



PROJECT TITLE: Participating in a Community Health Improvement Network

PROPOSAL NUMBER: Pop2

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RESEARCH THEME: Population Health

BUDGET: \$90,000

MULTI-UNIVERSITY PROJECT: NO

PROJECT YEAR: 1

DESCRIPTION:

The project participants will participate in one or more innovative "consumer-directed" community health information sharing networks designed to improve ability for people and organizations to more easily share health and well-being data to improve care coordination and support research across the community. The project will explore implementation and use of several innovations: 1) a multi-stakeholder, community-based governance and oversight structure; 2) consumer-directed health information exchange leveraging HIPAA individual right of access mechanisms; 3) a technology platform supporting safe, secure, encrypted data sharing among people, providers, plans, apps, AI firms, and researchers; 4) a sustainable business model tied to reducing costs and improve quality and outcomes; and 5) potential to generate millions in new private-sector led investments from sales of equity and a blockchain based digital currency.

HOW THIS IS DIFFERENT THAN RELATED RESEARCH:

The CHIN project will research a new paradigm of health information sharing that puts the person (patient/consumer) in the center of information sharing about them, and also uses next generation security technologies, including block chain, to protect and enable personal health information sharing. The CHIN will engage public and private-sector organizations to advance this emerging form of secure "consumer-directed exchange." The project will focus on use cases with potential for high impact and ROI, emphasizing populations with type-II diabetes and opiate addiction, but also looking at other chronically ill or under-served populations with care coordination challenges.

EXPERIMENTAL PLAN:

CHOT members will be invited to actively participate in the CHIN, working alongside embedded "action researchers" from UofL. Action-oriented research will focus on developing best practice recommendations for: 1) governance of the CHIN; 2) organizational participation agreements with the CHIN; 3) engaging "connectors" at providers, plans, social agencies and other offices to help patients/consumers sign-up with the system; 4) obtaining informed consent to access and re-share data with members of the CHIN; 5) conducting searches of data, starting with type II diabetes; and 6) potential to expand nationwide - in a network of CHINs, potentially including other CHOT sites.

EXPECTED MILESTONES:

- Month 2: CHOT members invited to participate in CHIN process. Getting organized.
- Month 6-9: First "connectors" trained and certified. Taught how to use system.
- Month 6-9: "Dummy" and real patients enrolled; data moved. Experience evaluated.
- Month 6-9: Encrypted data-search tested with selected sources.
- Month 6-9: Presentation of results presented to sponsor(s).
- Month 9-12: Write-up best practice recommendations.

BENEFITS TO INDUSTRY:

- 1. Advance knowledge of best practices for consumer-directed exchange (CDEx).
- 2. Advance knowledge of best practices for encrypted search with high security
- 3. Models for profitable CDEx-driven sharing in systems, communities, states.

EXPECTED DELIVERABLES:

- 1. Organizing meeting
- 2. 3-4 documents describing best practices and lessons learned.
- 3. Formal presentation in month 9.