

## Introduction to Collaborative Innovation Networks (COINs)

March 6, 2020

The Healthy Start EPIC Center is operated by the <u>National Institute for Children's Health Quality</u>. This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number 1 UF5MC327500100 titled Supporting Healthy Start Performance Project.

National Institute for Children's Health Quality



#### Webinar Agenda

Topic	Speaker
Housekeeping	Tess Pritchard
Welcome	Kenn Harris
Overview of Healthy Start COIN	Mary Emanuele
Creating COINs for Healthy Start	Peter Gloor
Q&A	Peter Gloor
Next Steps for Healthy Start COIN	Kenn Harris
Closing	Kenn Harris





#### Meeting Logistics

#### Please note the following:



 This session is being recorded, and will be archived for future viewing.



 All participants are muted upon entry. We ask that you remain muted to limit background noise.



 Members are encouraged to participate in the discussion by typing your comment/asking questions using the chat box.



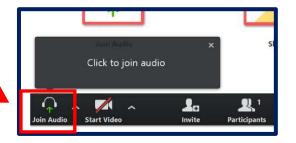


#### Connecting to the Audio Conference

- Join Zoom Meeting by clicking Zoom Meeting link & launching the Zoom application
- An audio conference box will appear
  - If you do not see the box click the 'Join Audio' button
- From the audio conference box: Select to "Phone Call" or "Computer Audio"
- If using the phone:
  - dial the number next to "Dial"
  - You will be prompted to enter the "Meeting ID"
  - Then you will be prompted to enter the "Participant ID"



https://zoom.us/j/237206404

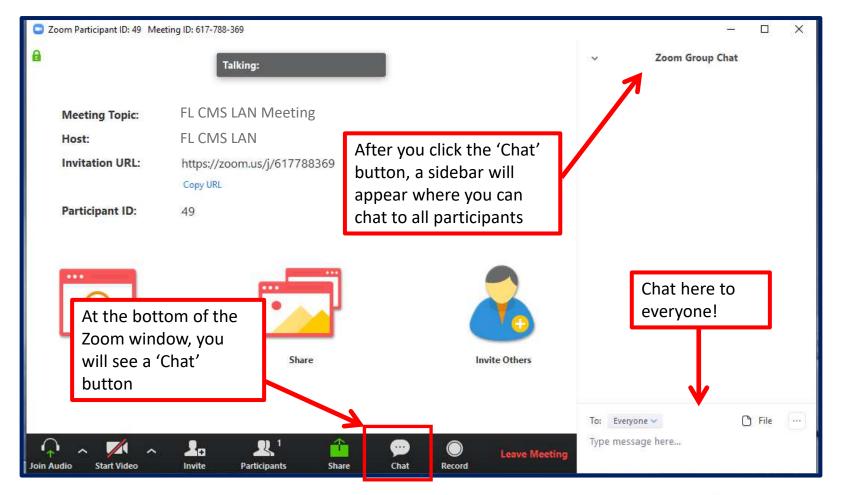








#### Ways to Participate: Chat









via text messaging



Send all messages to this five digit number: 22333

To log in, include in body of text the word (you only have to do this once): **HEALTHYSTART428** 







via text messaging

After you have logged in, you will receive this confirmation message









#### Poll Everywhere: Additional Tips

- Capitalization does not matter; spelling and spaces do
- You only have to text the word "HEALTHYSTART428" the first time.
  After that, just send a normal text to respond to polls.
- If texting 22333 doesn't work: Visit pollev.com/HEALTHYSTART428 to respond to the current poll
- NO charges to your cellphone beyond what your phone carrier typically charges for a text message









### Creating COINs for Healthy Start



Peter A. Gloor

MIT Center for Collective Intelligence

pgloor@mit.edu

Webinar for Healthy Start Support Center – March 6, 2020





#### Contents

- Intro to COINs
- The CCHMC example
- The IM CollN example
- Get your topics for COINs

## On a scale of 0 to 7, how satisfied are you with your life, all things considered?

```
0 (Completely Dissatisfied)
```

1

7

2

S

4

5

6

7 (Completely Satisfied)



### More Happiness – More Creativity

- How to measure
  - COINs (Collaborative Innovation Networks)
  - 7 Honest Signals of Collaboration
  - Tribes
- How to improve
  - Happimeter
  - Facial/Voice Emotion Recognition
  - Social Quantum Physics

## COINS

COIN CLN CIN creator Collaborative Collaborative Collaborative **Innovation Network Learning Network Interest Network** 3-15 ~ 150 >1500 http://www













