Adapting Data Systems to Support Integrated STD/HIV Field Investigations at the Local Level

A Regional Response to End the HIV Epidemic in California

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1/24/2020
Overview

- Background
- CalREDIE STD/HIV Field Investigation Incident (SHFII)
- Local Interventional Surveillance Access (LISA)
Background:
Public Health Activities on Reported Cases of HIV/STD

- Linkage/re-engagement in HIV care
- Tx verification or referral (STD)
- HIV/STD/HCV testing
- HIV pre-exposure prophylaxis (PrEP)
- Referral to other services
- Contact tracing (+ above, as appropriate)
Background:
Data Collection – Prior Approach (RED = Database)

### Contact Tracing:
1) HIV only → LEO
   - HIV Testing Encounter
   - Risk Reduction Activities Encounter
   - Stand Alone Partner Information Form

2) Ryan White funded → ARIES

1) STD only or STD + HIV → CalREDIE

### Linkage/Re-engagement in care:
1) HIV only → LEO
   - HIV Counseling Information From (CIF)
   - Health Care HIV Test From (HTF)
   - Risk Reduction Activities (RRA) Form

2) Ryan White funded → ARIES

3) If co-infected with STD → CalREDIE (duplicate data entry)
Variation among LHJs in level of Integration for STD/HIV Field Investigations

- Multiple Staff / Outreach Not Coordinated
- Multiple Staff / Coordinated Outreach
- Single Staff / Appropriate Access and Training
STD/HIV Field Investigation Incident (SHFII)
STD/HIV Field Investigation Incident (SHFII)

- A recently developed incident in CalREDIE that will be used to document health department follow-up activities for reported cases of STD and HIV
SHFII: Sections in CalREDIE

6 Sections:

1. Patient (system)
2. Investigation Tracking
3. Linkage to Care (HIV, STD, HCV, PrEP, other services)
4. Client Risk Information
5. Contacts
6. Case Investigation (system)
SHFII Development Process

- Local Health Jurisdiction (LHJ) learning sessions:
  - Visited 5 LHJs between June 2017 – March 2018

- Presentations at Annual STD/HIV Controllers’ Meeting
  - May 2018: Key Findings from Learning Sessions
  - May 2019: SHFII Demo & drop-in discussions

- Testing
  - Internal (July-September, 2019)
  - LHJs via WebEx & state staff (August, 2019)
  - Final checks and business rules (now)
Local Interventional Surveillance Access (LISA)
Local Interventional Surveillance Access (LISA)

• Nimble solution for two-way Local/State data exchange
  – Disseminate client-level and agency level actionable information
  – Timely (goal: as close to “real time” as possible)
  – Person-level priority and notifications for disease investigator caseload

• Overcome technical and statutory barriers
  – Provide LHJs access to eHARS
  – Integrated data from relevant OA/STD data systems
  – Cross-jurisdictional data sharing
  – Interface for administrative and programmatic feedback

  – Create routine tasks and reports
Local Interventional Surveillance Access (LISA)
## Local Interventional Surveillance Access (LISA)

### Health Department Follow Up

<table>
<thead>
<tr>
<th>ID</th>
<th>LName</th>
<th>FName</th>
<th>DOB</th>
<th>DxDT</th>
<th>COUNTY</th>
<th>PROVIDER</th>
<th>STAFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rodgers</td>
<td>Elizabeth</td>
<td>2000-01-21</td>
<td>2017-08-13</td>
<td>Sacramento</td>
<td>Sutter</td>
<td>Javier Gomez</td>
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<td>2</td>
<td>Baker</td>
<td>Dakota</td>
<td>1989-12-12</td>
<td>2017-11-22</td>
<td>Sacramento</td>
<td>County PH Clinic</td>
<td>Michael Jones (DHS)</td>
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<td>3</td>
<td>Price</td>
<td>Christian</td>
<td>1985-04-04</td>
<td>2017-02-10</td>
<td>Sacramento</td>
<td>HIV Specialist Org</td>
<td>Javier Gomez</td>
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<tr>
<td>4</td>
<td>Dixon</td>
<td>Aaron</td>
<td>1980-10-28</td>
<td>2017-11-22</td>
<td>Sacramento</td>
<td>Other HIV Specialist Org</td>
<td>Sarah Morton (DHS)</td>
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<tr>
<td>6</td>
<td>Vasquez</td>
<td>Alexa</td>
<td>1986-02-04</td>
<td>2017-03-10</td>
<td>Sacramento</td>
<td>Kaiser</td>
<td>Michael Jones (DHS)</td>
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<tr>
<td>7</td>
<td>Gardner</td>
<td>Mustafa</td>
<td>2000-11-30</td>
<td>2017-01-09</td>
<td>Sacramento</td>
<td>Other</td>
<td>Michael Jones (DHS)</td>
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<tr>
<td>8</td>
<td>Arnesen</td>
<td>Brandon</td>
<td>1984-02-14</td>
<td>2017-09-17</td>
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<td>Other HIV Specialist Org</td>
<td>Michael Jones (DHS)</td>
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<td>10</td>
<td>Sandoval</td>
<td>Martin</td>
<td>1988-03-28</td>
<td>2017-11-22</td>
<td>Sacramento</td>
<td>County PH Clinic</td>
<td>Unassigned</td>
</tr>
</tbody>
</table>

