Partnering with 2-1-1 Helplines for Cancer Prevention Equity

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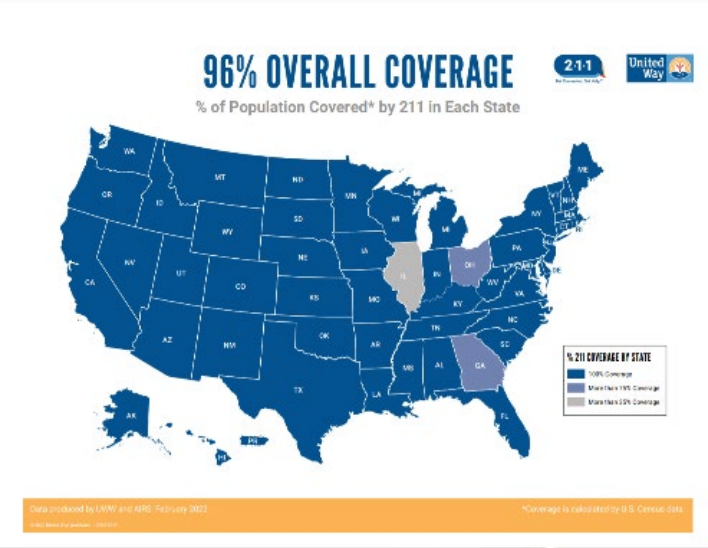
Center for Health Promotion AND PREVENTION RESEARCH

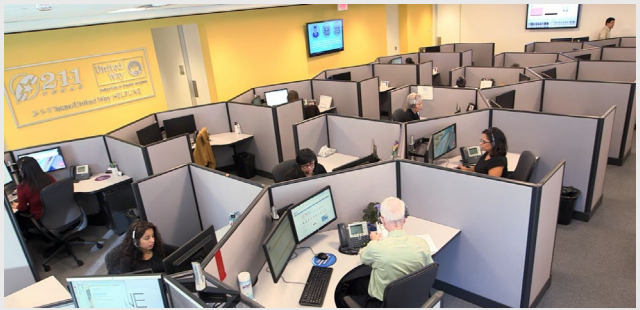
PRC PREVENTION RESEARCH CENTERS

UTHealth
The University of Texas Health Science Center at Houston

2-1-1 Helpline

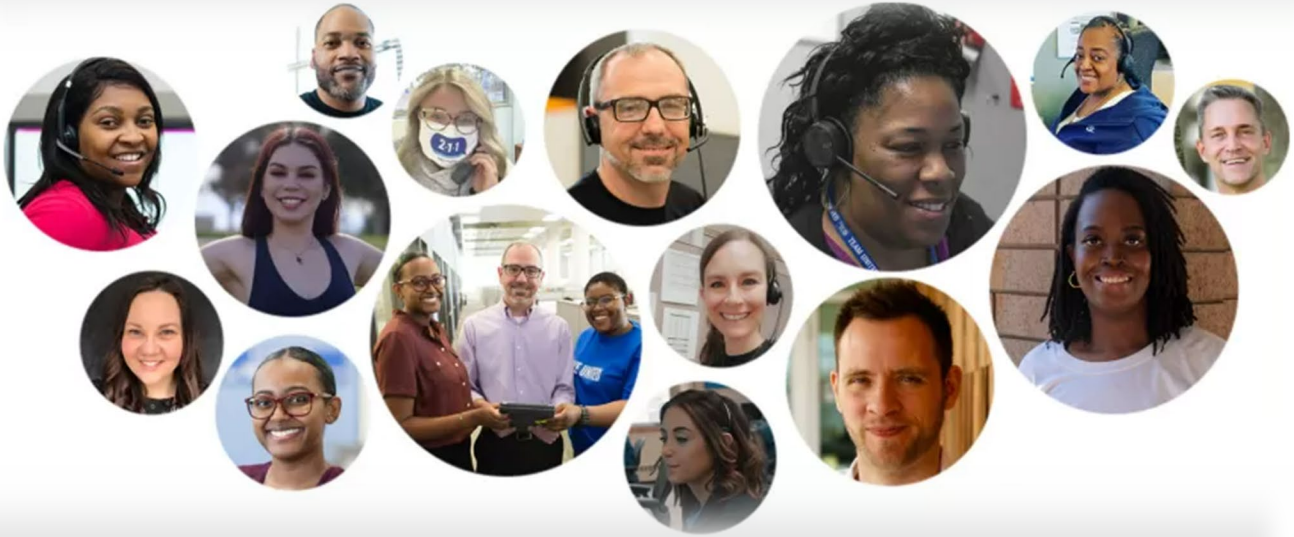
- Nationally designated 3-digit telephone exchange connecting callers to health and social services within their community.
- Operated by state and local systems, often in partnership with local public or private agencies.
- There are 2-1-1 systems in all 50 states, Washington, DC and Puerto Rico, covering over 96% of the U.S. population.





