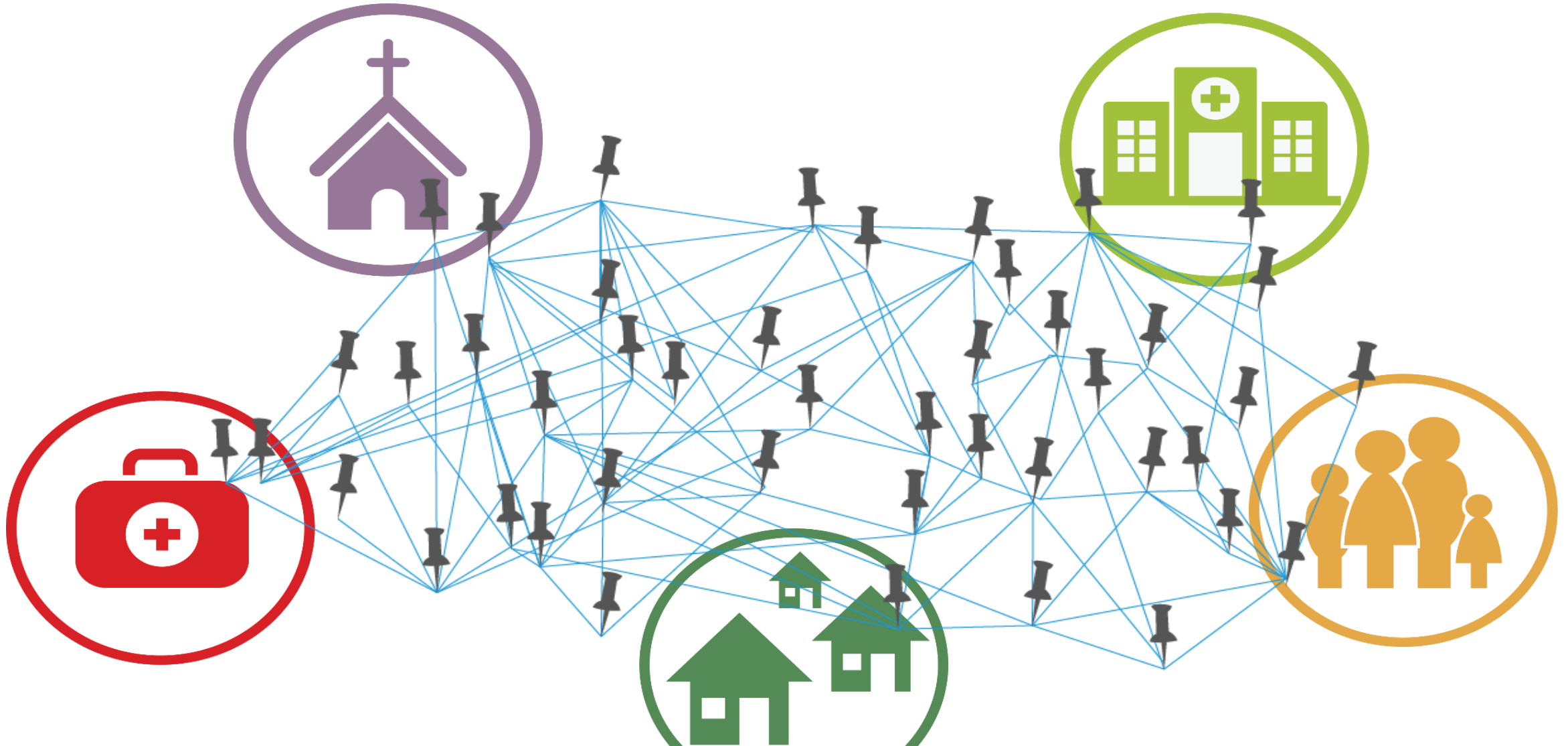




Thinking Like a Network Scientist

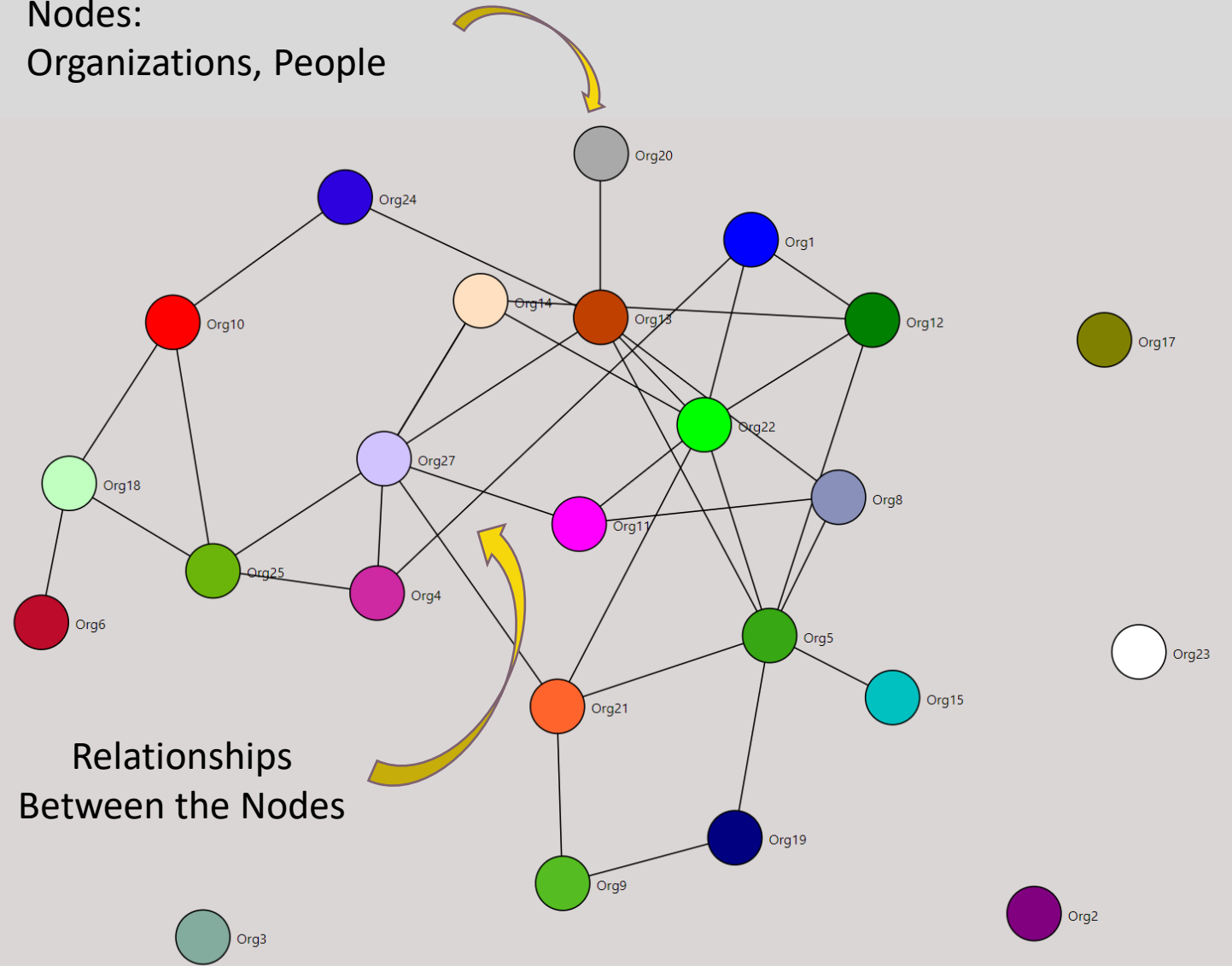
Wild, Wonderful, and Healthy West Virginia | 2.11.21

The New Norm: The Network Way of Working



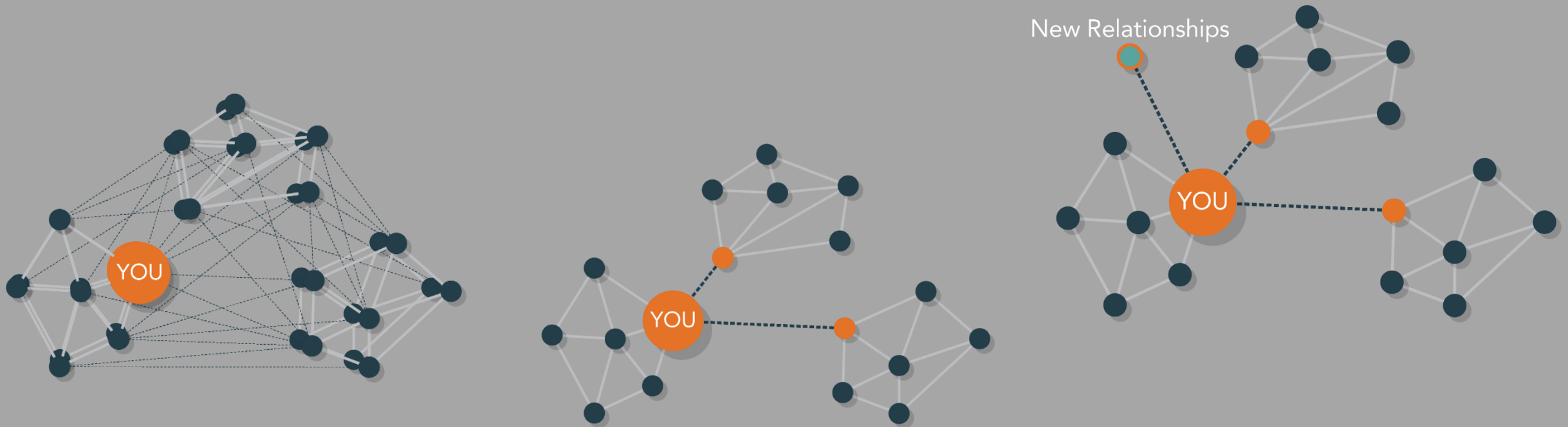
What Are Networks?

