

# HIV care cascades for New York City overall and Ryan White clients: A first look

HIV Health & Human Services Planning Council  
Needs Assessment Committee

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Ellen Wiewel & Laura McAllister-Hollod



## INTRODUCTION

## What is the HIV Care Cascade?

- Continuum of care for persons living with HIV
- The ultimate goal in the cascade is viral load suppression
- Visual depiction of the proportion of individuals in a population who “make it” to the next step in the continuum of care and treatment
- A first step to help identify areas where PLWH may fall off the continuum
- Variations on the cascade have been prepared nationally (e.g. CDC and HRSA), locally across the U.S. and internationally



## Why is the HIV Care Cascade important to the Needs Assessment Committee?

- One tool among many that tells the story of client engagement and clinical health outcomes
- Framework for thinking about the HIV service system as a whole: from diagnosis to treatment success
- Looking across demographic groups can be a starting point for investigating barriers to care and needs among specific populations
- Does not tell the story of engagement in supportive services or other quality of life indicators



## Preparing the NYC Ryan White Cascade

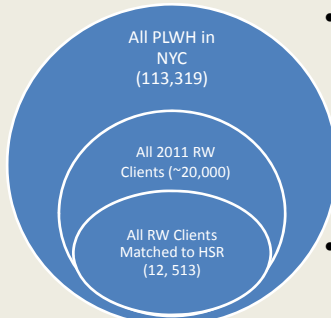
- This analysis includes Ryan White Part A (RW) clients enrolled at any time in 2011, and entered into eSHARE\*
- eSHARE data was matched to NYC HIV Surveillance Registry (HSR)
  - Complex algorithm matches on identifiers: name, DOB, SSN, etc.
  - Tri-County clients included in NYC surveillance records only if diagnosed or received care in NYC
- For comparability with the New York City (NYC) Care Cascade (all PLWHA in NYC), the same methodology was applied to the RW Care Cascade
- For cascade outcome measures, we used mandatory reporting of viral load (VL) and CD4 tests in the HSR (i.e. not Primary Care Status Measures reported in eSHARE/AIRS)

\*Note: AIRS data has not been matched to the surveillance registry as of June 2013. Thus, some clients who were enrolled in 2011 and not entered in eSHARE are missing from this analysis. This could apply to clients closed out of their programs before those programs transitioned to eSHARE (e.g., in March or October 2011) and also clients in programs that began the transition to eSHARE during 2012.



## Comparing Ryan White to All NYC PLWH

- RW Care Cascade is a subset of the NYC Care Cascade
- By definition, RW clients were in the HIV services system in NYC in 2011
  - Enrollment in a RW service indicates some form of HIV supportive service interaction in NYC
  - Most 2011 RW clients would likely have been living in NYC in 2011
  - These clients were theoretically more likely to have interacted with an HIV service provider for at least some part of 2011



- NYC Care Cascade includes all PLWH who are diagnosed, reported, and presumed to be living as of 12/31/2011
  - Unascertained moves or deaths are possible, especially for non-RW clients
  - Some individuals in the NYC Care Cascade may no longer have been living in NYC in 2011
- RW clients may be distinct from other PLWH in NYC in terms of socio-economic status, access to insurance and overall health

\*95% match rate. See note on previous slide.