Showing 1 to 10 of 210 entries
Proposed Follow-up Process Flow

1. **Public Health Investigations**
   - Communicates investigation status to LHJ

2. **LISA**
   - Updates investigation status to LHJ

3. **ARIES (HIV Care)**
   - LHJ Staff create new SHFII incident in CalREDIE, and follow up

4. **CalREDIE**
   - LHJ Staff continue SHFII follow-up/investigation with new information

5. **eHARS**
   - People identified as newly in need of follow up
   - Updated information on existing investigations
   - LHJ Staff finish follow-up and close SHFII

6. **ELR**
   - Complete dispositions imported into eHARS

7. **LHJ Staff**
   - Create new SHFII incident in CalREDIE, and follow up

**People identified as newly in need of follow up**
- Updated information on existing investigations
- Public Health Investigations Data Exchange/Access Utility (PHIDEAU)
- LHJ Staff finish follow-up and close SHFII
Local Interventional Surveillance Access (LISA)

- Supported by Office of AIDS Informatics Section in partnership with OA and STD Control Branch stakeholders

- Local Health Jurisdiction Advisory Group
  - Advise on LISA and other informatics projects development
  - Provide local testing and feedback on newly developed work items
  - Propose and define specifications for new functionality
  - Help OA/STD/Informatics prioritize development
  - Advise on local workflows and how informatics projects can enhance workflow
THANK YOU!

Office of AIDS
Will Wheeler, MPH PhD
Lauren Nelson, MPH

STD Control Branch
Denise Gilson

CalREDIE
Deniz Dominguez, MHS
Sebastian Chavez
Allison Jacobsen, MPH
Larry Imel
SHFII – Screenshots
SHFII – Screenshots: Patient Tab
SHFII – Screenshots:
Investigation Tracking Tab
INVESTIGATOR ASSIGNMENT HISTORY

ID  Investigator name  Date of assignment  Initial vs. Reassignment  Date investigation closed or re.
ID-001 01 Diaz, Carlos - DIS Worker 326 05/14/2019  Initial  05/14/2019

COMMUNICATION ATTEMPTS

ID  Method of contact  Contact result  Date/Time of contact
ID-001 Phone Call  No contact, left message  05/14/2019

COMMUNICATION NOTES

Communication notes:

HIV INVESTIGATION OUTCOMES

HIV disposition date
HIV disposition
HIV-related diagnosis

SYPHILIS INVESTIGATION OUTCOMES

Syphilis disposition date
Syphilis disposition
Syphilis-related diagnosis

OTHER DISEASE INVESTIGATION OUTCOMES

ID
ID-001
Count: 1
SHFII – Screenshots: Linkage to Care Tab
Instructions for this tab

Use this tab to document all linkage to care activities, including: HIV medical care, HIV, STD, and Hepatitis testing, STD treatment; HIV pre-exposure prophylaxis (PrEP); and other services.

HIV status and care status at initiation

- HIV status at initiation: [Select option]
- If negative, enter month and year of most recent HIV test below:
  - Month: [Enter value]
  - Year: [Enter value]

HIV testing and linkage to care

- Did the client receive an HIV test as part of this investigation: [Select option]
- If yes, date of HIV test: [Enter value]
- HIV test result: [Select option]
- Date returned or linked to care: [Enter value]
- How was returned to care status determined: [Select option]
### STD AND HEPATITIS C TESTING AND LINKAGE TO CARE

<table>
<thead>
<tr>
<th>ID</th>
<th>Disease tested</th>
<th>Test results indicative of current infection</th>
<th>Date of test (specimen collection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID-001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Count:** 1

**Page:** 1 of 1

### REFERRAL/LINKAGE TO PréP

- **Currently on PréP:**
- **Screened for PréP eligibility?:**
- **Eligible for PréP?:**
- **Reason not referred:**
- **PrÉP referral date:**
- **Referral for PréP services:**
- **Client assisted with navigation/linkage to PréP provider:**

