

# Cystic Fibrosis Disease-Modifying Drug Therapy Identification and Management of Cumulative Drug Oversupply

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## BACKGROUND

- Pharmacy benefit design typically allows for non-controlled substance prescriptions to be refilled prior to exhaustion of on-hand medication supply; members are typically able to refill non-controlled medications once 75% of the on-hand supply from the most recent fill is exhausted, based on billed days' supply. For a 28-day supply, refilling at day 22 is allowed using the "75% on-hand supply has been exhausted" rule.
- Although refilling after 75% of on-hand supply may promote adherence, it can also permit excessive on-hand medication supply accumulation, aka stockpiling. Stockpiling results in increased payer and member costs due to additional member co-payments, payer expenditures, and waste if there is a drug therapy change.
- High-cost, chronic specialty medications, including disease-modifying drugs for cystic fibrosis (DMDCF), contribute most dramatically to the overall cost impact of accumulated on-hand supply.
- Providing managed care pharmacists (MCPs) with identified instances of oversupply, generated from pharmacy claims data, can assist in managing stockpiling.

## METHODS

- MCPs performed interventions across a 6-month period, from August 2022 through January 2023, as part of a broader high-cost drug management strategy.
    - Opportunity identification and interventions are continuing in 2023.
  - Cases involving members with an on-hand DMDCF supply of more than 28 days at the next anticipated refill date were loaded into the web application for MCP review.
  - Eligible members were commercially insured, enrolled in the Prime Therapeutics HighTouchRx<sup>®</sup> high-cost drug management program, and had paid pharmacy claims across the preceding 6-month period indicating stockpiling of DMDCF.
  - Of the 16.4 million eligible members in the commercial book of business, approximately 13.5 million were enrolled in the MCP intervention program; these members were evaluated for oversupply.
  - The DMDCF drugs included in the analysis: elexacaftor, ivacaftor, lumacaftor, tezacaftor, and any licensed combination products containing these ingredients.
- Intervention**
- Cystic Fibrosis cumulative oversupply opportunities were identified by the rules engine and sent to pharmacists in the web tool with an estimated savings value associated with the opportunity.
  - Interventions typically involved patient case and claims history review within the web tool and outreach to the dispensing pharmacy requesting follow-up with the member to confirm on-hand supply and request refill delays as appropriate.
- Outcomes**
- Intervention outcomes were reported by MCPs including whether it was a successful or unsuccessful intervention, pharmacist notes, calculated savings associated with refill delays in successful interventions, and reasons for continued filling frequency in unsuccessful interventions.
  - Savings were calculated for each successful intervention by calculating the average daily cost of therapy and multiplying this by the number of days between the anticipated refill date, based on refill history, and the actual refill date post-intervention.
  - Savings for each successful intervention were summed to determine total savings associated with program.