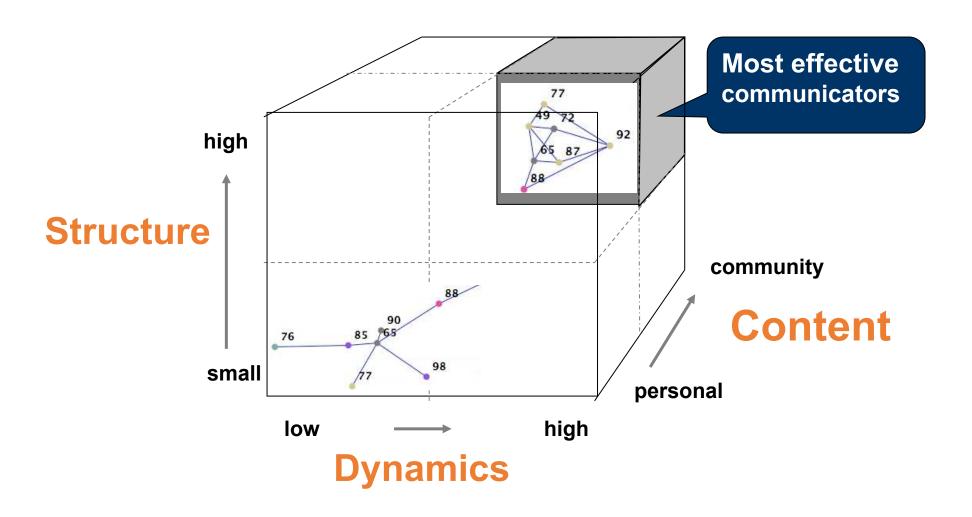




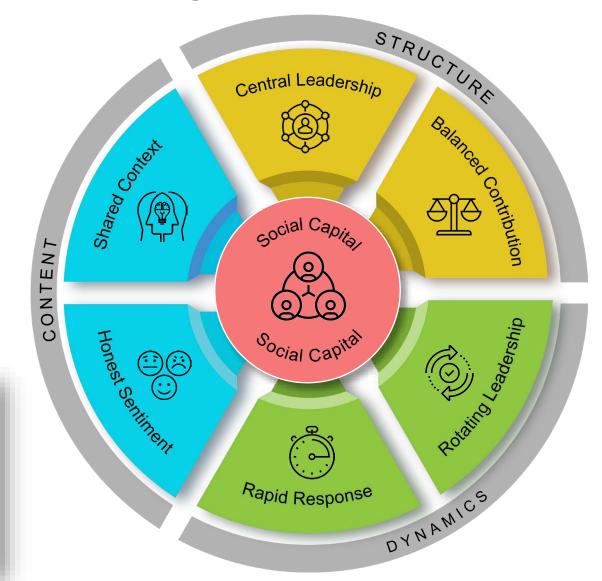
# 7 Signals



#### People for Innovation



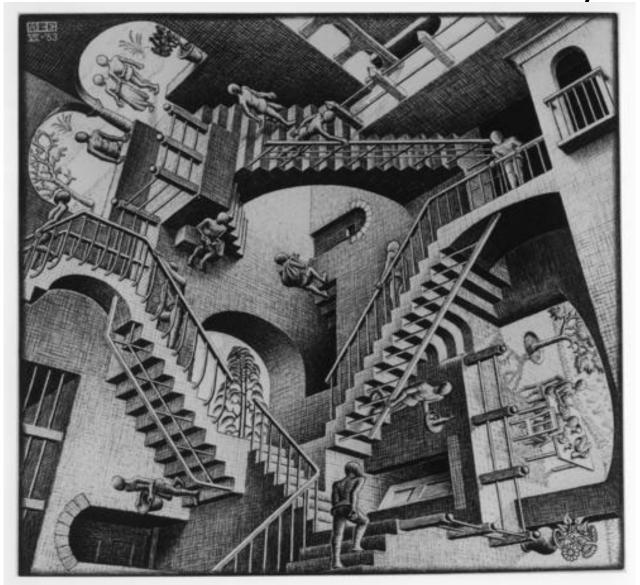
#### 7 Honest Signals of Collaboration



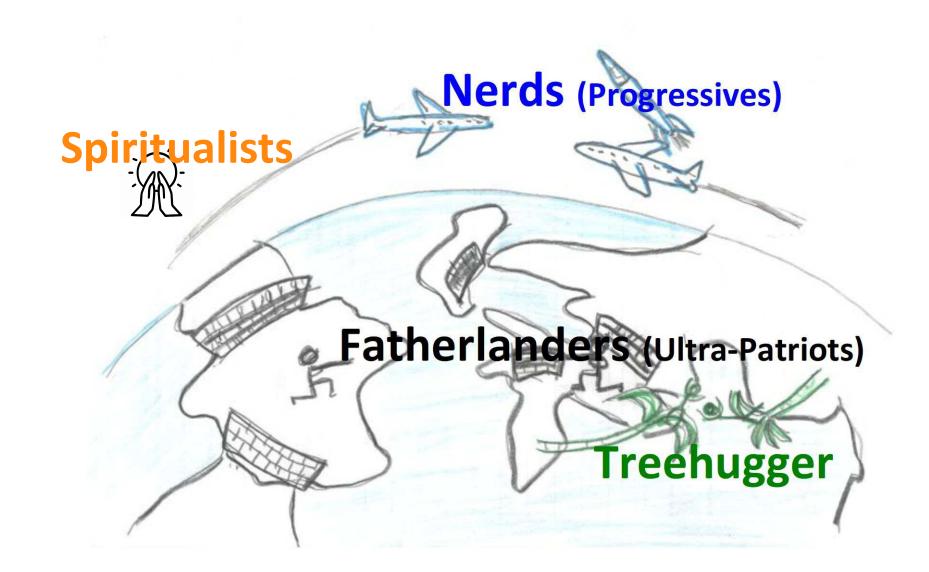


# 

#### Everybody lives in a different reality



#### Virtual Tribes live in Alternative Realities



#### Tribefinder

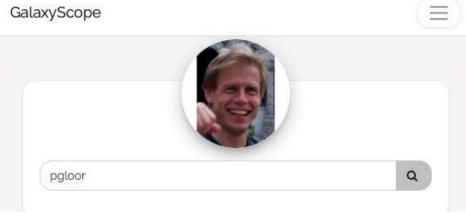


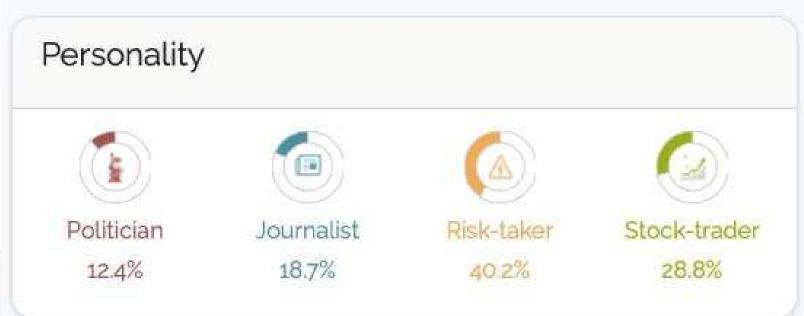






#### Tribefinder







#### Tribefinder





63.8%

15.4%

7.2%

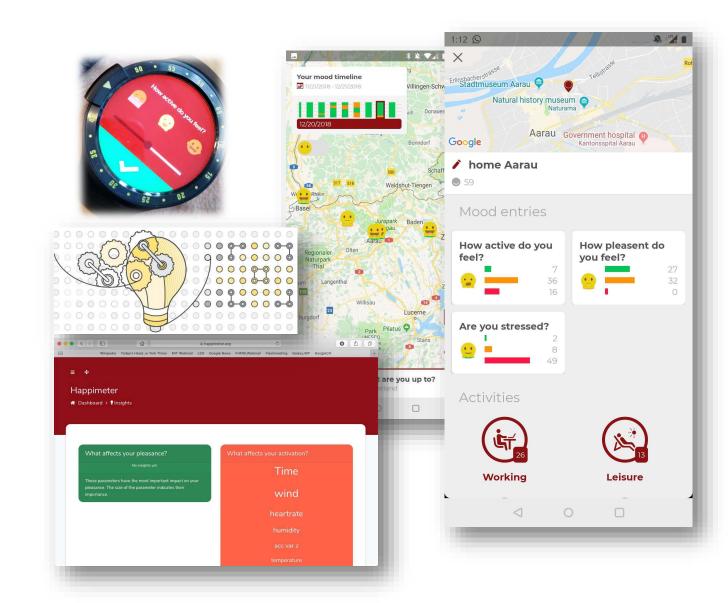
13.6%

## Happimeter

#### Happimeter tracks emotions

Happimeter consists of four components:

