

Using Early Intervention Services to Maximize Coordination Between HIV Surveillance and HIV Care

Kama Brockmann, PhD, LCSW

Kama Brockmann

Data to Care Specialist

California Department of Public Health, Office of AIDS

kama.brockmann@cdph.ca.gov

916-449-5964



Disclosures

Presenter has no financial interest to disclose.

This continuing education activity is managed and accredited by Professional Education Services Group in cooperation with HSRA and LRG. PESG, HSRA, LRG and all accrediting organization do not support or endorse any product or service mentioned in this activity.

PESG, HRSA, and LRG staff has no financial interest to disclose.





Learning Objectives

At the conclusion of this activity, the participant will be able to:

1. Describe HIV Data to Care activities in California and San Diego County.
2. Identify ways to use Ryan White funding for Data to Care activities.
3. Identify potential barriers and challenges to implementing Data to Care activities.



Obtaining CME/CE Credit

If you would like to receive continuing education credit for this activity, please visit:

<http://ryanwhite.cds.pesgce.com>

California in Context

- California is 163,700 square miles
 - Only to Alaska and Texas are bigger
- California is state with largest population
 - 38 million; Texas = 26 million; New York 19 million
- 61 local health jurisdiction - 58 counties; 3 cities
- ≈ 350 acute care hospitals
- ≈ 800 federally qualified health centers (FQHC)

California HIV Disease in Context

- 126,200 people diagnosed and living with HIV (as of 2014)
- Estimated 138,900 with living HIV (91% diagnosis rate)
- 5,002 new diagnoses in 2014
- 1,156 (23%) were late diagnoses

States with the Highest Number of Diagnosed PLWH – 2013

State	Number of diagnosed PLWH*	Percent of all diagnosed PLWH in U.S.
New York	130,691	14.0%
California	119,845	12.9%
Florida	101,452	10.9%
Texas	73,959	7.9%
Georgia	42,067	4.5%
Total (all U.S.)	931,526	100%

* Centers for Disease Control and Prevention. *HIV Surveillance Report, 2014*; vol. 26.

<http://www.cdc.gov/hiv/library/reports/surveillance/>. Published November 2015. Accessed 03/11/2016.

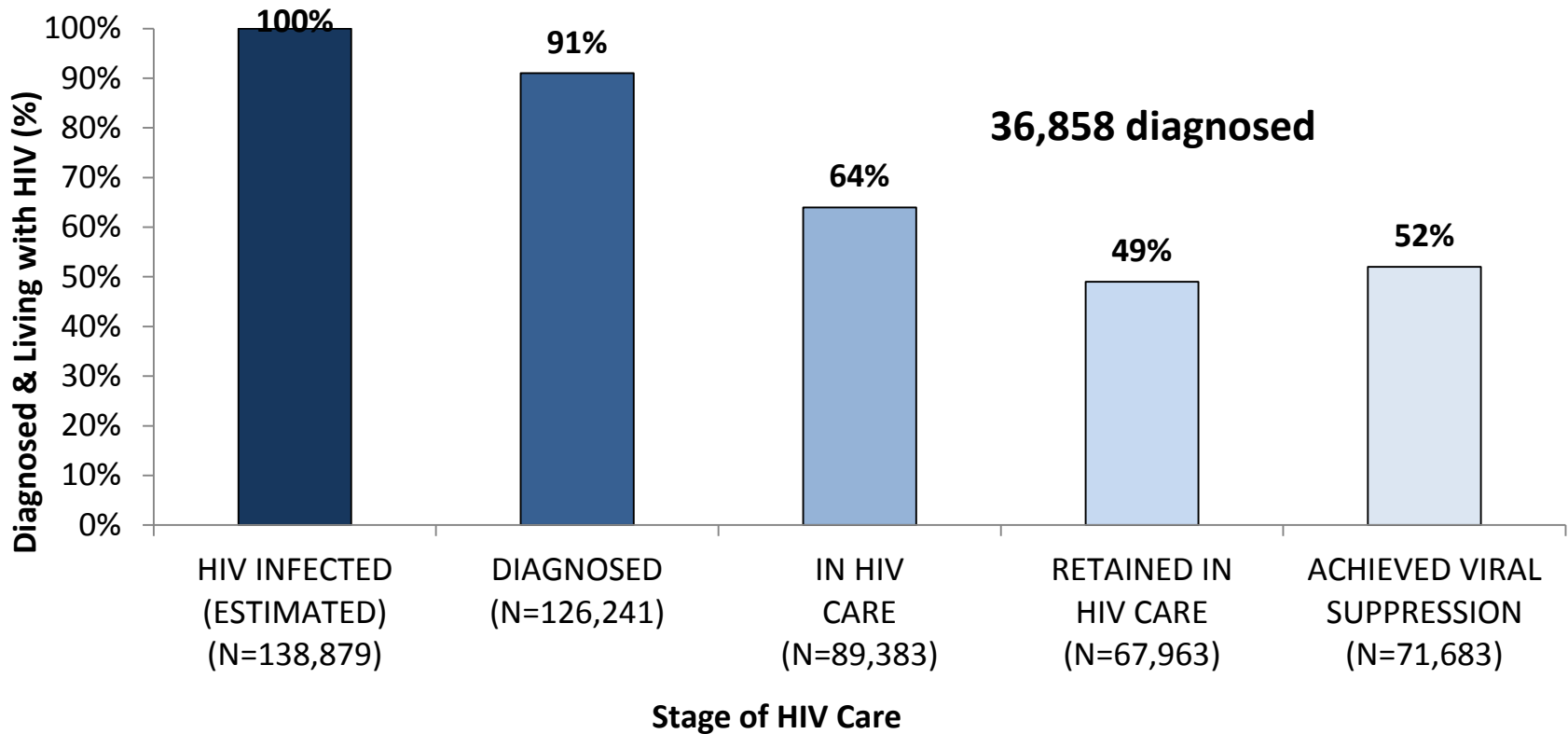
States with the Highest Number of New HIV Diagnoses – 2014

