

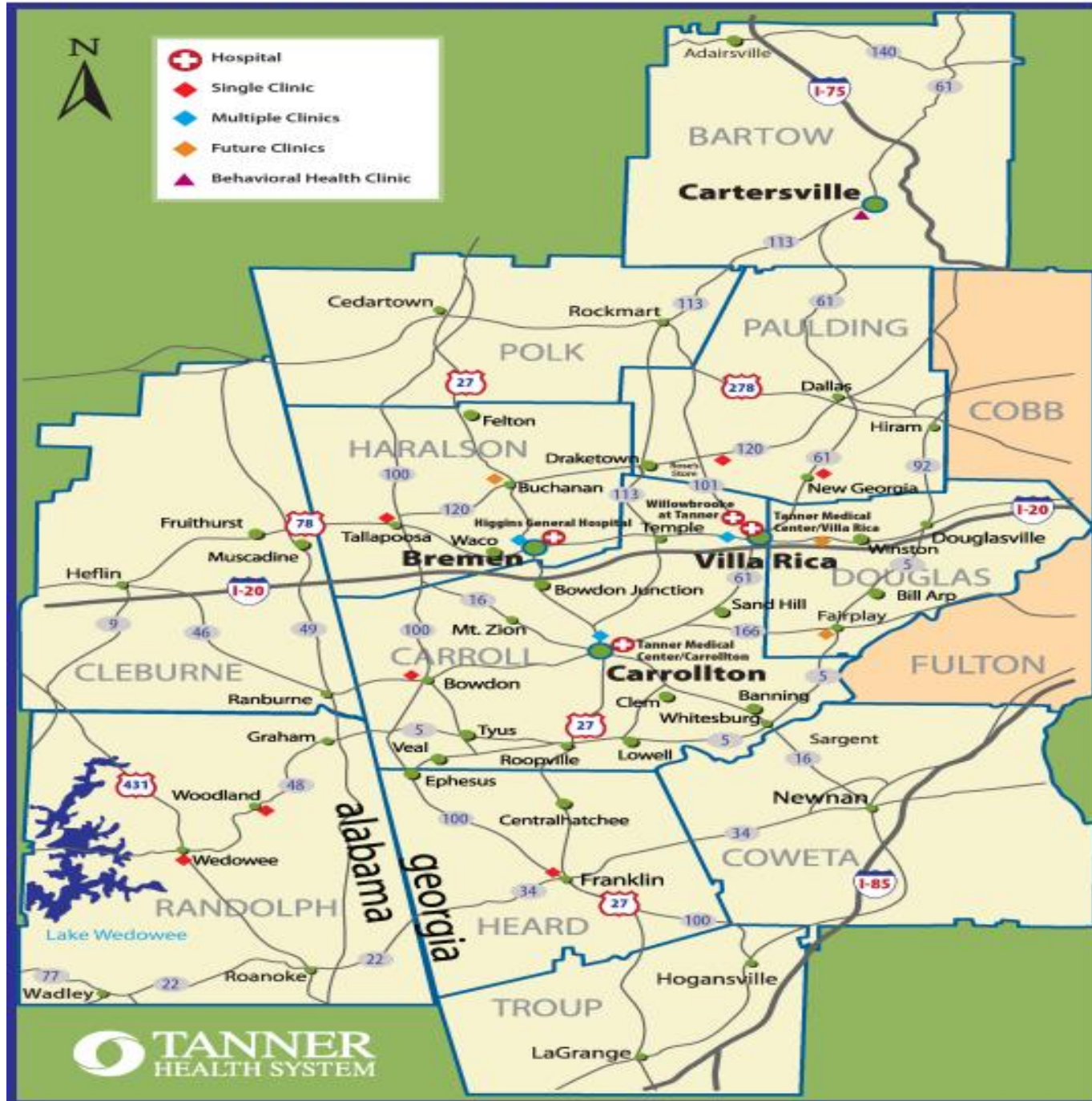
# Community Clinical Linkages

Tanner Health System  
Amy Riedesel MPA CIRS-A,  
Director of Community Health

**GET HEALTHY  
LIVE WELL**



# TANNER HEALTH SYSTEM



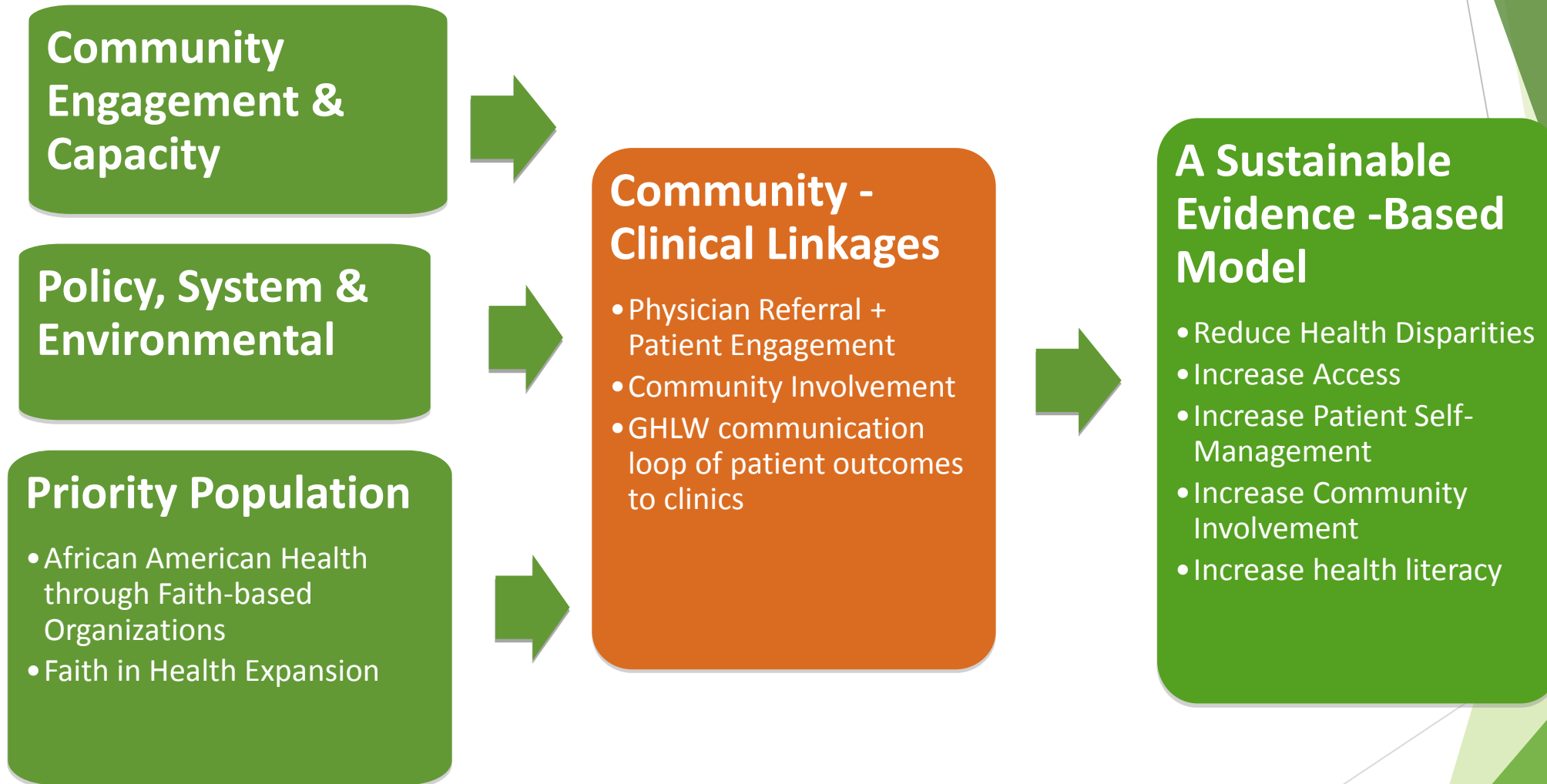
# Tanner Community Health Needs Assessment (CHNA) 2016-2019

