HIV Cluster Detection and Response

San Francisco, CA

HCPC Meeting

October 23, 2023

Outline

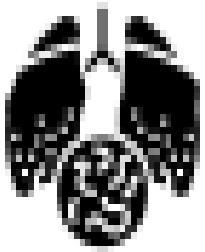
- Overview – *Mia/Lizette*
  - What is surveillance?
  - Ending the HIV epidemic
  - What is cluster detection and response?
- How SF responds to clusters - *Erin*
  - LINCS Navigation
  - Community testing events
- Community Engagement - *Thomas*
  - Community response
  - Q&A

Overview

Public Health Helps People and Communities

- Public health surveillance

- Over 70 reportable health conditions in California

Public Health Helps People and Communities

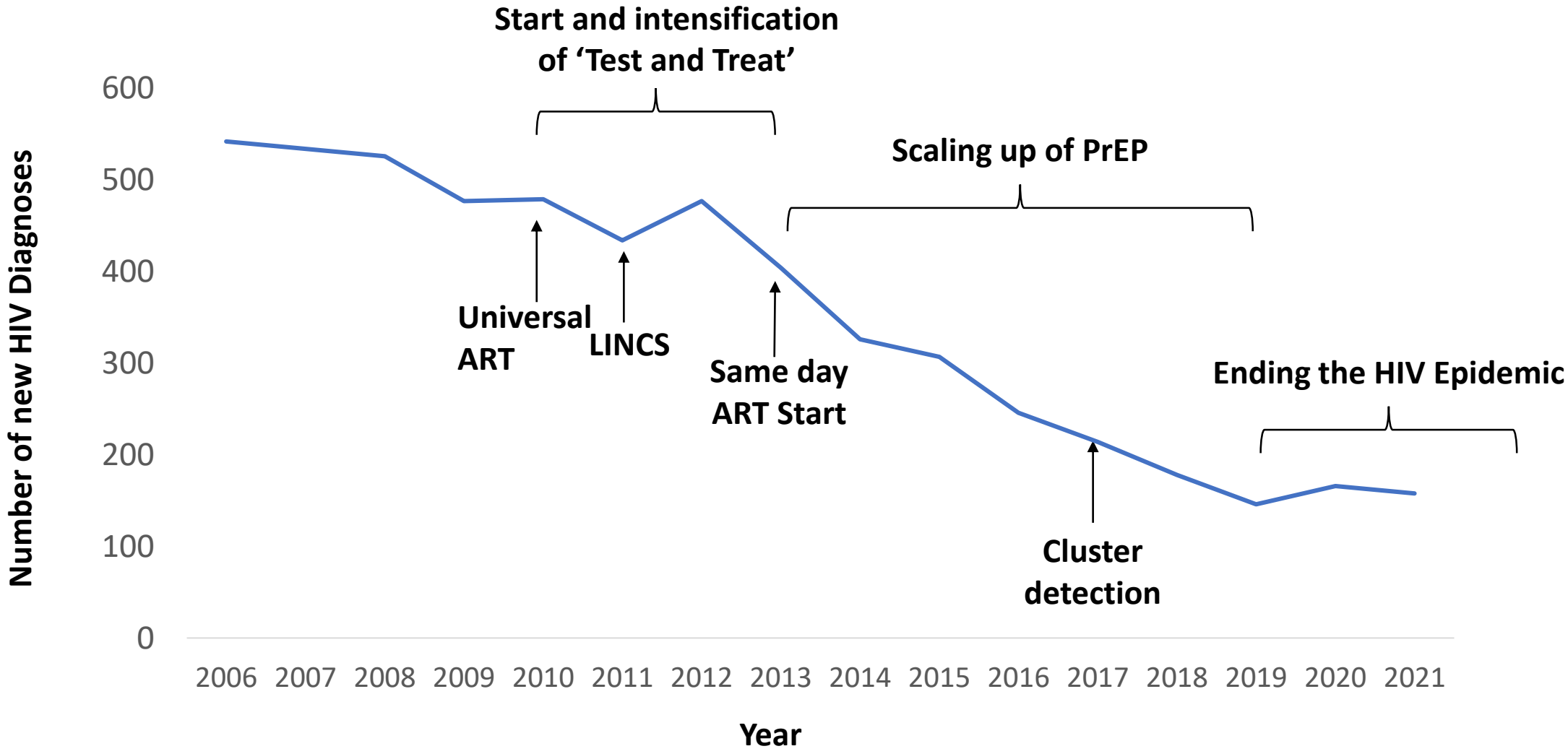
Use of public health data

