



Using Social Network Analysis to Evaluate Your Hep B Coalition

September 21, 2017

Phone/Audio Option

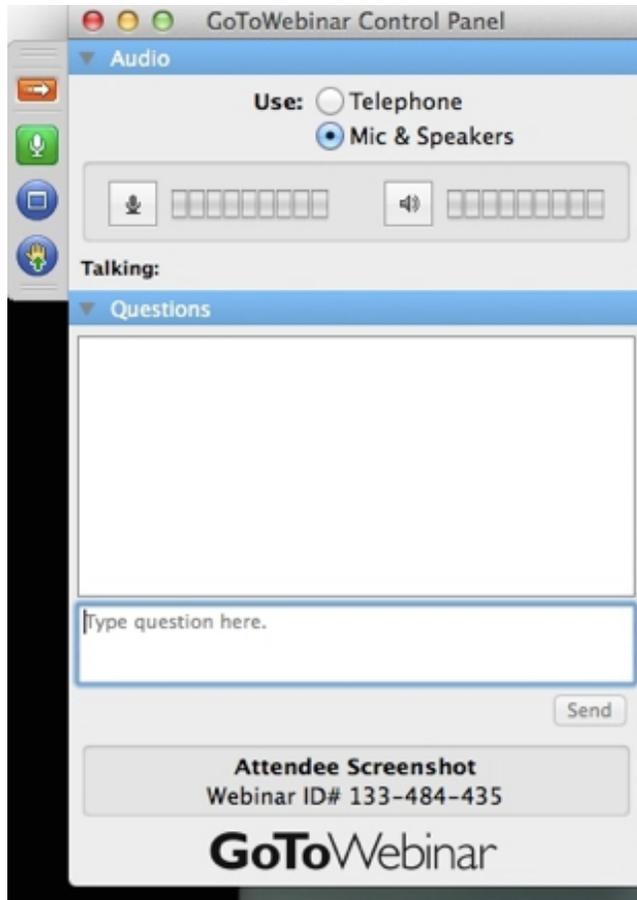


Call-In #: (213) 929-4212

Attendee Access Code: 467-378-021

All attendees are muted.

Questions?



Questions? Submit questions in the chat box at anytime throughout the webinar.

Hep B United: A National Coalition



hepbunited.org



Dedicated to reducing the health disparities associated with hepatitis B by increasing awareness, screening, vaccination, and linkage to care for high-risk communities across the United States.

- 30+ local coalitions & national organizations that focus on the Asian American & Pacific Islander communities.
- Collectively screen over 20,000 people each year
- Voices for local and national advocacy
- Co-brand the multi-lingual Know Hepatitis B campaign with CDC

Expert Speaker



Kanako Kashima, MPH

Research Program Associate

Comprehensive Cancer Control

Institute for Patient-Centered Initiatives and

Health Equity at GW Cancer Center

The George Washington University

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UNIVERSITY

WASHINGTON, DC

Using Social Network Analysis to Measure Coalition Collaboration: A Case of Community Roundtables

Kanako Kashima

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The George Washington University Cancer Center

September 21, 2017



Cancer Center

Funding Disclaimer

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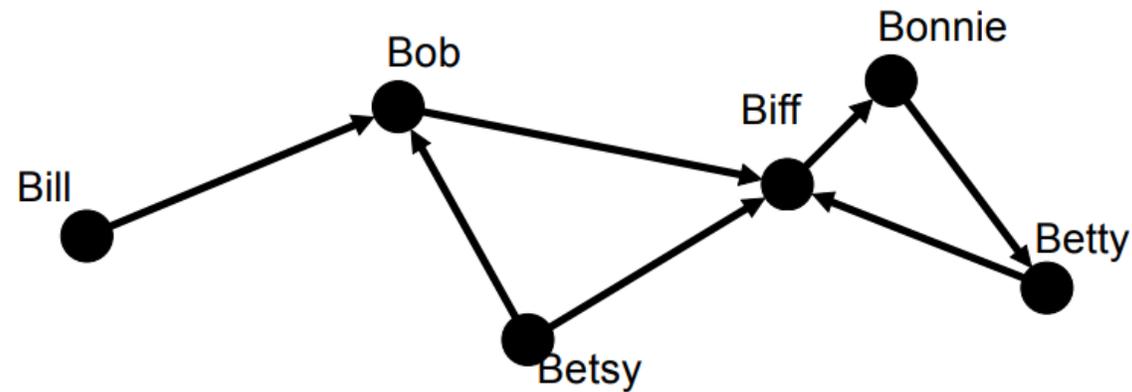
Learning Objectives

- Define social network analysis (SNA)
- Describe ways to use SNA to monitor the development of relationships and improve program delivery



What is a network?

A set of nodes (individuals/organizations) with a set of ties (social relation) that link them



De Jordy, 2015.

Dr. Steve Borgatti



Photo courtesy of steveborgatti.com

Paul Chellgren Chair and Professor of Management
University of Kentucky

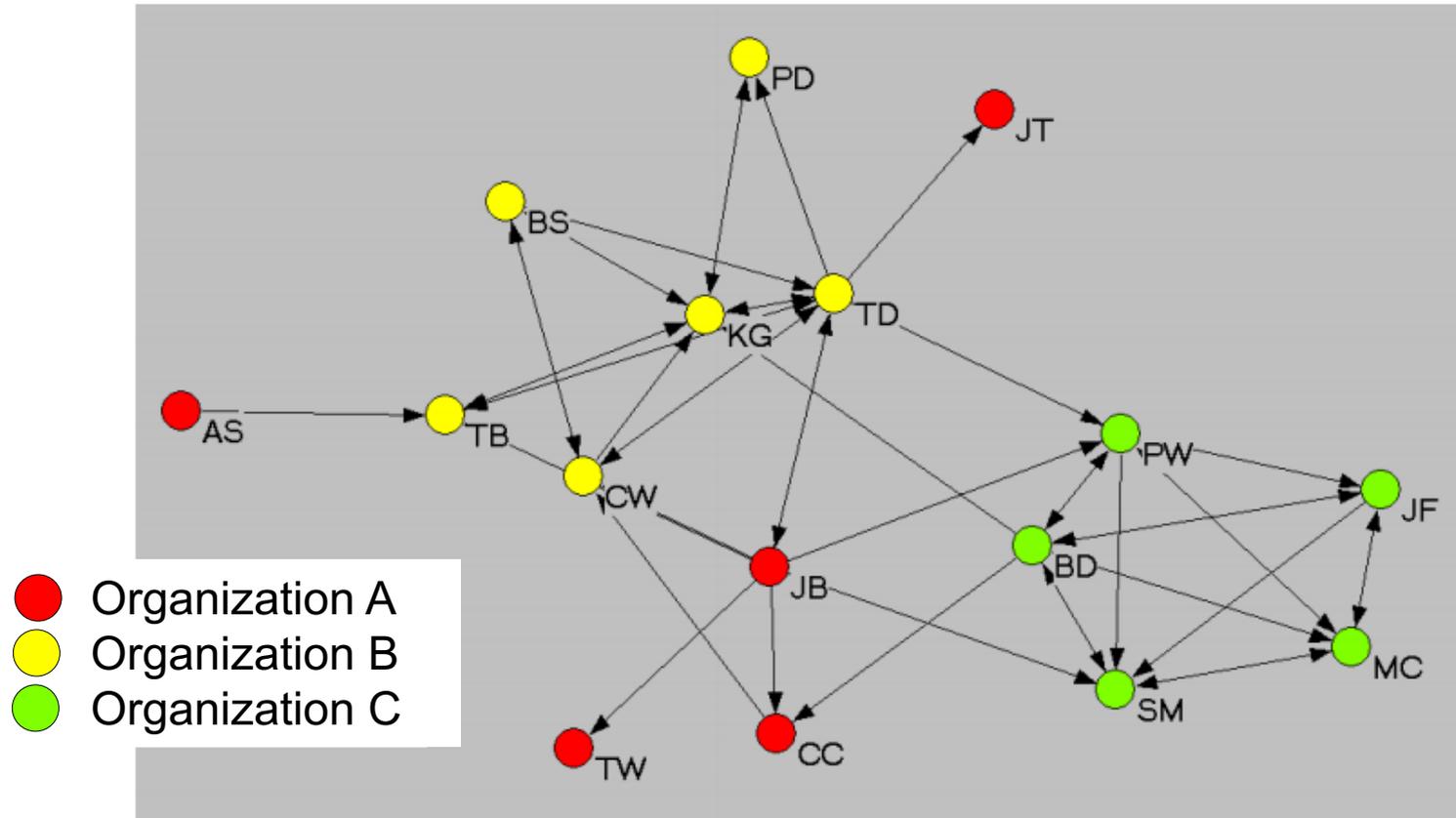
https://www.youtube.com/watch?time_continue=43&v=kAN-E3u47ys

Basic assumptions of SNA

- People influence each other
 - Kinship: mother of; husband of
 - Roles: boss of; teacher of
 - Perceptual: knows; aware of
 - Affective: likes; trusts
 - Interactions: gives advice to; receives funding from; works with
 - Affiliations: belongs to the same organizations as; geographically near
- Ideas and materials flow through relationships
- Structure of relationships have consequences

Borgatti, 2002; De Jordy, 2015.

Communication flow in coalition network



Who are communication facilitators in the coalition network?

Who should you interview to assess areas for improvement in coalition communication?

Borgatti, 2002.

