

## Advanced Comprehensive Diabetes Care (ACDC)

*This model of care improves control of refractory type 2 diabetes while increasing access for rural Veterans, and is recommended for replication at other facilities.*

### Medical Issue

Within the Veterans Health Administration (VHA), diabetes is:

1. the top cause of renal failure, amputation, and blindness;
2. a major cardiovascular risk factor;
3. and the 4th costliest condition.

### Access Challenge

Rural Veterans with type 2 diabetes face unique barriers to improved control, including limited access to specialty care and diabetes education. Many rural Veterans maintain an elevated HbA1c because they lack access to effective diabetes management approaches that are amenable to rural delivery.

### Solution

The Advanced Comprehensive Diabetes Care (ACDC) telehealth program is specifically designed to:

1. lower HbA1c even for Veterans whose control is refractory to standard care
2. leverage existing VHA clinical staffing and infrastructure, making rural delivery feasible.

ACDC includes three components: telemonitoring, module-based self-management support, and medication management. The telemonitoring and self-management support components are delivered by a clinical VHA home telehealth (HT) nurse during biweekly phone encounters over 6 months. The home telehealth nurse manages all contact with Veterans, including medication management.

The HT nurse collaborates with a clinical pharmacy specialist medication manager. After each phone encounter, the HT nurse adds a summary of the Veteran's clinical data into the electronic health record, which the medication manager updates with any recommended medication changes.

In a prior randomized trial, ACDC improved HbA1c by a clinically significant margin of 1.0% (versus usual care) in a population of Veterans with refractory type 2 diabetes, and by nearly 2.0% among engaged Veterans.

Since fiscal year 2017, ACDC has been implemented at nine VHA sites and has served over 300 Veterans nationwide. In fiscal year 2020, ACDC reduced HbA1c by an average of 1.4% at 6 months among these previously refractory Veterans (equal to a 50-point drop in average blood glucose). Most of this HbA1c benefit continued to the 18-month mark. Qualitative interviews have confirmed that ACDC is valued and well-tolerated by Veterans and staff and ACDC was named a winner of the Diffusion of Excellence National Shark Tank Competition in 2018.



ACDC is proven to lower HbA1c among Veterans with refractory poor control in research and clinical settings – it is thus effective enough to reduce VHA type 2 diabetes costs and complications. Because ACDC uses only existing VHA staffing and infrastructure, requires minimal training, and calls for no new hiring, any VHA site can deliver the program. ACDC is thus ideally suited for implementation in clinical practice (including in rural areas) and broad dissemination across VHA.

## Office of Rural Health

The Office of Rural Health (ORH) works to see that America's Veterans thrive in rural communities. To support the health and well-being of rural Veterans, ORH and its Veterans Rural Health Resource Centers establish and disseminate initiatives that increase access to care for the 2.7 million rural Veterans enrolled in the U.S. Department of Veterans Affairs' health care system. Key focus areas include programs that address workforce shortages, transportation, primary care, mental health, telehealth and specialty care. To learn more, visit [www.ruralhealth.va.gov](http://www.ruralhealth.va.gov).