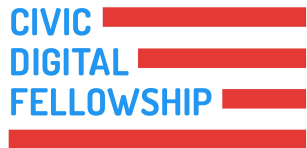


HUMAN-CENTERED DESIGN IN HEALTHCARE

InnovationX

Kristen Honey PhD, PMP — Executive Director of InnovationX

Benjamin C Eloff, PhD — Director, Innovation Management



JAXON SILVA
California Polytechnic State University - San Luis Obispo
Liberal Arts and Engineering Studies

DISCLAIMER:

The perspectives offered in this presentation are my own and are not reflective of Health and Human Services in any fashion or manner

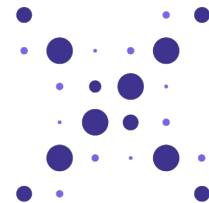
A LITTLE BACKGROUND

- Cal Poly San Luis Obispo, Liberal Arts and Engineering Studies - Design Studies Concentration
- Focus: How can we create more **meaningful ways of being through design?**
- Approach: Value-add human-centered designer **operating collaboratively** within **multiple project streams**



HOST OFFICE

I N N O V A T I O N



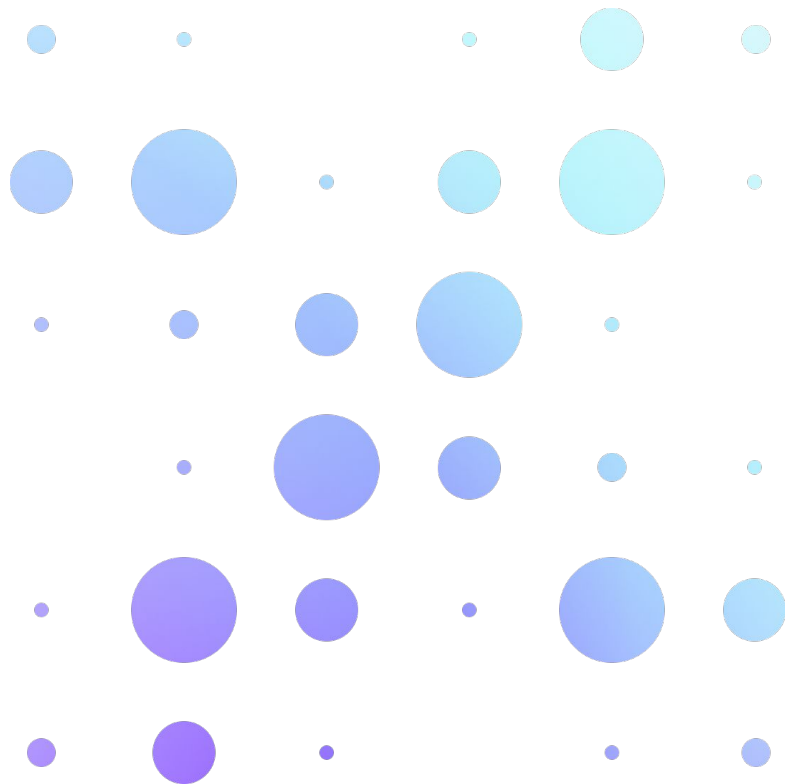
InnovationX is an office working to **tackle wicked problems** within the space of healthcare.

Methods:

- Data-driven Innovation
- **Human-centered design**
- Collaborations and partnerships

Fellows in Office

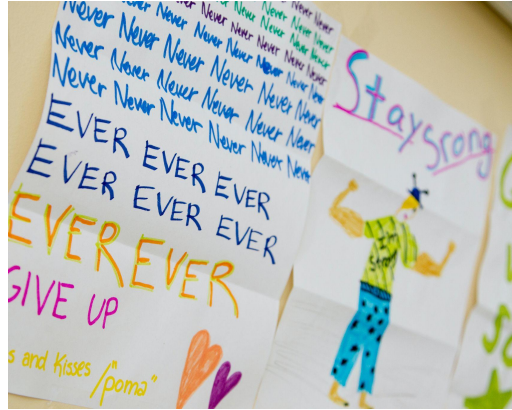
- Caroline Fong (Civic Digital Fellow), Harvard
- Atherv Gole (Civic Digital Fellow), UCSB
- Ella Kim (Civic Digital Fellow), UW
- Ghelatia Araia (ORISE Fellow), NYU
- Daniel Desautels (ORISE Fellow), Emory
- Kathleen Carroll (US Digital Corps)
- Trey Gordner (US Digital Corps)



