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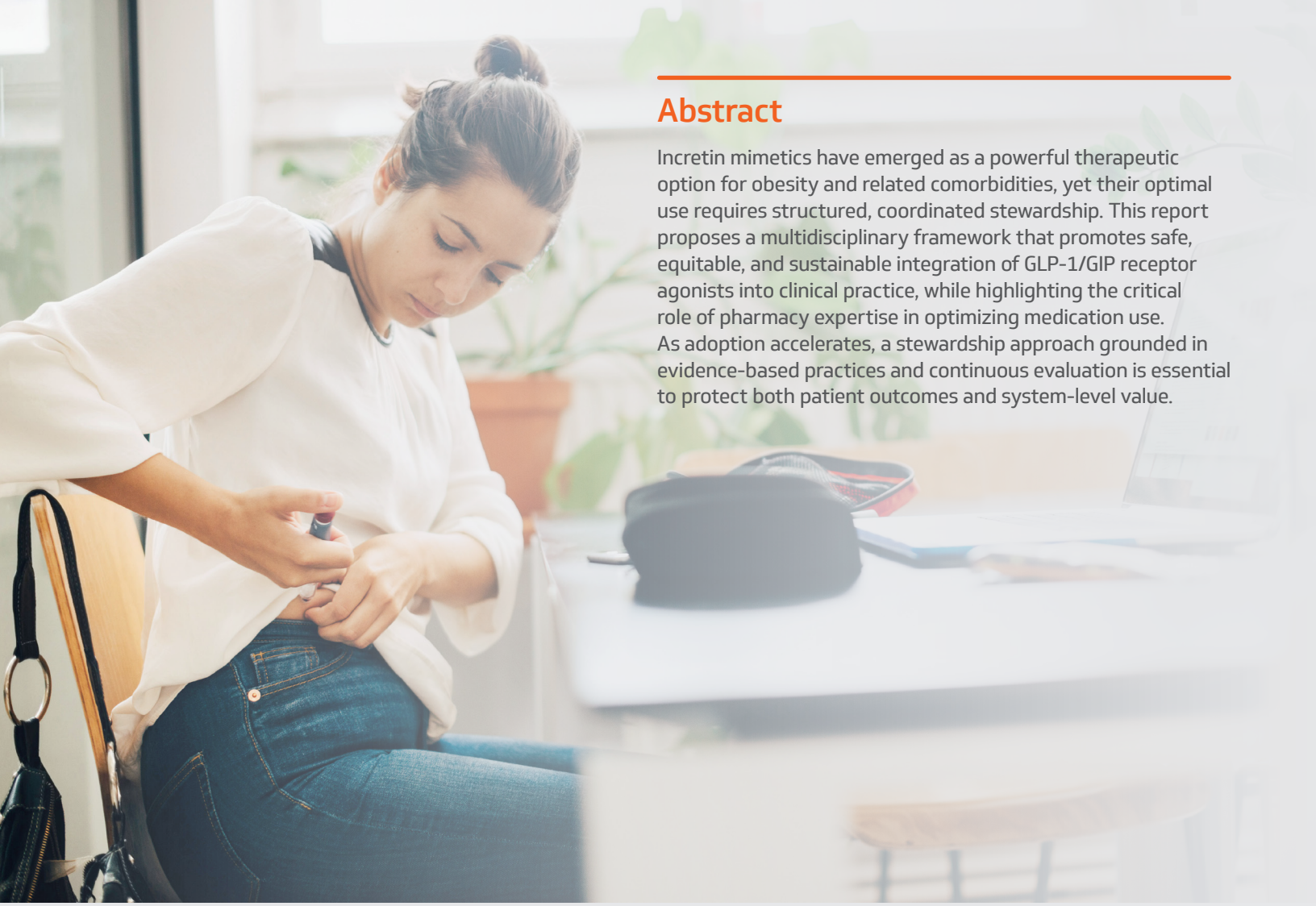
Developing a Stewardship Approach to GLP-1/GIP Receptor Agonist Use in Obesity and Related Conditions: Consensus from a Vizient Workgroup Series



Abstract

Incretin mimetics have emerged as a powerful therapeutic option for obesity and related comorbidities, yet their optimal use requires structured, coordinated stewardship. This report proposes a multidisciplinary framework that promotes safe, equitable, and sustainable integration of GLP-1/GIP receptor agonists into clinical practice, while highlighting the critical role of pharmacy expertise in optimizing medication use. As adoption accelerates, a stewardship approach grounded in evidence-based practices and continuous evaluation is essential to protect both patient outcomes and system-level value.

Key Concepts

- **Obesity is a chronic condition that requires comprehensive management-**the ongoing rise in obesity prevalence highlights the need for integrated care strategies that combine lifestyle, behavioral, pharmacologic, and supportive interventions to improve long-term outcomes.
- **GLP-1/GIP receptor agonists signal a paradigm shift-**GLP-1/GIP receptor agonists offer powerful new tools for obesity and cardiometabolic risk management—but their benefits can only be realized through deliberate, sustained, and equitable use.
- **Rising utilization raises important concerns related to access, equity, and sustainability-**as GLP-1/GIP receptor agonists reshape the therapeutic landscape and global sales continue to grow, questions remain regarding equitable access, affordability, and long-term value. Disparities in prescribing, financial barriers, and limited real-world cost-effectiveness data present ongoing challenges to delivering equitable and evidence-based care.
- **Pharmacist-led stewardship can optimize use and outcomes-**pharmacists are uniquely positioned to lead GLP-1/GIP receptor agonist stewardship, leveraging their expertise in medication management, access navigation, and patient education to promote appropriate, sustained, and equitable therapy.
- **A scalable framework for stewardship is essential-**a flexible, multidisciplinary stewardship model is needed to guide safe and effective GLP-1/GIP receptor agonist use across ambulatory settings—focusing on collaboration, prescribing oversight, access facilitation, adverse event tracking, and performance metrics.

Introduction/Background

In the US, obesity is a significant public health concern. According to data from the National Health and Nutrition Examination Survey collected between August 2021 and August 2023, approximately 40.3% of adults aged 20 and older have a body mass index (BMI) of at least 30 kg/m^2, the threshold for obesity. While trends in age-adjusted obesity have remained consistent over the past decade, the prevalence of severe obesity, defined as a BMI of 40 kg/m^2 or higher, has increased from 7.7% to 9.7% over the same period.[1] Obesity leads to multiple health issues and is estimated to cost the US $289 billion annually in direct medical expenditures. Research suggests that 51% of the growth in per capita health care spending in the last decade can be attributed to the rise in chronic diseases, many of which are linked to obesity and are largely preventable.[2] In recognition of the impact of obesity and its related illnesses on morbidity, mortality, and health care costs, the American Medical Association adopted a policy in June 2013 that recognized obesity as a disease state requiring a range of interventions.[3]

Clinical practice guidelines for obesity management advocate for a comprehensive, holistic approach—integrating lifestyle modifications, behavioral and psychological support, and pharmacotherapy or surgical interventions when appropriate—to achieve sustainable weight loss.[4] Nevertheless, despite substantial efforts, current strategies employed in the US have not succeeded in reversing the rising prevalence of obesity. In real-world care, key contributing factors to obesity such as poor dietary habits, insufficient physical activity, genetic predispositions, psychological challenges, and socioeconomic barriers are often insufficiently addressed.[5]

The approval of second-generation anti-obesity medications that demonstrate markedly greater weight loss efficacy than first-generation agents such as orlistat, phentermine, and naltrexone-bupropion may cause a paradigm shift in how some clinicians approach obesity care. Glucagon-like peptide-1 (GLP-1) receptor agonists, alone or combined with glucose-dependent insulinotropic polypeptide (GIP) receptor agonists, target physiological pathways that regulate appetite and caloric intake and have demonstrated significant efficacy in promoting weight loss. In clinical trials, semaglutide resulted in a mean total body weight loss (TBWL) of 14.9% to 17.4% over 60 weeks, while tirzepatide achieved a mean TBWL of 19.5% to 20.9% over 76 weeks, along with notable improvements in cardiometabolic risk factors. These outcomes were achieved regardless of structured dietary interventions.[6,7] Beyond promoting weight loss, GLP-1/GIP receptor agonists may have a transformative impact on the management of obesity-related cardiometabolic conditions. Phase 3 trials in individuals with obesity have demonstrated that semaglutide reduces the risk of secondary cardiovascular events,[8] normalizes blood glucose levels,[9] improves symptoms of heart failure with preserved ejection fraction,[10] and improves liver histology in patients with metabolic dysfunction-associated steatohepatitis.[11] Similarly, tirzepatide has been shown to delay or prevent the progression from prediabetes to type 2 diabetes,[12] improve symptoms of obstructive sleep apnea,[13] and reduce heart failure admissions.[14] While not completely understood, it appears some of these effects may be independent of the weight loss effect.

While GLP-1/GIP receptor agonists mark a substantial advancement in obesity management, important questions remain about their long-term use in clinical practice - specifically how to optimize patient access and outcomes, mitigate risks, prevent inappropriate use, support obesity care beyond pharmacotherapy, and ensure cost-effective, sustainable integration into health care.