State	Number of new HIV diagnoses*	Percent of all new HIV diagnoses in U.S.
California	5,551	12.6%
Florida	5,347	12.1%
Texas	4,833	11.0%
New York	3,825	8.7%
Georgia	2,253	5.1%
Total (all U.S.)	44,073	100%

* Centers for Disease Control and Prevention. *HIV Surveillance Report, 2014*; vol. 26.

<http://www.cdc.gov/hiv/library/reports/surveillance/>. Published November 2015. Accessed 03/11/2016.

California's Continuum of HIV Care – 2014



•Data were obtained from the HIV surveillance system on 12/31/2015, for persons diagnosed and meeting CDC case definition for HIV, and living in California as of 12/31/2014. In HIV care includes persons with at least one care visit during 2014. Retained in HIV care includes persons with at least 2 or more care visits 3 months apart during 2014. Achieved viral suppression includes persons with most recent viral load test results ≤ 200 copies /mL during. Note that 813 persons alive at some time during the year were no longer alive at the end of the calendar year and were excluded from the figure.

HIV Prevention in California

- Three CDC-funded jurisdictions:
 - Los Angeles
 - San Francisco (including San Mateo, Marin)
 - California Project Area (all other local health jurisdictions – LHJs)

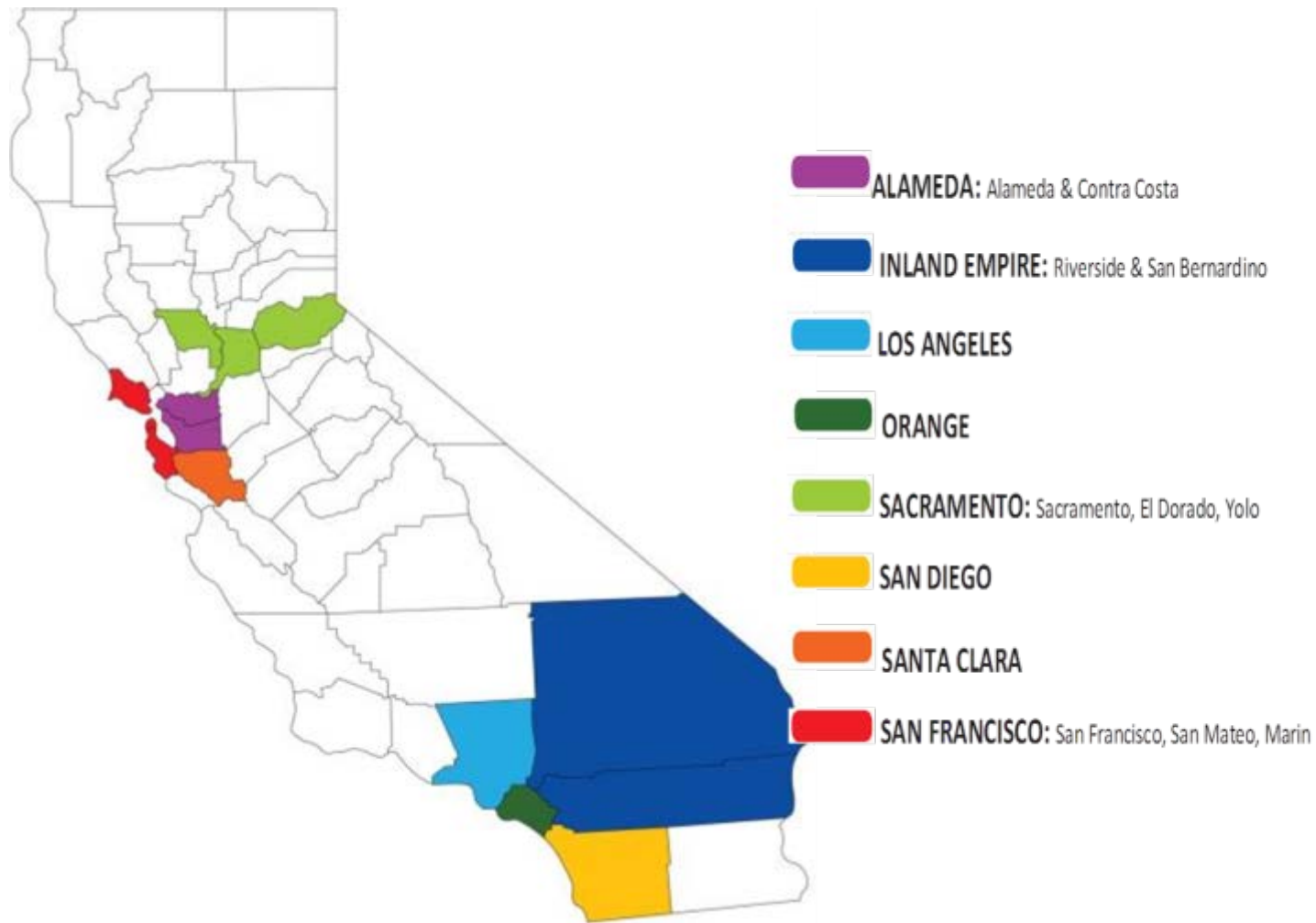
HIV Prevention in California

- CDC Funding \approx \$17.5 million in the California Project Area
 - Five required activities: HIV testing; linkage to care; partner services; prevention with people living with HIV/AIDS; condom distribution
- State Funding \approx \$8 million
 - Prevention Demonstration Projects
 - PrEP Navigation Program
