 BUENO PHARMACY LLC
 BUNNELL PHARMACY, INC.
 BURKLOW PHARMACY
 BURRY'S PHARMACY, INC.
 BUSCH PHARMACY LLC
 BUTTERFIELD PHARMACY & MEDICAL SUPPLIES @ SLW, LLC
 C & C COMMUNITY PHARMACY
 C & M HEALTHPRO LLC
 C & P ROMANOS PHARMACY, INC.
 C AND H DISCOUNT DRUGS
 CAB PHARMACY INC
 CAB PHARMACY, INC.
 CADI HEALTH LLC
 CADUCEUS PHARMACY II, LLC
 CALLAHON PHARMACY, INC
 CALLAWAY GULF COAST PHARMACY CO
 CAMDEN PHARMACY
 CAN COMMUNITY HEALTH INC.
 CANCER SPECIALISTS, LLC
 CANTONMENT PHARMACY
 CAPAK LLC
 CAPITAL PHARMACY AND DISCOUNT INC
 CAPITAL PHARMACY AND DISCOUNT, INC
 CAPRICORN HEALTHCARE SERVICES
 CARDENAS PHARMACY
 CARDINAL HEALTH SPECIALTY PHARMACY, LLC
 CARE AMERICA AT MAITLAND, LLC
 CARE CENTRIX PHARMACY LLC
 CARE CONNECTION PLUS ASSURASCRIP
 CARE FIRST PHARMACY CORP
 CARE FIRST PHARMACY SURGICAL, INC
 CARE MED PHARMACY GROUP LLC
 CARE ONE PHARMACY
 CARE PHARMACY
 CARE PLUS INFUSION, LLC
 CARE RITE PHARMACY LLC
 CARE RX PHARMACY GROUP LLC
 CARELINE PHARMACY AND HEALTHCARE SERVICES LLC
 CAREMART, INC
 CAREMAX PHARMACY 725 LLC
 CAREMAX PHARMACY, LLC
 CAREMED PHARMACEUTICAL SERVICES
 CAREMED PHARMACY LLC
 CAREONE PHARMACY SERVICES, LLC
 CAREPLUS RX CORP.
 CAREPOINT PHARMACY INC
 CAREY CONNOLLY
 CAREY CONNOLLY, D.O.
 CARL D ACQUAVIVA
 CARLOS A MENDEZ
 CARLOS POZO, MD
 CARO PEDRO R
 CARRABELLE MEDICAL PHARMACY
 CARROLLWOOD PHARMACY
 CARTERS ORTEGA PHCY
 CASH WISE PHARMACY
 CASTELLON INVESTMENT INC
 CBA PHARMACY INC
 CBS PHARMACY
 CCM PHARMACY,LLC
 CCN AMERICA LP
 CDDL,LLC
 CEDARS MEDICAL GROUP LLC
 CENTER CITY PHARMACY, INC.
 CENTER DRUGS
 CENTER FOR FAMILIES AND CHILDREN PHARMACY 3
 CENTRA RX INC
 CENTRAL AVENUE PHARMACY LLC
 CENTRAL CARE PHARMACY, LLC
 CENTRAL FL FAMILY HEALTH CENTR,INC.
 CENTRAL FL HEALTH CARE, INC.
 CENTRAL FL PHARMACY CORP.
 CENTRAL FLORIDA FAMILY HEALTH CNTR
 CENTRAL FLORIDA FAMILY HEALTH CTR.
 CENTRAL FLORIDA HEALTH CARE INC
 CENTRAL FLORIDA HEALTH CARE, INC
 CENTRAL FLORIDA HEALTH CARE, INC.
 CENTURY PHARMACY LLC
 CEPEMART
 CERVER PHARMACY CORP.
 CFP MEDICAL SOLUTIONS, LLC
 CHAAND INC
 CHANGS PHARMACY INC
 CHANS PHARMACY PLUS
 CHARLES PHARMACY, LLC.
 CHEEK AND SCOTT DRUGS INC.
 CHEEK AND SCOTT DRUGS, INC
 CHEEK DRUG COMPANY #2
 CHEEK PHARMACY INC.
 CHEMISTS N DRUGGISTS INC
 CHERYSGROUP LLC
 CHILDREN'S CLINIC PHARMACY
 CHILDRENS HOME PHARMACY SERV.
 CHILDRENS HOSPITAL MEDICAL CENTER
 CHILDRENS MEDICAL CENTER PHCY
 CHOICE PHARMACY
 CHOICE PHARMACY INC
 CHOICE PHARMACY SERVICES LLC
 CHR G GROUP LLC
 CHRIS LOU CORPORATION
 CHRIST PHARMACY INC.
 CHRONIC CARE PHARMACEUTICAL SERVICE
 CHRONIMED HOLDINGS, INC.
 CIRCLE S PHARMACY INC
 CIRCLES OF CARE
 CIRCLES OF CARE, INC.
 CIRQUE DU CORP.
 CIRQUE DU RX CORPORATION
 CITRUS CO. HLTH DEPT
 CITRUS HEALTH NETWORK,
 INCPHARMACY
 CITRUS SPRINGS PHARMACY INC.
 CITY CARE SERVICES INC
 CITY DISCOUNT PHARMACY
 CITY DRUG AND SURGICAL
 CITY DRUG CO
 CITY VIEW PHARMACY INC
 CK PHARMA LLC
 CLA PHARMACY GROUP LLC
 CLARKE'S PHARMACY
 CLAXTON COLE PHARMACY
 CLERMONT COMMUNITY PHARMACY INC
 CLEVELAND CLINIC
 EUCLID AVENUE PHARMACY
 CLEVELAND CLINIC
 FAIRVIEW HEALTH CENTER PHARMACY

CLEVELAND CLINIC FLORIDA WESTON PHARMACY CLINICAL CARE PHARMACY CLINICAL COMPOUND PHARMACY CND 3, INC CND 4, INC COASTAL CARE PHARMACY LLC COASTAL PHARMACY LLC COASTAL RX PHARMACY LLC COASTALMED OF FLORIDA,LLC COCOA BEACH DISCOUNT PHARMACY,LLC COCONUT GROVE PHARMACY COLLIER HEALTH SERVICES, INC COLLIER HEALTH SERVICES,INC. COLLIER HMA PHYSICIAN MANAGEMENT LLC COLLIER PHARMACEUTICAL SERVICES COLONIAL DRUGS OF KISSIMMEE LLC COLONIAL DRUGS OF ORLANDO LLC COLONIAL DRUGS, LLC COMBINED HEALTH SERVICES CORP. COMFORT PHARMACY COMFORT PHARMACY CORP COMFORT PHARMACY, LLC COMM HEALTH CENTERS OF PINELLAS COMM HEALTH OF S FL, INC COMMCARE PHARMACYFTL, LLC COMMCARE PHARMACYMIA, LLC COMMCARE PHARMACYWPB, LLC COMMUNITY COMMUNITY HEALTH CENTER, INC. COMMUNITY HEALTH CENTERS INC COMMUNITY HEALTH CENTERS INC. COMMUNITY HEALTH CENTERS, INC COMMUNITY HEALTH OF SOUTH FL, INC. COMMUNITY HEALTH OF SOUTH FLORIDA INC COMMUNITY HLTH.OF S.DADE COMMUNITY PHARMACY	COMMUNITY PHARMACY INC COMMUNITY SPECIALTY PHARMACY LLC COMMUNITY PHARMACY LLC COMPOUNDING DOCS INC COMPOUNDING DOCS, INC. COMPREHENSIVE CONSULTANT SERVICES COMPREHENSIVE HEALTH CENTER COMPREHENSIVE HOME CARE INC. CONTINENTAL PHARMACY CONVENIENT CARE PHARMACY 3 COOK DISCOUNT DRUGS COOPERS DRUGS, INC COPRX LLC CORAL SPRINGS MEDICAL CENTEROUTPATIENT PHARMACY CORAL SPRINGS SPECIALTY PHARMACY, INC CORAL WAY PHARMACY CORAM ALTERNATE SITE SERVICES, INC. CORAM ALTERNATE SITE SERVICES,INC. CORAM HEALTHCARE CORAM HEALTHCARE CORPORATION OF SOUTHERN FLORIDA CORE HEALTH PHARMACY COREYS PHARMACY CORNER DRUG COTOS PHARMACY COUNTRYSIDE PHARMACY LLC COVENANT VENTURES INC. CPMS FLORIDA PHARMACY LLC CRAIG A TRIGUEIRO CRAIG BADOLATO CRAIG KENNETH DELIGDISH CRAWFORDVILLE PHARMACY, INC CRESCENT HEALTHCARE INC CRESCENT HEALTHCARE, INC CRESCENT HEALTHCARE, INC. CRESTMARK PHARMACY SERVICES, LLC CRESTVIEW PHARMACY INC. CRITICAL CARE SYSTEMS, INC	CS PHARMACY 06851 CUE PHARMACY CULPEPPER HARRELL INC CUMBERLAND PHARMACY LLC CURANT HEALTH FLORIDA LLC CURE PHARMACY, INC. CURERX CURRIES FAMIL CARE PHARMACY OF AMORY CURRIES FAMILY CARE PHARMACY OF ABERDEEN CVH PHARMACY DISCOUNT INC CYNTRIST PHARMACY, LLC CYPRESS CENTER PHARMACY, INC CYPRESS PHARMACY CYPRESS PHARMACY INC. CYSTIC FIBROSIS PHARMACY INC CYSTIC FIBROSIS SERVICES CYSTIC FIBROSIS SERVICES INC CYSTIC FIBROSIS SERVICES, INC D. Y. L. INC D.Y.L. LLC D&S ENTERPRISES OF VERO BEACH, LLC DADE MEDICAL, INC. DALE DRUG DALICE MEDICAL EQUIPMENT, INC DALTON DRUG CO, INC DAMOL INC DANANG PHARMACY LLC DANIA DISC DRUGS INC DANIA DISCOUNT DRUGS DAVE PHARMACY LLC DAVIDS PHARMACY DAVIDSON DRUGS DAVIDSON DRUGS INC. 1 DAVIDSON DRUGS INC. 2 DAVIE PILL BOX LLC DAVIE ROAD PHARMACY INC DAVITA RX DAVITA RX, LLC DAYLAN INC DAYTON HUDSON CORPORATION DAYTONA DISCOUNT PHARMACY, INC DCA PHARMACY DE2 LLC DEE CAR INC DEECAR INC DEGC ENTERPRISES US INC DEL PRADO DISCOUNT PHARMACY, LLC	DELIVRXD LLC DELRAY SHORES PHARMACY DELTONA MED ARTS PHA DELTONA MEDICAL ARTS PHARMACY INC DELTONA MEDICAL ARTS PHARMACY, INC DELTONA PHARMACY OF FLORIDA LLC DENNING'S PHARMACY, LLC DENNIS SCARBROUGH DERMATRAN HEALTH SOLUTIONS DHAM INC DHANALAKSHMI RX, LLC DIA RX, LLC DIABETES SPECIALTY CENTER DIABETIC CARE RX, LLC DIABETIC SOLUTIONS INC DIABETIC SOLUTIONS, INC. DIABETIC SUPPLY & SUPPORT, INC DIANA L FRANCHINI DIAZ & DIAZ, INC. DIKSHA INC DIKSHA, INC. DINESH KHANNA, MD, P.A. DIPLOMAT PHARMACY INC DIRECT MEDS OF FLORIDA LLC DIRECT PHARMACY SOURCE DIRECT RETAIL PHARMACY LLC DIRECT SUCCESS PHARMACY DEPT DISCOUNT DRUG MART DISCOUNT PHARMACY OF PINES LLC DISPENSING PHYSICIAN CONSULTING INC DIVINE PHARMACY AND HEALTHCARE LLC DIXON TONY DNCA ENTERPRISE INC DOCS DRUGS OF BRAIDWOOD DOCTOR'S MEDICAL PHARMACY INC DOCTORS MEDICAL PHARMACY DOCTORS PHARMACY DOH BCPU PHARMACY DOH CENTRAL PHARMACY DOHMEN LIFE SCIENCE SERVICES, LLC DON HOUSTON, INC. DORIS MARTIN DOSE OF DIAMOND, LLC DOTHAN PHARMACY
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DOUGLAS GARDENS
 COMM MNTL HLTH CTR
 OF MIAMI BEACH
 DOUGLAS HEALTH MART
 PHARMACY
 DR GS PHARMACY BY
 THE SEA
 DR GS PHARMACY OF
 DELRAY
 DR. G'S PHARMACY, INC.
 DRM ENTERPRISES, INC
 DRUG CENTER
 PHARMACY INC
 DRUG SHOP INC
 DRUG TOWNE INC
 DRUGPLACE, INC.
 DRUGS 4 LESS, INC
 DRUGSTOREANDMORE
 DS RX LLC
 DURAMED SOUTHEAST
 INC
 DURAMED SOUTHEAST
 INC.
 DUTTA, LLC
 DUVAL CO HEALTH DEPT
 DUVALL DRUGS INC
 DYL, LLC
 E PHARMACY, INC.
 E.P. MEDICAL
 EQUIPMENT
 EAGLE ENTERPRISE INC
 EAGLE LAKE PHARMACY
 EAGLE PHARMACY
 EAST COAST PHARMACY
 EAST HILL PHARMACY
 EASTERN PHARMACY
 INC.
 EASTPORT PHARMACY
 EASTWOOD PHARMACY
 INC
 EASYCARE PHARMACY
 INC
 EASYCRE
 PHARMACY, INC.
 EASYSCRIPTS LLC
 EB DRUGS
 EBENEZER CLINICAL
 PHARMACY LLC
 ECKERD CORPORATION
 ECKERDS RX 105 LLC
 ECO PHARMACY LLC
 EDDIE VELAZQUEZ
 EDGE PHARMACY, LLC
 EDR GROUP INC
 EDUARDO QUESADA
 EDWARDS PHARMACY
 OF INDIAN ROCKS, LLC
 EIGHTY EIGHT
 PHARMACY & DISCOUNT
 EL JARDIN PHARMACY 2
 LLC
 EL JARDIN PHARMACY,
 INC
 EL VIGNOBLE LLC
 ELBERTA PHARMACY
 ELKABARY ENTERPRISES
 LLC
 ELLENTON DISCOUNT
 PHARMACY LLC

ELSA PHARMACY INC
 ELY'S PHARMACY &
 DISCOUNT CORP
 EMBASSY PHARMACY
 EMEDRX SOLUTIONS
 EMERALD HILLS
 PHARMACY, LLC
 EMISWET EZ LLC
 EMPATH HEALTH
 PHARMACEUTICALS, LLC
 EMPIRE PHARMACY AND
 HEALTHCARE SERVICES
 LLC
 EMPIRE SPECIALTY
 PHARMACY, LLC
 ENCOMPASS RX LLC
 ENDMETRX LLC
 ENGLEWOOD
 PHARMACY
 ENGLEWOOD SPECIALTY
 PHARMACY, INC
 ENRIQUE GORIN
 ENRIQUE HANABERGH
 ENSLEY PHARMACY
 ENUKORA INC
 ENVISION HEALTH
 SERVICES LLC
 ENVISION PHARMACY
 AND HEALTHCARE
 SERVICES LLC
 EP MEDICAL
 EQUIPMENT, INC
 EPIC CARE PHARMACY
 ESPIMAR CORPORATION
 ETOWN PHARMACY
 EVANS DRUG MART
 EVELYN NIEVES
 EVENTUS RX, INC
 EVERCARE INC
 EVERGREEN PHARMACY
 INC
 EXACT DOSE
 PHARMACY, INC.
 EXCELLENT HOME
 MEDICAL EQUIPMENT
 CORP
 EXL INVESTMENT
 GROUP, LLC
 EXPERT CARE
 PHARMACY
 EXPRESS AID PHARMACY
 SERVICES, LLC
 EXPRESS MEDS RX LLC
 EXPRESS PHARMACY
 CORPORATION
 EXPRESS PHARMACY4
 EXPRESS PLUS
 PHARMACY LLC
 EXPRESS RX OF
 CARTHAGE
 EXPRESS RX PHARMACY,
 INC
 EXTENDED CARE
 PHARMACY HASTINGS,
 INC
 EXTENDED CARE
 PHARMACY, INC
 EXTRA CARE CITY
 PHARMACY LLC