Some of the uncertainties include:

- **Financial affordability and sustainability:** In 2024, semaglutide and tirzepatide became the top two drugs by total US pharmaceutical expenditure, with spending reaching $54 billion and $31.7 billion, respectively—driven largely by rising use for obesity,[15] with days of therapy increasing 51% over the year.[16] Nearly 93 million US adults meet eligibility criteria for GLP-1/GIP receptor agonist treatment based on BMI, and annual sales are projected to approach $150 billion within five years.[17] At current net prices, treating all eligible individuals with a GLP-1/GIP receptor agonist would carry an estimated annual cost of $600 billion, posing a scale of short-term expenditure that is currently unsustainable for both public and private payers.[18] While long-term affordability should be considered in the context of potential clinical value, there is minimal real-world evidence to support the long-term cost-effectiveness of widespread use.[19]

  Although the obesity pipeline is rich, many late-stage pipeline candidates offer more convenient dosage forms to current subcutaneous formulations or introduce new combinations that may provide incremental improvements in efficacy and safety. If trends of other branded pharmaceutical classes are any indication, branded competition is not nearly as effective as generic competition at driving down costs.[18]

- **Persistence and value:** A long-term challenge for GLP-1/GIP receptor agonists for obesity treatment is the need for ongoing treatment to maintain clinical benefits, which is critical to their long-term cost-effectiveness. Off-treatment periods in clinical trials demonstrated that discontinuation of semaglutide and tirzepatide results in weight recurrence and a return of cardiometabolic risk factors to baseline.[20,21] Real-world persistence rates reported in the literature vary based on population, data source, and time period, but for studies limited to GLP-1/GIP receptor agonist use primarily for obesity, 1-year persistence rates range from 40% to 53.6%,[22-26] which are at odds with the greater than 80% persistence rates reported across the STEP and SURMOUNT phase 3 development programs.[6,7] Although medication shortages during the review periods in real-world studies may have contributed to low persistence, analysis of patient characteristics offers additional insights. In a commercially insured cohort, patients prescribed semaglutide by an endocrinologist or obesity medicine specialist were more likely to remain on therapy, as were those with more frequent physician or mid-level practitioner visits during the first 12 weeks of treatment. Among patients using GLP-1/GIP receptor agonists for type 2 diabetes or obesity, persistence was higher in those with a diabetes diagnosis compared to those treated solely for obesity. Additionally, individuals with obesity who experienced greater weight loss during treatment were more likely to continue therapy. Across the cohort, the most reported reasons for discontinuation were adverse events and cost.[27] Finally, data from the Komodo Healthcare Map suggest that multiple characteristics increased odds of discontinuation at 12 months including Black or Hispanic, male, Medicare or Medicaid, living in areas of high needs, obesity diagnosis only, heart failure or other cardiovascular disease conditions except heart failure at baseline, and new gastrointestinal (GI) adverse events at follow-up.[26]
- **Health care disparities:** Real-world data on initiation of anti-obesity medications, including semaglutide, indicate that initiation is more common among females compared to males, White non-Hispanic individuals compared to other racial and ethnic groups, adults aged 40–65 years compared to those under 40, and those with private insurance versus public insurance or self-pay. These patterns highlight racial, ethnic, and socioeconomic disparities in access to pharmacologic obesity treatment and may reflect suboptimal value in current use.[28,29] According to IQVIA, prescribing of GLP-1/GIP receptor agonists for obesity is not aligned with disease prevalence in the US. In 2024, only 24% of prescriptions were for males despite similar obesity rates between men and women. Additionally, patients aged 40 to 50 years accounted for 50% of prescriptions, even though they represent only about one-third of the population with obesity. Lastly, per capita GLP-1/GIP receptor agonist use at the county level showed no correlation with local obesity prevalence, suggesting that the potential long-term value of these agents is not being fully realized.[16] Both intrinsic and extrinsic factors likely contribute to barriers to initiation, and a deeper understanding of these factors is needed through additional research. However, obesity-related health care costs increase progressively with each higher obesity category, underscoring the importance of a tailored and nuanced approach to patient and treatment selection.[15,28,29]
- **Long-term safety profile:** Long-term safety data for GLP-1/GIP receptor agonists primarily stem from use in type 2 diabetes, but ongoing surveillance remains critical—especially given within-class differences, tirzepatide's recent introduction, and broader use as an anti-obesity medication at higher doses. Different responses in patients without diabetes and increased uptake may reveal safety signals not previously observed. While mild to moderate GI side effects such as nausea, vomiting, diarrhea and constipation are the most common adverse events reported, serious GI adverse events such as acute pancreatitis and gallbladder diseases are noted to occur. Evidence for rare adverse events such as ocular complications (retinopathy, nonarteritic anterior ischemic optic neuropathy, and neovascular age-related macular degeneration),[30] psychiatric disorders,[31-34] and thyroid cancer[35-37] is emerging, but remains inconclusive. Anecdotally, physicians are reporting dehydration and malnutrition with GLP-1/GIP receptor agonist use. Additionally, patients who experience rapid or excessive weight loss are showing signs of fatigue syndrome, which is characterized by symptoms such as fatigue, listlessness, low energy for life activities, and cognitive clouding.[38] An unresolved concern is around sarcopenia and bone loss, with a numeric imbalance of hip and pelvic fractures noted in females receiving semaglutide in the SELECT safety follow-up.[39]

  Several recent drug safety monitoring studies using post-marketing surveillance systems have been published. However, because reporting is spontaneous and voluntary, it remains difficult to determine whether observed adverse events are due to the medication itself, underlying disease, random occurrence, or unmeasured confounding factors. A recent analysis of VigiBase, the World Health Organization's global pharmacovigilance database, identified potential safety

signals associated with semaglutide, including abdominal discomfort, nausea/vomiting, diarrhea, constipation, gastroesophageal reflux disease (GERD), gastroenteritis, cholecystitis, cholelithiasis, pancreatitis, pancreatic cancer, depression, suicidal ideation, hair loss, thyroid cancer, and vision loss. For tirzepatide, reported signals included: abdominal discomfort, nausea/vomiting, diarrhea, constipation, GERD, cholecystitis, cholelithiasis, pancreatitis, and thyroid cancer.[40] To determine whether these associations reflect true causal relationships, further studies with more rigorous methodology will be necessary.[25] Given the strong efficacy of GLP-1/GIP receptor agonists in weight management, it is essential to ensure patients are fully informed of both the benefits and potential risks to support shared decision-making and to help determine whether an GLP-1/GIP receptor agonist is the right therapy, at the right time, for the right patient.

Collectively, these uncertainties indicate that prescribing GLP-1/GIP receptor agonists is not enough – they must also be carefully managed. As utilization expands, ensuring appropriate oversight and coordination of care becomes increasingly critical. Given the anticipated scale of GLP-1/GIP receptor agonist use for chronic weight management and related comorbidities – coupled with broader prescribing by clinicians outside of specialties that traditionally deliver comprehensive obesity care – a structured stewardship program may offer value for this therapeutic class. Such a program will help promote safe, equitable and evidence-based use of these therapies, support consistency of utilization and management across specialties, improve quality of medication use at both the individual and population levels, and help mitigate the financial impact of low-value or inappropriate use.

To introduce and advocate for GLP-1/GIP receptor agonist stewardship as a component of comprehensive obesity care, Vizient convened two workgroups: one consisting of stewardship subject matter experts (SME) to identify foundational principles common to effective stewardship programs, and a second group of SMEs with experience with GLP-1/GIP receptor agonists use in obesity or diabetes care to explore application of these principles to a stewardship model for obesity and its related comorbidities (See Appendix 1 for a more detailed description of methods). Recognizing the presence of multi-receptor incretin mimetics in the late-stage development pipeline for chronic weight management, Workgroup 2 recommended expanding the scope of stewardship efforts beyond current GLP-1/GIP receptor agonists to include all potentially high-impact incretin mimetic analogs that may be approved in the future. As a result, GLP-1/GIP receptor agonists will be referred to collectively as incretin mimetics for the remainder of the report.

While outpatient stewardship programs vary and must be tailored to available resources, the framework presented in this report is based on an inpatient stewardship program. In this model, most stewardship personnel are employed by a single entity – such as a health system – and serve as consultants, providing education and expert support for stewardship initiatives across multiple clinics or pharmacies. This model was selected for its potential to support both sustainability and scalability across diverse care settings. It is presented as a flexible framework that can be adapted to varying levels of available resources.

Defining medication stewardship and outlining the framework for an incretin mimetic stewardship program

The primary goal of medication stewardship is to promote the safe, high-quality, and appropriate use of medications that meet individual patient needs, while also minimizing harm to both individuals and society. Ultimately, stewardship aims to improve health outcomes across the entire population.[41]

While clinical guidelines and treatment algorithms provide direction for specific interventions, they often lack the broader system-level strategies necessary to support consistent medication use, reduce practice variation, and establish accountability for medication-related outcomes. These broader strategies are essential for achieving system-wide improvement in medication use.[42] To be effective, stewardship programs require a structured framework that can be applied across different practice settings.