WHAT I WORKED ON



Infection-Associated Chronic Illness: Dashboard



KidneyX: K-12 Design Challenge



OCAIO: Utilization of AI During COVID

KidneyX



Consider the Following
Scenario:

K-12 Design Challenge

Design Challenges:

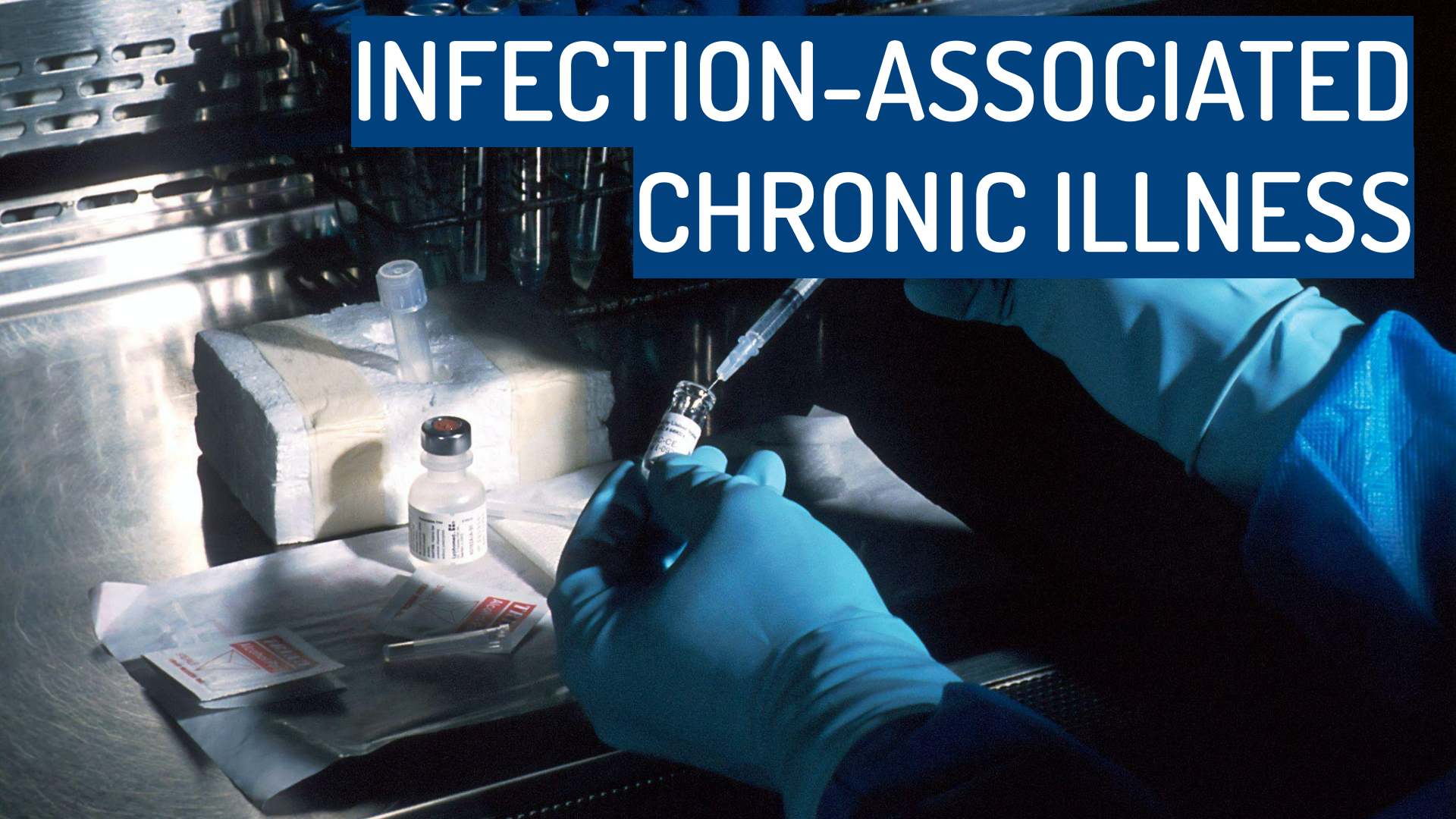
- One of InnovationX's most powerful tools is the creation of a design challenge
- Inspire action through the power and prestige of HHS