- ✓ Monitoring trend
- ✓ Describe disease burden
- ✓ Identify health disparities
- ✓ Detect outbreak
- ✓ Monitor prevention and care outcome

Public Health Action

Keep People Healthy

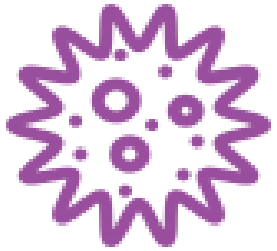
Progress in HIV care, treatment, and prevention has led to a decrease in the yearly number of new HIV diagnoses in SF



‘Respond’: The 4th Pillar in Ending HIV Epidemic

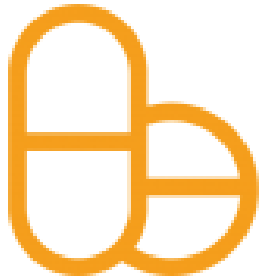
Diagnose

all individuals with HIV as early as possible after infection



Treat

HIV infection rapidly to achieve sustained viral suppression



Prevent

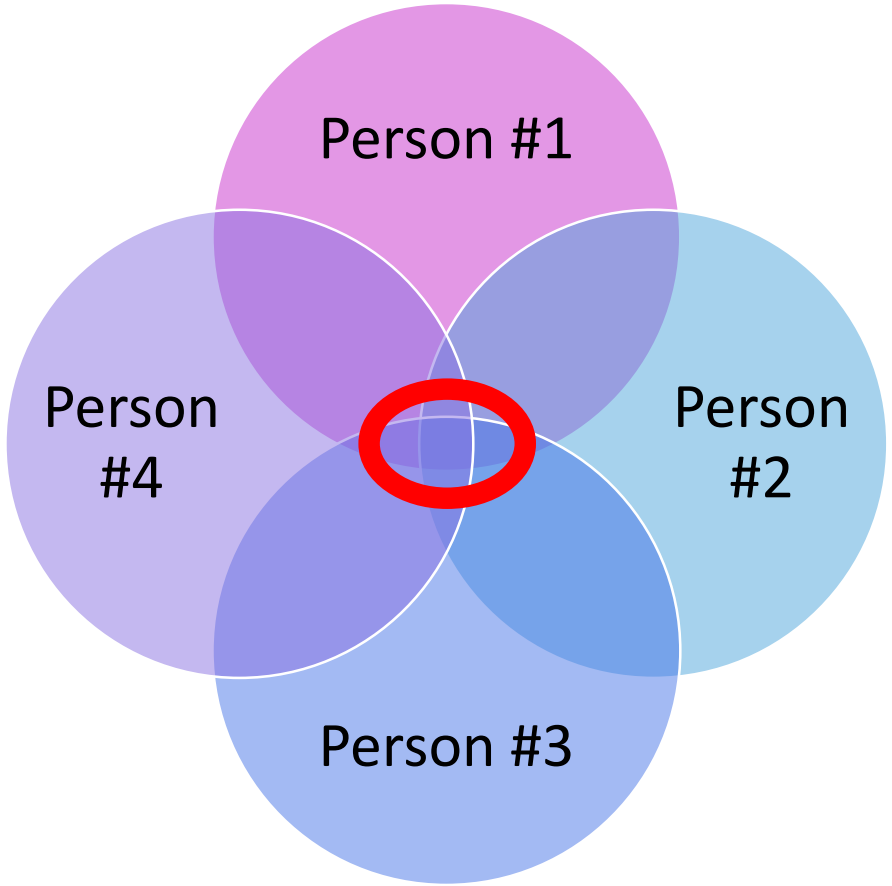
individuals from acquiring HIV, including using PrEP