Stewardship programs share core principles regardless of their therapeutic focus. Antibiotic and opioid stewardship initiatives, for example, are both grounded in the shared tenet of ensuring "an indication for a particular medication, in the right patient, at the right time."[43] The ambulatory setting presents distinct challenges for implementing medication stewardship programs, including limited infrastructure and prescribing oversight, lack of dedicated personnel, incomplete documentation, and inadequate tracking capabilities.[44] The Centers for Disease Control and Prevention (CDC) and The Joint Commission (TJC) have historically played pivotal roles in advancing antimicrobial stewardship through structured, evidence-based frameworks that increasingly encompass ambulatory care. In 2014, the CDC introduced the Core Elements of Hospital

Antibiotic Stewardship Programs, emphasizing leadership, accountability, drug expertise, and data-driven improvement.[45] Recognizing the need to extend stewardship beyond hospitals, the CDC released the Core Elements of Outpatient Antibiotic Stewardship in 2016, specifically tailored to the ambulatory care environment.[46] Likewise, TJC, which began requiring antimicrobial stewardship programs in hospitals in 2017,[47] expanded its standards to ambulatory care organizations in 2020.[48] In addition, the Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA) developed guidelines for implementing antibiotic stewardship programs. These guidelines underscore the importance of leadership commitment, multidisciplinary collaboration, education, and routine tracking and feedback—principles that promote consistent, measurable practices across care settings.[49] Workgroup 1 reviewed established resources to guide the selection of key stewardship elements and the development of a stewardship framework. The framework highlights multidisciplinary collaboration, operational feasibility, and adaptability across a variety of ambulatory care settings to address the complexities of incretin mimetic use in obesity management. A detailed description of framework elements is outlined in Table 1, and the stewardship framework is illustrated in Figure 1.

Figure 1: Consensus-based core elements of incretin mimetics medication stewardship framework

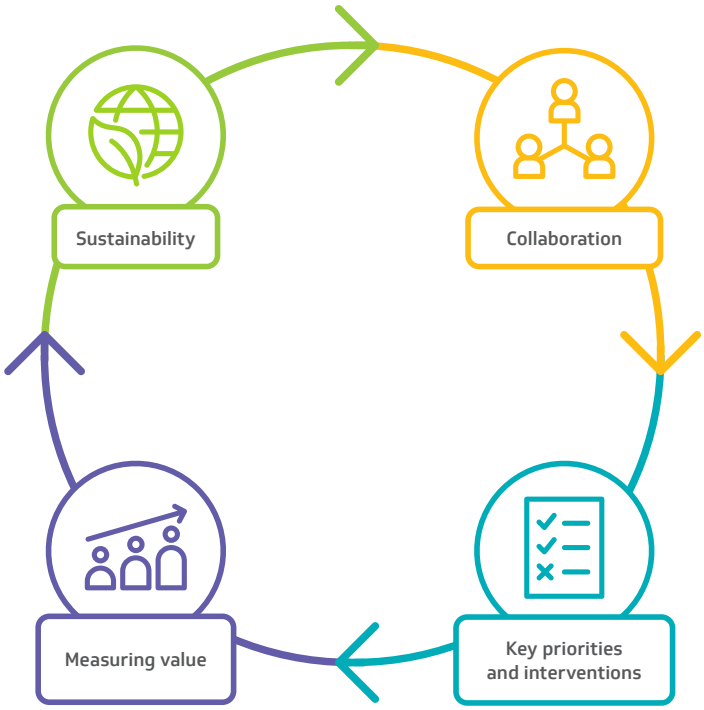


Figure 1. illustrates components of the framework for incretin mimetic stewardship, including ***collaboration*** through multidisciplinary team, key stakeholders and pharmacy expertise; implementation of ***key priorities and interventions; measuring value*** through program assessment, feedback, and communication strategies and a focus on ***sustainability***

Components of proposed framework

The following sections review components of the framework including collaboration, key priorities, measuring value, and sustainability.

Collaboration – Multidisciplinary team, stakeholders, pharmacy expertise

Multidisciplinary team

Multidisciplinary stewardship teams are typically co-led by a physician and a pharmacist, both of whom have undergone advanced training and possess the expertise necessary to support the program's functions and objectives. For example, antimicrobial stewardship programs are commonly led by a physician and pharmacist with specialized training in infectious diseases. In contrast, obesity medicine is not currently recognized as a subspecialty by the American Board of Medical Specialties or the American Osteopathic Association, nor is it designated by the American Society of Health-System Pharmacists (ASHP) as an advanced area of pharmacy practice for Postgraduate Year Two (PGY2) residency training.[50] For physicians, certification in obesity medicine is granted by the American Board of Obesity Medicine (ABOM) through designation as a Diplomate.[51] This credential may be obtained by completing a clinical fellowship or through continuing medical education followed by a qualifying examination. As of this writing, approximately 9,800 clinicians have been certified as ABOM Diplomates, with internal medicine, family medicine, pediatrics, endocrinology, and surgery comprising the top five primary specialties represented.[52]

The Board of Pharmacy Specialties, pharmacy's primary certification body, does not currently offer a specialty certification in obesity medicine, nor are pharmacists eligible for certification as Diplomates of the ABOM. While not direct equivalents, certifications such as the Certified Diabetes Care and Education Specialist (CDCES) and Board Certified–Advanced Diabetes Management (BC-ADM) cover

topics that are closely related to obesity management. Due to the limited formal recognition of specialized training in obesity management, Workgroup 2 reached consensus that an incretin mimetic stewardship program should be co-led by a pharmacist and a physician, each of whom should possess relevant education, training, or clinical experience in obesity care. A foundation in obesity care is essential due to its complexity and its central role in the effective stewardship of incretin mimetics. Clinicians in this space must have a foundational understanding of the physiology, etiology, epidemiology, and biology of obesity, as well as its behavioral, nutritional, and physical activity components, associated comorbidities, and current treatment strategies.

Key stakeholders

As outlined in clinical practice guidelines, many interventions in obesity care are best delivered by a multidisciplinary team.[4] Figure 2 presents a stakeholder map developed by Workgroup 2 that reflects the group's consensus on the key organizational stakeholders essential for successful implementation of an incretin mimetic stewardship program for management of obesity and its related comorbidities. Engaging stakeholders across the program is essential for identifying gaps and opportunities in delivering safe, effective obesity care for all patients, and for ensuring alignment on key priorities for the program.

Pharmacy expertise: Role of the pharmacist in incretin mimetic stewardship for obesity management

Although the term "drug expertise" was used by workgroups to discuss the role of the pharmacist in stewardship programs, this paper will use the term "pharmacy expertise" to align with the CDC's stewardship framework terminology.[46]

The American Association of Clinical Endocrinology (AACE)/ American College of Endocrinology (ACE) Comprehensive Clinical Practice Guidelines for Medical Care of Patients with Obesity specifically state that an obesity care team should include a member that manages pharmacotherapy.[4] As medication experts, pharmacists play an important role in caring for patients with obesity, especially for managing the pharmacotherapy aspect of obesity care. Incretin mimetics require frequent touchpoints for dose titration, dose adjustment and optimization, management of adverse events, and patient counseling on nutritional considerations such as adequate protein, calorie, and fluid intake during treatment.

Practice consideration:

Ideally, the physician and pharmacist co-leads will have education, training, or experience in obesity management as leaders of the incretin mimetic stewardship program.

Results from several recent studies have demonstrated the value of pharmacists in managing incretin mimetic pharmacotherapy. In a retrospective pre-post study, clinical pharmacists in a cardiology clinic conducted monthly telehealth visits for patients on liraglutide or semaglutide, focusing on dose titration, tolerability, and lifestyle support. At six months, 100% of patients achieved at least 5% weight loss, with 71% achieving a reduction of 10% or more.[53] In a family medicine clinic, patients initiated on

Figure 2. Key stakeholder map – incretin mimetic stewardship program for management of obesity and its related comorbidities

incretin mimetics who were managed by a pharmacy-directed weight management service experienced significantly greater weight loss compared to those managed by primary care physicians (change in body weight: 9.32% vs. 5.11%; respectively; *P* = .01), resulting in an estimated reduction in $54,000 in annual health care expenditures. Pharmacist-driven deprescribing for those unable to tolerate therapy led to an additional $102,000 in avoided medication costs.[54] Another study found that patients managed by pharmacist-led services across multiple specialties achieved a median body weight loss of 8% over six months (interquartile range (IQR): –3.1% to 12.1%), with a median referral-to-visit time of only 12 days (range: 5 to 21 days).[55] Embedded ambulatory care pharmacists improved access to incretin mimetics by streamlining the prior authorization (PA) and appeals process. Pharmacy expertise reduced treatment delays and administrative burden, positioning them as key facilitators in overcoming access barriers.[56]

In these and studies conducted prior to the approval of incretin mimetics for obesity management, pharmacists contributed to weight management through a variety of roles, including medication selection, facilitating access, administration education, managing dose titration and dose adjustment, delivering life-style coaching, educating patients, and monitoring adherence, effectiveness, and tolerability. Informed by the combined expertise of Workgroup 1 and 2 SMEs, Table 2 outlines several pharmacist-led incretin mimetic stewardship initiatives that achieved consensus in Workgroup 2 and address key challenges to optimal utilization. These initiatives span clinical, operational, and educational domains and reflect the expanding scope of pharmacist responsibilities in chronic weight management.

Informatics development did not achieve consensus as a pharmacist-led initiative; however, workgroup participants acknowledged its potential as a critical enabler of incretin mimetic stewardship efforts. Several members emphasized the value of integrating prescribing pathways, clinical decision support tools, and documentation templates into electronic health record (EHR) systems to enhance consistency, scalability and operational efficiency. Despite this potential, participants acknowledged several barriers to implementation. These included limited informatics staffing, competing institutional information technology (IT) priorities, and significant variability in EHR functionality across organizations. As a result, informatics tools were considered more feasible for mature programs or health systems with existing infrastructure and dedicated clinical decision support capabilities. Given the operational and resource challenges, informatics development may be more effectively advanced through a multidisciplinary team—including clinicians, IT specialists, and quality leaders—rather than as a pharmacist-led initiative. This collaborative approach may better align with institutional priorities and support broader implementation across varied care environments.