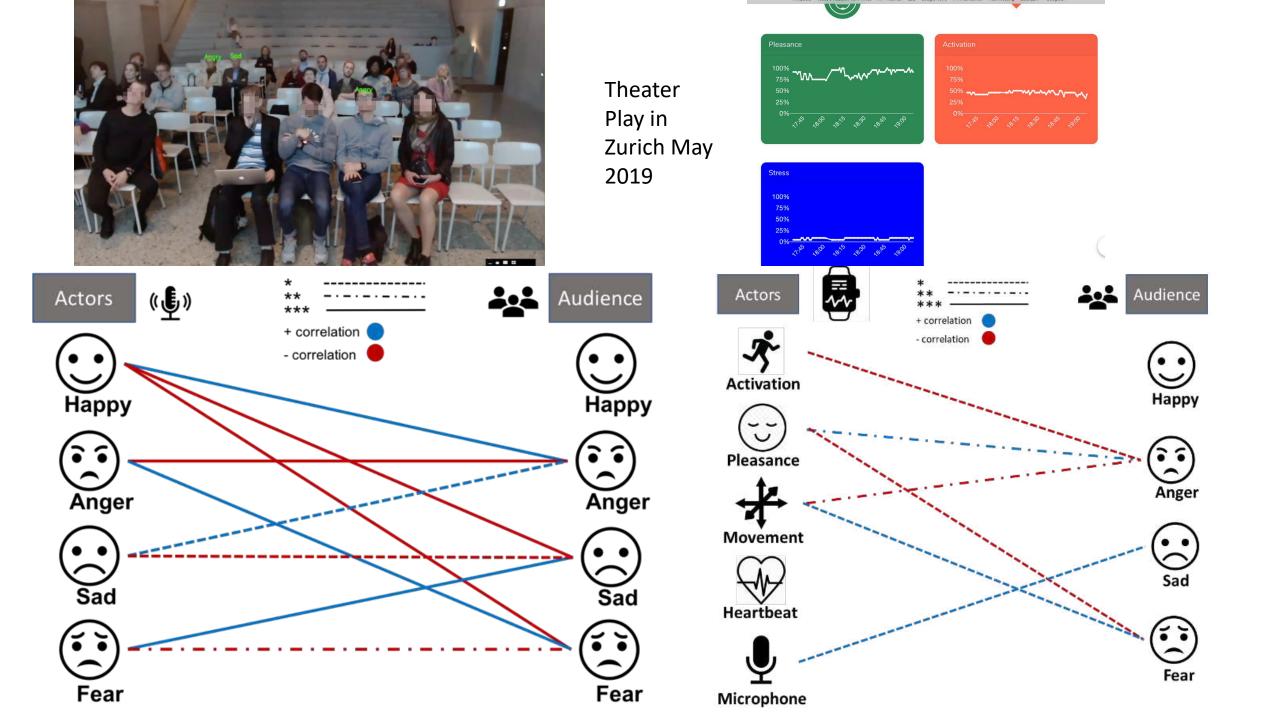
- 1. An Android Wear smartwatch (Apple watch version under development) that tracks acceleration, heart rate, voice, and location
- 2. An Android/iPhone app that transmits data to the server, and visualizes (shared) happiness
- A machine learning backend in the AWS cloud
- 4. A Website that visualizes results and allows users to create/manage groups of friends and teams



## Facial Emotion Recognition with Vuzix Smartglasses









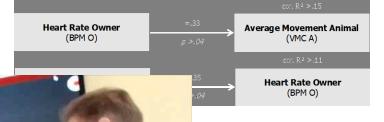
Measuring Emotions of Dogs, Horses &

**Plants** 



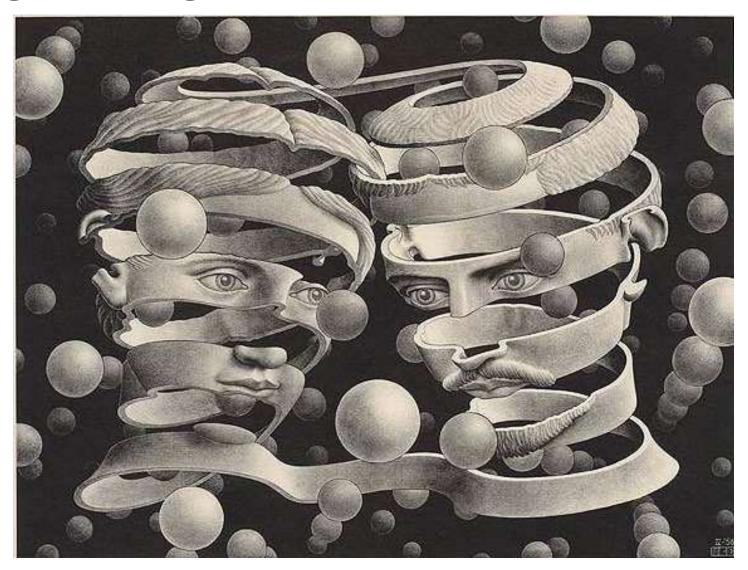






## Social Quantum Physics

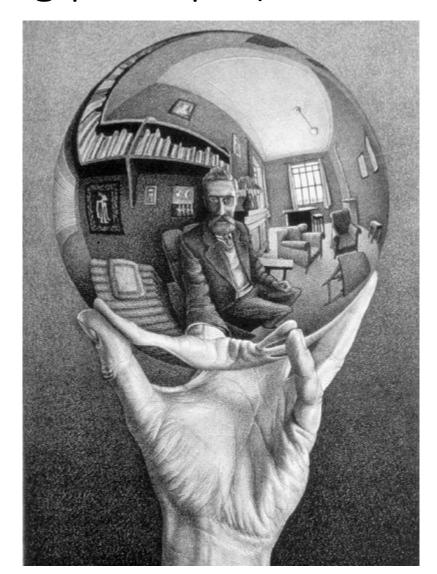
#### Creating Entanglement



# Social Quantum Physics



A virtual mirror gives truth about self (Heisenberg principle)