EXTRA CARE PHARMACY,
 INC.
 EZ CARE PHARMACY, INC
 EZ RX BONITA SPRINGS
 LLC
 F & B DRUGS INC
 FACTOR PHARMACY, LLC
 FADAJO PHARMACY
 FADI SABA
 FAIRVIEW PHARMACY
 AND HOMECARE SUPPLY
 FAIRVIEW RIDGEVIEW
 PHARMACY
 FAMILY CARE PARTNERS
 PATIENT PHARMACY
 FAMILY CARE RX, LLC
 FAMILY CHOICE
 PHARMACY
 FAMILY DRUGS OF
 INDIANTOWN INC.
 FAMILY FOCUS
 INFUSION LLC
 FAMILY HEALTH CENTER
 PHARMACY
 FAMILY HEALTH
 CENTERS OF
 SOUTHWEST FLORIDA,
 INC.
 FAMILY HEALTH CTRS OF
 SW FL INC
 FAMILY HEALTHMART
 PHARMACY INC.
 FAMILY PHARMACY
 FAMILY PHARMACY &
 MEDICAL SUPPLY
 FAMILY PHARMACY, LLC
 FAMILY PHCY SARASOTA
 FAMILY PHYSICIANS RX
 FAMY INC
 FARLOWS PHARMACY
 FARMACIA 2224
 FARMACIA 2224 CENTRO
 FARMACIA 2224 HIALEAH
 FARMACIA CALI
 FARMACIA CALI, INC.
 FARMACIA JULIA
 DISCOUNT
 FARMACIA JULIA
 DISCOUNT, INC.
 FARMACIA LAS
 AMERICAS, LLC
 FARMACIA LAS
 MARTINAS PHCY
 FARMERS HOSPITAL
 PHARMACY
 FATHER DAVID LLC
 FAVOR PHARMACY INC
 FEDERAL DISCOUNT
 PHARMACY, INC.
 FELIX G PENATE
 FELKY RX, LLC
 FELOBATER LLC
 FEMY DRUG
 CORPORATION
 FERRO INTL INC
 FERTILITY PHARMACY
 FFP, LLC
 FIELDER AND BROOKS
 PHARMACY

FILL RX LLC
 FIRST CHOICE
 PHARMACY
 FIRST CHOICE
 PHARMACY DISCOUNT II
 CORP
 FISHER PHCY
 FISS CARE PHARMACY,
 INC.
 FIVE PILLARS
 CORPORATION
 FIVE POINTS PHARMACY
 OF COCOA LLC
 FIVE STAR PHARMACY
 FLAGLER BEACH
 PHARMACY
 FLAGLER COMMUNITY
 PHARMACY, INC
 FLAGLER PHARMACY INC
 FLEMING ISLAND
 PHARMACY LLC
 FLETCHER DISCOUNT
 PHARMACY
 FLETCHER MED. CTR.
 PHCY.
 FLORALA PHARMACY,
 INC.
 FLORES PHARMACY
 FLORESTA DRUGS, INC
 FLORIDA A&M
 UNIVERSITY COLLEGE OF
 PHARMACY
 FLORIDA CARE
 PHARMACY
 FLORIDA COAST
 PHARMACY, INC
 FLORIDA COMMUNITY
 HEALTH CENTERS, INC
 FLORIDA COMMUNITY
 HEALTH CENTERS, INC.
 FLORIDA DEPARTMENT
 OF HEALTH
 FLORIDA DEPARTMENT
 OF HEALTH IN
 SARASOTA
 FLORIDA DISCOUNT
 DRUGS
 FLORIDA DISCOUNT
 PHARMACY
 FLORIDA HEALTH
 SCIENCES CENTER INC.
 FLORIDA HOSP HOME
 INFS., LLP
 FLORIDA HOSPITAL
 HOME INFUSION, LLP
 FLORIDA INFUSION
 SVCS.
 FLORIDA INTEGRATED
 HEALTH SERVICES
 FLORIDA INTEGRATED
 HEALTH SERVICES LLC.
 FLORIDA INTEGRATED
 HEALTH SERVICES, LLC
 FLORIDA INTEGRATED
 HEALTH SERVICES, LLC
 FLORIDA
 INTERNATIONAL
 UNIVERSITY

FLORIDA MEDICAL CLINIC, PA
FLORIDA MEDICAL CLINIC,PA
FLORIDA PHARMACY
FLORIDA PHARMACY SOLUTIONS
FLORIDA PHARMACY, INC
FMP PHARMACYSCMS
FOLKLORE PHARMACY DISCOUNT, INC.
FOOD CITY PHARMACY
FORD DRUG, INC
FOREM SERVICES INC
FOREST HILL PHARMACY, LLC
FORGHABS GLOBAL HEALTH CONSULTING
FORMULA PHARMACY, INC.
FORT MYERS BEACH PHARMACY, LLC.
FORT PIERCE DISCOUNT PHARMACY INC
FOSTER DRUG & SURG. SUPP
FOSUYI ENTERPRISES, LLC
FOUNDATION ASSOCIATES, INC
FOUNDATION CARE LLC
FOUNDATIONAL ASSOCIATES INC
FOUNDCARE INC
FOUNTAIN PHARMACY INC
FRANAKO PHARMACY INC
FRANCES MARTINEZ
FRANCK'S LAB, INC
FRANCKS PHARMACY
FRANCOFE INC.
FREEDOM PHARMACY, LLC
FREEDOM PHARMACY,LLC
FRESENIUS MEDICAL CARE PHARMACY
FRESENIUS MEDICAL CARE RX
FRIENDS PHARMACY, LLC
FRONTLINE HEALTH SERVICES LLC
FRUTH PHARMACY 11
FUTURE HEALTH CARE LLC
FUTURE PHARMACY LLC
FZAIPAN INC
G & R PHARMACY INC
G AND C HEALTHCARE INC
G&H PHARMACY INC
GABRIEL LIZARRAGA
GABRIEL LIZARRAGA, MD
GALEN DRUG, INC.
GARDEN DRUGS, INC
GARDENS DRUG INC
GARDENS DRUGS

GARON PHARMACY
GARRETT'S PHARMACY SERVICES, INC
GASTRO HEALTH SPECIALTY PHARMACY, LLC
GATEWAY PRESCRIPTION CENTER, INC
GATEWAY PRESCRIPTION CENTER, INC.
GATEWAY PRESCRIPTION, INC.
GATTOLINE ENTERPRISES, INC
GATUS PHARMA LLC
GAYATRIKRUPA LLC
GENE WINDOM, INC
GENERIC DEPOT 2 INC.
GENERIC DEPOT 3, INC
GENERIC PHARMACY INC
GENERIC RX
GENOVESE DRUG STORES, INC
GEORGE PHARMACY CARE,CORP
GEORGE PHARMACY, INC.
GERIZIM VENTURES INC.
GERMAINE PHARMACY INC
GET RX HELP PHARMACY
GILBERT DRUGS
GILEAD PHARMACY
GINGER PHARMACY
GIRIRAJ LLC
GLENN MEYERS
GLENS PHARMACY 1517
GLOBAL PHARMACY SERVICES, INC.
GLORIA SANDOVAL
GNAMS LLC
GNSP CORP
GOLDEN GATE PHARMACY INC.
GOLDEN HILLS PHARMACY, LLC
GOLDEN PHARMACY, INC.
GOLDENROD PHARMACY LLC
GOLDTREE RX LLC
GONCAN, INC
GONZALEZ PHARMACY SERVICES, INC
GONZALEZ SANDINO A
GOOD FOR YOU PHARMACY
GOOD HEALTH PHARMACY AT MARY
IMMACULATE
GOOD HOMES PHARMACY LLC.
GOOD LIFE PHARMACY INC.
GOOD RX V LLC
GOODLIFE PHARMACY
GOODLUCK PHARMACY INC

GOODMAN DRUGS INC
GOODMAN DRUGS OF FL CORP
GOODPILL PHARMACY, INC
GOPALA INC
GOVERDHAN LLC
GPS PHARMACY TAMPA LLC
GPS PHARMACYTAMPA LLC
GRANDMAS COUNTRY PHARMACY, INC.
GREAT CARE PHARMACY
GREEN APPLE PHARMACY, INC
GREEN PHARMA LLC
GREENWOOD HEALTHCARE LLC
GREY DOG II, INC
GREY DOG III, INC
GREY DOG IV, INC
GREY DOG, INC.
GROVE PHCY AND AA
MEDICAL SUPP
GS TAMPA RD, INC
GSP HEALTHCARE LLC
GUARDIAN PHARMACY LLC
GUARDIAN PHARMACY OF DAYTONA, LLC
GUARDIAN PHARMACY OF JACKSONVILLE
GUARDIAN PHARMACY OF NW FLORIDA, LLC
GUARDIAN PHARMACY OF ORLANDO, LLC
GUARDIAN PHARMACY OF SOUTHEAST FLORIDA LLC
GUARDIAN PHARMACY OF SOUTHWEST FLORIDA, LLC
GUARDIAN PHARMACY OF TAMPA, LLC
GUDOC PHARMACY PLLC
GULF COAST PHARMACY, INC
GULF COAST SCRIPTS LLC
GULF MED PHARMACY INC
GULF MEDICAL SERVICES, INC
GULF PHARMACY CORP.
GULF SHORE RX LLC
GULFSHORE PHARMACY
GULFSTREAM PHCY INC
GURLEYS PHARMACY
H & O SPECIALTY PHARMACY LLC
H E FARMACIA INC
H.A.R.S. DRUGS INC
HABANA HOSP. PHARM. INC.
HABERSHAM DRUG
HAGUE PHARMACY
HALIFAX HOSPITAL MEDICAL CENTER

HALLANDALE PHARMACY
HALLIDAYS & KOIVISTO
HANAI INC, DBA DRUG MART DS
HANNAFORD FOOD AND DRUG
HANNAFORD FOOD DRUG
HANSARAJ INC
HAPPY HARRYS 11027
HAPPY HARRYS 11037
HAPPY HARRYS 11054
HARBIN DISCOUNT PHARMACY
HARBOUR ISLAND SPECIALTY PHARMACY
HARHAR MAHADEV LLC
HARIGOPAL INC.
HARRIS DRUG
HARRIS TEETER PHARMACY
HARRISONS PHARMACY
HARS DRUGS INC
HARVEYS SUPERMARKET PHARMACY
HAVANA LTC PHARMACY INC
HAVANA PHARMACY AND DISCOUNT
HAWA PHARMACY INC.
HAWKINS PHARMACY
HC PHARMACY LLC
HEAL N HALE LLC
HEALTH CHOICE PHARMACY
HEALTH FIRST FAMILY PHARMACY
HEALTH FIRST INFUSION
HEALTH MART PHARMACY
HEALTH MATTERS PHARMACY LLC
HEALTH PROMOTE PHARMACY LLC
HEALTH RESOURCES CONSULTANTS
HEALTH TREASURES PHARMACY INC
HEALTHCITE LLC
HEALTHNET PHARMACY SERVICES
HEALTHNOW PHARMACY LLC
HEALTHPLUS PHARMACY
HEALTHPLUS PHARMACY INC
HEALTHRIDGE PHARMACY
HEALTHSMART PHARMACY
HEALTHWISE PHARMACY
HEALTHY MEDS
HEALTHY MEDS PHARMACY CORP.
HEALTHY OUTCOMES INC
HEARTLAND DISCOUNT PHARMACY L.L.C.

HEARTLAND HEALTH CARE SERV
HEARTLAND PHARMACY
HEARTLAND PHARMACY INC
HEARTLAND PHARMACY LAKE PLACID. INC
HEALTH CARE CENTER FOR HOMELESS INC
HEB PHARMACY
HECTOR J CORDERO
HECTOR JUNCO
HEDGES PRESCRIPTION SHOP OF SARASOT
HELEN B. BENTLEY FAMILY HEALTH CTR
HELFMAN PHARMACY
HELIX MEDICAL CENTERS
HEMOPHILIA OF FLORIDA PHARMACY, LLC
HENRY FORD MEDICAL CENTER PHARMACY
HEPZIBAH INC
HERMANAS GONZALEZ PHARMACY
HERMANAS GONZALEZ PHARMACY & DISCOUNT INC.
HHCS PHARMACY, INC.
HIALEAH PHARMACY
HIGHLAND PHARMACY
HIGHLAND PHARMACY, INC
HIGHLANDS PHARMACY
HILL PHARMACY
HILLIARD PHARMACY, INC.
HILLS PHARMACY, LLC
HILLSBOROUGH CO HLTH DEPT
HILLSBOROUGH RIVER PHARMA
HILLSBOROUGH RIVER PHARMACY INC.
HILLTOP HEALTH INC
HITCHCOCK AND SONS, INC
HKS PHARMACY
HM BRANDON LLC
HMV LLC
HOA V LE
HOBBS PHARMACY
UNITED INC
HOLIDAY PHARMACY, INC
HOLLY HILL PHARMACY
HOLLYWOOD DISCOUNT PHARM
HOLMES REGIONAL MEDICAL CENTER
HOLMES REGIONAL MEDICAL CENTER INC
HOLMES REGIONAL MEDICAL CENTER, INC.
HOME CARE PHARMACY N
HOME CARE SOLUTIONS, INC

HOMECARE PHARMACY
HOMESCRIP PHARMACY SVCS
HOMESCRIPTS.COM, LLC
HOMESTEAD
COMMUNITY PHARMACY
HOMETOWN OLD COUNTRY PHARMACY
HOMETOWN PHARMACY
42 HONOR
HOMETOWN
HOMETOWN
SUPERMARKETS, LLC
HOMETOWN UMATILLA, LLC
HOOK SUPERX LLC
HOOKSUPERX LLC
HOPE RISING
ENTERPRISELCC
HOPKINS PHARMACY INC.
HORIZON HEALTH CARE SYSTEMS INC
HPC LLC
HPCS LLC
HR RX LLC
HTB ENTERPRISE LLC
HUBER DRUGS
HUDSON DRUGS, LLC
HUDSON PHARMACY
HUMANITARY PHARMACY
HUMANITARY PHARMACY INC
HUMERAA QAMAR
HUNTINGTON DRUGS
HUNTSVILLE HOSPITAL
EMPLOYEE PHARMACY
HURRICANE FAMILY PHARMACY
HVVP RX LLC
HYBRID PHARMA LLC
HYGEIA HOLDINGS LLC
ICARE RX LLC
ICF ENTERPRISES INC
ICON
PHARMACEUTICALS, INC
IDEAL PHARMACY SERVICES LLC
IDEAL RX PHARMACY INC
IDEL PHARMACY
IFB PHARMACY LLC
IGLESIA BAUTISTA
CENTRAL DE KISSIMMEE, INC.
IHS ACQUISITION XXX, INC
IJEM LLC
ILDEFONSO GOMEZ
IMPERIAL POINT PHARMACY CENTER, INC.
INC LIL DARLIN
INVESTMENT
INCANICA, INC
INDIAN RIVER PHARMACY
INFINITI PHARMACY AND
INFUSION SERVICES, INC
INFUPHARMA

INFUSION PARTNERS OF MELBOURNE, INC
INFUSION SYSTEMS SW FL
INFUSION
TECHNOLOGIES, INC
INFUSION
TECHNOLOGIES, INC
INGELS MARKET INC
INGLES PHARMACY
INGLES PHARMACY 036
INNOVATIVE RX GULF COAST PHARMACY INC
INNOVATIVERX GULF COAST PHARMACY INC
INTEGRA RX
INTEGRATED
COMMUNITY
ONCOLOGY
INTEGRATED HEALTH CONCEPTS INC
INTEGRATED MEDICAL SUPPLIES
INTEGRATED
PHARMACEUTICAL SOLUTIONS LLC
INTERAMERICAN
MEDICAL CEN
INTERAMERICAN
MEDICAL CENTER
INTERAMERICAN
MEDICAL CENTER GROUP LLC
INTERAMERICAN
MEDICAN CENTER GROUP LLC
INTERNATIONAL
PHARMACY INC
INTERNATIONAL
PHARMACY SOLUTIONS INC
INTRAMED INC
INTRAMED, INC
INVOTEX LLC
IPHARMACY DISCOUNT INC
ISHAAN & RIHAAN, LLC
ISLAND FAMILY PHARMACY INC
ISLAND PHARMACY
ISLAND RX, LLC
ISSAM ALBANNA
IV STAT
J & H STORES, INC.
J & N PHARMACY
J & N PHARMACY, CORP
J & S RX PHARMACY INC.
J.C.R. MEDICAL EQUIPMENT INC.
J.L. FOLSOM ENTERPRISES INC
J'S PHARMACY, LLC
J&K CARE PHARMACY
JABERS PHARMACY INC
JACK P HERICK INC
JACK P. HERICK INC.
JACKSON MEM. HOSP. PHAR.

