APHA: 11-05-2019

International Pre-Diabetes Center

Home To

DCRC

DIABETES COMMUNITY
Resource Center

Session: 4239.0, Presentation G: Community Health Workers (CHW) Change Agents to Reduce Health Disparities: Type 2 Diabetes

APHA: 11- 5 - 2019 Annual Conference

CHWs Role in SDoH

❖ **Objectives**

- Patient Selection
- Use of Predictive Analytics
- Incorporating SDoH

❖ **Community Partnerships**

- Role of CHW- Screening
- Impact: Results
- Impact: Cost Avoidance
- Program Endorsement

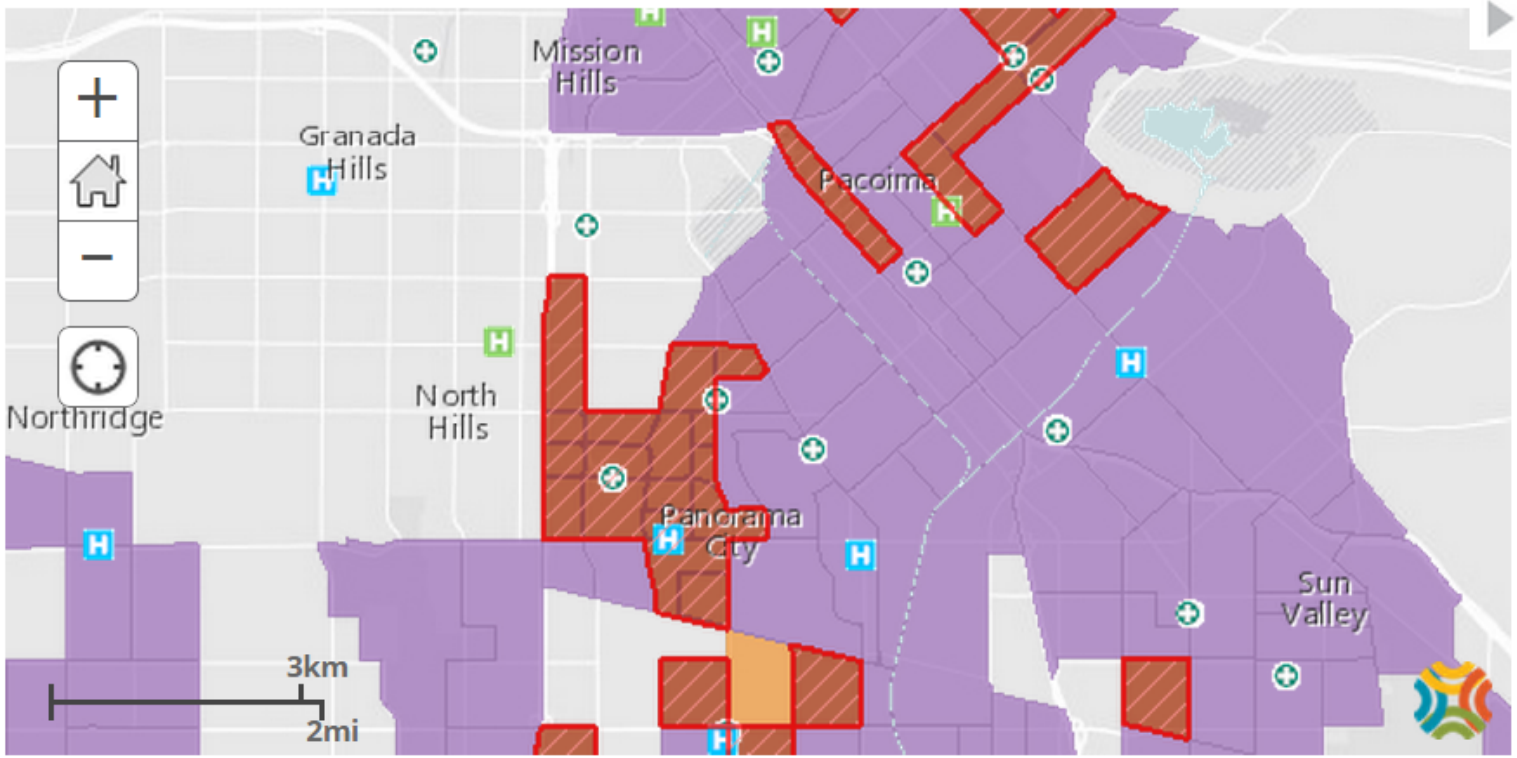
Objectives:

