

Engaging the Consumer in Chronic Care:

The Implementation of the VA Coordination of
Care/Home Telehealth Program (CCHT) at the
VA Greater Los Angeles Healthcare System

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CCHT: What Is It?

(VA Definition)

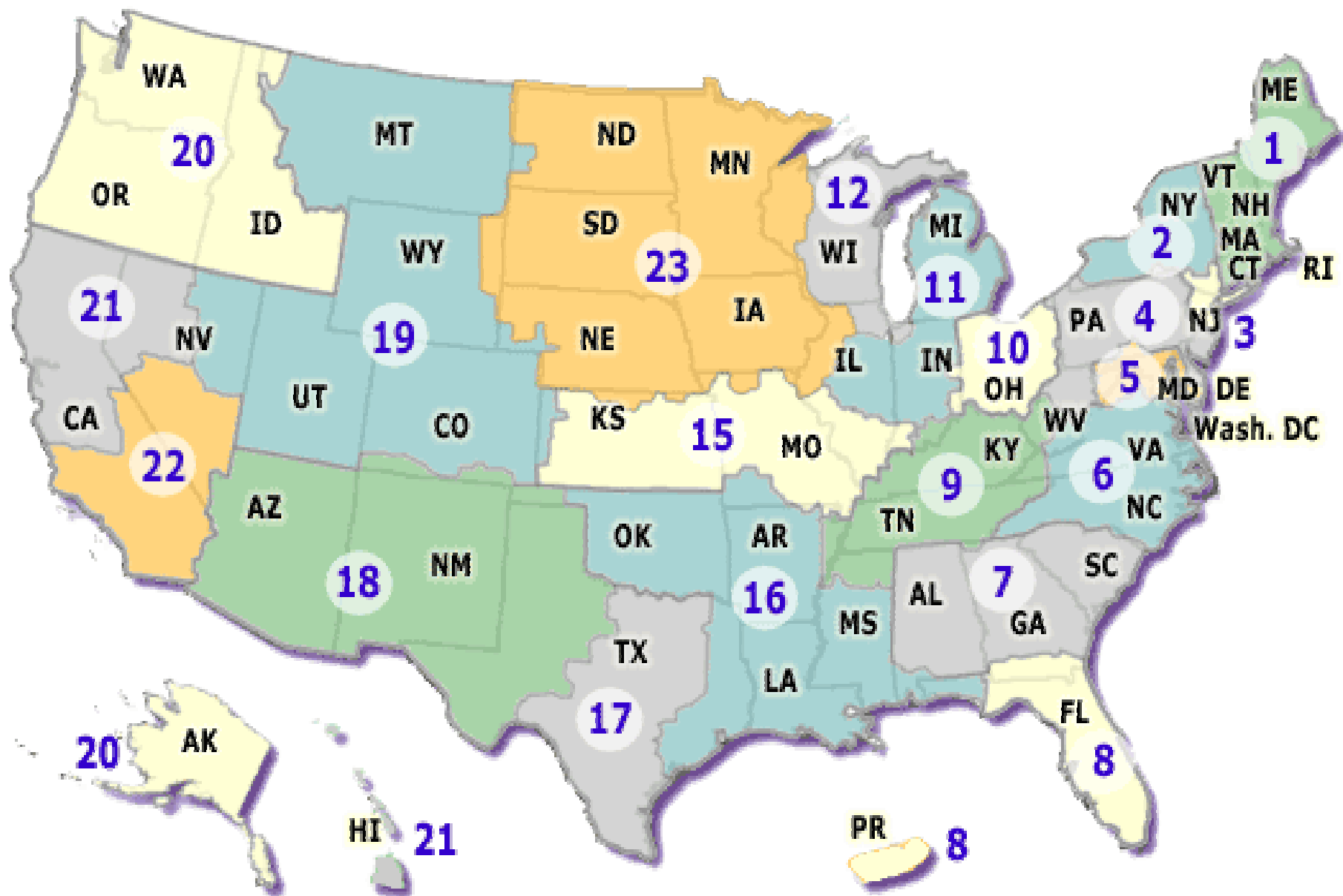
- Care coordination/home telehealth (CCHT) provides ongoing assessment, help arranging services, education, and emotional support for frail patients with complex clinical needs in their home environments at frequent intervals using telehealth technologies.
- The goal of CCHT is make prompt interventions for issues that might otherwise be neglected and cause avoidable acute care episodes or long-term institutional care.