GW Cancer Center Cooperative Agreement with CDC



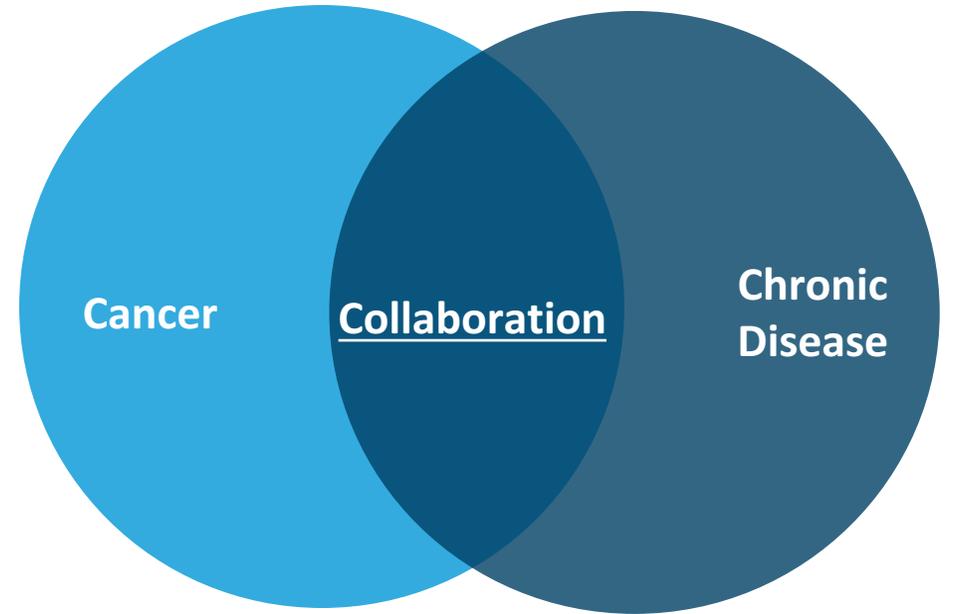
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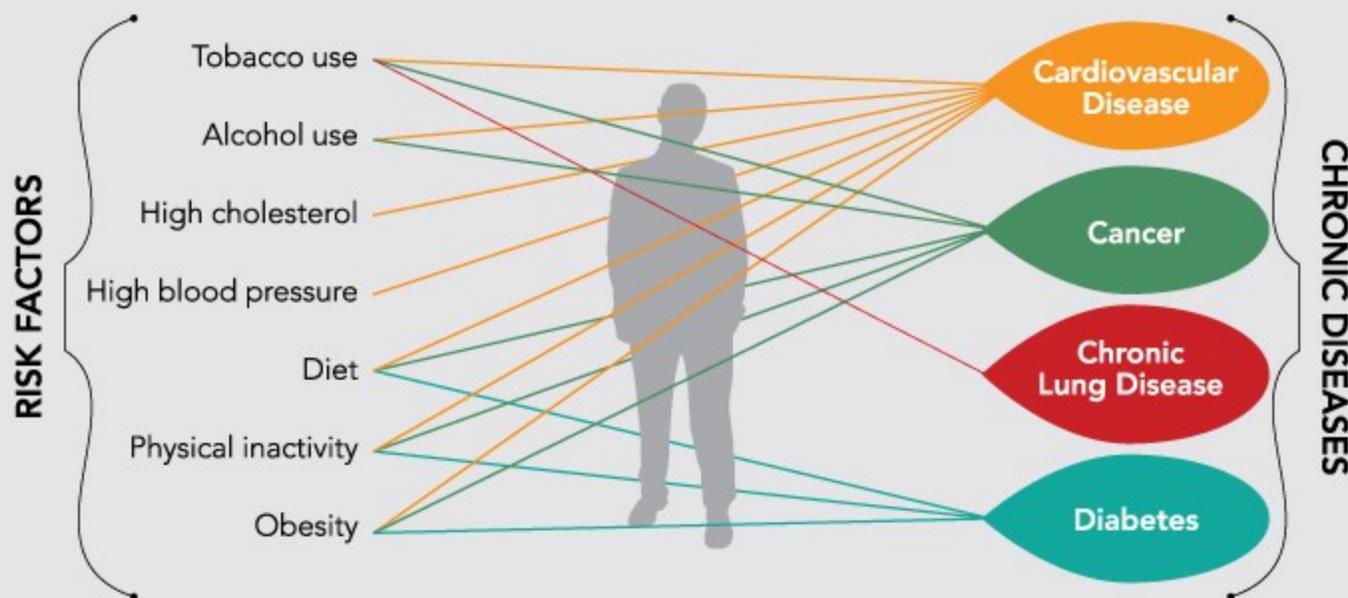
- Title: “Enhancing Implementation of Comprehensive Cancer Control Activities”
- Timeframe: 5 years (2013-2018)
- Purpose: Provide technical assistance and training opportunities to support National Comprehensive Cancer Control Program grantees and their partners
- Website: www.CancerControlTAP.org

Community Roundtables Goal

Convene key cancer and chronic disease stakeholders and strengthen relationships at the community, state or regional level to promote increased integration efforts



The Whole Person: The Web of Chronic Disease¹



Among Alaska Adults with **Cardiovascular Disease**²

- 23% smoke
- 35% are inactive
- 42% are obese
- 25% have diabetes

Among Alaska Adults with **Cancer**²

- 20% smoke
- 30% are inactive
- 29% are obese
- 16% have a history of cardiovascular disease

Among Alaska Adults with **Diabetes**²

- 19% smoke
- 30% are inactive
- 59% are obese
- 19% have a history of cardiovascular disease

¹Remington PL, Brownson RC, Wegner MV, eds. Chronic Disease Epidemiology and Control, 3rd Ed. Washington DC: American Public Health Association; 2010. ²AK BRFSS (2009-2011).

<http://dhss.alaska.gov/dph/Chronic/>
Chronic Disease Prevention & Health Promotion

