

Streamlining Laboratory Report Processing Reduces Workload, but Maintains Case Finding

Emily Westheimer, Selam Seyoum, Julie Yuan, Sonny Ly, Sarah Braunstein

Selam Seyoum, MPH

HIV Epidemiology and Field Services Program

NYC Department of Health and Mental Hygiene

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Background (1)

- **NYCDOHMH receives close to 1,000,000 HIV related laboratory reports annually**
- **Lab reports that do not match to existing cases in the HIV Surveillance Registry are considered potential new cases and prompt a field investigation.**
- **In 2014 , ~11,000 potential new cases were sent for field investigation.**

Background (2)

- **In early 2015, field staff reported spending a substantial amount of time on investigations that did not lead to a new case of HIV, but yielded a “non-case” determination.**
- **We sought strategies for reducing the number of “non-case” investigations without sacrificing the ability to find new cases**

Background (3)

Possible explanations considered for the increase in non-case determination:

- **Undetectable HIV Viral load tests:**
 - Have long been suspected as low yield for new cases in NYC*
 - Increase in use of NAAT as screening tool for high risk negative persons
- **Multi-Test Algorithm:**
 - Significant change in HIV diagnostic testing
 - Protocol for processing lab results not optimized
 - Improper ordering of test components by providers

Methods (1)

- Reviewed yield of undetectable viral load Investigation (Jan-June 2013 and June- Dec 2014)

	New Case		Non-Case		Total
	N	Row %	N	Row %	
<i>Und Viral Load Only</i>	4	0.5	863	99.5	867
<i>Und Viral Load + CD4</i>	258	27.4	683	72.6	941
<i>ALL</i>	262	14.5	1546	85.5	1808

- Reviewed and modified the protocol for assigning lab tests that were part of the Multi-test algorithm

Methods (2)

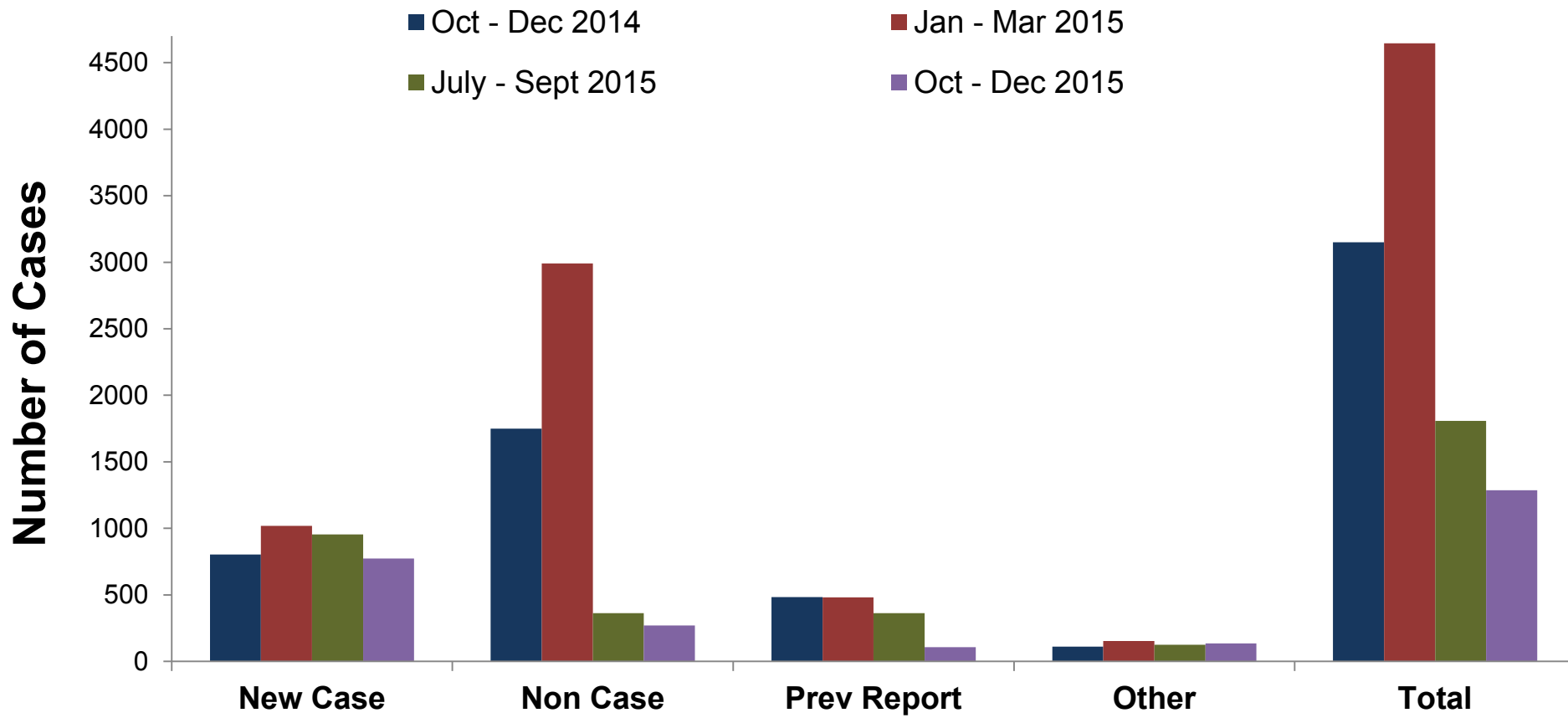
In the second quarter of 2015:

