

# Injecting Insight: Analyzing GLP-1 Agonist Usage and Opportunities for Optimization Within an Integrated Health Specialty System Pharmacy



# Meet Our Speakers



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# Learning Objectives

- 1 Review an ambulatory clinical pharmacist model for complex care disease states
- 2 Identify opportunities to enhance clinic collaboration and optimize continuity of care for GLP-1 and GLP-1/GIP agonists
- 3 Evaluate the external and internal factors influencing patient adherence and discontinuation rates for these therapies
- 4 Examine strategies to address common barriers to adherence including cost, side effects, and patient education related to GLP-1 and GLP-1/GIP agonists

# Background

- 38 million Americans have diabetes (about 1 in 10)
- More than 2 in 5 adults in the United States (US) have obesity
- 80-90% of patients with type 2 diabetes (T2D) are also overweight or obese
- Estimated medical costs attributed to diabetes alone were \$413 billion in the US in 2022 and estimated medical costs of obesity were nearly \$173 billion in 2019.



# Treatment Options

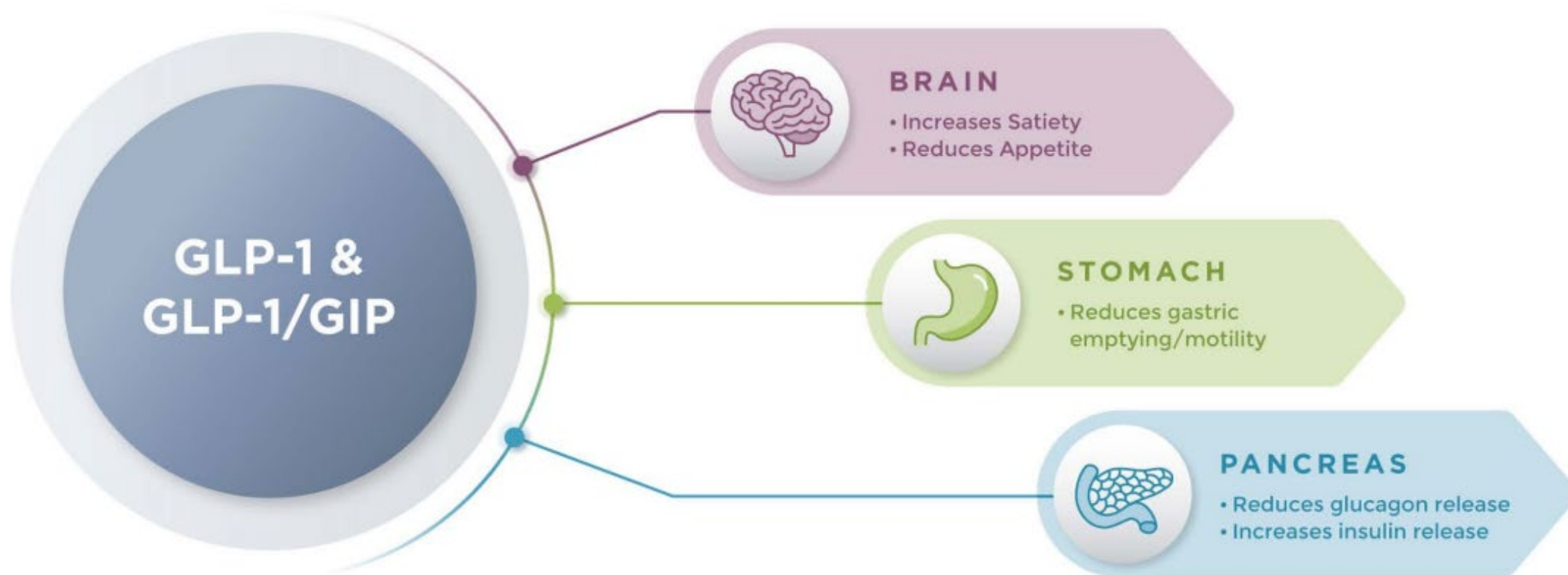
## Glucagon-Like Peptide-1 (GLP1) Agonists