Obesity training

As medication experts, pharmacists are well positioned to serve as stewards of incretin mimetic therapies and to provide coordinated pharmacotherapy management for obesity and its related comorbidities, given their established role in managing hypertension, type 2 diabetes, and dyslipidemia. The workgroup discussed how pharmacists without specialized training can support foundational pharmacotherapy interventions within the scope of obesity management but acknowledged that comprehensive obesity care involves more than just medication.

Although the workgroup affirmed that a team-based approach is ideal for obesity care, many SMEs noted that, in practice, pharmacists often assume responsibility for delivering pharmacotherapy, lifestyle, and behavioral support without compensation. This is due to limited resources or because payers may not separately reimburse other clinicians—such as dietitians, nutritionists, or behavioral specialists—for these components of care. As a result, pharmacists are frequently left to coordinate and deliver a broader spectrum of services, including nutrition counseling, physical activity promotion, stress management, sleep hygiene, and motivational interviewing. Workgroup 2 emphasized that formally expanding the pharmacist's role to include these elements is essential to supporting long-term treatment success with incretin mimetics.

Workgroup 2 expressed concern that current pharmacy curricula may not adequately prepare pharmacists to provide comprehensive obesity care. Considering this perceived gap, Workgroup 2 reached consensus that additional training beyond a PharmD may be needed to care for patients with obesity and obesity-related comorbidities treated with incretin mimetics. This concern is supported by recent data highlighting gaps in obesity-related education and training across US PharmD programs.

Practice consideration:

Additional training beyond a PharmD may be needed to care for patients with obesity and obesity-related comorbidities treated with incretin mimetics.

A recent survey of approximately half of US PharmD programs (n = 75) found that only 19% had at least one faculty member specializing in obesity management, and just 3% offered a standalone obesity course.[57] Furthermore, only 23% of programs provided elective shadowing opportunities with clinicians who treat patients with obesity, and a mere 4% offered experience working with dietitians or psychologists. As a result, many PharmD graduates may lack the foundational competencies needed to address non-pharmacologic aspects of obesity care and may benefit from additional postgraduate training or education to provide more holistic support for patients with obesity. To address this unmet need, organizations such as the Obesity Medicine Association and ASHP offer educational resources and certifications to support pharmacists in developing and strengthening competencies in obesity care.[58,59]

Key priorities and interventions

Key challenges to safe and effective use of incretin mimetics for obesity management

Workgroup 2 participants engaged in focused discussions to identify barriers limiting the safe, effective, and equitable use of incretin mimetics in ambulatory settings. The group highlighted several high-priority challenges that were consistently observed across institutions and practice environments. The prioritization of these challenges and areas of focus will vary by institution, depending on their specific needs and practice environment. The following themes reflect areas of discussion and represent the experiences shared during the workgroup sessions.

- **Care access** – Limited access to care significantly hinders the appropriate and equitable use of incretin mimetics for weight management and may drive patients to seek care outside of the health care system. Lack of coverage often prevents patients from accessing obesity-related services, while many primary care settings lack the capacity for sustained weight management support. This dynamic contributes to fragmented and delayed care, often resulting in an overreliance on specialists—such as those in cardiology, pulmonology, or gastroenterology—who may not be optimally positioned to manage obesity as a chronic condition over the long term. Additionally, social determinants of health—such as food insecurity, transportation barriers, low health literacy, and financial hardship—further impede access and continuity of care, especially among high-risk populations. These systemic challenges collectively impede treatment initiation, adherence, and maintaining long-term follow-up.
- **Medication access (e.g., PA, supply issues)** – Access to incretin mimetics is significantly influenced by factors such as insurance type and prescriber availability, often leading to disparities in care—where lower-risk patients receive treatment while higher-risk individuals do not. Private plans are often associated with fewer access constraints, in contrast to the more frequent coverage limitations seen with government-sponsored plans when incretin mimetics are used solely for obesity. Administrative burdens related to PA and coverage strain resources, contribute to treatment abandonment, and can potentially impact clinical outcomes. A key barrier involves the duration of insurance approvals, which are often limited to six months and contingent on documentation of at least 5% weight loss for renewal. This requirement may be misaligned with clinical timelines, particularly during the titration phase of agents like semaglutide, where expected outcomes may not yet be realized. Delays in follow-up—common with specialist backlogs—can result in treatment interruptions and the need to reinitiate and re-titrate therapy. Pharmacists are well-positioned to help address these challenges through accessible monitoring and care coordination to support continuity of treatment.
- **Persistence** – Sustaining use with incretin mimetic therapy is challenged by factors such as high cost, limited evidence on long-term use, and restrictive coverage policies. Concerns were raised about patients discontinuing treatment within six months—often before realizing long-term clinical benefits—highlighting a disconnect between short-term costs and long-term value for payers, raising concerns for “sunk costs.” While emerging data from cardiometabolic trials suggest benefits from extended use, current evidence remains insufficient to guide optimal treatment duration. Additionally, policies that impose annual or lifetime coverage limits can abruptly disrupt therapy and undermine continuity of care, especially for patients who have achieved their goal body weight and subsequently no longer meet insurance criteria for continued use. This remains a common and significant challenge in obesity management. These challenges emphasize the importance of strategic patient selection, informed decision-making in partnership with the patient, proactive planning for treatment duration, and defined criteria for therapy continuation or transition when coverage ends, all of which are essential to supporting sustainable and evidence-informed stewardship of incretin mimetic medications. Additional challenges to the safe and effective use of incretin mimetics in obesity that reached consensus in Workgroup 2 are summarized in Box 1.

Box 1: Additional consensus-based challenges impacting safe and effective use of incretin mimetics in obesity

- **Dose titration** – Structured titration protocols are essential to ensure efficacy and mitigate adverse effects. Inconsistent practices around dose escalation can impact tolerability, persistence, and overall treatment success.
- **Safety and adverse events** – The lack of standard monitoring protocols across care settings can compromise patient safety and lead to premature discontinuation, particularly in the context of the real-world management of adverse events, including GI adverse events and less well-documented issues such as fatigue and malnutrition.
- **Physician education** – Many physicians lack formal training in prescribing and the longitudinal management of patients on incretin mimetic therapies, contributing to underutilization and treatment delays; limited understanding of payer requirements and documentation further impedes access and appropriate initiation and sustained management of incretin mimetic therapy.
- **Social drivers of health and health-related social needs** - Factors such as transportation barriers, limited health literacy, and socioeconomic status disproportionately affect high-risk populations and can hinder initiation, adherence, and persistence with GLP-1/GIP receptor agonist therapy, highlighting the need for stewardship strategies that identify and address these non-clinical barriers to care.

Stewardship implementation - interventions to reduce inappropriate prescribing

Common examples of evidence-based interventions used in inpatient stewardship programs to reduce inappropriate prescribing include prospective audit and feedback, patient and prescriber education, adoption of institutional guidelines, computerized order-entry sets, clinical decision-support algorithms, and educational pop-ups or warnings in the EHR.[44]

Implementing stewardship in the outpatient setting is more challenging due to reduced access to both prescribers and patients and the separation of prescribing and dispensing functions. Workgroup 1 SMEs emphasized that, regardless of the specific interventions selected, multifaceted approaches are generally the most effective in outpatient stewardship — an observation supported by the antimicrobial stewardship literature.[60] Table 1 outlines key considerations and barriers related to stewardship implementation and interventions and Table 2 outlines key pharmacy-led initiatives for stewardship implementation.

The workgroup also noted that for outpatient stewardship to be successful, interventions must integrate seamlessly into prescriber workflows, be quick, and eliminate any guesswork involved in appropriately prescribing and managing incretin mimetics for obesity and its related comorbidities.

Measuring value and sustainability - Monitoring and reporting

Ensuring the long-term sustainability of an incretin mimetic stewardship program requires a structured focus on continuous measurement, transparent outcome reporting, and effective communication of program impact. Workgroup participants emphasized that sustained engagement with organizational leadership is best supported by regular reporting on key performance indicators, including metrics related to medication access, clinical quality, and patient outcomes. Equally important is the establishment of clear financial alignment—whether the objective is cost containment, prescription capture, or programmatic expansion. Early articulation of the value proposition enhances strategic clarity and reinforces leadership support for ongoing investment.

To support sustainability, participants highlighted the utility of tools such as dashboards, scorecards, and automation platforms. These technologies help demonstrate clinical and economic return on investment, inform resource allocation decisions, and bolster the case for continued pharmacist involvement. Ultimately, program sustainability depends on the ability to translate data into actionable insights that validate program value and inform continuous improvement efforts.

Metrics play a central role in demonstrating the value of stewardship, justifying resource needs, and guiding iterative program enhancements. While clinical and adherence metrics serve as foundational indicators, workgroup members emphasized the importance of also tracking medication access activities and implementation process measures to provide a holistic view of stewardship impact. Importantly, metrics should be meaningful to patients, clinicians, and health care systems alike.

The stewardship framework supports a flexible, tiered approach to metric collection—beginning with a focused set of foundational indicators and expanding as organizational capacity and infrastructure mature. The workgroup reached consensus on the categories of metrics outlined in Table 3 as essential for assessing program effectiveness and guiding quality improvement.