 - Harm Reduction Technical Assistance and Supplies

HIV Care in California

- HRSA Funded Programs
 - Part A = 8 TGA/EMAs
 - Part B
 - Part C = 41 clinics
 - Part D = 8 programs

Ryan White Part A TGA/EMA



Ryan White Part B

- HRSA-HAB Base Grant - X08 - \$131,859,269
- 42 HIV Care Program(HCP) contracts cover the entire state -- with 81 subcontractors
- Covers 25 of 29 service categories (does not cover Child Care, Respite Care, Treatment Adherence Counseling, Rehabilitation Services)
- Minority AIDS Initiative 18 LHJs
 - Alameda, Contra Costa, Fresno, Kern, Long Beach, Marin, Monterey, Orange, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, San Mateo, Santa Clara, Solano, Ventura

Ryan White Part B and Data to Care

- Early Intervention Services support Data to Care activities
 - Identifying patients not receiving HIV care
 - Engaging patients related to out of care status
 - Assisting patients with issues that hinder HIV care and treatment

Goal: Implement data to care

Use statewide HIV surveillance data to identify ~40,000 diagnosed PLWHA in California who are out of care, find them, and re-engage them in care

California Laws and Regulations

- “Home rule” state
 - Public health authority lies with local jurisdictions, not state health department
- Strict laws around HIV data sharing
 - Often separate from other public health data sharing laws
- All HIV labs are legally required to be reported to local health department
 - Includes diagnostic tests, CD4, viral load, and molecular HIV test results
 - But electronic lab reporting not legal until 2013; was implemented for HIV labs until November 2015