- Understand how to use predictive analytics and Electronic Health Record (EHR) to identify patients who can benefit from CHW support
- Demonstrate how partnering with Community Based Organization (CBO) can close health disparity gaps and lead to better health outcomes for diabetes

Pt. Individualization: Screening

- Who should assess and address patients' social, environmental and un-met needs?
- 85 % of primary care providers(PCP) agree that we should screen for and address SDOH
- 80 % of PCP agree they lack the time, ability and skills-set to do this work
- 78 % of PCPs recommend partnering with community based organizations for this work
- We examined the role of CHW in screening and community outreach for SDOH, and impact on patient outcomes and health care costs for vulnerable population with Type 2 diabetes

Medical Center: High Risk Zip-Codes



Pacoima

Van Nuys

Panorama City

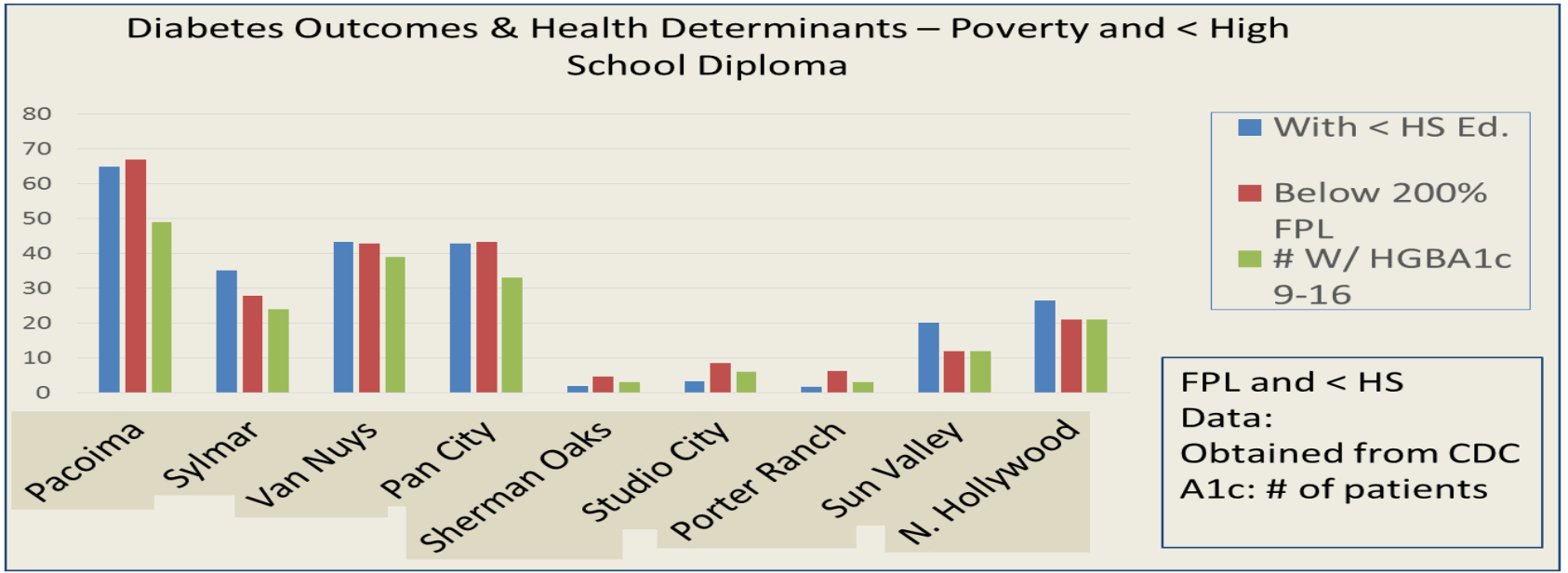
Sylmar

North Hollywood

North Hills

Target Population: Uncontrolled A1c

Health Determinants as Percentage, A1c # of pts.