JACKSON PHARMACY & DISCOUNT INC
JACKSONS DRUGS, INC.
JAGPHARMACY AND HEALTH CARE SERVICES, LLC
JAHD INC
JAHEMA ENTERPRISE INC.
JAI BOHLE INC
JAI HANUMANJI LLC
JAI MARUTI RX LLC
JAIMY PHARMACY INC
JAMES H. JOHNSON JR MD PA
JARES INVESTMENTS
GLOBAL INC
JAY CARE PHARMACY LLC
JAY PHARMACY INC
JAYS PHARMACY OF MADISON, LLC
JAYVI CAPITAL LLC
JC RESOURCES L.L.C.
JDM ENTERPRISES OF VERO BEACH
JEBBA INVESTMENTS GROUP LLC
JEFFS PRESCRIPTION SHOP
JEHNISSI INC
JELMA CORPORATION
JENEL PHARMACY, INC
JENNY'S PHARMACY & DISCOUNT
JENNYS YOUR FRIENDLY PHARMACY LLC
JEROME GOLDEN CENTER FOR BEHAVIORAL HEALTH, INC.
JET PHARMACY
JET PHARMACY LLC
JET PHARMACY, LLC
JGJW LLC
JIGNESH LLC
JIMOND CORPORATION
JJDRUG CO
JK SERVICES OF SARASOTA LLC
JM WARD ENTERPRISES LLC
JNS RX LLC
JNT HEALTHCARE LLC
JOE GOLDEN DRUG
JOHN HOPKINS
OUTPATIENT PHARMACY AT THE
JOHN KNOX VILLAGE
JOHN KNOX VILLAGE OF CENTRAL FLORIDA
JOHN TOM
CRUTCHFIELD
JOHNS DISCOUNT DRUGS INC
JOHNS HOPKINS ALL CHILDREN'S HOSPITAL, INC

JOHNS HOPKINS ALL CHILDREN'S HOSPITAL, INC.
 JOHNSONS PHARMACY, LLC
 JONELEEN LLC
 JONELEEN, LLC
 JONES TOTAL HEALTH PHARMACY, LLC
 JORGE J GIL SABINA
 JORGE LUNA
 JORGE LUNA, D.O.
 JORGES PHARMACY
 JOSE A
 GONZALEZPANTALEON
 JOSE CARIZ
 JOSE ESTEVES
 JOSE MARICHAL
 JOSE MORGAN, MD
 JOSEFINA M LLANOS
 JOSEPHS PHARMACY LLC
 JOSEYKAY CONSULTANT SERVICES, INC
 JPPD INC
 JR PHARMACY
 JRM PHARMACY INC.
 JRX PHARMACY LLC
 JS PHARMACY LLC
 JSA HEALTHCARE CORPORATION
 JSK RX LLC
 JSN9 INC.
 JUAN & JOHN DRUGS INC
 JUAN AND JOHN DRUGS, INC.
 JUAN BLEMIL FERNANDEZ MD, PA
 JULIA BARRIGA MD
 JULIO'S PHARMACY
 JULIOS PHARMACY
 JUNE DEFAS
 JUNIOR FOOD STORES OF WEST FL, INC
 JUPITER DRUGS
 JUPITER DRUGS LLC
 JUPITER PHARMACY
 JUSTRX PHARMACY, INC
 JYA, LLC
 K & M DRUGS FORT MYERS LLC
 K & M DRUGS SOLIVITA, INC.
 K AND M DRUGS OF LAKE PLACID, INC
 K T PHARMACY INC
 K.M.E. RX INC
 KAASINDRA AND CO INC
 KABS OF TAMPA, INC
 KABS OF TAMPA, INC.
 KABS PHARMACY OF TAMPA, INC.
 KACHEEZ PHARMACY LLC
 KARE PHARMACY, INC.
 KARMA HEALTH CARE, LLC
 KARMA HEALTHCARE LLC
 KASHIBEN SAY LLC
 KASN N' KARRY FOOD STORES, INC.
 KD RX LLC
 KELSON DISCOUNT DRUGS
 KEMET CARE COMPOUNDING
 KENNEBEC PHCY AND HOME CARE
 KENNETH A BERDICK MD
 KERR DRUG
 KERR DURG 100
 KEVIN B FOX
 KEY PHARMACY
 KEYCARE PHARMACY
 KEYONA
 KEYONA LLC
 KEYSTONE PHARMACY
 KEZIT DISCOUNT PHARMACY
 KEZIT MEDICAL INC
 KGJ ENTERPRISES
 KIDS HOME CARE
 KIKOS PHARMACY INC.
 KIM MARTINEZ
 KIMA CORPORATION
 KIMS FAMILY PHARMACY, INC.
 KING DRUG COMPANY
 KING PHARMACY & COMPOUNDING LLC
 KINGS DRUGS INC
 KINGS DRUGSTORE, INC., THE
 KINGS PHARMACY
 KINGS PHARMACY INC.
 KINNEY DRUGS INC
 KIRBY AND COMPANY PHARMACY LLC
 KISKEYA INVESTMENT GROUP, LLC
 KNAP INC
 KPS HEALTHCARE LLC
 KRISHNA HEALTHCARE LLC
 KRUPA SAI LLC
 KTJ ENTERPRISES LLC
 L & H PHARMA CORP
 L AND N PHARMACY INC
 L. VASSAR, INC
 L&T COMP INC
 LA BOTICA PHARMACY
 LA CARIDAD PHARMACY
 LA CUBANA PHARMACY DISCOUNT INC
 LA CUBANISIMA PHCY DISCOUNT
 LA LUZ DRUG STORE
 LA LUZ DRUG STORE INC
 LA MILAGROSA PHARMACY & DISCOUNT LLC
 LA MILAGROSA PHARMACY & DISCOUNT, LLC
 LA REINA PHARMACY
 LAB DISCOUNT DRUGS INC
 LAFFITA PHARMACY, INC
 LAIYUAN LIU
 LAKE ELLA PHARMACY
 LAKE ONE COMMUNITY PHARMACY
 LAKE SIDE PHARMACY
 LAKE TOWN PHARMACY LLC
 LAKELAND CITY PHARMACY
 LAKELAND CITY PHARMACY INC
 LAKELAND DISCOUNT PHARMACY INC
 LAKELAND DRUG COMPANY
 LAKELAND FAMILY PHARMACY
 LAKELAND REGIONAL MEDICAL CENTER
 LAKEVIEW CENTER INC
 LAKEWOOD RANCH PHARMACY
 LAKHANI RX INC
 LAMBRIGHT PHARMACY
 LAMBRIGHT PHARMACY LLC
 LAMBRIGHT PHARMACY, LLC
 LANDMARK DRUGS, INC.
 LANE AVENUE PHARMACY
 INCORPORATED
 LANTANA PHARMACY INC
 LARKIN COMMUNITY HOSPITAL PALM SPRINGS CAMPUS, LLC
 LARODAT INTEGRATED HEALTH SERVICES
 LAS AMERICAS PHARMACY
 LAS MERCEDES PHARMACY INC
 LAS MIAS MEDICAL CENTER INC
 LAS OLAS CHEMIST INC
 LAS VILLAS PHARMACY DISCOUNT AND MEDICAL SUPPLIES
 LAS VILLAS PHCY DISC & SUPP
 LATIN MEDICAL SUPPLY INC
 LAWRENCE PHARMACY
 LAZARO DIAZ
 LAZARO M GARCIA
 LBGHOLDINGS LLC
 LE SELECT PHARMACY & MES INC.
 LE VT INC
 LEADER DRUG STORES INC
 LEAL PHARMACY LLC
 LEE ANN DRUGS INC
 LEE SILSBY COMPOUNDING PHARMACY
 LEESBURG REGIONAL MED CENTER, INC
 LEGACY PARK DISCOUNT PHARMACY
 LEGACY PHARMACY OC, LLC
 LEGEND DRUGS, INC
 LEHIGH PHARMACY & SUPPLIES, INC.
 LEON MARTINEZ
 LEONCIO SANCHEZ MD INC
 LEROYS PHARMACY
 LEWIS PHARMACY LLC
 LEWIS PHARMACY OF PALM BEACH LLC
 LEX DRUGS INC
 LIBERTY HEALTHCARE PHARMACY OF NEVADA, LLC
 LIBERTY MEDICAL SUPPLY OF LIBERTY MEDICAL SUPPLY, INC.
 LIBERTY PHARMACY AND DISC
 LIFE EXTENSION PHARMACY, INC
 LIFE PHARMACY INC
 LIFE SAVERX, LLC
 LIFE WORTH LIVING FOUNDATION INC.
 LIFECARE PHARMACY
 LIFESAVER PHARMACY
 LIFESAVER PHARMACY INC
 LILLIAN PHARMACY INC
 LILY CARE LLC
 LINCARE, INC
 LINCARE, INC.
 LINCOURT ASSISTED LIVING, INC.
 LINCOURT PHARMACY
 LINDEN CARE LLC
 LINK PHARMACY, INC.
 LINTON SQUARE PHARMACY
 LISS PHARMACY
 LISSSMART MEDICAL SUPPLY INC
 LITHAN LLC
 LITTLE DRUG CO INC
 LITTLE DRUG CO. INC.
 LITTLE ROAD PHARMACY LLC
 LIVE & LET LIVE PHARMA LLC
 LIVE & LET LIVE PHARMACY
 LMC MEDICAL SUPPLIES, INC
 LOCATEL HEALTH AND WELLNESS
 LOCATEL STORES OPERATIONS LLC
 LOCATEL SUNNY ISLES, LLC
 LONGEVITY DRUGS

LONGS DRUG STORES CALIFORNIA LLC	MAHIMN RX LLC	MARTINEZ DRUG STORE, INC	MEDICAL ARTS PHARMACY OF SARASOTA
LONGS DRUG STORES CALIFORNIA, LLC	MAIN STREET PHARMACY OF SAFETY HARBOR	MARTNICKS PHARMACY & DISCOUNT SVCS, INC.	MEDICAL ARTS PHARMACY OF SARASOTA, LLC
LONGS DRUGS	MAKTINA LLC	MARYVILLE PHARMACY	MEDICAL CENTER EAST PHARMACY
LONGS DRUGS OF FLORENCE	MALABAR PHARMACY LLC	MASSEY DRUGS	MEDICAL CENTER PHARMACY
LONGS DRUGS STORE CALIFORNIA LLC	MALADI, INC	MATHEW MANAGEMENT II	MEDICAL CENTER PHARMACY
LORDONI DISCOUNT PHARMACY	MALECON PHARMACY, INC	MATHEW MANAGEMENT INC	MEDICAL CENTER PHARMACY OF PINELLAS
LOS PALACIOS MED SUPP AND PHCY	MALLETTE DRUG COMPANY	MATHEW MANAGEMENT IV	MEDICAL HOTSPOTS, INC
LOS PALACIOS MEDICAL SUPPLIES INC.	MALOOKA PHARMA CORP	MATTHEW 7:25 INC	MEDICAL PLAZA PHARMACY
LOVES PHARMACY GIFTS, INC	MANASOTA PHARMACY SERVICES	MAX DRUGS INC	MEDICAL PLAZA PHARMACY OF PLANTATION LLC
LOWLITE INVESTMENT, INC	MANATEE CO RURAL HEALTH SERVICES	MAXCARE PHARMACY INC.	MEDICAL PRIORITY PHARMACY, LLC
LOXLEY DISCOUNT PHARMACY	MANATEE CO RURAL HEALTH SVCS INC	MAXICARE, INC.	MEDICAP PHARMACY
LTC PHARMA HLDG, LLC	MANATEE CO. RURAL HEALTH SERV.,INC.	MAXOR NATIONAL PHARMACY SERVICES LLC	MEDICATION STATION
LUCKY FLORES	MANATEE CO. RURAL HEALTH SRVS, INC	MAXXYCOM RX PHARMACY	MEDICINE SHOPPE PHARMACY
LUDWIGS PHARMACY	MANATEE COUNTY RURAL HEALTH SERVICES	MAYAR PHARMACY	MEDICURE LONGWOOD INC
LUIS F DE JONGH	MANATEE COUNTY RURAL HEALTH SERVICES INC	MAYHUGH DRUGS INC	MEDIDRUG, INC
LUIS PHARMACY INC	MANATEE COUNTY RURAL HEALTH SERVICES INC.	MAYHUGH DRUGS INC.	MEDIKON LLC
LUPER CORP	MANATEE COUNTY RURAL HEALTH SERVICES INC.	MAYO CLINIC JACKSONVILLE	MEDILINK PHARMACY
LUPER CORPORATION	MANATEE COUNTY RURAL HEALTH SERVICES INC.	MCARE HEALTH LLC	MEDILOT INC
LURDS INC	MANATEE COUNTY RURAL HEALTH SERVICES, INC	MCR HEALTH, INC	MEDIMIX SPECIALTY PHARMACY
LURDS, INC.	MANATEE COUNTY RURAL HEALTH SVCS. INC	MD MOULTON LLC	MEDINAMEDS PHARMACY, LLC
LUTZ PHARMACY	MANATEE COUNTY RURAL HEALTH SVCS.	MD OMEGA PHARMACY, INC	MEDISERV INFUSION LLC
LUTZ PHARMACY LLC	MANATEE COUNTY RURAL HEALTH SVCS.	MD OMEGA PHARMACY, INC.	MEDISERV PHARMACY SERVICES LLC
LYKINS PHARMACY	MANATEE COUNTY RURAL HEALTH SERVICES, INC	MED AND CO INVESTMENT LLC	MEDLIFE PHARMACY LLC
LYNNFIELD DRUG, INC	MANATEE COUNTY RURAL HEALTH SVCS.	MED AND Z INVESTMENT LLC	MEDO HEALTH CARE, LLC
M & M FAMILY PHARMACY CORP	MANATEE COUNTY RURAL HEALTH SVCS.	MED CARE CHOICE PHARMACY	MEDOZ PHARMACY OF OSCEOLA INC
M.M.S. DRUG CORPORATION	MANATEE COUNTY RURAL HEALTH SVCS.	MED CITI PHARMACY	MEDOZ PHARMACY OF POLK INC
MAA ASHAPURA INC	MANATEE COUNTY RURAL HEALTH SVCS.	MED EXPRESS PHARMACY INC.	MEDPOINT PHARMACY, INC
MAA ASHAPURI LLC	MANATEE COUNTY RURAL HEALTH SVCS.	MED EXPRESS RX, LLC	MEDROCK PHARMACY LLC
MAA BHAWANI INC	MANATEE COUNTY RURAL HEALTH SVCS.	MED HEALTH EQUIPMENT, LLC.	MEDS RX PHARMACY, LLC
MAA BHAWANI, INC	MANATEE COUNTY RURAL HEALTH SVCS.	MED MATCH	MEDSCRIPTS LLC
MAAHI LLC	MANATEE COUNTY RURAL HEALTH SVCS.	MED SOLUTION PHARMACY DISCOUNT & EQUIPMENT CORP	MEDSCRIPTS MEDICAL PHARMACY
MABELEX, INCORPORATED	MANATEE COUNTY RURAL HEALTH SVCS.	MED SOLUTIONS PHARMACY	MEDSOURCE PHARMACY
MACCLENNY PHARMACY COMPANY	MANATEE COUNTY RURAL HEALTH SVCS.	MEDCARE DIABETIC & MEDICAL SUPPLIES, INC	MEDSOURCE RX PHARMACY
MACDILL PHARMACY INC.	MANATEE COUNTY RURAL HEALTH SVCS.	MEDCARE INFUSION SERVICES, INC	MEDSTAR PHARMACY AT GEORGETOWN UNIVERSITY
MADABHUSHI PHARMACY SERVICES	MANATEE COUNTY RURAL HEALTH SVCS.	MEDCARE PHARMACY	MEDSTAR PHARMACY LLC
MADAHIMA PHARMACY	MANATEE COUNTY RURAL HEALTH SVCS.	MEDCITY PHARMACY LLC	MEDWINS PHARMACY INC
MADEL PHARMACY CORP.	MANATEE COUNTY RURAL HEALTH SVCS.	MEDEX PHARMACY	MEDWISE INC
MAGELLAN RX PHARMACY LLC	MANATEE COUNTY RURAL HEALTH SVCS.	MEDEX PHARMACY AND MEDICAL SUPPLY	MEDZ DIRECT, INC.
MAGGIE'S PHARMACY INC	MANATEE COUNTY RURAL HEALTH SVCS.	MEDI Q INC.	
MAGGIES PHARMACY	MANATEE COUNTY RURAL HEALTH SVCS.	MEDI SHOP PHARMACY, LLC.	
MAGGY PHARMACY DISCOUNT	MANATEE COUNTY RURAL HEALTH SVCS.	MEDIQ INC.	
MAGNOLIA PHARMACY, LLC	MANATEE COUNTY RURAL HEALTH SVCS.	MEDIC PHARMACYSURGICAL	
MAHA SAI LLC	MANATEE COUNTY RURAL HEALTH SVCS.	MEDICA OPTIMA LLC	
MAHANT PHARMACY INC	MANATEE COUNTY RURAL HEALTH SVCS.		
MAHANT RX INC	MANATEE COUNTY RURAL HEALTH SVCS.		
MAHEEM ENTERPRISE LLC	MANATEE COUNTY RURAL HEALTH SVCS.		
MAHFAR,LLC	MANATEE COUNTY RURAL HEALTH SVCS.		

