Southern California Regional Implementation & Improvement Science Webinar Series

Welcome to the Webinar

Clemens Hong, MD, MPH
Primary Care Physician & Researcher
LA County Department of Health Services
Co-Founder
Anansi Health

“Evaluating the Care Connections Program, A Community Health Worker-integrated, Primary Care-embedded, Care Management Program for Los Angeles County’s Sickest, Most Vulnerable Populations”

1. Everyone will be in listen-only mode, until Q&A.
2. At the start of Q&A, everyone will be unmuted. Please mute your phones to prevent feedback noise.
3. Any additional questions? Please email them to abmartinez@mednet.ucla.edu or isankare@mednet.ucla.edu.

The webinar will begin shortly.
At the end, please take 2 minutes to complete a brief evaluation.
Evaluating the Care Connections Program
A Community Health Worker-integrated, Primary Care-embedded Care Management Program for Los Angeles County’s Sickest, Most Vulnerable Patients

Clemens Hong MD MPH
Los Angeles County Department of Health Services
Anansi Health

Dissemination, Implementation & Improvement Science Webinar Series
Figure 1. Distribution of health expenditures for the U.S. population by magnitude of expenditure and mean expenditures, 2010

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2010

Using complex care management teams to improve care & reduce costs

Specially trained multidisciplinary, complex care management teams
Inconsistent Data on Utilization/Savings

- **Medicare Coordinated Care Demo** – Peikes NEJM 2009, HA 2012
  - 3/15 sites eventually showed net savings in high risk subsets

- **Health Quality Partners** – Coburn, 4th report to congress - 2011
  - In high risk subgroups (diagnosis-based)
    - 39% decreased admissions (p<0.01)
    - 37% decreased ED use (p=0.05)
    - $511 PMPM decreased Medicare expenditures (-36%, p=0.01) on $397 PMPM net expenditures (including program fees) (p=0.05)
    - 30% decrease mortality rate
Inconsistent Data on Utilization/Savings

• **MGH Medicare Demonstration** – Urato RTI Report 2013
  – 20% decreased admissions
  – 25% decreased ED visit rates by 25%
  – 4% decreased annual mortality
  – 7.1% annual net savings for enrolled patients
    • 15.1% annual net savings at MGH
    • 4% annual savings for total population
  – $2.65 ROI (per $1 spent)

• *All p-values <0.05*
Inconsistent Data on Utilization/Savings

• **GRACE** – Counsell JAMA 2007, JAGS 2009
  – Decreased (-$1487, p<0.001) 3-year total medical expenditure in highest risk subgroups (PRA 0.4+)
  – Increased specialty, rehab, mental health expenditures

• **King County Care Partners** – Bell Report 2012
  – No change in total Medicaid costs
  – Decreased admissions & inpatient PMPM costs in patients with addiction
  – Increased prescription costs, in-home support service costs, use of chemical dependency treatment services
Challenges for CCM Programs: Drops in Potential

Potential opportunity

Identification

Engagement

Finding opportunities for improvement

Intervention

Realized improvement

Adapted from J Eisenberg *JAMA*. 2000
Trusting relationship between a patient & a proactive care team the foundation to care management
A strong relationship between the CCM Team & Primary Care team also critical for care management.

As is a strong relationship between the PCMH/CCM Teams & Community Partners.
Los Angeles County
Department of Health Services
Care Connections Program (CCP)
Serving 5-10% of LAC DHS’s Patients

- Complex biopsychosocial needs
- Hard to engage
- High utilization of health care
- High cost of care

19,000-38,000 out of 380,000 primary care patients
<table>
<thead>
<tr>
<th>Phase 1: Demonstration</th>
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<tbody>
<tr>
<td>March/April 2015 – March 2017</td>
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<tr>
<td>5 DHS primary care practices in South and East LA</td>
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<tr>
<td>Hire 25 CHWs</td>
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<td>CHW training by WERC &amp; Anansi Health</td>
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<td>1,250 patients</td>
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<th>Phase 2: Expansion</th>
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<tr>
<td>Apply lessons from Phase 1</td>
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<tr>
<td>Replicate model across LAC DHS</td>
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<tr>
<td>Up to 30X expansion possible</td>
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</table>
Current DHS Model

PCMH Team

CCM Team

Social Service Agencies

Government Service Agencies

Acute & Post-acute Facilities

Specialty Care Providers

Patient-Centered Medical Home

PCP

Payers & Purchasers

Public Health Agencies

Behavioral Health

Home Health & VNA

Public Health Agencies
Care Connections Team

RN Manager

Social Worker

PCP

RN Care Manager

CHW

PCMH Embedded

Medical Director

Program Director

Pharmacist

Analyst
CCP Program Overview

- Patient Engagement
  - Face-to-face: Hospital, Clinic, Or home visit

- Comprehensive Needs Survey
  - Revise Care Plan if needed
  - Acute Event or Status Change

- Care Transition Work if needed

- Care Plan Development
  - Accompaniment /Routine FU visits

- "Step Down"
  - Follow-up Assessment
Patient Engagement

Social Support

Comprehensive Assessment & Care Planning

Health System Navigation

Care Transition Support

Chronic Disease Support & Health Coaching

CHW Role
What to Do About
Low Blood Sugar (Hypoglycemia)