# Do you want to .....

Being led from the top



Lead yourself based on shared values and culture



# Do you want to communicate .....

By speaking



By *listening* 

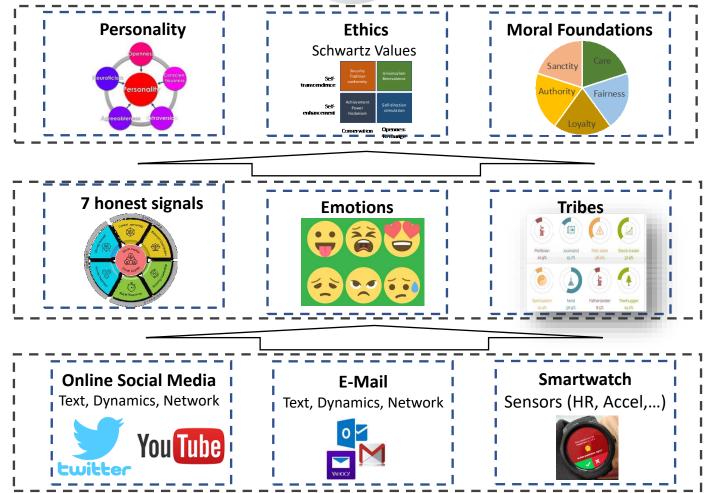
By watching

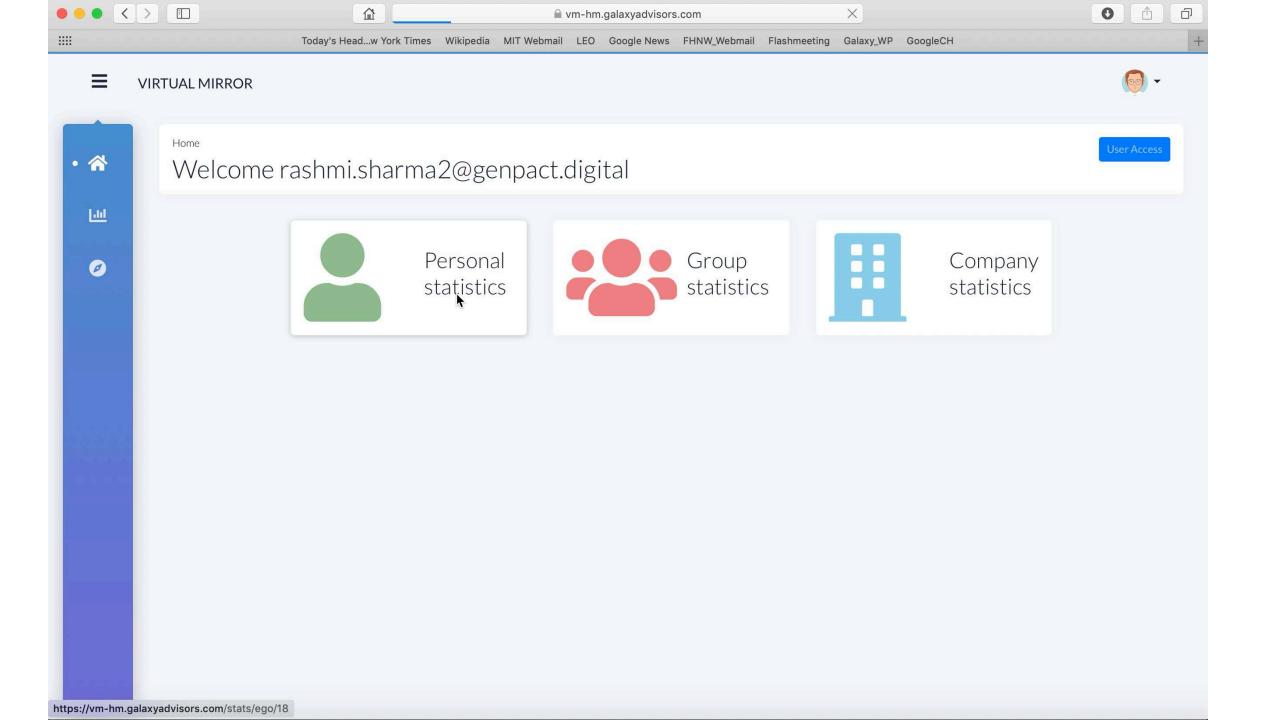


# Our Goal - The Social Compass (17 years of research at MIT CCI)



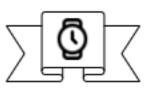
Ethical behavior (Golden rule) Humility, Respect, Compassion, No Stress/Burnout



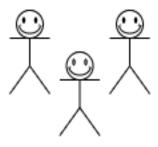


### Virtual Mirroring 3 Months, German Bank (14% more happiness)

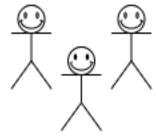
#### Experimental group



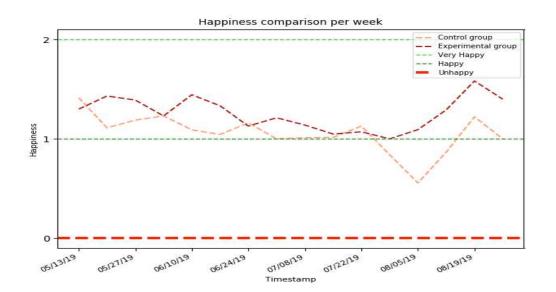
#### Control group

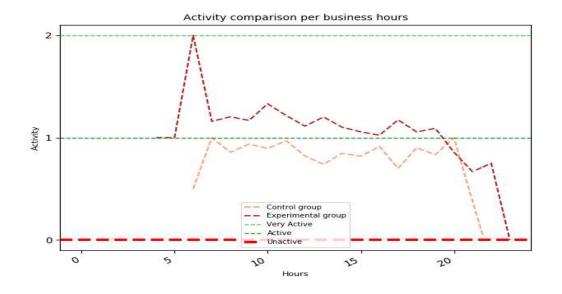


- Smartwatch
  - Receive questions about mood
  - Collect sensor data
  - Receive mood predictions
- · Smartphone application
  - Monitor emotions
  - Manage social network
  - Receive interventions
- Website
  - Receive mood inputs
  - See drivers of mood
  - Influence by whom?
  - Exert influence on whom?
  - Modify interventions