- ▶ Access to Care
- ▶ Chronic Disease Prevention and Management
- ▶ Behavioral Health
- ▶ Health Education & Literacy

# Health Rankings 2016

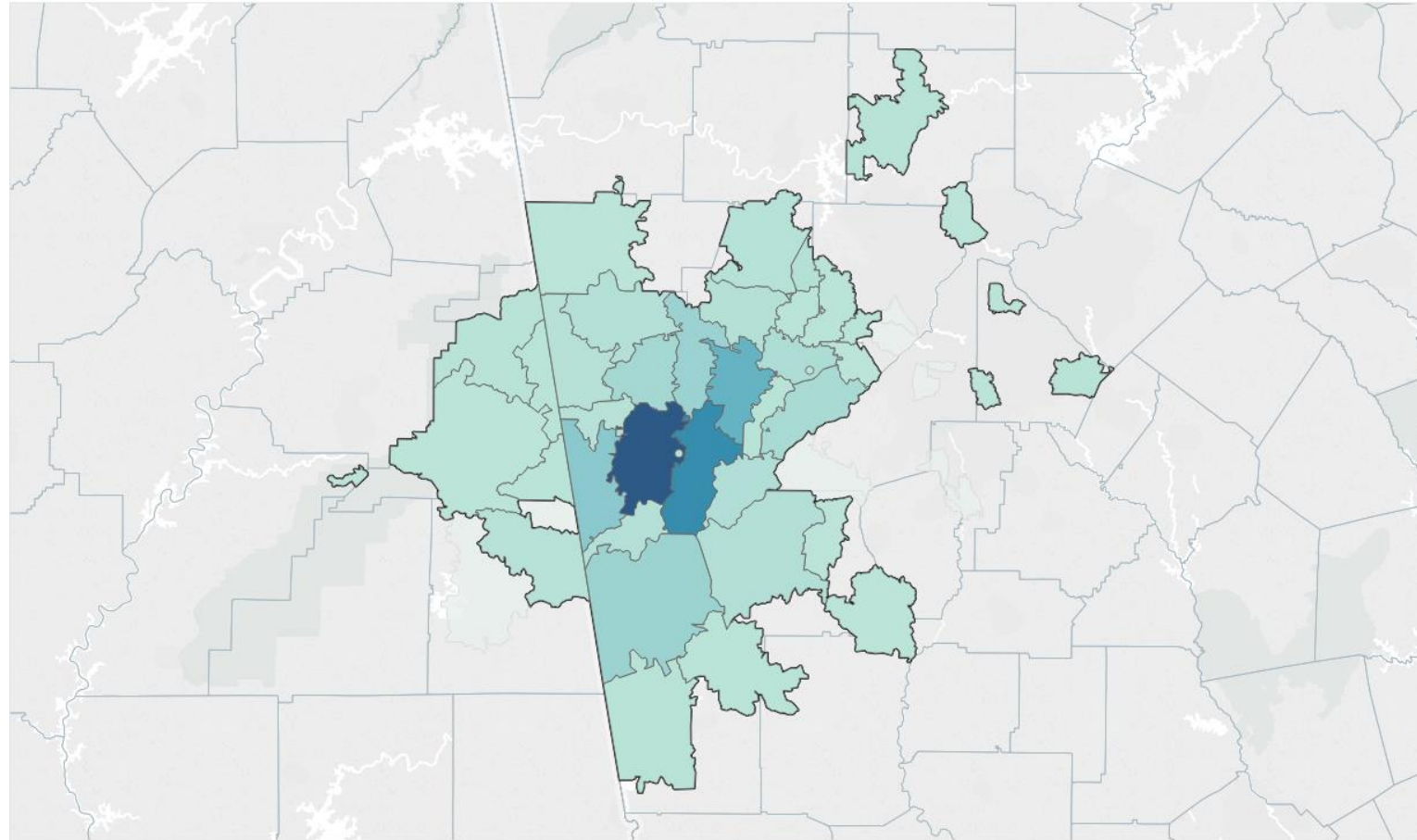
Carroll Co.	Haralson Co.	Heard Co.
58 <sup>th</sup> health outcomes	95 <sup>th</sup> health outcomes	60 <sup>th</sup> health outcomes
60 <sup>th</sup> health factors	55 <sup>th</sup> health factors	66 <sup>th</sup> health factors
56 <sup>th</sup> health behaviors	37 <sup>th</sup> health behaviors	63 <sup>rd</sup> health behaviors
70 <sup>th</sup> social & economic factors	92 <sup>nd</sup> social & economic factors	53 <sup>rd</sup> social & economic factors
145 <sup>th</sup> physical environment	116 <sup>th</sup> physical environment	89 <sup>th</sup> physical environment