https://youtu.be/mSs_5Ohg-hg

People talking to people



"I was treated with such dignity. I never got the feeling anyone was looking down their nose at me. They were wonderful. I wish everyone knew about 211."

Michigan 211 Client

2-1-1 Helps with…

Basic Needs

Criminal Justice & Legal Services

Health Care

Mental Health Care & Counseling

Senior Services

Veteran Services

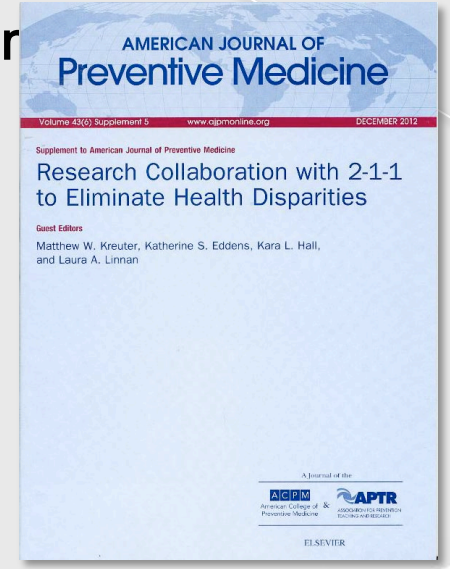
Disaster Resources

Top Needs in 2021

- Housing insecurity and homelessness
- Healthcare information and resources, substance use treatment/ mental health services
- Reduce hunger and food insecurity
- Utilities assistance
- COVID-19 support/info

2-1-1 Research Consortium Special Journal Supplemer

American Journal of Preventive Medicine



- Funded by the National Cancer Institute
- Co-editors include Kara Hall (NCI), Matt Kreuter & Kate Eddens
- Full issue dedicated to research with 2-1-1
- Practice-based research

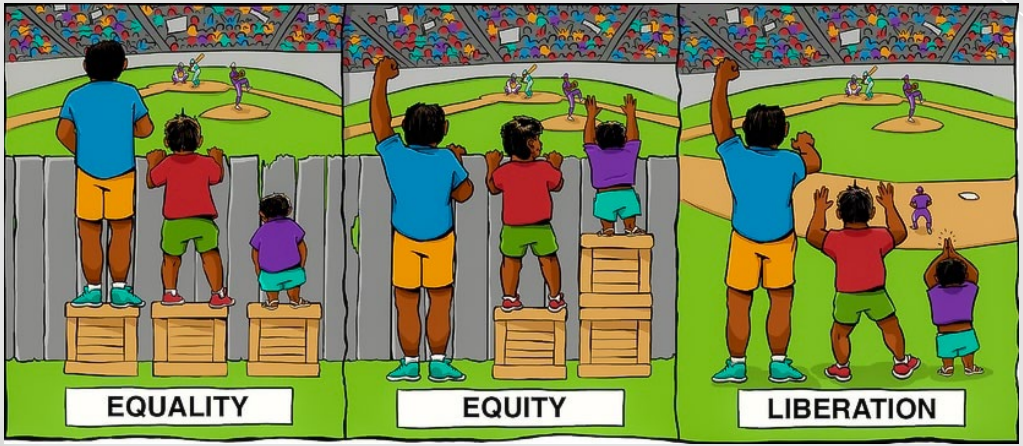
Leveraging 2-1-1 to Reduce Health Disparities

(1) **Utilize theoretical and conceptual frameworks to place 2-1-1 in the larger public health context and show linkages with other organizations.**

(2) **Establish common measures and methods to enable data integration.**

(3) **Identify unmet needs of individuals and communities served by 2-1-1 systems.**