Nodes:
Organizations, People



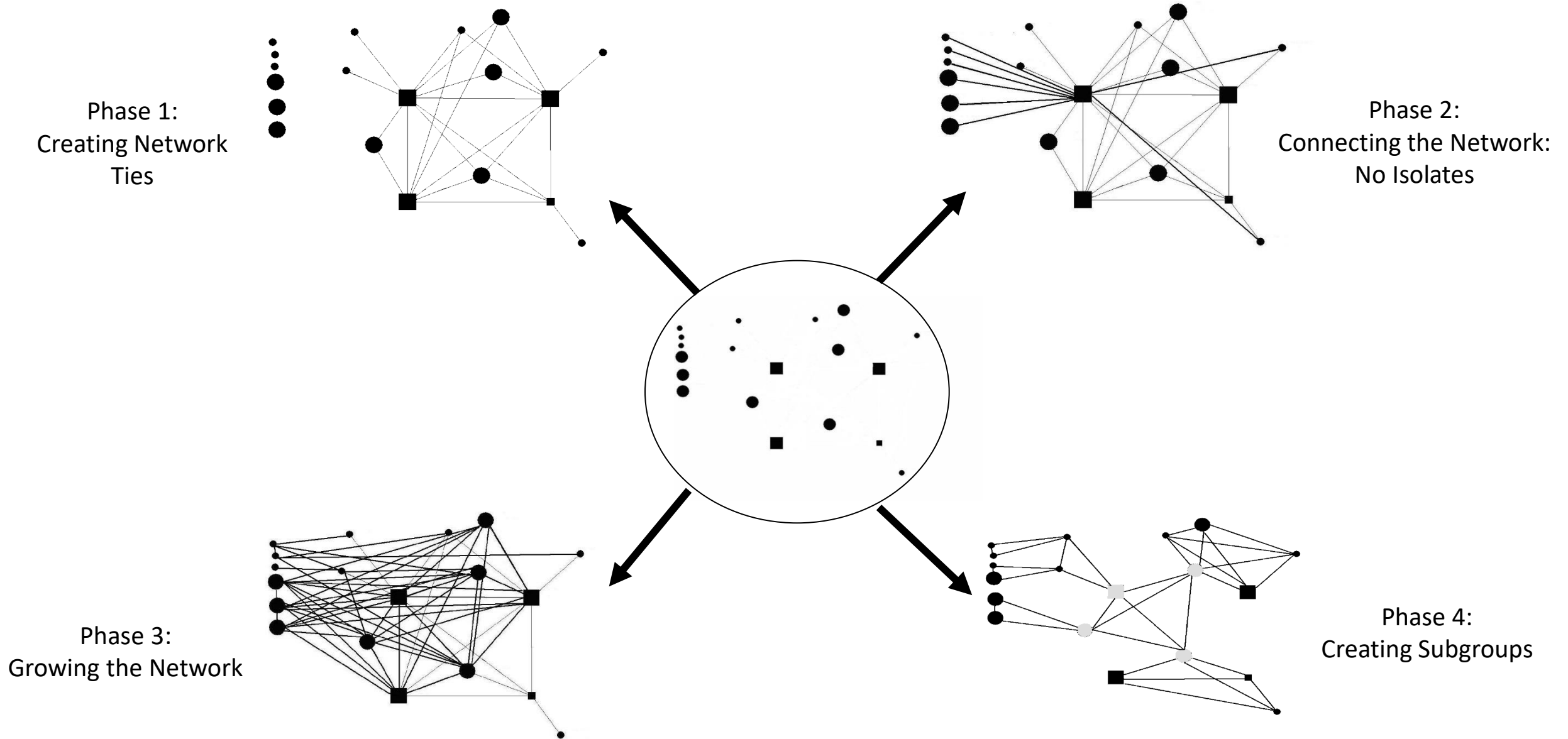
Network Science as a Unique Lens

Basic Network Science Principle: More is Not (Always) Better

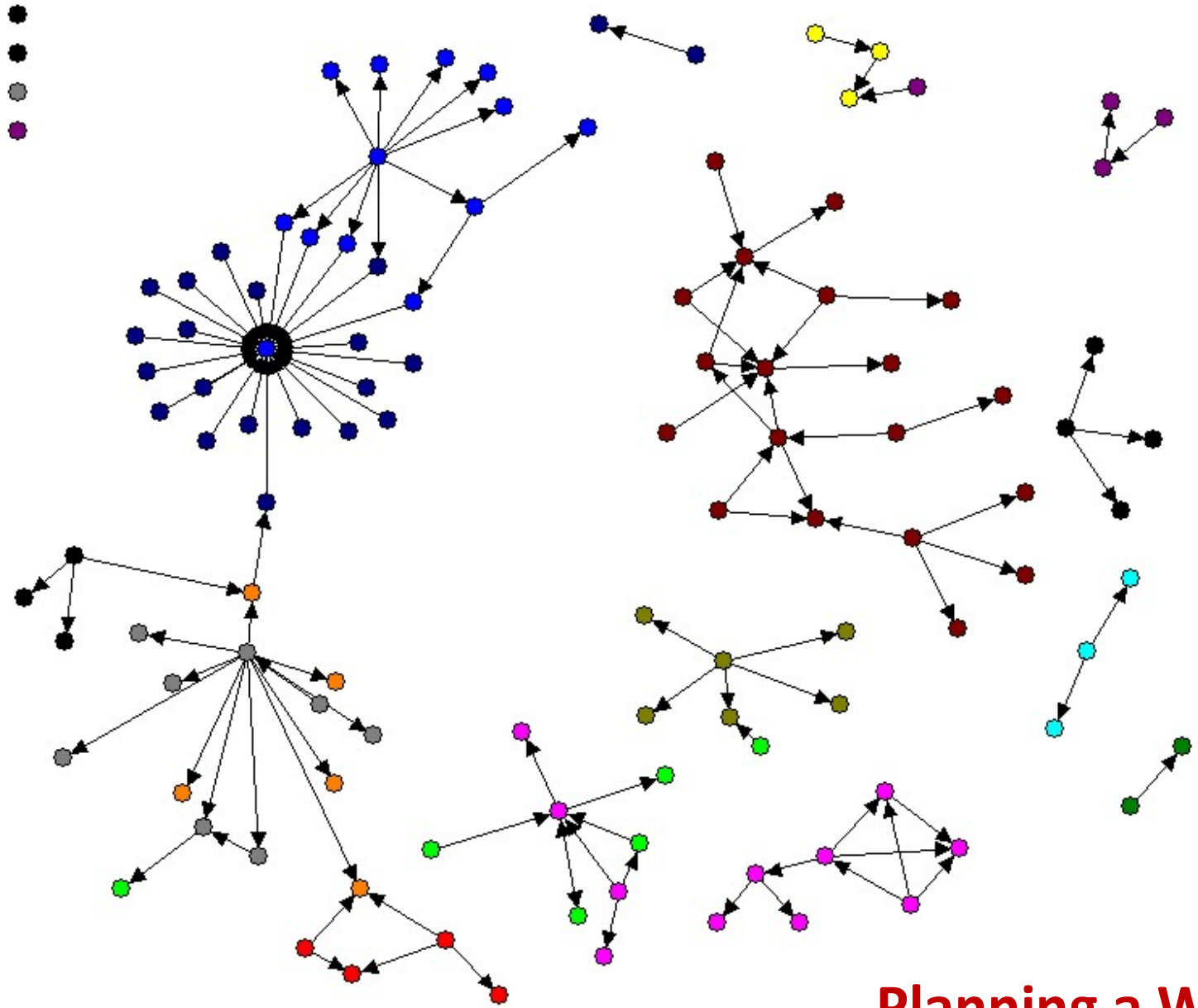


You can manage relationships to create a network strategy,
but you need data to do it.

Lifecycle of a Sustainable Network



Network Science in Real Life



Planning a Wedding...

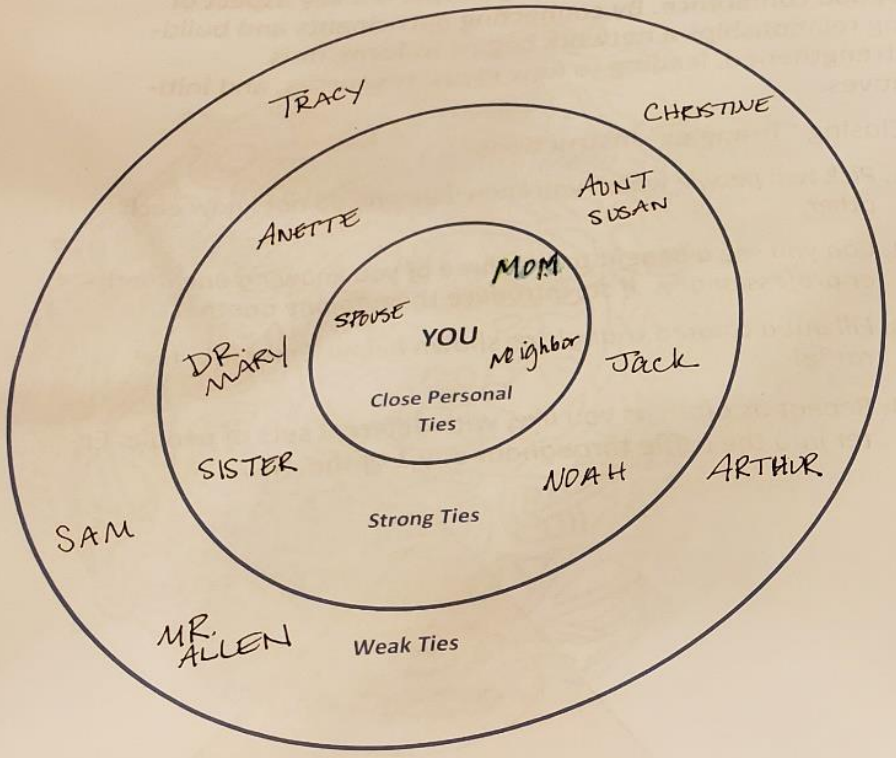


Main Take Aways

1. You are already a network scientist. You use network science every day.
2. More networking is not better networking. In fact networking can create new inequities in communities.
3. Building and managing a network doesn't have to be left to chance – there is a science to help guide you.
4. You can manage network relationships to develop a strategy, but we need data to do it.
5. You can identify redundancy and holes in your network, which can inform the strategy and give you the insight you need to ensure an equitable approach, balance power, and develop representative networks.
6. A proven strategy for network sustainability:
 - Everyone in the network has a role they understand.
 - Participation only required when that role is needed; otherwise its optional.
 - The network has a stated goal that the end includes a strategy to use the fewest number of resources to reach the same collaborative advantage.

WHO IS IN YOUR NETWORK?

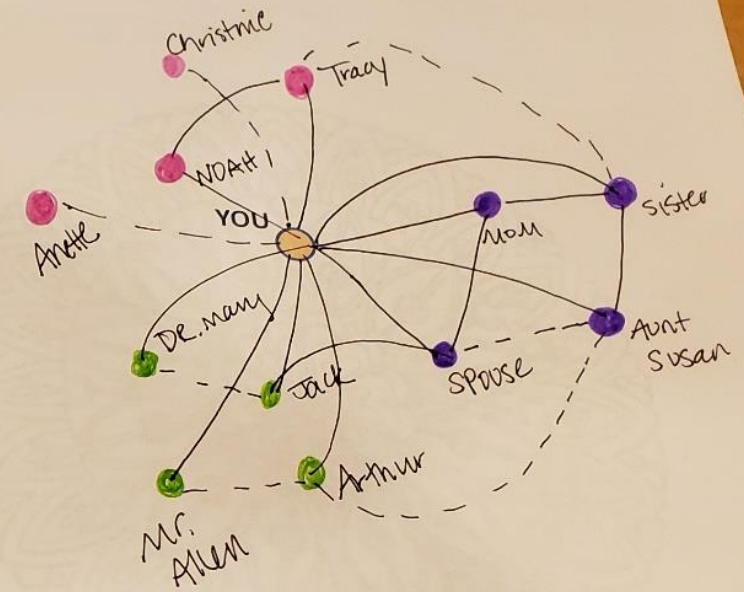
Thinking Like a Network Scientist



Thinking about your networks as "nodes" and "lines" is a helpful way to quickly visualize who is connected to whom, where redundancies exist, and where there might be gaps. In this exercise we will practice drawing our personal support networks. In this first worksheet, list out the people who "help you with the things you need". It is up to you to decide if you want this to be a personal or professional or both network.