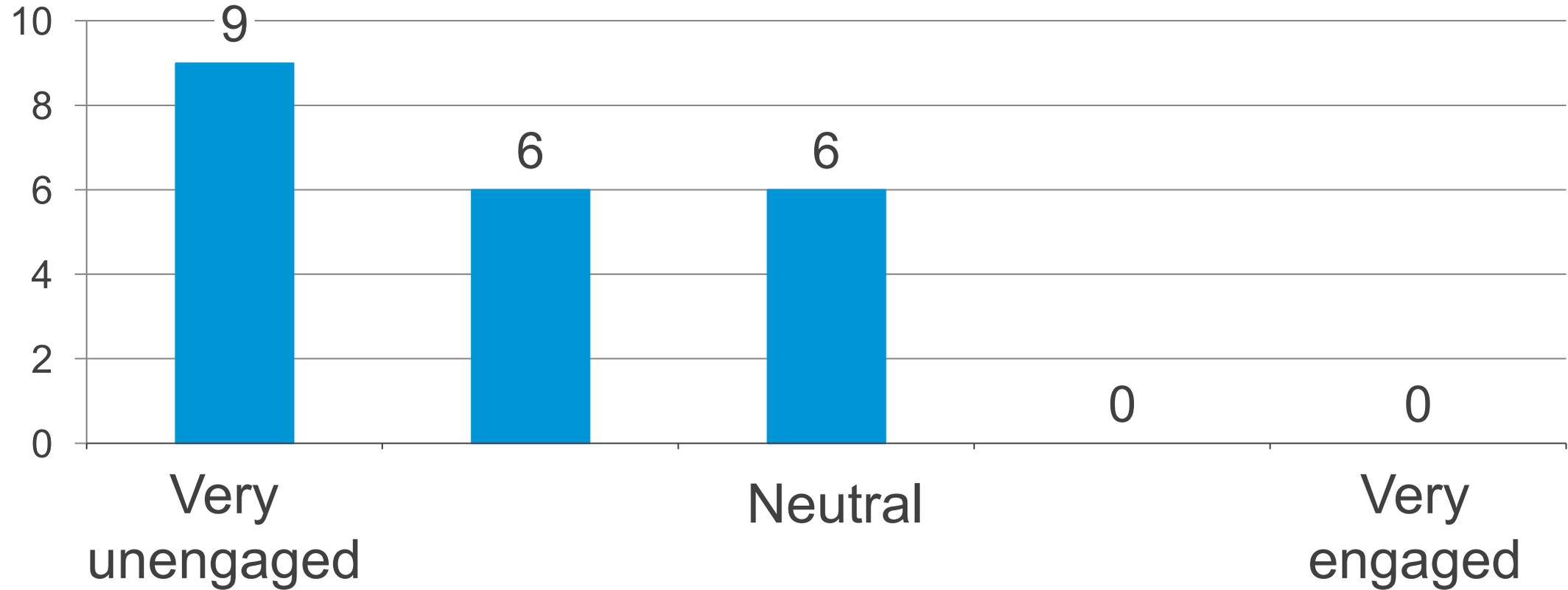


Partnership with Area Health Education Centers

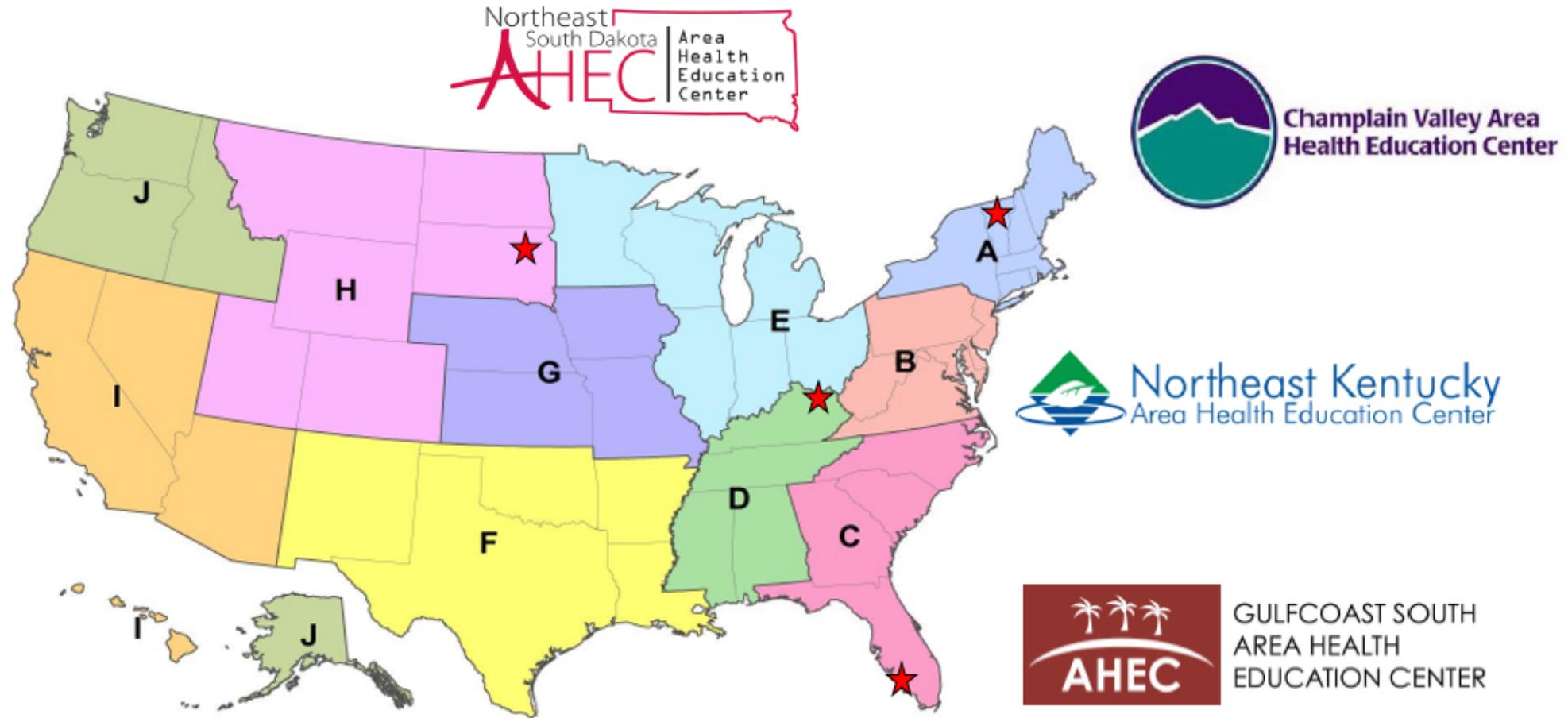


Photo courtesy of National Area Health Education Center Organization

Partnership with Area Health Education Centers



Partnership with Area Health Education Centers



Topics

- Nutrition, physical activity and obesity
- Tobacco and alcohol use and substance abuse
- Access to health services
- Mental and emotional wellbeing

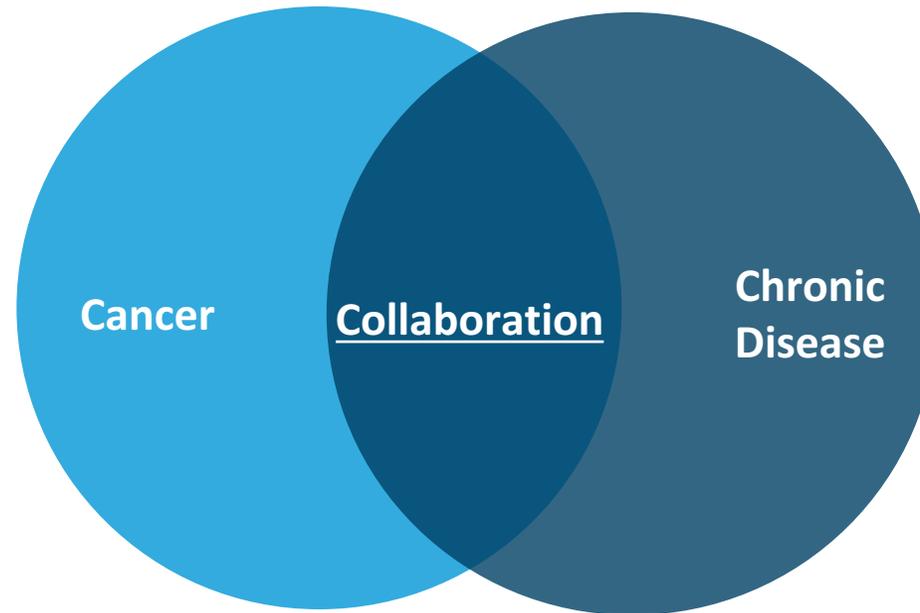
Static across 3 years

Strategies

- Epidemiology, surveillance and IT
- Policy, systems and environmental approaches
- Prevention and detection
- Communication, education and training
- Coordination between health professionals
- Community-clinical linkages
- Workforce improvement

Changes every year

How should we measure collaboration?



SNA survey

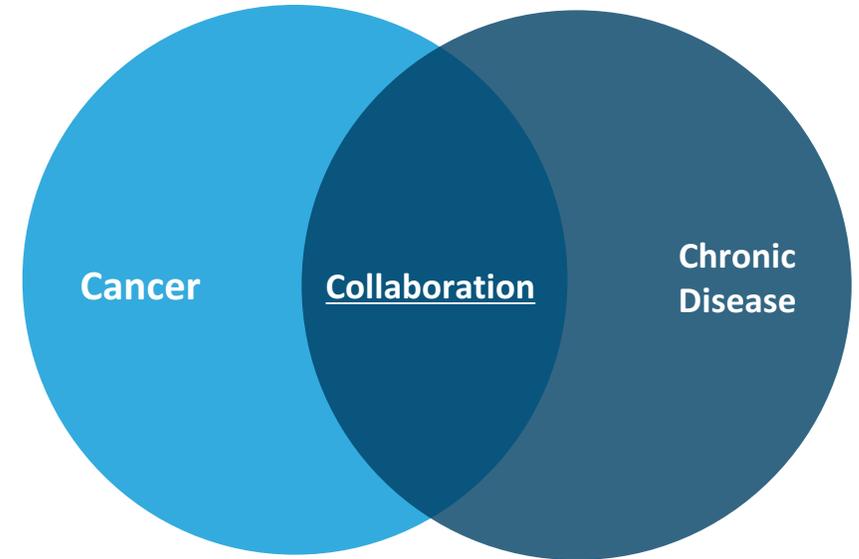
Questions	If you know this person, how do you know this person?	How often do you contact this person?	How often do you provide information to this person?	How often do you receive from this person?	How much do you trust this person?
Answer options	By name [1], only class mate [2], only lab partners in class [3], personal friends [4]	Never [0], once a year or less [1], ~once a quarter [2], ~once a month [3], every week [4], every day [5]			low [1], medium [2], high trust [3]
Harry Potter	0	0	0	0	0
Hermione Granger	4	5	5	5	3
Draco Malfoy	3	4	1	0	1
Neville Longbottom	4	5	4	3	2
And so on...					

SNA survey completed by Harry Potter

Questions	If you know this person, how do you know this person?	How often do you contact this person?	How often do you provide information to this person?	How often do you receive from this person?	How much do you trust this person?
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And so on...					

Community Roundtables SNA methods

- SNA surveys administered before each roundtable meeting
- 2015 Roundtables (all four locations): N=91
- 2016 Roundtables (all four locations): N=80
- UCINET SNA software
- Assess changes in network and working relationships



Activities: Northeast Kentucky

Topic: Tobacco



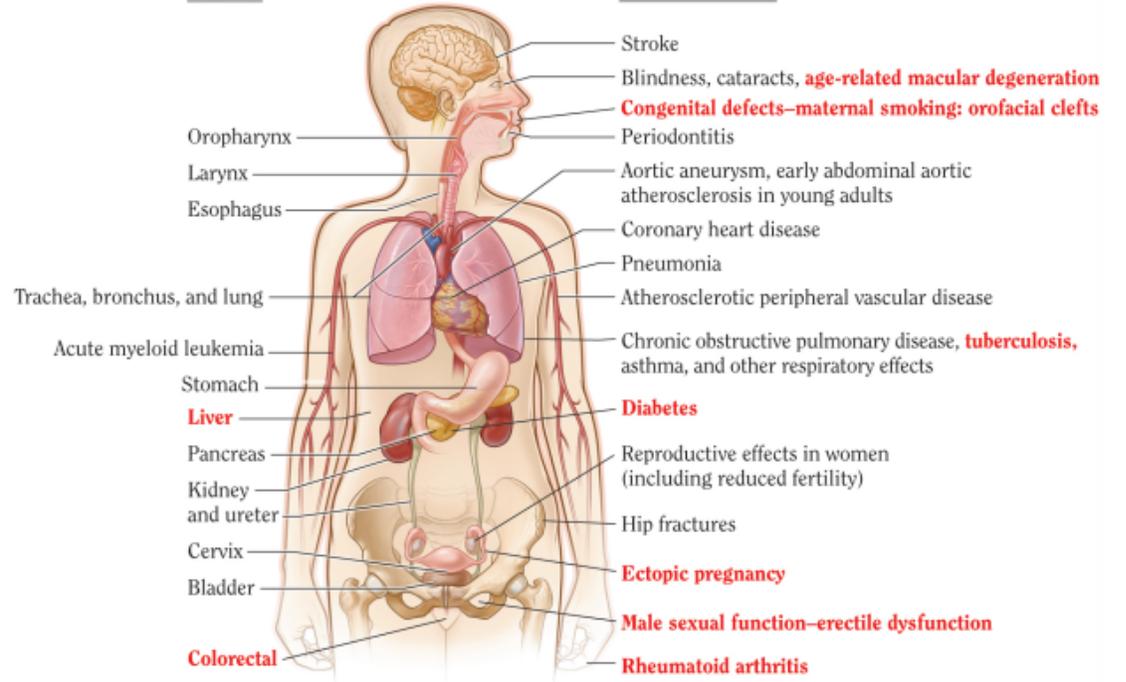
Map courtesy of Northeast Kentucky AHEC

Cancers

Oropharynx
Larynx
Esophagus
Trachea, bronchus, and lung
Acute myeloid leukemia
Stomach
Liver
Pancreas
Kidney and ureter
Cervix
Bladder
Colorectal

Chronic Diseases

Stroke
Blindness, cataracts, **age-related macular degeneration**
Congenital defects—maternal smoking: orofacial clefts
Periodontitis
Aortic aneurysm, early abdominal aortic atherosclerosis in young adults
Coronary heart disease
Pneumonia
Atherosclerotic peripheral vascular disease
Chronic obstructive pulmonary disease, **tuberculosis**, asthma, and other respiratory effects
Diabetes
Reproductive effects in women (including reduced fertility)
Hip fractures
Ectopic pregnancy
Male sexual function—erectile dysfunction
Rheumatoid arthritis
Immune function
Overall diminished health



