

# Thinking Outside the Bottle: How A Clinical Pharmacist Team Adds Value and Saves Money in a Managed Care Plan

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## Background

- The scope of pharmacy practice has evolved from the traditional role of compounding and dispensing medications to becoming an integral member of the health care team.<sup>1</sup>
- The collaboration of managed care pharmacists, physicians, nurses and other clinical auxiliary staff offers opportunities for optimizing drug therapy and reducing costs.
- Interventions by pharmacists have been considered a valuable input by the health care community by reducing the medication errors, rationalizing the therapy and reducing the cost of therapy.<sup>2</sup>
- Many hospitals often document and track pharmacist interventions; however, there is little research that demonstrates actuarial validation of the added value of these interventions and return on investment (ROI).
- Pharmacist-led interventions at the health plan level may result in optimizing drug therapy that reduces hospital readmissions and emergency department visits as well as improving drug therapy cost effectiveness.<sup>3</sup>
- Studies have shown pharmacist-provided direct patient care improves patient outcomes across several disease states, and patients cared for by a team including a pharmacist have fewer hospital readmissions.<sup>4</sup>

## Objective

- To develop and measure the outcomes of drug therapy optimization programs in which managed care pharmacists utilize medical and pharmacy claims data to intervene with members and providers.

## Methods

### Study Population

- The population of focus for this prospective review was identified using integrated medical and pharmacy claims with a focus on high cost and high risk members.
- High cost and high risk members from Medicare, commercial, and Health Insurance Marketplace lines of business were identified from Jan. 1, 2016 to Nov. 30, 2016.
- These members' medical and pharmacy claims were reviewed for drug therapy optimization opportunities by five full-time managed care pharmacists.
- Managed care pharmacists worked collaboratively within a multi-disciplinary care management team through a Place of Delivery (POD) model to enhance quality of care and improve medical utilization and medical spend through targeted telephonic or facsimile engagement with members and providers (Figure 1).
- Opportunities to optimize drug regimens included a routine review of key drug categories and disease states, as well as referrals from colleagues within POD team. Key drug categories and disease states included but were not limited to (Figure 2):

- HIV (Human Immunodeficiency Virus) antiretrovirals
- Hepatitis C
- Other conditions
  - Oncology
  - Rare diseases

- Managed care pharmacists reviewed prior authorization requests for key drugs of interest and identified therapeutic interchange opportunities.

### Outcomes of Interest

- Managed care pharmacists electronically tracked interventions in a reporting database.
- Change in drug therapy regimen was captured in medical and pharmacy drug claims occurring after the managed care intervention.
- Cost savings were defined by an actuarial assessment of the difference between the members' actual plan paid drug claim costs compared to anticipated allowed charge costs without a managed care pharmacist intervention.

### Validation

- Cost savings were confirmed by a health plan actuary.

## Results

### Targeted Population

- During Jan. 1, 2016 to Nov. 1, 2016, among a total of 1,959,448 (1,762,769 commercial and 196,679 Medicare) insured members with pharmacy benefits enrolled at Florida Blue, there were 2,259 interventions (one per 867 members) (Figure 3):

- 879 (38.9 percent) HIV members
- 217 (9.6 percent) Hepatitis C members
- 387 (17.2 percent) Medicare members through the prior authorization system with targeted drug interventions
- 776 (34.4 percent) miscellaneous categories (e.g., oncology, rare diseases) members

### Cost Savings Breakdown and ROI (Figure 3 and 4):

- Of the total 2,259 target population identified as potential opportunities, 234 (10.4 percent) were successful in generating \$8.6 million of actuarial validated cost savings:
  - Prior authorization online system review yielded \$1.8 million (20.8 percent)
  - HIV antiretroviral review yielded \$0.37 million (4.2 percent)
  - Hepatitis C review yielded \$5.9 million (68.9 percent)
  - Other category (e.g., cancer, rare diseases) yielded \$0.5 million (6 percent)
- Providers and members were receptive to the pharmacist interventions, and savings was confirmed through pharmacy claims history with reversed claims or medication regimen changes seen within the paid claims.
- The majority of cost savings was from therapeutic interchanges in specialty medications.
- With an estimated administrative cost of \$780,000 for the five managed care pharmacists and \$8.6 million in actuarial validated savings, this program yielded a conservative 10:1 ROI.
  - Administrative costs included payroll for the five managed care pharmacists, training and support from auxiliary staff, and other fees associated with running the program.