DRAW YOUR NETWORK

Thinking Like a Network Scientist



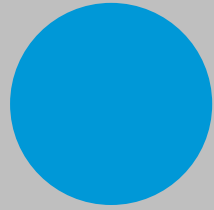
Now, take the list of people (places and things) that you listed on the previous sheet. Draw a circle (a node) for each person and then draw the lines between them to show who has a connection to each other. You might want to use colors to define different types of connections, or dotted or thin/skinny lines. You might make the nodes different colors or sizes to show their differences. Keep track of your decisions in the "Key" box.

Is your network more open?
Or do you have a more closed network?

KEY:

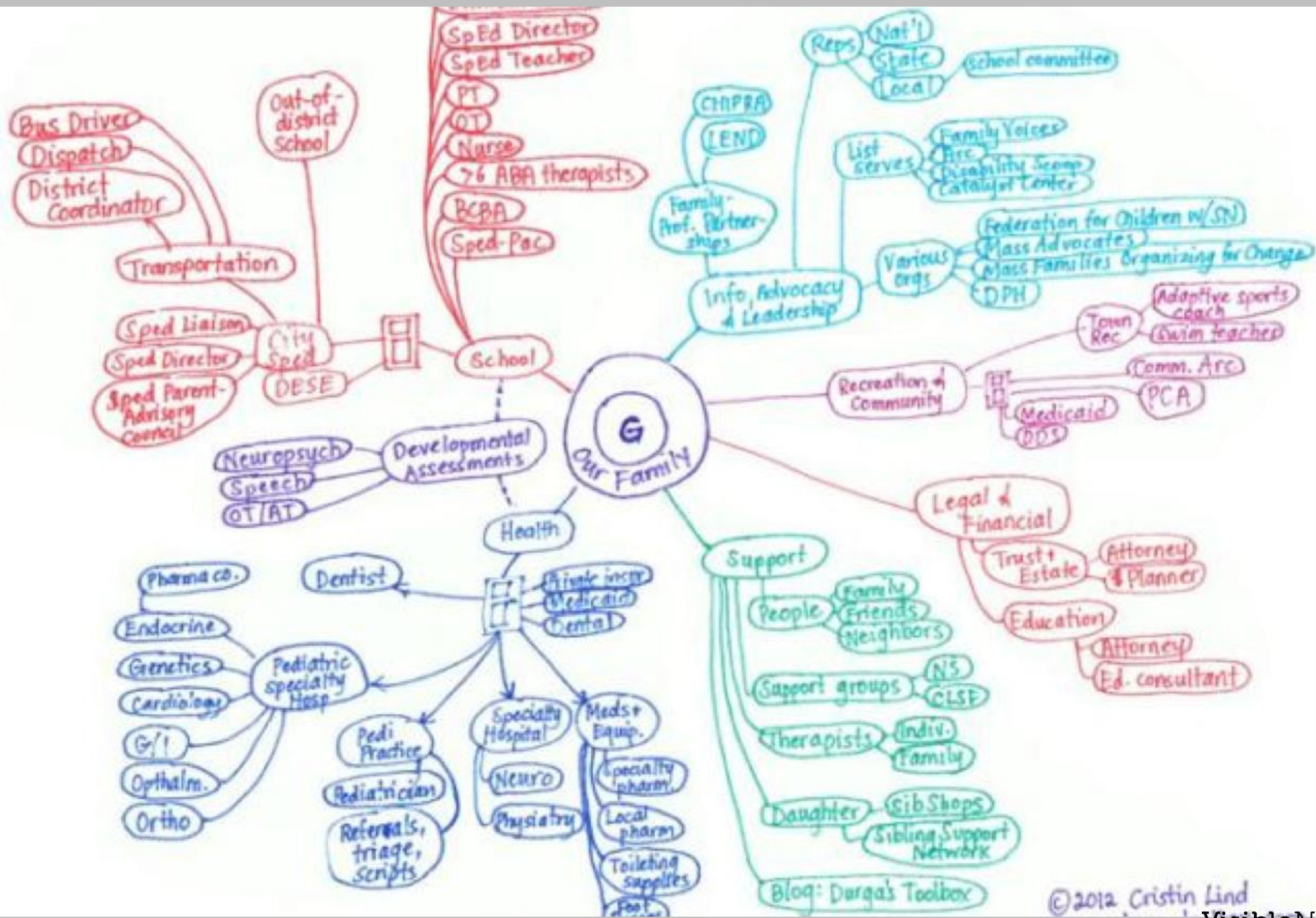
- FAMILY
- CO-WORKER
- FRIENDS
- Strong tie
- Weak tie

Real World Application of Network Science



WONDERbabies
Partnerships for Health Initiative

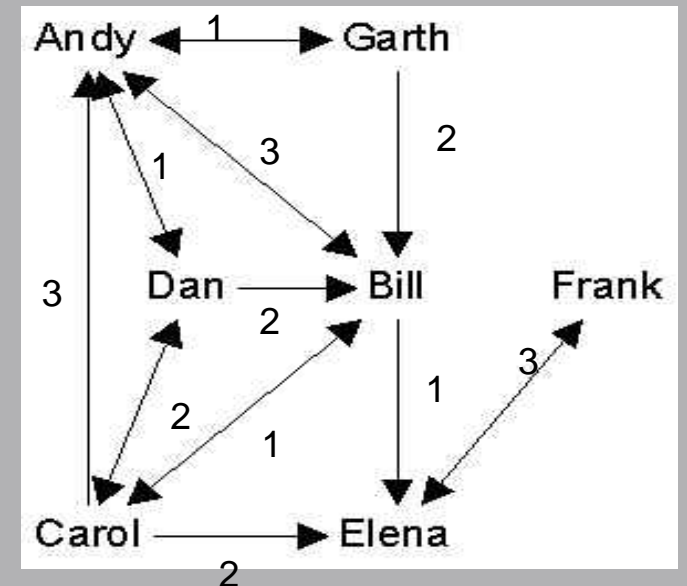
With funding from
The Colorado
Trust



©2012 Cristin Lind

Social Network Analysis

- Collects data on who is connected to whom
- How those connections vary and change
- Focus on patterns of relations
- Type, Extent, Quality of Connections
- Nodes (People, Orgs, Etc)
- Lines (Relationships)



VisibleNetworkLabs



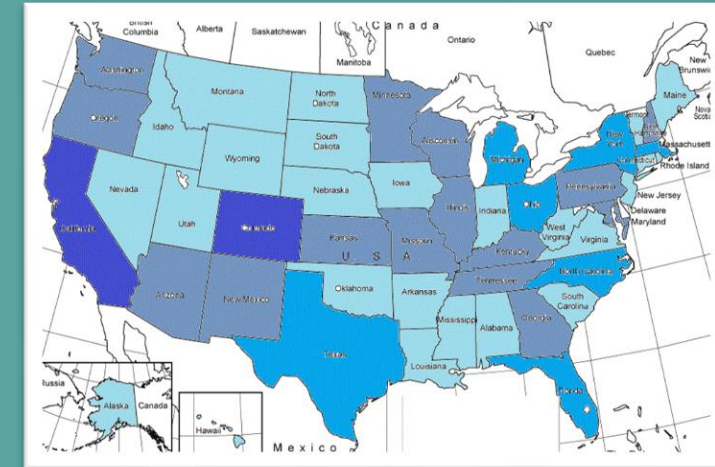
The **PARTNER** Platform

[Program to Analyze, Record, and Track Networks to Enhance Relationships]

www.partnertoolnet

Background on PARTNER

- ❖ Funded by the RWJF for 7 years
- ❖ Used by Practitioners, Evaluators, Researchers in Over 4000 Communities
 - All 50 states, over 40 countries
 - Each user represents a community coalition/group (e.g. Healthy Living, Tobacco, Cancer, etc)
- ❖ As of January 2019, the database includes
 - N=2,000 NETWORKS; N=60,000 ORGS
 - N=135,524 of DYADIC PARTNERSHIPS



What Does PARTNER Do?

