Unanticipated Learnings about Team Care, Secondary Stroke Prevention Intervention, from SUCCEED trial

Oakland, California

July 13, 2015

Theresa Sivers-Teixeira, Amytis Towfighi, Barbara Vickrey

Los Angeles SPIRP

Secondary Stroke Prevention in Los Angeles County

- 10 million residents
- Racially/ethnically diverse:
  - 48% Latino
  - 28% non-Hispanic White
  - 14% Asian; 9% Black; 1% Native American; 0.3% Pacific Islander
- LA County Department of Health Services safety-net system
  - integrated network of hospitals, health centers, clinics
  - 700,000 individuals each year
  - 63% uninsured
  - > 2/3 Hispanic; 90% minorities
  - < 1/2 households speak English at home

Specific Aims of SUCCEED Study

1. Develop a community-centered component of a Chronic Care Model-based secondary stroke prevention intervention
2. Conduct a randomized controlled trial to test the impact of the intervention on control of systolic blood pressure (primary outcome), and other stroke risk factors (secondary outcomes), among 500 adults with recent stroke or TIA, in LA safety net system
3. Conduct a cost analysis of SUCCEED from the perspective of LAC-DHS, and develop a sustainability plan for LAC-DHS to maintain SUCCEED after the funding period

Characteristics of 156 SUCCEED Enrollees to date

- **65% male, 35% female**
- ***Mean age 56.9 years* (SD=8.5)**

- **13% African-American**
- **72% Latino/Hispanic (of these, 65% are Mexican, 28% are Central American)**
- ***59% of baseline surveys conducted in Spanish***

- ***76% were born outside of the United States***
- **Mean duration in US = 27.2 years (of those not born in US)**

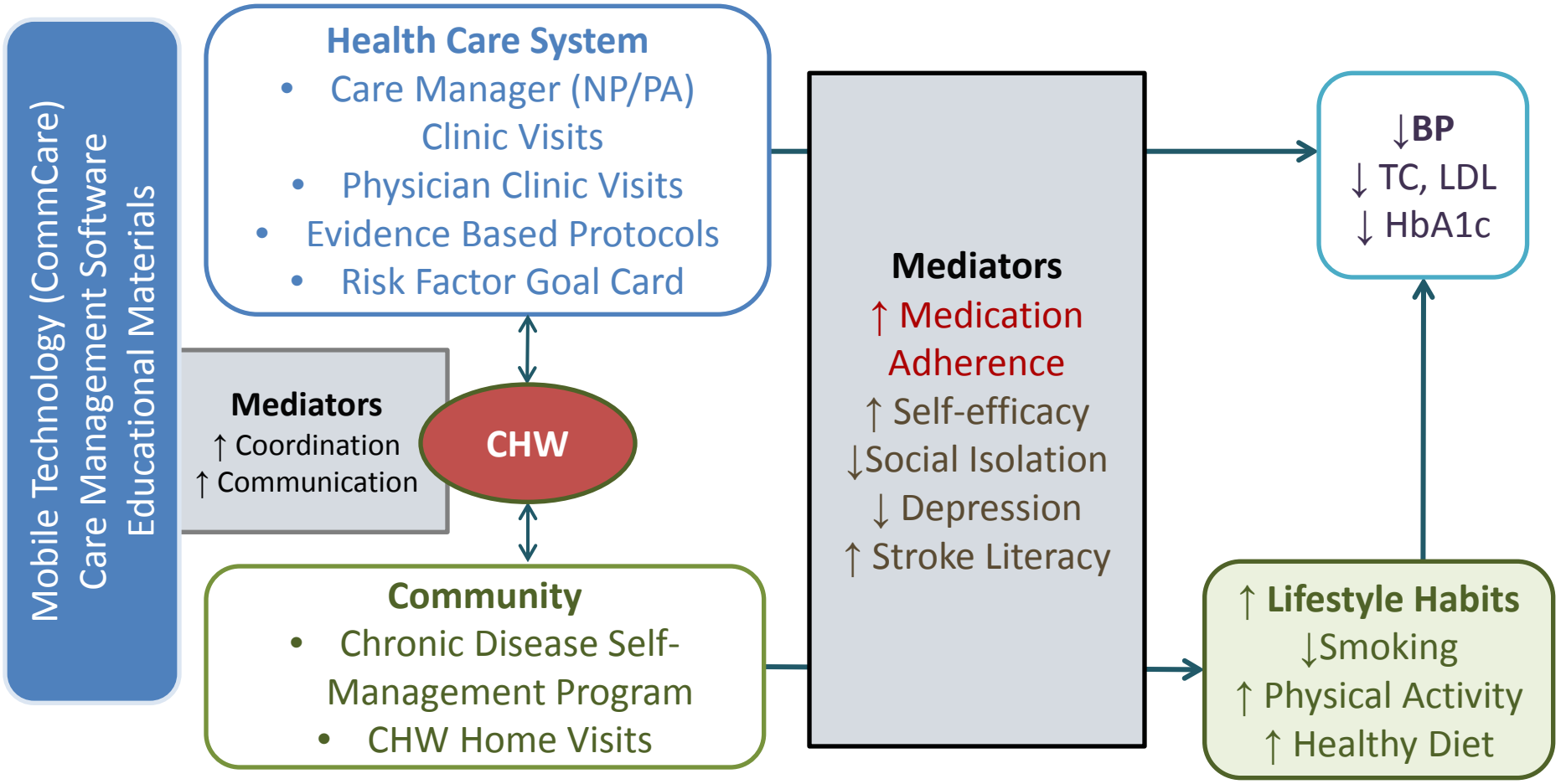
- ***9% never attended school; 24% had less than a 6th grade education***

