


DISPELLING DATA MYTHS

How to Make Your Data Work for You

www.liscchicago.org
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Taryn Roch
troch@lisc.org
@Taryn_Roch

session outcomes

- Interactive – learn from each other
 - Identify and discuss data myths
 - Create alternatives that work for us
- 

spectrogram #1

What has been your experience with data to date?

positive

negative

spectrogram #2

How much do you agree or disagree with the following statement – “data is a necessary evil”

100% agree

0% agree


spectrogram #3

To what extent do you feel you ‘have control’ over your own metrics?

100% control

0% control

who's in the room?

- Name
 - Organization, location, role
 - Why are you here/
One thing you hope to get out of this session/
Your biggest data challenge
- 

what are data?

1640-50; < Latin: a thing given

plural noun

1. a series of observations, measurements, or facts; information
2. (computing) *Also called* information. the information operated on by a computer program

what are data (really)?

“Data are experiences, thoughts, movement, ideas, interactions and more that are *captured* and *stored*”

Data = raw resource, invaluable unless pulled out, processed, and packaged

#1

if you're not engaged in big data analytics ...

Majority of nonprofits rate “assistance with big data analytics” as one of their top skills needs when it comes to data

what are **BIG** data?

Volume:

Deals with petabytes or exabytes of data

2 petabytes equals all research in US academic libraries; exabyte is one billion gigabytes

Velocity:

real time or nearly real time information

Variety:

data produced in many different forms – sensors, gps signals, social media posts, financial transactions, etc.

unstructured; semistructured

Community Coordination - 94

Citizen participation, neighborhood and community organization, information and referrals