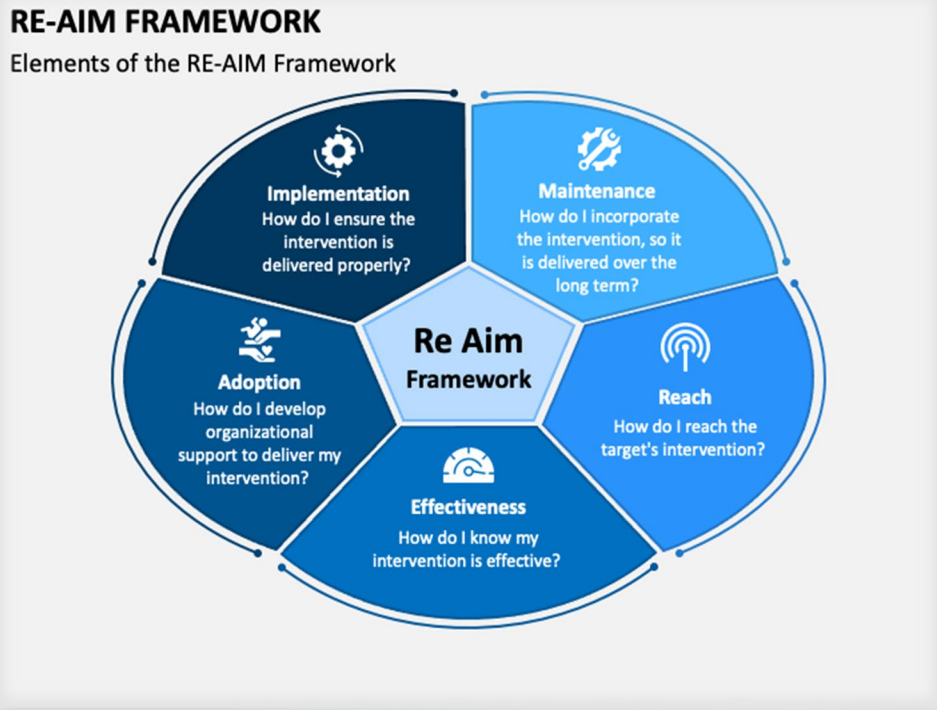
Increasing Equity by Removing Barriers to Cancer Prevention



“Of all the forms of inequality, injustice in health care is the most shocking and inhumane.” Martin Luther King, Jr.; 1966

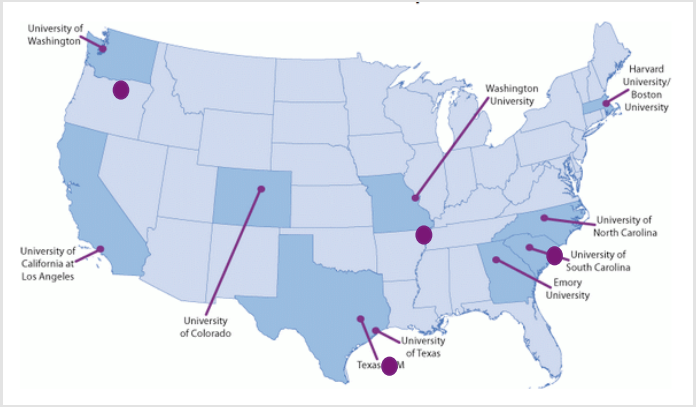
Maximizing Cancer Prevention Impact: *Effectiveness x Reach*

- Reach large numbers of people (especially those who can most benefit) with Effective interventions
- Be widely adopted
- Be consistently implemented with moderate levels of training and expertise
- Produce maintained effects at reasonable cost



Gaglio B, Glasgow RE. In: Brownson R, Colditz G, Proctor E, eds. Dissemination and implementation research in health: Translating science to practice. New York: Oxford University Press, 2012:327-56

Demonstrating Feasibility, Reach, and Impact for Cancer Prevention



CPCRN
Cancer Prevention and Control Research Network

Cancer Control Need	*2-1-1 Respondents (n)*	*2-1-1*, %*	*BRFSS US %*	*p*
No health insurance	All (n=1408)	37.2	15.2	<.0001
Current cigarette smoker	All (n=1408)	33.2	18.4	<.0001
Has smoke-free policy	All (n=1408)	69.4	76.4	<.0001
Ever had a colonoscopy	Men & women, 50+ (n=337	50.2	61.4	<.0001

The Cancer Prevention and Control Research Network is a national network of academic, public health, and community partners who work together to reduce the burden of cancer, especially among those disproportionately affected.