## FOCUSING ON GREATER IMPACT:



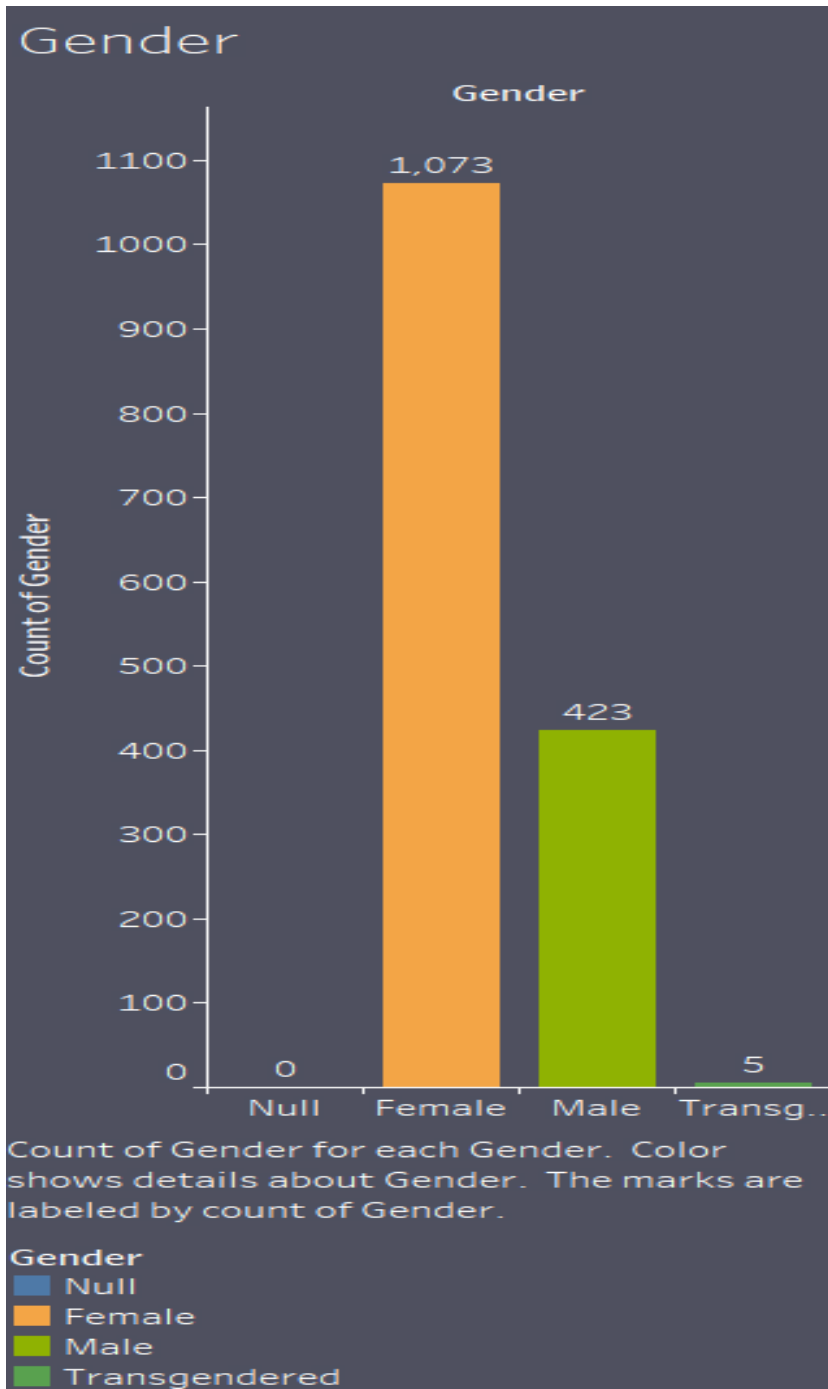
# Demographics

Zip Code



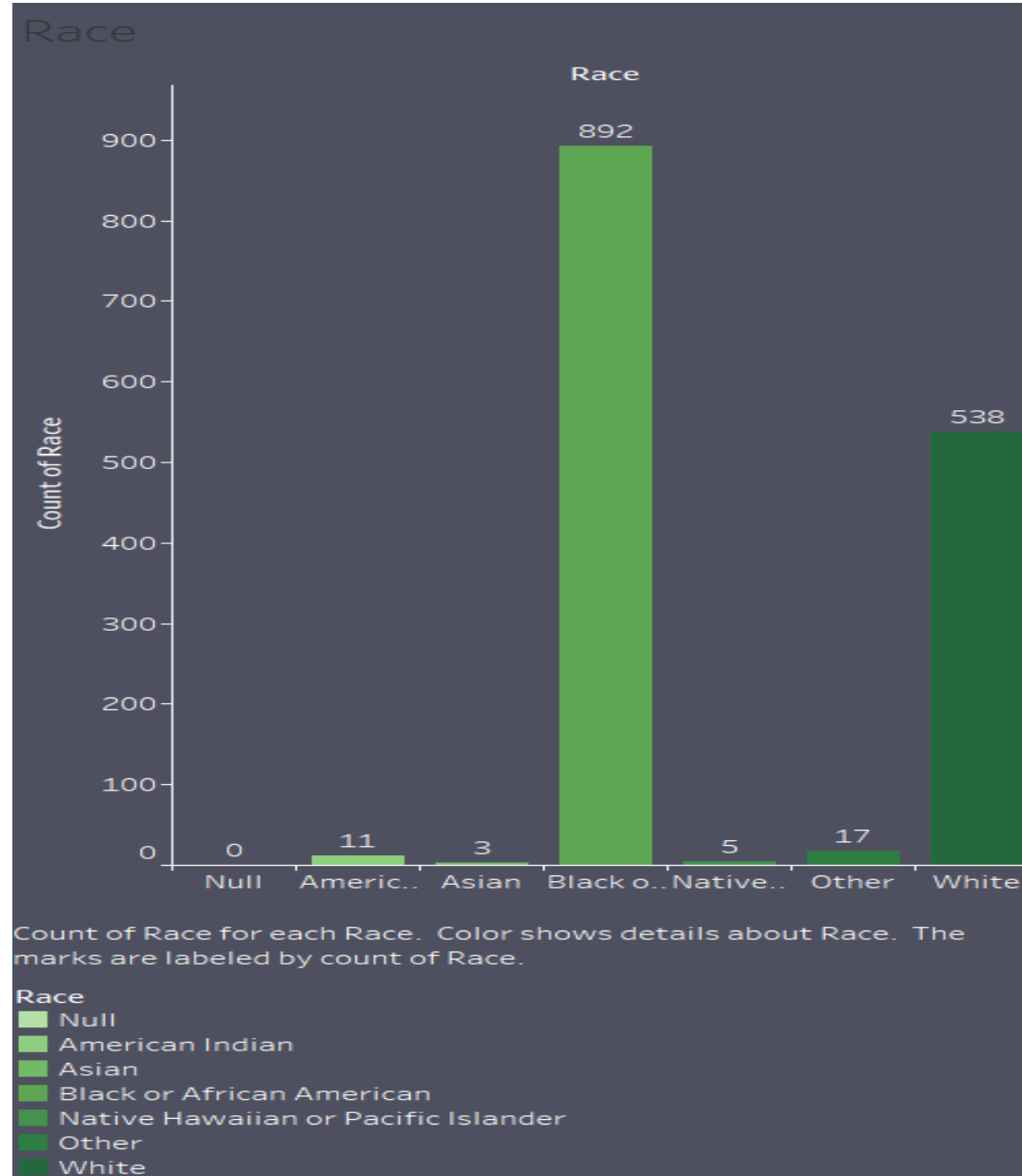
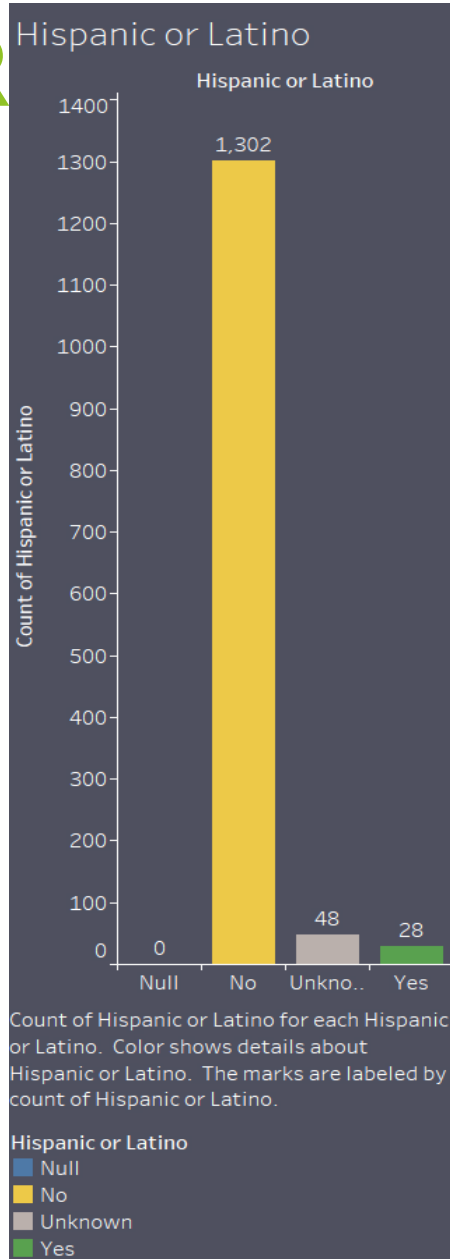
Map based on Longitude (generated) and Latitude (generated). Color shows count of Zip Code. Details are shown for Zip Code. The data is filtered on Class Name (Participant Class Information (Community Health Database V.3\_be)), which keeps 12 of 12 members. The view is filtered on Zip Code and count of Zip Code. The Zip Code filter keeps 50 of 58 members. The count of Zip Code filter keeps all values.