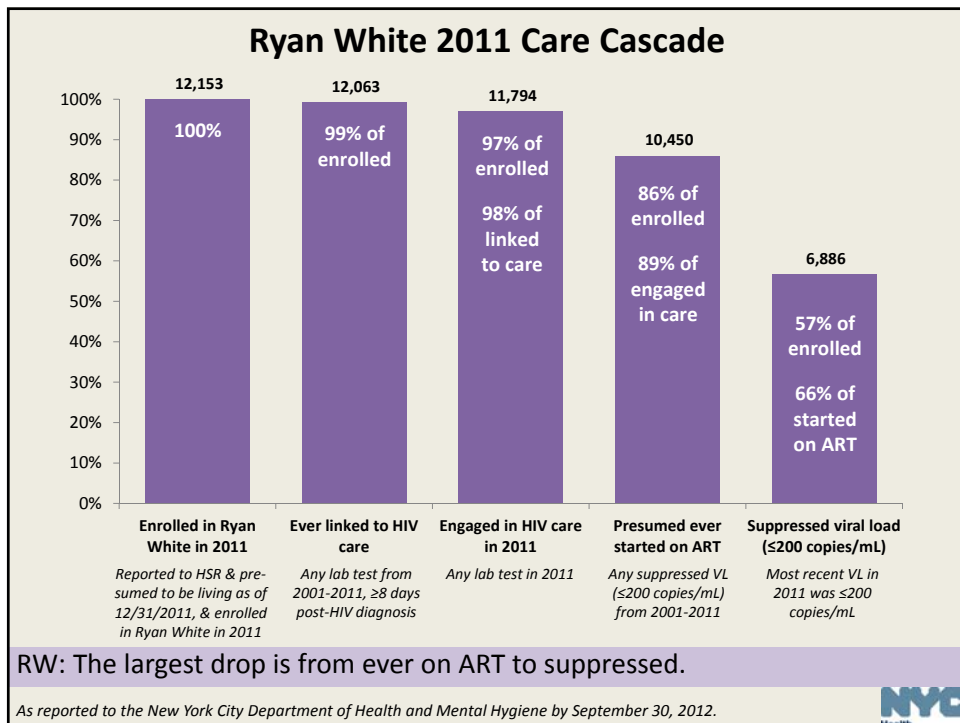
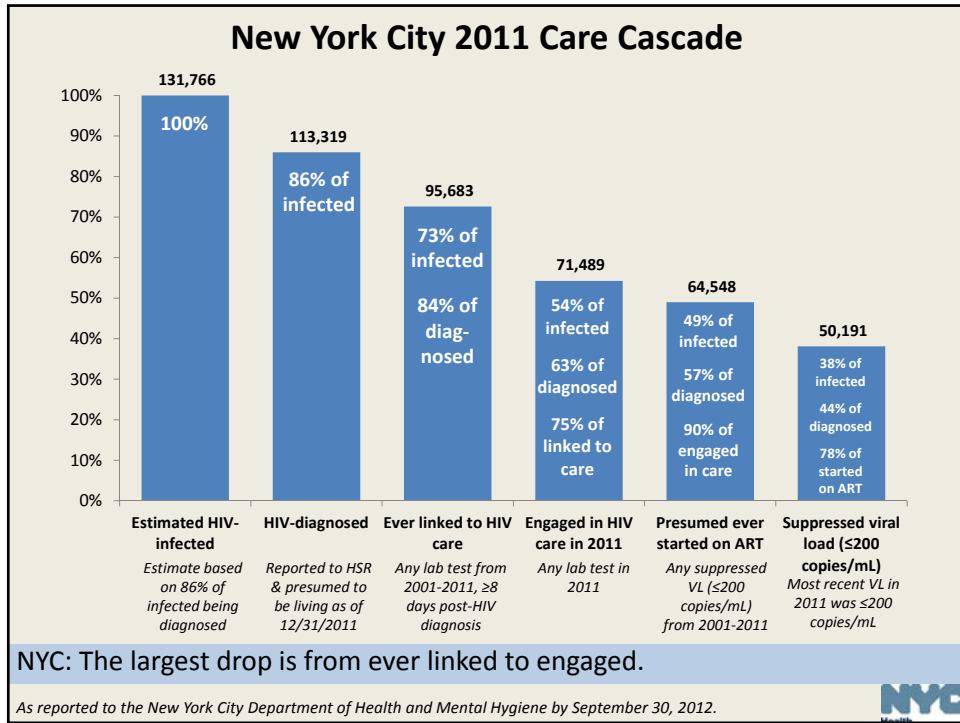