- **Ceased issuing case investigations for undetectable viral load results unless accompanied or followed by a second related test (CD4 or HIV diagnostic or confirmatory test)**
- **Implemented changes to MTA processing**
- **Compared field investigation outcomes across 4 quarters from October 2014- December 2015 (exclusive of Q2 2015)**

Type of Dispositions

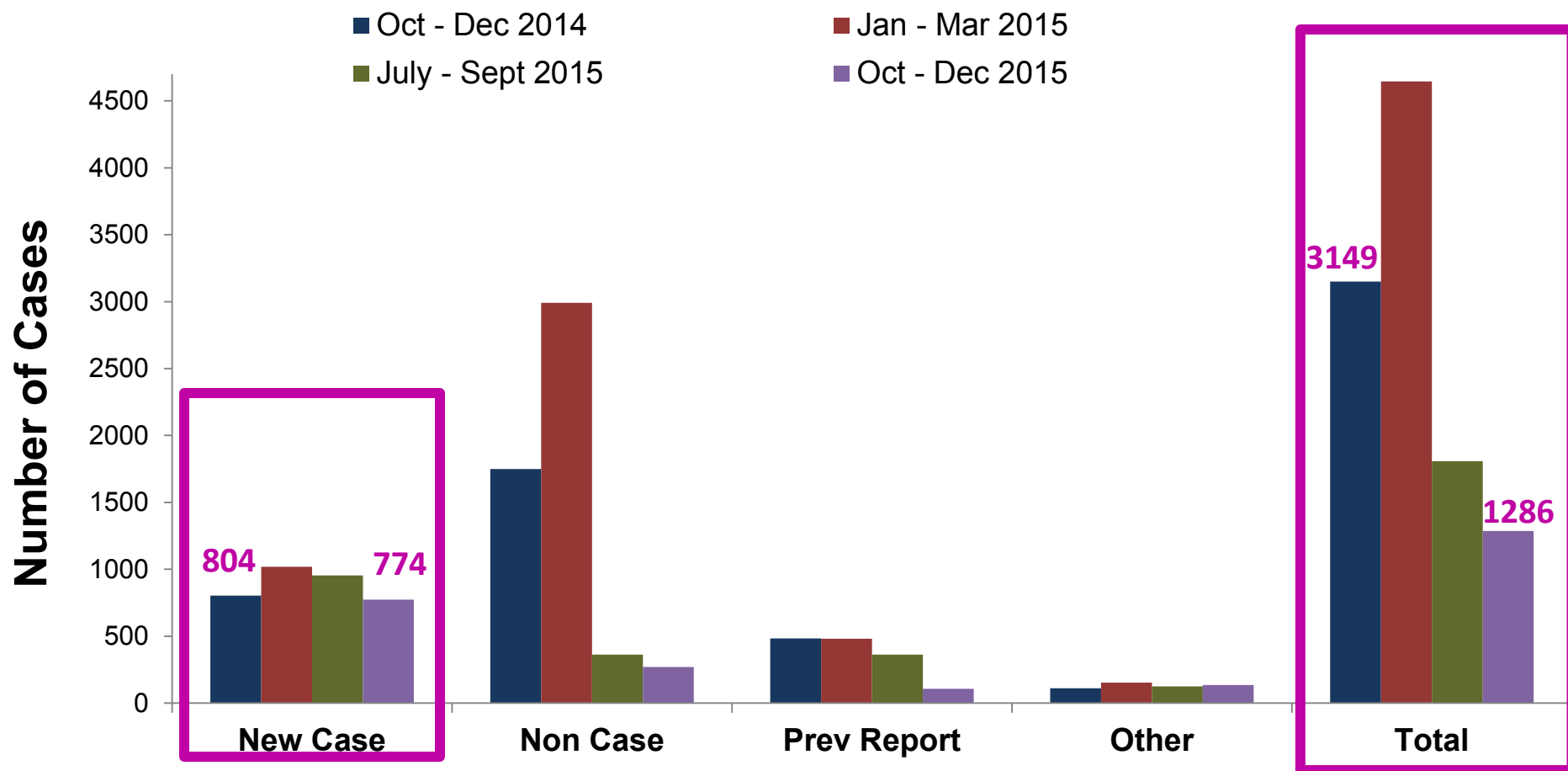
- **New Case** : New to HIV Surveillance Registry
- **Non Case**: Confirmed Non case
- **Previously reported**:
 - Did not automatically match, but with additional demographic information from field Investigation was later linked to existing Person in the Surveillance registry.
- **Other**: ‘Patient not as site’, ‘Possible HIV (+) case with missing information’, ‘Chart not available’, ‘Provider refused’ , ‘Provider out of Jurisdiction’.