Discussion

The increasing utilization of incretin mimetics for obesity management presents both an opportunity and a challenge. While these agents offer substantial clinical benefit, their real-world use raises important considerations around safety, appropriateness, access, and sustainability—particularly in the ambulatory setting. To address these complexities, the Vizient-led workgroups proposed a stewardship model informed by successful frameworks in antimicrobial and opioid stewardship. These established models emphasize the importance of structured oversight, appropriate prescribing, and multidisciplinary collaboration—all of which are directly applicable to the management of incretin mimetic therapies.

Pharmacists were identified as central figures in this stewardship framework, given their expertise in pharmacotherapy and their existing roles in chronic disease management. Their involvement in medication selection, dose titration, adverse event monitoring, and patient education is critical to ensuring safe and effective therapy. Moreover, emerging evidence from pharmacist-led weight management programs supports their capacity to drive both clinical and economic value, including improved weight outcomes, reduced health care utilization, and avoided medication costs through deprescribing efforts.

Conclusion

Incretin mimetics have emerged as powerful tools in the management of obesity and related comorbidities, yet their success in clinical practice depends on deliberate, coordinated stewardship. This report outlines a framework that leverages the unique capabilities of pharmacists and integrates multidisciplinary collaboration to ensure these therapies are used effectively, equitably, and sustainably.

As utilization of incretin mimetics expands, health systems must act with foresight to implement stewardship programs that safeguard both clinical and economic value. Through proactive engagement, evidence-based practices, and continuous evaluation, a stewardship approach can help deliver on the full promise of these agents—advancing whole-person obesity care while promoting responsible resource use.

Appendix 1: Methods

Vizient convened a series of workgroups with subject matter experts to develop a stewardship framework for the ambulatory setting and adapted for incretin mimetics. Participants were recruited through Vizient's Member Networks, Performance Improvement Collaborative Network, Antimicrobial Stewardship Committee, Alternate Site Pharmacy Committee, Clinical Pharmacy Advisory Council, and Vizient Pharmacy Aggregation Groups. Additionally, participants were solicited through the monthly pharmacy newsletter. A panel of Vizient steering committee members conducted interviews and selected the final workgroup members. The workgroup series, conducted from February to April 2025, included 23 participants representing 23 hospitals and 21 health systems.

The primary goals of the workgroup series were:

1. To create a scalable and sustainable stewardship model for the ambulatory setting.
2. To elevate the role of pharmacists as medication stewards.
3. To develop a comprehensive stewardship framework for incretin mimetics.

The workgroup series was divided into two groups:

- **Workgroup 1:** Comprised of participants with experience in stewardship programs. This group focused on defining the key elements of stewardship for ambulatory settings.
- **Workgroup 2:** Included participants with experience in the utilization of incretin mimetics in obesity management. This group focused on adapting the stewardship framework for incretin mimetics.

Virtual workgroup meetings were scheduled for 1 hour. Pre-meeting surveys were used to gauge initial consensus and establish areas of discussion during virtual meetings. Each meeting aimed to discuss and gather feedback on the core elements of a stewardship program. Post-meeting surveys were used to confirm consensus on the identified elements and to incorporate changes based on workgroup discussions. A threshold of 60% of participant agreement was set for inclusion of elements in the final recommendations. The core elements, challenges and key interventions outlined in this paper were derived from workgroup discussions and consensus.

Table 1. Consensus-based core elements for incretin mimetics medication stewardship framework

Core Element		
Considerations	**Barriers**	**Strategies**
Multidisciplinary Team: Identify leaders, who represent the specialties and patient population program is intending to address		
• Leadership should include both a physician and a pharmacist, reflecting clinical and operational expertise. • The leadership model should be flexible enough to accommodate a range of specialties (e.g., primary care, endocrinology, cardiology). • Ideally, leaders should have education, training, or experience in obesity management.	• Lack of standardized obesity-specific credentials or training requirements for leadership roles. • Potential to create access barriers by requiring overly prescriptive qualifications (e.g., formal certifications). • Variation in system-level privileging and credentialing requirements. • Challenges in coordinating stakeholders across departments and aligning priorities.	• Allow flexibility in leader qualifications, focusing on demonstrated interest and competency in obesity care. • Encourage co-leadership models (physician + pharmacist) to reflect multidisciplinary collaboration. • Develop internal training modules or mentorship pathways to build leadership capabilities.
Key Stakeholders: Key players who hold interest and influence over the program's success and inform how the program is communicated and reported		
• Key stakeholders should reflect the full care continuum involved in incretin mimetic prescribing and support. • Stakeholder mapping helps clarify interests, influence, and communication needs within program implementation. • Anticipate future involvement from specialties as incretin mimetic indications expand.	• Inconsistent identification or engagement of stakeholders across institutions. • Emerging prescribers may not view themselves as part of stewardship efforts or lack awareness of shared goals. • Lack of clear role definitions can lead to fragmented communication or duplication of efforts.	• Shared committee for health systems with multiple sites or clinics. • Conduct a stakeholder mapping exercise early in program development to identify key roles and responsibilities. • Include a broad range of disciplines, especially those directly involved in prescribing or managing comorbid conditions. • Establish formal communication channels and feedback loops across departments. • Use flexible stakeholder categories (e.g., 'prescribing specialists') to future-proof the framework.
Pharmacy Expertise: Pharmacy expertise ensures the safe, effective, and evidence-based use of therapies through clinician proficiency in pharmacology, therapeutic decision-making, and navigation of access and formulary challenges		
• Pharmacists are highly competent in managing incretin mimetic pharmacotherapy, including initiation, titration, and adverse event management. • Effective stewardship involves integrating pharmacologic knowledge with broader care goals (e.g., patient outcomes, access, equity). • Pharmacists often contribute to deprescribing and comorbidity management as patients lose weight or reduce medication needs.	• Limited formal training in obesity pharmacotherapy beyond diabetes-related content. • Lack of structured CE or certification pathways specific to obesity. • Insufficient support for pharmacists to lead access-related workflows (e.g., PA approvals and renewals, appeals).	• Leverage existing diabetes expertise to transition pharmacists into incretin mimetic therapy roles. • Leverage internal mentorship, training modules, and peer learning for drug-specific competencies. • Develop reference tools, templates, and dosing protocols to promote consistency.

Abbreviations: CE=continuing education; EHR=electronic health record; IT=information technology; PA=prior authorization

Table 1. Consensus-based core elements for incretin mimetics medication stewardship framework (continued)

Core Element		
Considerations	**Barriers**	**Strategies**
Goals/Key Priorities: Goals are important in the development and implementation of policies to support a program		
• Program goals should align with both institutional priorities and patient-centered outcomes. • Goals should be specific, measurable, and adaptable over time. • Patient population, available resources, and data infrastructure should influence goal selection. • Stakeholder input, including from prescribers and patients, helps shape meaningful priorities.	• Variability in priorities across health systems (e.g., financial vs. clinical focus). • Lack of consensus on what outcomes to target in early-stage programs. • Misalignment between payer-driven metrics and prescriber or patient-centered goals. • Staffing and resource constraints that limit goal execution or scope.	• Start with 1–3 manageable goals, particularly for new programs; consider a single overarching aim with 1–2 operational goals — move to broader set of objectives as program becomes more established. • Involve multidisciplinary stakeholders in goal setting to promote buy-in and relevance. • Goals may shift based on evolving clinical priorities, payer expectations, or patient population needs. Reassess and update goals annually based on evolving data and program maturity. • Document goals and link them clearly to measurable interventions and stewardship metrics, consider benchmarking for additional insight.
Interventions: Interventions as a core element in a medication stewardship framework serve to operationalize best practices by guiding, standardizing, and supporting clinical decision-making through targeted tools, workflows, and education that improve medication use and patient outcomes		
• Interventions should be practical, scalable, and embedded within existing clinical workflows to support outpatient care delivery. • Combining passive tools (e.g., order sets, EHR guidance) with active prescriber engagement may help enhance uptake and sustainability. • Interventions should promote both medication stewardship and comprehensive obesity care, including lifestyle and behavioral health integration.	• Outpatient settings often lack real-time oversight and infrastructure for prospective audit and feedback. • Manual, time-intensive interventions are less sustainable and prone to inconsistency. • Variation in staffing and resources across sites affects the consistency of intervention implementation.	• Implement smart order sets, auto-documentation tools, and EHR-integrated decision support to guide prescribing and monitoring. • Develop and distribute standardized protocols and educational templates for side effect management and titration. • Utilize retrospective reviews and feedback loops (e.g., report cards, peer comparisons) to reinforce best practices without interrupting care delivery.
Education: Education is a foundational component of stewardship and must be directed at both prescribers and patients and when effectively implemented, can significantly influence prescriber engagement and prescribing behavior		
• Tailor education formats for different learners (e.g., physicians, advanced practice providers, pharmacists, patients). • Education should be continuous and updated as new therapies and evidence emerge.	• Limited time and competing priorities reduce engagement with traditional education formats. • Inconsistent access to educational tools or support teams (e.g., dietitians, behavioral health). • Lack of resources to support recurring education sessions or training.	• Use multimodal education approaches (e.g., live training, recorded modules, embedded EHR tips). • Long-term success depends on embedding education into routine clinical practice; embed passive education into documentation tools and order sets to reinforce best practices. • Collaborate with internal departments (e.g., psychology, nutrition) to develop and deliver content.