**TABLE 1**

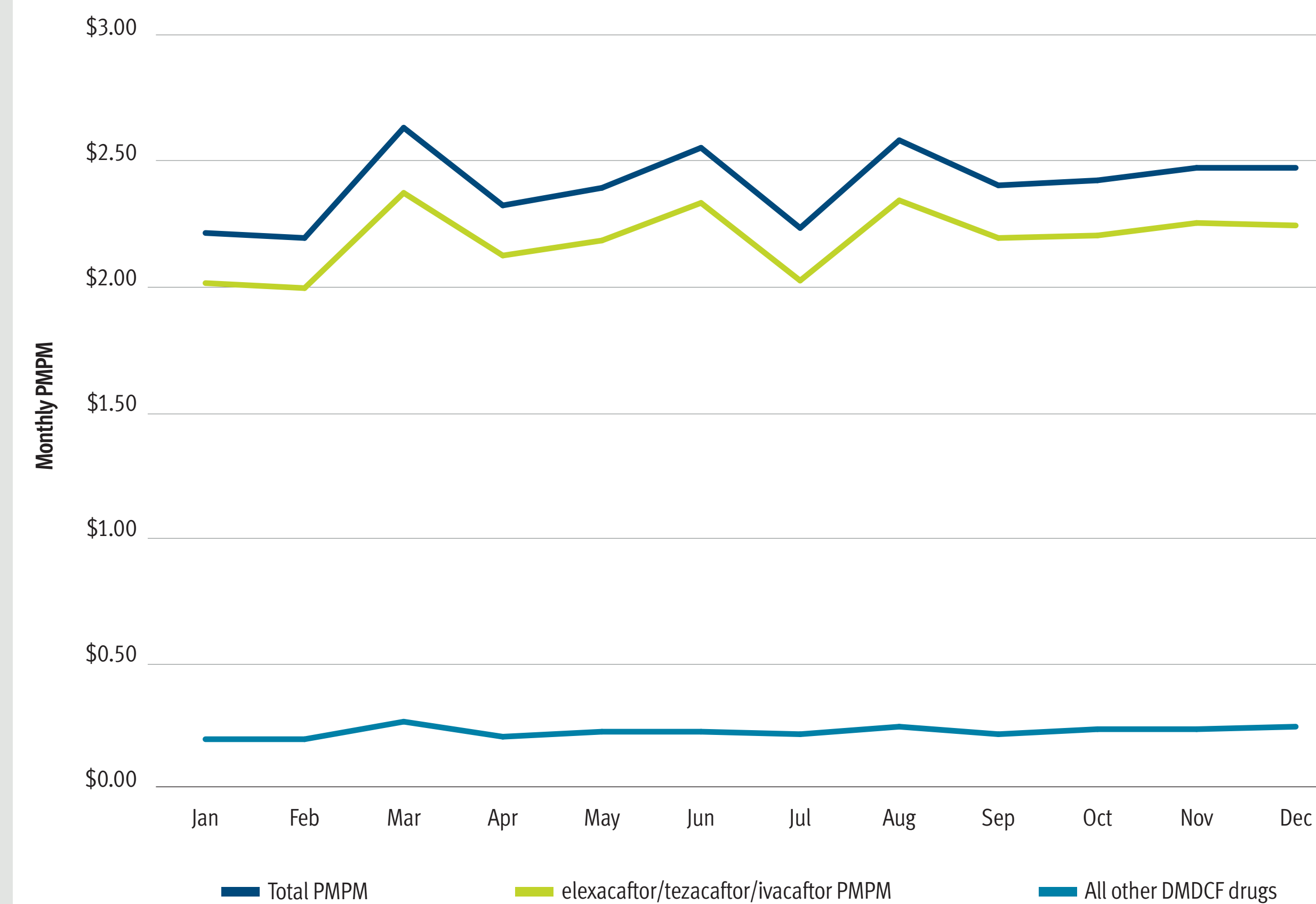
**Disease-Modifying Drugs for Cystic Fibrosis Managed Care Pharmacist Delaying Refill Due to Member Stockpiling Medication Supply, Successful Cases\***

Drug	Days of Delayed Therapy <sup>†</sup>	Validated savings <sup>††</sup>
elxacaftor/tezacaftor/ivacaftor	57	\$53,602
elxacaftor/tezacaftor/ivacaftor	31	\$28,486
elxacaftor/tezacaftor/ivacaftor	50	\$45,765
elxacaftor/tezacaftor/ivacaftor	33	\$29,478
elxacaftor/tezacaftor/ivacaftor	20	\$17,887
elxacaftor/tezacaftor/ivacaftor	27	\$23,911
elxacaftor/tezacaftor/ivacaftor	38	\$35,190
elxacaftor/tezacaftor/ivacaftor	23	\$21,052
elxacaftor/tezacaftor/ivacaftor	27	\$21,820
elxacaftor/tezacaftor/ivacaftor	63	\$56,108
elxacaftor/tezacaftor/ivacaftor	41	\$36,515
elxacaftor/tezacaftor/ivacaftor	50	\$44,493
elxacaftor/tezacaftor/ivacaftor	26	\$23,183
elxacaftor/tezacaftor/ivacaftor	36	\$32,048
elxacaftor/tezacaftor/ivacaftor	16	\$14,266
elxacaftor/tezacaftor/ivacaftor	17	\$15,158
elxacaftor/tezacaftor/ivacaftor	23	\$20,508
lumacaftor/ivacaftor	70	\$52,920
ivacaftor	12	\$10,346
ivacaftor	37	\$31,899

Managed care pharmacists performed interventions across a 6-month period, from August 2022 through January 2023, as part of a broader high-cost drug management strategy.  
 \* Cases are classified as successful when an on-hand oversupply is confirmed and the refill is successfully delayed from the anticipated refill date.  
<sup>†</sup> Number of days between expected refill date, based on refill cadence over the preceding 6 months, and actual refill date post-intervention.  
<sup>††</sup> Case validation involves savings calculation using cost per day and days of delayed therapy; calculation process is performed by a managed care pharmacist with secondary review of the calculation by another managed care pharmacist.