CDC, 2017

Activities: Northeast Kentucky



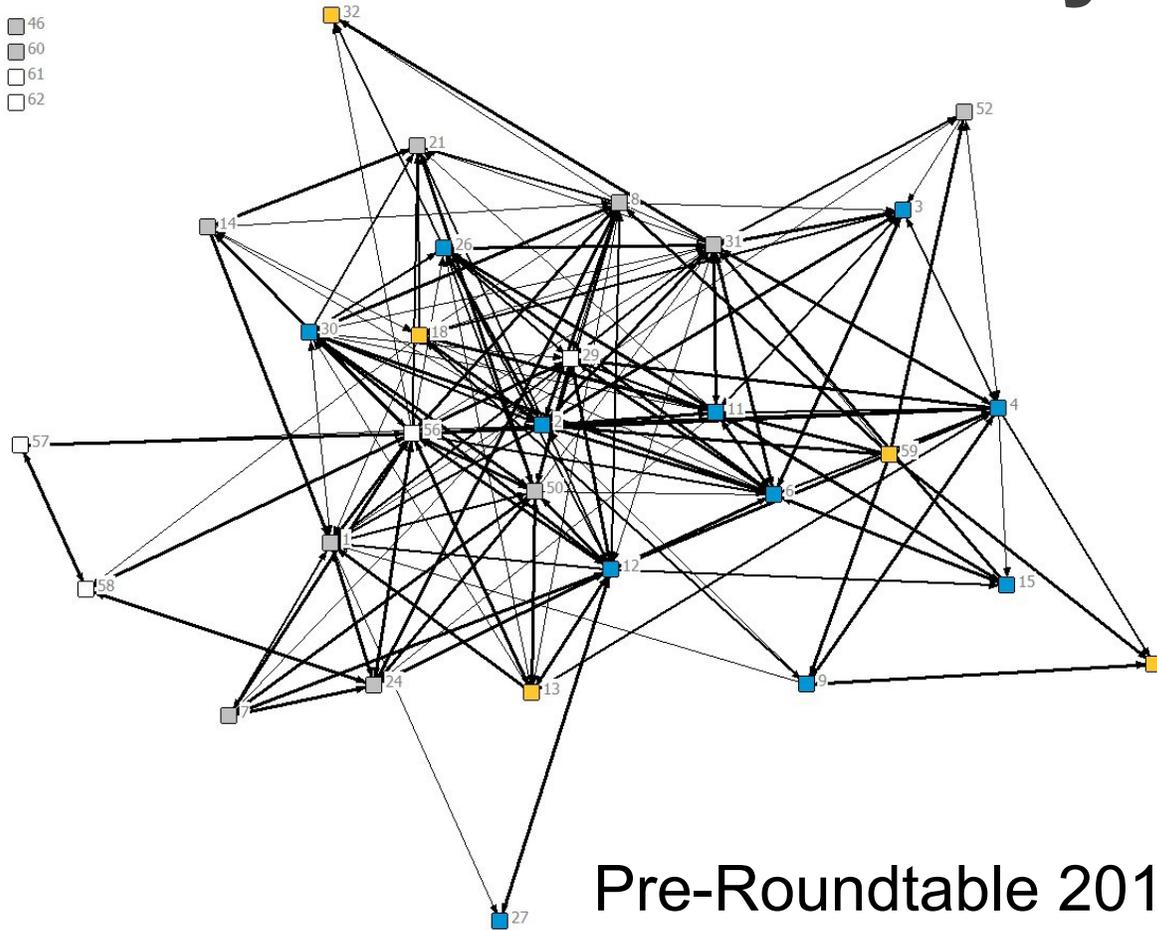
Topic: Tobacco

- Identified local and national smoking cessation resources and incorporated into St. Claire Regional Medical Center's EMR for easy referrals
- Developed and pilot tested the BREATHE Tobacco Treatment Specialist Training