## Demographics of Ryan White vs. All NYC PLWH

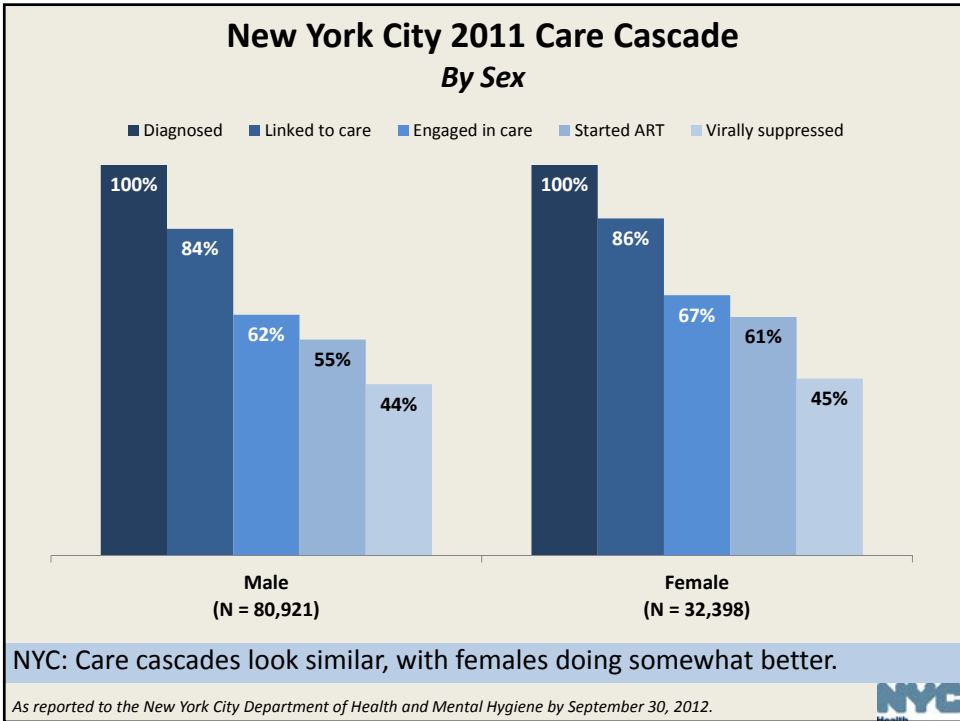
|                                  | <b>RW PLWH</b><br>(N=12,513) | <b>All NYC PLWH</b><br>(N=113,319) |
|----------------------------------|------------------------------|------------------------------------|
| <b>Male</b>                      | 7,850 (65%)                  | 80,921 (71%)                       |
| <b>Black or Hispanic</b>         | 10,920 (87%)                 | 87,355 (77%)                       |
| <b>Less than 45 years old</b>    | 4,888 (39%)                  | 41,959 (37%)                       |
| <b>Foreign-born</b>              | 2,366 (19%)                  | 20,686 (18%)                       |
| <b>HIV, non-AIDS</b>             | 3,763 (31%)                  | 46,237 (41%)                       |
| <b>MSM Transmission</b>          | 3,307 (27%)                  | 39,846 (35%)                       |
| <b>IDU Transmission</b>          | 2,994 (25%)                  | 20,115 (18%)                       |
| <b>Heterosexual Transmission</b> | 2,977 (24%)                  | 22,103 (20%)                       |