Geographic Location by Zip-code (FPL = Federal Poverty Level)

(FIGURE: 4)

Electronic Health Record: SDoH

- We used electronic health record to identify patients with housing problems “moved > 4 times in prior 12 months”
- Patients who did not pick up diabetes medications in prior 6 months “Evaluate for ability to make co-pay”
- Patients hospitalized with low blood glucose at the end of each month x 3 months “evaluate for food insecurity”
- Patients who did not show up for follow-up appointments x 4 visit (evaluate for transportation”

Methods for Patient Engagement (N=300)

Method	# of Patients Engaged	Comments
Text Campaign	144 (48%)	Text campaign using predictive analytics and behavioral economics.
Flyer (KP)	57 (19%)	Flyers obtained from Health/ Wellness Class, PCP
Provider Letter	48 (16%)	Santa Clarita, Pan City
Farmers' Market	39 (13%)	KP/ PC Farmers' Market
Complete Care	6 (2%)	PC, Panel Manager
Telephone	6 (2%)	Patient also had a Flyer

Collect Data

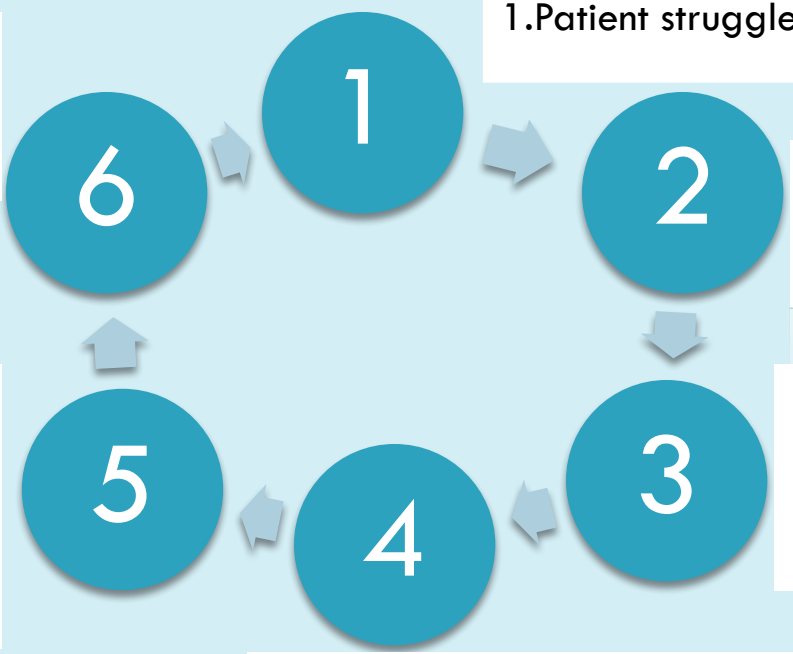
- # of trained navigators
- # of patients screened
- # of patients linked to each category for resources
- # of patients screened/referred to community programs
- Quality and quantity of patient interventions
- Patient satisfaction with resources
- 30-day readmission rates, ED visits

Accomplishments: Trained CHW (#30)

- **Training Workshops: with support from Dr. Richard Jackson, MD; Harvard**
- **University and Grassroots Diabetes;**
- The trained/certified Community Navigators (CN): support programs throughout the
- Community: Churches, Schools, FQHC, CSUN, IPDC's: peer-support NDPP, MDPP, DSME