- **50% were working for pay full-time or part-time prior to the stroke or TIA**

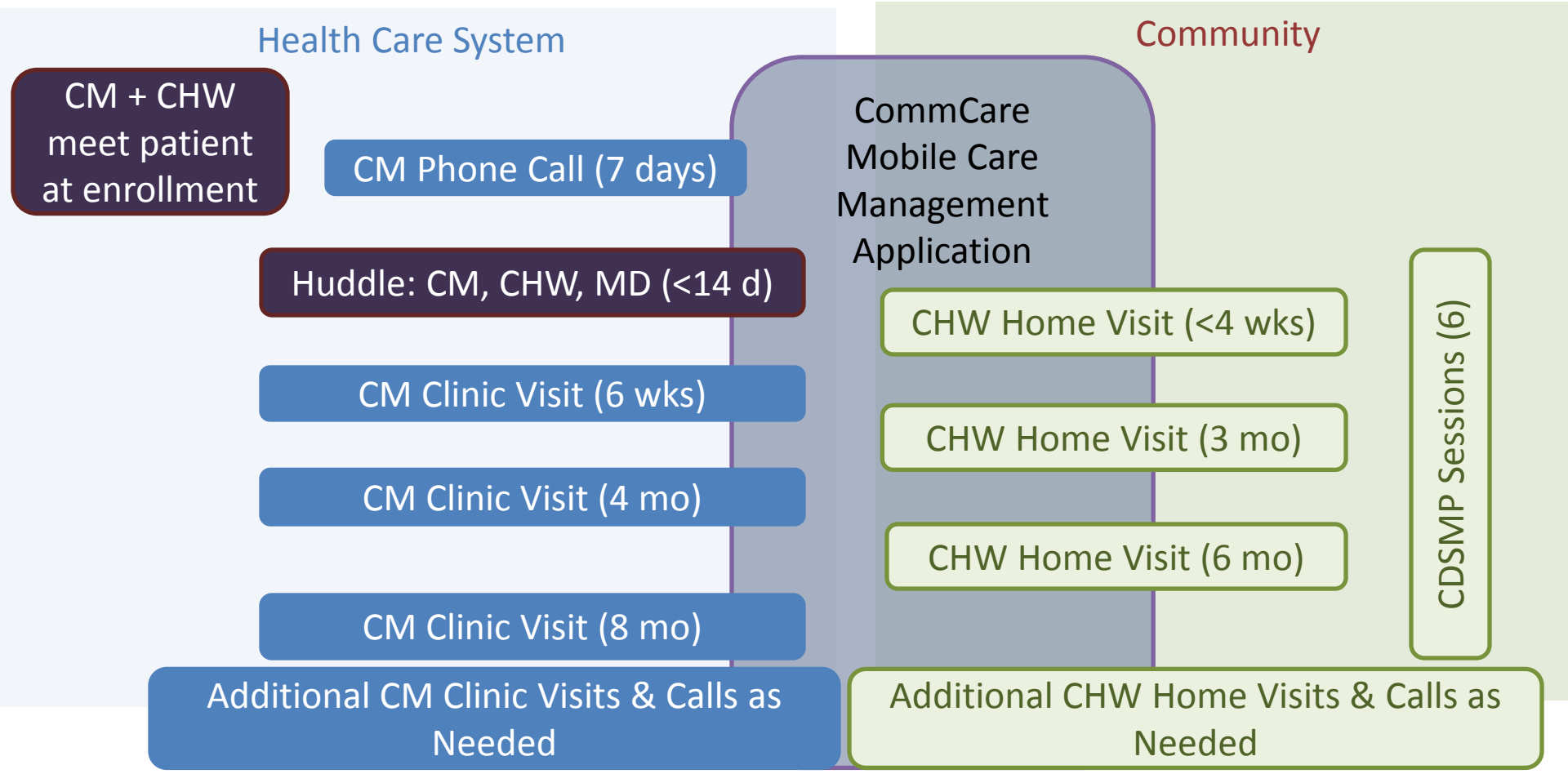
- **38% currently married or in a domestic partnership**
- ***8.5% living in a room of a house or hotel;***
- ***20% living in the home of a parent or relative;***
- ***1.3% living on the street or in a shelter***