Conceptualization:

- A Design Challenge for K-12 students to develop interventions in the educational space
- Students designing for their peers with chronic kidney disease

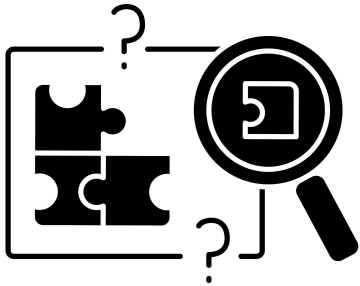


INFECTION-ASSOCIATED CHRONIC ILLNESS

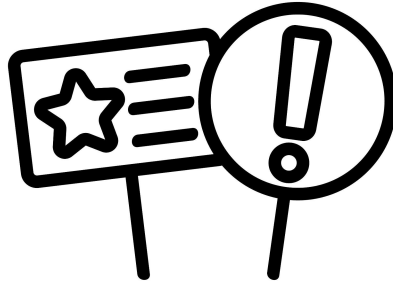


**7.7-23 MILLION AMERICANS
HAVE DEVELOPED LONG-COVID**

WHY IS INNOVATION NEEDED?



It's an area where science hasn't yet been able to meet people's immediate needs



It's a highly contentious space

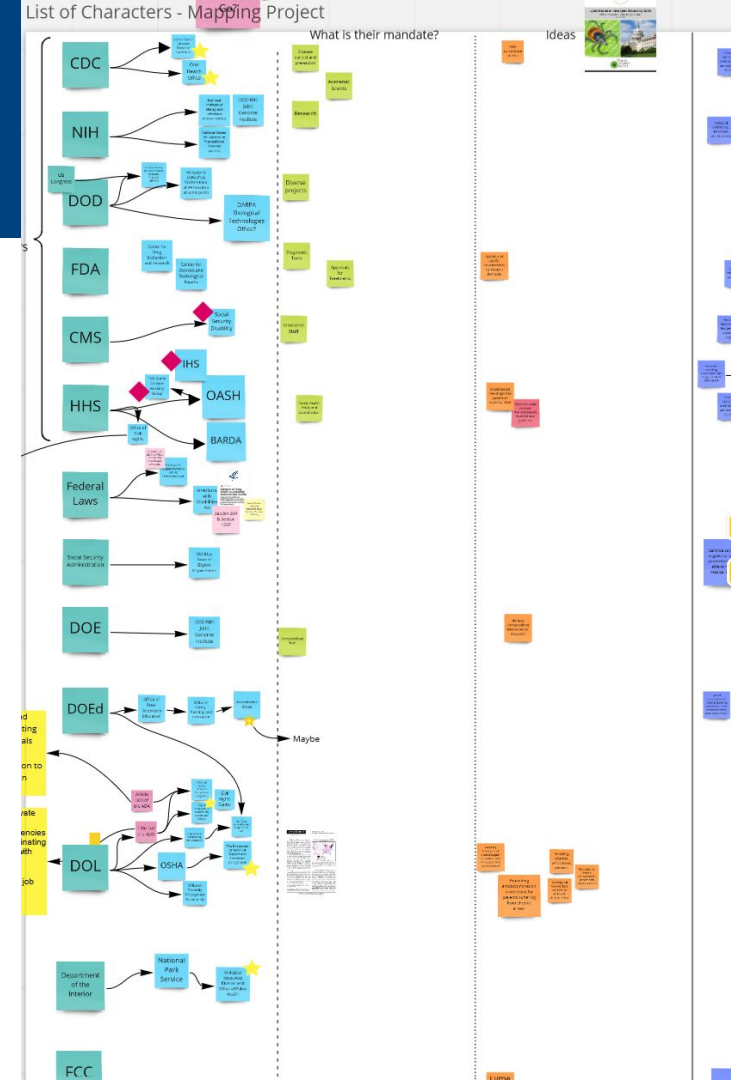