- Semaglutide (Ozempic/Wegovy/Rybelsus)
- Liraglutide (Victoza/Saxenda)
- Dulaglutide (Trulicity)
- Exenatide (Byetta, Bydureon)

## GLP1/glucose-dependent insulinotropic polypeptide (GIP) Agonist

- Tirzepatide (Mounjaro/Zepbound)

# Mechanism of Action



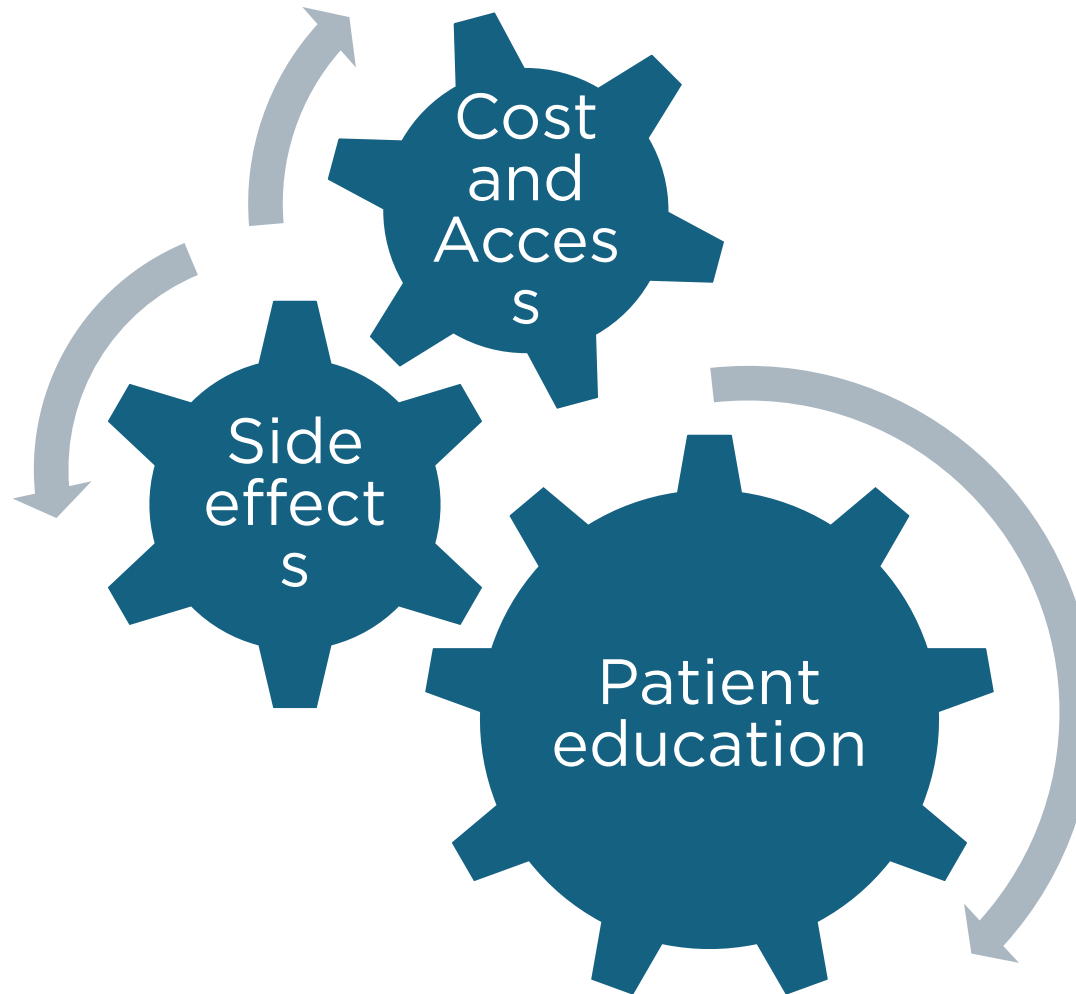
# Adherence to GLP-1 Agonist

Study	Analysis	Outcome
<b>Gleason et al.</b>	<ul style="list-style-type: none"><li>- Evaluated pharmacy/medical claims for commercially insured patients</li><li>- Obese patients without diabetes aged <math>\geq 19</math> who started GLP-1 agonist therapy between Jan 1, 2021 and Dec 31, 2021</li><li>- Required to be continuously enrolled 1-year before and after the GLP-1 therapy start date</li></ul>	<ul style="list-style-type: none"><li>- Persistence: 32%</li><li>- Adherence: 27%</li><li>- PDC: 51%</li></ul>