Count of Zip Code  
1 473



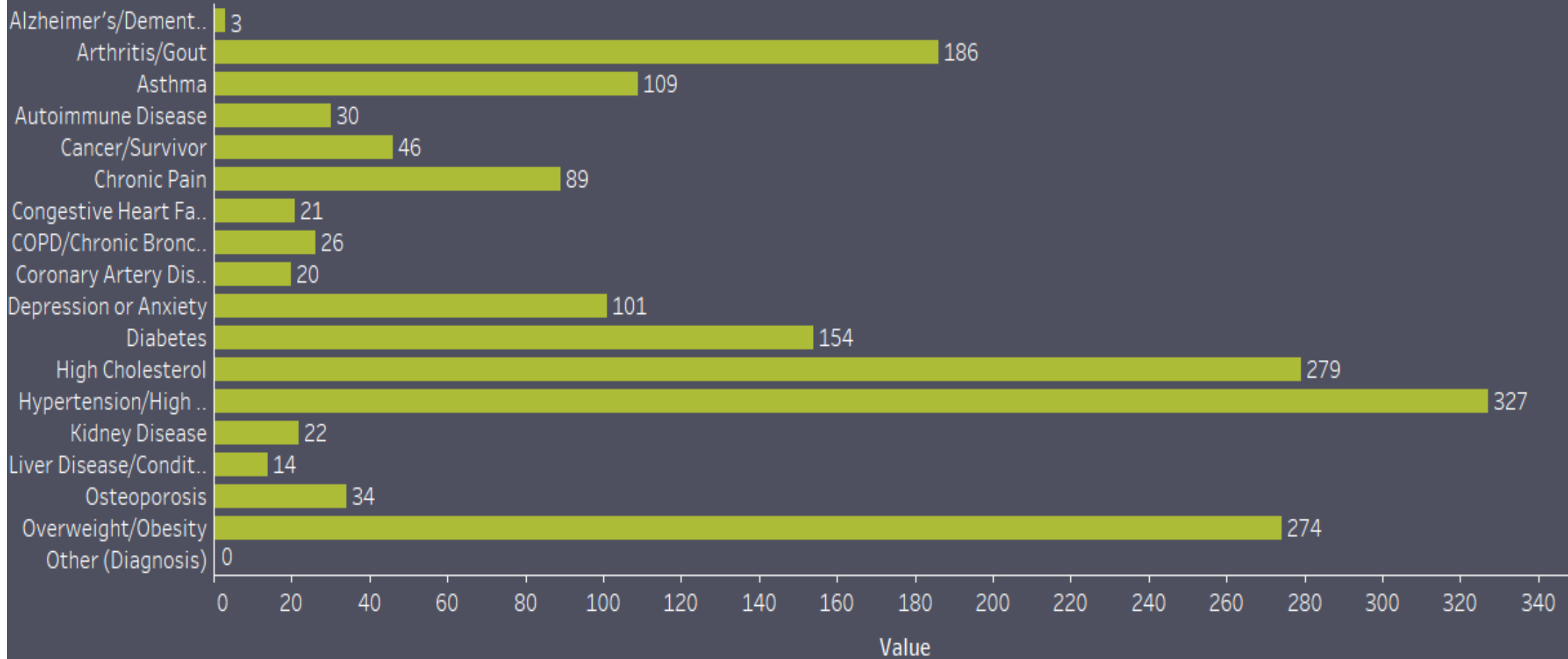
R

nicity





## Self Reported Diagnoses



Alzheimer's/Dementia, Arthritis/Gout, Asthma, Autoimmune Disease, Cancer/Survivor, Chronic Pain, Congestive Heart Failure, COPD/Chronic Bronchitis, Coronary Artery Disease, Depression or Anxiety, Diabetes, High Cholesterol, Hypertension/High Blood Pressure, Kidney Disease, Liver Disease/Condition, Osteoporosis, Overweight/Obesity and Other (Diagnosis). The marks are labeled by Alzheimer's/Dementia, Arthritis/Gout, Asthma, Autoimmune Disease, Cancer/Survivor, Chronic Pain, Congestive Heart Failure, COPD/Chronic Bronchitis, Coronary Artery Disease, Depression or Anxiety, Diabetes, High Cholesterol, Hypertension/High Blood Pressure, Kidney Disease, Liver Disease/Condition, Osteoporosis, Overweight/Obesity and Other (Diagnosis). The data is filtered on Class Name and Class Start Date Month. The Class Name filter keeps 12 of 12 members. The Class Start Date Month filter ranges from May 0445 to September 2016.