It's a growing problem

PROCESS

FEDERAL RESEARCH

- What opportunity areas exist for the federal government to make positive action?
- Desk Research + Interviews
- How might these opportunity areas overlap with previously established recommendations?



INTERVIEWING SUBJECT-MATTER EXPERTS

1

Why are healthcare providers refusing treatment to patients?

2

Why is this space so contentious

3

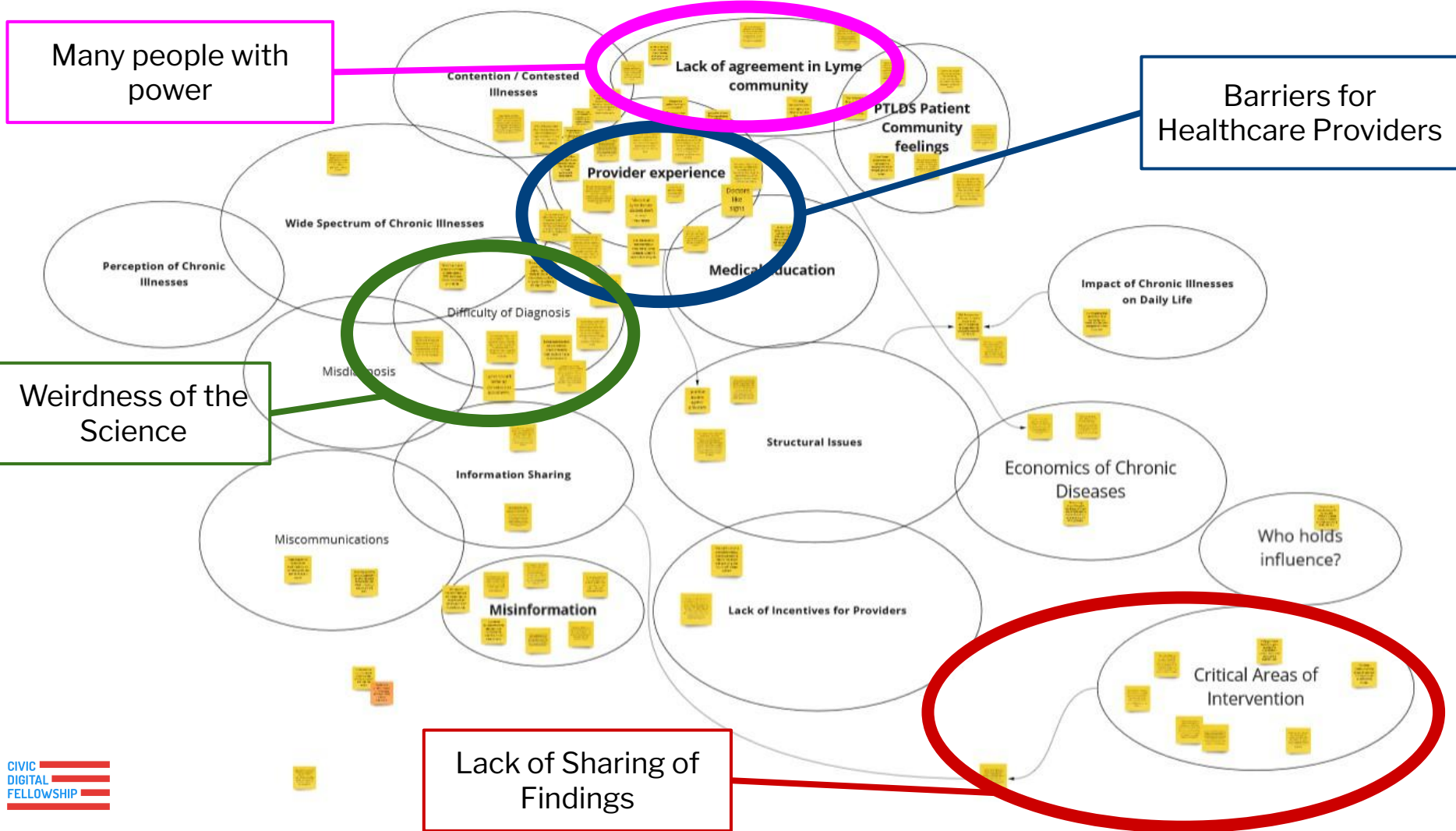
What is hampering Health and Human Services for conducting decisive action?