<b>Weiss et al.</b>	<ul style="list-style-type: none"><li>- Retrospective analysis from Jan 2009 and Dec 2017</li><li>- Adult patients with type 2 diabetes mellitus in the United States</li><li>- Required to be continuously enrolled for 12 months prior to starting GLP-1 agonist therapy</li></ul>	<p>Adherence rates:</p> <ul style="list-style-type: none"><li>- 12 months: 50.9%</li><li>- 24 months: 47.4%</li></ul> <p>Discontinuation rates:</p> <ul style="list-style-type: none"><li>- 12 months: 47.7%</li><li>- 24 months: 70.1%</li></ul>

Gleason PP, et al. J Manag Care Spec Pharm. 2024;30(8):860-867.

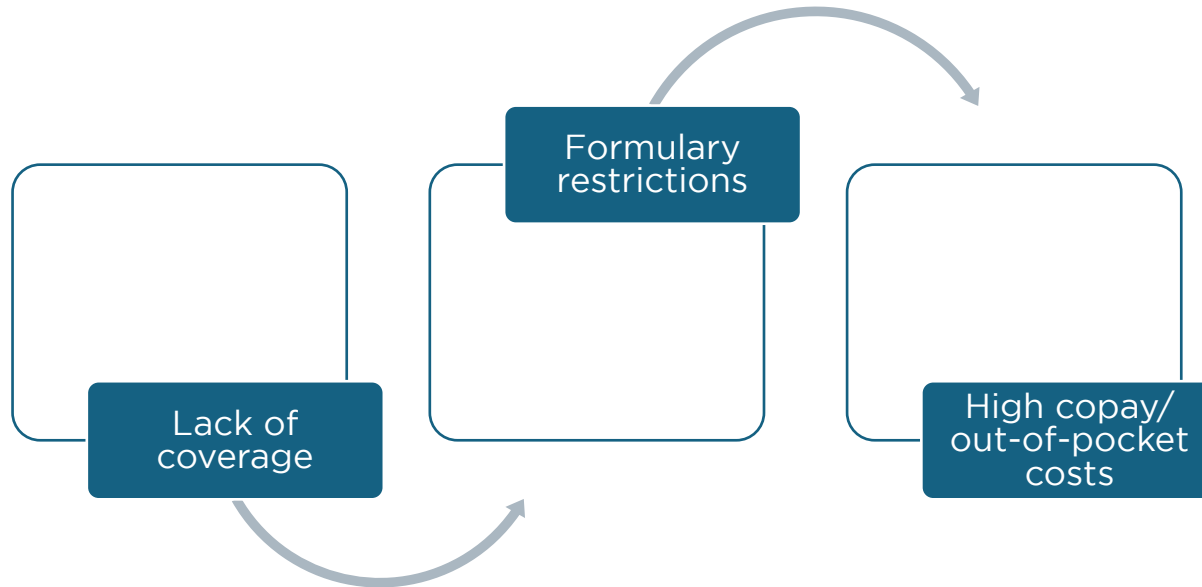
Weiss T, et al. Patient Preference and Adherence. 2020;14:2337-2345.