Northeast Kentucky

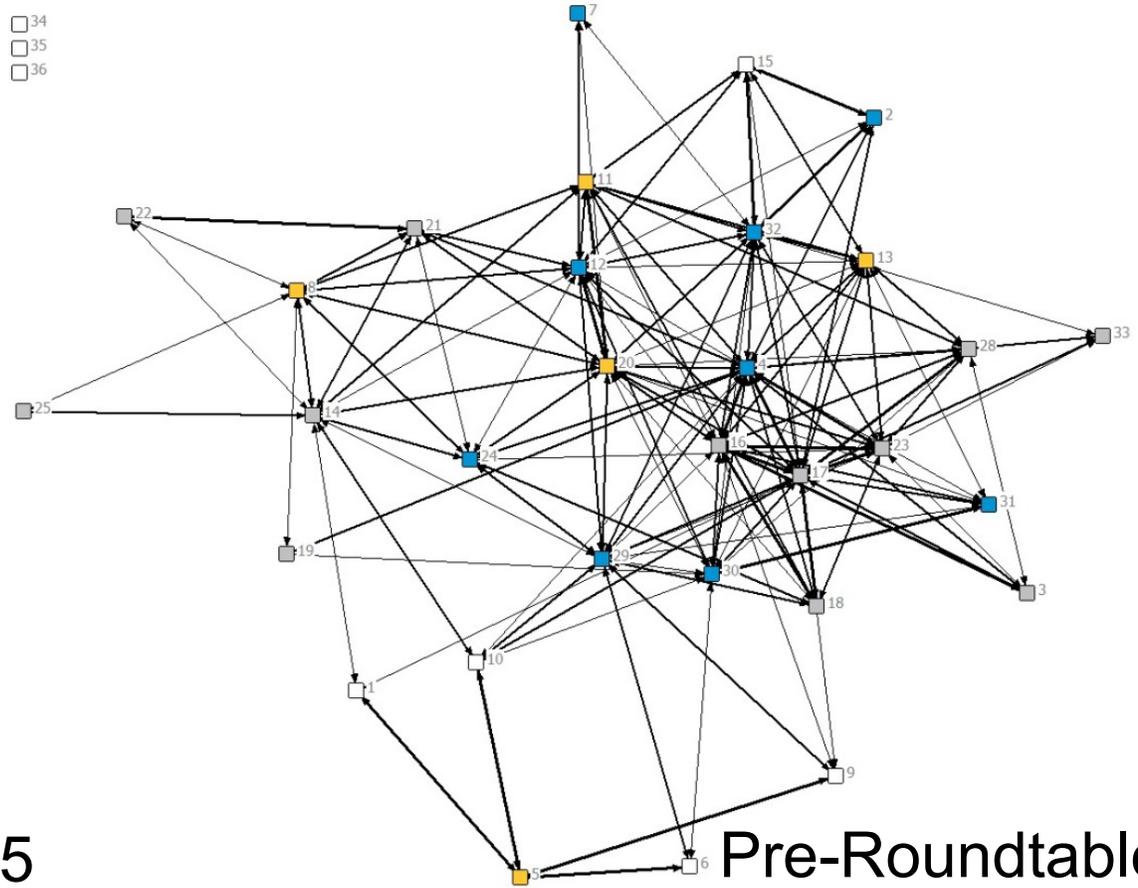


- 46
- 60
- 61
- 62



Pre-Roundtable 2015

- 34
- 35
- 36

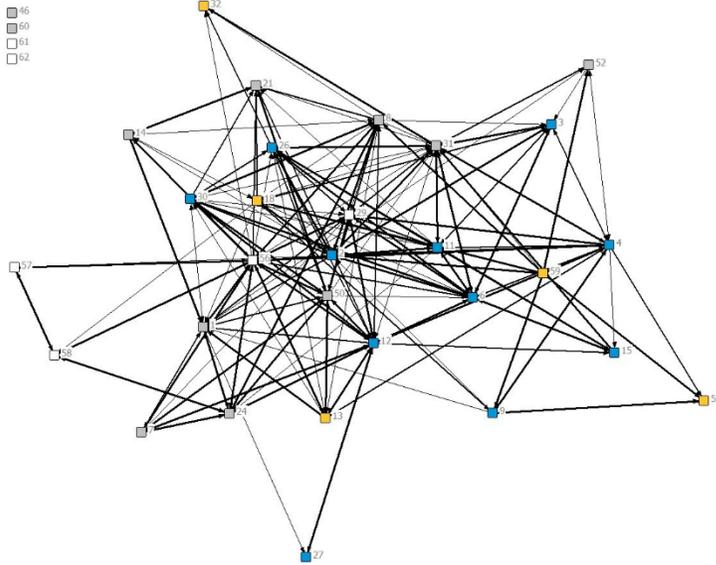


Pre-Roundtable 2016

Northeast Kentucky

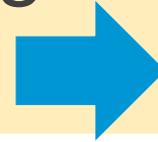


Pre-Roundtable 2015



Average Degree

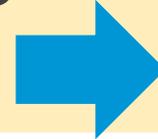
6.61



5.44

Average Distance

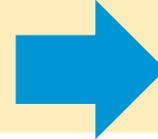
1.89



2.03

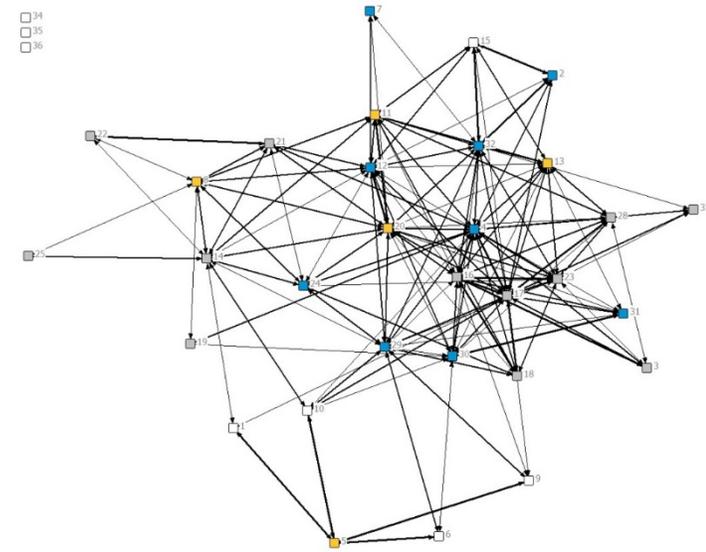
Dyad Reciprocity

0.12



0.40

Pre-Roundtable 2016



Activities: Champlain Valley



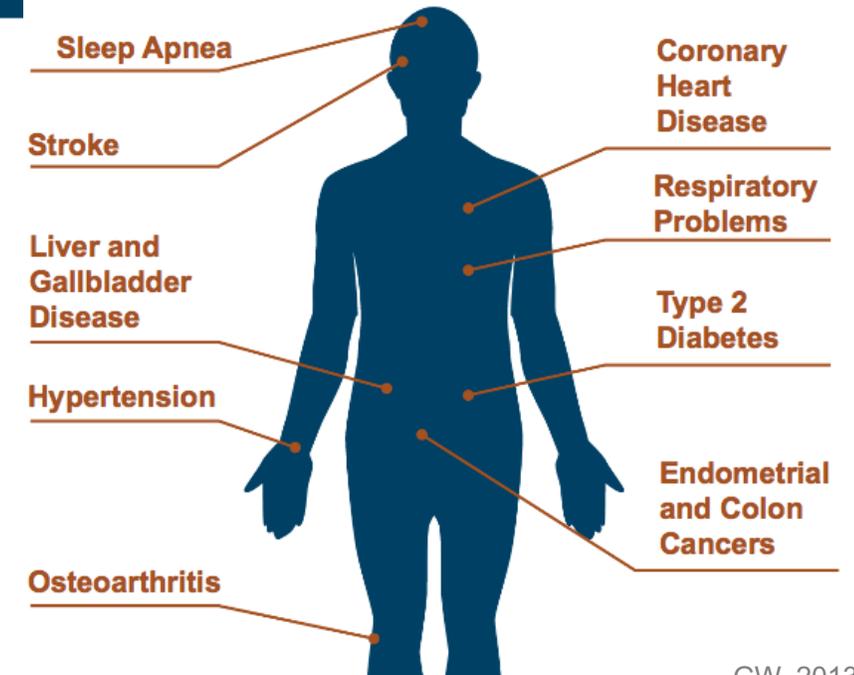
Champlain Valley Area
Health Education Center

Topic: Nutrition and Physical Activity



Map courtesy of Champlain Valley AHEC

OBESITY INCREASES THE RISK OF OVER 20 CONDITIONS, INCLUDING:⁷



GW, 2013.

Activities: Champlain Valley



Champlain Valley Area
Health Education Center

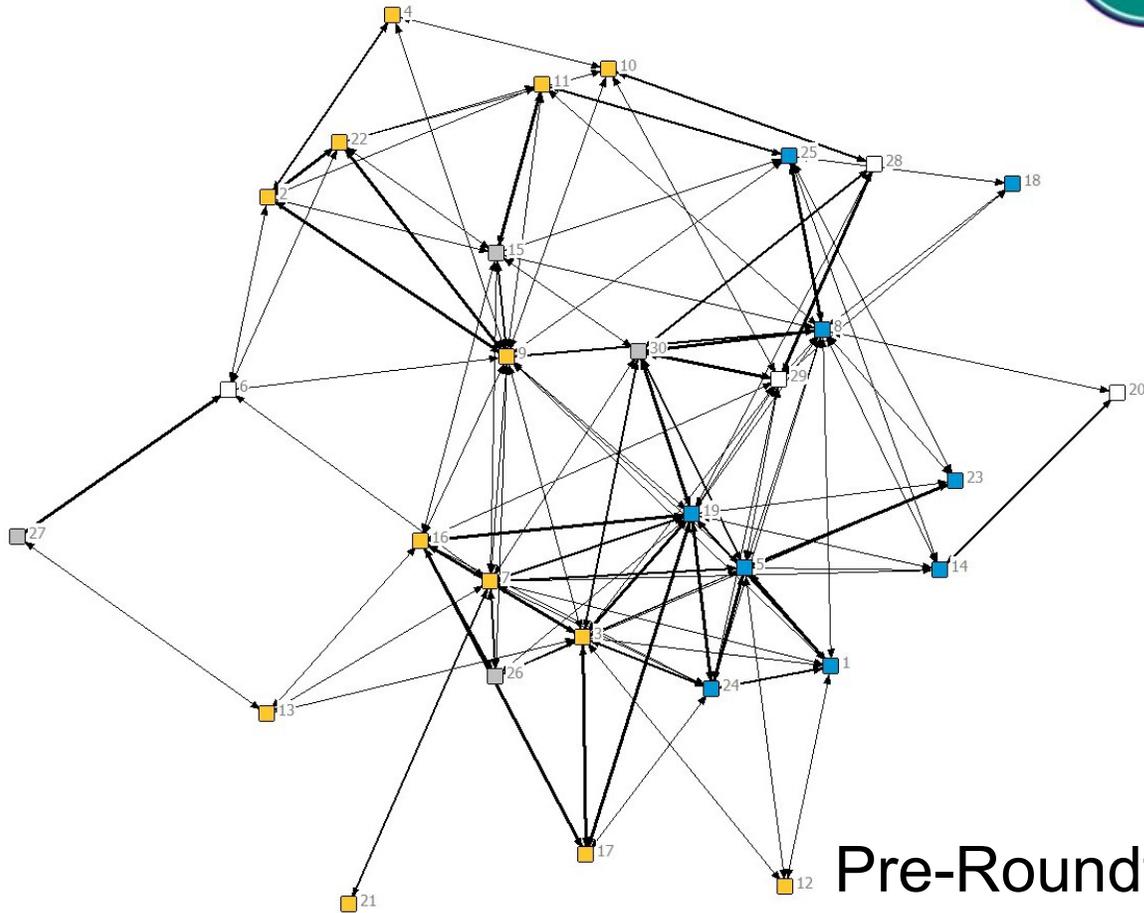
Topic: Nutrition and Physical Activity

- Partnered with Vermont Department of Health to amplify communication campaign
- Identified and obtained commitment from an employer to incorporate 3-4-50