Diverse Local Jurisdictions

- 61 local health jurisdictions (LHJ)
 - 58 counties and 3 cities
- Population differences
 - Los Angeles County: 9,862,049
 - Alpine County: 1,175
- Size Differences
 - San Bernardino at 20,100 sq miles is the largest county in US
 - San Diego is 4526 sq miles; Los Angeles is 4083 sq miles
 - San Francisco 91 sq miles
- Varied public health capacity
 - Surveillance
 - Data analysis
 - Outreach

Diverse HIV epidemics

Five highest counties		
County	No. PLWHA	No. new diagnoses
Los Angeles	50,298	2,035
San Francisco	13,600	335
San Diego	12,862	480
Orange	7,187	282
Alameda	6,125	202
Five lowest counties		
County	No. PLWHA	No. new diagnoses
Sierra	2	0
Mono	2	0
Modoc	2	0
Alpine	0	0

Source: 2014 California HIV surveillance data

Data to Care: Creating the Line Lists

- Use statewide HIV surveillance data to create lists of PLWHA who are out of care for each local jurisdiction
 - Used viral load, CD4, or molecular HIV result as proxy for care visit
- Routinize analytic processes at state level
 - Update lists monthly
 - Provide lists to LHJs via secure FTP sharing
- Lists group PLWHA by priority for intervention
 - De-emphasize older cases

Challenges in Creating Line Lists

- Analyses
 - No established method for creating these lists
- Prioritization scheme
 - Lots of different perspectives on how to prioritize
 - Iterative process
 - Getting input from broad group of stakeholders
- Time consuming development process

HIV Data to Care Line List Description

HIV Data-to-Care Line List Description

The HIV Data-to-Care (DtC) Line List is an Excel spreadsheet containing all cases presumed to be alive and still residing in the state of California based on the most currently available data in the Enhanced HIV/AIDS Reporting System (eHARS). The cases are grouped by the most recent residence address into separate spreadsheets for each local health jurisdiction (LHJ) in California by county of residence or city if residence in the case of the Berkeley, Long Beach, and Pasadena LHJs. The monthly Line Lists are generated based on the prior end-of-month frozen eHARS data set, and therefore reflect the most up-to-date information about each case. Cases are deemed to be "out-of-care" if they do not have a CD4, viral load, or diagnostic genotype laboratory result (i.e., a "Care Lab Result") in eHARS during a specified time period (3 months for newly diagnosed cases; 12 months for non-newly diagnosed cases).

The cases in each LHJ's Line List are organized into 10 separate Excel tabs to help prioritize workload, 3 of which represent newly diagnosed cases (cases diagnosed \leq 12 months as of the date the data were frozen), 6 represent non-newly diagnosed cases with recent lab activity (cases diagnosed $>$ 12 months that received at least one lab result of any type within the last 36 months as of the date the data were frozen), and 1 representing non-newly diagnosed "stale" cases (cases diagnosed $>$ 12 months that received no labs of any type within the last 36 months as of the date the data were frozen). Each Excel tab represents a different priority for investigation, and cases are categorized into the highest level priority tab for which they qualify.

Newly Diagnosed Cases (diagnosed \leq 12 months as of the date the data were frozen)

1. Not linked to Care (notlinkedtocare1_1): No care lab as of the date the data were frozen
2. Dropped Out of Care (outofcare1_2): No care lab $>$ 90 days as of the date the data were frozen
3. In Care (Incare1_3): At least one care lab \leq 90 days as of the date the data were frozen

Non-Newly Diagnosed Cases with Recent Lab Activity (diagnosed $>$ 12 months and received at least one lab result of any type in the past 36 months as of the date the data were frozen)

4. Not in Care and Not Virally Suppressed (NotinCare_NotVSup2_4): No care lab $>$ 12 months and latest viral load $>$ 200 c/ml; or latest viral load result interpretation ' $>$ ' and the viral load result is missing; or latest viral load result interpretation not ' $<$ ' and the viral load result $>$ 200 c/ml
5. Not in Care and Viral Load Status Unknown (NotinCare_NoVL2_5): No care lab $>$ 12 months and no viral load test; or the latest viral load result interpretation not ' $>$ ', ' $=$ ', or ' $<$ ' and the viral load result is missing
6. Not in Care, but Virally Suppressed (NotinCare_VSup2_6): No care lab $>$ 12 months and latest viral load \leq 200 c/ml; or latest viral load result interpretation ' $<$ ' or ' $=$ ' and the viral load result is missing
7. In Care and Not Virally Suppressed (InCare_NotVSup2_7): At least one care lab \leq 12 months and latest viral load $>$ 200 c/ml; or latest viral load result interpretation ' $>$ ' and the viral load result is missing; or latest viral load result interpretation not ' $<$ ' and the viral load result $>$ 200 c/ml