Many people with power

Barriers for Healthcare Providers

Weirdness of the Science

Lack of Sharing of Findings



PROBLEM DEFINITION

"How might we provide **quick and easy to understand** federal agency progress in the infection-associated chronic illness space to **hold agencies accountable** and **share out updates to the public**?"

REFRAMING

NEW APPROACH

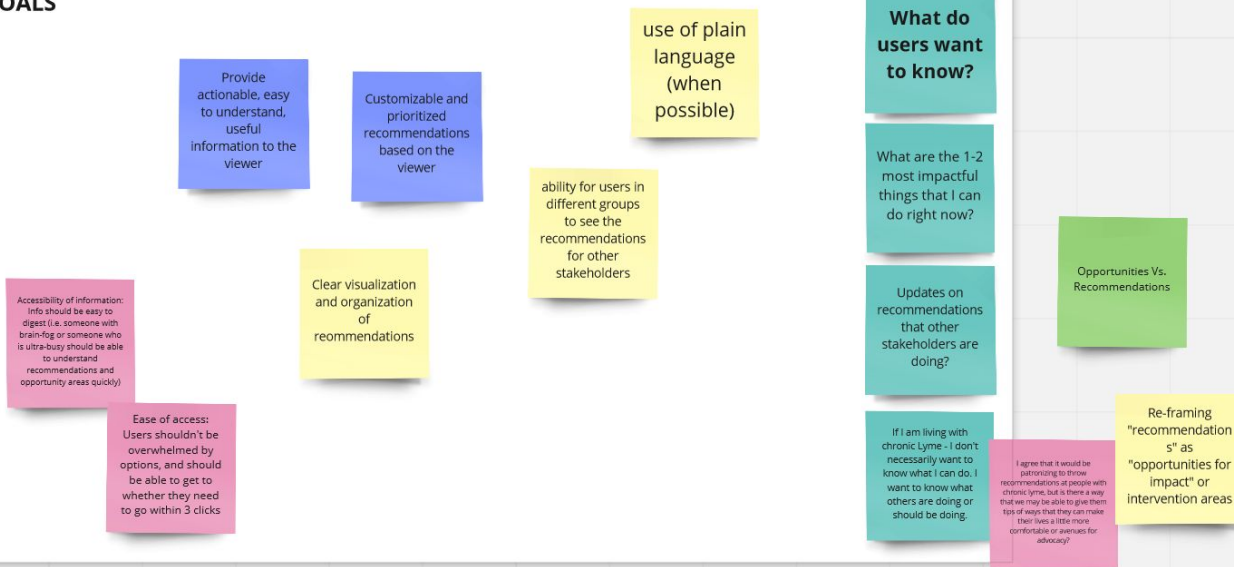
We have interviews, and a matrix of recommendations/opportunity areas, but how synthesize these findings for maximum efficacy?