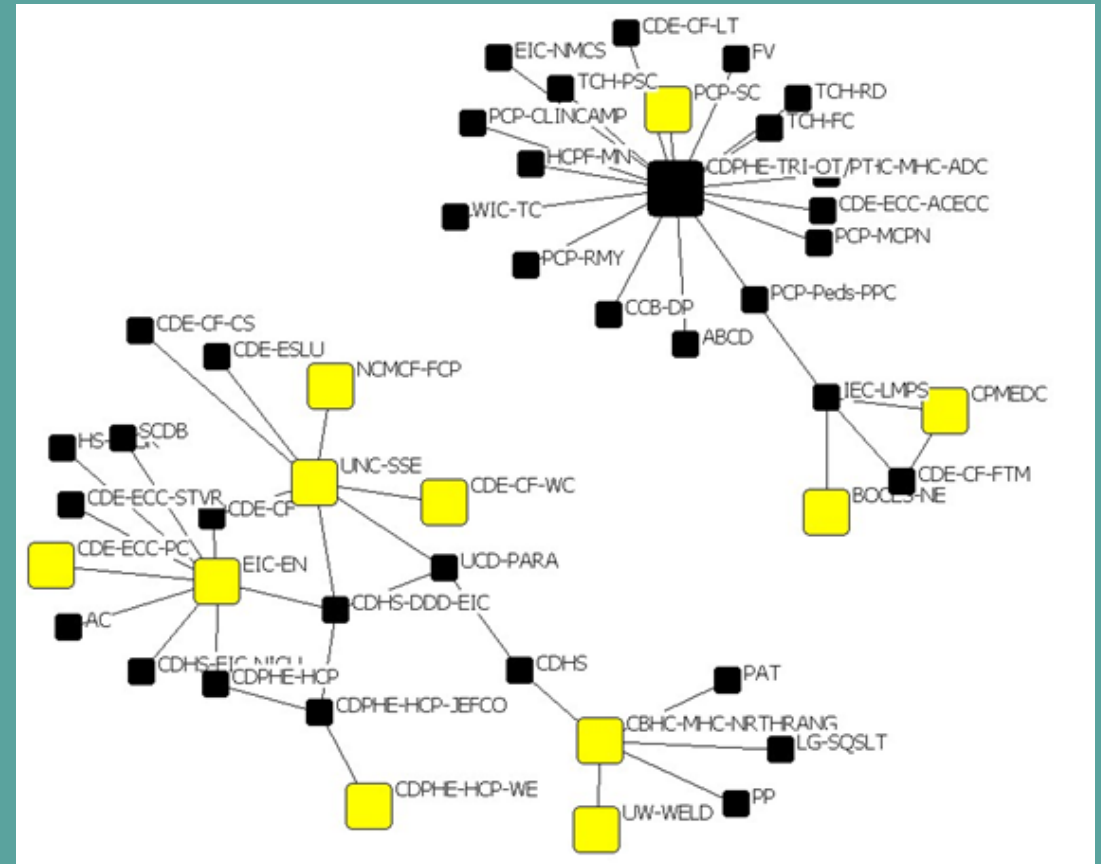
Maps connections among partners

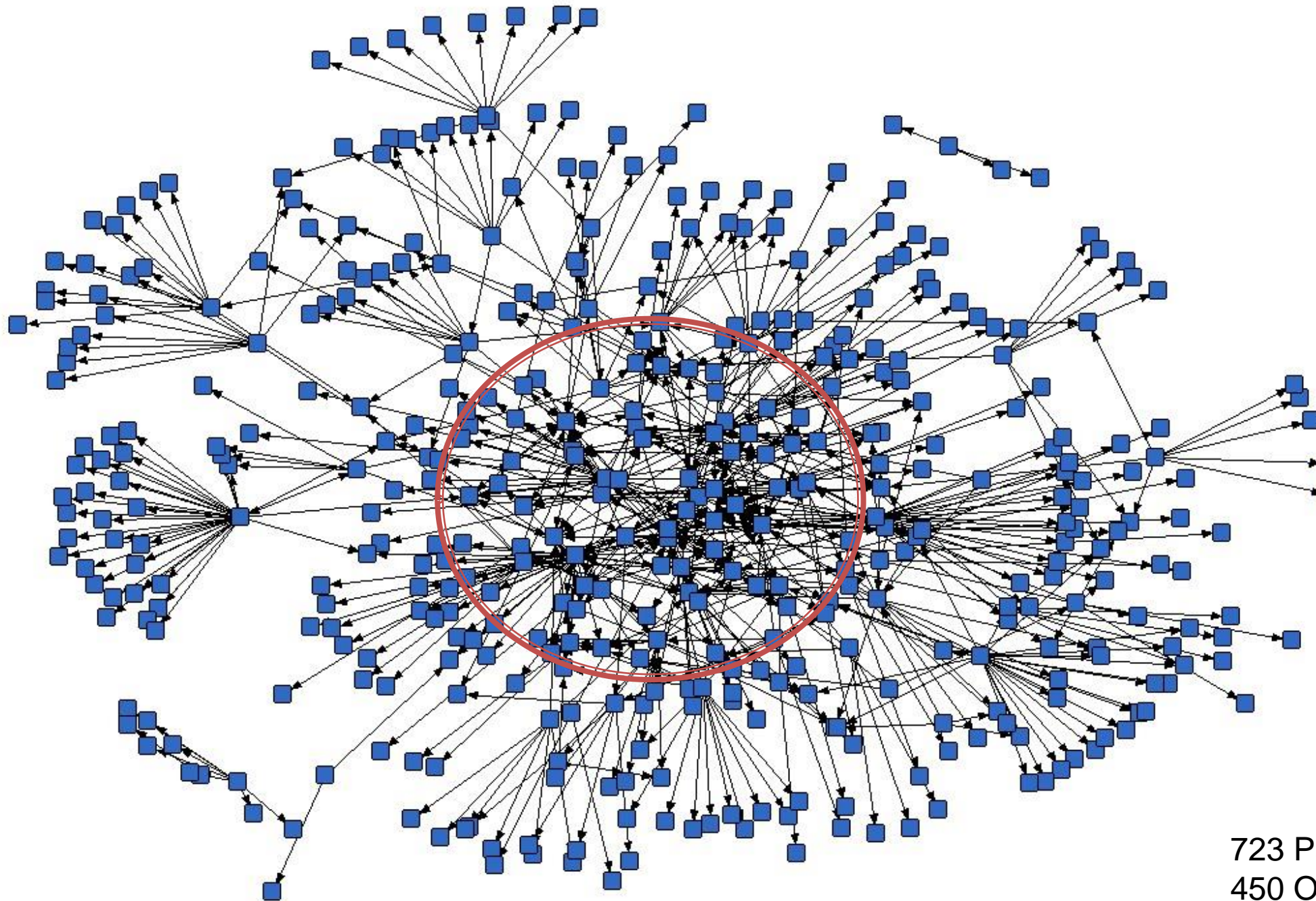
Using Social Network Analysis

- Collects data on who is connected to whom and how those connections vary and change

To:

- Visualize Partnerships
- Track how and why partners are engaging
- Measure perceptions of value and trust among partners
- Identify resources leveraged among partners
- Identify gaps and opportunities