# Barriers to Adherence





# Barriers to Adherence- Cost and Access



Study	Population	Outcome
<b>Luo et al.</b>	Evaluated association of cost and initiation of patients starting GLP-1RA or SGLT-2i with T2D and established CV disease who are treated with metformin	Mean estimated cost of \$69.20 with a standard deviation of \$38.30 for a 30-day supply

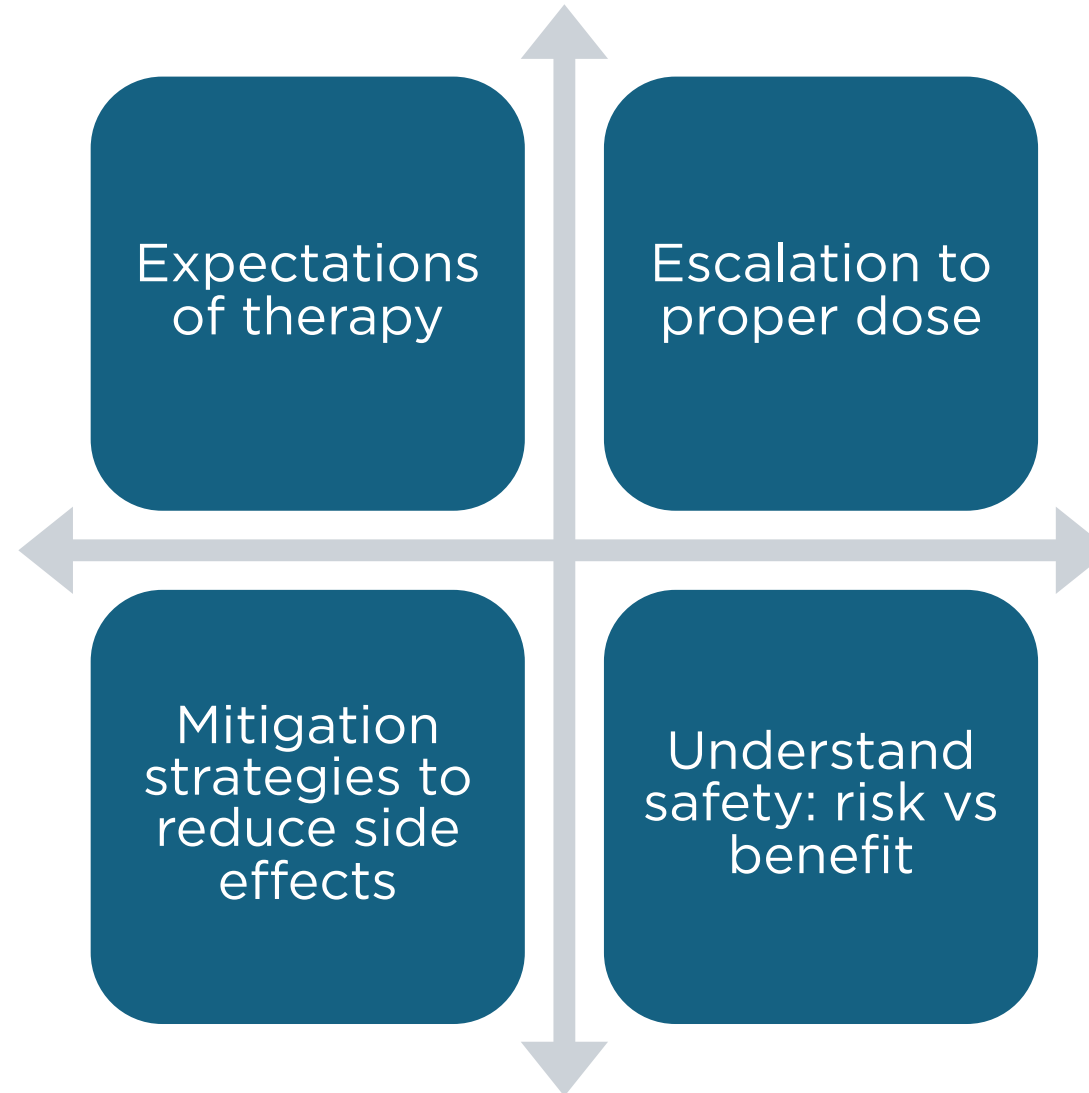
# Barriers to Adherence- Side Effects

- FDA Adverse Event Reporting System (FAERS)