New Steps:

- UX Principles
- User flow diagram

Frame 2

GOALS



UX PRINCIPLES

Easy to understand

- Dashboard that provides a high-level snapshot
- Accessible to the public, particularly those living with chronic illnesses who might experience brain fog, etc.

Promotes interagency accountability

- Holds agencies accountable using strategic priorities and goals
- Allows an agency to track their progress over time or in relation to other agencies

Internal and external facing

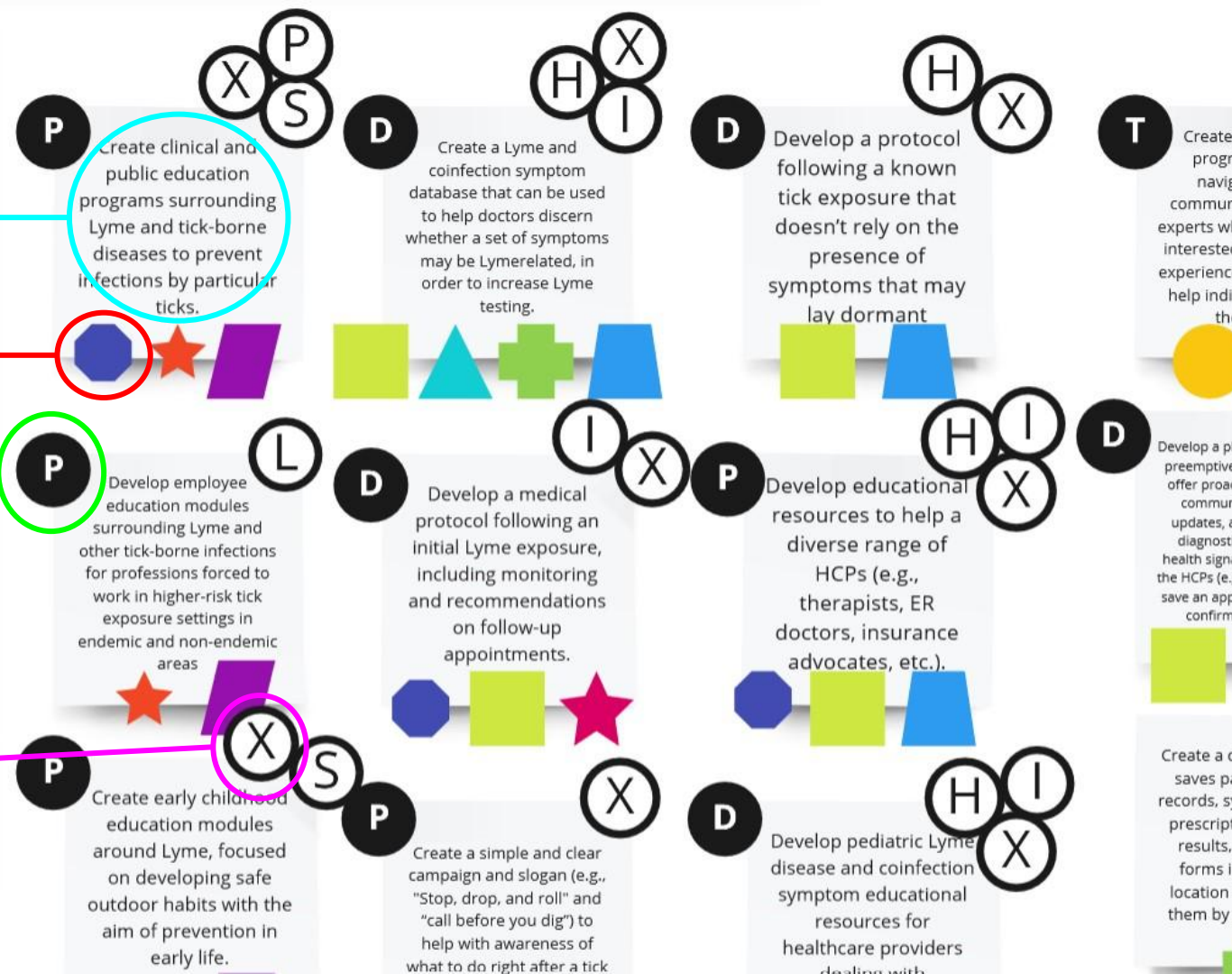
- Able to be used between agencies, but also can be accessed by the public to view updates