MEDZDIRECT INC
MELISSA PHARMACY
MEMORIAL HOSP OPD
PHARMACY AT 68TH ST
MEMORIAL HOSPITAL
JACKSONVILLE
MERIDIAN AMBULATORY
PHARM
MERIDIAN PHARMACY
MERIT PHARMACY INC.
MERRITT ISLAND
PHARMACY, LLC
METOMA CORPORATION
METRO
PHARMACEUTICAL
SERVICES INC
METRO PHARMACY LLC
METRO RX LLC
METROHEALTH MEDICAL
CENTER PLAZA
PHARMACY
METROMEDS PHARMACY
LLC
MG PHARMACY AND
DISCOUNT, INC
MGC PHARMACY
MIAMI BEACH
COMMUNITY HEALTH
CENTER INC
MIAMI BEACH
COMMUNITY HEALTH
CENTER PHARMACY #4
MIAMI CHILDRENS
HOSPITAL PHARMACY
MIAMI EXECUTIVE
PHARMACY, INC.
MIAMI GARDENS
PHARMACY
MIAMI SPRINGS
PHARMACY
MIAMI SPRINGS
PHARMACY INC
MICHAELS PHARMACY
MIDFLORIDA
HEMATOLOGY &
ONCOLOGY CORP
MIDTOWN DISCOUNT
PHARMACY
MIGUEL GARCIBLANCO
MIGUEL SANCHEZ
MILAGROS PHARMACY
CORPORATION
MILE STRETCH LLC
MILL PARK PHARMACY
MILLENNIA PHARMACY
MILLENNIUM PHARMACY
SERVICES
MILTON MED & DRUG
CO
MIRACLE PHARMACY
AND DISCOUNT INC.
MISIR DRUGS LLC
MJ MEDICAL & DENTAL
GROUP, INC.
MKST MANAGEMENT,
LLC
MMRX HEALTH
SOLUTIONS, INC.
MNR GROUP LLC

MODEL PHARMACY
MODERN PHARMACY,
LLC
MOFFITT CANCER
CENTER
MORENO PHARMACY &
DISCOUNT
MORNING LLC
MORRISONS RX INC
MORTAR AND PESTLE
INVESTMENTS
MORTON WEINSTEIN
MOTHERS PHARMACY
INC
MOTTO PHARMACY
MOULTONS PHARMACY
OF CRESTVIEW INC
MOULTONS
PHARMACY, INC.
MOULTRIE PHARMACY,
INC
MOUNT SINAI MEDICAL
CENTER OF FLORIDA INC
MPAM LLC
MPS RX FLORIDA, LLC
MR DISCOUNT DRUGS
MR RX LLC
MSP & MS INC
MULBERRY PHARMACY
MULBERRY PHARMACY,
INC
MULLINS PHARMACY
MY COMMUNITY
PHARMACY OF
BOYNTON, INC
MY COMMUNITY
PHARMACY, LLC
MY FAMILY PHARMACY &
DISCOUNT, LLC.
MY HEALTH SOUTH
PHARMACY, INC
MY PHARMACY OF BIG
BEND
MY PHARMACY OF BIRD
ROAD
MY PHARMACY OF
BRANDON
MY PHARMACY OF
HOMESTEAD
MY PHARMACY OF
NORTH FLORIDA, INC
MY PHARMACY OF
TAMPA
N&D MEDICAL
EQUIPMENT OF FL
NAI SATURN EASTERN
LLC
NAKHLE AND KHANLIAN
LLC
NAN PHARM INC.
NAPIER PHARMACY INC
NAPIER PHARMACY, INC.
NAPLES PHARMACY LLC
NAPLES RX SOLUTIONS,
LLC
NARANJA DISCOUNT
PHARMACY
NARANJA PHARMACY

NARAYAN PHARMACY,
LLC
NATES PHARMACY
NATIONAL HEALTH
INFUSION, INC
NATURA PHARMACY, INC
NATURE COAST
PHARMACY INC
NATURES CURE
PHARMACY INC
NAVAZA PHARMACY
CORP
NAVYA HEALTH LLC
NDBP LLC
NEERAJ SHARMA
NEGLEX INC
NEIGHBORHOOD
PHARMACY
NEIGHBORLY PHARMACY
LLC
NEPTUNE BEACH
PHARMACY LLC
NEW GEN RX LLC
NEW HOPE PHARMACY
NEW HOPE PHARMACY,
INC
NEW HORIZON
PHARMACY AND
MEDICAL SUPPLY
NEW HORIZON
PHARMACY, INC
NEW LIFE COMMUNITY
PHARMACY
NEW LIFE PHARMACY
NEW LYNK, LLC
NEW PHARMACY
DISCOUNT, CORP.
NEW VISION MEDICAL
NGUYENS INC NGUYENS
INC.
NH PHARMA, LLC
NH PHARMACY LLC
NIA RX SERVICES
NICHOLLS PHARMACY
LLC
NIGHT OWL PHARMACY,
INC.
NILDA R ACOSTA
NILKANTH VARNI GROUP
INC
NIMOH PHARMACY AND
COMPOUNDING LLC
NMB GENERICS , INC
NOEL MORA
NORTH BEACHES
PHARMACY INC
NORTH BROWARD
HOSPITAL DISTRICT
NORTH BROWARD
HOSPITAL DISTRICT
IPMCPHARMACY
NORTH BROWARD
MEDICAL CENTER
OUTPATIENT PHARMACY
NORTH DADE HEALTH
CTR
NORTH FL PHARMACY
OF FT WHITE INC

NORTH FLA. PHARMACY
#2
NORTH FLA. PHARMACY
OF CHIEFLAND INC
NORTH FLORIDA OF
KEYSTONE HEIGHTS
NORTH FLORIDA
PHARMACY INC.
NORTH FLORIDA
PHARMACY OF
BRANFORD
NORTH FLORIDA
PHARMACY OF
MADISON
NORTH FLORIDA
PHARMACY OF MAYO
INC
NORTH FORT MYERS
PRESCRIPTION SHOP,
INC
NORTH PORT
PHARMACY, INC.
NORTH TAMPA
PHARMACY
NORTHLAKE PHARMACY
LLC
NORTHSIDE HOMECARE
PHARMA
NORTHSIDE MAYSVILLE
PHARMACY
NORTHSIDE MENTAL
HEALTH CENTER
NORTHWEST MEDICAL
PHARMACY
NOSTRUM MEDICAL
CENTER NORTH WEST
NOVA PHARMACY CORP
NOVA SOUTHEASTERN
UNIVERSITY
NOVA SOUTHEASTERN
UNIVERSITY, INC
NOVO PHARMA OF
TAMPA, LLC.
NP PHARMACY LLC
NUMART DISCOUNT
PHARMACY
NUR CORPORATION
NURO PHARMA INC
NUTRA PHARM
O2M NEBMED, INC
OAKS RX LLC
OAKWOOD PHARMACY
DEARBORN
OCALA PHARMACY LLC
OCEAN BREEZE
PHARMACY
OCEAN CHEMIST LLC
OCEAN SIDE PHARMACY
ODALYS
ESPINOSAESTRADA
OHM PHARMACY
SERVICES, INC.
OKEECHOBEE
DISCOUNT DRUG
OLDE TIME PHARMACY,
LLC
OLSON DRUG
CORPORATION
OLYMPIA DISCOUNT

OM SHRI GANESH LLC	OWENS PHARMACY INC.	PATIENT SOURCE	PHARMACIE PHARMACY
OM TSM LLC	P & D PHARMACY	CONSULTING, LLC	INC
OMAR BENITEZ MD PA	DISCOUNT, INC.	PATIENTS CHOICE	PHARMACORE RX LLC
OMEGA DRUGS INC	P & P PHARMACY, INC.	PHARMACY, LLC	PHARMACOS SERVICES
OMRX,LLC	P.R. GROUP LLC	PATIENTS FIRST	INC
ONAMIA DRUG	P&M PHARMACY, LLC	PHARMACY, INC	PHARMACY 4 LESS
ONCOLOGY PLUS	P&P PHARMACY INC	PAUL GIPPS	PHARMACY 4U INC
INCORPORATED	PAC SHORES	PAUL P CAMMUSO	PHARMACY
ONCOLOGY SPECIALITY	PHARMACY, LLC	PAULINO MILLA	ALTERNATIVES, LLC
PHARMACY LLC	PACE PHARMACY, LLC	PAVILION PLAZA	PHARMACY ASSOCIATES
ONCOLOGY SPECIALTY	PACIFIC PHARMACY	PHARMACY INC	LLC
PHARMACY LLC	PACIFICO NATIONAL,	PAVILLION INFUSION	PHARMACY AT ABACOA,
ONE INFUSION	INC.	THERAPY	INC.
PHARMACY LLC	PALACE PHARMACY	PAVILLIONS PHARMACY	PHARMACY CARE
ONE SOURCE	CORP	#2739	CENTER
PHARMACY, LLC	PALM AVENUE	PAXON PRESCRIPTION	PHARMACY CARE
ONE STOP PHARMACY	PHARMACY	CTR.	CENTER , INC
101	PALM AVENUE	PAY LESS PHARMACY INC	PHARMACY CARE, INC.
ONESTOP RX LLC	PHARMACY, INC.	PB GARDENS DRUGS LLC	PHARMACY CHOICE, INC
ONSHK LLC	PALM BAY PHARMACY,	PCA MEDICAL SUPPLY	PHARMACY CORP. OF
OPHARMA GROUP LLC	INC.	PD & KD INC.	AMERICA #2171
OPS PHARMACY LLC	PALM BEACH CANCER	PDL PHARMACY CORP	PHARMACY
OPTIMUM CARE	INSTITUTE, LLC	PEACE DRUG STORES	CORPORATION OF
PHARMACY LLC	PALM BEACH PHARMA	PEAK PHARMACY INC	AMERICA
OPTIMUM HEALTH	CORP	PEAK PHARMACY INC	PHARMACY EXPRESS &
PHARMACY	PALM COAST PHARMACY	PEARL SHAH LLC	DISCOUNT, CORP
OPTION CARE	INC	PEBBLEBROOK, INC	PHARMACY INVESTMENT
ENTERPRISES INC	PALM LAKES PHARMACY	PEBBLEBROOK, INC.	COORDINATORS
OPTION CARE	PALMA CESIA HEALTH	PEE JAY, INC	PHARMACY INVESTMENT
ENTERPRISES, INC	MART PHARMACY,INC.	PEE JAY, INC.	COORDINATORS, INC.
OQUINN PHARMACY	PALMETTO PHARMACY	PELOTS PHARMACY	PHARMACY MEDICAL
ORANGE CO HLTH DEPT	PALMETTO PHARMACY II	PENSACOLA	SERVICES, INC.
ORANGE PARK	CORP.	APOTHECARY INC	PHARMACY OF TAMPA,
PHARMACY INC	PALMS HEALTH SERVICES	PENSACOLA	INC
ORANGE PARK	LLC	APOTHECARY, INC	PHARMACY PLUS, INC
PHARMACY INC.	PALMYRA PHARMACY	PENTEC HEALTH INC	PHARMACY PROS
ORANGEBAY PHARMACY	LLC	PEOPLES PHARMACY,	CORPORATION
ORIENTE PHARMACY	PANACEA INC.	INC	PHARMACY SUPER
ORLANDO	PANAMA CITY DRUG	PEPPER TREE PHARMACY	MARKETS,INC
COMPOUNDING	CORP	LLC	PHARMACY VENTURES
PHARMACY LLC	PANAMA CITY	PERFECTION RX LLC	LLC
ORLANDO DISCOUNT	PHARMACY, INC.	PERGONQUI CORP	PHARMACYMAX LABS,
PHARMACY, INC	PANITDA D TOOCHINDA	PERKINS	LLC
ORLANDO ESPINOZA,	PANTHERX SPECIALTY	COMPOUNDING	PHARMACYONEPRO
MD	PHARMACY	PHARMACY, INC.	MIAMI
ORLANDO FAMILY	PANTHERX SPECIALTY,	PERSONAL ENRICHMENT	PHARMADVICE, INC
MEDICAL INC	LLC	THROUGH MENTAL	PHARMAEXPRESS, INC.
ORLANDO HEALTH	PARAMORE'S PHARMACY	HEALTH SERVICES	PHARMAG INC
CENTRAL, INC.	PARAMORES PHARMACY	PETER BORTROS	PHARMAID
ORLANDO HEALTH INC	PARK AND KING	PHARMACY INC.	PHARMAKARE LLC
ORLANDO HEALTH, INC	PHARMACY	PHAMILY PHARMACY,	PHARMAKON LLC
ORLANDO PHARMACY	PARK AVENUE	LLC	PHARMAPLUS DRUG
INC	PHARMACY INC	PHARM LAND LLC	STORE CORP
ORLRX	PARK DRUGS, INC	PHARMA BUDDIES CORP	PHARMAQUICK, LLC.
ORLY PHARMACY INC. #	PARK PHARMACY	PHARMA GO OF WEST	PHARMAVILLE INC
2	SYSTEMS INC	PARK LLC	PHARMAX SPECIALTY
ORSINI	PARK SHORE DRUG	PHARMA LLC	PHARMACY INC.
PHARMACEUTICAL	PARK SHORE DRUG INC	PHARMA RXPRESS	PHARMCARE PHARMACY
SERVICES	PARK SHORE DRUG, INC	PHARMA SOURCE DME,	INC
ORSINI	PARK SHORE PHARMACY	INC.	PHARMCARE USA OF
PHARMACEUTICAL	PARTNER RX, LLC	PHARMA TOPCARE INC	FLORIDA, LLC
SERVICES, INC.	PARTNERS PHARMACY	PHARMACEUTICAL	PHARMCO, LLC
OSBORNE PHARM INC	OF FLORIDA, LLC	SPECIALIES INC	PHARMCORE INC
OSCAR HERNANDEZ MD	PASCO PHARMACY	PHARMACEUTICAL	PHARMERICA
OSCEOLA CLINIC	PASCO PHARMACY INC	SPECIALTIES INC	PHARMERICA DRUG
PHARMACY, INC.,	PASTEUR PHARMACY #1	PHARMACEUTICAL	SYSTEMS LLC
OSSIS APOTHECARY #2	PATIENT CARE	SPECIALTIES LLC	PHARMEZ MEDICAL, LLC
OUSIA PHARMACY CORP	PHARMACY	PHARMACEUTICAL	PHARMLAND
OWENS PHARMACY 25	SERVICES,INC	SPECIALTIES, INC.	PHARMLINK INC.

PHARMOMEDICAL
INTERNATI
PHARMOVISA INC
PHARMOVISA MD
PHARMScript OF
FLORIDA LLC
PHARMPRESS LLC
PHAROS MANAGEMENT
GROUP
PHC PHARMACY LLC
PHMN INC.
PHYSICIAN CHOICE
PHARMACY
PHYSICIAN CHOICE
PHARMACY, LLC
PHYSICIAN FAMILY
PHARMACY CORP
PHYSICIAN PREFERRED
PHARMACY, INC
PHYSICIAN PREFERRED
PHARMACY, INC.
PHYTOGENICS LLC,
PHARMACY
PICC LINES PLUS
PICC LINES PLUS LLC
PICENTI LLC
PICENTI LLC.
PICH KTM CORP
PIERSON COMMUNITY
PHARMACY
PIERSON COMMUNITY
PHARMACY INC
PILL BOX II PHARMACY
PILL BOX PHARMACY
PILL BOX PINES
WEST,LLC
PILLPACK PHARMACY
PILLS PLUS INC
PILLS POTIONS &
LOTIONS INC
PINE BROOK PHARMACY
LLC
PINE HILLS DRUGS, INC
PINELLAS SPECIALTY
PHARMACY,LLC
PINES DISCOUNT
PHARMACY INC
PINES ISLAND DRUGS
PINNACLE
PHARMACEUTICAL
SERVICES
PINNACLE PHARMACY
INC
PINO PHARMACY CORP
PKS PHARMA LLC
PLANTATION GENERAL
HOSPITAL, L.P.
PLANTATION PHCY
MIDTOWN 24
PLAZA PHARMACY INC
PLAZA PHARMACY,LLC
POARCH CREEK INDIAN
HEALTH DEPT
POINTE MED PHARMACY,
INC
POLARIS PHARMACY
SERVICES OF TAMPA
POLKS CROSSGATES
DISCOUNT DRUGS INC