Emergency Services - 91

Food Pantries, energy assistance homeless shelters, domestic violence

Education - 89

Head Start, youth mentoring ,literacy, Adult Basic Education

Food and Nutrition - 84

Meals on Wheels, congregate feeding, food banks

Family Development - 68

Day care, case management, counseling, support

Training/Employment - 63

Job readiness, job training, and job creation

Income Management - 53

Budget Counseling

Transportation - 49

Rural transportation systems, on-demand transportation

Housing - 46

Self-help housing, homeownership, rental assistance, Weatherization

Economic Development - 39

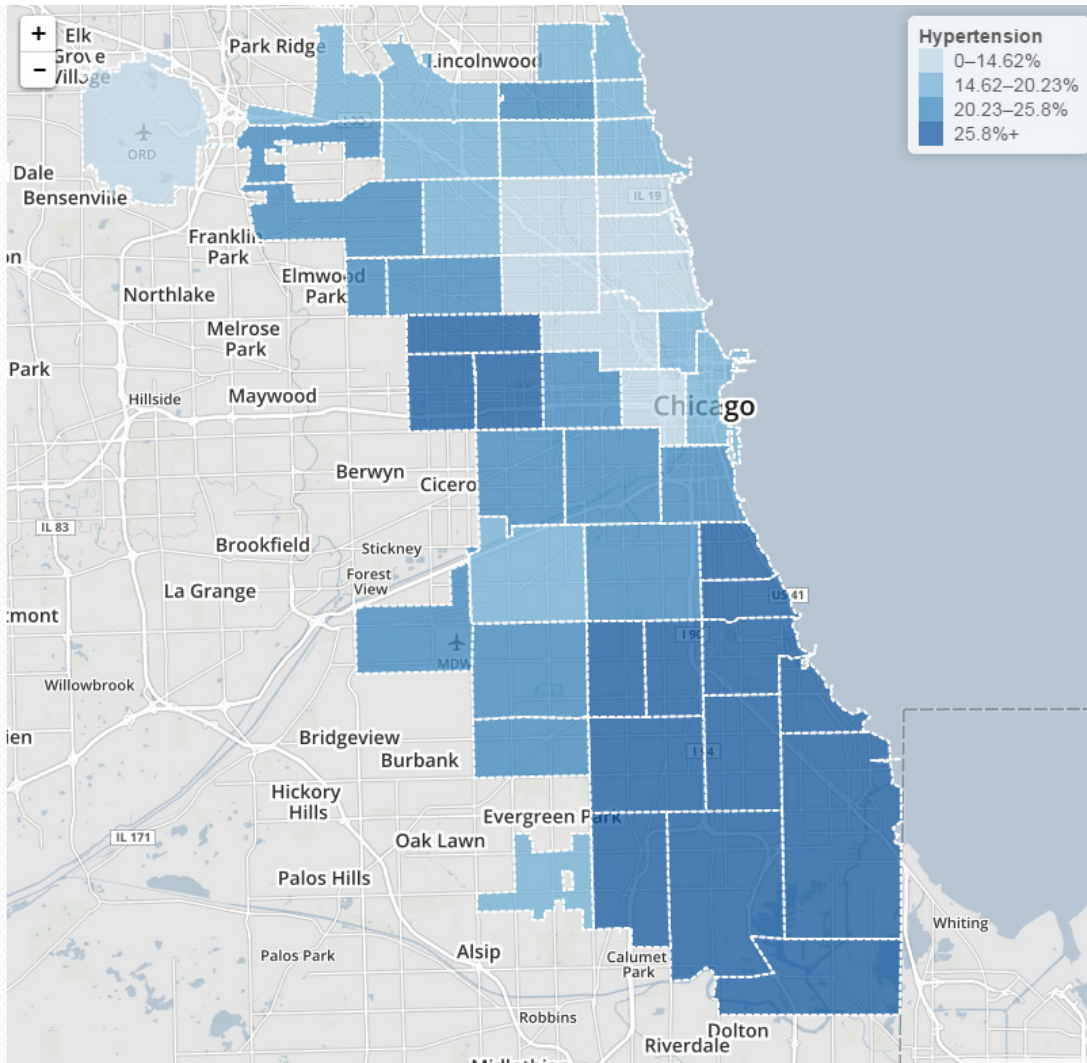
Business planning and loans, water and sewer

Health Care - 29

Health Clinics, WIC, prescription assistance

The average population a CAA serves is approximately 300,000 people.