Recommendation

Stakeholders

Patient Experience

Federal Agency best
thought to fit for
recommendation



PROTOTYPE

LIVE DEMO

DASHBOARD NAME



I am looking for recommendations

for

Select Federal Agency

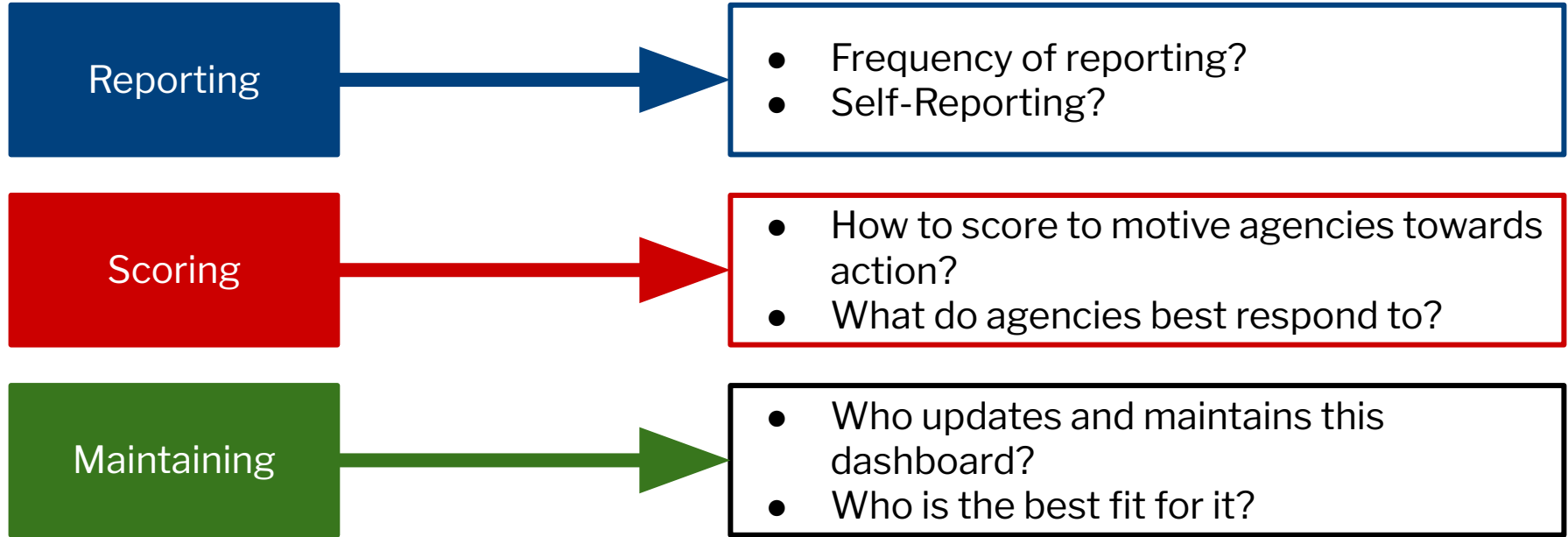


about

Select Chronic Illness



NEXT STEPS



INSIGHTS



LESSONS LEARNED

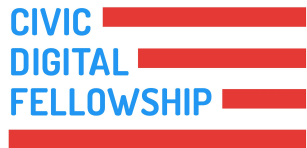
- Systemic change takes a lot of **time and effort**.
- How to navigate **politics while innovating**
- Fed Govt. is just a bunch of people **trying to do the best** they can to help those that need it in very **messy and chaotic situations**.
- **Collaboration** is key

THANK YOU!