# Community Interventions

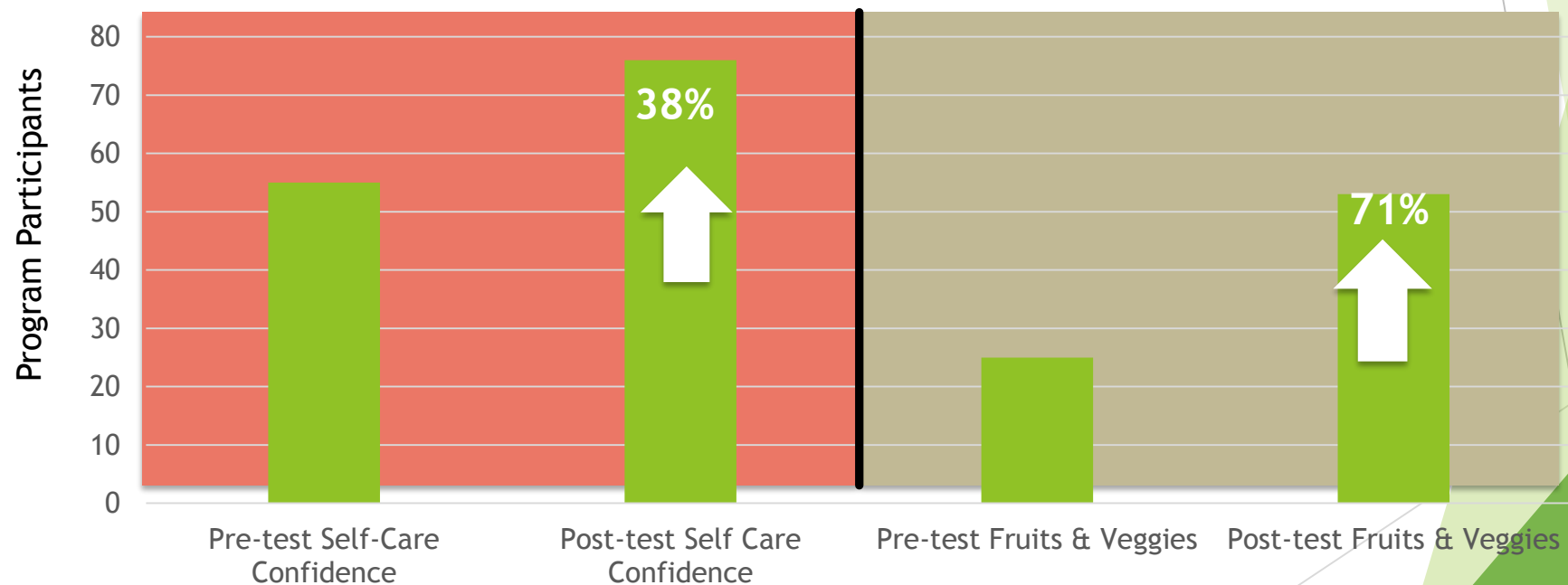
- ▶ Education on the 5 evidence-based programs offered for patient referrals
  - ▶ Diabetes Prevention Program (DPP)- CDC- Tanner GHLW has full recognition
  - ▶ Chronic disease self-management (CDMP)- Stanford University
  - ▶ Diabetes self-management (DSMP)- Stanford University- Tanner is accredited through AADE
  - ▶ FreshStart (FS)- American Cancer Society
  - ▶ Kids N Fitness ©- Los Angeles Children's Hospital \*(not part of evaluation study)

# EB Class Objectives

- ▶ 1) techniques for problems such as: frustration, fatigue, pain and isolation,
- ▶ 2) physical activity for maintaining and improving strength, flexibility, and endurance,
- ▶ 3) appropriate use of prescribed medications,
- ▶ 4) communicating effectively with family, friends, and health professionals,
- ▶ 5) nutrition,
- ▶ 6) decision making related to health,
- ▶ 7) how to evaluate new treatment options
- ▶ 8) develop coping skills to combat the psychological and physical side effects of smoking cessation
- ▶ 9) lifestyle change
- ▶ 10) weight loss

# Health Behavior Change: CDSMP & DSMP

- 261 Patients enrolled: Feb 1, 2015 through March 1, 2017
- 73.5% completion rate (192 patients)



# FRESHSTART

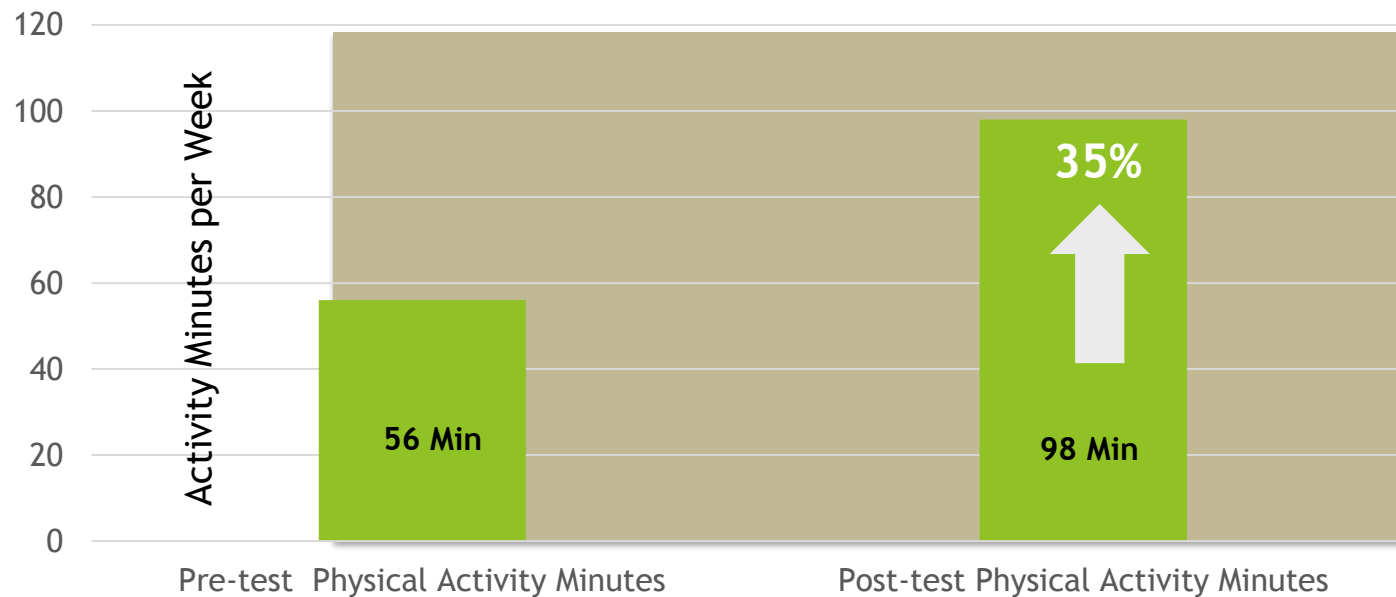


- 94 Patients enrolled: Jan 1, 2016 through Dec 31, 16
- 51% completion rate (46 patients)
  - No significant increase in coping with cravings confidence level noted for data collection period

Health Behavior Change:

# DIABETES PREVENTION PROGRAM (DPP)

- 104 Patients enrolled: Jan 1, 2016 through Dec 31, 2016
- 30% completion rate (73 patients)



COST AVOIDANCE:

# DPP - 2016

- Average Annual cost of patient with Diabetes \$ 13,700
- Amount directly attributed to Diabetes \$ **7,900**

<u>2016 Course Completion</u>		<u>Annual Medical Cost of Diabetes</u>		<u>Annual Cost Avoidance</u>
73	X	\$7,900	=	\$ 576,700