CCHT: Key elements?

- Disease Management Principles.
- The care coordinator role.
- The effective use of information technology to maintain patients in their homes.

CCHT: Scientific Evidence?

- MEDLINE MESH Search:
“Telemedicine” AND “Disease Management”
AND “Home Care Services”
(Limits: 10 Years, only items with abstracts)
90 references
- 2002 VA CCHT needs assessment cited 4 review articles and 8 research papers.



CCHT Pilot in VISN 8 started in 2000



- 7 Medical Centers
- 11 Multi-specialty Clinics
- 33 Primary Care Clinics
- 481,333 unique veteran users in FY03
- 4% of patients consuming 40% of resources.

14 Types of Disease Management Programs

- Cardiac
- Coagulation
- Dementia
- Diabetes Mellitus
- Hypertension
- Infectious Disease
- Mental Health
- Multiple Co-Morbidities
- Pulmonary
- Palliative Care
- Pain management
- Rehabilitation
- Spinal Cord Injured
- Wound Care

VISN 8 CCHT Results

- 791 veterans recruited into 5 different projects. Focused on patients with total estimated annual care costs >\$25,000.
- Evaluation of VISN 8 results in 2002 showed:
 - 40% reduction in Emergency Room visits.
 - 63% reduction in hospital admissions.
 - 64% reduction in VHA Nursing Home admissions.
 - 5 significant improvements out of 10 domains of the SF 36V.

(Meyer, et al. “Virtually Healthy”, *Disease Management*, Volume 5, Number 2, 2002)

- Currently there are about 2000 patients enrolled in VISN 8 programs.

Nationwide Implementation Decision

- CCHT Program was replicated in four additional VISN's (1, 2, 11, & 17) by mid-2003.
- VA Policy to implement CCHT in the remaining 16 VISN's during fiscal year 2004.
- Each VISN was charged to enroll 1000 patients in CCHT by October 2004.

Implementation Timeline

- April 2002: Needs Assessment performed. Recommended expanded use of CCHT.
- July 2003: Veteran's Health Administration (VHA) Office of Coordination of Care (OCC) established.
- Fall 2003: OCC Orientation Packet circulated.
- January 2004: OCC Conditions of Participation in Multi-VISN Project circulated. (It authorizes \$1 million reimbursement for CCHT equipment for each VISN.)