Field Investigation Volume and Disposition, Oct 2014 - Dec 2015



Despite the decrease in number of case investigations, a comparable number of new cases were confirmed (804 vs 774) in (Q4, 2014) and (Q4, 2015) respectively.

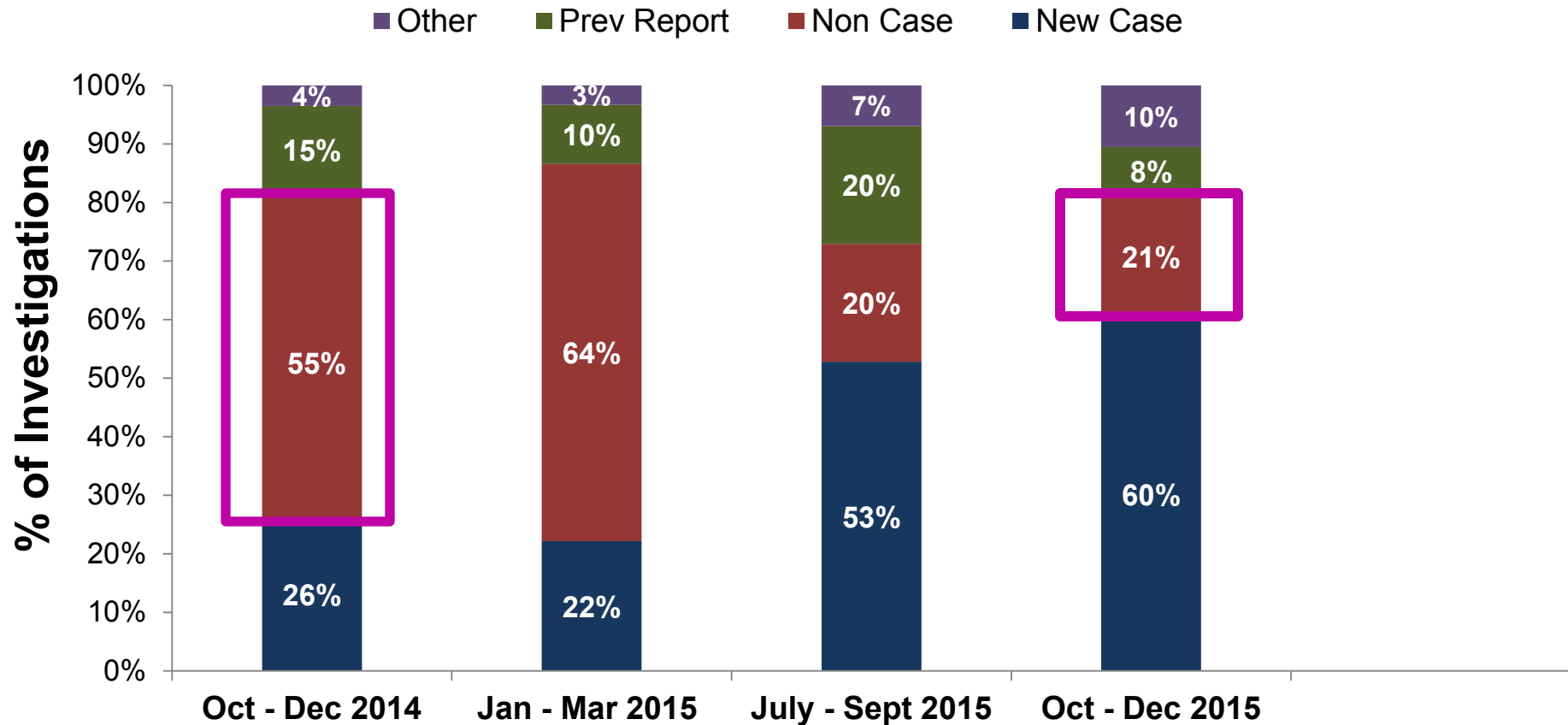
Field Investigation Volume and Disposition, Oct 2014 - Dec 2015