the power of predictive analytics



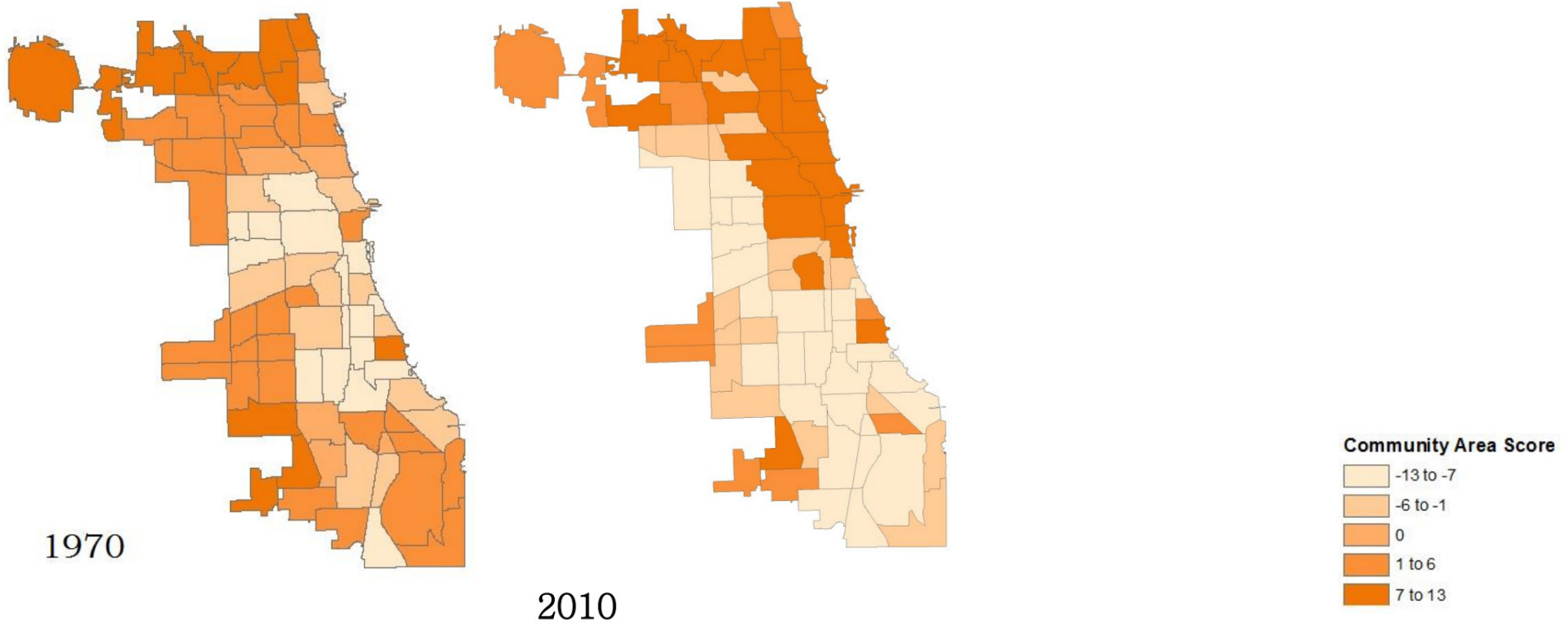
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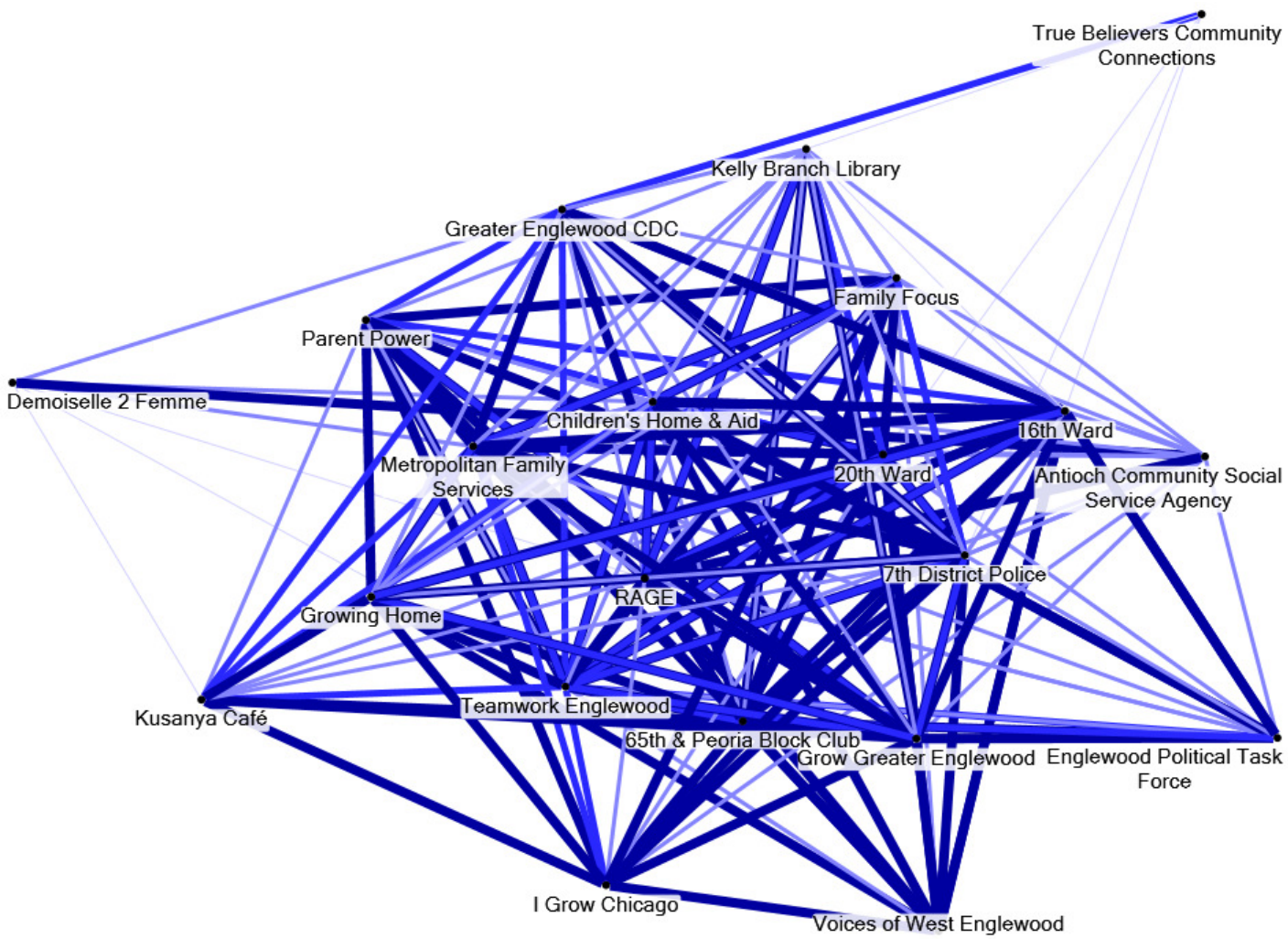
#3