Exenatide	Liraglutide	Dulaglutide	Semaglutide	Tirzepatide
2022: 1,832 2023: 1,206 2024: 1,240 *ADRs peaked in 2015 (4,545)	<ul style="list-style-type: none"><li>• 2022: 1,153</li><li>• 2023: 1,232</li><li>• 2024: 1,299</li></ul> *ADRs peaked in 2011 (5,344)	<ul style="list-style-type: none"><li>• 2022: 9,649</li><li>• 2023: 8,090</li><li>• 2024: 6,072</li></ul> *ADRs peaked in 2021 (11,345)	<ul style="list-style-type: none"><li>• 2022: 6,014</li><li>• 2023: 8,728</li><li>• 2024: 15,634</li></ul>	<ul style="list-style-type: none"><li>• 2022: 3,125</li><li>• 2023: 15,934</li><li>• 2024: 37,884</li></ul>

Most common side effects: nausea, vomiting, diarrhea, constipation, and dyspepsia

# Barriers to Adherence- Patient Education



# Overview of Liaison Services



Clinician writes electronic prescription.



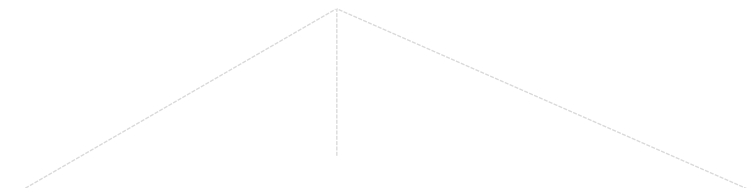
Liaison automatically receives prescription task via Epic MSOT.



HSP or external Pharmacy processes prescription.



**Liaison** ensures initial delivery



Performs benefits investigation, obtains PA, and secures financial assistance.

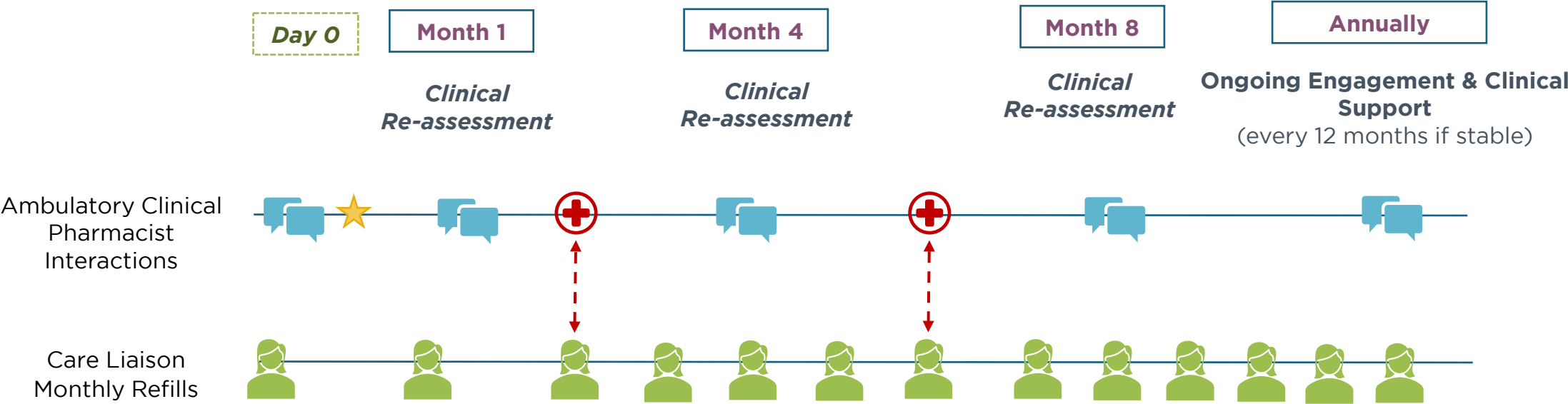


Updates patient on status and offers HSP Pharmacy if eligible.