Abbreviations: CE=continuing education; EHR=electronic health record; IT=information technology; PA=prior authorization

Table 1. Consensus-based core elements for incretin mimetics medication stewardship framework (continued)

Core Element		
Considerations	**Barriers**	**Strategies**
Data Collection, Analysis and Reporting: Data collection, analysis, and reporting enable programs to measure impact, monitor performance, and drive continuous improvement through evidence-based insights that inform clinical practice and operational decisions		
• Metrics should be directly tied to program goals and include both clinical outcomes and operational indicators. • Tracking access and persistence data is especially important given the unique challenges of incretin mimetic therapy in ambulatory settings. • Data collection processes must be feasible and sustainable across diverse health care environments with variable resources. • Engagement from analytics teams is crucial to streamline data extraction and interpretation.	• Outpatient systems often lack integrated, real-time data for tracking prescriptions, fills, and outcomes. • Manual data collection is time-consuming and limits scalability. • Lack of standardized definitions for metrics such as persistence, adherence, or access resolution can hinder benchmarking and comparison. • Patient follow-through (e.g., medication pickup, adherence) is difficult to verify in non-integrated systems. • Lack of standardized definitions and benchmarks makes comparison across programs difficult.	• Start with a small set of high-impact metrics tied to clear program goals (e.g., initiation rate, PA success rate, persistence). • Leverage EHR tools, pharmacy data, and smart documentation to streamline metric capture. • Use smart phrases, structured notes, and dashboards to facilitate consistent documentation and reporting. • Engage with IT and analytics teams early to define data needs and ensure feasibility of extraction. • Collaborate with analytics and IT teams to automate reporting and integrate dashboards into stewardship workflows. • Report metrics back to clinical teams to support continuous quality improvement and stakeholder engagement.
Communication Strategies: Tailored communication strategies ensure alignment, coordination, and transparency among multidisciplinary teams and patients, facilitating consistent implementation of best practices and optimizing care delivery		
• Clear, consistent communication between multi-disciplinary stakeholders is essential to align goals and ensure coordinated care. • Effective communication with prescribers improves uptake of stewardship recommendations and ensures adherence to protocols. • Patient-centered communication is vital to set expectations, encourage persistence, and promote shared decision-making.	• Fragmentation across care teams and departments can lead to miscommunication or lack of role clarity. • Variability in prescriber understanding and attitudes toward obesity care may impede consistent messaging. • Lack of standardized communication tools (e.g., templates, documentation guides) limits efficiency and alignment.	• Implement structured documentation tools and shared EHR note templates to promote consistency across teams. • Develop communication workflows that engage all relevant prescribers and support bidirectional feedback. • Create standardized patient education materials and scripts to support consistent, empathetic messaging on incretin mimetic therapy.

Abbreviations: CE=continuing education; EHR=electronic health record; IT=information technology; PA=prior authorization

Table 1. Consensus-based core elements for incretin mimetics medication stewardship framework (continued)

Core Element		
Considerations	**Barriers**	**Strategies**
Feedback: Feedback fosters continuous improvement by providing timely, data-informed insights to clinicians and teams, reinforcing best practices, and supporting accountability across the care continuum		
• Feedback loops are essential for program evaluation, prescriber engagement, and continuous quality improvement. • Feedback should be structured, timely, and aligned with institutional goals and individual performance metrics. • Feedback may be directed at prescribers, pharmacists, or the broader care team to reinforce best practices and identify areas for improvement.	• Lack of infrastructure or systems for collecting, analyzing, and disseminating actionable feedback in outpatient settings. • Organizational culture may influence whether feedback is welcomed, resisted, or acted upon by prescribers. • Feedback timing and framing can affect its impact—too frequent or poorly delivered feedback may be ignored or create friction.	• Consider delivering at strategically defined intervals to maintain momentum without disrupting progress of the program. • Use retrospective performance data (e.g., prescribing trends, adherence rates) to deliver prescriber report cards or dashboards. • Integrate feedback mechanisms into routine meetings or performance reviews to normalize the practice and encourage dialogue. • Tailor feedback delivery to the audience—consider peer-to-peer feedback for prescribers and patient-centered outcome feedback for pharmacists. • Avoid mid program feedback to prevent potential bias in program results. • Consider feedback from patient advisory councils.
Follow-Up and Assessment of Program: Follow-up and assessment ensure program sustainability and effectiveness by regularly evaluating outcomes, adapting strategies to evolving needs, and maintaining alignment with clinical and organizational goals		
• Follow-up should include both outcome evaluation (e.g., clinical results, access success) and process evaluation (e.g., workflow efficiency, team engagement). • Data-driven reassessment supports continuous improvement, informs leadership, and ensures accountability.	• Limited access to real-time, integrated data makes it difficult to track long-term program impact across systems. • Lack of protected time and dedicated personnel for conducting follow-up reviews or quality improvement activities. • Shifting institutional priorities or leadership turnover may undermine long-term support and continuity.	• Establish structured intervals (e.g., quarterly, annually) for program review, with predefined metrics and stakeholder reporting. • Use dashboards and automated data reports to streamline performance tracking and minimize manual effort. • Engage a multidisciplinary leadership team in regular reassessment to align on evolving goals and maintain shared ownership.

Abbreviations: CE=continuing education; EHR=electronic health record; IT=information technology; PA=prior authorization

Table 2. Consensus-based pharmacist-led initiatives in incretin mimetics medication stewardship program

Pharmacist-led initiative and description
Pharmacist-led initiatives in treatment algorithms and prescribing guideline development: Incorporating pharmacists into the development and refinement of prescribing guidance promotes multidisciplinary collaboration and helps create scalable, actionable tools that enhance safety, consistency, and equity in the delivery of obesity care.
1. Development of treatment algorithms/prescribing guidelines • Collaborate with multidisciplinary teams to create evidence-based algorithms tailored to clinical settings. • Recommend decision-tree models that account for comorbidities, weight history, and cardiometabolic risk. • Provide dosing, titration, interchanges, monitoring, and discontinuation criteria within the guidance to ensure consistent practice. • Incorporate formulary restrictions, approval criteria, and drug availability into algorithm design.
2. Patient selection criteria • Define clinical eligibility based on guideline-concordant indicators (e.g., BMI thresholds, comorbidity presence). • Assess patient readiness for therapy, including lifestyle factors, adherence potential, and treatment goals, including treatment duration. • Identify high-risk populations and integrate equity-focused considerations into selection tools.
3. Develop deprescribing criteria and protocols • Outline deprescribing criteria and protocols (e.g., plateaued weight loss, intolerable adverse events, loss of coverage access). • Include tapering and transition plans in documentation tools and patient education. • Train prescribers to initiate deprescribing discussions early—at initiation and key milestones.
4. Implementation and optimization • Lead training and education efforts for prescribers on guideline use and patient selection tools. • Monitor utilization trends and recommend updates to guidelines based on emerging evidence and real-world data. • Support scalability by embedding tools within EHR workflows and decision-support systems.
Pharmacist-led initiatives under CPAs:[61] CPAs between pharmacists and physicians serve as a foundational strategy to enhance the delivery, efficiency, and scalability of incretin mimetic therapy in ambulatory care. These agreements allow pharmacists to operate under defined protocols to initiate, adjust, or discontinue therapy, enabling more responsive, patient-centered management.
1. Therapy initiation and management • Initiate incretin mimetic therapy under defined CPA protocols based on approved patient selection criteria. • Adjust dosing and titration schedules in accordance with clinical response and tolerance. • Discontinue therapy when clinically indicated (e.g., lack of response, adverse events) per protocol.
2. Monitoring and follow-up • Monitor for adverse events and implement mitigation strategies (e.g., nausea management). • Track clinical parameters (e.g., weight, HbA1c, blood pressure) to assess efficacy and guide therapy adjustments. • Schedule and conduct follow-up visits to reinforce adherence and support patient engagement.

Abbreviations: APP=advanced practice provider; BMI=body mass index; CE=continuing education; CMR=comprehensive medication review; CPA=collaborative practice agreement; EHR=electronic health record; HbA1c=hemoglobin A1c; PA=prior authorization

Table 2. Consensus-based pharmacist-led initiatives in incretin mimetics medication stewardship program (continued)

3. **Comorbidity and medication optimization**
   - Review and adjust medications for related conditions (e.g., hypertension, dyslipidemia, diabetes) under CPA authority.
   - Identify opportunities for deprescribing or dose adjustment to minimize polypharmacy risks.
4. **Care coordination and team communication**
   - Establish structured communication workflows with referring prescribers for shared decision-making.
   - Document interventions and clinical updates in the EHR to support seamless team-based care.
   - Engage in routine case reviews with physicians to evaluate outcomes and refine CPA protocols.
5. **Implementation and scalability**
   - Advocate for expansion of CPAs across clinic sites to increase access to pharmacist-led care.
   - Participate in CPA development and revision to ensure alignment with regulatory standards and clinical goals.
   - Educate clinical teams on CPA scope and pharmacist capabilities to optimize collaborative workflows.

Pharmacist-led initiatives in CMR and incretin mimetic prescription review: Through structured medication reviews, pharmacists can identify opportunities to deprescribe, adjust dosages, or discontinue therapies that may no longer be necessary, thereby reducing polypharmacy, minimizing adverse effects, and improving overall treatment adherence. Pharmacists' ongoing evaluation of incretin mimetic prescriptions ensures that therapy remains aligned with the patient's clinical status and care goals throughout the patient's treatment journey. Incorporating routine CMRs into incretin mimetic medication stewardship efforts reinforces longitudinal, patient-centered care and supports proactive, coordinated medication management across multidisciplinary teams.