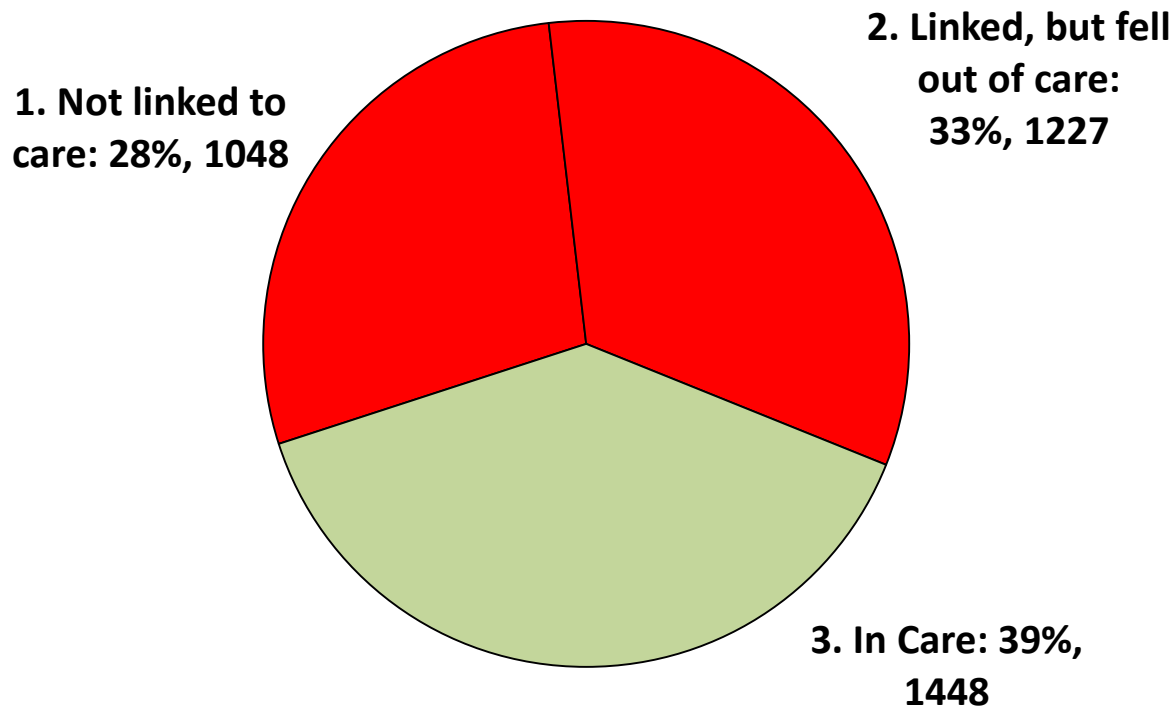
Prioritization of Cases

- Ten priority groups
 - Newly diagnosed (3 groups)
 - Non-newly diagnosed
 - With a lab in previous 36 months (6 groups)
 - Without any lab in previous 36 months (1 group)
- Newly diagnosed in previous 12 months
 1. Not linked to care: No labs since diagnosis
 2. Linked to care, but then fell out of care: Were initially linked, but no labs for at least the past 90 days
 3. Linked to care and in care: Had a lab in previous 90 days

Diagnosed Within Previous 12 Months

Local Health Jurisdiction	PLWHA in LHJ	1. Not linked to Care (notlinkedtocare1_1): No care lab 7 days since diagnosis upto the date the data were frozen, Diagnosed \leq 12 months	2. Dropped Out of Care (outofcare1_2): No care lab > 90 days as of the date the data were frozen, Diagnosed \leq 12 months	3. In Care (incare1_3): At least one care lab \leq 90 days as of the date the data were frozen, Diagnosed \leq 12 months
LHJ 1	6294	36	43	121
LHJ 2	7800	29	54	157
LHJ 3	7345	35	57	102
LHJ 4	14343	59	139	114
LHJ 5	1095	12	10	4