Purnell, Kreuter, Eddens, Ribsl, Hannon, Fernandez, Jobe, Gemmel, Morris & Fagin. Cancer control needs of *2-1-1 callers in Missouri, North Carolina, Texas and Washington.* Journal of Health Care for the Poor and Underserved

Cancer Prevention Research Institute of Texas (CPRIT)-funded Prevention Program

Participating Call Centers:

- Houston (CPRIT funded)
- Weslaco (CPRIT funded)
- El Paso (NCI-CNP funded)

Gulf Coast 2-1-1
~60,000 a month

Tip of Texas 2-1-1
~ 5,000 a month

Rio Grande 2-1-1
~ 7,200 calls a month

2-1-1 Telephone Navigation Program

- Patient navigation can increase the uptake of cancer screenings, vaccination, and smoking cessation behaviors.[1-3]
- The 2-1-1 Texas Telephone Helpline and UTSPH jointly developed and implemented a telephone-based cancer prevention navigation program that connected low-income and underserved callers with health and social services.
- Our study evaluated the program's effect on increasing use of cancer screening and prevention services in a sample of 2-1-1 callers.

Person calls 2-1-1 for help with utilities, medical, food, shelter, or other needs; once reason for call is addressed caller is asked to participate in a survey.

After caller provides consent, specialist administers risk assessment survey to assess cancer control needs.

If caller is eligible for cancer services he or she is placed into either a navigation + referral or referral only intervention.

Navigation + referral: Participant assigned a phone navigator who assists him/her in getting needed cancer control service(s).

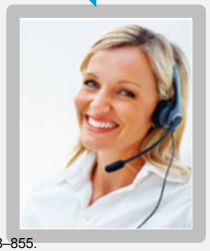
Referral only: Participant given referral(s) to clinics to obtain control services on his/her own.

Telephone follow-ups for all participants:

- Did participants contact referrals?
- Did they schedule appointments?
- **Did they obtain needed services?***

1st follow-up survey

2nd follow-up survey

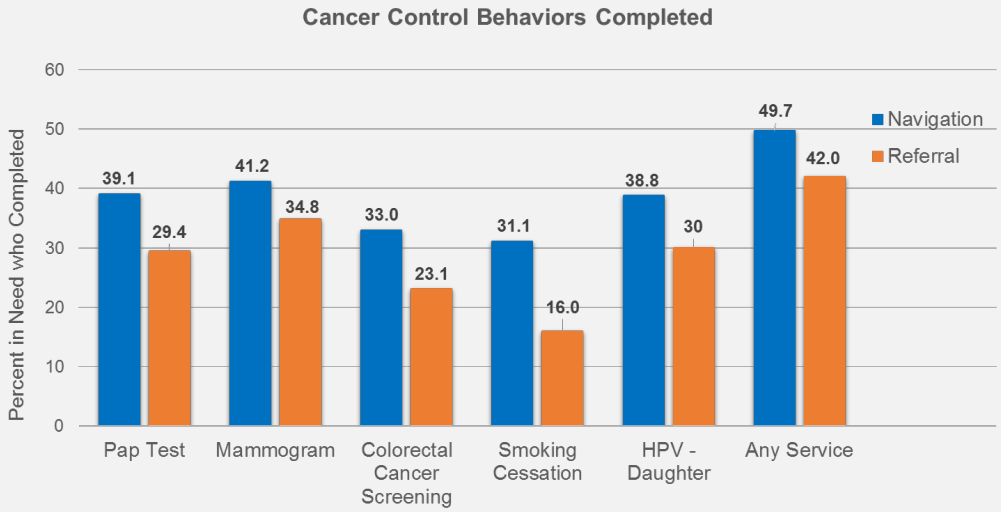


1. Dohan D,Schrag D. Using navigators to improve care of underserved patients: current practices and approaches. *Cancer*.2005; **104**: 848–855.
2. Battaglia TA,Roloff K,Posner MA,Freund KM. Improving follow-up to abnormal breast cancer screening in an urban population. A patient navigation intervention. *Cancer*. 2007; **109**(2 suppl):359–367.
3. Ell K,Vourlekis B,Lee PJ,Xie B. Patient navigation and case management following an abnormal mammogram: a randomized clinical trial. *Prev Med*. 2007;**44**: 26–33.

