### Wisconsin Diabetes Weekly

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#### In the News

#### Macrovascular Endothelial Dysfunction in OSA and T2D

Patients with both type 2 diabetes (T2D) and obstructive sleep apnea (OSA) demonstrated macrovascular endothelial dysfunction beyond the effect of either disease alone, according to a new study. Macrovascular endothelial function in patients with T2D, OSA, or both conditions was assessed by measuring brachial artery diameter before and after flow-mediated dilation. Participants also underwent cardiovascular magnetic resonance to determine left and right ventricular volume, mass, and ejection fraction. These measurements of cardiac function were then compared between patients of each group to assess the effects of each condition. Read more.

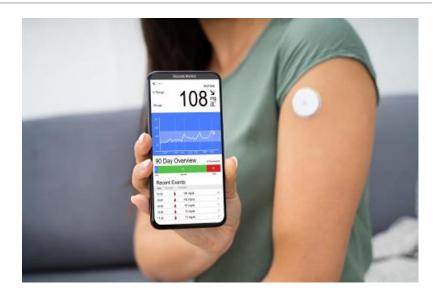
# Successful Test of Coin-Sized Smart Insulin Patch, Potential Diabetes Treatment

Researchers have developed a smart insulin-delivery patch that could one day monitor and manage glucose levels in people with diabetes and deliver the necessary insulin dosage. The adhesive patch, about the size of a quarter, is simple to manufacture and intended for once-a-day use. The adhesive patch monitors blood sugar, or glucose. It has doses of insulin pre-loaded in very tiny microneedles, less than one millimeter in length that deliver medicine quickly when the blood sugar levels reach a certain threshold. Read more.

#### **Important News**

#### Class I Recall Alert: MiniMed 600 Series Insulin Pumps

Medtronic has recalled MiniMed 600 Series insulin pumps due to a missing or broken retainer ring which helps to lock the insulin cartridge into place in the pump's reservoir compartment. If the cartridge is not locked firmly into place, under or over delivery of insulin may occur, resulting in hypoglycemia or hyperglycemia. The U.S. Food and Drug Administration (FDA) has identified this as a Class I recall, the most serious type of recall. Use of these devices may cause serious injuries or death. Learn more.



### New Certificate Program Launched to Build Diabetes Care Team Knowledge, Application of CGM

Continuous glucose monitoring (CGM) is an increasingly recognized tool to improve outcomes for people with diabetes and provide more effective, individualized management. To ensure a solid base of knowledge and support by diabetes care and education specialists (formerly called diabetes educators) and the greater diabetes care team, the Association of Diabetes Care and Education Specialists (ADCES) has rolled out the CGM Certificate Program. The program is part of a larger vision for the specialty of diabetes care by the association which, in part, seeks to leverage technology to improve clinical outcomes. Learn more.



#### In the News (continued)

### Damaged Eye Vessels May Indicate Higher Stroke Risk for Adults with Diabetes

Damaged small blood vessels in the eye may be a marker for increased stroke risk among people with diabetes, according to preliminary research. Diabetic retinopathy, damage to small blood vessels of the eye, is a common complication of diabetes and can lead to blindness. It has also previously been linked with an increased risk of heart attack and heart attack deaths. Researchers followed 874 people with diabetes who developed diabetic retinopathy and 1,954 who did not. All of the patients (average age of 62; 62% male) are participating in Action to Control Cardiovascular Risk in Diabetes (ACCORD), a large trial to test whether intensive efforts to control blood sugar, reduce cholesterol and lower blood pressure can reduce the risk of heart disease in people with diabetes. Read more.



#### Conferences, Educational, and Grant Opportunities

#### Blog Posts: Interpreting A1C, Principles of the A1C Assay

Interpreting A1C, Principles of the A1C Assay: What are the key issues that health care professionals should understand when interpreting hemoglobin A1C assays? Hemoglobin A1C is an essential component in the management of patients with diabetes. Dr. David Sacks kicks off the Interpreting A1C blog series by discussing the most common interfering factors and key issues of the A1C assay in this National Institute of Diabetes and Digestive Kidney Diseases (NIDDK) video blog post.



## Journal Articles and Reports of Interest

Declining Use of Primary Care Among Commercially Insured Adults in the United States, 2008-2016. Ganguli I, et al. *Ann* Intern Med. 2020 Feb 4. doi: 10.7326/M19-1834. [Epub ahead of print]

Trends in Incidence of Type 1 and Type 2 Diabetes Among Youths—Selected Counties and Indian Reservations, United States, 2002-2015. Divers J, et al. MMWR Morb Mortal Wkly Rep. 2020; 69:161–165. doi: 10.15585/mmwr.mm6906a3.

> Learn More About Standards of Care for Diabetes Monitoring Technology

#### **For More Information**

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