- ***54% reported having no regular medical provider***

SUCCEED Conceptual Model



SUCCEED Intervention Design



Roles of Care Manager and CHW

Care Manager

- Develop Care Plan with CHW and MD
- Prescribe Medications
- Teach Self-Management
- Provide Education

Community Health Worker

- Assist with Navigation of Healthcare System
- Assess & Promote Medication Adherence
- Promote Self-Management
- Education & Lifestyle Coaching
- Assess for Social Isolation & Depression
- Provide Resources

Unanticipated Learnings About Implementing SUCCEED

- **Under-recognition of the gap between our plans for care manager-community health worker use of Commcare app to guide, track and coordinate care, and the complexity/current capacity of the app/software**
- **Identification of "high need" individuals who need more resources/attention**
  - **Care manager and community health workers need to plan and track and coordinate activities, particularly with these individuals**
- **Special tools and much more time than anticipated needed to address medication adherence.**
  - *"If this is cut short, it undermines everything else."* (TS-T)
- **Need to integrate family and close caregivers into the individual's care team.**
  - **Explicitly invite family and close caregivers to clinic visits, home visits**
- **Importance of graduation to reinforce and recognize investment/what has made a difference**
  - ***"For the first time, I know how to take care of myself" due to having a team of people working with him on self-management*** (recent alum)

CommCare: Care Management Tool

Manage Patients

CHWs follow protocols with decision support, track tasks, perform assessments, and communicate with CM

Engage with Multimedia

CHWs use images, audio, and video to educate and engage patients

Manage Data

CHWs collect data which is submitted to the web in real-time

Mobile

CommCareHQ Information System

Manage Patients

CMs develop care plans, track tasks, perform assessments, communicate with CHW

Manage Apps and Users

PIs can remotely manage workforce from web-based application

Web

Monitor Activities & Support Workforce

"Active Data Management" enables PIs and team to focus on continuous performance improvement

dimagi

High Need Categorization to Help Plan Care Management

High needs - Patient requires more than the minimum of 3 clinic visits and 3 home visits over 12 months (criteria or these categories are being developed):

- Uncontrolled stroke risk factors
- Other medical Issues requiring referrals or communication with other providers)
- Not able to meet basic needs
- At risk of losing access to medical care
- Lack of self-efficacy

Stable -Stable risk factors/ currently making progress with expected amount of intervention

Total % SUCCEED participants meeting criteria for 'high need' during intervention	**=53%**