Findings

- We evaluated the effectiveness of the program among a sample of 1661 callers.

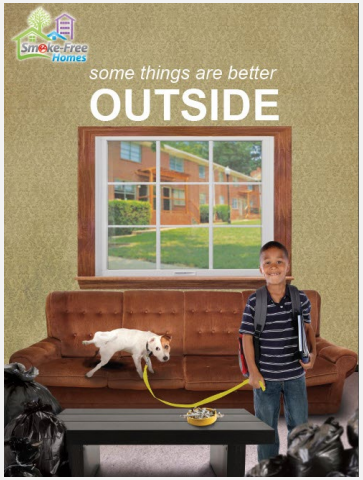
Table 2: Cancer control needs among callers	
Service asked about	In need of service
Breast – Mammogram (829)	594 (71.7%)
Cervical – Pap test (1556)	984 (63.2%)
Colorectal – Colonoscopy, FOBT (490)	316 (64.5%)
HPV vaccination – daughter (524)	327 (62.4%)
Smoking cessation (1661)	533 (32.1%)



- Participants in the CCN study group showed significantly greater increases in completion any service ($p<.05$) and for Pap test screening compared to the referral group. They also showed positive trends for the remaining services.
- Evaluation results demonstrate program feasibility and effectiveness in increasing cancer control behaviors among 2-1-1 callers.

Overview of Smoke-Free Homes Research

- Efficacy trial of smoke-free homes intervention in partnership with United Way of Greater Atlanta 2-1-1
- Effectiveness trial with North Carolina 2-1-1
- Replication trial with 2-1-1 Texas/United Way Helpline Gulf Coast (Houston area)
- National Dissemination to 2-1-1s through grants program
- Adaptation for American Indian/Alaska Native families & Translation into Spanish



Grant Number U01CA154282 from the National Cancer Institute.

Disseminating Results from Original Trial with FQHCs

AJPH RESEARCH

Impact of Improving Home Environments on Energy Intake and Physical Activity: A Randomized Controlled Trial

Michelle C. Kegler, DrPH, MPH, Regine Haardörfer, PhD, Iris C. Alcantara, MPH, Julie A. Gazmararian, PhD, MPH, J. K. Veluswamy, BA, Tarccara L. Hodge, Ann R. Addison, PhD, and James A. Hotz, MD

HHHF 2-1-1 Adaptation

Study Aims:

1) Adapt an effective home food environment intervention for 2-1-1
2) Conduct a pilot study to test the feasibility and among United Way of Greater Atlanta 2-1-1 clients

Hybrid Effectiveness-Implementation Trial

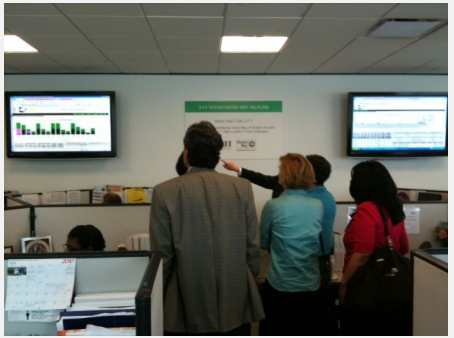
- RCT with follow-up at one month and six months post-intervention
- **504** Callers to United Way of Greater Atlanta 2-1-1, United Way of Central Georgia 2-1-1, United Way of Chattahoochee Valley 2-1-1 and United Way of Southwest Georgia 2-1-1
- Cost effectiveness of the intervention

Steering Committee: United Way of Greater Atlanta, Wholesome Wave Georgia, Dekalb County BOH, Atlanta Food Bank, Fulton County Health & Wellness, Georgia SnapEd, and Georgia Dept. of Public Health

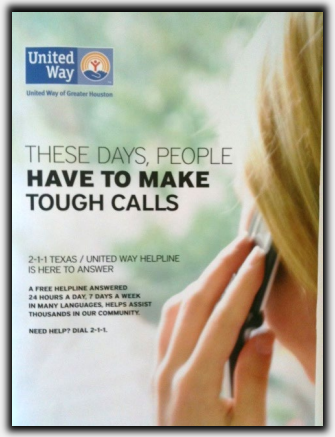
Healthy Homes
Healthy Families

Implementation Challenges & Lessons Learned

- Scientific research administration in a service-oriented environment
- 2-1-1 Competing responsibilities
- Varied implementation practices
- Quality control
- Support & Continuity



