

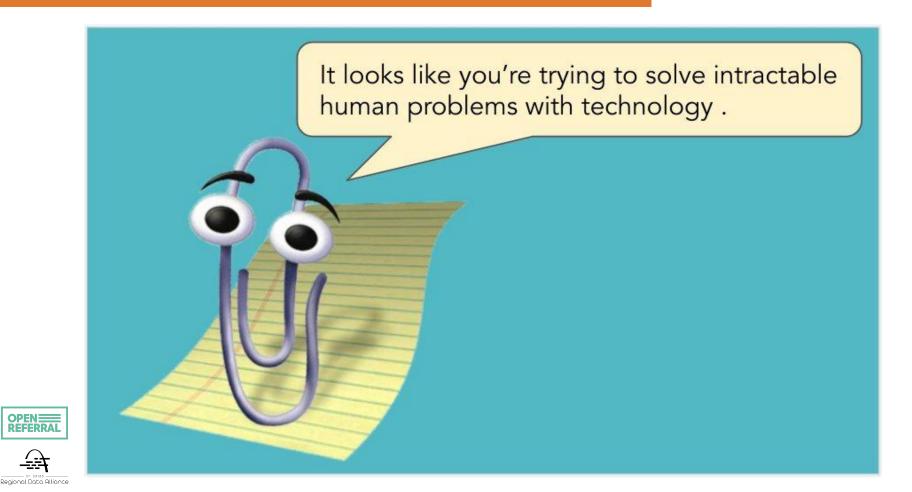


#### Tackling the Dueling-Platforms Dilemma:

Recommendations for Community Information Exchange



**OPEN** 



# The Problem

People's needs are complex and variable.

Organizations too.

One piece of software cannot solve everyone's problems.





#### A LANDSCAPE OF SILOS: CHAOTIC, WASTEFUL, INEFFECTIVE

### PEOPLE IN NEED

## REFERRAL PROVIDERS









Poor families with children People with disabilities Veterans Elders Etc.









Many others



Food Pantries



**Medical Care** 



Counseling







#### As a result of the technology-first approach to problem-solving:

#### **MORE silos:**

every attempt to build the "one system for all" competes with others.

#### **Immature markets:**

every effort has to start from scratch.

#### **Consolidation:**

early winners become monopolies, then become unresponsive/extractive.

#### Lack of accountability:

as vendors consolidate power, communities lose power





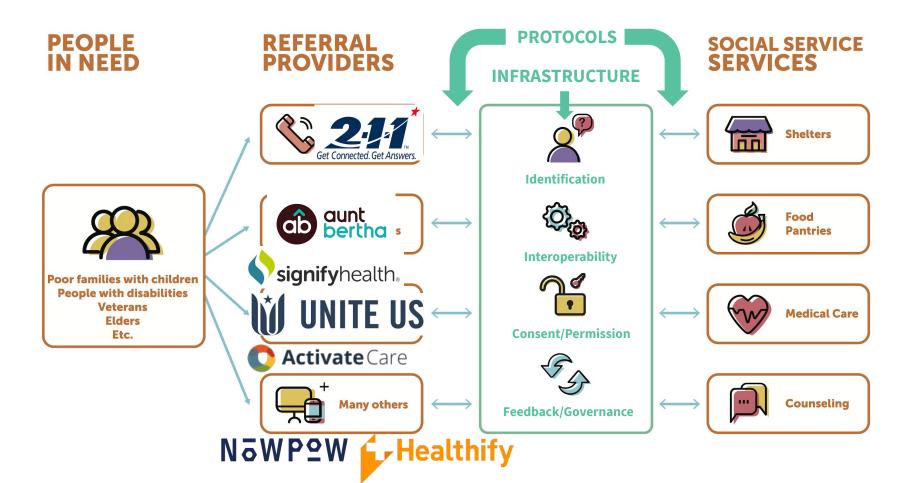
# The Vision

A healthy information **ecosystem** in which data can be **effectively** <u>and</u> **ethically** shared across many contexts using **many technologies**.





#### A HEALTHY ECOSYSTEM: ACCESSIBLE, INTEROPERABLE, ACCOUNTABLE



#### CORE FUNCTIONS OF A "COMMUNITY INFORMATION EXCHANGE"

#### **Resource Data Exchange:**

facilitate flow of info about health/human/social services.

#### **Client Data Exchange:**

facilitate flow of info about *people* shared among services.

#### **Different problems!**

Different protocols!

Different infrastructures!

Different governance strategies!





# **Ecosystem Strategy:**

**Protocols** to establish interoperability.

Infrastructure to establish common functionality.

Governance to ensure accountability and equitability.





#### **PROTOCOLS:**

What are protocols? Specific ways of doing things

Why does it matter? Protocols create interoperability. Different technologies can 'speak' to each other.

What are some examples? HTTP (TCP/IP); SMS; HSDS





#### **UNSOLVED (UNSOLVABLE?) PROBLEMS:**

# Interoperability:

**Syntactic** vs **Semantic** 

structure | meaning

mechanical | social/cultural

data portability | taxonomies/ontologies

Solvable problem! | We can cope with it?





