

# Managed Care Pharmacy and the Evolving Diabetes Treatment Paradigm—Are We Capable of Disease Control?

## Physician Continuing Medical Education

### Accreditation Statement

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of Postgraduate Institute for Medicine (PIM) and Impact Education, LLC. PIM is accredited by the ACCME to provide continuing medical education for physicians.

### Credit Designation

Postgraduate Institute for Medicine designates this educational activity for a maximum of 1.25 AMA PRA Category 1 Credit(s)<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## Pharmacist Continuing Education



### Accreditation Statement

Postgraduate Institute for Medicine is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

### Credit Designation

Postgraduate Institute for Medicine designates this continuing education activity for 1.4 contact hours (0.14 CEUs) of the Accreditation Council for Pharmacy Education (Universal Activity Number 0809-9999-10-109-H01-P).

### Type of Activity

Knowledge

### Posttest Questions

1. Until recently, which of the following components of type 2 diabetes pathophysiology did available therapies not address?
  - a. the influx of glucose from the gastrointestinal tract
  - b. impaired insulin activity
  - c. acute  $\beta$ -cell dysfunction
  - d. chronic  $\beta$ -cell decline
2. Appetite suppression is a treatment effect of which of the following classes of antidiabetic agents?
  - a. Thiazolidinediones
  - b. GLP-1 receptor agonists
  - c. Sulfonylureas
  - d.  $\alpha$ -Glucosidase inhibitors

### Method of Participation and Request for Credit

There are no fees for participating and receiving CME/CE credit for this activity. During the period August 15, 2010 through August 30, 2011, participants must read the learning objectives and faculty disclosures and study the educational activity.

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### Media

Journal supplement

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### Disclaimer

Participants have an implied responsibility to use the newly acquired information to enhance patient outcomes and their own professional development. The information presented in this activity is not meant to serve as a guideline for patient management. Any procedures, medications, or other courses of diagnosis or treatment discussed or suggested in this activity should not be used by clinicians without evaluation of their patient's conditions and possible contraindications on dangers in use, review of any applicable manufacturer's product information, and comparison with recommendations of other authorities.

3. In an administrative claims data analysis, what costs were lower for patients treated with a GLP-1 agonist than for those treated with insulin glargine?
  - a. annual diabetes-related drug costs
  - b. annual diabetes-related medical costs
  - c. total direct medical costs
  - d. both b and c
4. According to the ADA and AACE/ACE guidelines, patients with increased cardiometabolic risk may benefit from what type of therapy?
  - a. Incretin-based
  - b. Insulin
  - c. Glinide
  - d. Sulfonylurea
5. Estimates of the proportion of patients achieving the ADA's A1C goal of less than 7.0% range as low as \_\_\_\_\_.
  - a. 65.9%
  - b. 53.1%
  - c. 49.8%
  - d. 31.4%
6. As therapeutic nonadherence is a key contributing factor to clinical inertia in type 2 diabetes, what proportion of patients with the disease discontinue therapy within 12 months of the initial prescription?
  - a. 17%
  - b. 27%
  - c. 37%
  - d. 47%
7. The fact that no single antihyperglycemic agent is capable of fully arresting  $\beta$ -cell failure in type 2 diabetes is best measured by \_\_\_\_\_ over time in patients receiving monotherapy.
  - a. Progressive weight gain
  - b. Increased microvascular complications
  - c. Declining A1C control
  - d. Increased LDL-C levels
8. Due to a robust initial response in A1C level reduction followed by rapid deterioration of A1C level control over several years, which of the following classes of antihyperglycemics is experiencing declining clinician advocacy and diminished status on treatment guidelines?
  - a. Sulfonylureas
  - b. Thiazolidinediones
  - c. Glinides
  - d. Insulin
9. A key factor in therapeutic nonadherence, the average prescription cost for diabetes therapies rose from \$56 in 2001 to \_\_\_\_\_ in 2007.
  - a. \$60
  - b. \$66
  - c. \$70
  - d. \$76
10. For which of the following incretin-based therapies were head-to-head data available in terms of efficacy and safety upon the product's FDA approval?
  - a. Exenatide
  - b. Liraglutide
  - c. Sitagliptin
  - d. Saxagliptin
11. Reducing, but not eliminating, copays for patients likely to migrate to the high healthcare resource utilization demographic is an example of which of the following managed care initiatives?
  - a. Medication therapy management
  - b. Value-based benefit design
  - c. Pay-for-performance
  - d. Patient education
12. "A client-centered, goal-oriented method for enhancing intrinsic motivation to change by exploring and resolving ambivalence," best describes what technique for improving medication adherence?
  - a. Motivational interviewing
  - b. Patient-centered medical home
  - c. Web-based collaborative care
  - d. Value-based benefit design

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**Release date:** August 15, 2010

**Expiration date:** August 31, 2011

**Estimated time to complete activity:** 1.25 hours

This activity is supported by an educational grant from Novo Nordisk.

### Intended Audience

This activity has been designed to meet the educational needs of managed care pharmacy directors, clinical pharmacists, quality directors, medical directors, and other healthcare professionals involved in the management of patients with diabetes.

### Statement of Educational Need/Program Overview

Optimal glycemic control remains elusive for many health plan members with diabetes, despite the increasing number of medications. Treatment regimens have changed substantially in recent years as insulin use has declined and use of oral agents has increased. Availability of new options may have an impact on antidiabetic therapy patterns and rates of control, but may also add to the complexity of clinical decision-making. Because multidrug regimens are often used to control hyperglycemia and diabetes-related risk factors, polypharmacy is a natural consequence of evidence-based medical care for these patients. Treatment algorithms and evolving evidence on the use of current and emerging antidiabetics will be examined to help guide plans to implement therapeutic strategies to achieve glycemic control, address polypharmacy issues, improve patient adherence, and reduce the risk of costly diabetes-related complications.

### Educational Objectives

*After completing this activity, the participant should be better able to:*

- Explain the effect of evolving type 2 diabetes treatment algorithms on medication adherence, polypharmacy, and overall treatment success within the managed care pharmacy setting.
- Compare the safety and efficacy profile of incretin-based therapies with other treatment options on blood glucose levels and further aspects of diabetes pathology.
- Outline managed care pharmacy strategies, including medication therapy management services, to achieve optimal outcomes in patients with type 2 diabetes.
- Apply diabetes pharmacy formulary and medication management tools that can assist health plans to optimize outcomes for type 2 diabetes.

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Knowledge

**CME information continued on page S207.**



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