HIV/AIDS Newly Diagnosed Cases (diagnosed within the prior 12 months)



Prioritization of Cases

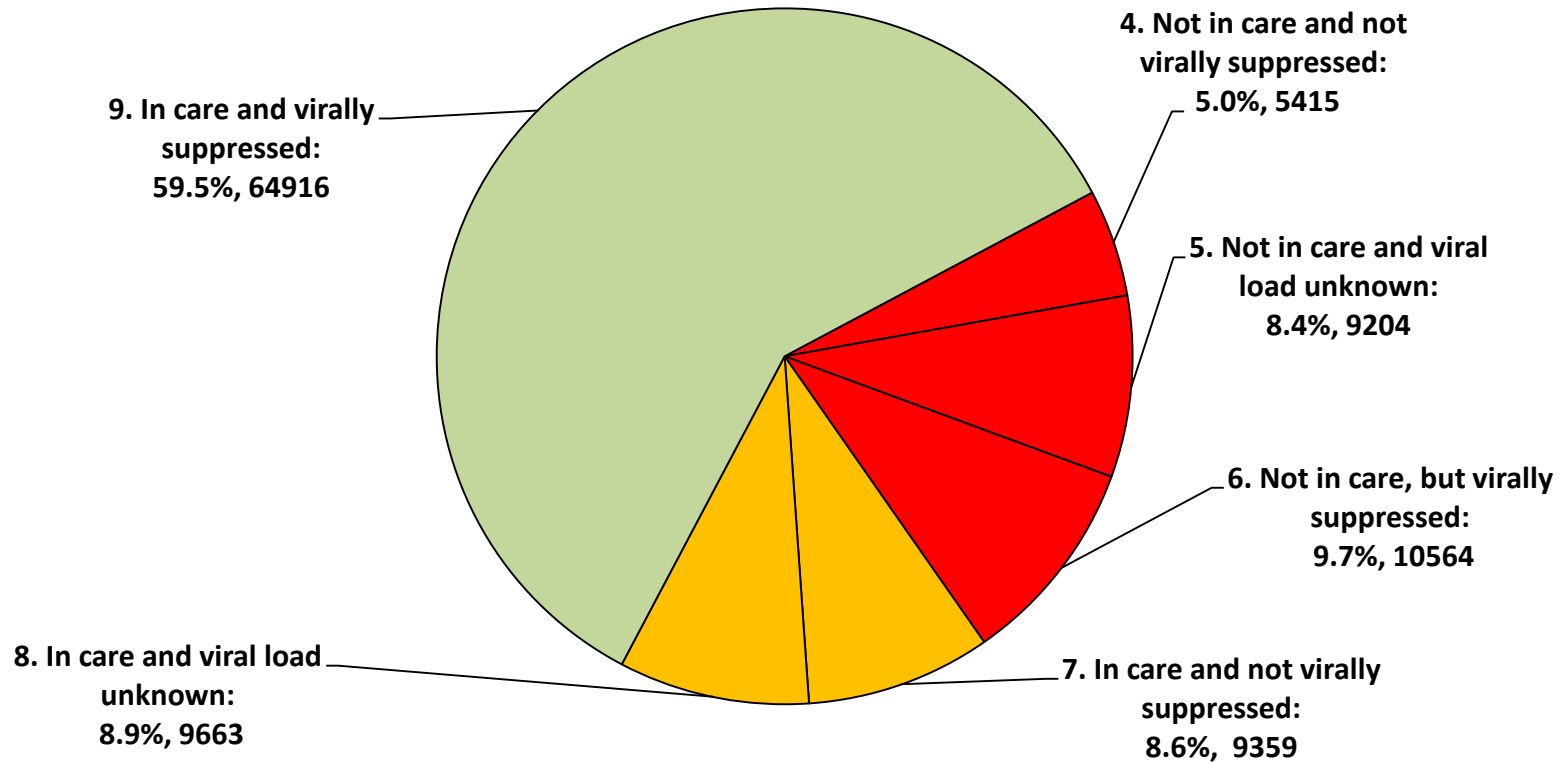
- Non-newly diagnosed (diagnosed more than 12 months ago, but a lab received in previous 36 months)
 - Not in care in previous 12 months
 4. Not in care and not virally suppressed on most recent lab
 5. Not in care and viral load unknown
 6. Not in care, but virally suppressed on most recent lab
 - In care in previous 12 months
 7. In care and not virally suppressed
 8. In care and viral load unknown
 9. In care and virally suppressed