#### **INFRASTRUCTURE:**

What is infrastructure? Systems that undergird and enable other systems.

What are some examples? Highways. Power. USPS. 2-1-1 San Diego's Community Information Exchange. Health Information Exchanges.

Can be **centralized** (one-to-many), **distributed** (many-to-many), **or federated** (hybrid)





#### **UNSOLVED (UNSOLVABLE?) PROBLEMS:**

Infrastructure is relational.

It isn't a thing.

It is a set of relationships between things, people, protocols, and institutions.

Hard to 'see,' hard to measure, hard to monetize.

Markets tend to fail to provide it.



#### **GOVERNANCE**

The alignment of diverse interests in the process of making and enforcing decisions about the allocation and use of resources.





#### The Core Questions of Governance

Whose needs matter? Who benefits from what?

2. What CAN, MUST or MUST NOT happen?

3. What happens when something goes wrong?

4. Who decides? Who decides who decides?





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#### Resource Data Exchange:

#### **Protocols:**

Human Service Data
Specs and APIs (HSDS/A)

#### Infrastructure:

"Open211" (centralized data utility)

Benetech ServiceNet (federated data management)

#### **Governance:**

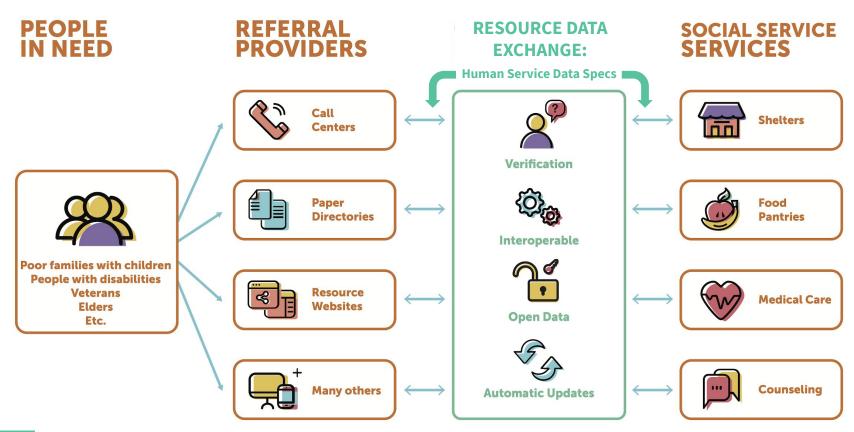
Service registers?

Data trusts?





#### A HEALTHY ECOSYSTEM: ACCESSIBLE, INTEROPERABLE, SUSTAINABLE





#### **Client Data Exchange:**

#### **Protocols:**

HL7/FHIR:

Fast

**H**ealthcare

**I**nteroperability

Resources

#### Infrastructure:

Health Info Exchanges?

Parallel Community Infrastructure: San Diego CIE

#### **Governance:**

Data trust?

Oversight board.





#### FHIR: Fast Healthcare Interoperability Resources



- RESTful (API) framework
- Standardizing data exchange for electronic health records

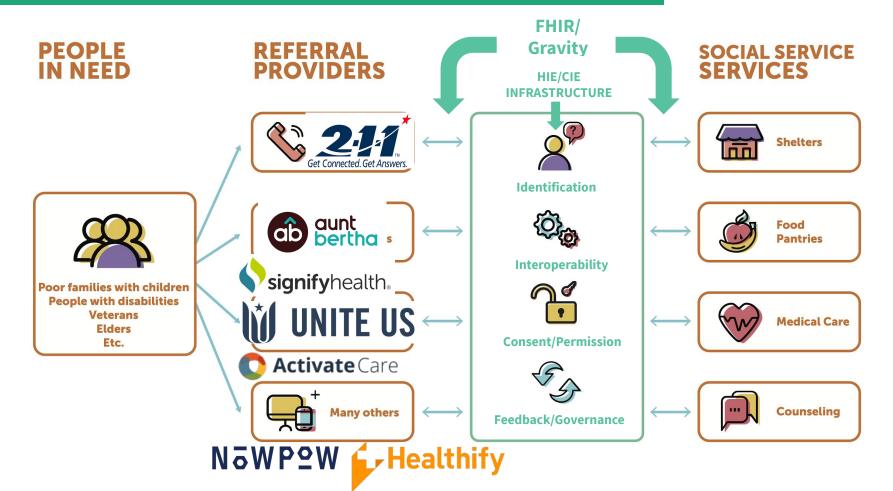


- Developing vocabulary for social risks, needs, goals, interventions
- Beginning pilot process to explore cross-platform referral interoperability





#### A HEALTHY ECOSYSTEM: ACCESSIBLE, INTEROPERABLE, ACCOUNTABLE



# What Should We Do?

1. Invest in PEOPLE and PROCESSES first.

2. Require interop (standards) and oversight (governance) as contracting conditions.

3. Experiment, learn, repeat.





# Thanks for listening. Let's talk.

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