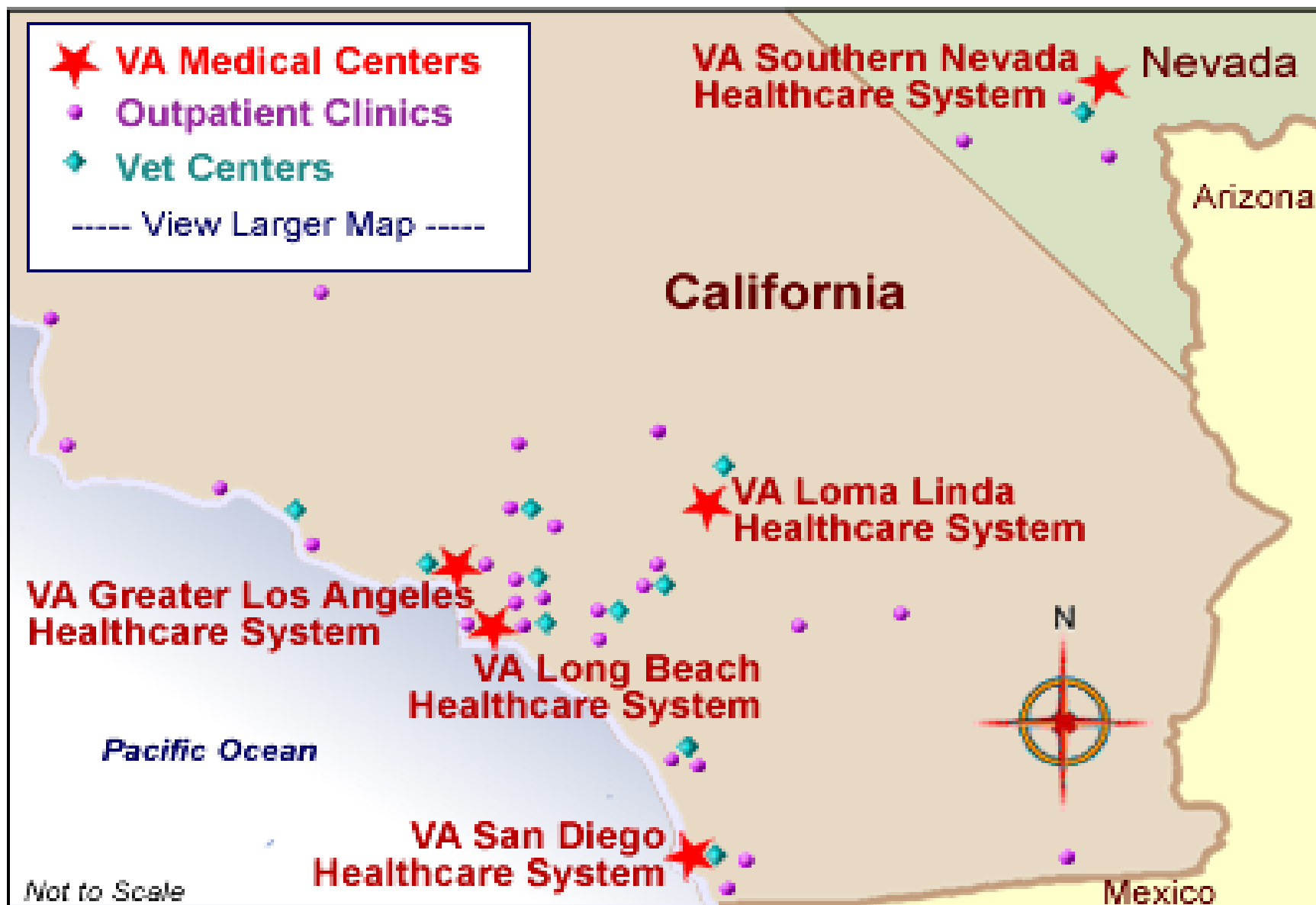
Implementation Timeline

- February 2004: VHA CCHT Leadership Development Meeting.
- March 2004: VISN 22 CCHT Committee chartered.
- May 2004: VISN 22 CCHT Proposal submitted.
- June 2004: VISN 22 CCHT Proposal accepted. (Authorizes \$200,000 reimbursement for VA Greater Los Angeles CCHT equipment purchases.)

VHA Nationwide Implementation

- September 2004: Approved vendors for VHA CCHT Equipment National Contract announced.
- September 2004: VA Greater Los Angeles fills Care Coordinator to start implementation of CCHT Program with goal to enroll 250 patients by 9/30/04.

VA VISN 22



VA Greater LA: 77,452 Unique Users in FY 03



GLA CCHT Program

- Staff:
 - Jane Montgomery, RN, Lead Care Coordinator
 - Leonard Kleinman, MD, Medical Consultant
 - Jolea McGinnis, BSCS, Program Coordinator
- Technologies:
 - Health Buddy by Health Hero
 - Viterion 100.
 - Viterion 500



Hello Mary.
What is your weight today?

120
Less More
OK

Reminder: A weight gain may be a sign of fluid retention. Be sure to take your medicines and call Dr. Jones if your weight goes up more than 3 pounds.

OK

Daily Health Quiz: What is the best way to avoid feeling thirsty?

1. Drink water constantly
2. Save your fluids for mealtime and when you are feeling very thirsty
3. Eat more salt

1 2 3



Health Hero Network - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Home Personal Bar Search Favorites Print Mail Stop

Address http://chopin.hhn.com/cgi-bin/WebObjects/WebQQual.woa/36/wo/no1vtahgpXIz4BbZsjyKPHjtZcB/15.0.10.1.5.1. Go

Links Customize Links Microsoft Windows Update Windows Media Windows MSN.com

Jill Walton
Fri, April 20, 2001

Find Patient: GO
(Last Name) Contact Health Hero Help Log Out

Home Patient Reports Enrollment Schedule Tools Setup

Work List Profile Results Trends Notes

Use these options to change the work list below.

