

# Impact of a Rapid HIV Testing Algorithm on Receipt of HIV Testing and Referral to Medical Care

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# Presenter Disclosures

**Jacqueline Rurangirwa**

- (1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

**No relationships to disclose**



# HIV Rapid Testing Algorithm (RTA) Project

- Centers for Disease Control and Prevention (CDC) funded study
- Two study sites: Los Angeles and San Francisco
- Goal: Evaluate the impact and feasibility of using a sequence of up to 3 HIV rapid tests, to provide clients with information about their HIV status within 1 hour and link into care
- Estimated positive tests at each study city
  - 100 to 150 at intervention sites
  - 100 to 150 at control sites
- Project period = 18 months



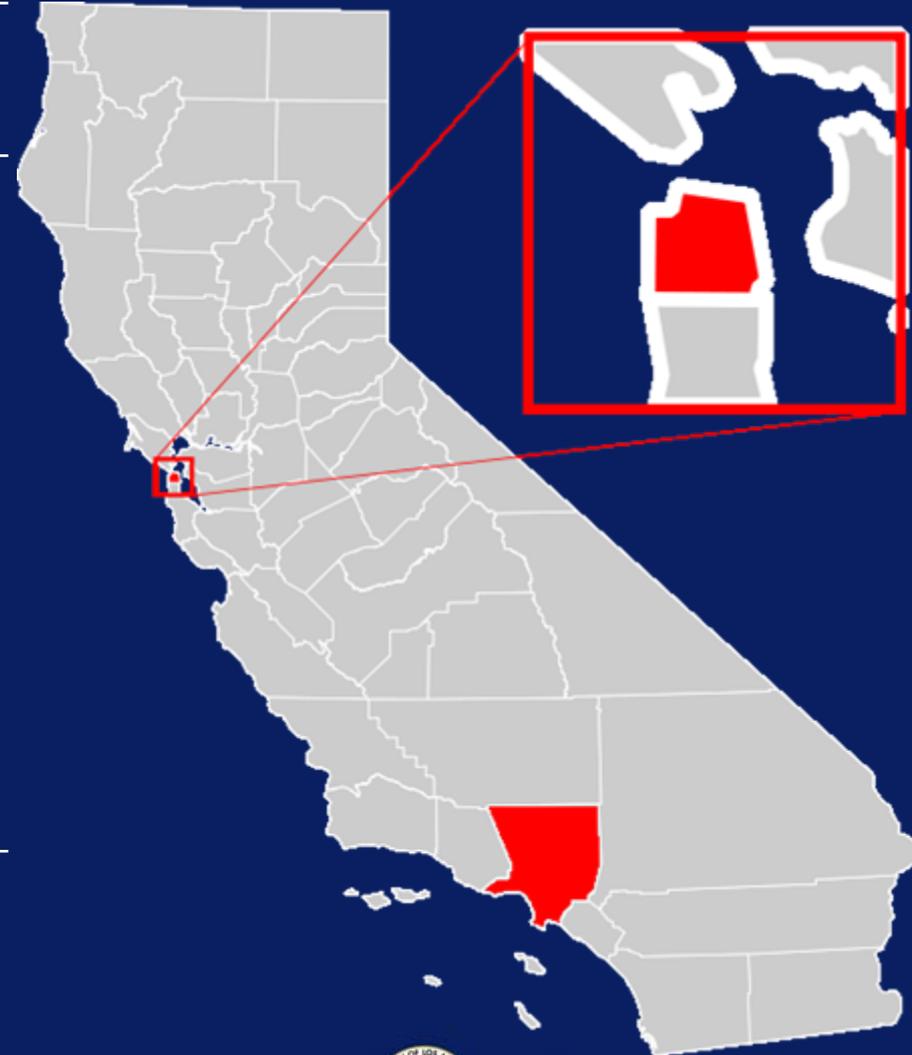
# RTA Project Objectives

- Feasibility and cost of implementing a RTA in public point-of-care HIV testing settings
- Validate use of a RTA to provide accurate diagnosis of HIV infection
- Assess the impact of same-day diagnosis of HIV on the linkage to medical care
- Develop written protocols and best practices for implementation of a RTA