Best Practices: CHW Model

1.Patient struggles to achieve blood glucose control



2. Provider Referral to DCRC for patient individualized Care

3. Patient receives screening for un-met social needs; Assessment in diabetes knowledge, and problem solving skills;

4. Patient is linked to Community Navigator (CN)
CN provides outreach, services, and support for un-met needs.

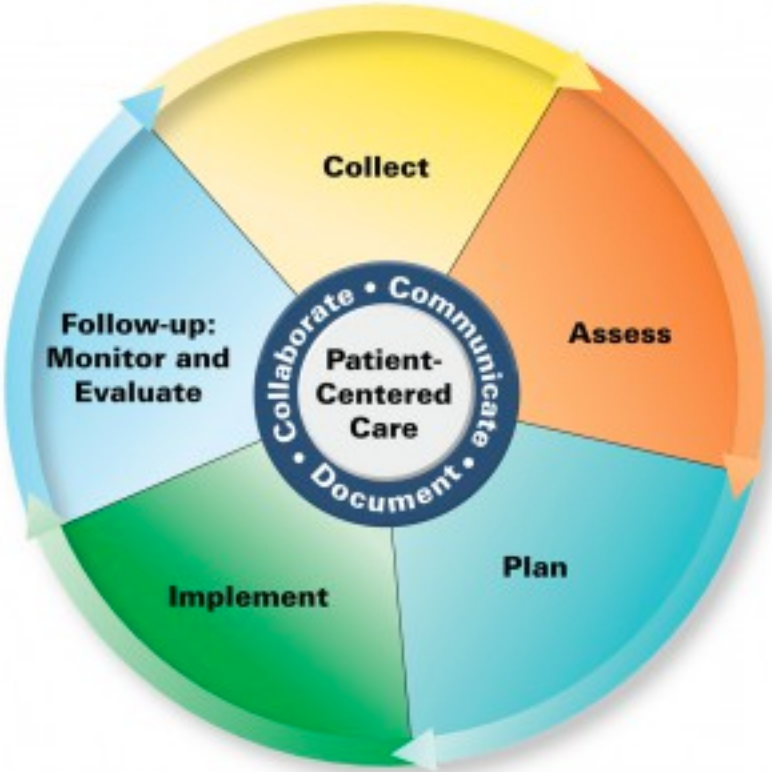
5. CN facilitates and coordinates care; advocates for community resources, follow-up with patient

6. CN provides update to care team

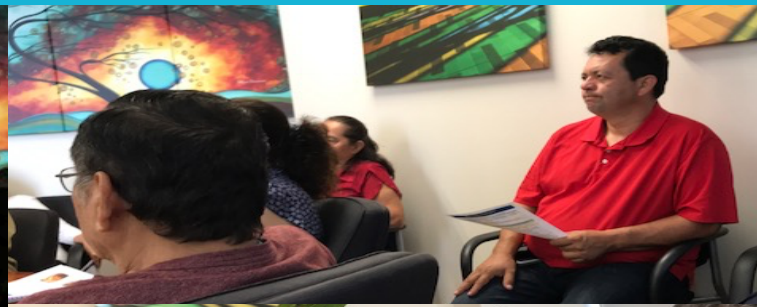
Intervention

- Meet patients where they are
- Assess & Bridge gaps in Need
- Partnership Building
- Engaging the "hard to reach"

- Collective Impact Framework Approach
- Contribute to Generation of Knowledge and Learning
- Learn Best Practices



Results: Peer to Peer Support



Number of Meetings to Date: 42

Total Number of Attendees to Date: 462

Spanish Speaking: 276; English Speaking: 186

Results: Screening for Gaps in Self Care

Using AADE 7 Guidelines:
Screen for gaps in Self-Care Behaviors Utilizing AADE7 Tool
(# Screened For Gaps (N) = 175)

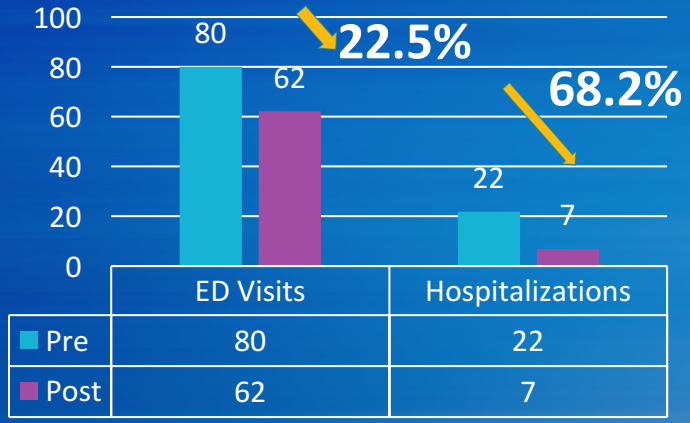
Gap Category	# Identified with positive Screens	# That improved post intervention
1. Healthy Eating	175	140 (80%)
2. Physical Activity	114	74 (65%)
3. Diabetes Monitoring	171	163 (95%)
4. Risk Reduction (Amputation)	17	16 (94%) improvement in A1c
5. Problem Solving	173	164 (95%) BG control
6. Taking Medication Appropriately	175	140 (80%)
7. Healthy Coping	69	41 (60%) Additional Resources Needed