- Tailor strategies based on organizational culture
- Research-based vs. Service-oriented
- Balance each party's interests
- Change in Site personnel
- Need to "Over-train"



Developing Strategies to Improve Adoption, Implementation And Maintenance

- Component 1: Training in Cancer Control
  - Standard 2-1-1 training (AIRS)
  - Project-specific training on cancer prevention and control including motivational interviewing and problem solving (MAPS)

- Component 2: Tracking and Quality Monitoring (Audit and Feedback) Systems
  - 2-1-1 computer referral software via ReferNet/CommunityOS
  - Online risk assessment tool via Qualtrics
  - Online project management database
  - Quality assurance and monitoring

Health Promotion in Health Care Systems

Using Implementation Mapping to Develop Implementation Strategies for the Delivery of a Cancer Prevention and Control Phone Navigation Program: A Collaboration With 2-1-1

Lynn N. Ibekwe, MPH[1]
Timothy J. Walker, PhD[1]
Ebun Ebunlomo, PhD, MPH, MCHES[2]
Katharine Ball Ricks, PhD, MPH[3]
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Lara S. Savas, PhD[1]
Maria E. Fernandez, PhD[1]

Ibekwe LN, Walker TJ, Ebunlomo E., Ricks KB, Prasad S, Savas LS, Fernandez ME. Using Implementation Mapping to Develop Implementation Strategies for the Delivery of a Cancer Prevention and Control Phone Navigation Program: A Collaboration with 2-1-1. Health Promotion Practice. Oct 2020;23(1):86–97. doi:10.1177/1524839920957979. PMID: 33034213; PMCID: PMC8032810.

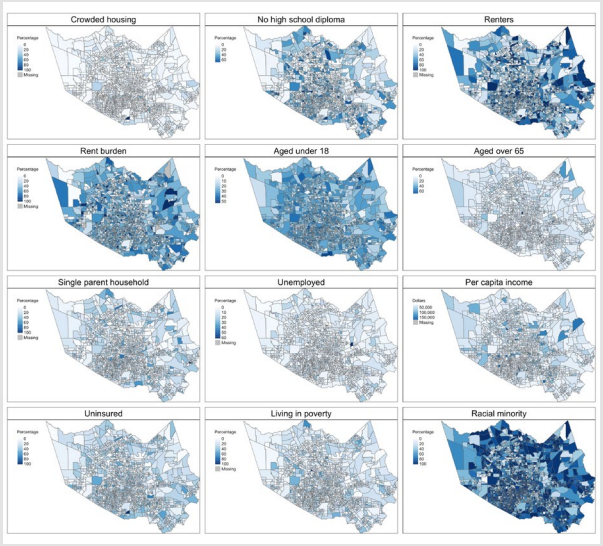
Innovative Approaches Leveraging a 2-1-1 Partnership: *Lessons from COVID-19*

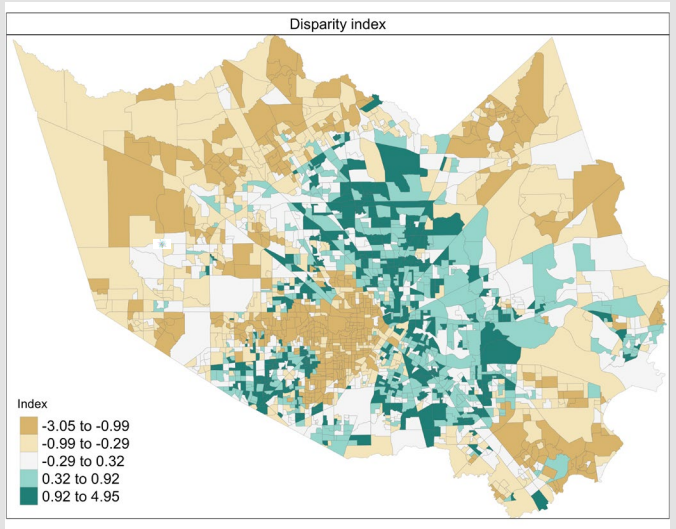
Geospatial modeling to identify small geographic areas with inequities