POLYCARP I AGBARA
POMPANO PHARMACY
INC
POPE SHENOUDA LLC
POPS PHARMACY, LLC
POSEY PROFFESIONAL
SERVICES, INC.
POSTE HASTE
PHARMACY
POTTER'S HAND LLC
PRAIRIE PHARMACY FA1
PRAKRUTI LLC
PRAMUKH KRUPA RX LLC
PRAXIS SPECIALTY
PHARMACY, LLC
PRECISION RX
COMPOUNDING LLC
PREMIER ACT
ENTERPRISES
PREMIER ACT
ENTERPRISES LLC
PREMIER KIDS CARE, INC.
PREMIER PHARMA
SERVICES, INC
PREMIER PHARMACY
PREMIER PHARMACY, LLC
PREMIUM MEDICAL
EQUIPMENT SUPPLIES,
CORP
PREMIUM PHARMACY
INC
PRESBYTERIAN
HEALTHCARE P
PRESCRIBED PED
EXTENDED CARE
PRESCRIBEIT RX BOCA
PRESCRIBEIT RX DELRAY
PRESCRIBEIT RX
HIALEAH
PRESCRIBEIT RX
HILLSBORO
PRESCRIBEIT RX
HOLLYWOOD
PRESCRIBEIT RX
LANTANA
PRESCRIBEIT RX LINTON
PRESCRIBEIT RX MIAMI
BEACH
PRESCRIBEIT RX N
CONGRESS
PRESCRIBEIT RX S
CONGRESS
PRESCRIBEIT RX SOUTH
DADE
PRESCRIBEIT RX SW 8TH
STREET
PRESCRIBEIT RX SW
40TH STREET
PRESCRIPTION CARE
PHARMACY, INC.
PRESCRIPTION CENTERS
PRESCRIPTION CENTERS
LLC S3
PRESCRIPTION DRUG
FOUN.
PRESCRIPTION DRUG
FOUNDATION OF
NORTH MIAMI BEACH

PRESCRIPTION PLACE
DEFUNIAK SPRINGS
PRESCRIPTION SHOP
INC.
PRESCRIPTION SHOP OF
STUA
PRESCRIPTION SHOP OF
STUART INC
PRESCRIPTION SHOPPES
LLC
PRESCRIPTIONS PLUS INC
PRESCRIPTRX PHARMACY
LLC
PRESIDENT PHARMACY &
DISCOUNT
PRESIDENTE PHARMACY
& DISCOUNT
PRESTIGE PHCY AND
MED SUPPLIES
PRESTON PHARMACY
PRICE CHOICE
PHARMACY #3 LLC
PRICE CHOPPER
PHARMACY 155
PRIDE PHARMACY, INC
PRIME PHARMACY
SERVICES, LLC
PRIME PHARMACY, LLC
PRIME SYNERGY LLC
PRIME THERAPEUTICS
SPECIALTY PHARMACY
LLC
PRIMENET MEDICAL
GROUP INC
PRIMROSE PHARMACY
PRO PHARMACY &
DISCOUNT
PROFESSIONAL
APOTHECARY
PROFESSIONAL
PHARMACY SRVCS &
DME
PROFESSIONAL TECH
GRP INC.
PROGRESS PHARMACY
INC
PROGRESSIVE
PHARMACY INC
PROGRESSIVE
PHARMACY INC.
PROGRESSIVE
PHARMACY MEDICAL
SUPPLY INC
PROJECT HEALTH INC.
PROMISE PHARMACY
PRONTO MED INC
PROPHARMACY AND
DISCOUNT INC
PROSCRIPT PHARMACY
SERVICES, INC.
PROSPERITY SPECIALTY
PHARMACY
PROVIDENCE PHARMACY
LLC
PROXYCARE, INC.
PRUITTHEALTH
PHARMACY SERVICES
VALDOSTA, INC.
PRX INC. PHARMACY

PSG OF SARASOTA LLC
PSJ PHARMACY ,LLC
PSRP INC.
PUBLIC HEALTH TRUST
PUBLIC HEALTH TRUST
OF DADE COUNTY
FLORIDA
PULMO DOSE
PHARMACY
PUMAR PHARMACY INC.
PURE PHARMACY
Q.L.A. CORPORATION
QUALITY RESPIRATORY,
INC.
QUALITY SPECIALTY
PHARMACY
QUALITY SPECIALTY
PHARMACY OF
JACKSONVILLE, INC
QUALITYRX
QUICK DRUGS
QUICK SCRIPT
PHARMACY INC
R & A GUPTA, LLC
R BISHT LLC
RADHIKA CORP
RADHIKA CORPORATION
RADIANCE ENTERPRISE
INC
RADIANCE HEALTH RX
LLC
RAGHAVENDRA
PHARMACY INC
RAMIL RX, INC
RANG INC
RANI INC.
RAPID SCRIPTS
PHARMACY
RAPIDSCRIPTS
PHARMACY, INC
RAV PHARMA LLC
RAZA ALI
READY PHARMACY INC
READY SCRIPTS
REAL TIME PHARMACY
REALO DISCOUNT
DRUGS
RECEPT PHARMACY, LP
RED ALAMO CORP
RED CROSS PHARMACY
REGAL PHARMACY
REGENTS OF THE
UNIVERSITY OF
CALIFORNIA
REGIONS PHARMACY,
CORP
REGIONS PHARMACY,
CORP.
REID HOSP PHARMACY
RELIABLE PHARMACY,
LLC
RELIABLE SUPER DRUGS
RELIABLE SUPER DRUGS
OF MIAMI, LLC
RELIANCE PHARMACY
LLC
RELIANT PHARMACY LLC
RELYON SPECIALTY
PHARMACY

REMED PHARMACY	RURAL HEALTH CARE INC	SAI RX LLC	SENIORCARE
REMEI SENIORCARE OF	RURAL HEALTH CARE,	SAI SCRIPTS INC	COMMUNITY PHARMACY
TAMPA,LLC	INC.	SAI SIVA HEALTHCARE	INC
RENAL PHARMACY	RUSH FAMILY CARE INC	LLC	SENIORCARE
SERVICES LLC	RUSHVILLE PHARMACY	SAISAI INC	COMMUNITY
RENE CABEZA	RX ADVANTAGE, INC.	SAISAI INC.	PHARMACY, INC.
REVIVE PHARMACY, INC	RX ADVISORY AND	SALUS PHARMACY LLC	SENTARA NORFOLK GEN
RICARDO	SOLUTIONS	SAMARA PHARMACY	OUTPTNT PHCY
SANCHEZRIVERS	RX CARE 7, LLC	SERVICES, LLC	SENTRIX PHARMACY
RIX INVESTMENT CORP	RX CARE 10 LLC	SAMMA LLC	AND DISCOUNT
RIDGE MANOR	RX CARE 11 LLC	SAMMA, LLC	SERVICE DRUG STORE
PHARMACY LLC	RX CARE 12 LLC	SAMPLE SQUARE	INC
RIDGELAND ALLIED	RX CARE 17, LLC	PHARMACY	SERVICE PRO
PHARMACY, INC.	RX CARE CLUB	SAMS HEALTH MART	PHARMACY,LLC
RIGHTBACK LLC	RX CARE OF LADY LAKE,	PHARMACY 001	SETON PHARMACY, INC
RIGHTCHOICE	INC	SAN JUAN PHARMACY	SG PHARMACEUTICALS
PHARMACY LLC	RX CARE OF LADY LAKE,	SAN PEDRO PHARMACY	LLC
RISE N SHINE PHARMACY	INC.	SANDER PHARMACY	SHAFI PHARMACY
RISSAN INC	RX CARE OF TAMPA, LLC.	SANFORD PHARMACY	SHAMBHU INC.
RISSAN INC.	RX CARE PHARMACY	SOUTH UNIVERSITY	SHAMROCK DRUGS, LLC
RITECARE HEALTH, LLC	RX CARE PHARMACY	SANTA BARBARA	SHANDS JACKSONVILLE
RITEMED PHARMACY LLC	SERVICES	PHARMACY	MEDICAL CENTER
RITTERS TOWNE	RX CARE SPECIALTY	SANTOS PHARMACY	SHANDS TEACHING
PHARMACY LLC	PHARMACY LLC	SANTOSH M NAIR	HOSP & CLINICS INC
RITTERS TOWNE PHCY	RX DIRECT LLC	SARASOTA COUNTY	SHANDS TEACHING
RIVER GARDEN HEBREW	RX DIRECT, INC.	HEALTH DEPT	HOSPITAL & CLINICS
HOME	RX DISCOUNT	SARASOTA DISCOUNT	SHANDS TEACHING
RIVER PHARMACY LLC	PHARMACY 7	PHARMACY INC	HOSPITAL & CLINICS INC.
RIVERS ONE INC	RX EXPRESS PHARMACY	SARNO PHARMACY, LLC	SHARED PHARMACY
RIVERSIDE COMMUNITY	OF MILTON, INC.	SATER PHARMACY	HOLDINGS, LLC
PHARMACY, INC.	RX EXPRESS PHARMACY	SAVALOT PHARMACY	SHAUKAT H CHOWDHARI
RIYASH CHEMISTS INC	OF NAVARRE INC	LAUDERHILL, LLC	SHAW'S PHARMACY
RKS PHARMACEUTICALS	RX EXPRESS PHARMACY	SAVE MART PHARMACY	SHEEPSHEAD BAY
INC	OF PANAMA CITY, INC	SAVE MORE PHARMACY,	PHARMACY, INC
RNA PRESCRIPTION	RX FLORIDA	INC	SHEPHERD PHARMACY
SERVICES INC	PHARMACY,LLC	SAVE N CARE LLC	SHEPPARD
RNA PRESCRIPTION	RX GROUP ONE LLC	SAVE RITE PHARMACY	APOTHECARY, LLC
SERVICES, INC.	RX HEALTH PHARMACY	INC.	SHIVAJI GROUP INC
RNS LLC	RX HEALTHCARE SYSTEM	SAVERS DRUG MART	SHIVAM LLC
ROBERT PALM MEDICINE	LLC	SAVERS DRUG MART,	SHIVKRUPA INC
INC.	RX INTERNATIONAL	INC.	SHIVSAI RX LLC
ROBERTO LLANTADA	PHARMACY	SAVON HUNTER	SHIVVINAYAK, INC
ROBERTS SOUTH BANK	RX MARINE INC	SAVMOR PHARMACY	SHOPKO PHARMACY
PHARMACY, INC	RX MEDS PHARMACY	SAVON PHARMACY	2691
ROCK CREEK PHARMACY	RX OF BOCA	SBCARE HEALTH	SHOPKO PHARMACY
ROCKS 3 INC	RX PERT #1, LLC	NETWORK,INC	2752
ROMAT VENTURES, INC.	RX PLUS PHAMACY LLC	SBF INVESTMENTS INC.	SHOPRITE PHARMACY
RONNY RAMIREZ RX	RX PRIDE LLC	SBF INVESTMENTS, INC.	169
CORP	RX PRO PHARMACY	SCHAEFER DRUGS	SHOPRITE PHARMACY
ROSEL HOME	COMPOUNDING, INC	WELLINGTO	OF PEEKSKILL
EQUIPMENT CARE, INC	RX REMEDIES	SCHNUCKS PHARMACY	SHREE AARNA INC
ROSEMAY T LATORTUE,	RX TO GO LLC	SCOTT R ENGLISH	SHREE HARI PSM INC
MD, INC #5	RX TO YOU	SCOTT'S PHARMACY	SHREY PHARMACY, LLC
ROSSY MEDICAL INC	RXCARE FOUR, LLC	SCOTTS RX INC	SHRI AARNA RX LLC
ROSYS PHARMACY, INC	RXMART PHARMACY LLC	SCRIPT CHOICE	SHRI GOVIND LLC
ROYAL CARE MEDICAL	RXPERT #3 LLC	PHARMACY LLC	SHRI SAIRAM DRUGS LLC
CENTER	RXPERTS PHARMACY	SCRIPTS DIRECT, LLC	SHRIJI SWAMI LLC
ROYAL MED CORP 1	SERVICES INC	SCRIPTS FOR LIFE, INC.	SHRINATHJEE LLC
ROYAL RX PHARMACY	RXPERTS	SCRIPTS PHARMACY LLC	SHS PHARMACY
INC	PHARMACYTAMPA INC	SCRUPLES PHARMACY	SHUBHOM HEALTHCARE
ROYAL WELLINGTON	RXPRESS PHARMACY LLC	SEASIDE FAMILY	LLC
PHARMACY INC.	S&B HEALTH SYSTEMS	PHARMACY, LLC.	SHUBHOM PHARMACY
RPH SOLUTION	LLC	SEBASTIAN PHARMACY	LLC
RS COMPOUNDING LLC	S&S PHARMACY INC	LLC	SIDDH INC
RSPP CORP	SA DRUGS LLC	SENIFF ENTERPRISES, INC	SIGMA PHARMACY, LLC
RUBIO PHARMACY AND	SACRED HEART	SENIOR CARE	SILVER LAKE PHARMACY,
DISCOUNT, INC.	HOSPITAL OF	PHARMACY OF FLA., LLC	LLC.
RUDHRA LLC	PENSACOLA		SILVER STAR PHARMACY
RUDRAKRUPA LLC	SAFEGWAY INC		

SILVER STAR PHARMACY
LLC
SIMALI HEALTHCARE LLC
SIMED HEALTH LLC
SIMFA ROSE
PHARMACEUTICAL
SPECIALTY INC.
SIMPLYWELL SPECIALTY
PHARMACY LP
SIMS PHARMACY
SIMS PHARMACY LLC
SIR CHARLES PHARMACY,
INC.
SISTERS PHARMACY, INC
SJT CORPORATION
SKP LLC
SKY PHARMACY AND
DISCOUNT CORP
SKYEMED INC
SKYEMEDORLANDO INC
SKYEMEDPALM BEACH,
INC
SMA BEHAVIORAL
HEALTH SVCS, INC.
SMART PHARMACY
SMART PHARMACY INC
SMITH FOOD & DRUG
CENTERS INC.
SMP COMPOUNDING
SMP PHARMACY
SOLUTIONS, LLC
SMZA ENTERPRISES LLC
SNEADS PHARMACY
SNS HEALTHCARE LLC
SOILEAUS PHARMACY
SOL HARARI
SOLEO HEALTH INC.
SOLERA SPECIALTY
PHARMACY, LLC
SOLTI GRASZ
GABRIEL
SOLUTIONS DRUG
STORE
SON CHAU
SONEE PHARMACY
SERVICES
SOONER DRUG
SOOTHE
COMPOUNDING
PHARMACY
SORKIN'S RX LTD.
SORYAL BUSINESS, LLC
SOUTH BROADWAY
PHARMACY
SOUTH CO MTL HLTH
CENT
SOUTH FLORIDA
PHARMACY
SOUTH MIAMI
PHARMACY II, INC.
SOUTH MIAMI
PHARMACY, INC
SOUTH OCEAN
PHARMACY INC
SOUTH PACIFIC MEDICAL
EQUIPMENT CORP
SOUTH POINT
PHARMACY CORP

SOUTH WALTON
PHARMACY, LLC
SOUTHCARE PHARMACY
SOUTHEAST
COMPOUNDING
PHARMACY
SOUTHEAST
COMPOUNDING
PHARMACY, LLC
SOUTHEASTERN
DERMATOLOGY GROUP,
PA
SOUTHEASTERN
INTEGRATED MEDICAL
INC
SOUTHERN FAMILY
MARKETS LLC
SOUTHERN HILLS
PHARMACY, LLC
SOUTHWEST FLORIDA
INFUSION CAR
SPAR USA LLC
SPECIALTY PHARMACY,
INC.
SPECIALTY THERAPEUTIC
CARE LP
SPEED PHARMACY INC
SPEEDY SCRIPTS II, INC.
SPEEDY SCRIPTS INC
SPNN LLC
SPRING CITY PHARMACY
SPRING PARK PHARMACY
SPRINGS PARK DRUG INC
SPRINGS PHARMACY
SREE GANESHA INC
SRI SAI SANVI
INTEGRATIVE PHARMACY
SERVICES LLC
SRI VENKATESWARA INC.
ST GEORGE PHARMACY,
INC
ST JOHNS PHARMACY
INC
ST JOSEPH PHARMACY &
MEDICAL SUPPLIES
ST JUDE HOSPITAL
PHARMACY
ST JUDE PHARMACY &
DISCOUNT INC
ST JUDES PHARMACY
INC
ST LUKE PHARMACY,
CORP.
ST LUKE'S
PROFESSIONAL PHCY
ST MARY PHARMACY,
LLC
ST RBAKAH PHARMACY
INC
ST. CLOUD PHARMACY &
WELLNESS CENTER.
ST. JOSEPH PHARMACY
ST. LOUIS CHILDREN'S
HOSPITALPHARMACY
ST. MARKS PHARMACY
LLC
ST. MINA AND POPE
KYRILLOS LLC