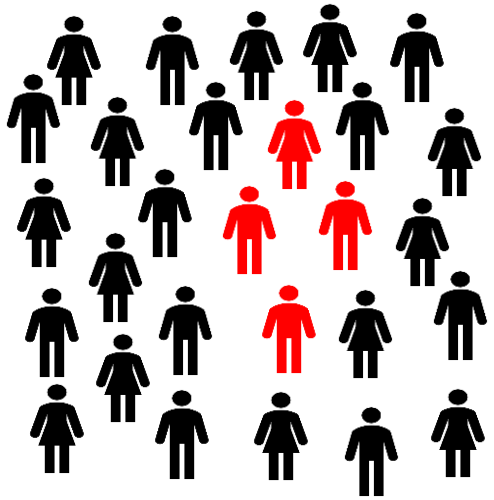
Respond

to new clusters of HIV infection to reduce transmission

What are clusters?

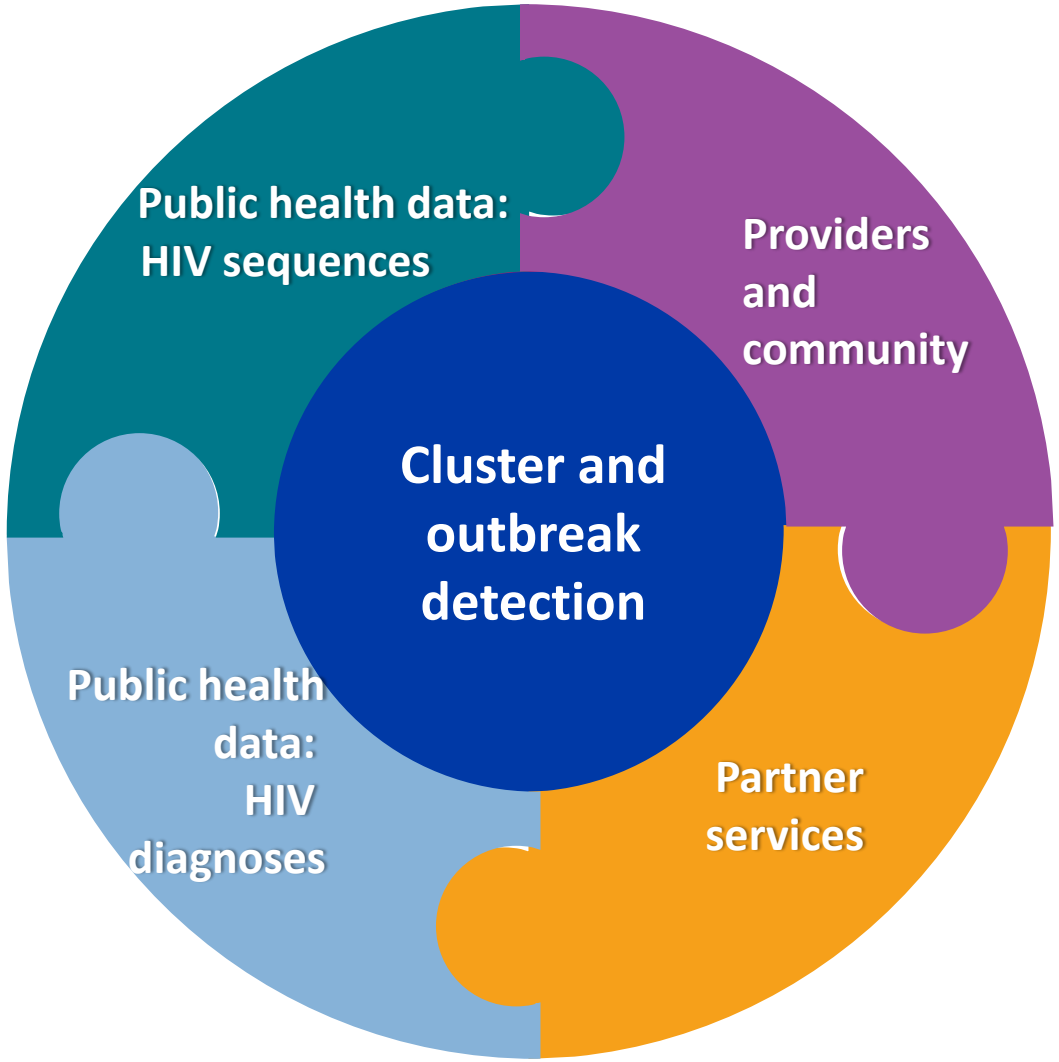
Random Spread