FIRST OPINION

Applying a pandemic-like response to cancer prevention

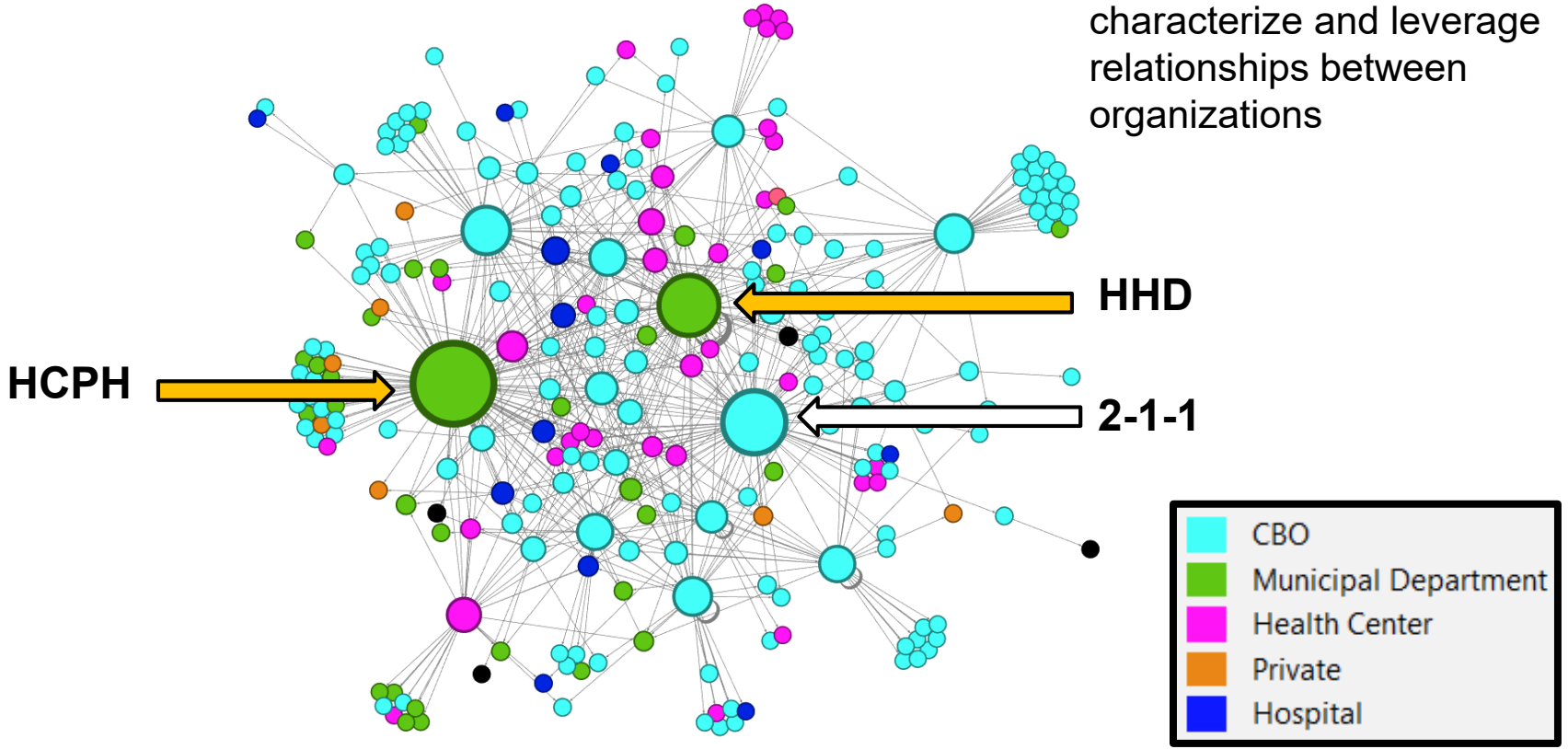
By Philip E. Castle Aug. 9, 2021





2-1-1 - a Central and Connected Organization

Social Network Analysis to characterize and leverage relationships between organizations



Potential Cancer Prevention Impact

2-1-1 Systems take an estimated 19 million calls annually

With the potential of reaching over 6 million million smokers,

3.1 million women in need of Pap or HPV tests,

Over 8 million people with Healthy Eating/ Obesity treatment resources

2.3 million women needing the HPV vaccination,

2 million in need of colonoscopies

Thank You!

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