- Kristen Honey - Executive Director of InnovationX
- Ben Eloff - Director, Innovation Management
- INSI Cloud Communications Team
- Greg Singleton - Chief Artificial Intelligence Officer, HHS
- Sanja Basaric - AI Program Lead, Office of the Chief AI Officer, HHS
- Leith States - Chief Medical Officer, Office of the Assistant Secretary of Health (OASH)
- OASH Office Staff

And of course, my fellow amazing and inspiring Fellows!

THANK YOU! :) QUESTIONS?

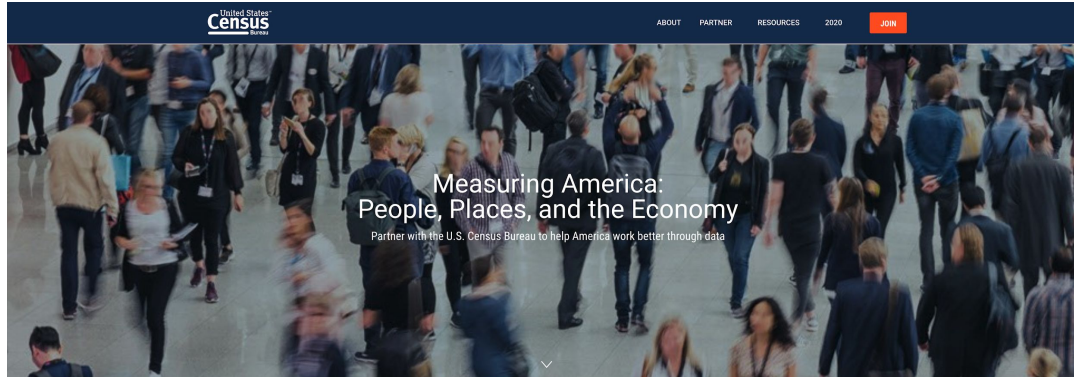


Jaxon Silva
California Polytechnic State University - San Luis Obispo
Liberal Arts and Engineering Studies

Resources

- Photo by [Matteo Vistocco](#) on [Unsplash](#)
- Photo by [National Cancer Institute](#) on [Unsplash](#)
- Photo by Markus Spiske: <https://www.pexels.com/photo/coronavirus-statistics-on-screen-3970333/>
- Photo by [National Cancer Institute](#) on [Unsplash](#)
- Photo by PhotoMIX Company from Pexels: <https://www.pexels.com/photo/person-holding-black-tube-1001897/>
- Photo by [National Cancer Institute](#) on [Unsplash](#)
- Photo by [Jackson Simmer](#) on [Unsplash](#)
- Photo by Alex Green from Pexels:
<https://www.pexels.com/photo/cute-ethnic-child-taking-care-of-ill-grandmother-resting-in-bed-5692694/>
- Photo by Max Fischer: <https://www.pexels.com/photo/girl-with-hand-on-chin-5212366/>
- Photo by MART PRODUCTION: <https://www.pexels.com/photo/technology-computer-health-medical-7088523/>
-

SLIDE TITLE



WHY PARTNER?



Here is a caption for this screenshot.

(gifs of scrolling websites are ok!)

Introduction:

- Who I am
 - Jaxon
 - Cal Poly SLO, LAES
- Where I worked at for the summer
 - HHS, InnovationX Office
 - What it's mission is
 - How it achieves its goals

Signpost of projects covering:

- Infection-Associated Chronic Illness
 - Dashboard
- KidneyX
 - K-12 Challenge
- OCAIO
 - Usage of AI during COVID pandemic

Infection-Associated Chronic Illness Dashboard:

- Problem Space
- Initial Idea of Approach
 - Addendum report to LymeX report
 - Federal Mapping Chart
- Interviews with SMEs (withhold names and identifying materials)
 - Challenges with recruiting participants with chronic illnesses
- Reframing/Pivot to Mapping Chart