ST. MOHRAEL& ST.
PHILOPATEER
ST. PHILOPATER LLC
ST. THOMAS PHARMACY,
LLC
ST. VERENA LLC
STANLEY LONG TERM
CARE PHARM OF FL
STANLEY LTC PHARMACY
ST. PETERSBURG LLC
STANS PHARMACY
STAR PHARMACY INC
STARX PHARMACY INC
STATE LINE DRUGS
STATSCRIPT PHARMACY
STAYWELL PHARMACY
INC.
STEVEN L JACKSON
STEVENS RX
STEVERSON PHARMACY
SERVICES INC
STEVES PHARMACY
STEWARTS PHARMACY &
WELLNESS STORE
STEWARTS PHARMACY:
THE WELLNESS STORE
INC.
STOBIDEK INC
STOBIDEK, INC.
STOP & SHOP
PHARMACY
STOP SHOP PHARMACY
SUBHAM HEALTHCARE
LLC
SUDDHA PHARMACY,
LLC.
SUMMERFIELD
PHARMACY INC
SUMMIT VISION INC
SUN AND LAKE
PHARMACY SERVICES
INC.
SUN HEALTH &
WELLNESS, INC
SUN HEALTH AND
WELLNESS, INC
SUN LAKE PHARMACY
SUN PHARMACY
SUN RX LLC
SUNCOAST COMMUNITY
HEALTH CENTERS, INC
SUNCOAST COMMUNITY
HEALTH CENTERS, INC.
SUNRISE PHARMACY LLC
SUNRISE PHARMACY OF
KISSIMMEE LLC
SUNRISE RX PHARMACY,
INC
SUNSCRIPT LLC
SUNSET PHARMACY
SUNSHINE BIOLOGICS,
INC.
SUNSHINE COMMUNITY
RX OF SARASOTA, LLC
SUNSHINE DRUGS #3
SUNSHINE DRUGS INC.
SUNSHINE MEDICAL
PHARMACY INC
SUNSHINE PHARMACY

SUNSHINE PHARMACY
AT LIVINGSTON
SUNSHINE PHARMACY
LLC
SUNSHINE PHARMACY
OF SANFORD
SUNSHINE PHARMACY
RX INC.
SUNSHINE PHARMACY,
LLC
SUNSHINE RX LLC
SUNSHINE WILD INC
SUNTREE PHARMACY
INC.
SUNTRUST PHARMACY
SUPER D DRUGS
ACQUISITION CO
SUPER DISCOUNT
PHARMACY LLC
SUPER SAVER #4, LLC
SUPER SAVER PHARMACY
#2, LLC
SUPER SAVER PHARMACY
#3, LLC
SUPER SAVER PHARMACY
#4, LLC
SUPER SAVER
PHARMACY, LLC.
SUPER SAVER
PHARMACY.,LLC
SUPERIOR CARE
PHARMACY LLC
SUPERIOR PHARMACY
SUPERIOR PHARMACY
LLC
SUPERIOR PHARMACY
OF TEMPLE TERRACE
SUPERIOR PHARMACY
OF TEMPLE TERRACE,
LLC
SUREHEALTH
PHARMACY, INC
SUREPOINT MEDICAL
SURF DRUGS INC
SVS HEALTH, INC
SW PHARMACY INC
SWEETBAY
SUPERMARKET #1906
SWEETBAY
SUPERMARKET
PHARMACY
SYLVESTRE PHARMACY
CORP.
SYMCARE INC
SYNERGY PHARMACY
SERVICES
T AND C PHARMACY, INC
TAGET PHARMACY
TAJJ MULTISERVICES LLC
TAJOSE LLC
TAKA HEALTH, LLC
TALLENT DRUG
COMPANY
TAMARAC PHARMACY
LLC
TAMIMI PHARMACY LLC
TAMPA COMMUNITY
HEALTH CENTERS INC

TAMPA COMMUNITY HEALTH CENTERS, INC
 TAMPA FAMILY HEALTH CENTERS INC
 TAMPA FAMILY HEALTH CENTERS, INC
 TAMPA FAMILY HEALTH CENTERS, INC.
 TAMPA FAMILY PHARMACY LLC
 TAMPA LONG TERM CARE PHARMACY LLC
 TAMPA LONG TERM CARE PHARMACY, LLC
 TAMPA PALMS PHARMACY LLC
 TARARA PHARMACY, INC.
 TATA COMPANIES INC
 TATA PHARMACY DISCOUNT LLC
 TATA RESOURCES LLC
 TAVARES PHARMACY LLC
 TAYLOR PHARMACY
 TAYLORS PHARMACY #2
 TEAMCARE INFUSION ORLANDO, INC
 TEAMCARE PHARMACY SERVICES, INC.
 TECA MEDICAL ENTERPRISES INC
 TECH
 PHARMACEUTICALS INC
 TENTHINO LLC
 TEQUESTA DRUGS, INC
 TGH BRANDON HEALTHPLEX PHARMACY, LLC
 THE BROOKS PHARMACY
 THE CLINICAL PHARMACY
 THE CLINIC PHARMACY
 THE CRAYTON MITCHELL GROUP, LLC
 THE DRUG SHOPPE, INC
 THE DRUG STORE
 THE DRUG STORE OF LIVINGSTON
 THE HOSPICE OF THE FLORIDA SUNCOAST, INC.
 THE HUNTERS CREEK, LLC
 THE LOBBY PHARMACY
 THE MEDICINE CHEST LTC, LLC
 THE MEDICINE CHEST
 SPANISH SPRINGS TOWN SQUARE,
 THE MEDICINE CHEST, INC.
 THE MEDICINE CHESTSPANISH SPRINGS TOWN SQUARE, LL
 THE NEBRASKA MED CENTER
 THE NEMOURS FOUNDATION
 THE PALMS PHARMACY
 THE PHARMACIST
 THE PHARMACY
 THE PHARMACY COUNTER LLC
 THE PHARMACY SHOP
 THE PHARMACY STORE, LLC
 THE PHARMACY, LLC
 THE PLANTATION PHARMACY
 THE PRESCRIPTION PLACE OF NICEVILLE
 THE PRESCRIPTION SHOP
 THE RIGHT PILL PHARMACY
 THE RIGHT PILL PHARMACY OF BOCA
 THE SMART CHOICE GROUP INC
 THE SMART GROUP LLC
 THE TOWERS PHARMACY
 THE WATTS COMPANY OF MARIANNA, INC.
 THERACOM
 THREE NOTCH PHARMACY LLC
 THREE OAKS PHARMACY, INC.
 THRIFT DRUGS AT ECHC, LLC
 THRIFT PHARMACY, INC
 THRIFTY DISCOUNT PHARMACY LLC
 TIME SQUARE DRUGS INC
 TIRUMALA PHARMACY INC
 TIRUMALA PHARMACY P.C. INC
 TITA HEALTHCARE INC.
 TITUSVILLE PHARMACY LLC
 TLC RX
 TMRX VENTURES LLC
 TMRX VENTURES, LLC
 TONAI'S PHARMACY & SURGICAL SUPPLY STORE INC
 TOP CARE PHARMACY, LLC
 TOP RX PHARMACY
 TOPCARE PHARMACY
 TORI INC.
 TORY SULLIVAN
 TOTAL CARE MEDICAL INC
 TOTAL CARE PHARMACY
 TOTAL CARE PHARMACY 2
 TOTAL CARE PHARMACY OF BL
 TOUCHPOINT RX, LLC
 TOWN AND COUNTRY PHARMACY
 TOWN DRUG
 TOWN DRUG AND SURGICAL
 TOWN DRUG OF HOLLYWOOD
 TOWN PHARMACY, INC
 TRACY L CHRISTIAN
 TRADELINE SH, INC
 TREASURE COAST COMMUNITY HEALTH INC
 TREASURE COAST COMMUNITY HEALTH, INC
 TREASURE ISLAND PHARMACY CARE INC
 TRENT EAST PHARMACY
 TRENTON MEDICAL CENTER
 TRENTON MEDICAL CENTER INC
 TRENTON MEDICAL CENTER INC.
 TREVOL DISCOUNT & PHARMACY INC
 TREVOL DISCOUNT AND PHARMACY
 TRICOUNTY HUMAN SERVICES, INC
 TRILLION ENTERPRISES INC
 TRIMED USA, INC.
 TRINITY MEDICAL PHARMACY, LLC
 TRINITY PHARMACY II, INC
 TRINITY PHARMACY, INC
 TRIPLE RESOURCES, INC
 TRISTAR DISCOUNT PHARMACY LLC
 TRISTAR PHARMACY LLC
 TROPICAL PHARMACY, INC
 TRU VALU DRUGS 1
 TRUST PHARMACY 2 LLC
 TRUST PHARMACY, LLC
 TRUSTEDMEDRX
 TRUVALU DRUG OF SANFORD
 TRX PHARMACY
 TUAN TRAN
 TUDELA PHARMACY, INC.
 TUJAX NORTH, INC
 TURNER BROTHERS INC
 TWT CONSULTING INC.
 U SAVE IT PHARMACY
 U SAVE IT PHARMACY CAIRO
 U SAVE IT PHARMACY FRANKLIN
 U SAVE IT PHARMACY SOUTH ALBANY
 U SAVE PHARMACY
 U TRUST PHARMACY INC.
 UGALAND INC
 ULTIMA RX LLC
 ULTRA CARE PHARMACY LLC
 ULTRA PHARMACY
 ULTRATECH MEDICAL
 UMBRA INC
 UMC OUTPATIENT PHARMACY
 UNC HOSPITALS
 CENTRAL OUTPATIENT PHARMACY
 UNION PHARMACY & MEDICAL SUPPLIES
 UNITED PHARMACY & DISCOUNT, INC
 UNITED PHARMACY LLC
 UNITED PHARMACY SRVCS OF VALDOSTA
 UNIV OF MIAMI HOSPITALISTS AND CLINICS
 UNIV OF SOUTH FLORIDA BOARD OF TRUSTEES
 UNIVERSAL PHARMACY & DISCOUNT INC.
 UNIVERSITY DRUGS LLC
 UNIVERSITY HEALTH CARE PHARMACY, INC
 UNIVERSITY OF CENTRAL FLORIDA
 UNIVERSITY OF COLORADO HOSPITAL PHARMACY
 UNIVERSITY OF SOUTH FLORIDA BOARD OF TRUSTEES
 UNIVERSITY PHARMACY OF CORAL GABLES
 UNIVERSITY PHARMACY OF CORAL GABLES, LLC
 UNIVERSITY PHARMACY, INC
 UNIVITA
 UNIVITA OF FLORIDA, INC
 UNIVITA SPECIALTY INFUSION PHARMACY, LLC
 UNIV I INC
 UNIV II INC
 UNIV INC
 UNLIMITED CARE SERVICES INC
 UNLIMITED MEDICAL SERVICES OF FLORIDA
 UNLIMITED PHARMACY
 UPSTATE MEDICAL PHARMACY
 URBAN SPECIALTY PHARMACY LLC
 URBAN SPECIALTY PHARMACY, LLC
 URJA PHARMACY, INC
 US ALLIANCE PHARMACEUTICALS
 US BIOSERVICES
 US COMPOUNDING
 US HEALTHLINK, LLC
 US HWY 1 PHARMACY, INC
 US MED
 US RX DISTRIBUTION LLC
 US SPECIALTY CARE, LLC
 USA DRUGS 15823
 USAV
 PHARMACEUTICAL, INC
 USF STUDENT HEALTH CARE CENTER
 PHARMACY

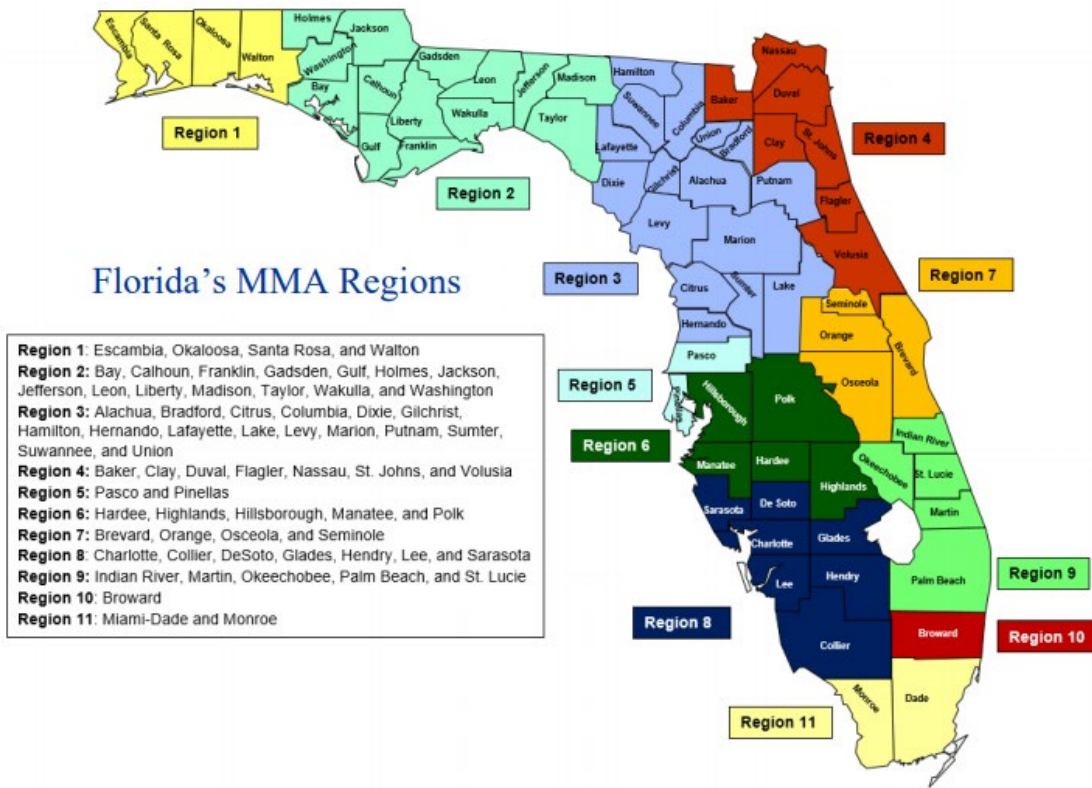
V & T PHARMACY, INC
V AND N PHARMACY LLC
V.H. ENTERPRISES, INC.
VAIDEHI INC
VALUABLE DRUGS
VALUE HEALTH
CONSULTANTS
VALUE HEALTH
CONSULTANTS, INC.
VALUE MEDICAL
PHARMACY
VALUE RX
VALUE RX BRANDON
VALUED CHOICE
PHARMACY LLC
VANDANA INC
VANDERBILT CHILDRENS
HOSPITAL PHARMACY
VAPS ACQUISITION
COMPANY, LLC
VARAHI PHARMACY INC.
VARGHESE GROUP LLC
VASO RPH SOLUTION
INC
VASUPUJYA INC
VCS PHARMACY 03364
VENICE APOTHECARIES,
LLC SAEDEH
VERNON DISCOUNT
DRUGS
VERO PHARMACY, INC.
VETERANS PHARMACY,
INC
VH HEALTH SOLUTIONS
LLC
VICTOR FARRIS
PHARMACY INC
VICTORY PHARMACY
CORPORATION
VIDA PHARMACY CORP
VILLA PHARMACY LLC
VILLAGE CLINIC AND RX,
LLC
VILLAGE HEALTH MART
DRUG
VILLAGE PHARMACY
VILLAGE PHARMACY OF
NOKOMIS, LLC
VINEYARD PHARMACY
AND HEALTHCARE
SERVICES
VINTAGE PHARMACY LLC
VISTA MEDICAL GROUP
LLC

VISTA SPECIALTY
PHARMACY
VISTACARE PHARMACY
SERVICES 2, LLC
VISTACARE PHARMACY
SERVICES LLC
VISTACARE PHARMACY
SERVICES, LLC
VIVA PHARMACY LLC
VOLEL PROFESSIONAL
PHARMACIST ASSOC
VOLITION GROUP CORP
VRA ENTERPRISES, LLC
VRAJ HEALTHCARE INC
WAAS DRUG STORE
WALDEN DRUG
WALDRUG, LLC
WALFER CORPORATION
WALHEALTH LLC
WALKER PHARMACY INC
WAMU LLC
WANDA E ALFONSO
WATSON DS INC.
WATSON PHARMACY,
INC
WATSONS PHARMACY
WCRX PHARMACY LLC
WEAVER'S PHARMACY
INC
WEBB'S FORT MYERS
PRESCRIPTION SHOP,
INC
WECARE PHARMACY LLC
WEEKSS PHARMACY LLC
WELAKA PHARMACY, LLC
WELCOME PHARMACY
CO
WELL DYNERX, INC
WELLCARE PHARMACY
SERVICES INC
WELLDYNE, INC
WELLDYNERX, INC
WELLHEALTHRX
PHARMACY
WELLINGTON
PHARMACY INC
WELLNESS PHARMACY
OF ST AUGUSTINE, LLC
WELLNESS PHARMACY,
INC.
WELLNESS RX AT
PENALVER
WELLNESS RX LLC
WELLPARTNER, INC

WELLS PHARMACY
WELLS SPECIALTY
PHARMACY
WELLS SPECIALTY
PHARMACY, INC
WESMARK INVESTMENT
CORP
WEST ATLANTIC
PHARMACY
WEST COAST PHARMACY
II LLC
WEST COAST PHARMACY
LLC
WEST LAB PHARMACY,
INC.
WEST LAKE PHARMACY,
INC
WEST ORANGE
HEALTHCARE DISTRICT
WEST PALM BEACH
PHARMACEUTICALS LLC
WEST PALM PHARMACY
WEST RETAIL PHARMACY
WEST SHORE PHARMACY
WESTMINISTER SENIOR
CARE PHARMACY
WESTWOOD DISC.
PHARMACY
WESTWOOD PHARMACY
INC
WHITE DRUG 9
WHITE DRUG 15
WHITE DRUG 45
WHITE ORCHID
PHARMACY
WHITMER & WHITMER
LLC
WHOLE FAMILY HEALTH
CENTER
WICKHAM DISCOUNT
PHARMACY,LLC
WILLACOOCHEE
PHARMACY
WILLCARE PHARMACY
LLC
WILLIAMS PHARMACIES
LLC
WINDSOR PHARMACY
INC
WINKLES PHARMACY
WINSHIPS PHARMACY
INC
WINSHIPS PHARMACY
INC.