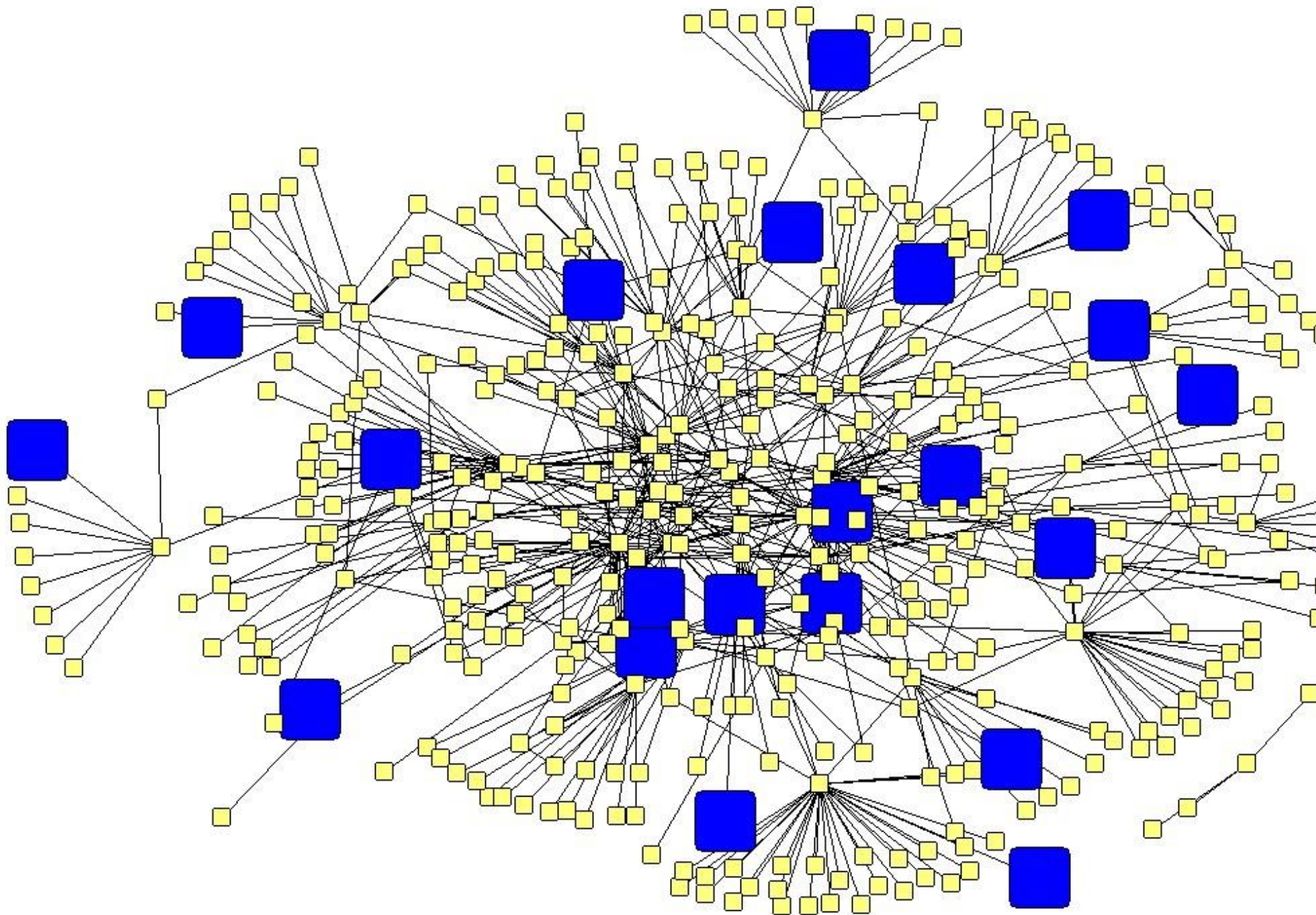




**System of Care
for Babies &
Young Children
With Special
Healthcare &
Developmental
Needs**

723 Partnerships
450 Organizations

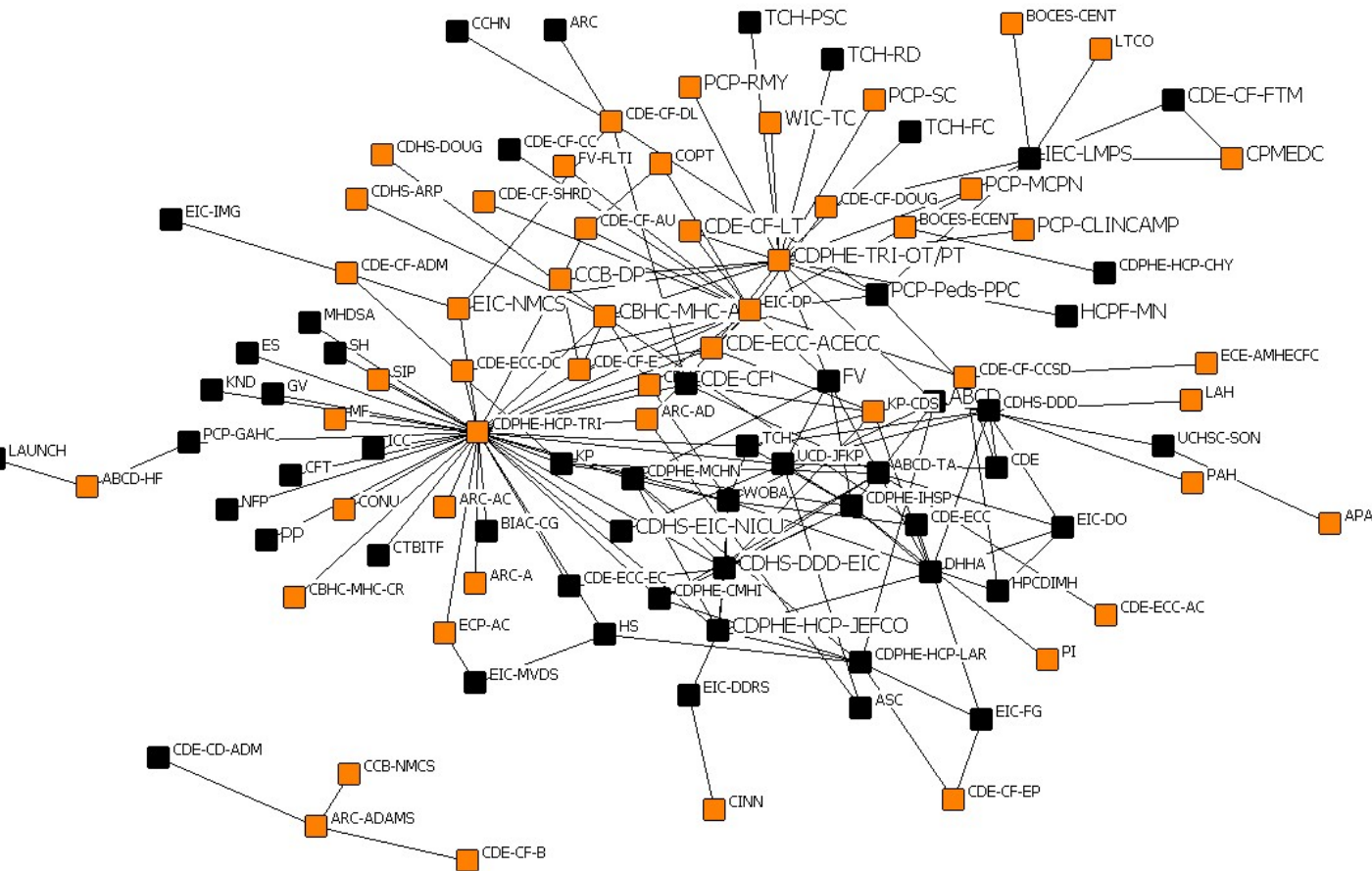
VisibleNetworkLabs



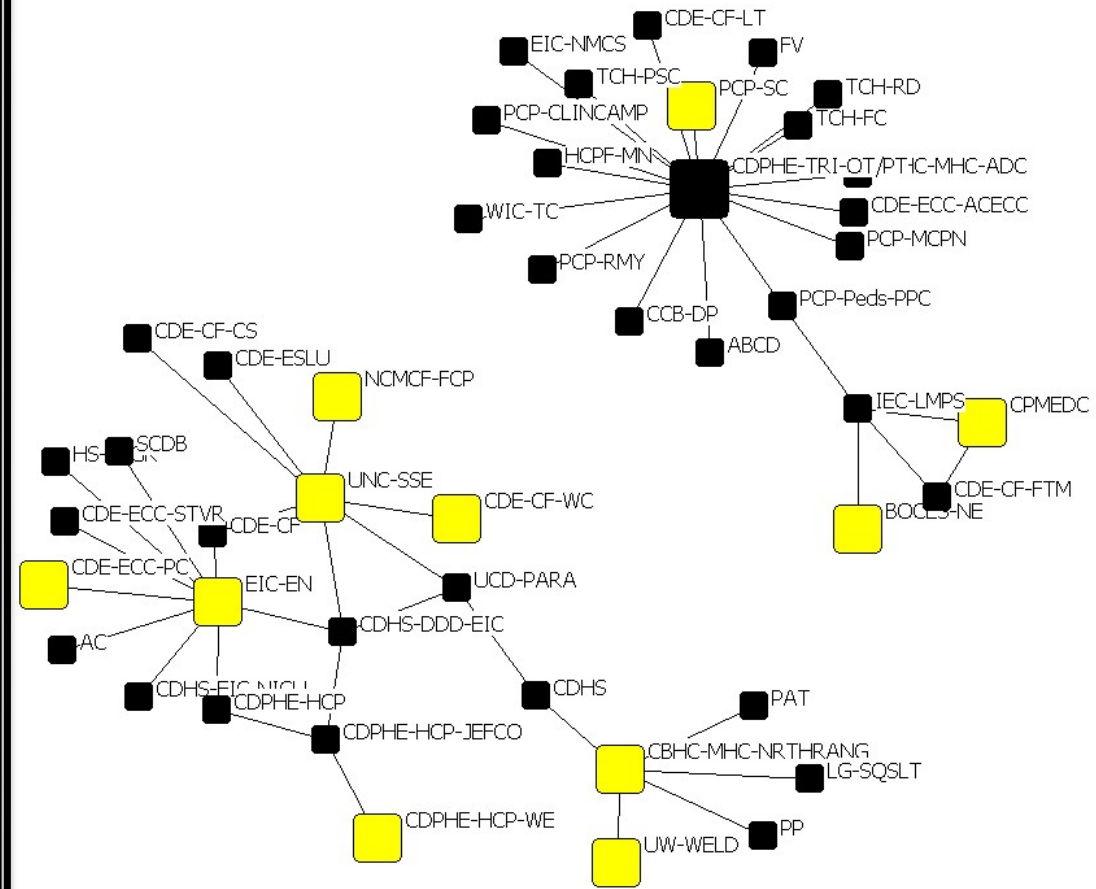
**Mental Health
Agencies:
Geographically
Disperse but
not Connected
to Each Other**

County Level Look at the Data Shows Lots of Variation

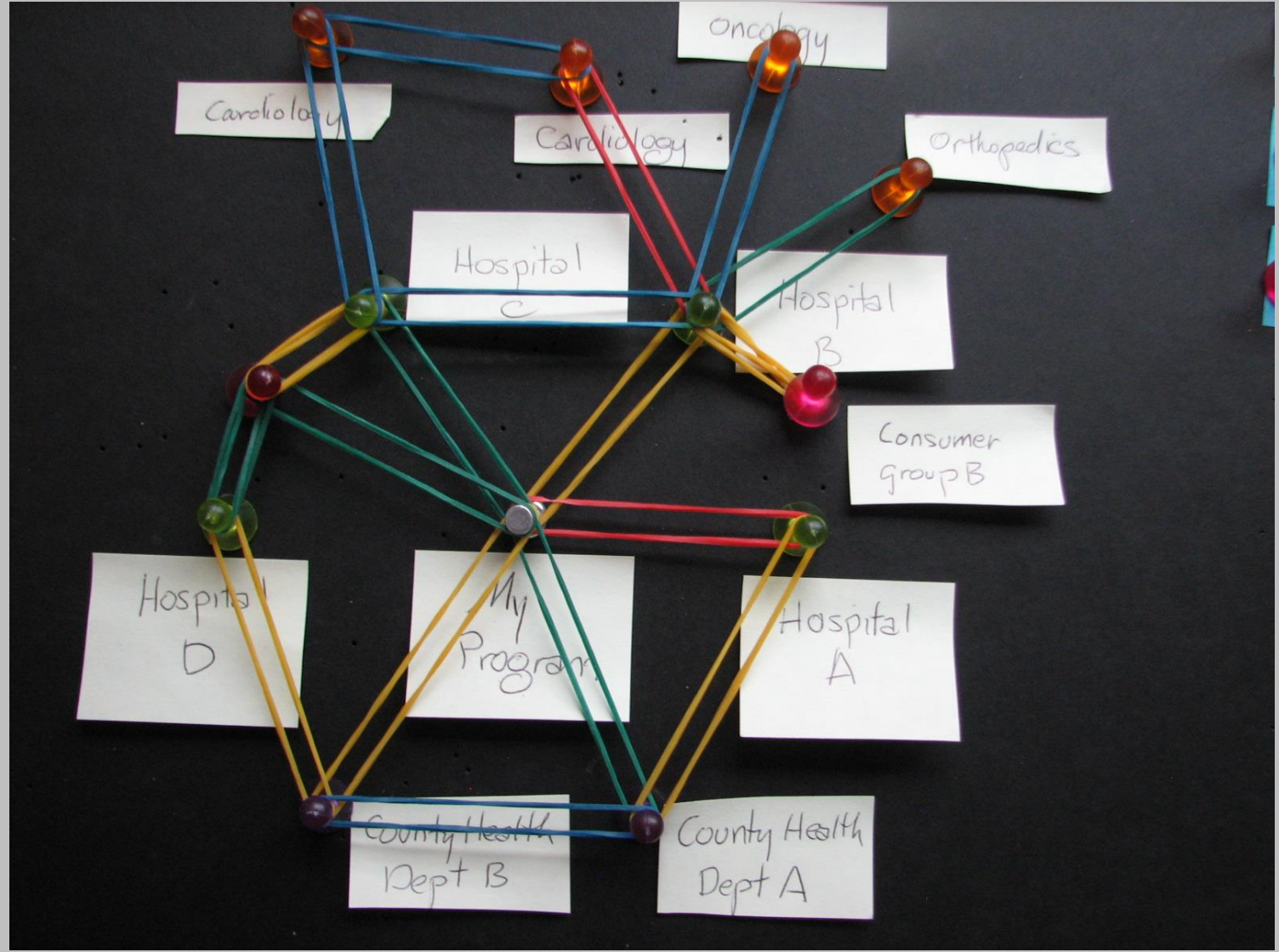
Adams/Arapahoe/Douglas



Weld









A Family Map Example

All the different persons with whom the family need to relate.

(The twin girls were born prematurely, with multiple complications.)

Please Note: Arrows are only beginning examples. Imagine them all filled in!

Doctors

Pulmanology

Drs. Kale/Herbin/Jamison
Nurse-Lucy
Rehab-Annette
Social Worker-Barbara

Neurology

Dr. Fiegerstein
Nurses-Michelle/Dan

Pediatrician

Dr. Wiener
Nurse-Barb C.

Cardiology

Dr. Graves

Surgeon

Drs. Huang/Williams

ENT

Dr. Bleckman

Special Care

Service Coordinator-Corry N.
Physician Assistant-LouAnn
Nurses: Beth, Shania, Gayelynn, Terry,
Betty, Sandy

Powell County Resources

Special
Need
Nurses-
Janet Betty
Part
contacts-
Kathy F.
Twin Club:
Renee,
Evaline, Jo

Children's Home Care

NingHua Anne
C./Stacey/Judy, et al!

Children's Hospital therapists

Occupational T-Susan
Physical T-Linda
Speech T-Lynne
Respiratory T-Jean

Church supports:

Pastor,
Nursery/Babysit
ter/HouseHelp
Volunteers

Neighbors

Extended family:

Grandmas,
Grandpas,
Aunts/Uncles
Cousins
Et all!