1. Show patients from which program? 2. For which session date? 3. For which care manager?

All Programs 09/19/2000 Jill Walton
(mm/dd/yyyy)

[Printer-friendly version](#) [Create Work List](#)

You are viewing sessions for Sep 19, 2000 in the "All Programs" Program Date: ⏪ ⏩

Responders' Risk Summary				
	Symptoms	Behavior	Knowledge	General
High Risk	3	0	0	0
Medium Risk	0	2	1	0
Low Risk	4	5	5	1
None	0	0	0	6

Patient Summary	
Responders	7
Non-Responders	2

Responders on Tuesday, September 19, 2000

Patient	Response Time	Sympt.	Blvr.	Kwldg.	Gen.	D.O.B
Mart, Ric	11:40 AM CDT	High	Medium	Medium	None	03/23/1934
Hoff, Jane	04:36 PM CDT	High	Low	Low	Low	10/12/1926
Tsiper, Angela	04:36 PM CDT	High	Low	Low	None	12/26/1929
Wo, Dave J.	11:28 AM CDT	Low	Medium		None	11/12/1932
Coll, Laurie	06:29 PM CDT	Low	Low	Low	None	04/15/1933
Klapp, Amy	01:06 PM CDT	Low	Low	Low	None	11/21/1932
Man, Marie	07:53 PM CDT	Low	Low	Low	None	08/23/1929

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Non-Responders

Patient	Home Phone	Last HB Call	Last Response Date	Days Since Last Response	D.O.B
McD, Jim	4084561234	01/31/2001	01/30/2001	79	07/10/1944
Messing, Mel	303-446-9999	01/31/2001	01/30/2001	79	08/25/1922

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Internet

iCare Desktop

- Work list is Color coded for risk stratification
- Red flags triage patients who need further investigation and early intervention

Viterion 100

TeleHealth Monitor



Viterion500

TeleHealth Monitor



- Web access
 - Real-time video conferencing
 - Digital photography capabilities
 - Customized question/answer interaction
 - Personalizable advice messages for patients
- Deliver schedules and reminders for measurements, questions, or medication
 - Graph display of results to identify trends, and
 - Important vital sign and schedule alerts
 - Medical peripherals

Appropriate Referrals:

- High risk patients with diagnoses such as heart failure, COPD, and diabetes mellitus with co-morbidities are the best candidates for CCHT.
- A variety of other frail or homebound patients, especially patients with geriatric syndromes, may also benefit.
- Patient finding by referral and by screening clinical data bases, e.g. DSS.

VA Greater Los Angeles Workload Report (10/27/04)

Summary

Responders	56
Non Responders	16
New Patients	223
Disenrolled	7
<hr/>	
Total	302
<hr/>	

VA Greater Los Angeles Workload Report (10/27/04)

Responders' Risk

	Symptom	Behavior	Knowledge	General
High	8	1	0	0
Medium	11	10	6	0
Low	37	45	49	1
None	0	0	0	18

VA Greater Los Angeles Workload Report (10/27/04)

Program: VISN 22 COPD I

Summary

Responders	46
Non Responders	12
New Patients	172
Disenrolled	7
Total	237

VA Greater Los Angeles Workload Report (10/27/04)

Program: VISN 22 Heart Failure

Summary

Responders	7
Non Responders	2
New Patients	49
Disenrolled	0
<hr/>	
Total	58
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CCHT Program Evaluation

- Hopp, *et al.* "The Benefits of Telehome Care: What does the Research Show?" VA HSR&D *Forum*, June 2004, p. 5.
- Most studies are descriptive and show positive outcomes in terms of provider and patient satisfaction.
- Few studies employ comparison groups.
- Most studies conducted outside the VA and show equivocal results.
- Randomized studies needed to determine impact on outcomes and cost-effectiveness.