WINSHIPS PRESC CTR
WINTER GARDEN
PHARMACY, INC.
WINTER SPRINGS
PHARMACY,LLC
WIREGRASS DRUGS, INC.
WISDOM PHARMACY
WISES DRUGSTORE INC
WISES PARKWOOD PHCY
WOODMONT
PHARMACY CORP
WORLD TRIUMPH
MEDICAL
WP GROUP INC
WR PHARMACY SERVICES
INC
WSRX HEALTHCARE LLC
WYNWOOD FAMILY
PHARMACY CORP
XCELLENT PHARMACY
XPRESSO PHARMACY INC
XTRA CARE PHARMACY
XUBEX PHARMACY
YADY PHARMACY
YADY PHARMACY AND
DISCOUNT, INC
YAMATO DISCOUNT
DRUGS, INC
YANISA PHARMACY INC
YATES PHARMACY &
GIFTS
YEVGENIYA
DUBROVSKAYA
YJM LLC
YOGI HEALTH LLC
YOLAINE CHAMBLIN
YONG PHARMACY
DISCOUNT INC
YORE X DRUGS
YORK DRUG INC
YOUR HEALTH RX, LLC
YOUR NEIGHBOR
PHARMACY L
YOURS NEIGHBORHOOD
PHARMACY
YRMA PHARMACY, LLC
YVONNE ENTERPRISES
Z ORANGE PHARMACY
Z STAT MEDICAL, LLC
ZEPHYRHILLS
COMMUNITY PHARMACY
LLC
ZEPHYRHILLS PHARMACY
ZMS 1 LLC

20 APPENDIX D: FLORIDA'S MMA REGIONS



2018	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Region 11
Amerigroup Florida, Inc.					X	X	X				X
Better Health, Inc.						X				X	
Simply D/B/A Clear Health Alliance¹	X	X	X		X	X	X	X	X	X	X
Coventry Health Care of Florida, Inc.											X
Florida Community Care, LLC									X	X	X
Humana Medical Plan, Inc.	X					X			X	X	X
Magellan Complete Care¹		X		X	X	X	X		X	X	X
Miami Children's Health Plan									X		X
Molina Healthcare of Florida, Inc.	X			X			X	X	X		X
Prestige Health Choice		X	X		X	X	X	X	X		X
Simply Healthcare Plans, Inc.										X	X
CCP										X	
Staywell Health Plan of Florida		X	X	X	X	X	X	X	X		X
Staywell Health Plan of Florida (SMI)									X	X	X
Sunshine State Health Plan of Florida	X	X	X	X	X	X	X	X	X	X	X

2018											
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Region 11
Sunshine (Child Welfare)¹	X	X	X	X	X	X	X	X	X	X	X
United Healthcare of Florida, Inc.			X	X			X				X
Children's Medical Services Plan-CMS	X	X	X	X	X	X	X	X	X	X	X
Total Plans, per Region	6	7	7	7	8	10	10	7	12	11	16
¹ MMA Specialty Plans Simply D/B/A Clear Health Alliance: HIV/AIDS Magellan Complete Care: Serious Mental Illness Sunshine (Child Welfare): Child Welfare Staywell Health Plan of Florida (SMI) Children's Medical Services Plan-CMS											

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22 REFERENCES

- ¹ 3 Axis Advisors. (2019, January 17). Analysis of PBM spread pricing in New York Medicaid managed care. Retrieved from <https://www.3axisadvisors.com/projects/2019/1/17/analysis-of-pbm-spread-pricing-in-new-york-medicaid-managed-care>
- ² 3 Axis Advisors. (2019, March 13). Illinois Medicaid managed care pharmacy analysis. Retrieved from <https://www.3axisadvisors.com/projects/2019/3/12/illinois-medicaid-managed-care-pharmacy-analysis>
- ³ 3 Axis Advisors. (2019, April 28). Analysis of PBM spread pricing in Michigan Medicaid managed care. Retrieved from <https://www.3axisadvisors.com/projects/2019/4/28/analysis-of-pbm-spread-pricing-in-michigan-medicaid-managed-care>
- ⁴ Yost, D. (2018, August 16). Ohio's Medicaid Managed Care Services Auditor of State Report. Retrieved from https://ohioauditor.gov/auditsearch/Reports/2018/Medicaid_Pharmacy_Services_2018_Franklin.pdf
- ⁵ Langreth, R. (2019, February 21). Drug Middlemen Took \$123.5 Million in Hidden Fees, State Claims. Retrieved from <https://www.bloomberg.com/news/articles/2019-02-21/drug-middlemen-took-123-5-million-in-hidden-fees-state-claims>
- ⁶ Langreth, R. (2019, April 9). Drug Middlemen Face State Probes Over Complex Pricing System. Retrieved from <https://www.bloomberg.com/news/articles/2019-04-09/drug-middlemen-face-state-probes-over-complex-pricing-system>
- ⁷ Kimsey, K. (2019, October 1). Report on Managed Care Pharmacy Benefit Manager (PBM) Transparency Report. Retrieved from <https://rga.lis.virginia.gov/Published/2019/RD593/PDF?fbclid=IwAR3uL8LVdO0xVrtV65HF02cYWEjfo8S4jjo5BEEdLq9TdxJ79WYopPTIP8>
- ⁸ Neall, R. (2020, January 3). Re: House Bill 589 (2019)-Report on Audit of Pharmacy Benefit Managers that Contract with Managed Care Organizations; Process for Appealing Decisions. Retrieved from <https://cdn.ymaws.com/www.marylandpharmacist.org/resource/resmgr/legislative/mcoauditreport.pdf>
- ⁹ Centers for Medicare & Medicaid Services. (2019, September). Medicaid Covered Outpatient Prescription Drug Reimbursement Information by State. Retrieved from <https://www.medicaid.gov/medicaid/prescription-drugs/state-prescription-drug-resources/drug-reimbursement-information/index.html>
- ¹⁰ Department of Health and Human Services (2019, December 3). "Federal Financial Participation in State Assistance Expenditures." Retrieved from <https://www.govinfo.gov/content/pkg/FR-2019-12-03/pdf/2019-26207.pdf>
- ¹¹ Dietz, Donald J. (2016, March). "CMS Introduces Professional Dispensing Fees for Pharmacies." Retrieved from <http://www.insidepatientcare.com/issues/2016/march-2016-vol-4-no-3/404-cms-introduces-professional-dispensing-fees-for-pharmacies>
- ¹² Medicaid and CHIP Payment and Access Commission. (2020). "Managed Care Rate Setting." Retrieved from: <https://www.macpac.gov/subtopic/managed-care-rate-setting/>
- ¹³ Ibid
- ¹⁴ Centers for Medicare & Medicaid Services. "2019-2020 Medicaid Managed Care Rate Development Guide for Rating Periods Starting between July 1, 2019 and June 30, 2020." Department of Health & Human Services Centers for Medicare & Medicaid Services, March 2019. Retrieved from: <https://www.medicaid.gov/medicaid/managed-care/downloads/guidance/2019-2020-medicaid-rate-guide.pdf>
- ¹⁵ Centers for Medicare & Medicaid Services. "Managed Care in Florida." Retrieved from: <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/managed-care/downloads/florida-mcp.pdf>
- ¹⁶ Agency for Health Care Administration. (2018). "Statewide Medicaid Managed Care Managed Medical Assistance (MMA) Program Financial Summary." Retrieved from AHCA via FOIA
- ¹⁷ Kidder, B. "Florida Medicaid: Managed Care Rate Setting." January 11, 2017. Retrieved from: https://ahca.myflorida.com/medicaid/recent_presentations/House_Health_Care_Appropriations_Subcommittee_Managed_Care_Rate_Setting_2017-01-11.pdf
- ¹⁸ Agency for Health Care Administration. (2018). "Statewide Medicaid Managed Care Managed Medical Assistance (MMA) Program Financial Summary." Retrieved from AHCA via FOIA
- ¹⁹ Rosenthal, Elisabeth. "Insurance Policy." Stanford Medicine. Penguin Random House LLC, 2017. Retrieved from: <https://stanmed.stanford.edu/2017spring/how-health-insurance-changed-from-protecting-patients-to-seeking-profit.html>
- ²⁰ Grassley, C. (2019, September 25). S.2543-Prescription Drug Pricing Reduction Act of 2019. Retrieved from <https://www.congress.gov/bill/116th-congress/senate-bill/2543/all-info>
- ²¹ Pallone Jr., F. (2019, September 19). H.R.3-Elijah E Cummings Lower Drug Costs Now Act. Retrieved from <https://www.congress.gov/bill/116th-congress/house-bill/3/text?q=%7B%22search%22%3A%5B%22H.R.+3%22%5D%7D&r=1&s=3>
- ²² Ohio Department of Medicaid. (2019, September 19). "Ohio Medicaid DeWine Administration Priorities and Status Report to the Joint Medicaid Oversight Committee." Retrieved from <http://jmoc.state.oh.us/assets/meetings/Medicaid%20Update%20JMOC%20Final%2009.19.19.pdf>
- ²³ Ohio Department of Medicaid. (2020). "Reports and Research." Retrieved from: <https://medicaid.ohio.gov/reports>
- ²⁴ Gianforcaro, Beth. "Auditor's Report: Pharmacy Benefit Managers Take Fees of 31% on Generic Drugs Worth \$208M in One-Year Period." Ohio Auditor of State. August 18, 2018. Retrieved from: <https://ohioauditor.gov/news/pressreleases/Details/5042>
- ²⁵ Centers for Medicare & Medicaid Services. (2018, November 13). "Medicaid Drug Rebate Program." Retrieved from: <https://www.medicaid.gov/medicaid/prescription-drugs/medicaid-drug-rebate-program/index.html>
- ²⁶ Medicaid and CHIP Payment and Access Commission. (2018, May). "Medicaid Payment for Outpatient Prescription Drugs." Retrieved from: <https://www.macpac.gov/wp-content/uploads/2015/09/Medicaid-Payment-for-Outpatient-Prescription-Drugs.pdf>
- ²⁷ Medicaid and CHIP Payment and Access Commission. (2020). "About MACPAC." Retrieved from: <https://www.macpac.gov/about-macpac/>
- ²⁸ Medicaid and CHIP Payment and Access Commission. (2019) "EXHIBIT 28. Medicaid Gross Spending and Rebates for Drugs by Delivery System." Retrieved from: <https://www.macpac.gov/publication/medicaid-gross-spending-and-rebates-for-drugs-by-delivery-system/>

- ²⁹ Florida Administrative Code. (2010). "Rule: 59G-4.250." Retrieved from: <https://www.flrules.org/gateway/ruleno.asp?id=59G-4.250>
- ³⁰ Florida Administrative Code & Florida Administrative Register. (2017, October 26). "Reference: Ref-08824." Retrieved from: <https://www.flrules.org/Gateway/reference.asp?No=Ref-08824>
- ³¹ Ohio Department of Medicaid. (2019, October 1). "Unified Preferred Drug List (UPDL)." Retrieved from: [https://pharmacy.medicaid.ohio.gov/sites/default/files/UPDL Announcement.pdf](https://pharmacy.medicaid.ohio.gov/sites/default/files/UPDL%20Announcement.pdf)
- ³² Centers for Medicare and Medicaid Services. (2019, November 26). "Drug Products in the Medicaid Drug Rebate Program." Retrieved from <https://data.medicaid.gov/Drug-Pricing-and-Payment/Drug-Products-in-the-Medicaid-Drug-Rebate-Program/v48d-4e3e>
- ³³ Texas Health and Human Services Commission Office of Inspector General. (2019, July 19). "Audit of Texas Medicaid and CHIP Pharmacy Benefit Services Delivered by Molina and Its PBM Caremark." Retrieved from <https://oig.hhs.texas.gov/sites/oig/files/documents/PBM-Molina-Caremark-Final-7-19-2019.pdf>
- ³⁴ Ibid
- ³⁵ Kumbhare, S., Beiko, T., Wilcox, S., & Strange, C. (2015, December 9). "Characteristics of COPD Patients Using United States Emergency Care or Hospitalization." Retrieved from: <https://journal.copdfoundation.org/jcopdf/id/1103/Characteristics-of-COPD-Patients-Using-United-States-Emergency-Care-or-Hospitalization>
- ³⁶ Agency for Healthcare Administration (2019, August). Retrieved from https://ahca.myflorida.com/Medicaid/Prescribed_Drug/pharm_thera/pdf/PDL.pdf
- ³⁷ Centers for Medicare & Medicaid Services. (2018, November 13). "Medicaid Drug Rebate Program." Retrieved from <https://www.medicare.gov/medicaid/prescription-drugs/medicaid-drug-rebate-program/index.html>
- ³⁸ Centers for Medicare & Medicaid Services, "Unit Rebate Amount Calculation for Single Source or Innovator Multiple Source Drugs." Retrieved from <https://www.medicare.gov/medicaid/prescription-drugs/medicaid-drug-rebate-program/unit-rebate-calculation/s-or-i-drug-products/index.html>
- ³⁹ U.S. Department of Labor Bureau of Labor Statistics. (2019, December 11). "Consumer Price Index - November 2019". Retrieved from <https://www.bls.gov/news.release/pdf/cpi.pdf>
- ⁴⁰ Levinson, Daniel R. (2005, June). "Medicaid Drug Price Comparisons: Average Manufacturer Price to Published Prices." Retrieved from: <https://oig.hhs.gov/oei/reports/oei-05-05-00240.pdf>
- ⁴¹ Ibid
- ⁴² Centers for Medicare & Medicaid Services. "Retail Price Survey." Retrieved from <https://www.medicare.gov/medicaid/prescription-drugs/retail-price-survey/index.html>
- ⁴³ 42 CFR 447.506(b). Retrieved from <https://www.law.cornell.edu/cfr/text/42/447.506>
- ⁴⁴ Levison, D (2019, April). "Medicaid Could Save Hundreds of Millions by Excluding Authorized Generic Drug Transactions to Secondary Manufacturers from Brand Name Drugs' Average Manufacturer Price Calculations." Retrieved from <https://oig.hhs.gov/oas/reports/region6/61804002.pdf>
- ⁴⁵ Centers for Medicare & Medicaid Services. (2019, October 17). "Medicaid Drug Rebate Program Notice Release for Participating Drug Manufacturers." Retrieved from <https://www.medicare.gov/medicaid-chip-program-information/by-topics/prescription-drugs/downloads/rx-releases/mfr-releases/mfr-rel-111.pdf>
- ⁴⁶ Agency for Health Care Administration. (2019, August). "Florida Medicaid Brand Drug Preferred List," Retrieved from: [https://ahca.myflorida.com/Medicaid/Prescribed_Drug/pdf/FL Medicaid Brand Preferred List.pdf](https://ahca.myflorida.com/Medicaid/Prescribed_Drug/pdf/FL_Medicaid_Brand_PREFERRED_List.pdf)
- ⁴⁷ Academy of Managed Care Pharmacy. (2016, February). "Drug Payment Methodologies." Retrieved from <https://www.amcp.org/sites/default/files/2019-03/Drug%20Payment%20Methodologies%20-%202016.ppt>
- ⁴⁸ Magellan RX Management. (2017). "Medicaid Pharmacy Trend Report." Retrieved from https://www1.magellanrx.com/documents/2019/03/medicaid-trend-report_2017.pdf/
- ⁴⁹ Agency for Health Care Administration. (2019, November 15). "Florida Medicaid Preferred Drug List (Updated 11-15-2019)," Retrieved from: https://ahca.myflorida.com/Medicaid/Prescribed_Drug/pharm_thera/pdf/PDL.pdf
- ⁵⁰ Card, Karen. (2019, September 12). "Florida Enhanced State Opioid Overdose Surveillance Program (FL-ESOOS)." Retrieved from <http://www.floridahealth.gov/statistics-and-data/fl-esoos/>
- ⁵¹ National Institute of Drug Abuse. (2019, May). "Florida Opioid Summary." Retrieved from <https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/florida-opioid-summary>
- ⁵² Ibid
- ⁵³ Agency for Health Care Administration. "Opioid Edit Resource," Retrieved from https://ahca.myflorida.com/Medicaid/Prescribed_Drug/pdf/Opioids_Edit_Resource.pdf
- ⁵⁴ Dunn, KM, Saunders, KW, Banta-Green, CJ, et al. (2010, January 19). "Opioid Prescriptions for Chronic Pain and Overdose: A Cohort Study." Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/20083827>
- ⁵⁵ Centers for Medicare & Medicaid Services. (2018). "Florida Medicaid Fee-For-Service (FFS) 2018 Drug Utilization Review (DUR)." Retrieved from <https://www.medicare.gov/Medicaid/Prescription-Drugs/Downloads/2018-FL-DUR.pdf>
- ⁵⁶ Salary.com. (2020). "Pharmacist Salary in Florida." Retrieved from <https://www.salary.com/research/salary/benchmark/pharmacist-salary/fl>
- ⁵⁷ Center for Medicaid and CHIP Services. (2017, August 17). "MS Retail Price Survey National Average Drug Acquisition Cost (NADAC) Overview and Help Desk Operations." Retrieved from <https://www.medicare.gov/medicaid/prescription-drugs/downloads/retail-price-survey/nadac-overview-operations.pdf>
- ⁵⁸ Grassley, C. (2019, September 25). S.2543-Prescription Drug Pricing Reduction Act of 2019. Retrieved from <https://www.congress.gov/bill/116th-congress/senate-bill/2543/all-info>
- ⁵⁹ Pallone Jr., F. (2019, September 19). H.R.3-Elijah E Cummings Lower Drug Costs Now Act. Retrieved from <https://www.congress.gov/bill/116th-congress/house-bill/3/text?q=%7B%22search%22%3A%5B%22H.R.+3%22%5D%7D&r=1&s=3>