# RTA Study Cities

	Los Angeles	San Francisco
Square Miles	4,086	47
Population	10.3 Million <sup>a</sup>	744,041 <sup>b</sup>
Proportion of:		
California AIDS Cases	36% <sup>c</sup>	19% <sup>d</sup>
U.S. AIDS Cases	5% <sup>c</sup>	3% <sup>d</sup>



Data Sources:

<sup>a</sup>United Way, Los Angeles (2008)

<sup>b</sup>US Census Bureau, 2006 Population Estimate

<sup>c</sup>Los Angeles County HIV Epidemiology Program (2008)

<sup>d</sup>San Francisco County HIV Epidemiology Program (2008)



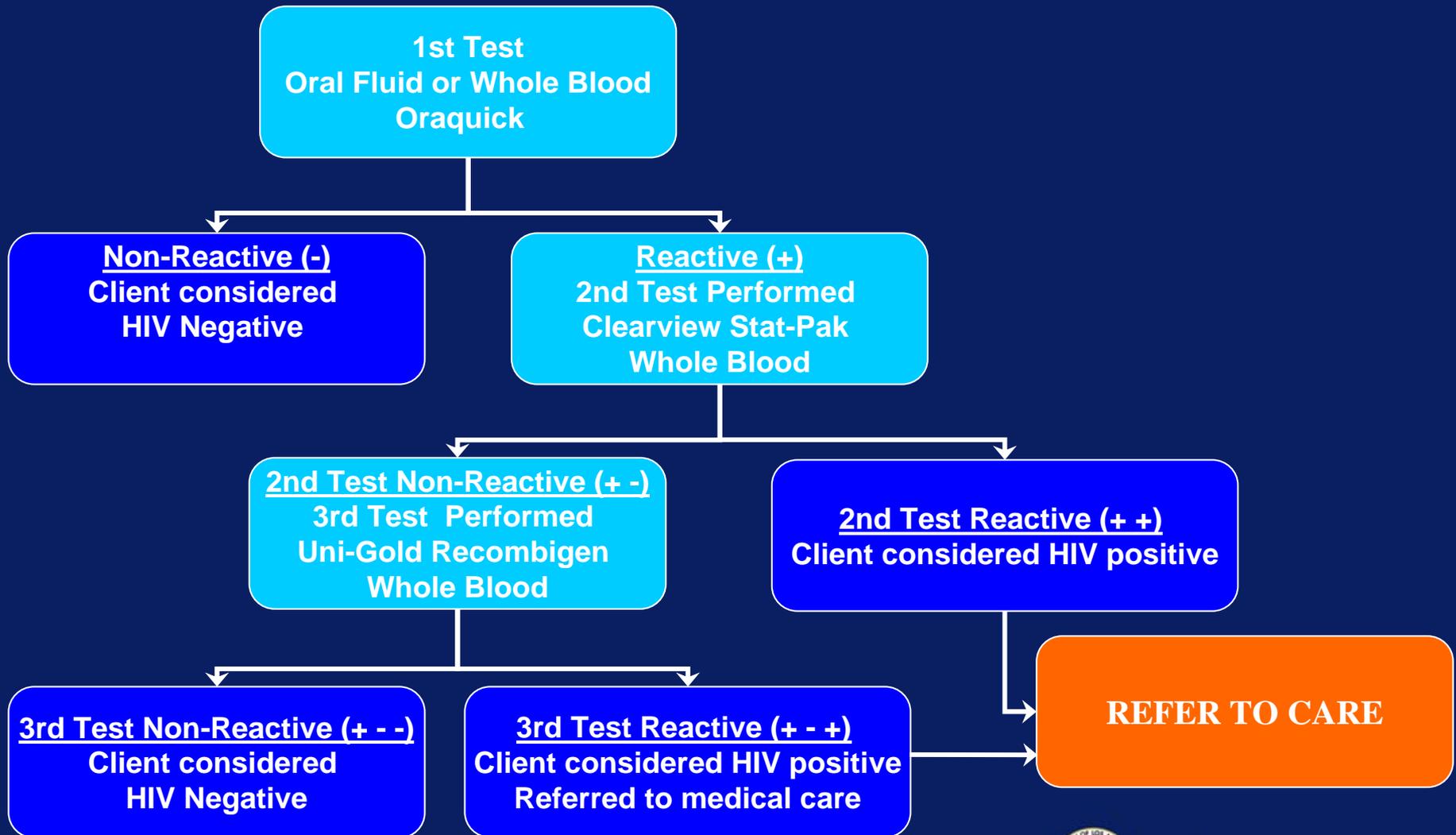
# RTA Project Structure

- Eligibility: All clients 12 years or older presenting for HIV rapid testing
- Standard HIV testing consent forms
- RTA intervention Sites
  - 9 publicly funded point-of-care settings
    - Jails, mobile testing units, clinics, store fronts
- Comparison Sites
  - 23 publicly funded sites providing standard rapid HIV testing