### REFERRALS TO OTHER SERVICES

- **Other referrals provided (select all that apply):**
  - None
  - Substance Abuse
  - Transportation
  - Family planning
  - Health Insurance Enrollment
  - Housing
  - Mental Health
  - Domestic Violence
  - Prenatal
  - Other

  **If Other, specify:** [ ]
SHFII – Screenshots: Client Risk Information Tab
### Sexual Risk Information

Vaginal or anal sex in the past 12 months (select all that apply):  
- None reported  
- Refused  
- Males  
- Females  
- Transgender/gender-queer

Other sexual risk behaviors in the past 12 months (select all that apply):  
- None reported  
- Anonymous partners  
- Received drugs/money for sex  
- Gave drugs/money  
- Sex partner used injection drugs  
- Vaginal or anal sex without a condom  
- Sex while high/intoxicated

- Had sex with a pregnant partner in past 12 months (males only)
- Had sex with MSM in past 12 months (females only)

### Substance Use

Substance use past 12 months (select all that apply):  
- None reported  
- Methamphetamine  
- Crack  
- Heroin  
- Cocaine  
- Prescription opioids  
- Excessive alcohol  
- Erectile dysfunction  
- Cannabis  
- Nitrates/Poppers  
- Other

Injection drug use (12 months):  
- No  
- Yes, no needle sharing  
- Yes, needle sharing

### Housing Status

Did the client experience any of these housing situations in the past 12 months (select all that apply):  
- None reported  
- Refused  
- Homeless  
- Transitional/instable housing  
- Group home/halfway house  
- Drug rehabilitation

### Incarceration

- Institutionalized at diagnosis?
- Has the client been to any of the following in the past 12 months (select all that apply):  
  - None reported  
  - Jail  
  - Prison  
  - Refused  
  - Juvenile Hall
SHFII – Screenshots: Contacts Tab
### Contacts (system)

<table>
<thead>
<tr>
<th>ID</th>
<th>Last Name</th>
<th>First Name</th>
<th>DOB</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID-001</td>
<td>Yocel</td>
<td>Pete</td>
<td>02/15/2001</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Count: 1

### Contacts (system) Details

- **Street Address**: 
- **Apartment**: ?
- **City**: 
- **State**: 
- **Zip**: 
- **Jurisdiction**: 
- **Investigator**: 

- **Race**: 
  - American Indian or Alaskan Native
  - Asian
  - Black or African American
  - Native Hawaiian or Other Pacific Islander
  - Other
  - Unknown
  - White

- **Reported Race**: 
- **Type of Contact**: 
- **Date of Contact**: 
- **Exposure Event**: 
- **Cluster ID**: 

- **Priority**: 
- **Status**: 
- **Medication Used**: 
- **E-mail Address**: 
- **Other Electronic Contact Information**: 

- **Link Patient**: 

### Action Buttons
- Create Incident
- Create Investigation
- OK
- Cancel
- Add
- Delete
SHFI – Screenshots:
Case Investigation Tab
<table>
<thead>
<tr>
<th>Case Information</th>
<th>Dates</th>
<th>Statuses</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Jurisdiction: Sacramento</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Jurisdiction</td>
<td>Date of Onset</td>
<td></td>
</tr>
<tr>
<td>Investigator</td>
<td>Lab Specimen Collection Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Date of Diagnosis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lab Specimen Result Date</td>
<td></td>
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<tr>
<td></td>
<td>Date of Death</td>
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<tr>
<td></td>
<td>Date Received</td>
<td></td>
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<td></td>
<td>^ Date Created</td>
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<td></td>
<td>Date Closed</td>
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<td>Provider Name</td>
<td>Process Status</td>
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<tr>
<td>Submitter Name: Wheeler, William</td>
<td>Set to: Not a Case</td>
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<tr>
<td>Lab</td>
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<td>Reported by:</td>
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<tr>
<td>Additional Provider</td>
<td>Web Report</td>
<td>Lab Report</td>
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<tr>
<td>Additional Lab</td>
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<tr>
<td>Index Case</td>
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<tr>
<td>Cluster ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Died of This Illness</td>
<td></td>
<td>Yes No</td>
</tr>
</tbody>
</table>
### Linked Outbreaks

<table>
<thead>
<tr>
<th>Outbreak ID</th>
<th>Outbreak #</th>
<th>Location</th>
<th>Date Created</th>
<th>Jurisdiction</th>
<th>Process / Resolution Status</th>
</tr>
</thead>
</table>

**Notes/Remarks**

Add

**Delete Incident**