Releases prescription to the appropriate required or chosen specialty pharmacy.

# Overview of Shields Care Model



# Study Design

- Retrospective chart review conducted at an outpatient HSSP
- Between 12/31/2022 to 11/30/2024
- Agents analyzed: Bydureon (exenatide), Byetta (exenatide), Trulicity (dulaglutide), Saxenda (liraglutide), Victoza (liraglutide), Ozempic (semaglutide), Wegovy (semaglutide), Mounjaro (tirzepatide)
- Descriptive statistics used to assess adherence, discontinuations, and cost

# Proportion of Days Covered (PDC)

The percentage of time a patient has access to a medication over a given period

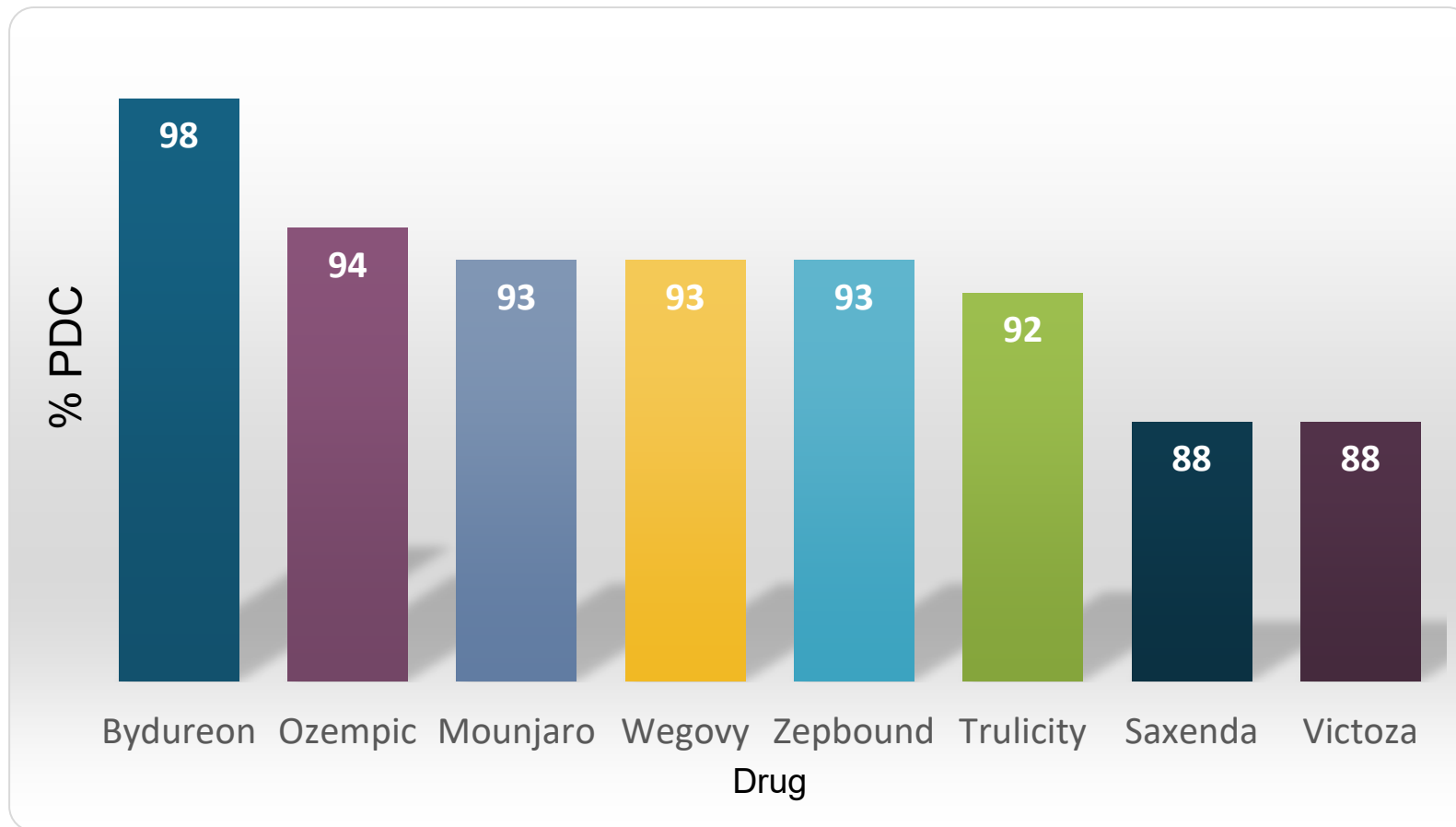


Calculated by dividing the total number of days a patient had their medication covered by the total number of days in the measurement period.