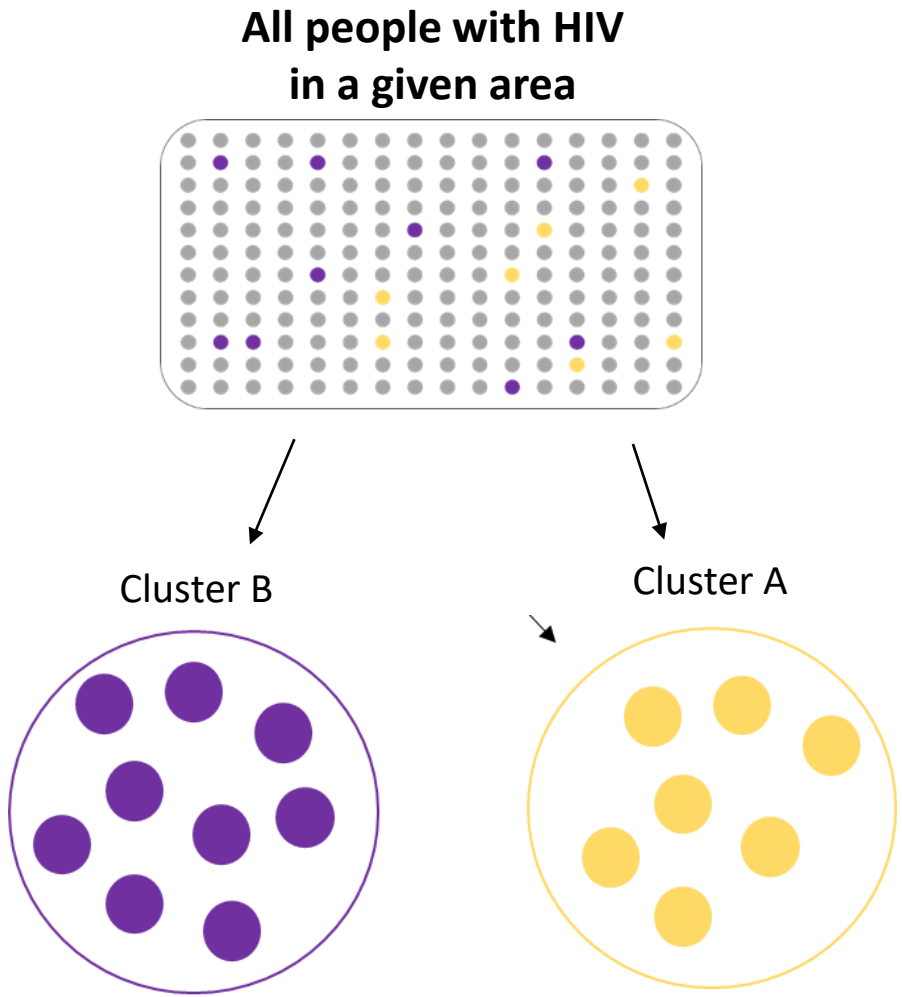
Cluster

The four ways that clusters are identified



How does HIV genetic data help identify clusters of rapid HIV transmission?