Diagnosed Before Previous 12 Months

Local Health Jurisdiction	PLWHA in LHJ	4. Not in Care and Not Virally Suppressed (NotinCare_NotVSup2_4): No care lab > 12 months and latest viral load > 200 c/ml; or latest viral load result interpretation '>' and the viral load result is missing; or latest viral load result interpretation not '<' and the viral load result > 200 c/ml, Diagnosed ≥ 13 months	5. Not in Care and Viral Load Status Unknown (NotinCare_NoVL2_5) : No care lab > 12 months and no viral load test; or the latest viral load result interpretation not '>', '=', or '<' and the viral load result is missing, Diagnosed ≥ 13 months	6. Not in Care, but Virally Suppressed (NotinCare_VSup2_6) : No care lab > 12 months and latest viral load ≤ 200 c/ml; or latest viral load result interpretation '<' or '=' and the viral load result is missing, Diagnosed ≥ 13 months	7. In Care and Not Virally Suppressed (InCare_NotVSup2_7) : At least one care lab ≤ 12 months and latest viral load > 200 c/ml; or latest viral load result interpretation '>' and the viral load result is missing; or latest viral load result interpretation not '<' and the viral load result >200 c/ml, Diagnosed ≥ 13 months	8. In Care and Viral Load Status Unknown (InCare_NoVL2_8): At least one care lab ≤ 12 months and no viral load test; or the latest viral load result interpretation not '>', '=', or '<' and the viral load result is missing, Diagnosed ≥ 13 months	9. In Care and Virally Suppressed (InCare_VSup2_9): At least one care lab ≤ 12 months and latest viral load ≤ 200 c/ml; or latest viral load result interpretation '<' or '=' and the viral load result is missing, Diagnosed ≥ 13 months
LHJ 1	6294	146	130	351	463	119	3710
LHJ 2	7800	254	410	473	384	916	2941
LHJ 3	7345	209	165	436	528	326	4406
LHJ 4	14343	1292	1128	3229	612	375	2984
LHJ 5	1095	73	83	195	51	81	275

HIV/AIDS Non-Newly Diagnosed Cases

(cases diagnosed more than 12 months ago with a lab any time in the previous 36 months)



Prioritization scheme

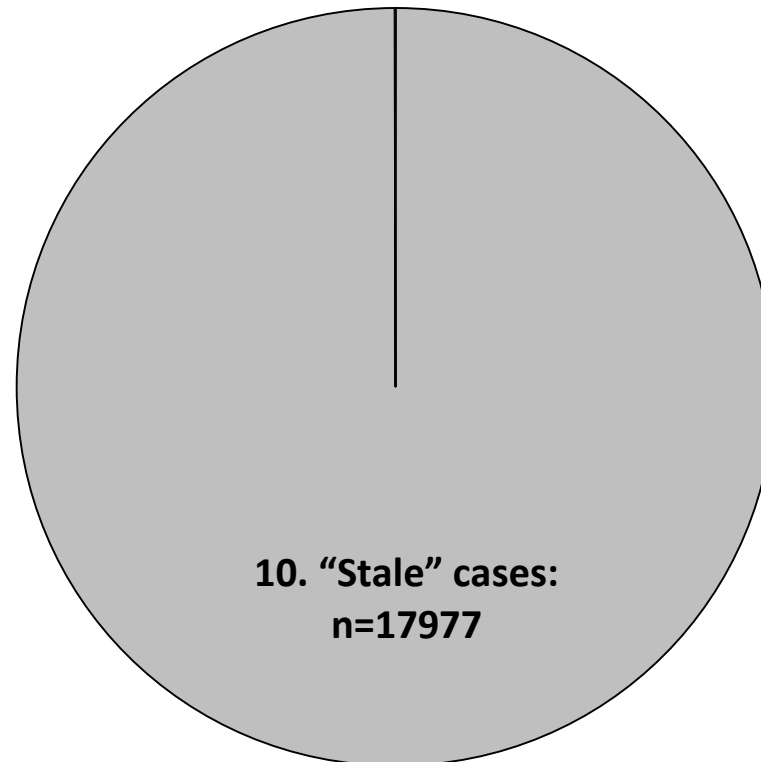
- Non-newly diagnosed (more than 12 months ago) and no labs for more than 36 months
 10. “Stale” cases