STROKE Prevention

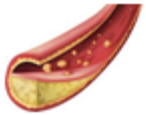
Turning Research into Outreach, Knowledge and Education

Medication Adherence Toolkit

BLOOD PRESSURE

DIABETES

SMOKE-FREE

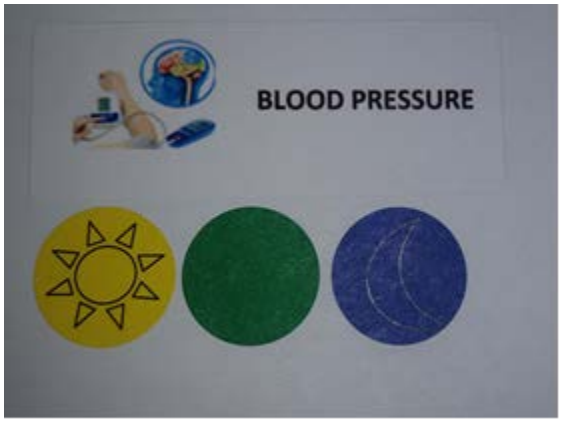


CHOLESTEROL

CLOT PREVENTION

EMOTIONAL HEALTH

Labels used: Blood pressure medication label, yellow dot, green dot and blue dot



"CHW Instructions For a Home Visit:

Use this kit to facilitate medication adherence for low literate or limited English proficiency patients. This kit is especially useful for patients with difficulty using pill boxes or who prefer to use their medication bottles."

STROKE Prevention

Turning Research into Outreach, Knowledge and Education

"Roll Around the Ranch"

Effective stroke prevention involves the individual's family and close caregivers

STROKE Prevention

Turning Research into Outreach, Knowledge and Education

"I SUCCEED"

STROKE Prevention

Turning Research into Outreach, Knowledge and Education

SUCCEED Team

PROJECT LEADERSHIP
PI: Amytis Towfighi, MD (Rancho/USC)
PI: Barbara Vickrey, MD, MPH (UCLA)
Project Manager: Monica Ayala
Care Management Advisors: Lillie Hudson, PA, MPH; Dorothy Harris, PhD

Core A Administrative Support: Roberta Rey, PhD; Sage Kim (UCLA)

Core C Biomarkers:
T Seeman, PhD (UCLA)
H McCreath, PhD (UCLA)

IMPLEMENTATION SCIENCE
B Mittman, PhD (VA, UCLA)
E Cheng, MD, MSc (UCLA)
V Hill, OT, PhD (USC)*

MOBILE HEALTH TECHNOLOGY/ SYSTEMS ENGINEERING
Hilary Haber & Jeremy Wacksman, DiMagi
Magaly Ramirez (USC)*& Shinyi Wu, PhD (USC)

STATISTICS/ DATA MANAGEMENT
Honghu Liu, PhD (UCLA)
Frances Barry, MS (UCLA)

**SPIRP fellows (Core B)*

Core D: Lucas-Wright, Jones (HAAF), Brown (UCLA), Community Action Panel

OUTCOMES/ EVALUATION
W Cunningham, MD (UCLA)
D Ganz (UCLA, VA)
B Martinez (Harbor)
L Moreno(Rancho Los Amigos)
J Lee (UCLA, Korean translation)
M Fernandez (LAC+USC)

COMMUNITY PARTNERS: CHW RECRUITMENT AND TRAINING

Workers Education & Resource Center
Diane Factor, MS
Mireya Macias

Esperanza Community Housing Corporation
Nancy Ibrahim, MPH
Lupe Gonzalez

Watts Labor Community Action Committee
Phyllis Willis, MSW

UCLA CTSI
Martin Lai (Redcap)

LAC-DHS STUDY SITES

Rancho Los Amigos
Razmara (Site PI)
Sivers (CM)
Corrales (CHW)

LAC+USC
Sanossian (Site PI)
Sivers (CM)
Mojarro (CHW)

Harbor-UCLA
Mehta (Site PI)
Tran (CM)
Montoya (CHW)

UCLA-Olive View
Bryg (Site PI)
Shaby (CM)
Montoya (CHW)

New partner: Cedars-Sinai, with funding from California Community Foundation