- Smartwatch
  - Receive questions about mood
  - Collect sensor data
- · Smartphone application
  - No access
- Website
  - No access





# On a scale of 0 to 7, how satisfied are you with your life, all things considered?

```
0 (Completely Dissatisfied)
```

1

7

2

S

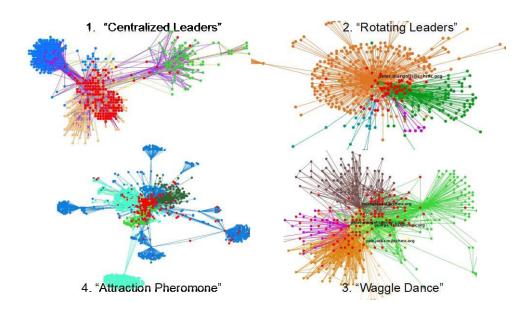
4

5

6

7 (Completely Satisfied)

# CCHMC - C3N





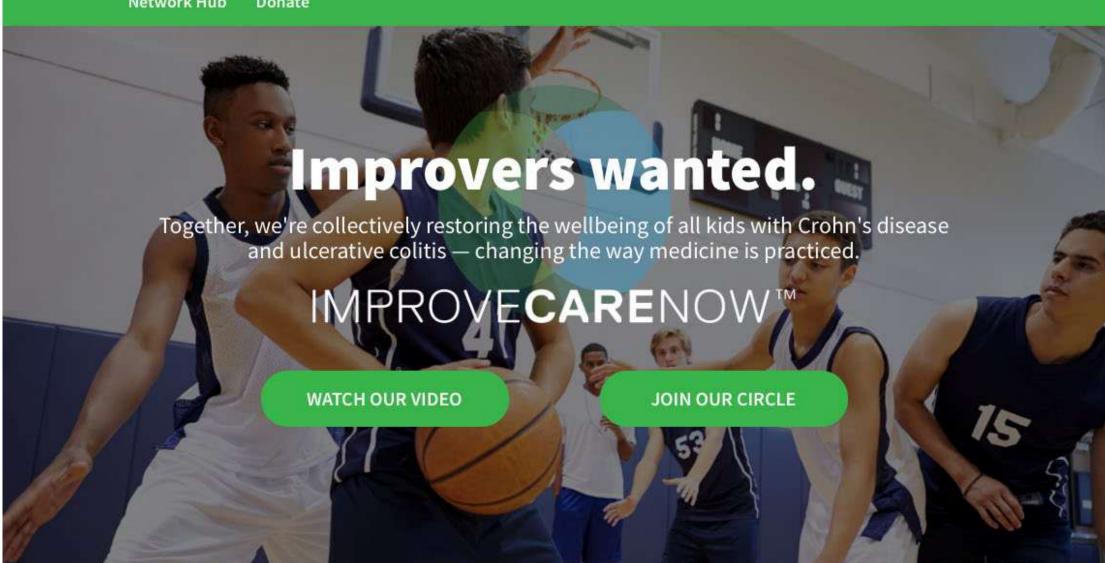






About - Get Involved - Tools Patients & Families - Healthcare Professionals - Research -