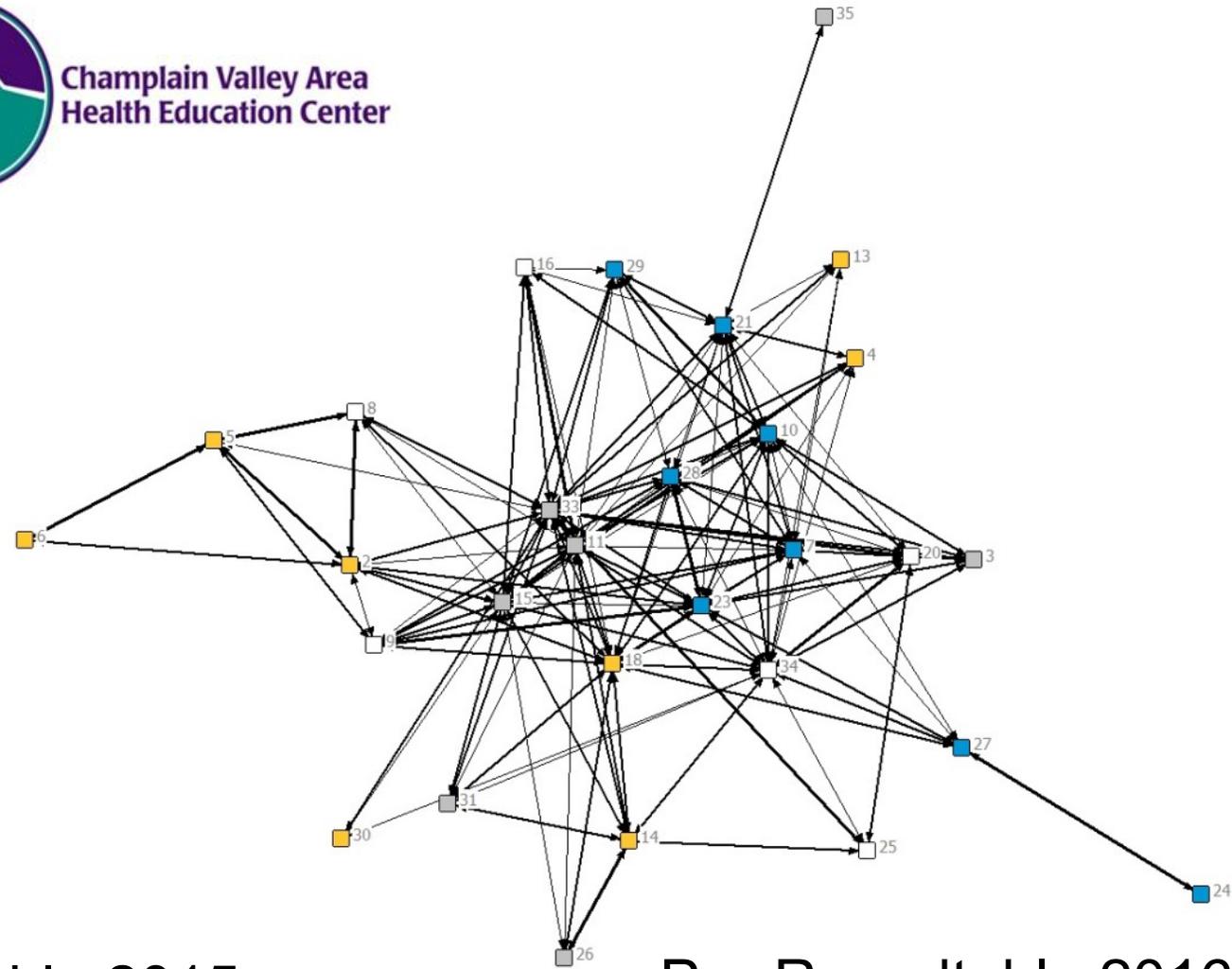
Champlain Valley



Champlain Valley Area
Health Education Center



Pre-Roundtable 2015



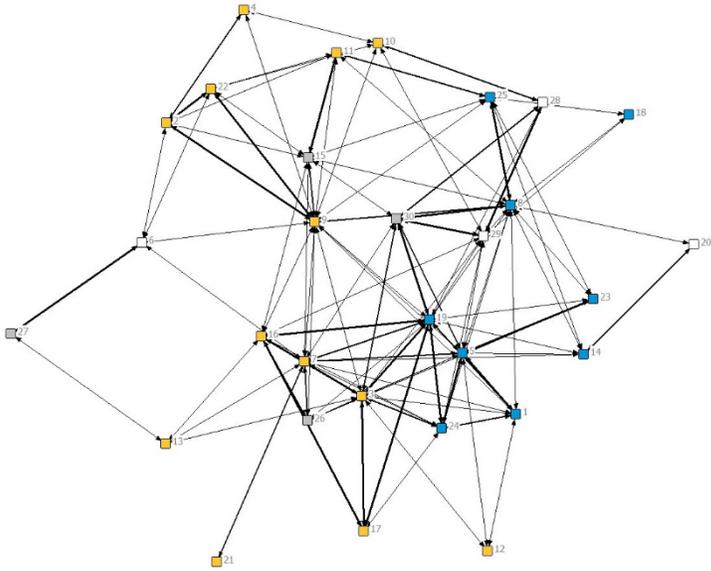
Pre-Roundtable 2016

Champlain Valley



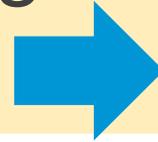
Champlain Valley Area
Health Education Center

Pre-Roundtable 2015



Average Degree

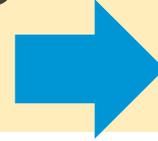
4.97



9.31

Average Distance

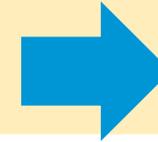
2.17



2.06

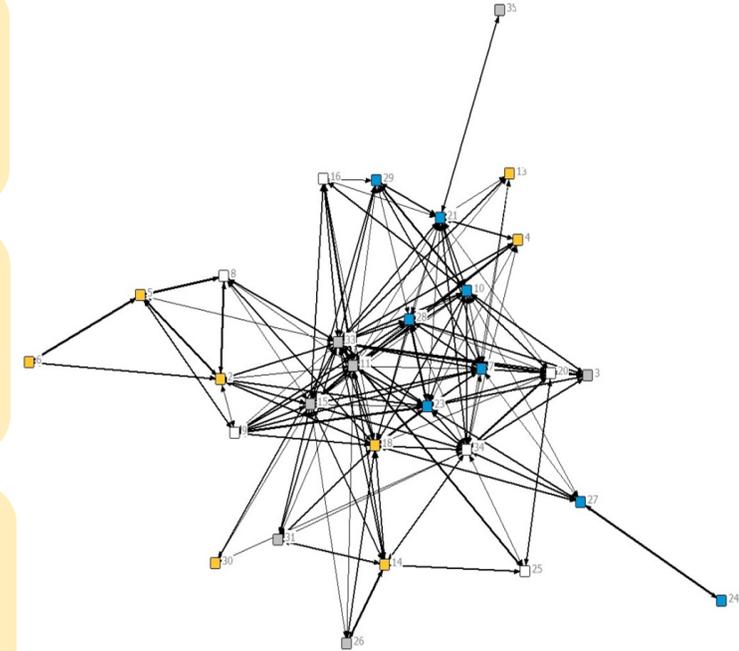
Dyad Reciprocity

0.38



0.21

Pre-Roundtable 2016

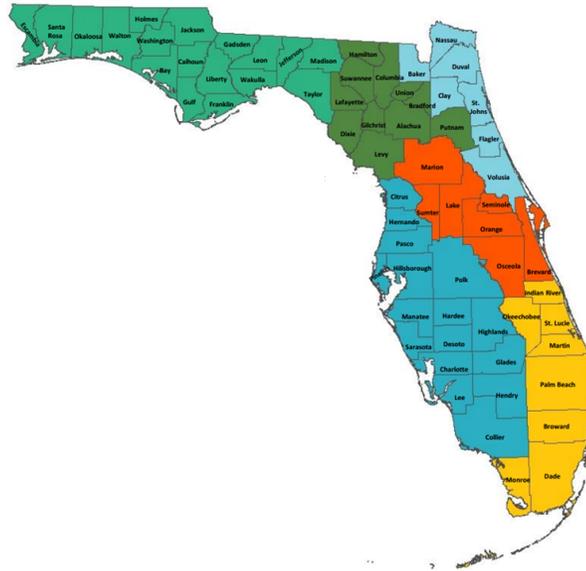


Activities: Florida



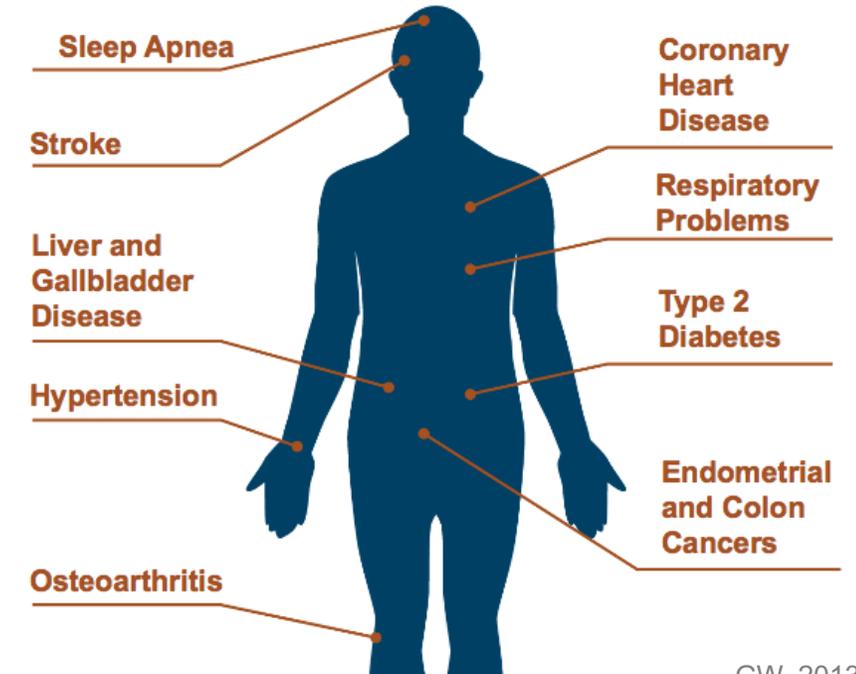
GULFCOAST SOUTH
AREA HEALTH
EDUCATION CENTER

Topic: Nutrition and Physical Activity



Map courtesy of Gulfcoast South AHEC

**OBESITY INCREASES THE RISK OF
OVER 20 CONDITIONS, INCLUDING:⁷**



GW, 2013.

Activities: Florida



GULFCOAST SOUTH
AREA HEALTH
EDUCATION CENTER

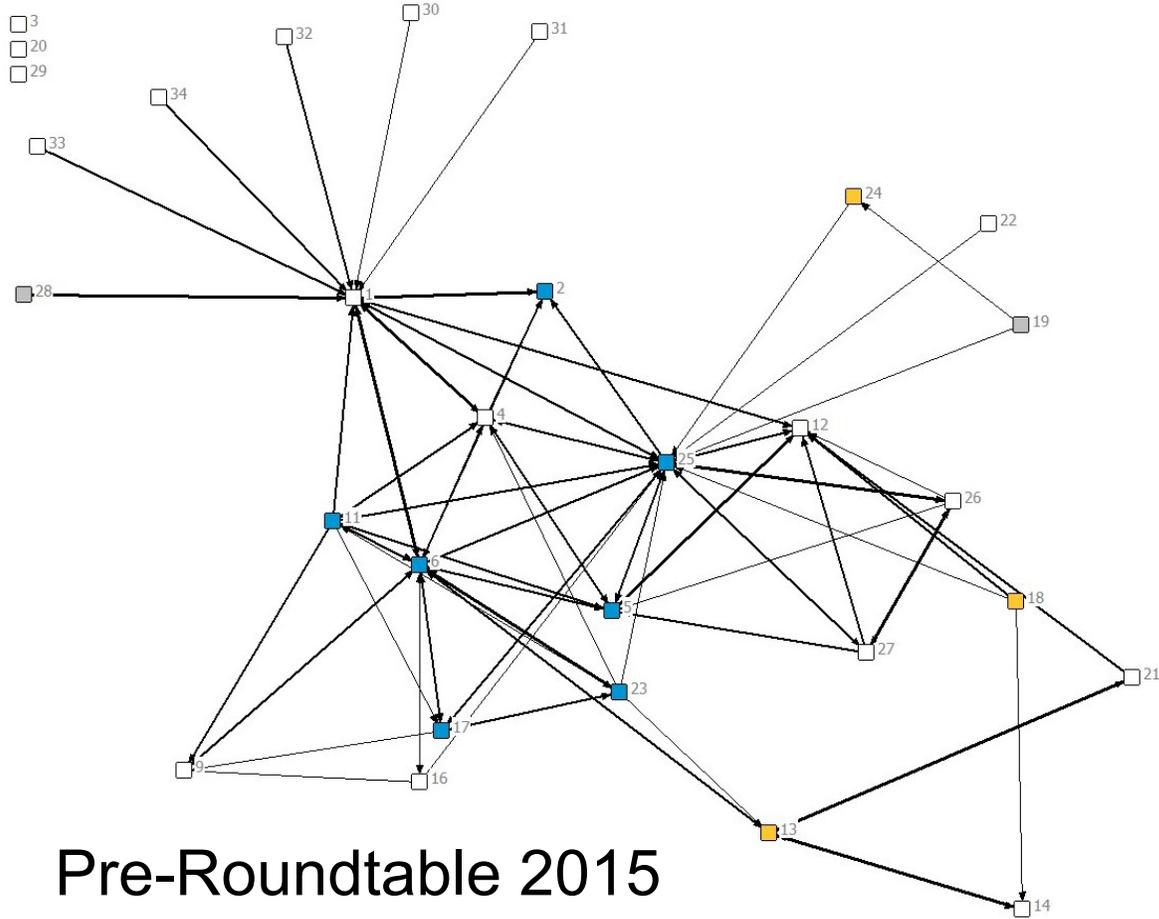
Topic: Nutrition and Physical Activity

- Mapped local resources
- Incorporated chronic disease slant to the South West Cancer Control Collaborative's two-year strategic plan