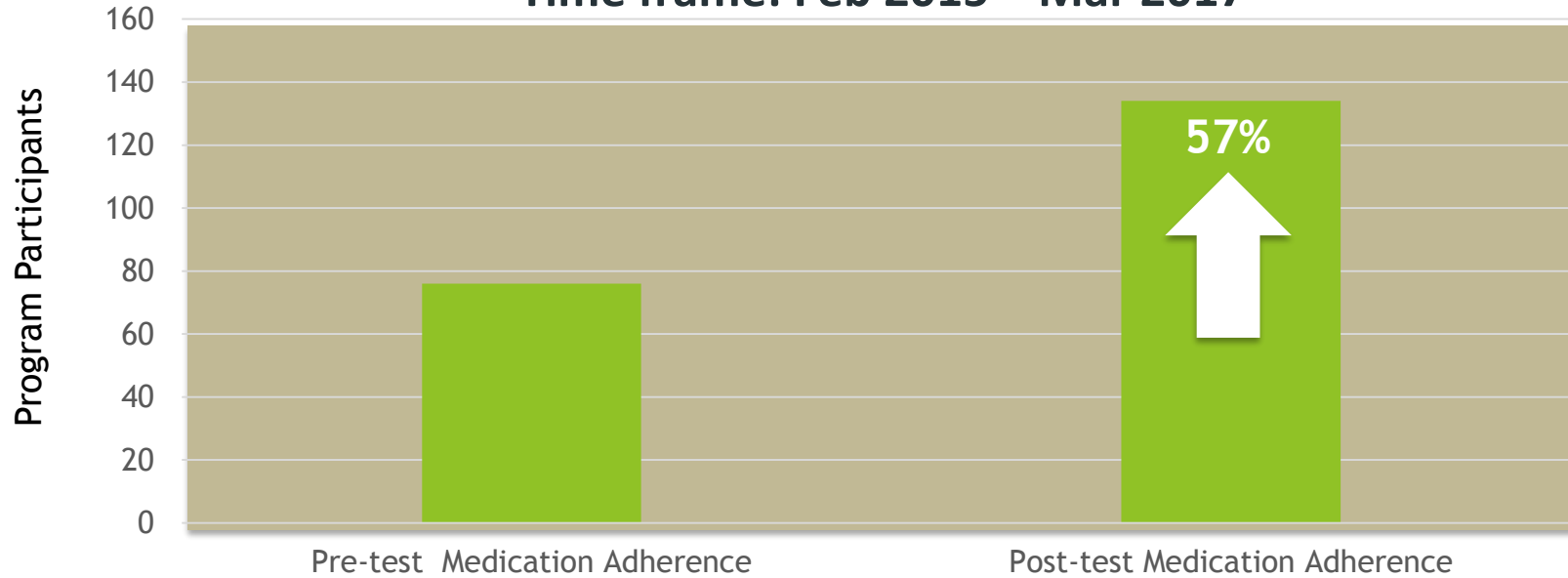
\*2011 CDC study demonstrated 34% decrease in diabetes dx for at least 10 years following class completion

vs.

18% for patients only on metformin compared to placebo.

# COST SAVINGS & REDUCED HEALTHCARE UTILIZATION: CDSMP & DSMP

Time frame: Feb 2015 – Mar 2017



Patients Completing

Program

192

X

Reduced HC

Util per pt/per yr

\$714

=

Total HC Util Cost

Savings (2 yrs)

\$ 274,176



# Tanner Community Clinical Linkages Actual Use Evaluation

- ▶ Single intervention
- ▶ AHRQ clinical-community relationship evaluation roadmap
  - ▶ Information Technology
  - ▶ Infrastructure
  - ▶ Clinical training
  - ▶ Referral process

# Evaluation Questions

- ▶ Are the components of CCL referral process implemented as proposed?
- ▶ What portion of eligible patients are referred to community resources by clinics receiving intervention versus those not receiving intervention?
- ▶ Are the patients who were referred to community programs healthier compared to patients in the control clinics?
- ▶ Study Participants:
  - ▶ Adults 21+
  - ▶ At risk of diabetes
  - ▶ Diagnosed with a chronic condition
  - ▶ 2 Intervention clinics
  - ▶ 2 Delayed-control clinics\*\*
  - ▶ Physician referral- vs. self-referral

Study clinics were all person-centered medical homes and part of Tanner Health System

# Study Details

- ▶ Estimate effects of community programs on health outcomes using reduced-form and instrumental variable methods
- ▶  $H_{ict} = B_0 + B_1\{TX\}_{ct} + B_2X_{ict} + a_{i+t} + e_{ict}$
- ▶ Two-stage model
  - ▶ Stage 1 estimates the effect of clinic being in the treatment group in given time period and probability of individual patients being referred
  - ▶ Stage 2 estimates the effect of patient referral on health outcome capturing causal effect of the referral