Network Hub Donate





improvecarenow







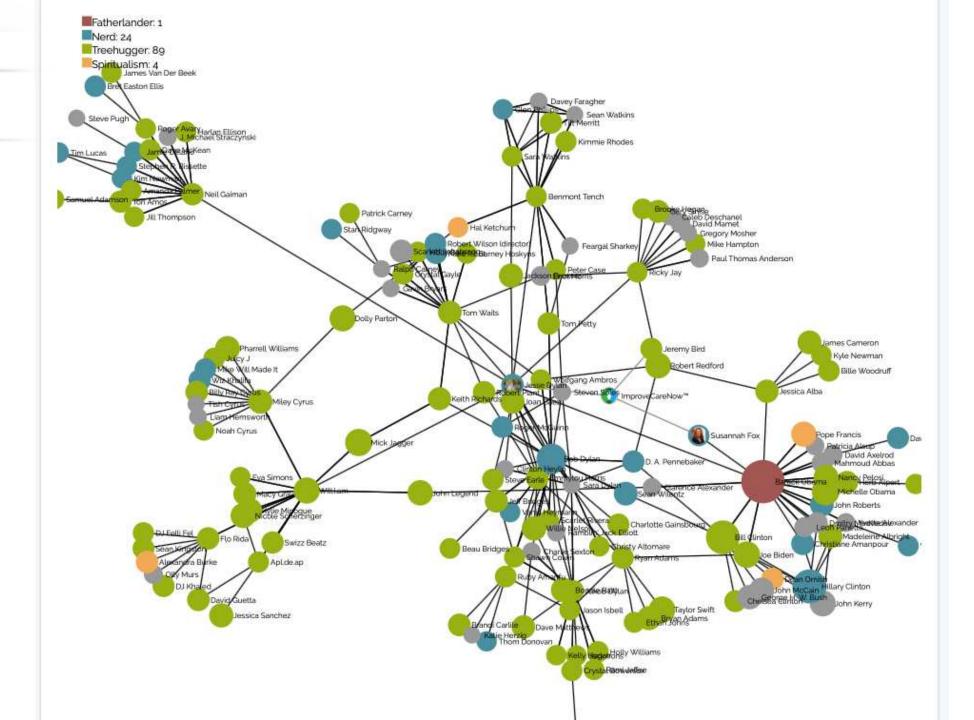




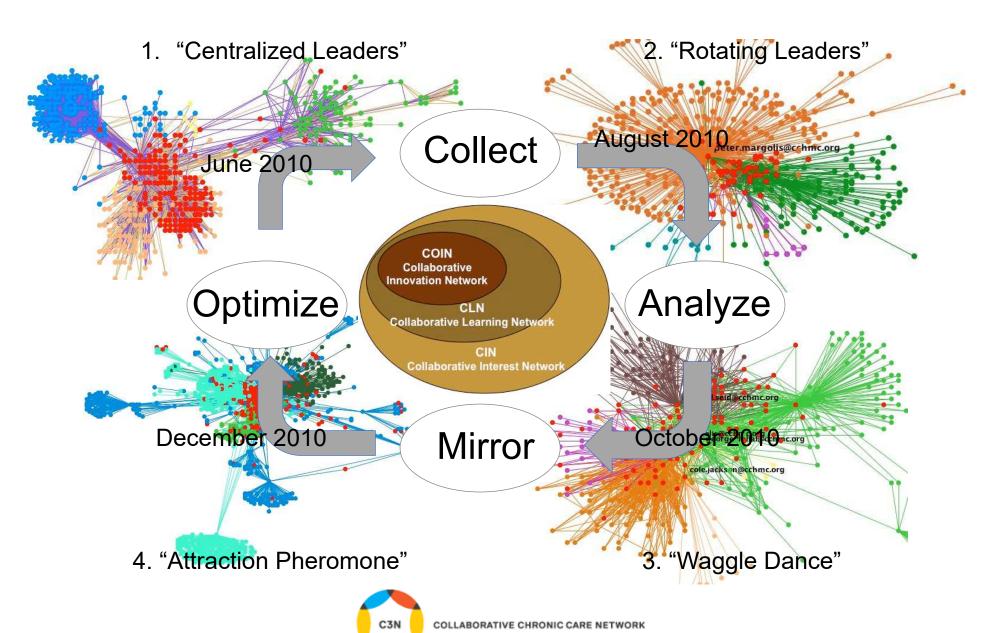




#### improvecarenow



## The C3N Project





























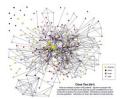






























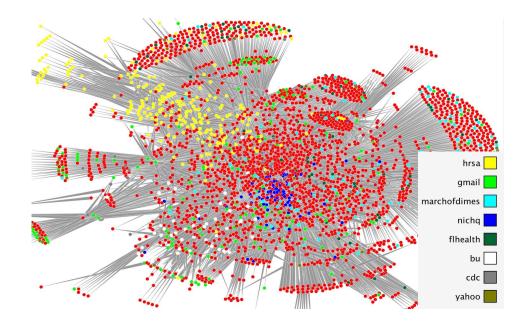






# 

- Virtual Mirroring of IM-COIIN
- Focus on SDOH: Coolhunting

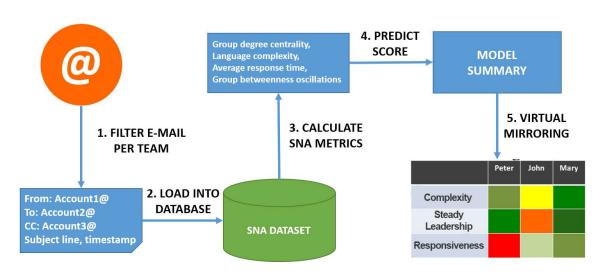


#### RESEARCH SETTING AND METHOD

Support the growth of the <u>IM-CollN project</u> of the *Maternal and Child Health Bureau* of the US Health Resource and Service Administration (HRSA) – 2012-2017.

#### Six sub-IM CollNs:

- 1. improving safe sleep practices for babies.
- 2. get smoking mothers to stop or at least reduce smoking before, during and after pregnancy.
- 3. improving women's health before, after and in between pregnancies.
- 4. improving social determinants of health (SDOH) and equity in birth outcomes.
- 5. prevent births before 39 weeks
- 6. increasing the delivery of higher risk infants and mothers at appropriate level facilities.

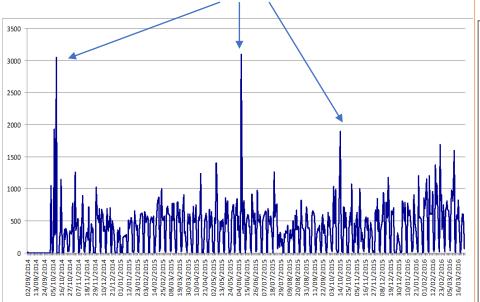


#### E-MAIL BASED VIRTUAL MIRRORING

VM sessions of 7 key members of the IM-CollN project (Nov 2014 - March 2016).

#### **Email Activity 2014-2016**

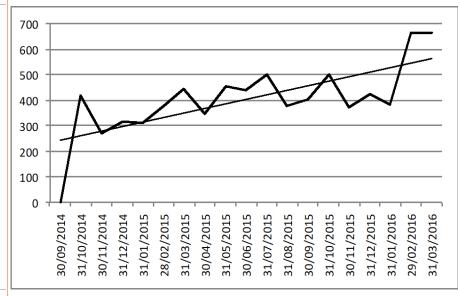
Learning Sessions: NICHQ reached out to health officials and administrators



Avg 500/day (max: 3000)

# Number of <u>new e-mail contacts</u> per month $(A \rightarrow B \text{ and } B \rightarrow A)$

150% Growth over 18 months (from 250 to 600 new community members)



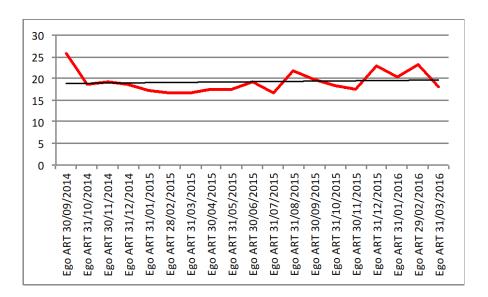
#### E-MAIL BASED VIRTUAL MIRRORING

Alter ART started at 25 hours, and has been decreasing to avg 17 hours.