## Limitations

- As there was no control group, it is unknown if the drug therapy regimens and subsequent savings would have occurred regardless of a managed care pharmacist intervention.
- No evaluation of medical harm was performed. It is possible the managed care pharmacist initiated changes in therapy could have induced medical harm and/or additional medical costs. However, the changes were approved and made by the member's health care provider.
- Administrative pharmacy and medical claims have the potential for miscoding and include assumptions of member actual medication use and diagnoses, therefore the data may represent information that is false-positive or -negative.
- Data are limited to commercial and Medicare populations that were targeted and intervened by managed care pharmacists in each of their respective POD regions. Each POD region has unique aspects of cost savings opportunity (e.g., the HIV population in South Florida is substantially higher than in North Florida). These differences may provide more or less cost-saving opportunities depending on region attributes.
- Cost-savings were validated by pharmacy claims and actuary; however, not all cost-savings may have been accounted for and the total validated cost-savings may be an underestimate of actual cost-savings to the health plan.
- The value of the provider's overall change in prescribing habits due to the enhanced education and pharmacist intervention could not be determined.
- Health plans who may want to replicate the program may not have timely access to pharmacy and medical integrated claims data.

Figure 1. Multi-disciplinary Care Management Place of Delivery (POD) Team

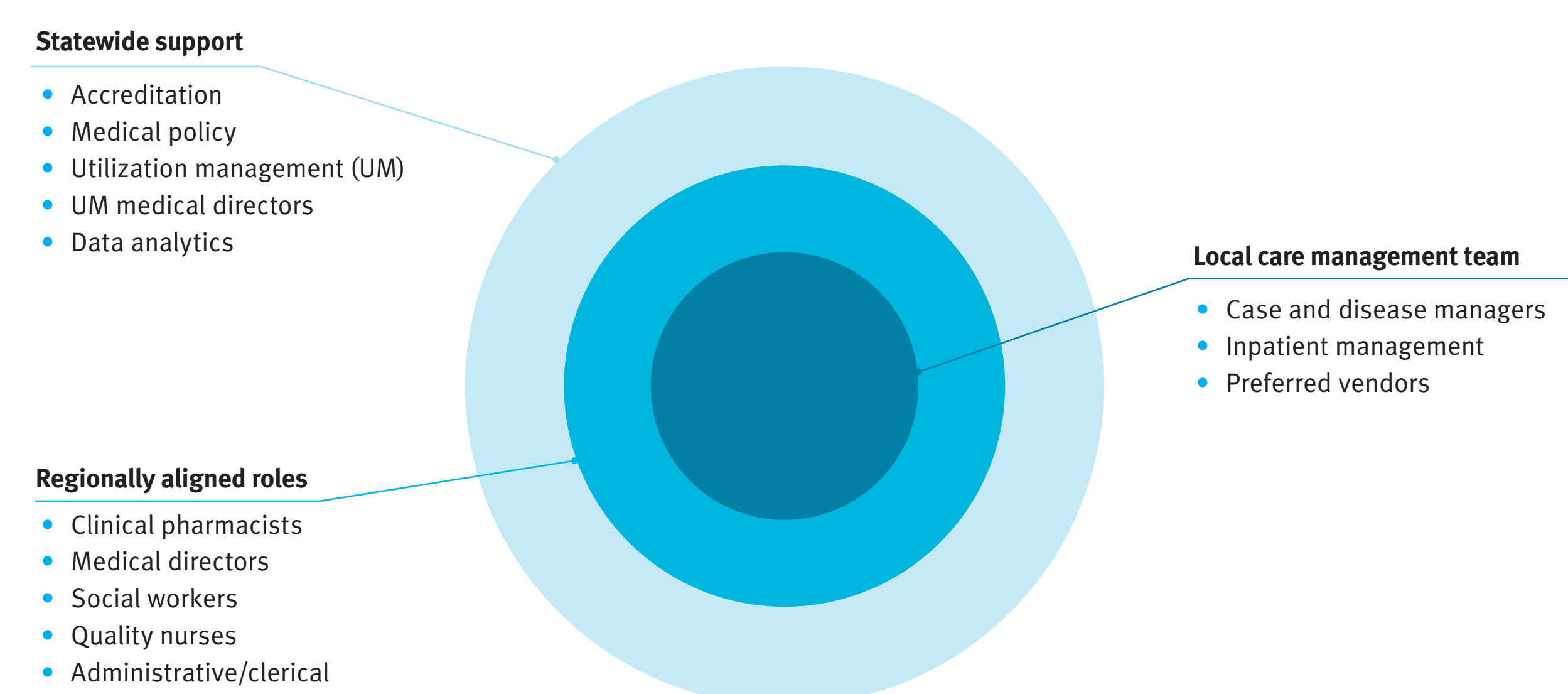


Figure 2. Workflow for Managed Care Pharmacists

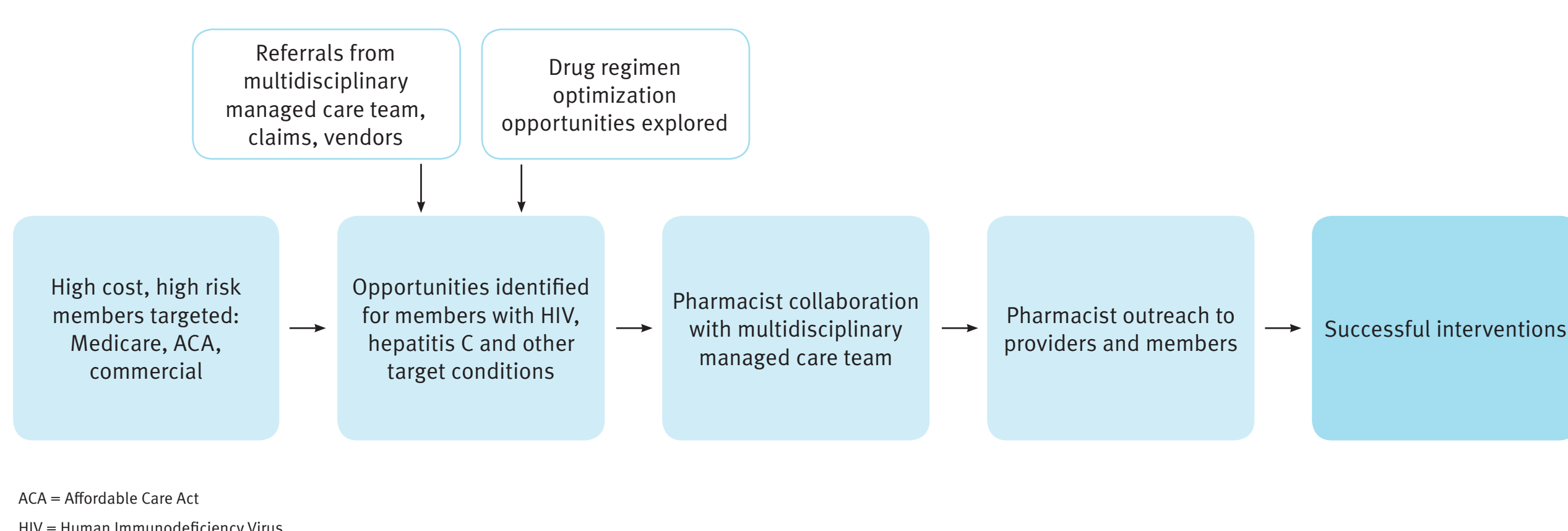


Figure 3. Membership Breakdown and Intervention Savings

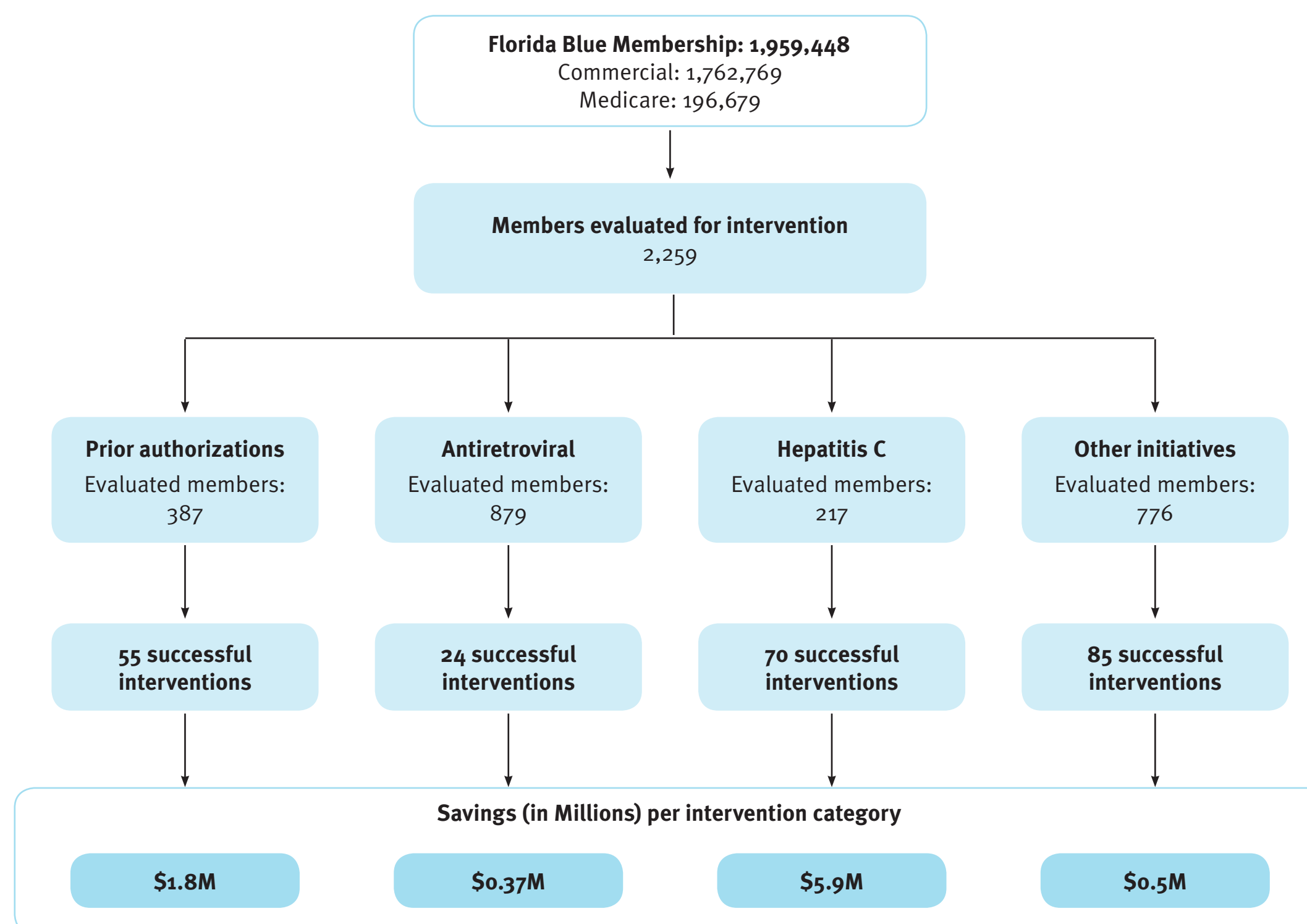


Figure 4. Return on Investment (ROI)

$$\begin{array}{r}
 \$8,600,000 \text{ Total cost avoided} \\
 - 780,000 \text{ Estimated admin cost} \\
 \hline
 \text{ROI } 10:1 = \$7,820,000 \text{ Net cost avoided}
 \end{array}$$

## Conclusions

- This study examined the ROI of hiring five full-time pharmacists in a managed care health plan to evaluate medical and pharmacy claims data for drug therapy optimization opportunities. Through telephonic or facsimile communication, recommendations were provided to the member and prescriber yielding results of a 10:1 ROI over a 10-month period.
- \$8.6 million in cost savings were identified and actuarially validated through pharmacy and medical claims.
- The unique knowledge base pharmacists possess allowed them to quickly adapt to the needs of varying patient populations (e.g., HIV, hepatitis C, cancer), and positively impact them and the health plan. This was done through physician outreach, patient education and therapy optimization.
- While this model may appear to be unique to a managed care plan setting given its integrated pharmacy and medical claims and partnership with the pharmacy benefit manager, the method of tracking interventions used can apply to any pharmacist that has access to their patients' drug claims to validate interventions.
- With the fast-paced changing landscape of health care particularly with new drug therapies emerging for high cost conditions, we believe there will be continued opportunities for a managed care pharmacist team to interact with providers and members to optimize drug therapy.

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