Threshold for adequate adherence is generally 80%

# Impact of ACP Services: Proportion of Days Covered (PDC)



**Average adjusted PDC: 93%**



# Impact of ACP Services: Average Out-of-Pocket Cost

	2022	2023	2024	Total
# of Fills	313	11,189	28,316	39,818
Patients	283	2,414	5,837	6,604
Copay	\$25.00	\$25.00	\$30.00	\$30.00
Average Copay: \$30				

# Impact of ACP Services: Discontinuations

Discontinuation Reason	% Discontinued
Patient Decision	33%
Prescriber Decision	20%
Drug Lockout/Insurance Lockout	13%
Unable to Contact Patient	11%
Adverse Events	11%
Drug not covered by insurance plan	8%
Unable to afford copay	4%

# Impact of ACP Services: Adverse Events

Gastrointestinal  
Effects  
(47.1%)

Injection Site Reaction  
(8.9%)

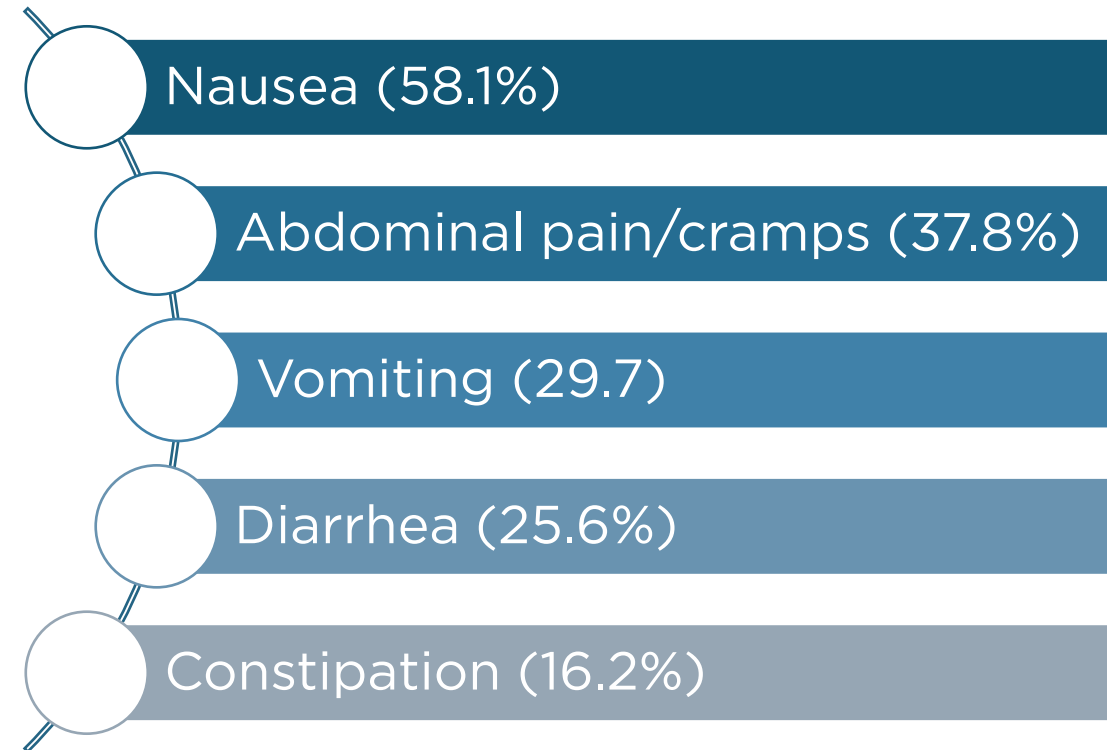
Fatigue  
(6.4%)