**FIGURE 1**

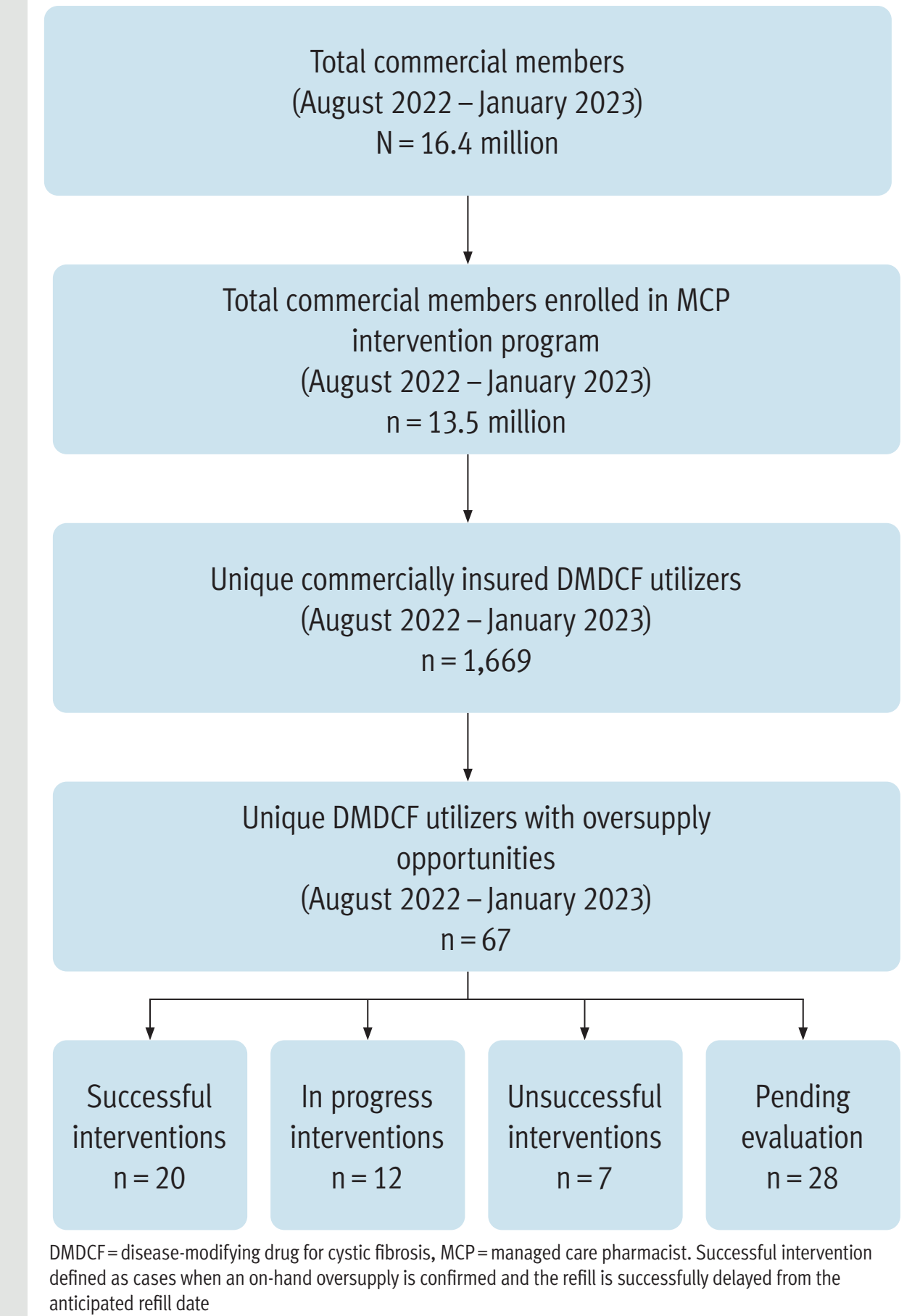
**Disease-Modifying Drugs for Cystic Fibrosis Monthly Cost PMPM Among 16.4 Million Commercially Insured Members in 2022\***