Results: Pre & Post ED/Hospitalizations

ED visits decreased by **22.5%**

Hospitalizations decreased by **68.2%;** Overall an A1c reduction for members that had **any** DCRC intervention

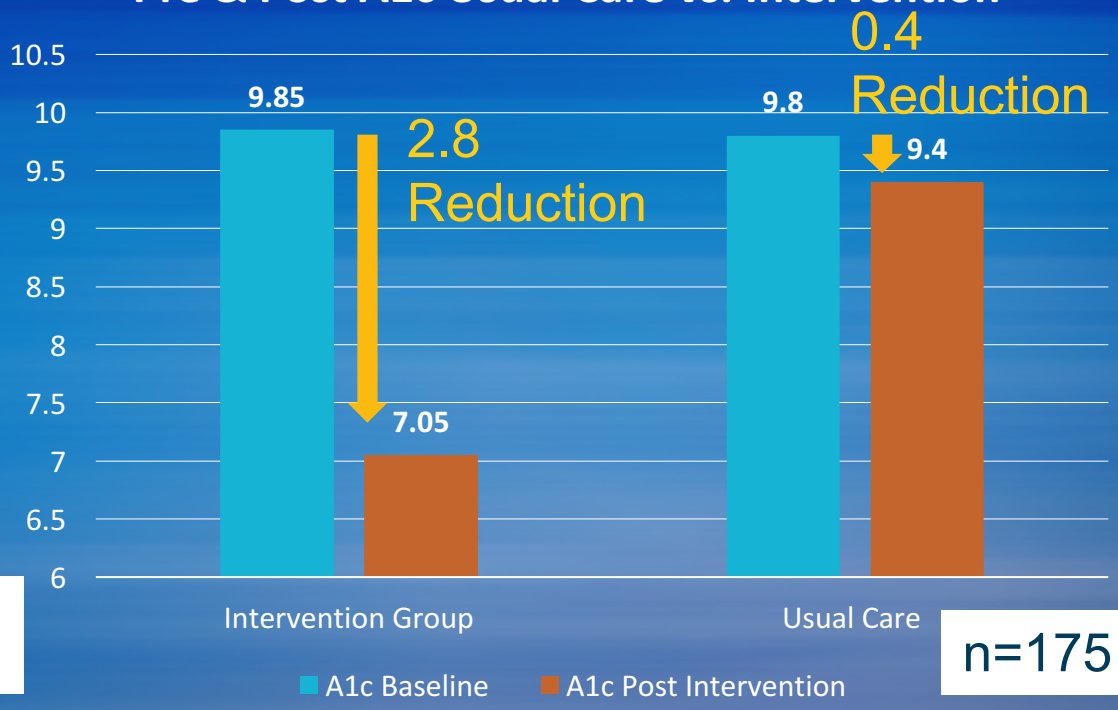
Pre & Post ED visits and Hospitalizations: Intervention Group