- ⁶⁰ Centers for Medicaid and CHIP Services. (2017, August 17). "CMS Retail Price Survey National Average Drug Acquisition Cost (NADAC) Overview and Help Desk Operations." Retrieved from <https://www.medicaid.gov/medicaid/prescription-drugs/downloads/retail-price-survey/nadac-overview-operations.pdf>
- ⁶¹ Centers for Medicare & Medicaid Services. "Medicaid Covered Outpatient Prescription Drug Reimbursement Information by State." Retrieved from <https://www.medicaid.gov/medicaid/prescription-drugs/state-prescription-drug-resources/drug-reimbursement-information/index.html>.
- ⁶² Issuu Inc. (2017, August 29). "Florida Pharmacy Today August 2017." Retrieved from https://issuu.com/floridapharmacyjournal/docs/fpaugustweb_f31936167c7bce
- ⁶³ 3 Axis Advisors. (2019, December 10).. "Purple Haze: How a little purple pill called Nexium exposes big problems in the U.S. drug supply chain." Retrieved from <https://www.3axisadvisors.com/projects/2019/12/10/purple-haze-how-a-little-purple-pill-called-nexium-exposes-big-problems-in-the-us-drug-supply-chain>
- ⁶⁴ Red Oak Sourcing. (2019). "Red Oak Sourcing." Retrieved from <https://redoaksourcing.com/>
- ⁶⁵ CVS Health. (2018, December 11). "CVS Health Statement on PA Auditor General's Report on PBMs." Retrieved from <https://cvshhealth.com/newsroom/press-releases/cvs-health-statement-on-pa-auditor-generals-report-on-pbms>
- ⁶⁶ Lee, David. (2016, August 1). "Lack of Pharmacy Access Sends Some Patients Back to the Hospital." Retrieved from <https://today.oregonstate.edu/archives/2016/aug/lack-pharmacy-access-sends-some-patients-back-hospital>
- ⁶⁷ RxList. (2019, October 15). "Dovonex Cream." Retrieved from <https://www.rxlist.com/dovonex-cream-drug/patient-images-side-effects.htm>
- ⁶⁸ Cahn, Linda. (2019, November 21). "Improving Ohio's Medicaid Prescription Coverage Program," Retrieved from [http://jmoc.state.oh.us/assets/meetings/Presentation%20to%20JMOC%20by%20Linda%20Cahn%20\(FINAL%2011-2-19\).pdf](http://jmoc.state.oh.us/assets/meetings/Presentation%20to%20JMOC%20by%20Linda%20Cahn%20(FINAL%2011-2-19).pdf)
- ⁶⁹ 3 Axis Advisors. (2019, April 28). Analysis of PBM spread pricing in Michigan Medicaid managed care. Retrieved from <https://www.3axisadvisors.com/projects/2019/4/28/analysis-of-pbm-spread-pricing-in-michigan-medicaid-managed-care>
- ⁷⁰ Pifer, R. & Muchmore, S. (2020, January 15). "CVS, Cigna execs tell JPM20 they're ready for a contentious election year." Retrieved from <https://www.healthcarediver.com/news/cvs-cigna-execs-tell-jpm20-theyre-ready-for-a-contentious-election-year/570440/>
- ⁷¹ Cross, Al. (2019, February 24). "Report on Medicaid Pharmacy Managers Confirms They Make a Profit at the Expense of Pharmacies; Calls for New Payment Model." Retrieved from <http://ci.uky.edu/kentuckyhealthnews/2019/02/24/report-on-medicaid-pharmacy-managers-confirms-they-make-a-profit-at-the-expense-of-pharmacies-calls-for-new-payment-model/>
- ⁷² Hartman, Micah. (2018, January). "National Health Care Spending in 2016: Spending and Enrollment Growth Slow After Initial Coverage Expansions"; *Health Affairs* 37(1): 150-160;
- Note that the "retail prescription drugs" category excludes drugs purchased directly from physicians or hospitals (e.g., infusion drugs).
- ⁷³ Medicaid and CHIP Payment and Access Commission. "Exhibit 28-Medicaid Gross Spending and Rebates for Drugs by Delivery System FY 2017." Retrieved from <https://www.macpac.gov/wp-content/uploads/2015/11/EXHIBIT-28.-Medicaid-Gross-Spending-and-Rebates-for-Drugs-by-Delivery-System-FY-2017.pdf>
- ⁷⁴ American Academy of Actuaries. (2018, March). "Prescription Drug Spending in the U.S. Health Care System." Retrieved from <https://www.actuary.org/content/prescription-drug-spending-us-health-care-system>
- ⁷⁵ Ibid
- ⁷⁶ Kamal, Rabah and Cox, Cynthia. (2017, December 20). "What are the recent and forecasted trend in prescription drug spending?" Retrieved from <https://www.healthsystemtracker.org/chart-collection/recent-forecasted-trends-prescription-drug-spending/>
- ⁷⁷ Cahn, Linda. (2019, November 21). "Improving Ohio's Medicaid Prescription Coverage Program," Retrieved from [http://jmoc.state.oh.us/assets/meetings/Presentation%20to%20JMOC%20by%20Linda%20Cahn%20\(FINAL%2011-2-19\).pdf](http://jmoc.state.oh.us/assets/meetings/Presentation%20to%20JMOC%20by%20Linda%20Cahn%20(FINAL%2011-2-19).pdf)
- ⁷⁸ Sullivan, Thomas. (2019, March 21). "A Tough Road: Cost to Develop One New Drug Is \$2.6 Billion; Approval Rate for Drugs Entering Clinical Development Is Less Than 12%." Retrieved from: <https://www.policymed.com/2014/12/a-tough-road-cost-to-develop-one-new-drug-is-26-billion-approval-rate-for-drugs-entering-clinical-de.html>
- ⁷⁹ Dusetzina SB, Bach PB. (2019, March 6). "Prescription drugs: list price, net price, and the rebate caught in the middle," *JAMA*. doi:10.1001/jama.2019.2445
- ⁸⁰ PWC. (2017). "A Look at Exchanges and What They Mean for Pharma," Retrieved from <https://www.pwc.com/us/en/health-industries/health-research>
- ⁸¹ Mattingly, Joey. (2012, June 20).. "Understanding Drug Pricing." Retrieved from <https://www.uspharmacist.com/article/understanding-drug-pricing>
- ⁸² Cornell Law School. "42 U.S. Code § 1395w-3a. Use of Average Sales Price Payment Methodology." Retrieved from: <https://www.law.cornell.edu/uscode/text/42/1395w-3a>
- ⁸³ Centers for Medicare & Medicaid Services. (2019, September 24). "NADAC Equivalency Metrics." Retrieved from: <https://www.medicaid.gov/medicaid/prescription-drugs/downloads/retail-price-survey/nadac-equiv-metrics.pdf>
- ⁸⁴ 46 Brooklyn. (2018, November 8). "Inside AWP: The Arbitrary Pricing Benchmark Used to Pay for Generic Drugs." Retrieved from <https://www.46brooklyn.com/news/2018/11/8/inside-awp-the-arbitrary-pricing-benchmark-used-to-pay-for-generic-drugs>
- ⁸⁵ Sec. 1927. [42 U.S.C. 1396r-8]
- ⁸⁶ Health Resources and Services Administration. "Sec. 340B Public Health Service Act." Retrieved from <https://www.hrsa.gov/sites/default/files/opa/programrequirements/phsactsection340b.pdf>
- ⁸⁷ Medicaid and CHIP Payment and Access Commission. (2018, May). "The 340B Drug Pricing Program and Medicaid Drug Rebate Program: How They Interact." Retrieved from: <https://www.macpac.gov/wp-content/uploads/2018/05/340B-Drug-Pricing-Program-and-Medicaid-Drug-Rebate-Program-How-They-Interact.pdf>
- ⁸⁸ St. Mary's Health Care System. (2018). "Calculating Estimated 340B Program Savings." Retrieved from: <http://www.trinity-health.org/documents/Athens- St Marys Health Care System Savings.pdf>

- ⁸⁹ National Association of Medicaid Directors (NAMD). (2015). "Medicaid and the 340B Program: Alignment and Modernization Opportunities." Retrieved from: http://medicaiddirectors.org/wpcontent/uploads/2015/07/namd_340b_modernization_alignment_opportunities_may2015.pdf.
- ⁹⁰ Agency for Health Care Administration. (2018, November 21). "Remittance Advice Provider Alerts." Retrieved from: https://ahca.myflorida.com/medicaid/Prescribed_Drug/banners.shtml
- ⁹¹ Agency for Health Care Administration. (2018, March 29). "59G-4.251 Prescribed Drugs Reimbursement Methodology," Retrieved from: https://ahca.myflorida.com/medicaid/review/Reimbursement/59G-4.251_Prescribed_Drug_Reimbursement.pdf
- ⁹² Drug Channels Institute. Pembroke Consulting, Inc. (2019, July 18). "Walgreens, CVS, and Walmart Lead the 25,000 Pharmacies Now Profiting From the 340B Program." Retrieved from: <https://www.drugchannels.net/2019/07/walgreens-cvs-and-walmart-lead-25000.html>
- ⁹³ Business Insider. Insider Inc. (2019, September 18). "One Chart Reveals How the Cost of Insulin Has Skyrocketed in the US, Even Though Nothing about It Has Changed." Retrieved from: <https://www.businessinsider.com/insulin-price-increased-last-decade-chart-2019-9>
- ⁹⁴ NBC Universal News. (2019, January 22). "U.S. Insulin Costs per Patient Nearly Doubled from 2012 to 2016, Study Finds." Retrieved from: <https://www.nbcnews.com/health/diabetes/u-s-insulin-costs-patient-nearly-doubled-2012-2016-study-n961296>
- ⁹⁵ Alltucker, Ken. (2019, March 27). "Struggling to Stay Alive: Rising Insulin Prices Cause Diabetics to Go to Extremes. The Escalating Cost of Insulin Has Desperate Diabetics Rationing Medication, Acquiring the Drug from Friends or Getting It from Canada or Mexico." Retrieved from: <https://www.usatoday.com/in-depth/news/50-states/2019/03/21/diabetes-insulin-costs-diabetics-drug-prices-increase/3196757002/>
- ⁹⁶ WellCare. (2017, March 3). "PBM Change Notification." Retrieved from <https://www.wellcare.com/Florida/Providers/Bulletins/PBM-Change-Notification>
- ⁹⁷ American Academy of Actuaries. (2018, March). "Prescription Drug Spending in the U.S. Health Care System." Retrieved from <https://www.actuary.org/content/prescription-drug-spending-us-health-care-system>
- ⁹⁸ Gianforcaro, Beth. (2018, August 16). "Auditor's Report: Pharmacy Benefit Managers Take Fees of 31% on Generic Drugs Worth \$208M in One-Year Period" Retrieved from: <https://ohioauditor.gov/news/pressreleases/Details/5042>
- ⁹⁹ Langreth, R. (2019, February 21). Drug Middlemen Took \$123.5 Million in Hidden Fees, State Claims. Retrieved from <https://www.bloomberg.com/news/articles/2019-02-21/drug-middlemen-took-123-5-million-in-hidden-fees-state-claims>
- ¹⁰⁰ Maryland Department of Health. (2020, January 3). "Maryland's 2019 Report on the Maryland Medical Assistance Program and Managed Care Organization that Use Pharmacy Benefit Managers - Audit and Professional Dispensing Fees." Retrieved from: <https://cdn.ymaws.com/www.marylandpharmacist.org/resource/resmgr/legislative/mcoauditreport.pdf>
- ¹⁰¹ HealthPlan Data Solutions, LLC. (2018, June 15). "Ohio Department of Medicaid Report on MCP Pharmacy Benefit Manager Performance." Retrieved from <https://www.gongwer-oh.com/public/130/pbmredacted.pdf>
- ¹⁰² Centene Corporation. (2019, March 27). "Centene and WellCare to Combine to Create a Premier Healthcare Enterprise Focused on Government-Sponsored Healthcare Programs." Retrieved from <https://investors.centene.com/news-releases/news-release-details/centene-and-wellcare-combine-create-premier-healthcare>
- ¹⁰³ Centene Corporation. (2010, January 21). "Centene and WellCare Have Now Satisfied All Regulatory Approvals for Acquisition." Retrieved from <https://www.prnewswire.com/news-releases/centene-and-wellcare-have-now-satisfied-all-regulatory-approvals-for-acquisition-300990802.html>
- ¹⁰⁴ Centene Corporation & WellCare Health Plans, Inc. (2020, January 21). "Centene and WellCare Have Now Satisfied All Regulatory Approvals for Acquisition." Retrieved from <https://www.prnewswire.com/news-releases/centene-and-wellcare-have-now-satisfied-all-regulatory-approvals-for-acquisition-300990802.html>
- ¹⁰⁵ WellCare. (2017, March 3). "PBM Change Notification." Retrieved from <https://www.wellcare.com/Florida/Providers/Bulletins/PBM-Change-Notification>
- ¹⁰⁶ Center for Medicaid and CHIP Services & Myers and Stauffer LC. (2017, August 17). "CMS Retail Price Survey National Average Drug Acquisition Cost (NADAC) Overview and Help Desk Operations." Retrieved from <https://www.medicaid.gov/medicaid/prescription-drugs/downloads/retail-price-survey/nadac-overview-operations.pdf>
- ¹⁰⁷ Wolters Kluwer Clinical Drug Information, Inc. (2020). "Comprehensive Price History Get a Fuller Pricing Picture ... All the Way Back to the '80s." Retrieved from: <https://www.wolterskluwercli.com/drug-data/drug-price-history/>
- ¹⁰⁸ Centers for Medicare & Medicaid Services. (2013, November). "Methodology for Calculating the National Average Drug Acquisition Cost (NADAC) for Medicaid Covered Outpatient Drugs." Retrieved from: <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/prescription-drugs/ful-nadac-downloads/nadacmethodology.pdf>
- ¹⁰⁹ Washington Publishing Company. (2010, January 1). "Health Care Provider Taxonomy Code Set." Retrieved from: <http://www.wpc-edi.com/reference/codelists/healthcare/health-care-provider-taxonomy-code-set/>
- ¹¹⁰ Agency for Health Care Administration. (2014, July). "Prescribed Drug Services Coverage, Limitations and Reimbursement Handbook." Retrieved from: https://www.flrules.org/gateway/readRefFile.asp?refId=4163&filename=Prescribed_Drug_Services_Adoption.pdf
- ¹¹¹ Centers for Medicare & Medicaid Services. "Cost Sharing Out of Pocket Costs." Retrieved from: <https://www.medicaid.gov/medicaid/cost-sharing/cost-sharing-out-pocket-costs/index.html>
- ¹¹² 42 CFR § 447.502
- ¹¹³ Center for Medicaid and CHIP Services & Myers and Stauffer LC. (2017, August 17). "CMS Retail Price Survey National Average Drug Acquisition Cost (NADAC) Overview and Help Desk Operations." Retrieved from <https://www.medicaid.gov/medicaid/prescription-drugs/downloads/retail-price-survey/nadac-overview-operations.pdf>