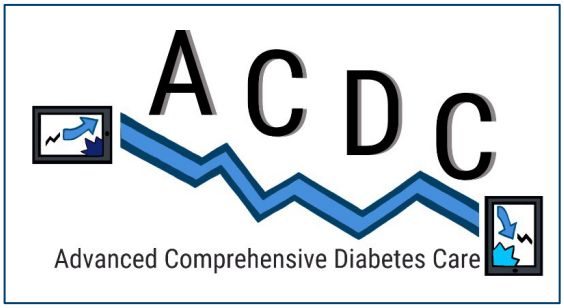
U.S. Department of Veterans Affairs
Veterans Health Administration
Office of Rural Health
April 2025

ORH PROJECT OVERVIEW

Advanced Comprehensive Diabetes Care (ACDC)

Background



A quarter of all Veterans have diabetes.[1] Within the Department of Veterans Affairs (VA) Veterans Health Administration (VHA), diabetes is: 1) the top cause of renal failure, amputation, and blindness; 2) a cardiovascular risk factor; and 3) the 4th costliest condition.[2-4] Controlling diabetes reduces diabetes complications and costs.[5-7] Veterans maintaining an elevated hemoglobin A1c (HbA1c) drive VA's diabetes burden. Rural Veterans with type 2 diabetes face unique barriers to control, including low access to specialty care and education.[8-9] Many rural Veterans maintain an elevated HbA1c because they lack access to effective diabetes care suited for rural delivery.

The VHA Office of Rural Health (ORH) Veterans Rural Health Resource Center-Iowa City (VRHRC-IC) project, *Advanced Comprehensive Diabetes Care (ACDC)*, is working to improve the effectiveness and efficiency of diabetes care for rural Veterans by implementing the ACDC telehealth program. ACDC is delivered by VA Remote Patient Monitoring-Home Telehealth (RPM-HT) nurses and augments standard RPM-HT telemonitoring with self-management support and specialist-guided diabetes medication management (Box 1). ACDC is specifically designed to: 1) lower HbA1c even for Veterans whose diabetes doesn't respond to standard care; and 2) leverage existing VA telehealth staffing and infrastructure, making rural delivery feasible. In randomized trials, ACDC significantly improved HbA1c versus usual clinical care and versus standard VA RPM-HT management.[10-11]

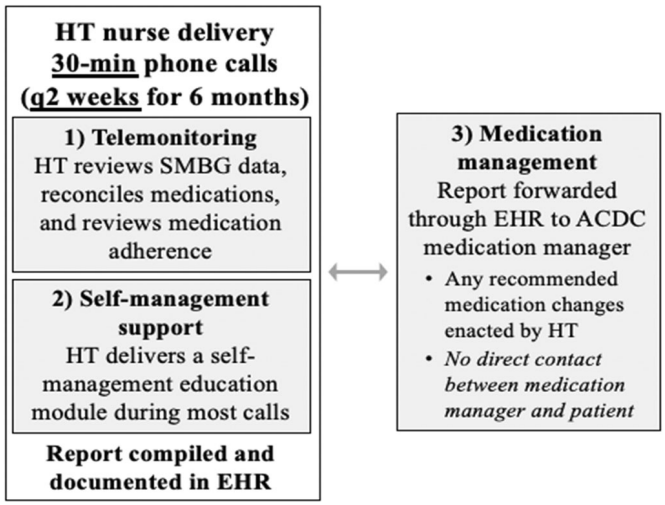
Goals and Objectives

In fiscal year (FY) 2025, the ACDC project team is collaborating with the VRHRC-IC to promote ACDC's continued growth as a Rural Mentored Implementation. We will continue delivering ACDC at 27 VHA sites and add 4 new sites. Our Durham VA Medical Center VAMC team will conduct an implementation analysis by examining HbA1c trends and other metrics. Our specific objectives are:

1. To implement delivery of ACDC for Veterans maintaining poor type 2 diabetes control despite standard VA services.
2. To evaluate the process of implementing ACDC at each site.
3. To transition mature sites from ORH funding to site-based funding, while continuing sustainable delivery of ACDC in clinical practice.

Methodology

With support from the VRHRC-IC during FYs 2017-25, more than 1,500 Veterans with type 2 diabetes have received ACDC across 30 VHA sites. ACDC is delivered by clinical staff over a 6-month period using standard VA equipment (*see figure, right*). RPM-HT nurses and medication managers (Clinical Pharmacy Practitioners) deliver ACDC. The Durham VAMC ACDC team annually analyzes implementation using the RE-AIM (Reach, Effectiveness, Adoption, Implementation, and Maintenance) framework.[12]



ACDC Program Design

Impact on Rural Veteran Health

- ACDC is clinically proven to lower HbA1c by an average of 1.7% by 6 months (from 9.7% to 8.0%) among rural Veterans with refractory poor control in research and real- world settings, and this improvement is sustained beyond four years.
- ACDC is valued and well-tolerated by Veterans and staff.
- ACDC was a winner of the *VA National Shark Tank Competition* in 2018.
- Analyses under review for publication confirm that ACDC is cost-saving for VA.

> *"[My ACDC nurse] calls me periodically, checks on me. Any of my needs I can discuss with her, and she'll follow through with it."*
> **~ Veteran, Durham, NC**

> *"[My ACDC nurse] is so supportive and so terrific and is willing to answer any question or talk to me about issues that I've had going on."*
> **~ Veteran, Denver, CO**

Key Takeaways

- ACDC is proven to lower HbA1c among Veterans with refractory poor control in research and clinical settings. This degree of sustained HbA1c improvement substantially reduces heart attacks, strokes, and other diabetes complications, lowering VA's burden of type 2 diabetes costs and complications.
- Because ACDC uses only existing VA staffing and infrastructure, requires minimal training, and calls for no new hiring, any VA site can deliver the program. ACDC is thus ideally suited for rural implementation in clinical practice across VA.

Key Takeaways *(continued)*

- We have created an easy-to-use ACDC Program Toolkit to facilitate set-up and delivery of the program at implementing sites, and a detailed ACDC Business Plan to help facilitate leadership engagement and support for the program at implementing sites.
- ACDC addresses all 6 ORH Rural mentored Implementation Project criteria (increased access, strong partnerships, clinical impact, return on investment, operational feasibility, and customer satisfaction).

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