Headaches/Migraines  
(3.8%)

Cardiac Effects  
(3.2%)

# Impact of ACP Services: Adverse Events

## Gastrointestinal Effects



# Barriers and Resolutions

## Resolution

**A**

### Cost/Access

- Prior authorizations/appeals
- Financial assistance
- Proactive continuation of therapy

**B**

### Side Effects

- Thorough counseling prior to start date
- Mitigation strategies
- 24/7 OnCall Clinical Pharmacist line

**C**

### Patient Education

- In person/virtual teaching appointments
- Educational material
- Continuity of care

# Patient Case #1



## Patient Story

- 31-year-old female initiated on Wegovy 0.25mg once weekly
- Contacted the clinical line reporting severe constipation and lack of efficacy



## Intervention

- Provided mitigation strategies for constipation and education on expectations of therapy
- Contacted the provider to switch to Zepbound



## Impact

- Patient contacted 1 month after switching to Zepbound and reported 3% weight loss and no tolerability issues

# Patient Case #2



## Patient Story

- 52-year-old male on Zepbound for 4 months transferred to specialty pharmacy
- Concern for nonadherence based on dispense history
- Patient noted nonadherence due to travel and lack of access to refrigeration



## Intervention

- Counseling provided regarding temperature excursion (21 days at room temperature)
- Counseling provided regarding missed dose management



## Impact

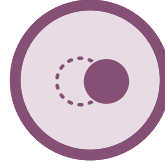
- At follow up patient reported full adherence
- >7% weight loss seen since patient transferred to our services

# Value of Ambulatory Clinical Pharmacist Services:



## **Integrate ACP Services within new clinics**

Embedding ACPs within fast-growing clinics allows for real-time collaboration with providers, facilitating seamless transitions of care and optimizing medication management due to rapid market demands



## **Bridging Gaps in Care Transitions**

Uncover blind spots: medication reconciliation, enhanced counseling with specialist, and high-touch care to ensure optimal dose balance. Manage dose escalations, shortages and backorders to reduce the risk of medication-related problems and improve adherence.



## **Beyond Chronic Disease Management**

ACP services ensures patient care needs are always met and continue to evolve with market trends beyond current uses. Proactively address new concerns from drug class



## **Holistic Patient Engagement**

ACPs engage with patients/caregivers for clinical, provider and other HCP needs. Empower self-management with injectables, ongoing support available and building trust to strengthen relationships.

**Integrate ACP program to proactively address emerging healthcare demands and elevate clinical value beyond traditional disease state management. By shifting the focus toward personalized services and rapid alignment with market trends, we can drive higher adherence, deliver improved health outcomes, and create a more positive and engaging patient experience.**



# Summary

- ACP program in complex care models adopts new version of ambulatory clinical pharmacist to balance increased clinic burden and promote continuity of care across entire care team with added support.
- Adapt clinic collaboration to unique setting, scalability and pivot program to address barriers and promote optimal medication management.
- Common side effects include gastrointestinal, injection site reactions, fatigue, and cardiac.
- Pharmacists play a pivotal role in overcoming key barriers—such as cost, access, and side effect management, while elevating patient knowledge through personalized education, ultimately driving better outcomes and empowering patients in their care journey.

The background is a solid dark blue color. It features several faint, light blue geometric shapes. On the left side, there are two shield-like shapes, one near the top and one in the middle. On the right side, there is a large, rounded square shape. At the bottom center, there is a small shield-like shape. The overall design is minimalist and modern.

# THANK YOU

FOR YOUR VALUABLE TIME