- → mutual respect has been going up and passion stable
- → a very positive sign of **organizational health**

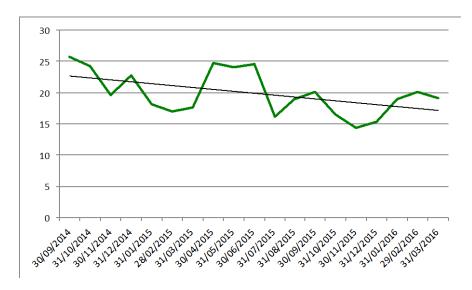
Average response time of mailbox owners (Ego ART)

#### **PASSION**



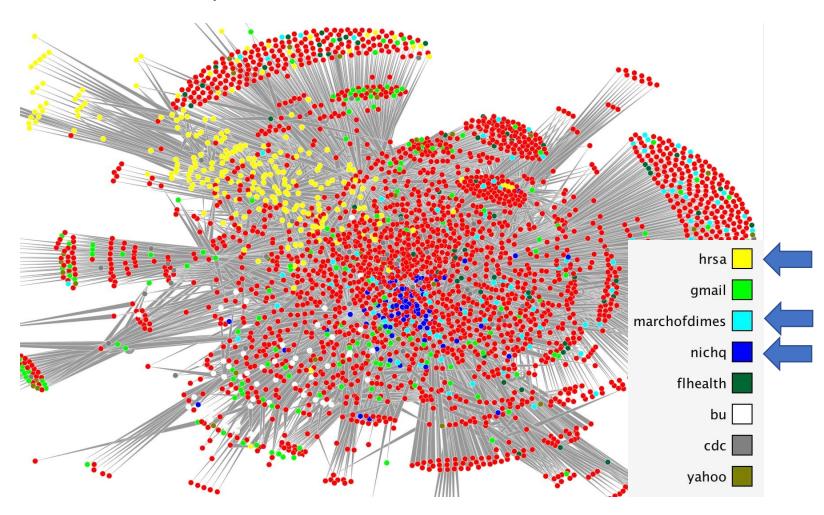
Average response time of others to the mailbox owners (Alter ART)

**RESPECT** 



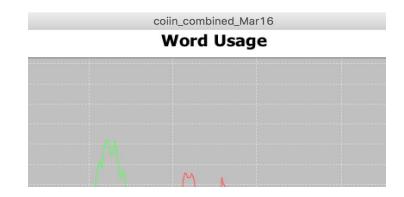
#### THE MOST ACTIVE ORGANIZATIONS

Largest group of participants: from the US government HRSA, NPO "March of Dimes" and NICHQ

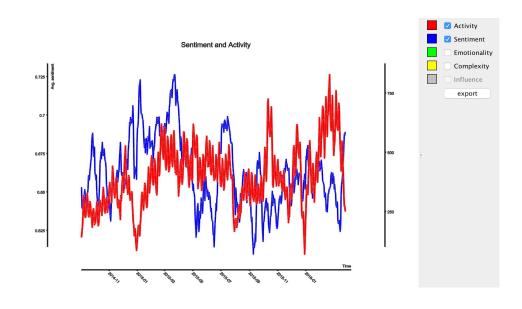


#### **CONTENT ANALYSIS**

- A community focused mostly on execution: large use of the term "call".
- Sentiment is strongly positive, from 0.6 to 0.73 (0.5 is neutral) → participants use positive language and give a lot of praise to each other.
- Oscillation in sentiment might also indicate that occasionally they are not shy of speaking out (open and honest communication).



Sentiment and Activity per month

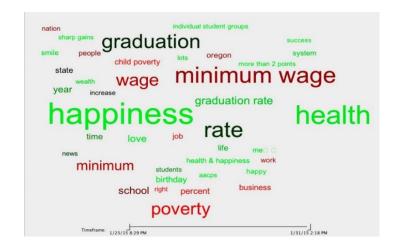


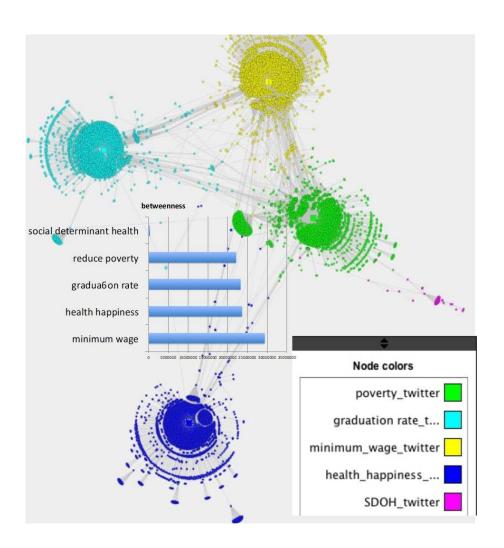
#### SDOH COOLHUNTING

- Collected Keywords with the help of IM-COIIN experts
- Looking for **innovative ideas**.

#### <u>Topics most twitted about:</u>

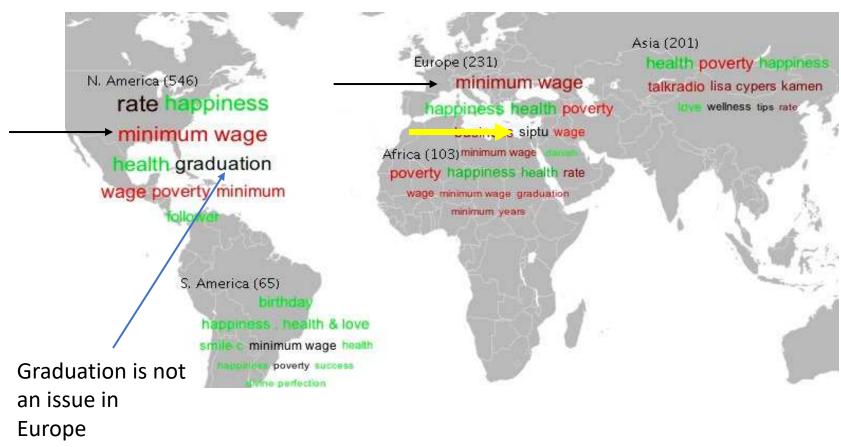
- reduce poverty
- increase the graduation rate
- increase the minimum wage
- increase general happiness





# GLOBAL DISTRIBUTION OF COOLHUNTING RESULTS FOR SDOH ON TWITTER

#### Occurrence of search terms across the globe

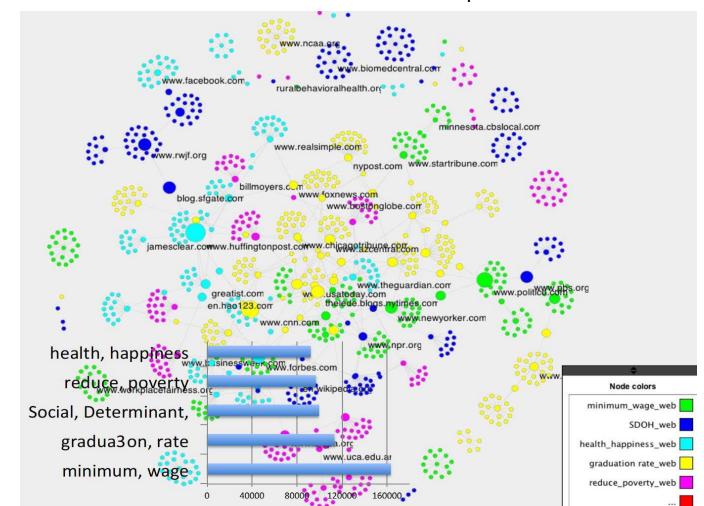


#### KEY SEARCH TERMS AND WEB SITES ON THE WEB

 SDOH is more popular on the Web than on Twitter: SDOH is too complex to be discussed through 140 characters!