Florida

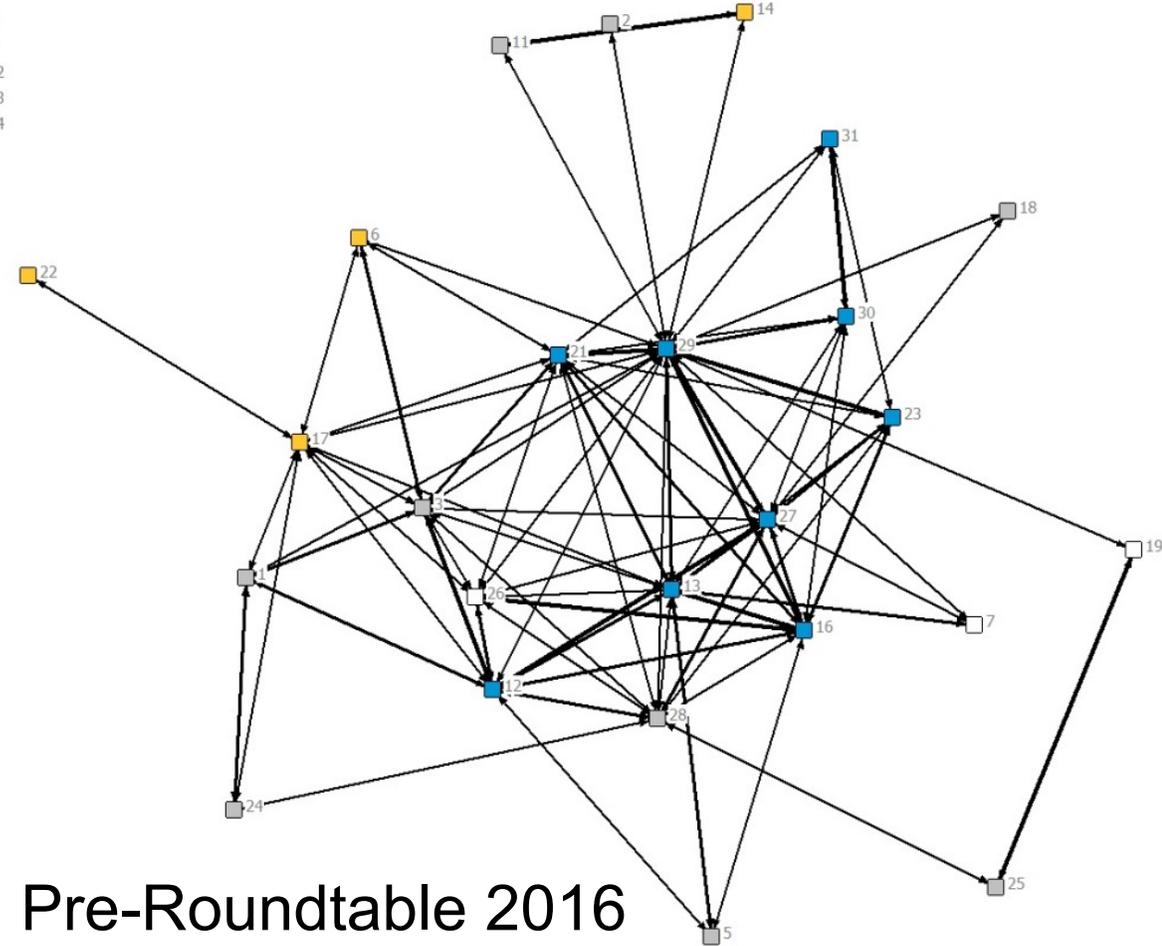


GULFCOAST SOUTH
AREA HEALTH
EDUCATION CENTER



Pre-Roundtable 2015

- 8
- 9
- 32
- 33
- 34



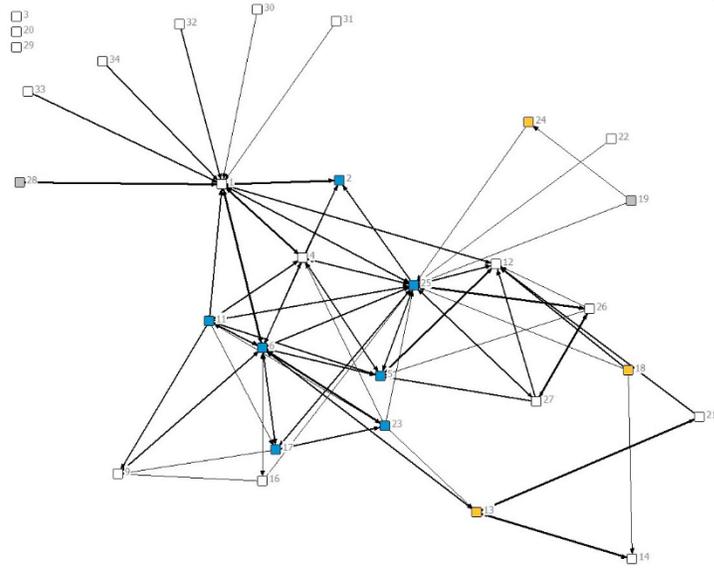
Pre-Roundtable 2016

Florida



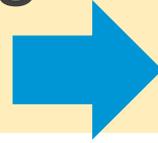
GULFCOAST SOUTH
AREA HEALTH
EDUCATION CENTER

Pre-Roundtable 2015



Average Degree

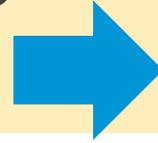
2.83



4.43

Average Distance

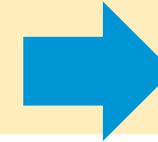
2.12



1.99

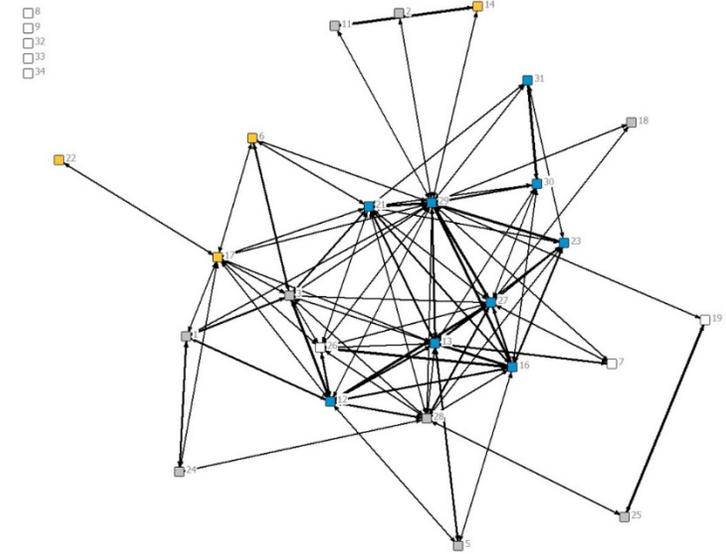
Dyad Reciprocity

0.42



0.62

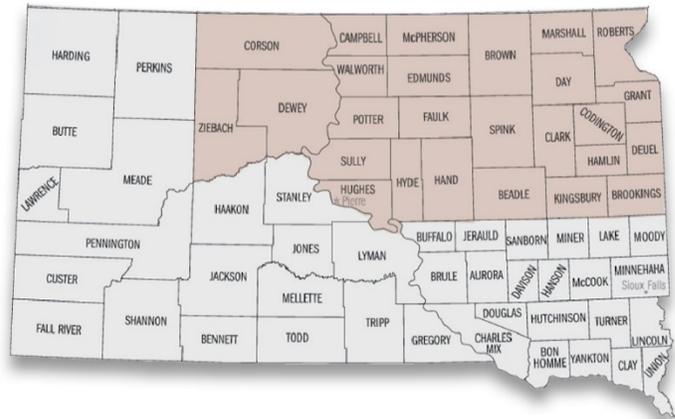
Pre-Roundtable 2016



Activities: South Dakota

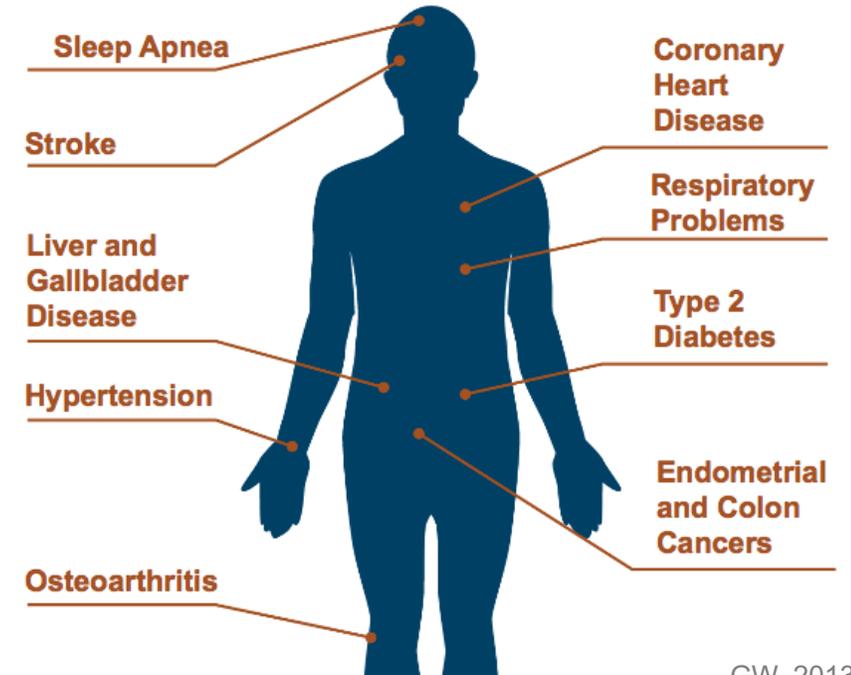


Topic: Nutrition and Physical Activity



Map courtesy of Northeast South Dakota AHEC

OBESITY INCREASES THE RISK OF OVER 20 CONDITIONS, INCLUDING:⁷



GW, 2013.