1. **Comprehensive medication review**
   - Conduct structured reviews of all medications at therapy initiation and regular intervals.
   - Assess appropriateness, effectiveness, and safety of concurrent therapies in light of weight loss and improved metabolic parameters.
   - Identify and implement deprescribing opportunities for medications such as antihyperglycemics, antihypertensives, or lipid-lowering agents as clinically appropriate.
   - Adjust medication dosages based on clinical needs and lab results.
2. **Incretin mimetic evaluation**
   - Confirm indication, dosing, titration schedule, and duration of incretin mimetic therapy are aligned with guidelines and patient-specific factors.
   - Monitor for contraindications or potential drug interactions throughout therapy.
   - Ensure therapy remains appropriate as patient progresses (e.g., reassess benefit-risk balance after weight loss milestones).
3. **Patient-centered optimization**
   - Educate patients on medication changes related to weight loss or comorbidity improvement.
   - Align pharmacotherapy plans with patient goals and preferences to enhance adherence and satisfaction.
   - Document medication adjustments and rationale in EHR to support coordinated care.
4. **Care coordination and follow-up**
   - Collaborate with primary care providers and specialists to implement changes in therapy.
   - Recommend lab monitoring schedules (e.g., HbA1c, blood pressure, lipid panel) to guide ongoing treatment decisions.
   - Schedule follow-up assessments to evaluate medication changes and ensure continued therapeutic alignment.

Abbreviations: APP=advanced practice provider; BMI=body mass index; CE=continuing education; CMR=comprehensive medication review; CPA=collaborative practice agreement; EHR=electronic health record; HbA1c=hemoglobin A1c; PA=prior authorization

Table 2. Consensus-based pharmacist-led initiatives in incretin mimetics medication stewardship program (continued)

Pharmacist-led initiatives to support medication access:[56,62-66] Pharmacists play a pivotal role in overcoming access barriers to incretin mimetics, particularly in navigating complex insurance requirements, managing PAs, and supporting therapeutic continuity.

1. PA navigation and management
   - Interpret payer criteria: Stay up to date with plan-specific coverage and formulary policies to guide prescriber selection of covered agents.
   - Prepare and submit PAs: Use standardized templates and EHR tools to efficiently complete and submit PA and renewal requests.
   - Manage appeals: Lead the preparation of appeal letters with clinical justification when initial PA requests are denied.
2. Clinical support and documentation
   - Monitor clinical metrics: Establish workflows for timely collection of weight and other required metrics to support PA renewals.
   - Align documentation with payer expectations: Proactively review insurer criteria and ensure documentation meets necessary thresholds (e.g., % weight loss).
   - Educate patients and prescribers: Provide guidance on documentation timelines and data needed to maintain therapy access.
3. Therapeutic continuity and shortage management
   - Coordinate therapeutic interchanges: Identify clinically appropriate alternatives and support prescribers in selecting covered options during shortages or non-coverage.
   - Develop and implement interchange protocols: Collaborate with multidisciplinary teams to establish treatment algorithms prioritizing patients by clinical need during shortages.
   - Monitor inventory and trends: Partner with supply chain teams to anticipate and respond to access disruptions proactively.
4. System efficiency and equity
   - Streamline workflows: Leverage electronic tools and collaborative protocols to reduce administrative burden on prescribers.
   - Target high-risk populations: Identify and prioritize support for patients at higher cardiometabolic risk who may face access barriers.
   - Track and report access disparities: Collect and analyze data on medication access trends to inform institutional equity initiatives.

Pharmacist-led initiatives in dosing titration and monitoring: Integrating pharmacists into the titration and monitoring process promotes continuity of care, facilitates rapid intervention when needed, and supports individualized treatment pathways within a structured stewardship model. Through close patient follow-up, pharmacists can identify early signs of intolerance, modify dosing regimens accordingly, and reinforce adherence strategies.

1. Dose initiation and titration management
   - Initiate therapy at recommended starting doses and escalate according to clinical guidelines and patient tolerance.
   - Customize titration schedules based on patient-specific factors.
   - Educate patients on the importance of gradual dose escalation and how to manage common side effects.
2. Clinical response monitoring
   - Track clinical markers such as weight, HbA1c, and blood pressure at defined intervals to evaluate therapy effectiveness.
   - Use results to guide dose maintenance, escalation, or de-escalation based on therapeutic goals and patient progress.
   - Identify patients not meeting targets and recommend alternative strategies or adjunctive therapies.
3. Patient engagement and education
   - Provide counseling on administration techniques, timing, and expectations throughout titration phases.
   - Reinforce adherence strategies and empower patients to report symptoms or barriers promptly.
   - Schedule regular touchpoints (in-person or virtual) to support continuous monitoring and individualized care.

Abbreviations: APP=advanced practice provider; BMI=body mass index; CE=continuing education; CMR=comprehensive medication review; CPA=collaborative practice agreement; EHR=electronic health record; HbA1c=hemoglobin A1c; PA=prior authorization

Table 2. Consensus-based pharmacist-led initiatives in incretin mimetics medication stewardship program (continued)

Pharmacist-led initiatives in adverse event management:[55] Pharmacists' accessibility in ambulatory settings allows for early engagement when adverse effects arise, reducing the likelihood of premature discontinuation and enhancing patient confidence in treatment. Timely identification and intervention are essential to maintaining adherence and achieving clinical benefit. Incorporating pharmacists into adverse event monitoring promotes consistent, evidence-based management strategies and facilitates communication between patients and prescribers. Involvement ensures that side effects are addressed promptly and effectively, reinforcing the safety and sustainability of incretin mimetic therapy.

1. Early identification and assessment
   - Conduct proactive follow-up (in-person, phone, or virtual) to screen for common adverse effects, particularly gastrointestinal symptoms.
   - Assess severity, frequency, and impact of symptoms on daily functioning and adherence.
   - Document adverse events in the EHR to inform multidisciplinary decision-making and continuity of care.
2. Individualized symptom management
   - Recommend supportive measures or dosing adjustments to minimize discomfort and avoid discontinuation (e.g., dietary modifications, antiemetics, hydration guidance).
   - Adjust titration schedules or hold doses temporarily based on patient tolerance.
   - Provide patient-specific education to set expectations and reduce anxiety related to side effects.
3. Therapy continuation support
   - Counsel patients on the self-limiting nature of many side effects to improve persistence with therapy.
   - Collaborate with prescribers to develop a modified dosing plan if adverse events persist.
   - Reinforce long-term benefits of therapy to promote sustained engagement and adherence.
4. Communication and coordination
   - Serve as a liaison between patients and prescribers to ensure timely intervention for reported adverse events.
   - Standardize documentation and communication pathways for adverse event reporting within the care team.
   - Incorporate adverse event management protocols into pharmacist-led care models for consistent practice.

Pharmacist-led initiatives in patient counseling and education: Beyond medication-specific information, pharmacists also contribute to broader obesity care education, including goal setting, lifestyle modification, and managing patient expectations. Their frequent patient contact positions them to reinforce education over time, address concerns as they arise, and adapt messaging to individual health literacy levels and needs that supports medication adherence and long-term treatment success.

1. Medication education and administration guidance
   - Explain the mechanism of action, expected benefits, and timeline for clinical improvement.
   - Provide clear instructions on injection technique, storage, and handling of incretin mimetics.
   - Educate on the importance of adhering to prescribed titration schedules to minimize side effects.
2. Side effect counseling and management strategies
   - Set realistic expectations regarding common side effects (e.g., nausea, decreased appetite).
   - Discuss symptom management strategies and when to seek medical attention.
   - Reassure patients about the self-limiting nature of many side effects and reinforce continuation strategies.

Abbreviations: APP=advanced practice provider; BMI=body mass index; CE=continuing education; CMR=comprehensive medication review; CPA=collaborative practice agreement; EHR=electronic health record; HbA1c=hemoglobin A1c; PA=prior authorization

Table 2. Consensus-based pharmacist-led initiatives in incretin mimetics medication stewardship program (continued)

3. **Lifestyle and obesity care support**
   - Counsel on the importance of lifestyle modifications (e.g., diet, physical activity) to enhance treatment outcomes.
   - Assist patients in setting realistic, personalized weight and health goals.
   - Connect patients with supportive resources such as nutrition counseling or behavioral programs.
4. **Documentation and communication**
   - Record counseling sessions in the EHR to support coordinated, team-based care.
   - Share relevant patient concerns or barriers with the care team to align messaging and interventions.
   - Integrate education protocols into stewardship pathways to ensure consistency across the care continuum.

Pharmacist-led initiatives in academic detailing: Academic detailing led by pharmacists supports the dissemination of unbiased, non-commercial information, helping prescribers align their practice with current best evidence and institutional protocols. By fostering dialogue, addressing knowledge gaps, and reinforcing stewardship goals, pharmacist-led academic detailing enhances clinician confidence, optimizes therapeutic decision-making, and contributes to the overall success of an incretin mimetics medication stewardship initiative.