New Born Center

Neonatologist
NNP
Nurses
RespiratoryTherapist

Rose Medical Center

Neonatologists
NNP

Anchor Center

Visual Therapy

Community Centered Board Infant/Toddler services

Service Coordinator-
Nancy
Family Support SS-April
Model 200-Nolbert
OT-Alex, PT-Zach,
Speech-Sholi

Insurance

HIS: Utilization
Manager-Marganne S.

Apria

Rehab Designs

Assistive Technology Center-

OUR FAMILY

Michelle

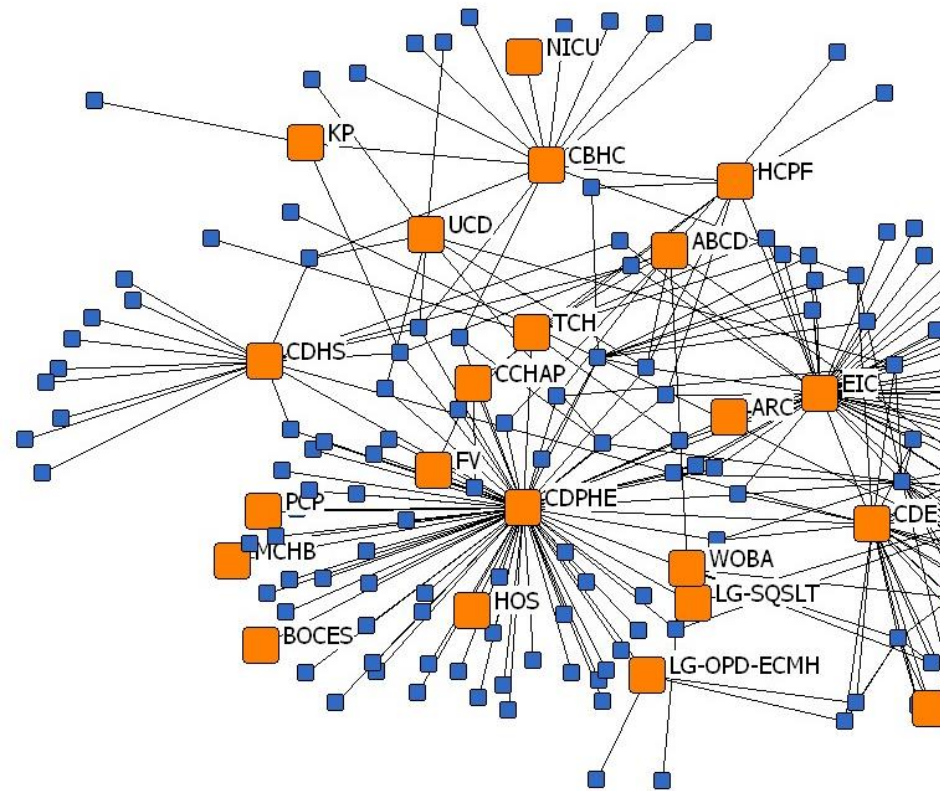
Tanya

Mom/Cindy

Dad/Stephen

Family Blueprint
Shows
a Fragmented
System

Systems vs. Family Networks

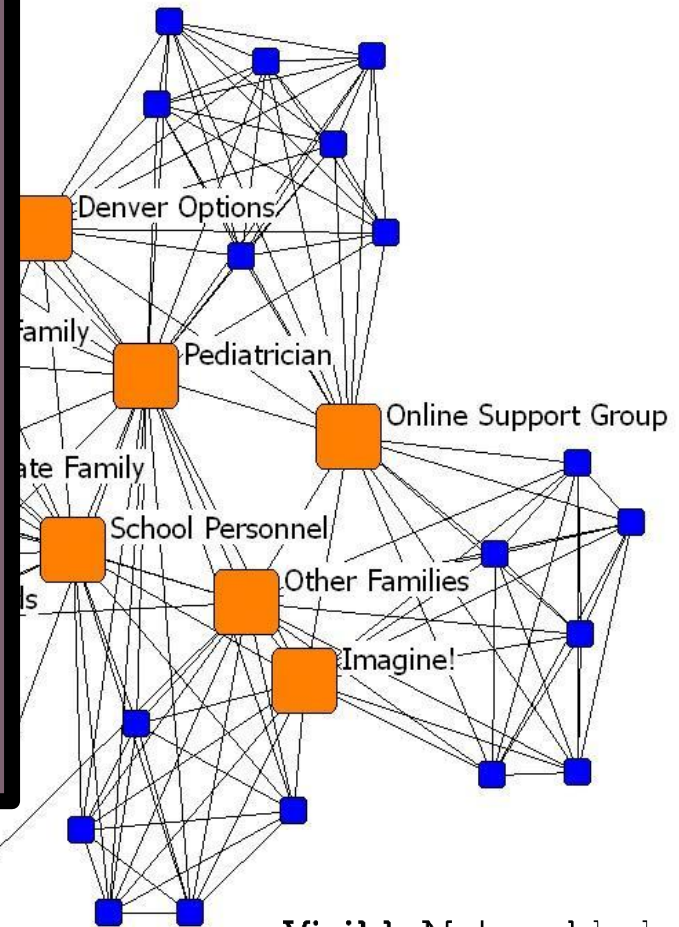


SYSTEM NETWORK

1 – Families have a preference for tapping into their informal supports for help first; then they will use the system when that's not enough.

2 – People want to help themselves...they want to be resilient, not dependent or a burden.

FAMILY NETWORKS



This is Interesting - But Can We Use This to Help People?

- ▶ Question: Why do we expect people to fit into the system? Why don't we expect the system to fit around people?

First

Understand
personal
support
networks
and needs

Then

Build an
adaptive
system to
respond to
variations

- ▶ Hypotheses reflected

- ▶ Outcome personal system is

en this is
es.

ay their
know the



PARTNERme

A Person-Centered Network Tool



PARTNERme

Person-Centered Network Tool



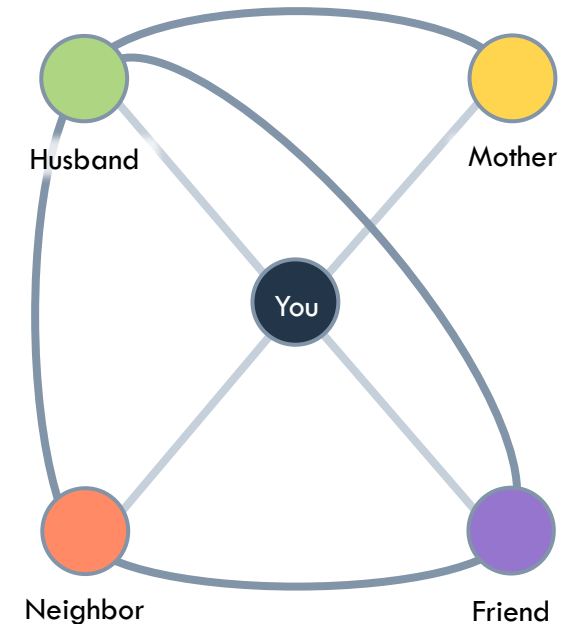
Please rate your own health?



How often do you feel lonely?



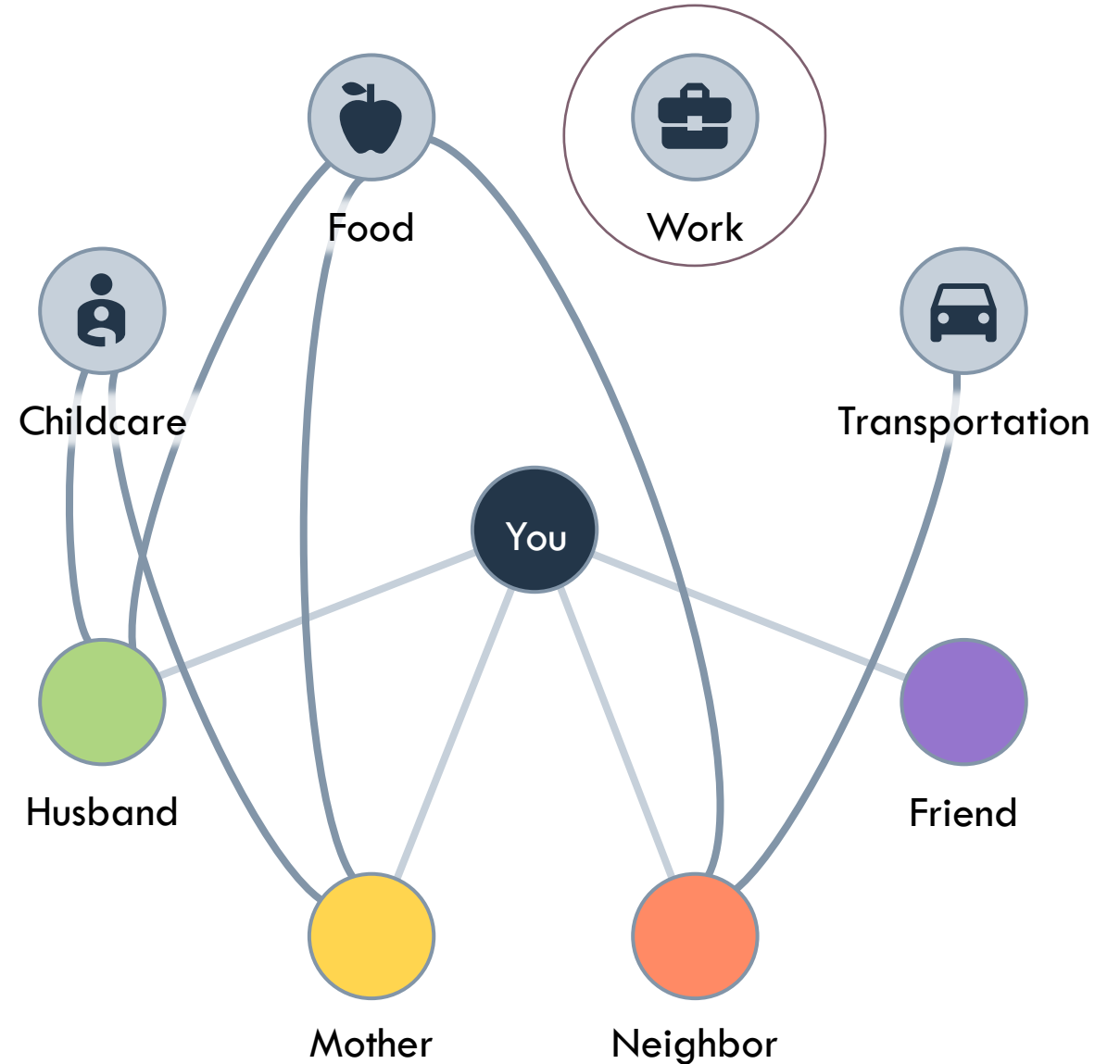
Who do you rely on when you have problems?