long term impacts with short term interventions

- Outcomes need to be right sized
- “Getting on a trajectory” rather than achieving
- Moving out of poverty is a long term project that requires sustained support

#4 population/community level change is within our control

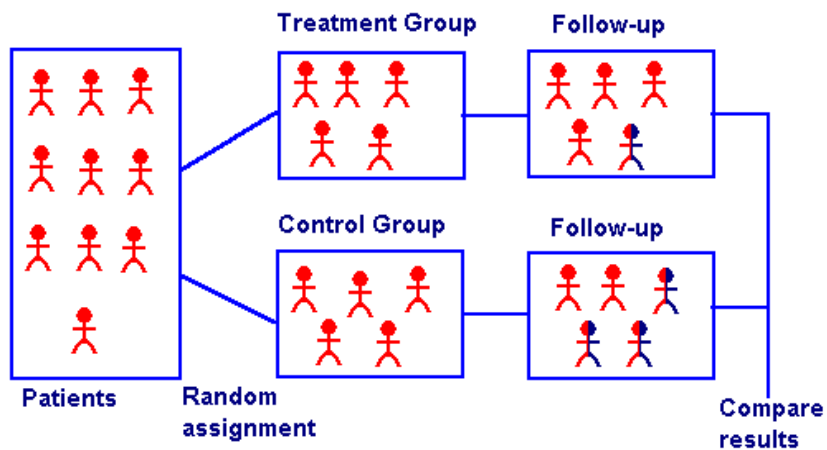




#5

RCTs are the only way . . .

Question to ask before opting for an RCT...



What's your treatment?



We don't have one,
we just heard RCTs were
the gold standard.



#6

by the press of a button . . .