Diagnosed More Than 12 Months Ago No Information in Previous 3 Years

Local Health Jurisdiction	PLWHA in LHJ	10. Not in Care (No Care more than 3 yrs _10): No lab result of any type received within the last 36 months, Diagnosed \geq 13 months	11. County has Primary or Secondary Ownership of the case: Not in tab1-10 in the current month.	12. Dropped-off from County: Any case found in tab1-10 in the previous month (no longer in tab 1-10).
LHJ 1	6294	622	413	140
LHJ 2	7800	1198	471	513
LHJ 3	7345	804	5	272
LHJ 4	14343	2788	1258	365
LHJ 5	1095	204	65	42

HIV/AIDS Non-Newly Diagnosed Stale Cases

(cases diagnosed more than 12 months ago with no labs for more than 36 months)



Lessons Learned from Prioritization

- TOO MANY CATEGORIES/COLUMNS
- It is possible to provide too much information
- Still have no good working definition of “in care” agreed upon by CDC and HRSA.

OA Data to Care Activities

- Pilot with five LHJs: San Diego, Orange, Alameda, Riverside, Ventura (added San Bernardino)
- Site Visits to Pilot Sites for feedback

To come:

- Survey of Current Data to Care Activities in Local Health Jurisdictions
 - What are currently doing regarding Data to Care?
 - Who is doing it?
- Release Line Lists to all LHJs
- Use of Accurint (Lexis/Nexis) as a Data to Care Resource



Challenges

- Workload
 - Almost 40,000 PLWHA out of care and ~5,000 new diagnoses each year
 - Limited capacity to do outreach. How to prioritize?
- Limited analytic capacity at most LHJs
- Some LHJs have local data not in statewide HIV surveillance database

Challenges

- Ongoing need for data to care information
 - Not a one-time analysis
 - Updating HIV surveillance data with patient information
- Many PLWHA classified as “out of care” are not actually out of care

Special Thanks

- Juliana Grant and Sunitha Gurusinghe contributing knowledge and slides.

Planning and Development of Data to Care Implementation

Lauren Brookshire, MSW, MPH

County of San Diego

HIV, STD, and Hepatitis Branch

Data to Care team

- California Dept. of Public Health, Office of AIDS
 - County of San Diego
 - Public Health Services
 - HIV, STD and Hepatitis Branch
 - Field Services
 - Epidemiology and Immunization Services Branch
 - HIV/AIDS Epidemiology Unit

Process Overview

- It starts with a list
- The list is matched
- The refined list is shared with disease investigation manager
- Cases are assigned, investigations are conducted, linkages are made
- Documentation and evaluation are conducted.
- Final dispositions are made, looped back to SD EPI, eHARS updated

Data to Care Line List

- Quarterly, State Office of AIDS provides SD EPI with the *HIV Data to Care Line List* through a secure electronic method.
- List contains all cases presumed to be alive and still residing in San Diego County.
- Cases are organized into 10 categories.
- SD EPI matches the cases with local lab data and match to priorities for disease investigation.

Implementation Priorities

- Cases diagnosed between 12 months and 36 months prior to list created

Implementation Priorities

- Priority 1
 - Not in HIV care, with an unknown HIV viral load
 - No HIV VL result has been reported for this case
- Priority 2
 - Not in HIV care and not virally suppressed
 - HIV VL is greater than 200 copies per millimeter of blood according to lab results reported
- Priority 3
 - Accessing HIV care but not virally suppressed

How many?

- Priority 1
 - Original list contained 1,232 cases
 - 713 cases after match
- Priority 2
 - Original list contained 1,062 cases
 - 515 cases after match
- Priority 3
 - Original list contained 692 cases
 - 142 cases after match

Assigning Cases for Investigation

- Prior to assignment
- Assignment
- Logging cases

Investigations, Interviews and Linkage to Care

Pre-Patient Interview Activities

Interview

Providing Linkages to Care

Closing investigations, dispositions and documentation

- Closing the investigation
- Disposition represents the final outcome
- Represents the final outcome of the HIV intervention process

Training

- HIV test counselor training
- Passports through Partner Services (disease investigation)
- Stigma training
- Strengths-based training

Contact Information

*Lauren Brookshire
County of San Diego
(619) 293-4705*

Lauren.Brookshire@sdcounty.ca.gov