What are your most pressing concerns?

- Childcare
- Education
- Emergency needs
- Health/healthcare
- Food
- Housing & Utilities
- Legal matters
- Mental/behavioral health
- Money
- Social support and guidance
- Transportation
- Work

Who helps you with these concerns?



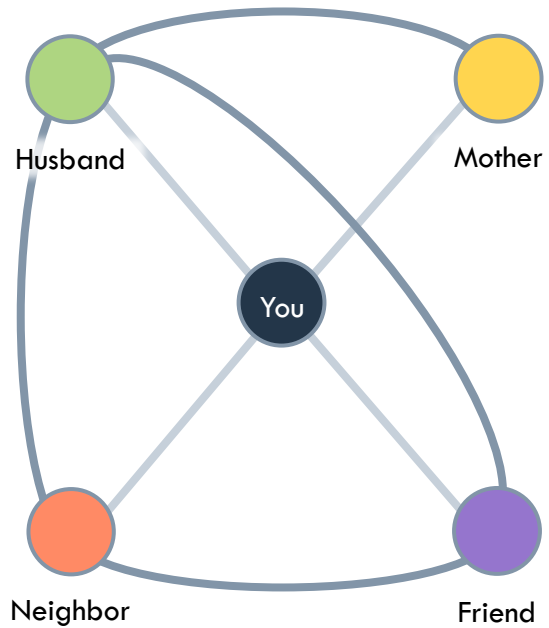


MEMBER NAME
VNL ID / Patient Name

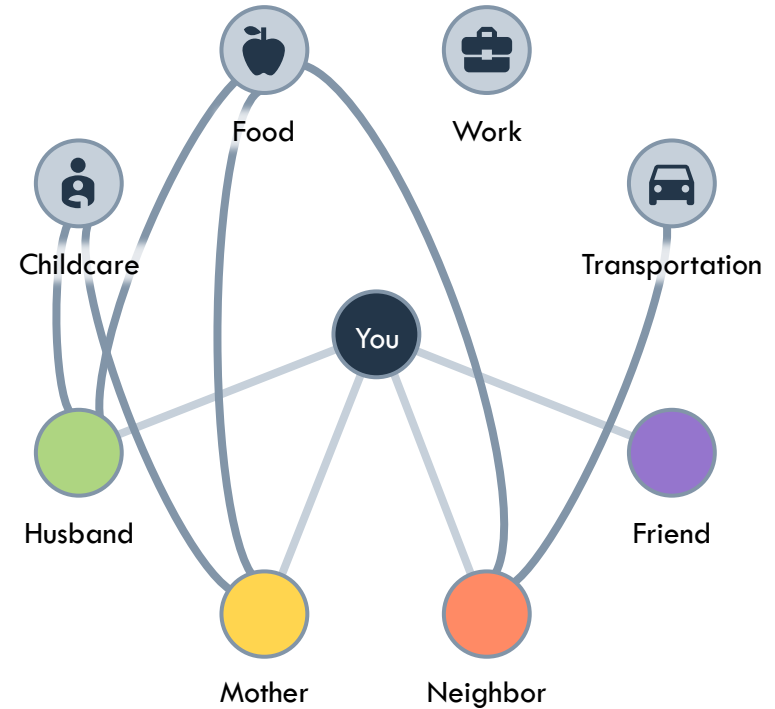
TYPE
9-month visit

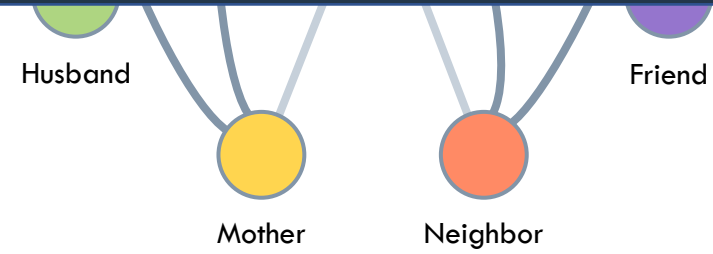
APPOINTMENT TIME
1:00 PM 10/24/2020

Personal Map



NeedsMap



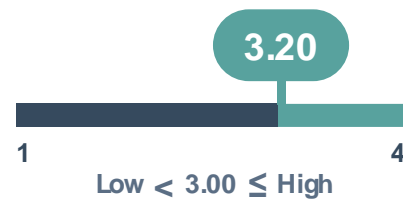


Trust Score



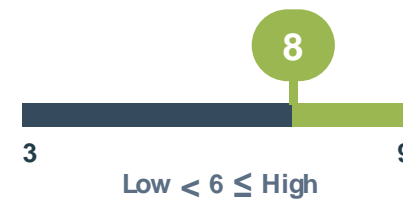
Low trust rating for members in their social support system.

Dependency Score



Highly dependent on members in their social support system.

Loneliness Score



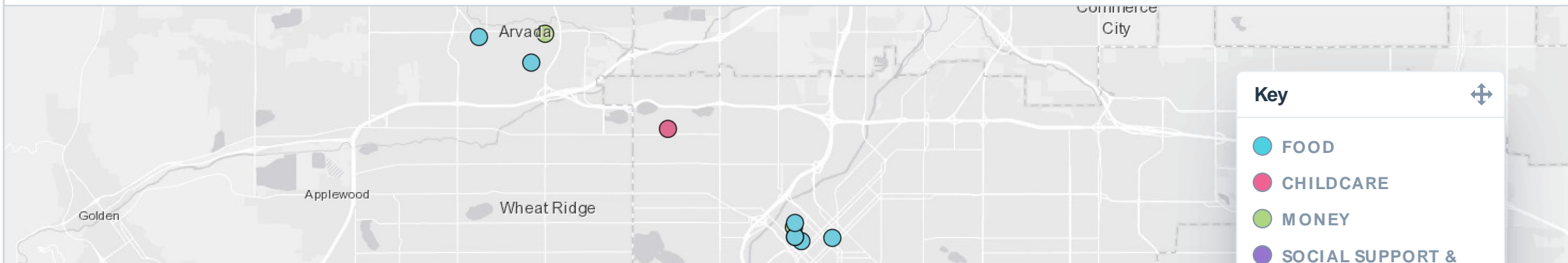
Scores that range from 6 to 9 indicate that this person does identify as lonely.

Social Connectedness Level

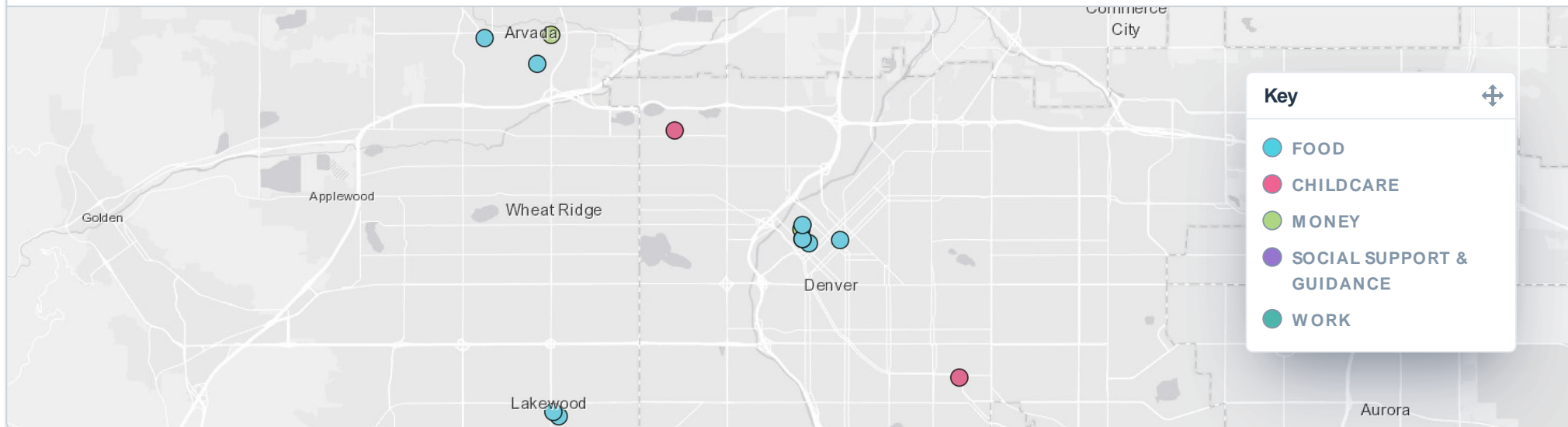


This person is at medium risk.

Resource Map



Resource Map



Food

Adventist Community Services

LIFT

(303) 783-3777

2575 SBroadway
Denver, CO 80210

www.acslift.org

OTHER INFO

Food pantry

Arvada Community Food Bank

303-424-6685

8555 W. 57th Ave
Arvada, CO 80002

OTHER INFO

Food Assistance 12X per year

Aveanna

(720) 498-5045

OTHER INFO

Baby formula

Bienvenidos Food Bank

(303) 935-7389

5045 W 1st Ave
Denver, CO 80219

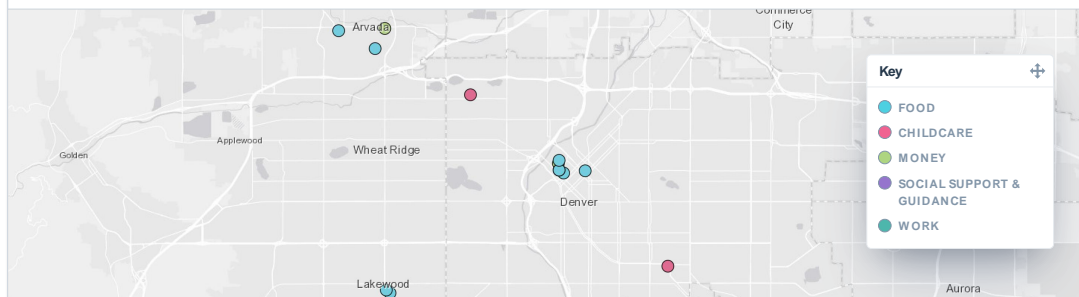
www.bienvenidosfoodbank.org

OTHER INFO

Food pantry

[See More](#)

Resource Map



Food

Adventist Community Services

LIFT
 (303) 783-3777
 2575 SBroadway
 Denver, CO 80210
www.acslift.org

OTHER INFO
 Food pantry

Arvada Community Food Bank

303-424-6685
 8555 W. 57th Ave
 Arvada, CO 80002

OTHER INFO
 Food Assistance 12X per year

Aveanna

(720) 498-5045
 OTHER INFO
 Baby formula

Bienvenidos Food Bank

(303) 935-7389
 5045 W 1st Ave
 Denver, CO 80219
www.bienvenidosfoodbank.org

OTHER INFO
 Food pantry

[See More](#)

Childcare

The Action Center

(303) 477-3944
 2222 W 32nd Ave
 Denver, CO 80211

OTHER INFO
 Food for all, they request donations for the food

Catholic Charities Emergency Assistance

303-654-1040

Christian Action Guild

303-279-5674
 1401 Ford St.
 Golden, CO 80401

HOURS
 Tuesday, Friday, 10 a.m. - 3:30 p.m.; Saturday, 11 a.m. - 12:30 p.m.