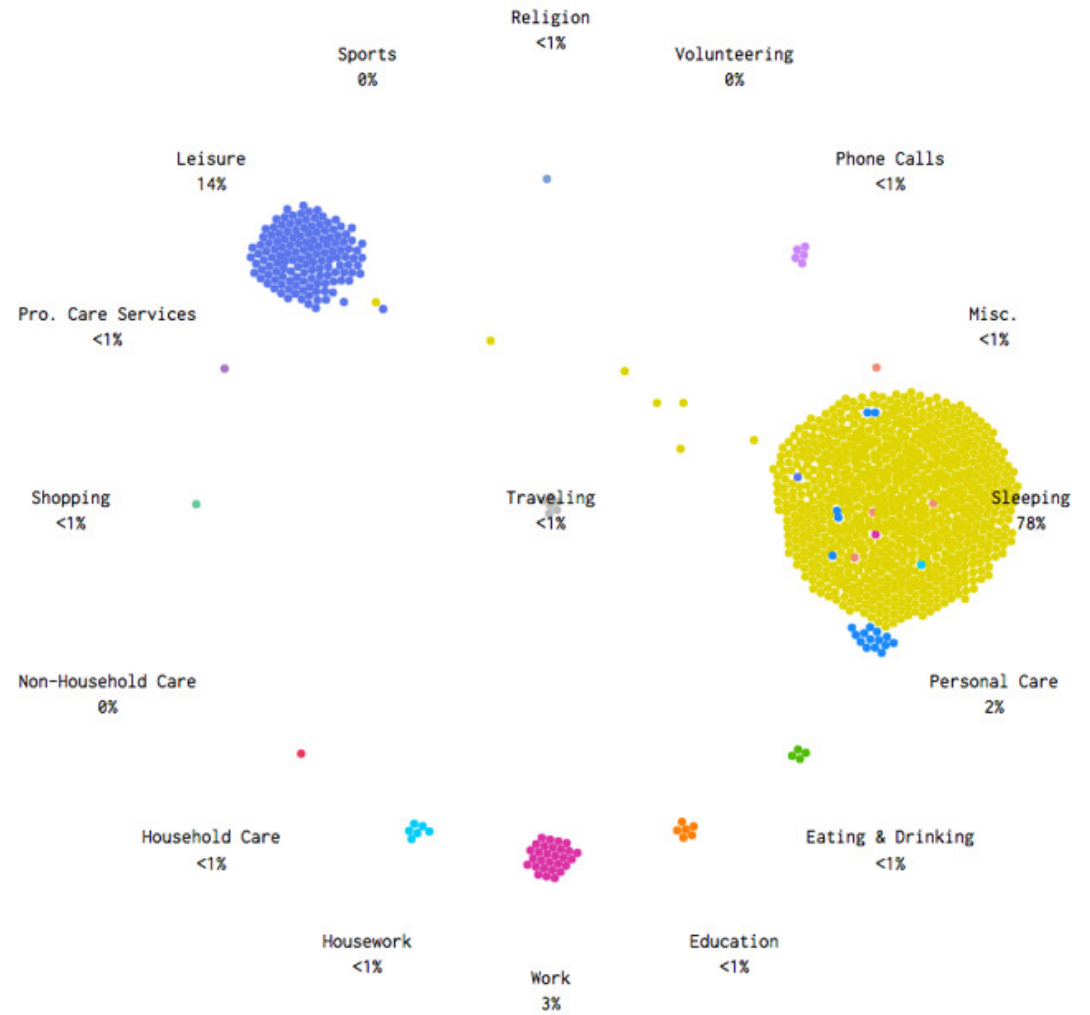
- Use excel or other low cost option until you know the level of sophistication you'll need
- What is essential to track and what is not?
- “Pressing a button” will never be enough – will require maintenance, quality control, ongoing analysis

#7

needs to be beautiful to be meaningful

12:00am

SLOW MEDIUM FAST



This is a simulation of 1,000 people's average day. It's based on 2014 data from the *American Time Use Survey*, made way more accessible by the [ATUS Extract Builder](#).

Households with children in large cities that are food-insecure: [25 percent](#).

People in the US experiencing poverty by age 65: [Roughly half](#).

Jobs in the US paying less than \$34,000 a year: [50 percent](#).

Jobs in the US paying below the poverty line for a family of four, less than \$23,000 annually: [25 percent](#).

Poverty-level wages, 2011: [28 percent](#) of workers.

Low-income families that were working in 2011: More than [70 percent](#).

Some data visualization tools/software:

Tableau

Piktochart

Infogram

Datawrapper

Qgis as an alternative to GIS

human impact genome

efficacy rate: percentage of your client base that will achieve positive impact

e.g.: serve 1000 clients with job placement services, half get jobs; efficacy rate is 50%

compare across service providers to get the biggest return on investment

recap

1. Big data analytics
 2. Power of predictive analytics
 3. Long term impacts for short term interventions
 4. We can control population/community level change
 5. RCTs are the answer
 6. Press of a button
 7. Beautiful to be meaningful
- Human impact genome