Blood Sugar Reading 70 or below

Warning Signs

<table>
<thead>
<tr>
<th>Dizziness</th>
<th>Sweating</th>
<th>Headache</th>
<th>Fainting</th>
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<tbody>
<tr>
<td><img src="image1.jpg" alt="Image" /></td>
<td><img src="image2.jpg" alt="Image" /></td>
<td><img src="image3.jpg" alt="Image" /></td>
<td><img src="image4.jpg" alt="Image" /></td>
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</table>

What to Do

1. **Eat sugar.**
   Examples:
   * Sugar tablets
   * ½ cup fruit juice or regular soda
   * 5-6 pieces hard candy
   * 1 cookie
   * 1 tablespoon of sugar or honey

2. **Wait 15 minutes, then check your blood sugar again.**
   If it is still below 70, eat or drink something sugary again.

3. **Wait 15 minutes, then check your blood sugar again.**
   If it is still below 70, drink more juice and go to the doctor or emergency room.
Patient Engagement

CHW Role

Social Support

Comprehensive Assessment & Care Planning

Health System Navigation

Care Transition Support

Advanced Illness management support

Chronic Disease Support & Health Coaching
CHW Training

• Motivational Interviewing/Harm Reduction
• Chronic disease self-management support
  – CHW Conversations
  – Health Coaching/Behavior Modification
  – Medication Review
• Program protocols – e.g. care transitions
• Behavioral Health Topics
• Other – e.g. boundary setting, safety
CHW Supervision/Support

• CHW Supervision - CCP
  – Programmatic – e.g. CQI meetings, performance evaluations
    • Program Director – Ami Shah
    • Program Manager – Simon Ma
  – Clinical – Weekly one-on-ones, case conferences
    • Medical Director – Clemens Hong (medical)
    • Social Worker – Jenebah Lewis (behavioral health/social service)

• Clinical Support – Also undergo training
  – PCPs
  – RN Care Managers
Primary Care Team Selection

• Approach
  – No PCP opt out
  – Clinic leaders select eligible providers
  – At least 1 CHW per nurse care manager
  – Start 1 PCP per CHW – 14 PCPs during soft launch
    • Increase to 2-3 PCPs per CHW during full launch

• Timeline
  – Soft Launch – March 30, 2015
  – Full Launch August, 2015
    • PCP engagement for full launch – July/August, 2015
Challenges for CCM Programs: Drops in Potential Engagement
Finding opportunities for improvement Intervention Realized improvement

Potential opportunity
Identification

Adapted from J Eisenberg JAMA. 2000
Patient Selection Approach

Hybrid Approach – qualitative gate
1. Generate lists for each eligible provider using risk criteria (7%)

- High-risk criteria:
  1. CDPS>1.0 AND 2+ chronic conditions (9157)
  2. 2+ Admit OR (1+ Admit and 2+ ED) OR 4+ ED (+1300)
  3. High-risk conditions – [CHF, IHD OR Stroke, COPD, Asthma, DM w/ A1c>9, Substance Use Disorder, HIV, Age>80yo] AND [1+ Admit OR 2+ ED] (+869)
  4. Not in disease management program (CHF, DM) – 80-120 PMPM

- Total = 11,326 of whom 79% have had a PCMH visit
## High-risk Population Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Patients (N = 11,326)</th>
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<tbody>
<tr>
<td>Age median (SD)</td>
<td>57 (12.8)</td>
</tr>
<tr>
<td>PCMH visit in 2 years (%)</td>
<td>79.0%</td>
</tr>
<tr>
<td>Primary Language, Spanish</td>
<td>41.8%</td>
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<tr>
<td>Diagnoses (%)</td>
<td></td>
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<tr>
<td>Hypertension</td>
<td>71.2%</td>
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<tr>
<td>Diabetes</td>
<td>54.3%</td>
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<tr>
<td>Diabetes A1c &gt; 9</td>
<td>38.9%</td>
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<tr>
<td>Substance use disorders</td>
<td>13.2%</td>
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<tr>
<td>Ischemic Heart Disease/Stroke</td>
<td>12.8%</td>
</tr>
<tr>
<td>COPD/Asthma</td>
<td>11.2%</td>
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<tr>
<td>Psychiatric disorders</td>
<td>11.0%</td>
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<tr>
<td>CHF</td>
<td>8.5%</td>
</tr>
<tr>
<td>HIV</td>
<td>1.4%</td>
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<tr>
<td>Age &gt;80 years old</td>
<td>0.6%</td>
</tr>
</tbody>
</table>
Patient Selection Approach

Hybrid Approach – qualitative gate

1. Generate lists for each eligible provider using risk criteria (7%)
2. Primary care teams review list & identify candidates (3-7%)
3. Randomly select patients to receive the intervention (<1%)