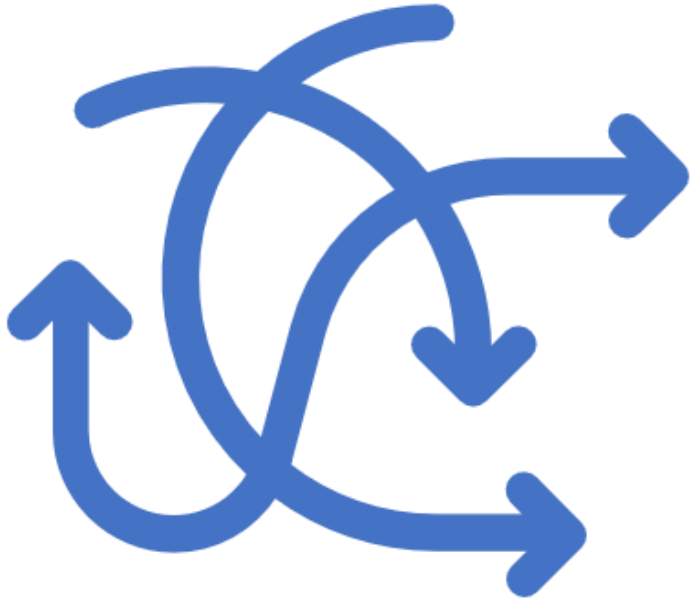
- HIV genetic data is routinely collected when someone is initially diagnosed with HIV
  - Identifies resistance patterns that may affect what treatment can be used
- HIV evolves over time
  - It evolves a little differently in each person
- Analysis compares sequences to see how similar or different they are (~99.5% similar)
- Suggests transmission in the past 2-3 years or less



What is cluster detection and response (CDR)?

- Clusters are a group of related HIV diagnoses
- An HIV cluster with may indicate rapid HIV transmission within a group of people in a location or social network
- HIV cluster detection and response helps us understand and close gaps in prevention and care services for communities where HIV is spreading rapidly
- Public health entities (local, state, CDC) develop criteria to prioritize clusters with rapid and recent transmission
- **Goal:** Improve health outcomes and interrupt further transmission

Direct transmission links and directionality cannot be determined



Cluster data has been used to identify outbreaks in other jurisdictions

- **Massachusetts:** Outbreak of HIV related to injection drug use
  - Qualitative interviews conducted with people who inject drugs, providers, and other stakeholders
  - Genetic data demonstrated the extent of the outbreak, leading to statewide service expansion

9 Syringe Service Programs → 34 Syringe Service Programs

- **San Antonio**: Providers, community members, and CDC used data to identify rapidly growing HIV transmission cluster among Latino MSM. This led to a multiple community-based efforts including.
  - Increased community-based testing
  - Letter to providers to increase routine HIV testing and offer of PrEP
  - Conducted partner services to ensure HIV-negative partners knew about PrEP

Linked to care in 13 days → Linked to care in 2 days

How SF Responds

How does SF respond/help?

- Since 2017, SFDPH has been running analyses to identify groups of related diagnoses that meet our locally-defined criteria for response
- We look at diagnoses closely related in:
  - Time
  - Location
  - Genetic sequences
- When we identify a group with related diagnoses, we determine who is not-in-care and refer those individuals to LINCS navigation

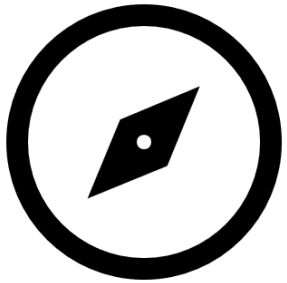
LINCS is a partner services and linkage to care program, staffed by a team of DIS and Navigators, that aims to **decrease transmission of and lower morbidity and mortality** from sexually transmitted infections

- **L**inkage,
- **I**ntegration
- **N**avigation and
- **C**omprehensive **S**ervices