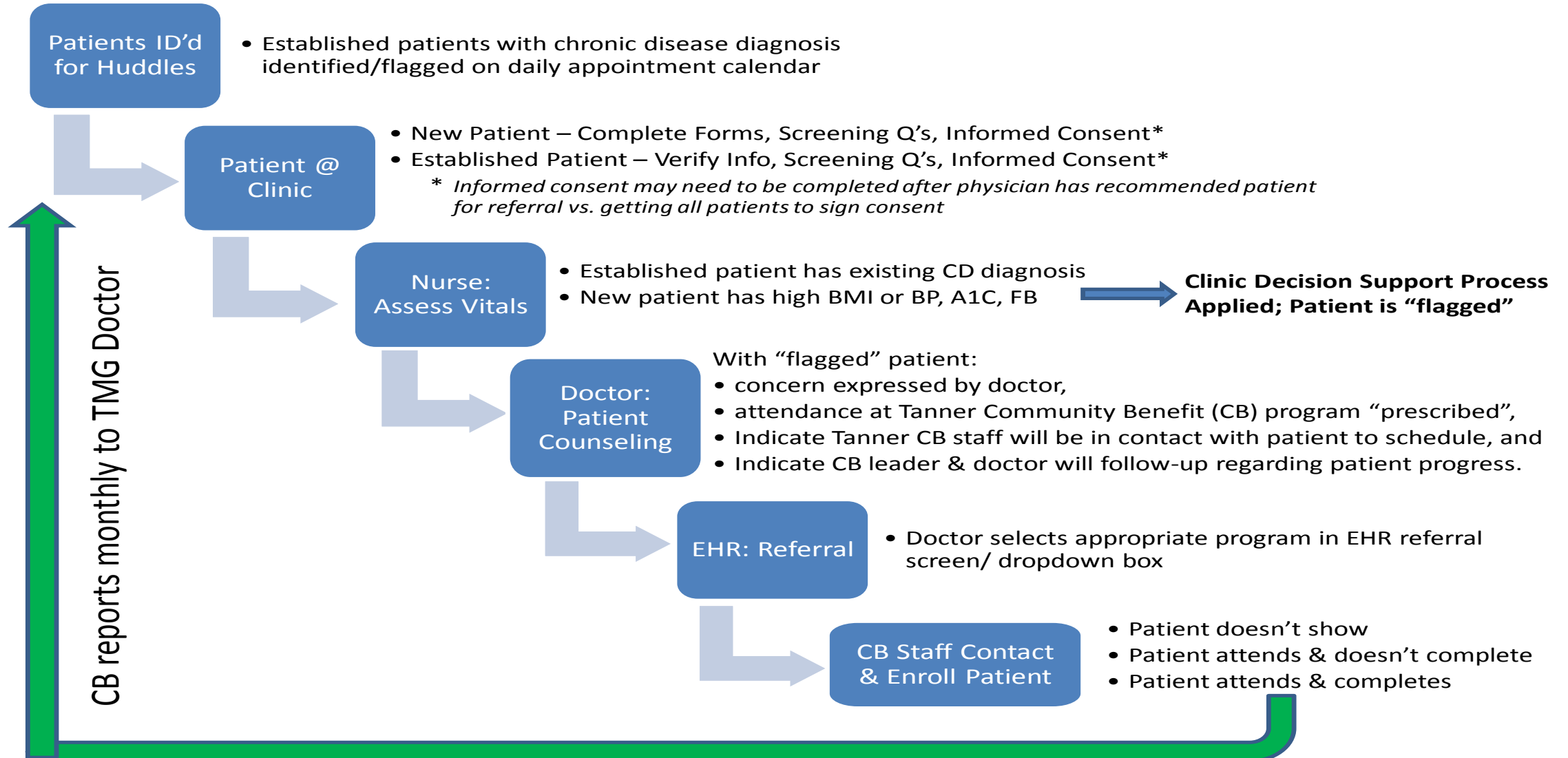
# Clinicians

- ▶ Consistent training of physicians, nurse managers, clinical staff and office managers in CCL model
- ▶ Use of 5 A's in community-based settings
  - ▶ **Ask** - Identify and assess tobacco use for every patient at every visit. *(This can be done in a few minutes.)*
  - ▶ **Advise** - In a clear, direct, and personalized manner, urge every tobacco user to quit.
  - ▶ **Assess** - Is the tobacco user ready to make a quit attempt at this time?
  - ▶ **Assist** - For the patient willing to make a quit attempt, use education programming and pharmacotherapy to help him or her quit.
  - ▶ **Arrange** - Schedule follow-up contact, in person or by telephone, preferably within the first week after the quit date.



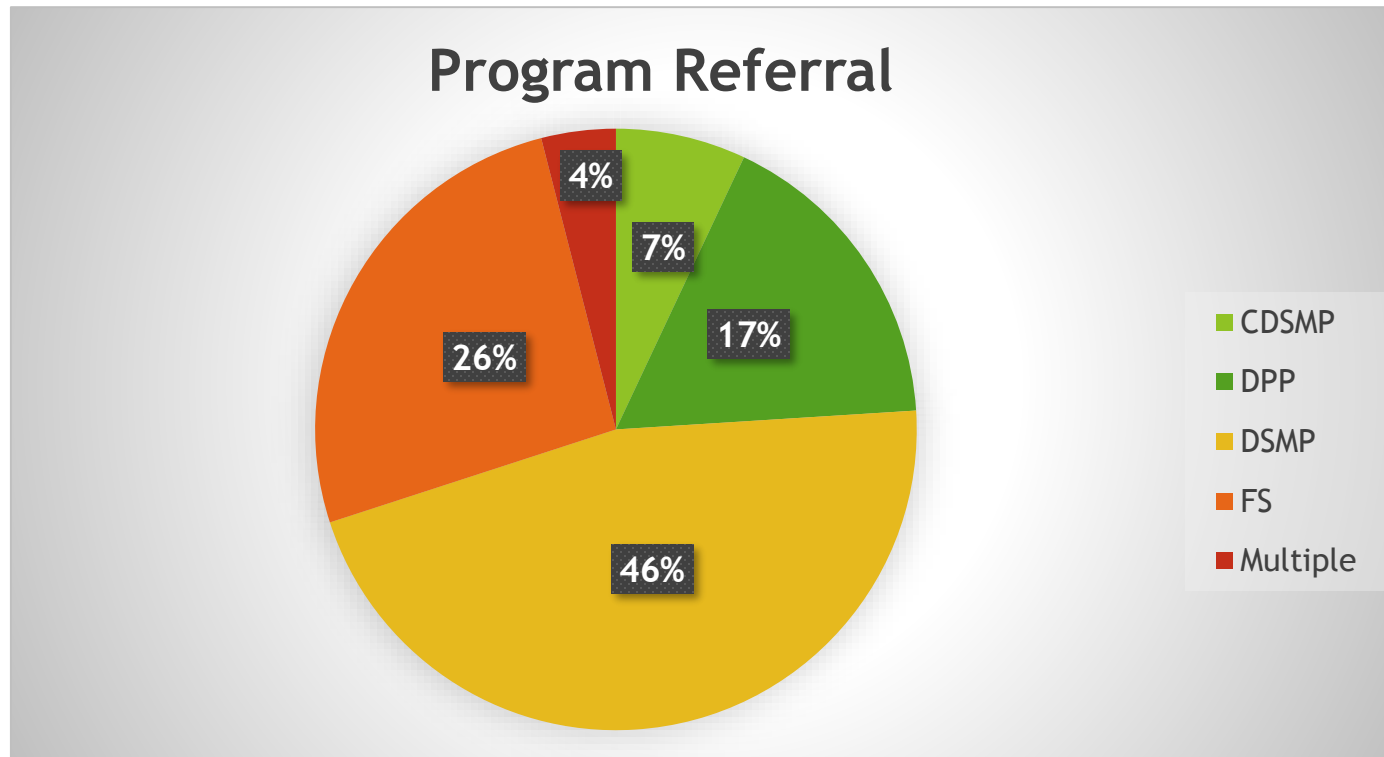
Readiness  
Factor

# Tanner Community Clinical Linkages (CCL) Project: Patient Flow Chart to Enhance Chronic Disease (CD) Management



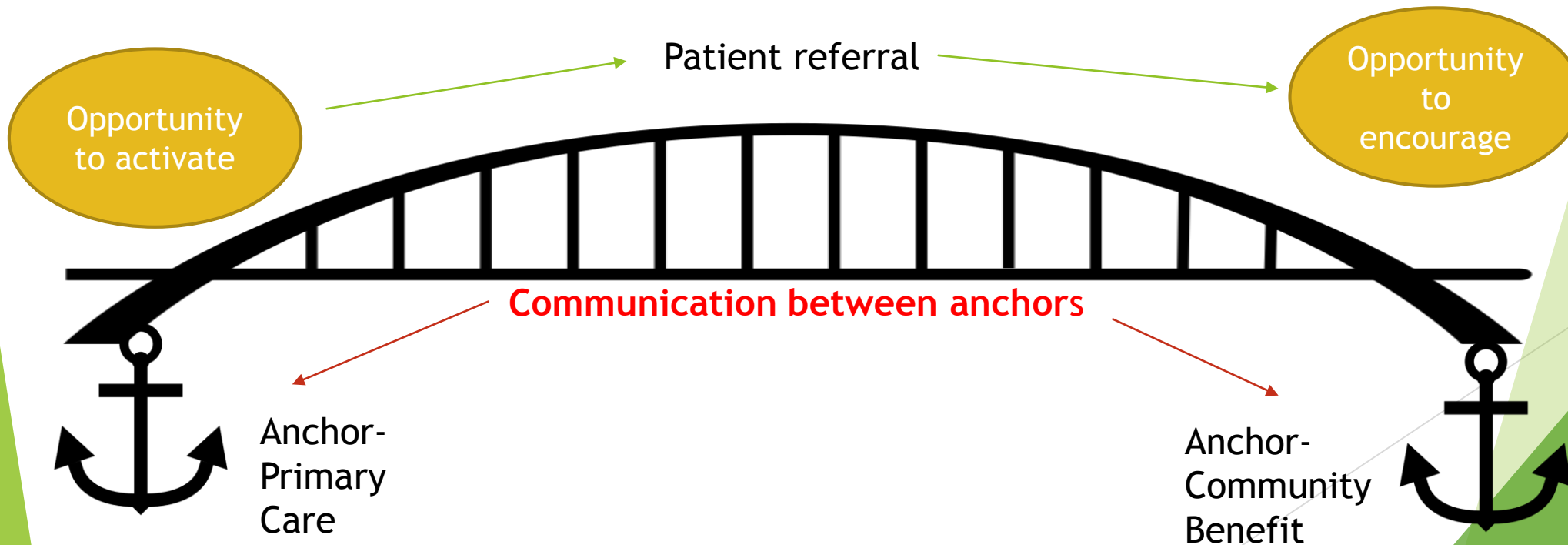
# Referral Data

- ▶ Physicians are referring patients predominantly to Diabetes self-management program and FreshStart