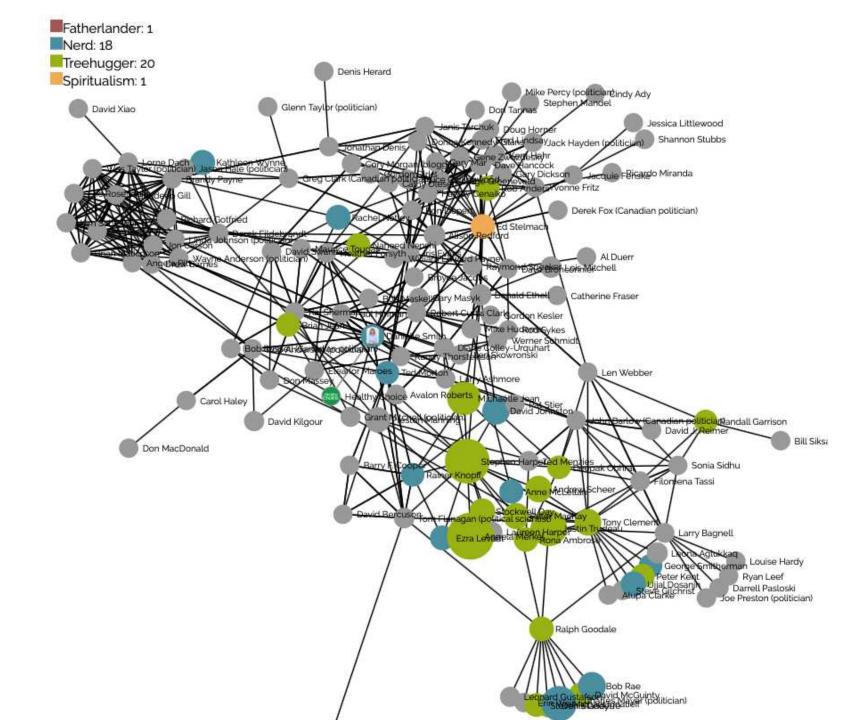
PBS and NPR, and the Robert Wood Johnson Foundation: the most important

newsfeed about SDOH



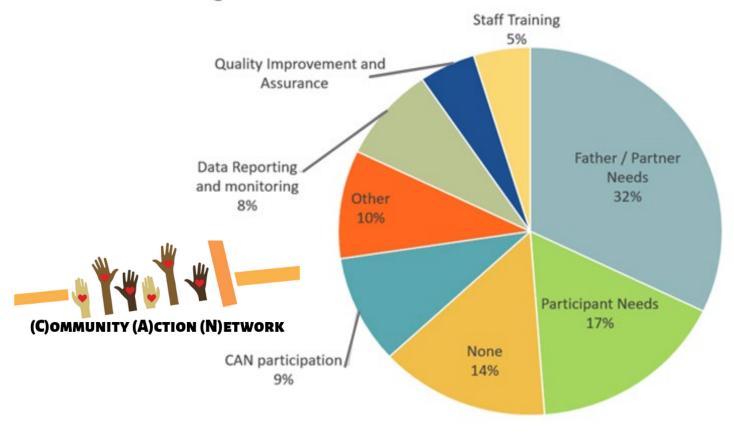
# Your own

healthy start



# Your Topics? (from "Most Urgent TA Needs")

#### **Most Urgent TA Needs**





## What are your preferred topics for a COIN?

Father/Partner Needs A

Participant Needs **B** 

CAN Participation C

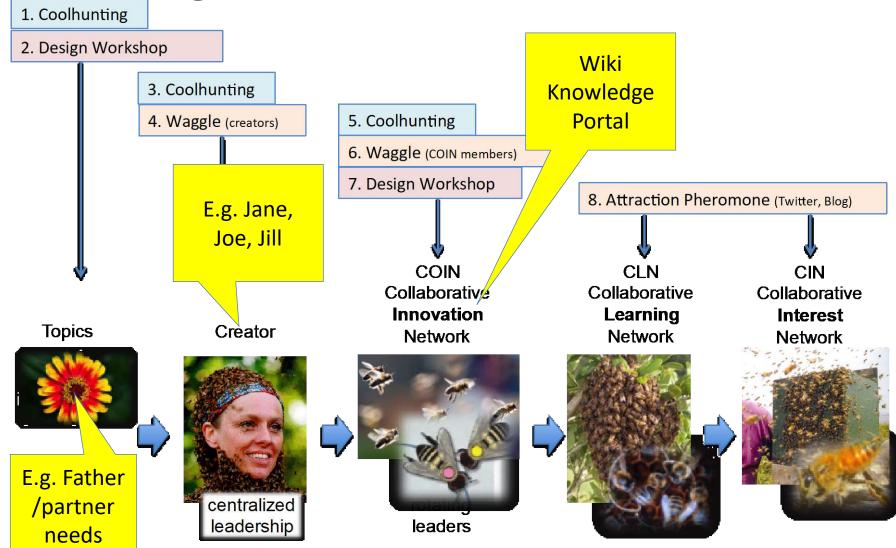
Data Reporting **D** 

Quality Improvement **E** 

Staff Training **F** 

Other **G** 

# Coolfarming a new COIN



# Next steps?

What are the deliverables of a new COIN?

- 1. Wiki (knowledge sharing portal coolhunting)?
- 2. Stepping up innovate?
- 3. Organizing virtual symposium?
- 4. Creating CLN network?