- High-risk criteria:
  1. CDPS>1.0 AND 2+ chronic conditions (9157)
  2. 2+ Admit OR (1+ Admit and 2+ ED) OR 4+ ED (+1300)
  3. High-risk conditions – [CHF, IHD OR Stroke, COPD, Asthma, DM w/ A1c>9, Substance Use Disorder, HIV, Age>80yo] AND [1+ Admit OR 2+ ED] (+869)
  4. Not in disease management program (CHF, DM) – 80-120 PMPM

- Total = 11,326 of whom 79% have had a PCMH visit
Primary Care Team Referral Process

Hybrid Approach – quantitative gate

1. Primary care team refers any patient they deem to be a good candidate for the program
   – Those previously considered not eligible in phase 1
2. Apply quantitative screening criteria to the list
   – Utilization & Chronic disease criteria (see last slide)
3. Randomly select subset of patients for the intervention
Additional Patient Selection Details

PCP Over-ride

• Each PCP can select one patient into the intervention regardless of criteria or random selection

“Don’t know” patients

• CCP leadership will perform a clinical review and identify patients for random selection
• The number of patients will not exceed 20% of the total group for any given provider
Patient Selection Summary

- All patients selected by PCPs who meet quantitative criteria and those added from “don’t know” list undergo random selection (1:2) into the program – e.g. provider level randomization

- Patients selected through PCP override will be considered separately

- The final list, in most cases, will contain more patients than the CHWs can manage at maximum case load
A Multi-faceted Program

Community Health Workers

Care Without Walls

Community Engagement

Social Needs Navigation

Care Transition & Acute Care Planning

Data-driven Improvement

Chronic Disease Management

Components
Clinical Protocols

- Development process
  - Steering committee engagement
  - Driver review -> Workflows Development & Approval
  - Written Protocol Development -> Training
    - Forms -> Care Management IT Platform
  - Iteration -> Re-training
A Multi-faceted Program

- Community Health Workers
- Care Without Walls
- Community Engagement
- Social Needs Navigation
- Care Transition & Acute Care Planning
- Pharmacy Intervention
- Advanced Illness Management
- Data-driven Improvement
- Chronic Disease Management

Components
CCP Core Evaluation Team & Funding

• Core Team
  – Arleen Brown MD, PhD (Co-PI)
  – Clemens Hong MD MPH (Co-PI)
  – Susan Ettner PhD
  – Sheba George PhD
  – Anish Mahajan MD MPH
  – Ami Shah MPH
  – Chanan Reitblat

• Funding
  – The California Endowment, California Healthcare Foundation, UCLA CTSI
# Specific Aims

<table>
<thead>
<tr>
<th>Aim 1</th>
<th>To compare quality, utilization and cost outcomes of patients receiving care from a CHW-integrated complex care team versus usual team-based primary care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim 2</td>
<td>To compare patient activation, quality of life, and the experience of care of patients receiving care from a CHW-integrated complex care team versus usual team-based primary care</td>
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<tr>
<td>Aim 3</td>
<td>To study experience with, and facilitators and barriers to program implementation</td>
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<tr>
<td>Aim 4</td>
<td>To examine the impact of program participation on the lives of patients and CHWs</td>
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Evaluation Overview

• Summative Evaluation
  – Randomized effectiveness evaluation (natural experiment)
  – Pre- Post- difference-in-difference analysis with controls
  – Linked data from DHS, DPH, DMH, Sheriff

• Formative Evaluation
  – Concurrent implementation & post implementation focused
  – No pre-implementation work planned

• In depth interviews of CHWs & patients (by sociologist)
Summative Evaluation - Measures

- Clinical Quality
- Utilization/Cost
- Patient reported outcomes & experience
  - Patient activation
  - QOL/functional status
  - Access, communication, care coordination
  - Other – social support, homelessness, food insecurity, employment, jail recidivism
Formative Evaluation

• Examine contextual factors, experience with, and barriers/facilitators to implementation

• Quantitative & qualitative approaches
  – Quantitative data on processes
    • Tracking primary care team and CHW interactions
  – Surveys/Interviews/Focus Groups
Challenges

• Implementation challenges
  – Front-line provider engagement & patient selection/provider level randomization
  – Perceived “External” Development

• Culture “Clash”
  – Innovation at DHS
  – Resistance to randomization/evaluation

• Data Integration

• Costs Calculation
Questions for the Group

• How would you strengthen our overall evaluation? DII component?
• What are the key DII domains? How do we best hone in on the key implementation constructs?
• What high yield instruments or questions do you recommend?
  – How do you best assess primary care team characteristics influencing implementation?
  – How do you best assess contextual factors?
Thank you!

Questions?

Contact:
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SOUTHERN CALIFORNIA REGIONAL
Dissemination, Implementation & Improvement
Science Webinar Series

presents

Social Networks and Health

An Interactive Session with:

Tom Valente, PhD

Professor
Department of Preventive Medicine
Keck School of Medicine of USC

Keck School of Medicine of USC

Wednesday, October 7, 2015  11:30 am—1:00 pm
911 Broxton Plaza or UCLA WebEx

Submit your learning goals and questions on social networks and health for Dr. Valente.

Questions? Contact:
Arturo Martinez (abmartinez@mednet.ucla.edu) or
Ibrahima Sankare (isankare@mednet.ucla.edu)