Activities: South Dakota



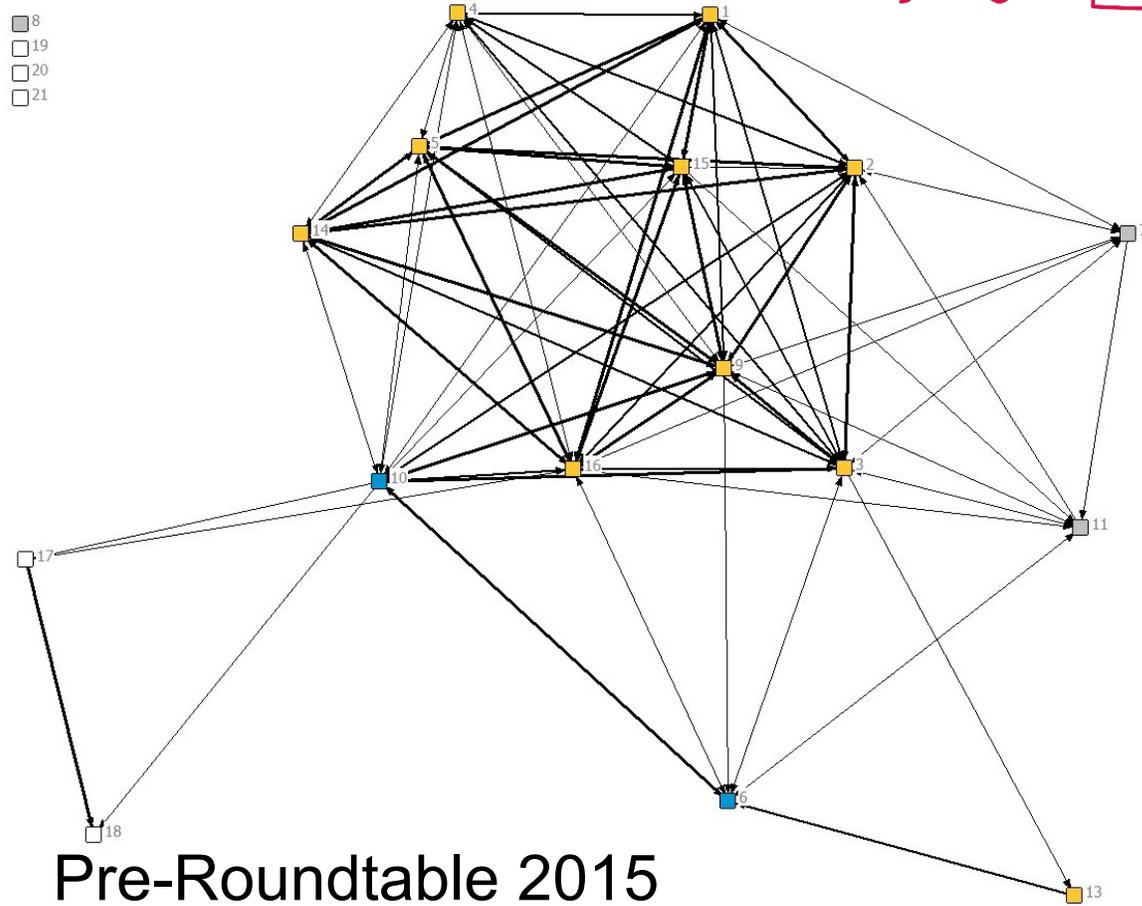
Topic: Nutrition and Physical Activity

- Mapped resources
- Collaborated with cancer clinics for referrals to Diabetes Prevention Program
- Produced electronic referrals policy

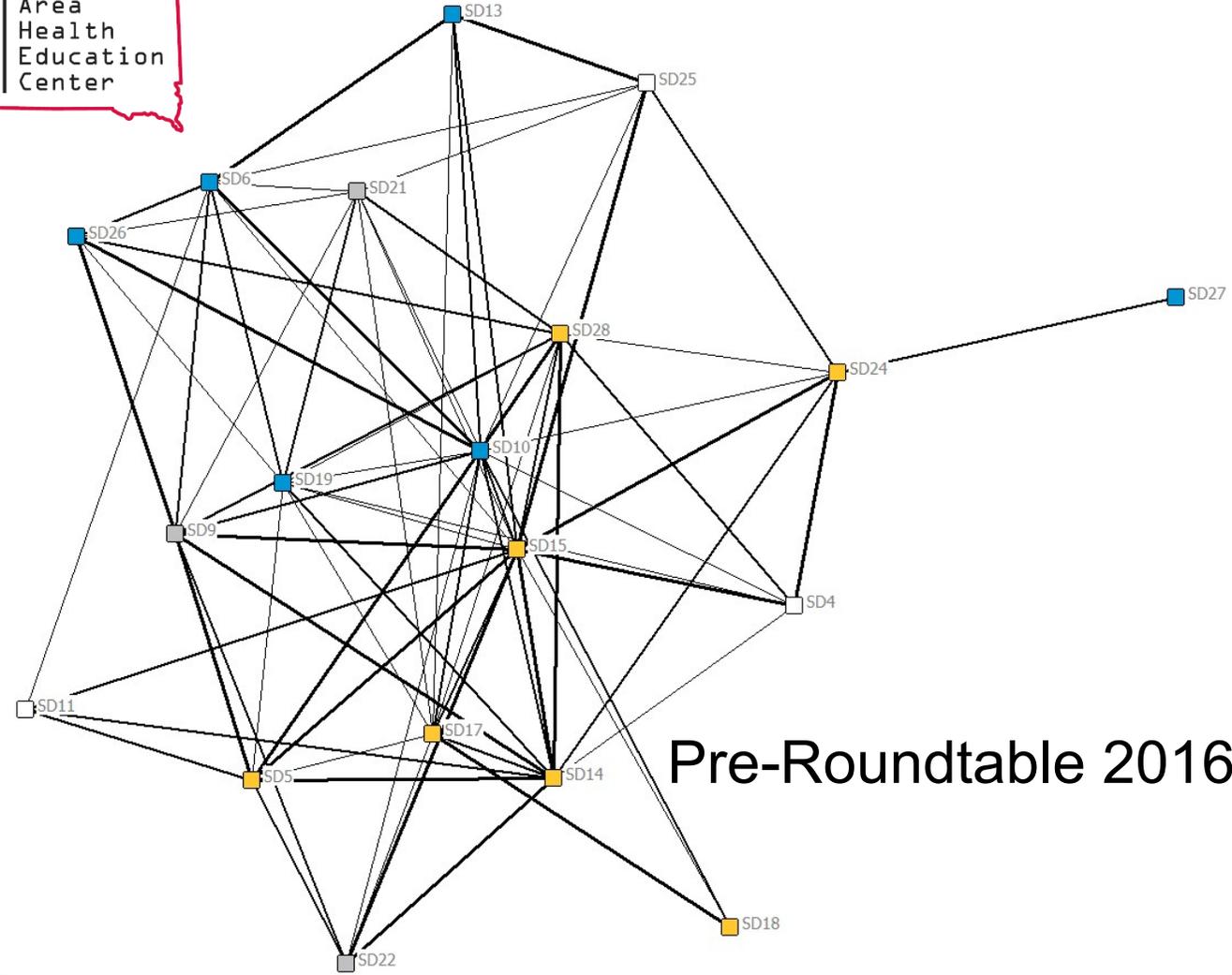
South Dakota



- 8
- 19
- 20
- 21



Pre-Roundtable 2015



Pre-Roundtable 2016

Use SNA to...

Triangulate
qualitative
feedback

Monitor
project
progress

Identify areas
for
improvement

Make project
improvements

Identify
missing
stakeholders

Identify key
stakeholders

Additional SNA resources



- **Professional development workshops** at [American Evaluation Association Conference](#) on Monday, November 6 to Tuesday, November 7, 2017 in Washington, DC
 - [Social Network Analysis: Theories, Methods, and Applications](#)
 - [Evaluating Organizational Collaboration and Networks](#)
 - [Introduction to Social Network Analysis for Program Evaluation](#)
 - [Using Social Network Methods in Program Monitoring and Evaluation](#)

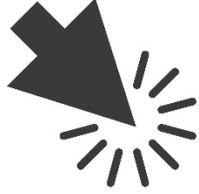
Additional SNA resources

- [Using Social Network Analysis to Assess Mentorship in a Public Health Network](#) by Petrescu-Prahova, et al. in Preventing Chronic Disease
- [Interorganizational Relationships Within State Tobacco Control Networks: A Social Network Analysis](#) by Krauss, et al in Preventing Chronic Disease
- [“Making Connections: Using Social Network Analysis for Program Evaluation”](#) by Mathematica Policy Research
- [“Evaluating Form and Function of Regional Partnerships: Applying a Social Network Analysis to the *Network for a Healthy California, 2001-2007*”](#) by Gregson, et al. in Journal of Nutrition Education and Behavior
- [“Social Network Diagnostics: A Tool for Monitoring Group Interventions”](#) by Gesell, et al. in Implementation Science

Thank You!

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www.CancerControlTAP.org

- Free online learning modules on:
 - Patient navigation
 - Cancer survivorship
 - Communication and Media
- Comprehensive Cancer Control toolkits and guides
- Webinars and Ask-the-Expert sessions
- ...and more!

References

Borgatti, S. (2002). *Basic Social Network Concepts*. PowerPoint presented at Analytic Technologies meeting.

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Q & A

Please submit questions in the chat box!

Thank You!

Connect with us!



Hepatitis B Foundation

www.hepb.org

Join the Hep B United Coalition!

www.hepbunited.org