# Connecting Strategies

- ▶ Point of access
- ▶ Identification of community resources
- ▶ Evidence-based programming
- ▶ Educate and patient engagement



# Evaluation Findings:

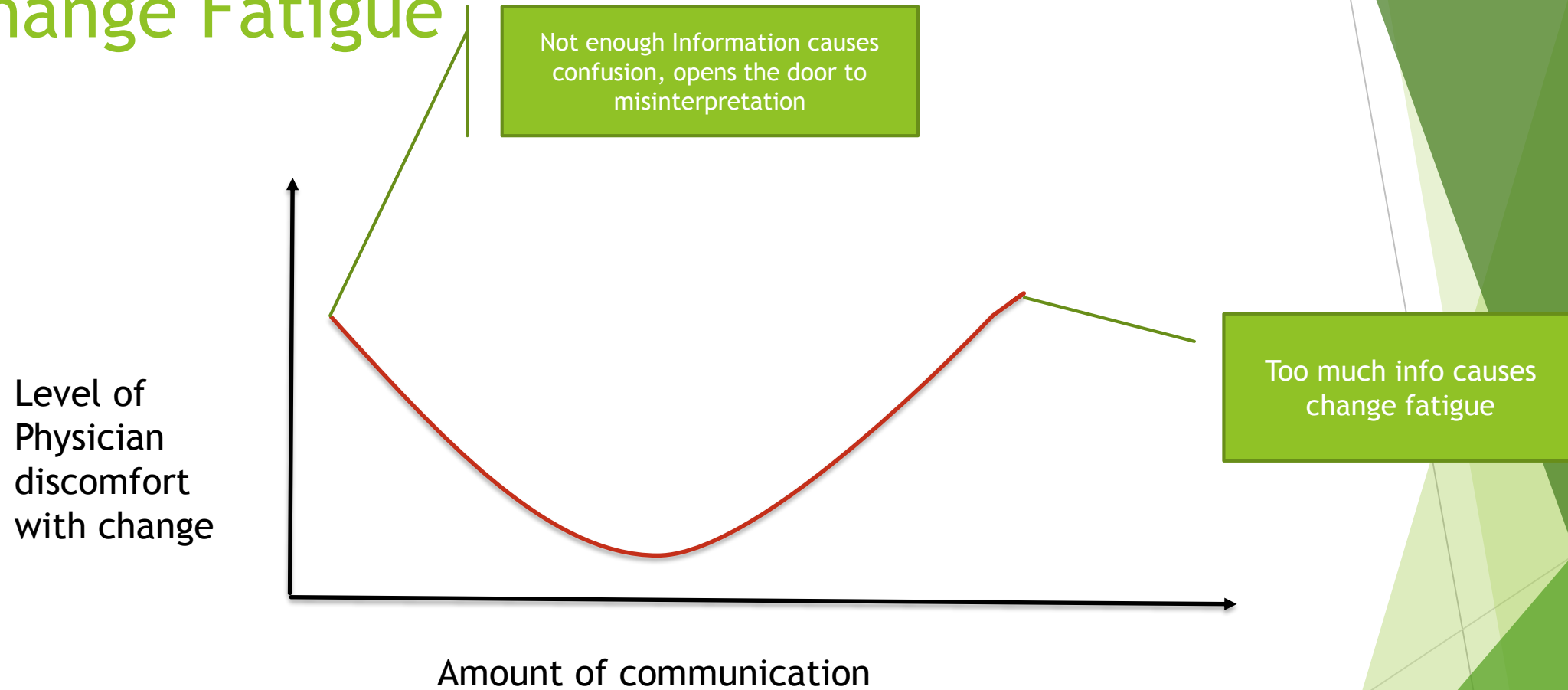
- ▶ Older adults (age 58+) tend to be more confident they have the tools to take care of and make decisions about their health.
- ▶ Females are less confident than male respondents about tasks and activities they need to do to manage their health condition and reduce their need to see a doctor
- ▶ Chronic condition pool of patients referred: hypertension, obesity, high cholesterol, pre-diabetes/diabetes, arthritis/gout, depression/anxiety
- ▶ Of evaluation cohort, 45.9% were referred by their physician directly and 53.9% were self-referrals
- ▶ Female physicians were more than twice as likely to refer patients to evidence-based programs than their male counterparts.



# Barriers Noted:

- ▶ Medical model stigma toward community health programs
- ▶ Physician participation in key informant interviews was minimal
- ▶ Engagement varied among physicians and clinics
- ▶ Nurses were the gatekeepers to referrals and referral reminders for physicians
- ▶ Lack of ease of access to A1C and other clinical indicator data (chart reviews)
- ▶ 24 month process to create a referral order in the EHR
- ▶ Patients not wanting to enroll in classes upon contact by Community Benefit dept. of Tanner
- ▶ Rural area, could not offer classes in all areas on dates/ times requested

# Another Barrier: Communication and Change Fatigue



# Success Story Video

- ▶ [https://www.dropbox.com/s/loih6sk6je9dz0k/GHLW\\_Strickland2.2.mov?dl=0](https://www.dropbox.com/s/loih6sk6je9dz0k/GHLW_Strickland2.2.mov?dl=0)

Pt. who became an instructor for chronic disease self-management. Learned how to talk with physician and insisted on a colonoscopy due to symptoms in spite of physician recommendation. As a result found a polyp that would have possibly turned cancerous by 2019 when the pt. was next scheduled for procedure.

Pt. and wife attend Diabetes Self-management class. As a result changed lifestyle cutting out soda habit, becoming more physically active and successfully reduced his blood sugar levels.

Pt. lost weight with other DPP participant before taking the class ate fast food almost everyday and no physical activity. Through the class lost 32 lbs. and now eats healthy meals and walks.

Patient with arthritis Tanner quit smoking, participated in GHLW weight loss challenge and lost 56 lbs total over 2 years of challenges, took DPP and began walking on the trail joined Move it Mondays through GHLW and is now member of the West GA Track Club, runs 5K and 10K races and just completed a half marathon.

Pt struggling with Type II diabetes for 30 years learns through diabetes self-management class to change eating habits and lose weight. Now has blood sugar under control and has been able to decrease medications per his physician.



# Advancing Health

**WITH COMMUNITY  
BEYOND MEASURE.**