City Square Denver

(303) 295-6180
 2501 California St
 Denver, CO 80205

www.citysquare.org

Work

SAME Work Café

3315 SBroadway
 Englewood, CO 80113

OTHER INFO
 Food for all, they request donations for the food

SHARE Colorado

303-428-0400

Shield's

800-765-8775

OTHER INFO
 Baby formula

The Action Center

303-237-7704
theactioncenter.org

HOURS
 Food back M-W, 9-3:30, Thurs 11-5:30, Fri 9-3:30

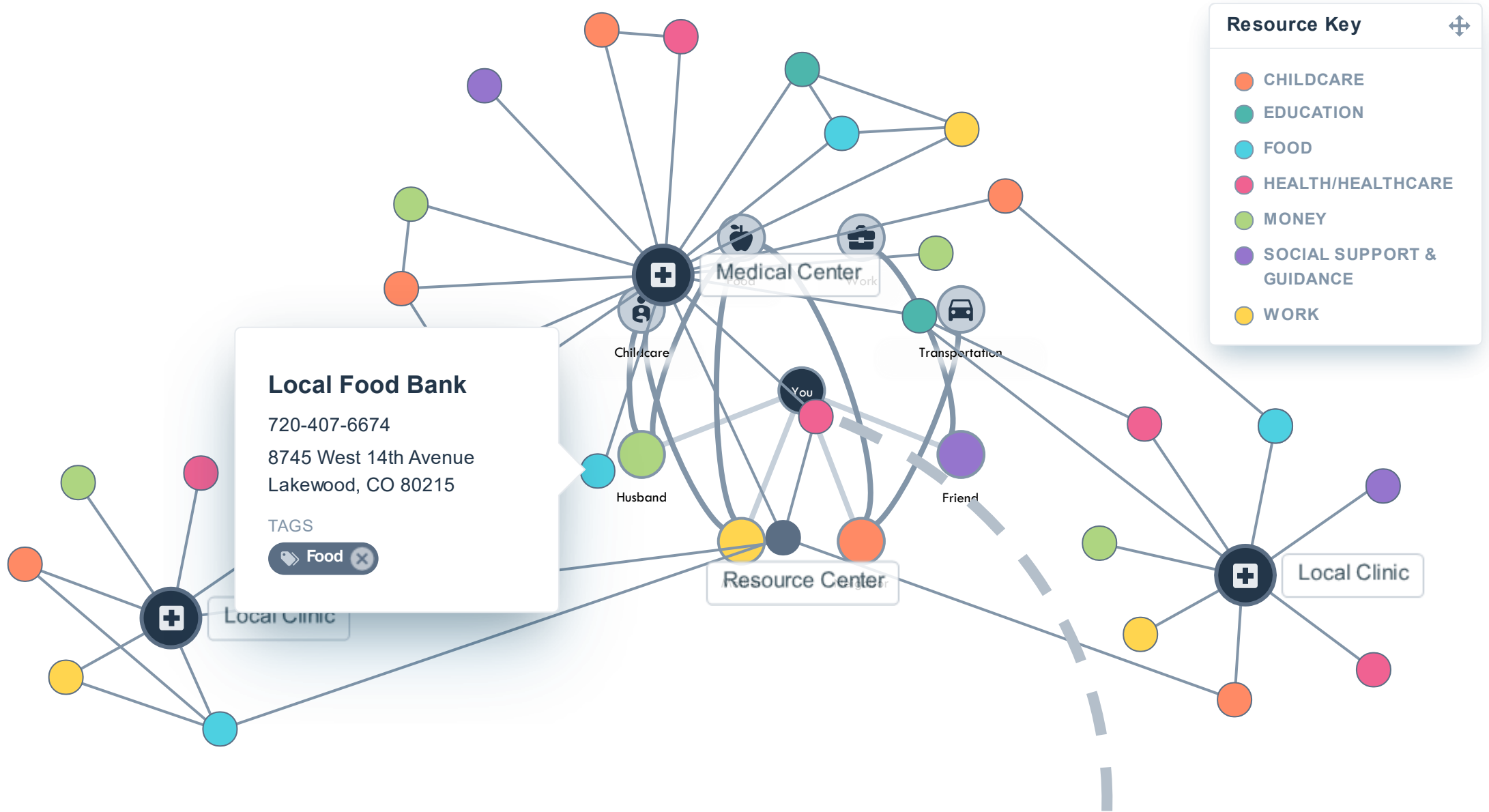
Transportation

Food Bank of the Rockies- Mobile

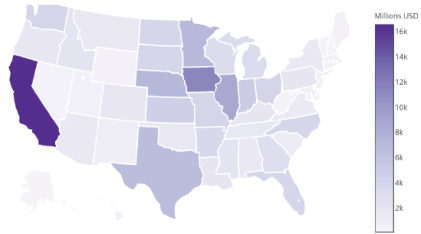
Food Bank of the Rockies- Mobile

Good Health Will

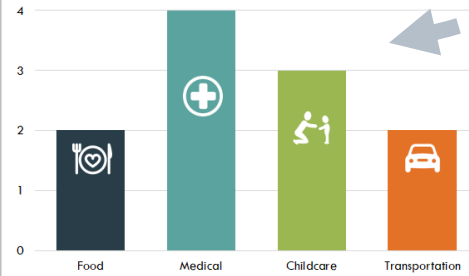
Green Mountain Christian



SOCIAL NEEDS BY REGION

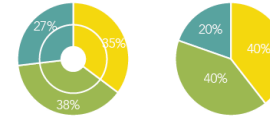


REFERRALS IN THE LAST MONTH



POPULATION HEALTH REPORT

NEEDS BY COUNTY
TOTAL CLIENTS ASSESSED: 1,582
SUPPORT NETWORK STRENGTH DISTRIBUTION



Connected
Community
Lab

Draw Maps

Find Resources

Data Analytics

Build a Care Plan



Cara Flowers, 62yr Female
Moderate Risk
Connections Made: 3

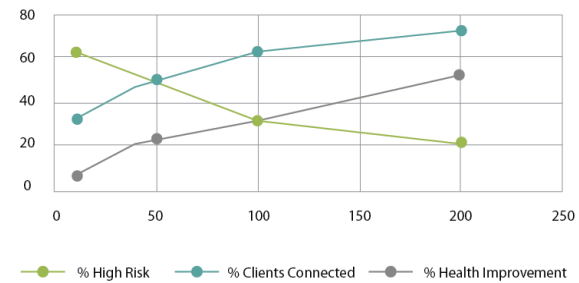
82%
Complete



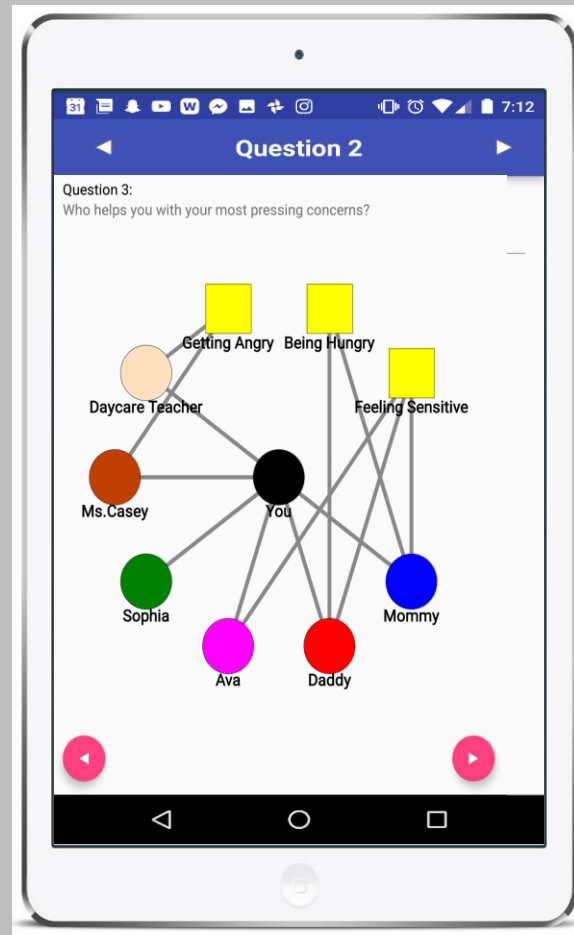
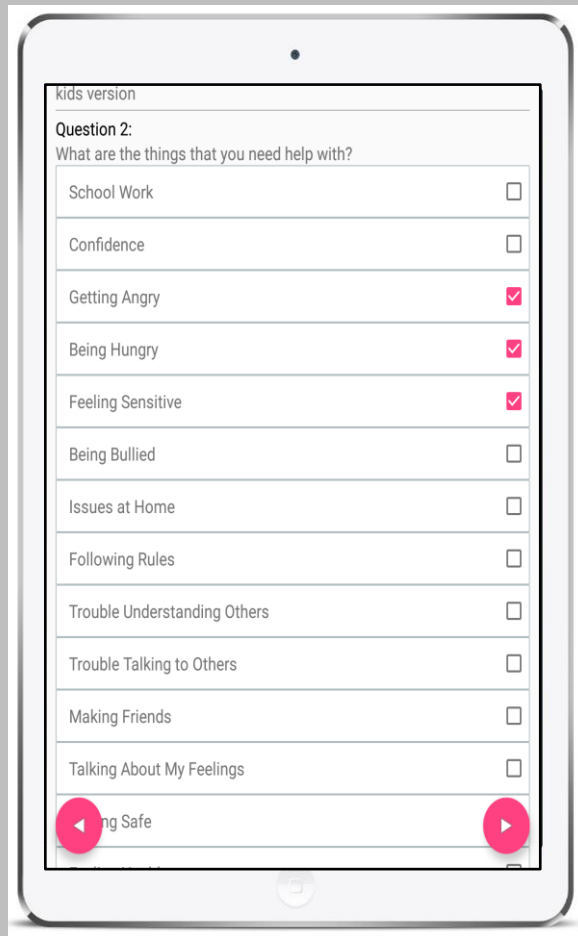
Pablo Munoz, 28yr Male
Low Risk
Connections Made: 1

33%
Complete

SYSTEM OUTCOMES



We are also discovering the other ways we can apply this – for kids!



Questions/Ideas?



danielle@visiblenetworklabs.com
www.visiblenetworklabs.com