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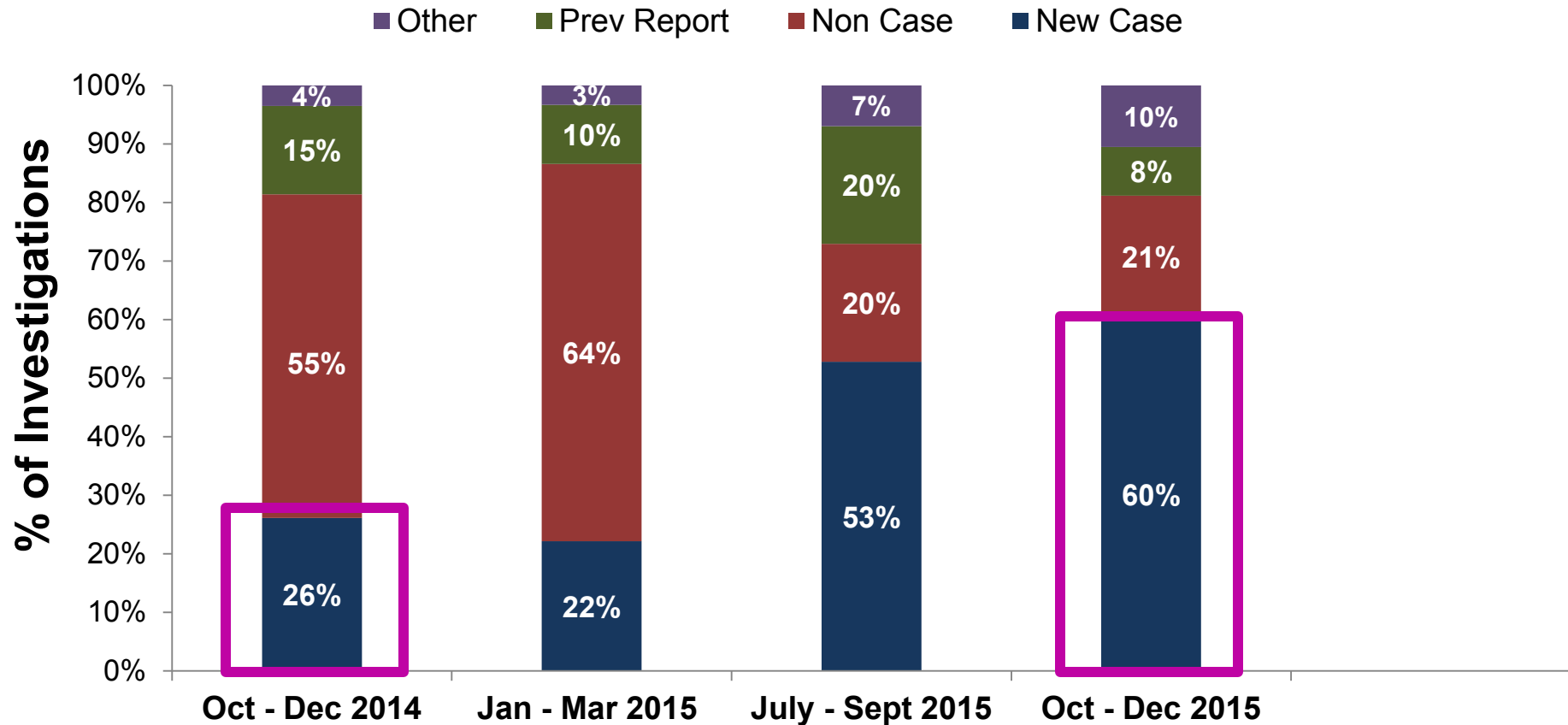
Field Investigation Dispositions by Type

Oct 2014 - Dec 2015



From Q4-2014 to Q4-2015, investigations resulting in a non-case determination decreased from 55% to 21% and those resulting in a new case increased from 26% to 60%.

Field Investigation Dispositions by Type Oct 2014 - Dec 2015



Conclusions

- **Periodic evaluation of the yield of case investigations with corresponding protocol modifications can improve the efficiency of surveillance field work**
- **Advances in HIV testing technology and changes in testing practices mean that surveillance programs will need to be flexible and adjust their protocols accordingly**

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