\* PMPM = per member per month, DMDCF = disease-modifying drug for cystic fibrosis. DMDCF PMPM cost by month and drug calculated as the sum of the total paid amount for all claims for a drug in the month divided by the sum of the average membership for each month of the year. Ivacaftor, tezacaftor/ivacaftor, and lumacaftor/ivacaftor were aggregated above as "all other DMDCF drugs."

**FIGURE 2**

**Disease-Modifying Drugs for Cystic Fibrosis Oversupply Opportunity Identification**



DMDCF = disease-modifying drug for cystic fibrosis, MCP = managed care pharmacist. Successful intervention defined as cases when an on-hand oversupply is confirmed and the refill is successfully delayed from the anticipated refill date.

## OBJECTIVE

To assess a DMDCF stockpiling MCP intervention program impact in delaying refills, reducing oversupply, and saving on drug DMDCF expenditures.

## RESULTS

- Among 13.5 million eligible members for the period in which opportunities were identified and loaded, there were 1,669 unique DMDCF utilizers with \$2.50 per member per month expenditures. (Figure 1)
- 67 (4.0%) of 1,669 DMDCF utilizers were identified as having a potential DMDCF medication oversupply (stockpile) of at least 28 days, and these cases were loaded into the web tool for review by an MCP. (Figure 2)
  - 5.0 cases identified per 1,000,000 enrolled lives
- 20 cases for which MCP outreach was performed resulted in a delay in DMDCF refilling. (Table 1)
  - 17 elxacaftor/tezacaftor/ivacaftor cases, 2 ivacaftor cases, 1 lumacaftor/ivacaftor case
  - 7 cases for which outreach was performed resulted in no delay in subsequent refilling.
  - In 6 cases, member denied on-hand stockpiling consistent with that observed in pharmacy claims history
  - In 1 case, member could not be reached
  - 12 additional cases are currently in progress.
  - Successful cases resulted in total validated program savings of \$614,635 with an average of \$30,732 in savings per successful case.

## LIMITATIONS

- Long-term impact of outreach (e.g., changes in refill cadence, return to previous refill cadence) is not assessed in this analysis.
- There were a small number of pharmacist-reviewed opportunities with a final outreach status, and several were still pending at the time of data analysis.
- Savings were not assessed in unsuccessful cases where refills were ultimately delayed despite denial of excessive on-hand oversupply by the member during outreach attempts.
- Opportunity identification logic assumes that the member does not have a non-clinical need for additional on-hand supply which may be relevant depending on factors like housing.
- Identification and savings logic assume that member would have continued filling at the cadence observed over the preceding 6 months and that the member would not have independently delayed the refill.

## CONCLUSIONS

- \$610,000 in client costs associated with disease-modifying drugs for cystic fibrosis refills were averted among 20 members with medication stockpiles identified through an automated pharmacy claims algorithm that outputs potential oversupply cases for managed care pharmacist review followed by provider and member confirmatory outreach and authorization to hold a refill.
- 1 out of every 25 utilizers of disease-modifying drugs for cystic fibrosis were identified as having an apparent oversupply of medication involving a pattern of repeated filling at or near the time of 75% exhaustion of the on-hand supply from the most recent fill, as allowed by the pharmacy benefit insurance policy.
- Medication oversupply trends previously noted in community pharmacy settings are also present in the specialty pharmacy setting and increase payer and member costs substantially.
- Outreach by managed care pharmacists to pharmacies requesting a review of member medication fill history and outreach to member to confirm on-hand supply was a successful strategy for delaying subsequent refills.
- A member denying excess on-hand supply was the most common reason for refills not being delayed after managed care pharmacist outreach.
- Encouraging prescribers and pharmacies to discuss medication stockpiling with patients may lead to fewer observed cases of long-term oversupply.

## REFERENCES

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