LINCS provides Navigation services to help find and connect people living with HIV to care

Navigation services include:

- 3 months of intensive support with appt reminders, escorts, transportation
- Guidance to health care services including benefits/system navigation
- Health education, motivational interviewing
- Address barriers to care (eg. Transportation, housing, food insecurity)

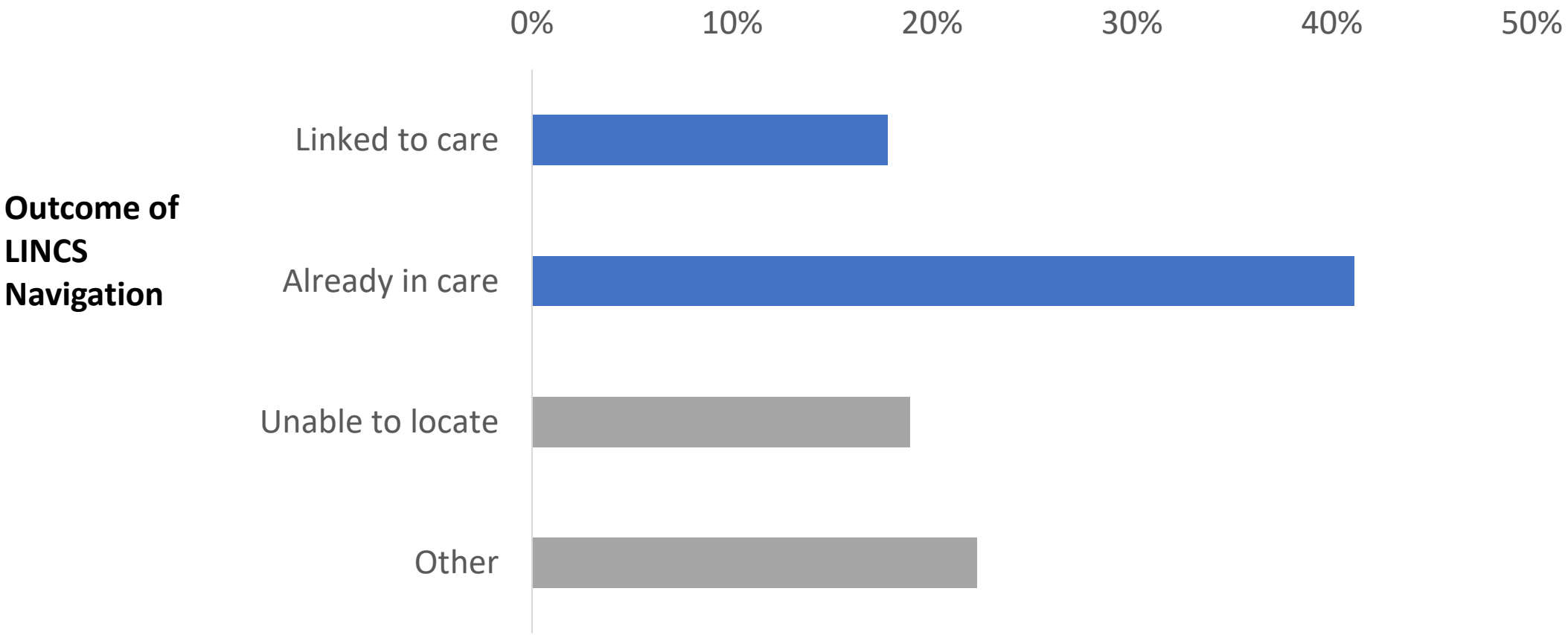


How does LINCS respond to a cluster?