1. **Evidence-based prescriber education**
   - Conduct one-on-one or small-group educational sessions on incretin mimetics indications, benefits, and clinical outcomes.
   - Share treatment algorithms/prescribing guidelines and current literature to support evidence-based prescribing.
   - Tailor discussions to prescriber needs, including specialty-specific considerations (e.g., cardiometabolic risk, obesity staging).
2. **Dosing, titration, and adverse effect guidance**
   - Provide practical education on dose initiation, titration schedules, and management of common adverse events.
   - Address clinical scenarios to build confidence in therapy adjustments and patient follow-up.
   - Reinforce key safety considerations, including contraindications and monitoring parameters.
3. **Access and operational considerations**
   - Educate prescribers on formulary coverage, PA requirements, and documenting best practices.
   - Offer tools and workflows to streamline medication access and minimize administrative burden.
   - Highlight pharmacist-led services available to support access and adherence.
4. **Stewardship and protocol alignment**
   - Promote consistency in prescribing by reviewing institutional protocols and approved treatment algorithms.
   - Use detailing sessions to gather prescriber feedback and identify areas for protocol refinement.
   - Reinforce the role of pharmacists in the multidisciplinary care team and in supporting incretin mimetics medication stewardship goals.
5. **Ongoing support and follow-up**
   - Provide follow-up communication or refresher sessions as new evidence, products, or institutional updates emerge.
   - Maintain open channels for prescribers to consult pharmacists on complex cases or evolving access challenges.
   - Track engagement and impact of detailing efforts to inform continuous quality improvement initiatives.

Abbreviations: APP=advanced practice provider; BMI=body mass index; CE=continuing education; CMR=comprehensive medication review; CPA=collaborative practice agreement; EHR=electronic health record; HbA1c=hemoglobin A1c; PA=prior authorization

Table 2. Consensus-based pharmacist-led initiatives in incretin mimetics medication stewardship program (continued)

Pharmacist-led initiatives in healthcare professional education: Pharmacists' knowledge and proximity to both clinical practice and administrative processes allow them to bridge gaps between evidence, policy, and workflow implementation. Educational content provided by pharmacists often includes therapeutic rationale, dosing strategies, adverse event management, and access considerations, including payer policies and documentation requirements

1. **Delivery of targeted educational programs**
   - Lead in-services, CE programs, and clinical training sessions tailored to physicians, APPs, nurses, and care teams.
   - Present guideline-based recommendations on initiation, titration, and monitoring of incretin mimetic therapies.
   - Customize content to address service-line specific needs (e.g., primary care, endocrinology, cardiology, bariatrics).
2. **Therapeutic and operational content development**
   - Provide education on therapeutic rationale, mechanism of action, and expected clinical outcomes.
   - Include practical guidance on adverse event management, access pathways, and PA requirements.
   - Offer workflow-based education to align clinical use with institutional protocols and formulary policies.
3. **Promotion of multidisciplinary alignment**
   - Standardize messaging across prescriber types to ensure consistent care delivery and patient counseling.
   - Reinforce the importance of shared decision-making and documentation to support continuity of care.
   - Facilitate team discussions to clarify roles in incretin mimetic therapy management and monitoring.
4. **Support for guideline rollout and implementation**
   - Lead or support implementation of institutional prescribing protocols through educational campaigns.
   - Distribute quick-reference tools, dosing guides, and access tip sheets for front-line staff.
   - Provide follow-up education as protocols evolve or new therapies become available.
5. **Evaluation and continuous improvement**
   - Gather feedback from learners to refine educational content and identify knowledge gaps.
   - Monitor uptake of key practices and adjust strategies to support ongoing stewardship goals.
   - Serve as a point of contact for ongoing prescriber questions and emerging educational needs.

Abbreviations: APP=advanced practice provider; BMI=body mass index; CE=continuing education; CMR=comprehensive medication review; CPA=collaborative practice agreement; EHR=electronic health record; HbA1c=hemoglobin A1c; PA=prior authorization

Table 3. Examples of metric definitions, reporting, and implementation considerations

Metric categories	Considerations
Clinical outcomes – Metrics that measure improvements in patient health status, such as changes in weight, HbA1c, blood pressure, or other disease-specific indicators.	
Weight related clinical outcomes • % weight loss at 3,6, and 12 months • Proportion of patients achieving ≥5%, ≥10% or ≥15% weight loss • Proportion of patients with <5% weight loss **Improvement in comorbidities** • Change in HbA1c, blood pressure, lipid panels or other disease specific indication • Reduction or deprescribing of concomitant medications for comorbid conditions	Use smart phrases or flowsheets to standardize documentation for outcome tracking. Stratify by baseline BMI and comorbidities to evaluate effectiveness in target populations.
Medication utilization and prescribing patterns – Metrics that measure the appropriateness of prescribing practices, including initiation, dose titration, deprescribing, and integration of lifestyle interventions.	
Dose titration success • Proportion of patients successfully titrated to target dose • Time to achieve maintenance dose **Medication discontinuation and deprescribing** • Percentage of patients with documented tapering plans at therapy discontinuation • Rate of deprescribing discussions documented at therapy milestones (e.g., 6 or 12 months) • Deprescribing rate due to clinical criteria (vs. insurance access loss alone) **Integration of lifestyle intervention** • Percentage of patients referred to lifestyle programs (e.g., nutritionist, behavioral health, exercise specialist) within 30 days of initiating pharmacotherapy • Participation rate in structured lifestyle programs (e.g., number of sessions attended vs. offered)	Build structured data fields in the EHR to capture titration and adverse event trends. Use of smart phrases or resources and education for interchanges for patient's already on and tolerating therapy. Creation of order sets with appropriate doses and supply in EHR (when possible). Integration of lifestyle counseling in EHR.

Abbreviations: BMI=body mass index; EHR=electronic health record; ED=emergency department; FTE=full time equivalent; HbA1C=hemoglobin A1c; PA=prior authorization; PDC=proportion of days covered

Table 3. Examples of metric definitions, reporting, and implementation considerations (continued)

Metric categories	Considerations
Patient adherence and persistence - Metrics to measure medication adherence and persistence over time, including discontinuation rates and identification of barriers to ongoing therapy.	
Adherence and persistence • Duration of therapy (e.g., proportion of patients remaining on therapy at 6 and 12 months) • Missed refill rates or gaps in therapy >30 days • Discontinuation metrics (e.g., reason for stopping, rate of weight recurrence, adverse effects) • Re-initiation rates after discontinuation • PDC ≥80%	Partner with pharmacy to access refill data; incorporate refill reconciliation into follow-up visits. Monitor loss-to-follow-up rates and re-engage patients as needed. Use pharmacy claims and internal dispensing records to track discontinuation rates and investigate drivers (e.g., side effects, cost, loss of coverage).
Adverse effect monitoring • Frequency and type of reported side effects • % of patients requiring dose holds, reductions or discontinuations due to intolerance	Integrate side effect documentation fields in the EHR; evaluate dropout rates at each titration step.
Access resolution metrics – Metrics that measure medication access resolution efforts, to capture the full scope of support activities provided by pharmacists, pharmacy techs, and PA teams which are often resource-intensive and a key barrier to therapy continuity.	
• Time to access medication (from prescription to first fill) • PA total completed and approved • Number of appeals completed and approved • Therapy interruptions due to coverage or supply issues • Number of formulary interchanges due to access or shortage issues • Access resolution effort metrics (e.g., FTE hours spent, number of PAs processed)	Use metrics to justify staffing (e.g., pharmacy technicians) and streamline PA documentation templates. Create access dashboards for leadership to quantify resource needs and identify bottlenecks.

Abbreviations: BMI=body mass index; EHR=electronic health record; ED=emergency department; FTE=full time equivalent; HbA1C=hemoglobin A1c; PA=prior authorization; PDC=proportion of days covered

Table 3. Examples of metric definitions, reporting, and implementation considerations (continued)

Metric categories	Considerations
Program impact and quality metrics – Important but often more difficult to capture or resource-dependent, better suited for mature programs.	
Prescriber engagement and education	
• Number of prescribers trained • Completion of initial and annual incretin mimetic training modules • Guideline adoption rate (e.g., use of EHR order sets, smart phrases or documentation templates)	Track EHR tool usage and incorporate adoption metrics into prescriber feedback.
Equity-related metrics	
• Proportion of eligible patients by demographic groups (race, insurance type) who initiate therapy • Comparison of prescribing rates across patients according to risk stratification	Incorporate risk-stratified prioritization into referral workflows or pharmacist triage systems.
Patient satisfaction and experience	
• Survey-based assessments of patient-reported outcomes and engagement • Quality-of-life improvements or self-reported functional changes	Use targeted surveys (e.g., at 3- or 6-month intervals) to assess patient experience.
Health care utilization and cost savings	
• Emergency visits or hospitalizations linked to incretin mimetic use (e.g., side effects, adverse events)	Integrate pharmacist initiatives and documentation into EHRs to support justification for therapy, dose adjustments, or discontinuation.
• Incretin mimetic dose optimization and deprescribing efforts to minimize cost while maintaining efficacy	Report cost avoidance from interventions, such as avoiding early use of high-dose agents or discontinuing therapy when ineffective or poorly tolerated.
• Percent change in referrals or patient encounters across targeted service lines (e.g., bariatric, orthopedic, pulmonology)	Establish service-line impact monitoring to monitor changes in referral volumes and adjust staffing, scheduling, and resource allocation.
• Decrease in workplace absenteeism or disability claims, where data is accessible (e.g., employer-sponsored programs)	

Abbreviations: BMI=body mass index; EHR=electronic health record; ED=emergency department; FTE=full time equivalent; HbA1C=hemoglobin A1c; PA=prior authorization; PDC=proportion of days covered

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