48 patients had 80 ED visits

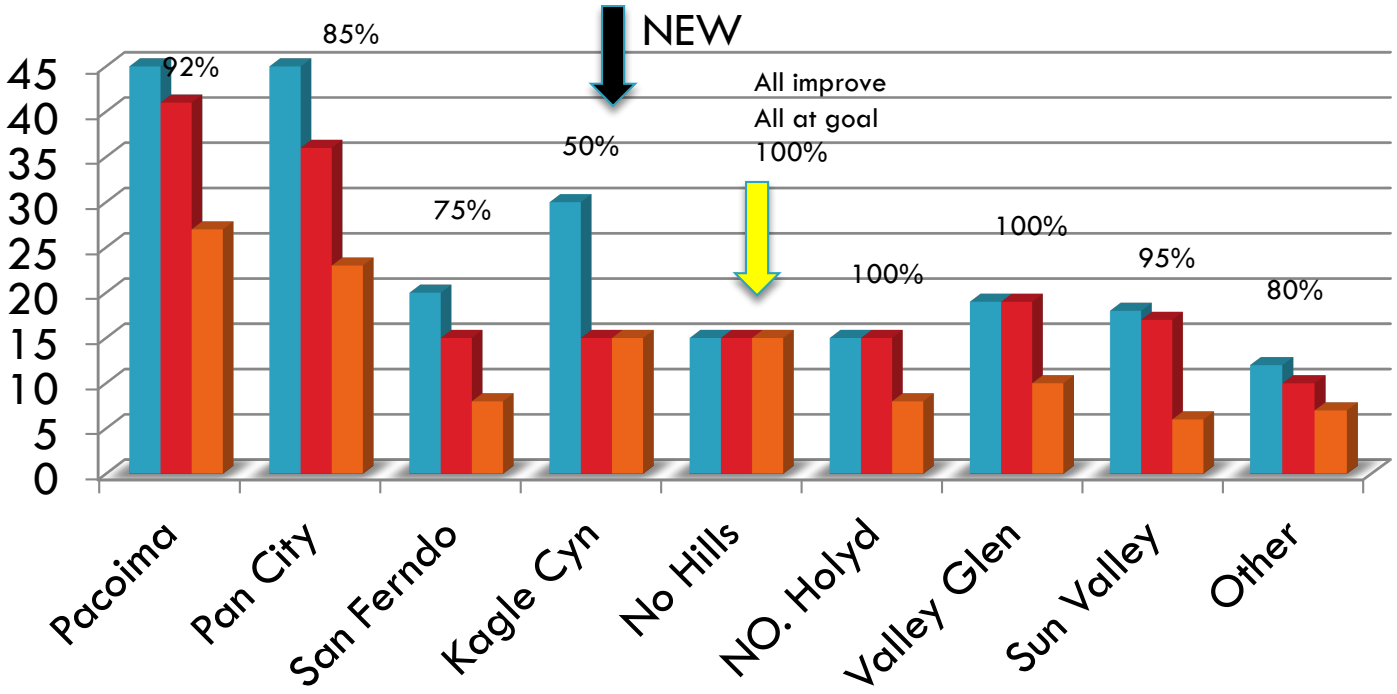
11 patients had 22 hospitalizations

Pre & Post A1c Usual Care vs. Intervention



n=175

Reach: Impact Target Zip-Codes



Number of Patients from each zip-code

Comments:
- Kagle Cyn is New And slow to improve
- Those who live close to DCRC are doing better

Sustainable: Cost Savings > Program Cost

DSME/T Number of Patients	First Year Cost of $1,750/ per patient For 10 hours in program - DSME/T - Peer Support - Outreach - Coaching	Cost Savings From 1% Reduction in A1c $960/ per/ pt	Cost Savings From A1c < 7.0% Decrease by $1,540/ per/ pt Target 60% of pts	COSTS SAVINGS From ED Visit Reduction $1,500/pt/ visit (25% Reduction)	Cost Savings From Hospital Reduction $10,800/ hosp/ pt 15% reduction	Savings after Cost of Program
250 patients	**$437,500** In program for 12 months	$240,000	$355,740	$93,750	$405,000	**$656,990**
500 patients	$875,000 In program 12 months	**$480,000**	**$711,480**	**$187,500**	$810,000	**1,313,980**
Total Cost Savings to KP Per patient		**Net Savings= $2,628 (after cost of program)**		**Higher A1c Linked to higher rates of hospitalizations/ higher costs**		

CHW MODEL: DOES IT WORK?

PATIENT CASE- R.R.

6/18/17
Age: 53
Hispanic, Male
A1C: 12.3

BEFORE

AFTER

2/18/18
(9 months later)
A1C: 6.4

Sustainability: CHW Bottom-line

1.Social Responsibility & Community Needs

What is the Right Thing to Do?

2.Value to Members Burden of Diabetes

3.Health Equity Vulnerable Populations

Questions



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