- LINCS has been providing Navigation for persons living with HIV who are not in care since 2012
- Our approach has been to focus on persons not in care; other jurisdictions have reached out to everyone in a cluster
- *We have not done outreach to anyone who is already in HIV care*
- Cluster interviews: at the end of their successful navigation to care we have asked some individuals in group of related diagnoses about recommendations for preventing HIV and STI transmission

Outcomes

From 2020 to 2022, of the 90 SF residents in >10 clusters who were referred to LINCS Navigation, **over 50% were successfully linked to care or confirmed to be in care.**



Community Testing Events

- Cluster interviews helped LINCS to identify a service gap: community was not accessing prevention and testing and identified locations that would benefit from these and other health resources
- CHEP coordinated a collaboration with SFCHC, Street Medicine, and Health workers from CHEP and LINCS. Successful integrated approach to provide harm reduction supplies alongside STI/HCV/HIV testing and treatment
  - **Two, Community-Driven Approaches:**
    - Door-to-Door Testing
    - Central Pop-up Testing Clinic
- **Outcome:** Three well received and attended events conducted, over 120 people engaged with about 1/3 receiving testing

Community Engagement

How has the community responded to CDR? (National Perspective)

The President's Advisory Council on AIDS (PACHA) raised multiple important concerns, including:

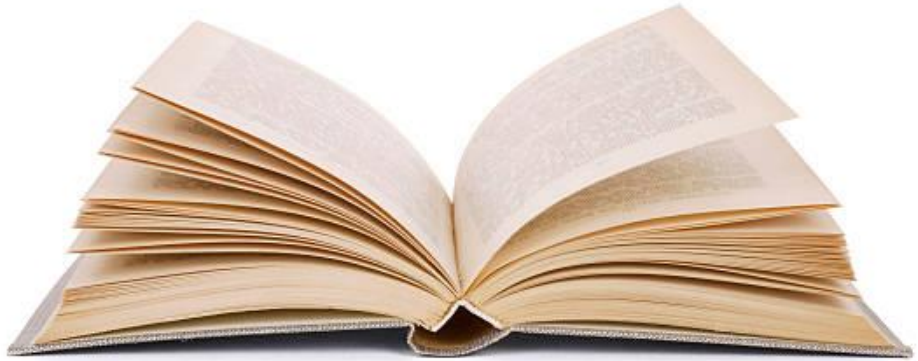
- Data security and privacy
- Potential for misuse of data within the criminal legal system

How does SF reduce these risks? (1 of 2)

- Protecting the privacy of data
  - Data is governed by California Health and Safety Codes (HSC) and the strict confidentiality guidelines of the CDC, CDPH and the SFDPH
  - Data can only be used when there is clear public health need
  - Data protection
    - Encrypted and stored securely
    - Can only be accessed by a small number of staff who are required to take ongoing data security and confidentiality training

How does SF reduce these risks? (2 of 2)

HSC 121022 prohibits the disclosure of HIV data to any third-party, unless authorized by law for **public health purposes (NOT legal purposes)**, or by the **written consent** of the individual identified in the record or their guardian/conservator.



California Community Advisory Board has recommended

- **Language is important**
  - Reduce using “molecular”, “surveillance”, “outbreak” -> it is inappropriate and unnecessary
  - Best not to use ‘**cluster**’ – bad connotation and complex
  - Prefer “a group with related diagnoses”
- **Most advisory board members agree that it’s important to tell people they are part of a cluster, and**
  - It should not be the focus of the phone call
  - Make sure the client is in care before discussing cluster
  - Do not have conversations around clusters during the initial diagnosis/first phone call
  - Framing as to empower individuals to improve health in their communities
- **Members like the approach King county takes, to ask people if they want to learn more -> this empowers and respects individuals**

How have we engaged with community around this work?

2019 presentation by Darpun Sachdev and Susan Scheer to HCPC

Received feedback:

Carefully develop messaging to address concerns around confidentiality

Participate in California DPH Community Advisory Board

Presented to Ending the Epidemic (ETE) Committees

Present updates in 2023 to HCPC

Other strategies

Thank you

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Julia Janssen, SFDPH Medical Director of LINCS

Stephanie Cohen, SFDPH STD Director, STI and HIV Prevention and Control

Sharon Pipkin, SFDPH Epidemiologist, HIV Surveillance

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Q and A