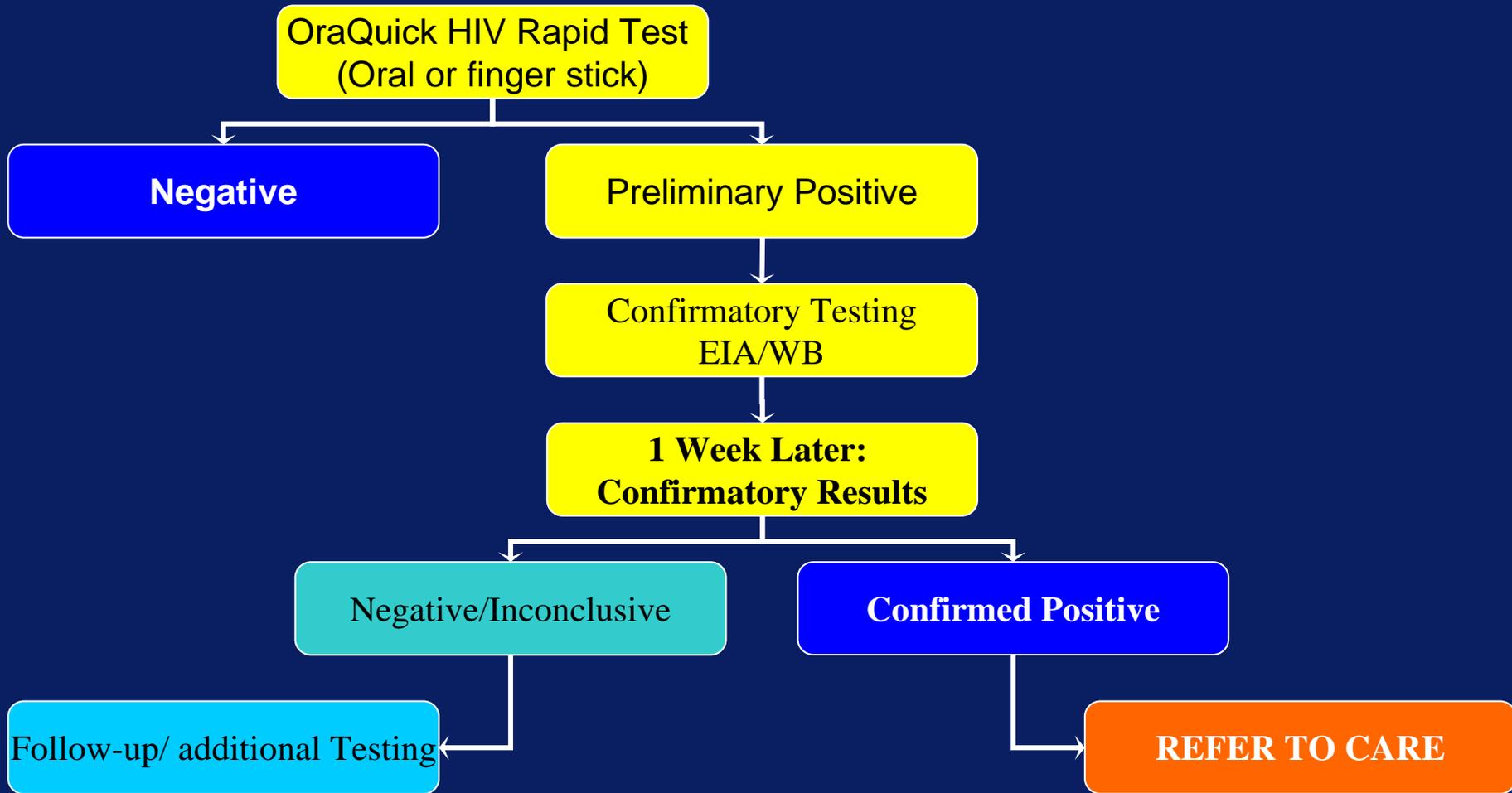


# HIV Rapid Testing Algorithm (RTA)

## – Intervention Sites



# Current Rapid HIV Testing Standard – Control Sites



# RTA Intervention Site Results

	Los Angeles N (%) (8/15/07 – 9/1/08)	San Francisco N (%) (8/1/07 – 7/31/08)
<b># Tested</b>	5,187	5,511
<b># Screened Reactive</b>	127 (2.45%) <sup>1</sup>	104 (1.89%) <sup>1</sup>
<b># RTA Positive</b>	39 (0.75%) <sup>2</sup>	76 (1.38%)
<b># False Positive</b>	4 (0.08%)	24 (0.44%)
<b>Mean # Days Referred to Medical Care</b>	0 days	0 days

<sup>1</sup> 84 clients from Los Angeles and 4 clients from San Francisco with reactive screening did not proceed to RTA due to refusal of confirmatory testing or reported prior HIV positive result.

<sup>2</sup> 1 Western Blot Result did not match RTA reactive Results (EIA/WB negative).



# RTA Control Site Results

	Los Angeles N (%) (8/15/07 – 9/1/08)*	San Francisco N (%) (8/1/07 – 7/31/08)*
<b># Tested</b>	16,495	7,829
<b># Screened Reactive</b>	320 (1.94%)	145 (1.85%)
<b># False Positive</b>	25 (0.15%)	27 (0.34%)
<b># Received Confirmatory Test Results</b>	135 (42.2%)	87 (60.0%) <sup>†</sup>
<b>Mean # Days Referred to Medical Care (range)</b>	11.3 days (1 – 55 days)	7.6 days (7 – 21 days)

\* HIV counseling and testing data are provisional due to reporting delays.

† Estimate due to reporting delays.



# RTA Data Summary

- Intervention Sites
  - All clients received their test results on the same day
  - All RTA reactive clients were referred to medical care on the same day
  - 28 individuals had a false positive result resolved on the same day
  - The number of false positive OraQuick results are within the limits of the FDA approved package insert
  - Out of over 10,000 screening tests, one anomaly (RTA +/- WB result - ) was observed



# RTA Data Summary

- Control Sites
  - 42% – 60% of clients with initial reactive rapid HIV test returned for confirmatory test results
    - Intervention sites 100% of clients received final results
  - Mean 7.6 – 11.3 days before referred to medical care
    - Intervention sites mean 0 days



# RTA Next Steps

- Complete study period
- Link HIV counseling and testing data to HIV/AIDS surveillance data to determine:
  - If and when client entered into care
  - Differences between control and intervention sites
- Perform cost analysis of RTA
- Share best practices and lessons learned



# Thanks!

**Kevin Delaney**

Project Officer

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# For More Information

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