

EDITORIAL & PRODUCTION

Senior Vice President, Managed Markets Jeff Prescott, PharmD	Copy Chief Jennifer Potash
Clinical Team Lead Michael R. Page, PharmD, RPh	Copy Editor Maggie Shaw
Senior Clinical Projects Manager Ida Delmendo	Medical Writer Angelia Szwed
Clinical Projects Manager Michelle LaPlante	Associate Medical Writer Lydia Chou, PharmD
Project Manager Jessica Toye	Assistant Editor Sarah Anwar
	Designer Julianne Costello

SALES & MARKETING

Director of Sales Gil Hernandez	National Account Managers Michael Costella Elise Maier
Senior National Account Manager Gabrielle Consola	

OPERATIONS & FINANCE

Vice President of Finance Leah Babitz, CPA	Circulation Director Jonathan Severn
Accountant Katherine Wyckoff	

CORPORATE

Chairman and CEO Mike Hennessy, Sr	Chief Digital Strategy Officer Steve Ennen
Vice Chairman Jack Lepping	Vice President of Editorial Services and Production Kerrie Keegan
President Mike Hennessy, Jr	Vice President, Digital Media Jung Kim
Chief Financial Officer Neil Glasser, CPA/CFE	Chief Creative Officer Jeff Brown
Chief Marketing Officer Warren Dardine	Director of Human Resources Shari Lundenberg



© 2017 Clinical Care Targeted
Communications Group, LLC

Opinions expressed by authors, contributors, and advertisers are their own and not necessarily those of Clinical Care Targeted Communications Group, LLC, the editorial staff, or any member of the editorial advisory board. Clinical Care Targeted Communications Group, LLC, is not responsible for accuracy of dosages given in articles printed herein. The appearance of advertisements in this publication is not a warranty, endorsement, or approval of the products or services advertised or of their effectiveness, quality, or safety. Clinical Care Targeted Communications Group, LLC, disclaims responsibility for any injury to persons or property resulting from any ideas or products referred to in the articles or advertisements.

Challenges in Diabetes Management: Glycemic Control, Medication Adherence, and Healthcare Costs

This article is based on "Real-World Insights & Economic Considerations in Type 2 Diabetes," a presentation given at the 2017 Asembia Specialty Pharmacy Summit in Las Vegas, Nevada, April 30-May 3, 2017.

This publication was made possible through financial support provided by Intarcia Therapeutics, Inc.

THE CURRENT STATE OF DIABETES MANAGEMENT: CHALLENGES AND UNMET NEEDS

The Growing Burden of Diabetes

Diabetes affects approximately 29.1 million Americans (9.3% of the US population), according to National Health and Nutrition Examination Survey (NHANES) data from 2012.¹ This number accounts for approximately 21.0 million diagnosed and 8.1 million undiagnosed individuals; in other words, 27.8% of people with diabetes in the United States have yet to be diagnosed.¹

Healthcare costs associated with diabetes are high. In fact, the average cost of healthcare for patients with diabetes is 2.3 times higher than for patients without diabetes (based on 2012 estimates).¹ Direct healthcare expenditures associated with diabetes were estimated at \$176 billion in 2012, with additional costs due to loss of productivity related to chronic disability and premature mortality representing an additional \$69 billion, for a total of \$245 billion in healthcare expenditures attributed to diabetes.^{1,2}

At the 2017 Asembia Specialty Pharmacy Summit, a special presentation addressed key challenges in the current state of diabetes management and considered potential approaches to improve outcomes. Jay Skyler, MD, MACP, professor of medicine, pediatrics, and psychology in the Division of Endocrinology, Diabetes and Metabolism, Department of Medicine, University of Miami Miller School of Medicine, led the discussion. He began by emphasizing the growing prevalence of diabetes: "In the United States, diabetes is projected to affect more than 40 million people by 2034." Skyler emphasized that complications associated with diabetes are related to poor metabolic control. He also noted that the increasing prevalence of diabetes in America is "driven by obesity and a sedentary lifestyle."

Complications and the Importance of Glycemic Control in Diabetes

Diabetes is associated with many complications, notably macrovascular and microvascular diseases, which include cardiovascular disease (CVD) (eg, coronary artery disease, stroke, high levels of low-density lipoprotein cholesterol [LDL-C]) and peripheral vascular disease (PVD), which may lead to amputation.¹ Diabetes causes about 60% of nontraumatic lower-limb amputations for individuals 20 years or older.¹ Microvascular complications of diabetes also commonly include end-stage renal disease (ESRD) and retinopathy.¹ Diabetes was the primary cause of kidney failure in 44% of all new cases in 2011, and in 2005-2008, 4.4% of people with diabetes 40 years or older had advanced diabetic retinopathy, which could lead to severe vision loss.¹

Given the prevalence and severity of complications associated with diabetes are associated with imbalanced blood glucose, achieving glycemic control is an important step in diabetes management. During this presentation, barriers to glycemic control and improvements for modifications diabetes management was a key topic of discussion. Glycemic control is typically measured by glycated hemoglo-