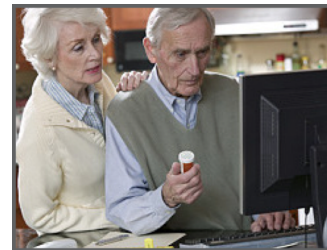




The Medication Optimization Technology Diffusion Grants Program

Winter 2012 Update



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INTRODUCTION

Purpose

After a brief background about the Center for Technology and Aging (CTA) and its grantmaking initiatives, this report describes the CTA Medication Optimization Technology Diffusion Grants Program (“MedOp” program). The purpose of and results from the MedOp grant cycle are described, including an update of MedOp grantee activities one year after funding ended. The report concludes with a policy discussion followed by a brief description of each of the five MedOp grantee projects.

Background

CTA (www.techandaging.org) supports the adoption and diffusion of technology-enabled care that is patient-centered, coordinated, efficient, and effective. Since 2009, CTA has developed, managed, and funded four Technology Diffusion Grants programs to catalyze adoption and diffusion of promising innovations within health and aging services organizations. The purpose of these CTA grants programs is to demonstrate and document the benefits of selective technologies, to identify adoption barriers and successes, and to share lessons learned, best practices, and tools with interested stakeholders across the US. The knowledge gained through these demonstrations helps organizations working in diverse environments to implement technology-enabled care that is based on real world experiences and informs policymakers about policy barriers that are commonly encountered in such implementations.

CTA’s grantmaking history is summarized below. Note that the Medication Optimization Technology Diffusion Grant was the first of CTA’s four grant rounds.

**Table 1. Center for Technology and Aging (CTA)
Summary of Grantmaking Activities 2009-2012**

CTA’s Primary Funding Source	The SCAN Foundation
Number of CTA Grant Rounds	4
Length of CTA Grant Cycles	12 months was the targeted length of each grant cycle, but several grantees required no-cost extensions
Number of Total CTA Grantees	22
Technology Focus Area of Each CTA Grant Round	<ol style="list-style-type: none">1. Medication Optimization Technologies (MedOp)2. Remote Patient Monitoring Technologies (RPM)3. Technologies for Improving Care Transitions (Tech4Impact)4. Mobile Health Technologies (mHealth)
Size of CTA Grant Awards	An award of approximately \$100k per grantee was most common. None of the awards exceeded \$100k
Geographic Focus	A majority of grantee activities benefitted older adults in California. In 3 of 4 grant cycles, CTA required most of the grant awards to benefit older Californians.

THE MEDICATION OPTIMIZATION GRANT CYCLE

Overview

Medication use is ubiquitous among older adults—90% of older adults use one or more prescription medications per week. Medications help many older adults lead longer, healthier, and more productive lives. Yet, CTA's 2009 research indicated that medication use among older adults was clearly suboptimal and that optimizing medication use could dramatically improve the health of older Americans, as well as the cost of their care. Hence, CTA's first round of technology demonstration grants focused on how technologies could help optimize medication use.

In Summer 2009, CTA drafted a position paper on Medication Optimization Technologies to help conceptualize and design the grant program (see <http://www.techandaging.org/MedOpPositionPaper.pdf>). On September 1, 2009, CTA distributed a request for letters of intent for the Medication Optimization Diffusion Grants Program ("MedOp" grant) to more than 700 organizations and 2000 individuals. A total of 47 letters of intent were received on October 9, 2009, 14 of which were invited to submit full proposals. After reviewing the proposals, the CTA Grant Review Committee identified 7 grants that merited funding. CTA was able to fund the top 5 proposals. The 5 1-year grants, totaling \$485,000, commenced on January 1, 2010. Four of the five grantees finished their projects by the scheduled time of December 31, 2010. One grantee (Veterans Administration of Central California Health Care System) was scheduled to complete their project in Spring 2012.

The purpose of the MedOp grant program was to encourage broader adoption and diffusion of technologies that:

- Help improve medication use by older adults (60+ years old) with chronic health conditions.
- Enable older adults to live independently and in the setting of their choice.
- Reduce the need for older adults to move to more intensive, higher-cost care settings.
- Reduce the burden on formal and informal caregivers.
- Improve medication reconciliation, medication adherence, and/or medication monitoring.
- Lead to improvements in the cost and quality of care and better health outcomes.

CTA awarded grants to: American Society of Consultant Pharmacists Foundation (ASCPF); Caring Choices (CC); Connecticut Pharmacists Foundation (CPF); the Veterans Administration of Central California Health Care System (VACCHCS)*; and the Visiting Nurse Service of New York (VNSNY).

As can be seen in Table 2, grantees differed across multiple dimensions including:

- Organizational structure and experience
- The specific technology tested
- The number and characteristics of partners/practice sites
- The care providers involved in the coordinated effort
- The sub-population of older adults targeted

Generally, two types of technology were utilized:

- Devices placed in patients' homes to assist with adherence and monitoring (CC & VACCHCS)
- Software and other technologies to support providers' ability to address potential medication-related problems (ASCPF, CPF, VNSNY)

Benefits of technologies used in the grant programs included:

- The CPF project resulted in improved medication use for underserved Khmer elders, producing substantial savings and stimulating state and federal public policy attention;
- Caring Choices achieved a 98% medication adherence rate, which surpassed CC's expectations and provided support for a change in California Medicaid policy
- ASCPF far exceeded their goal for number of adopters;
- VNSNY successfully used technology to identify high-risk cognitively impaired patients and caregivers and provide automatically generated decision support tools available to all staff.