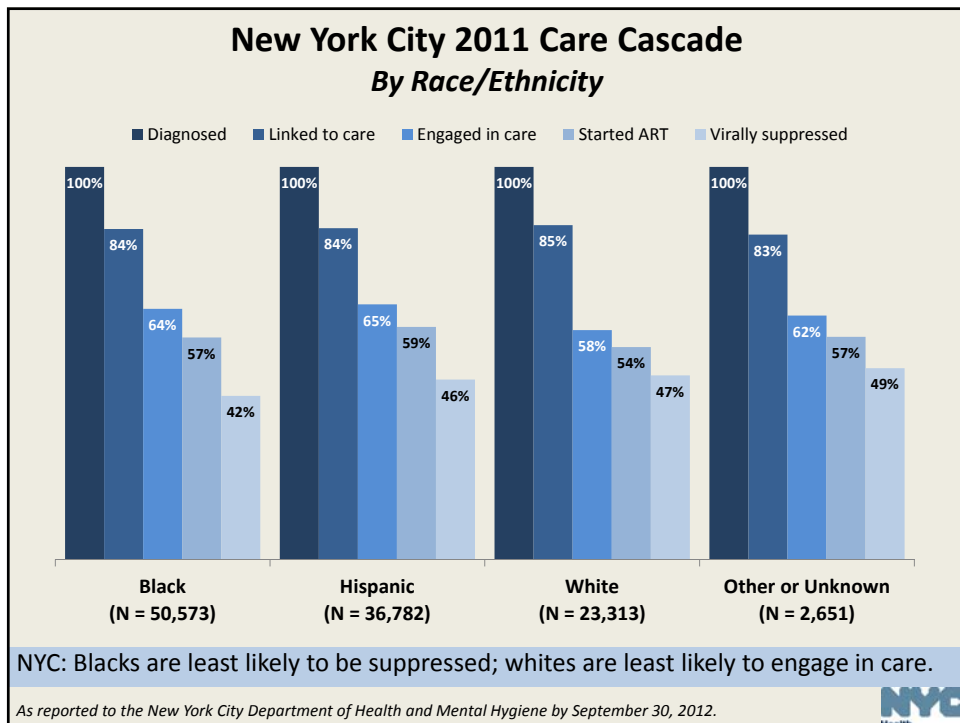
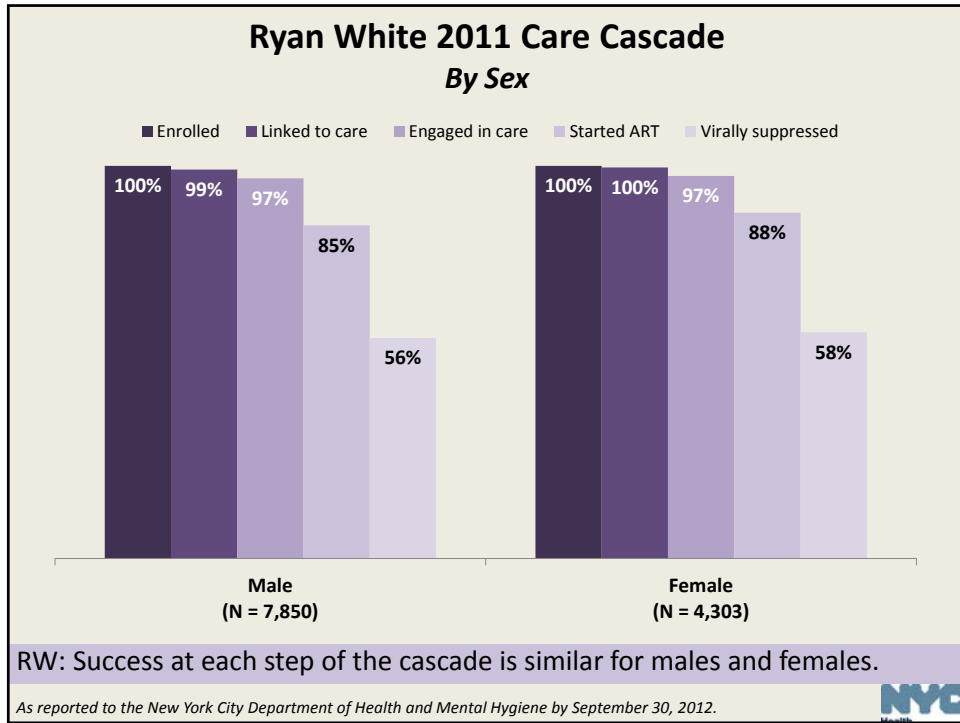


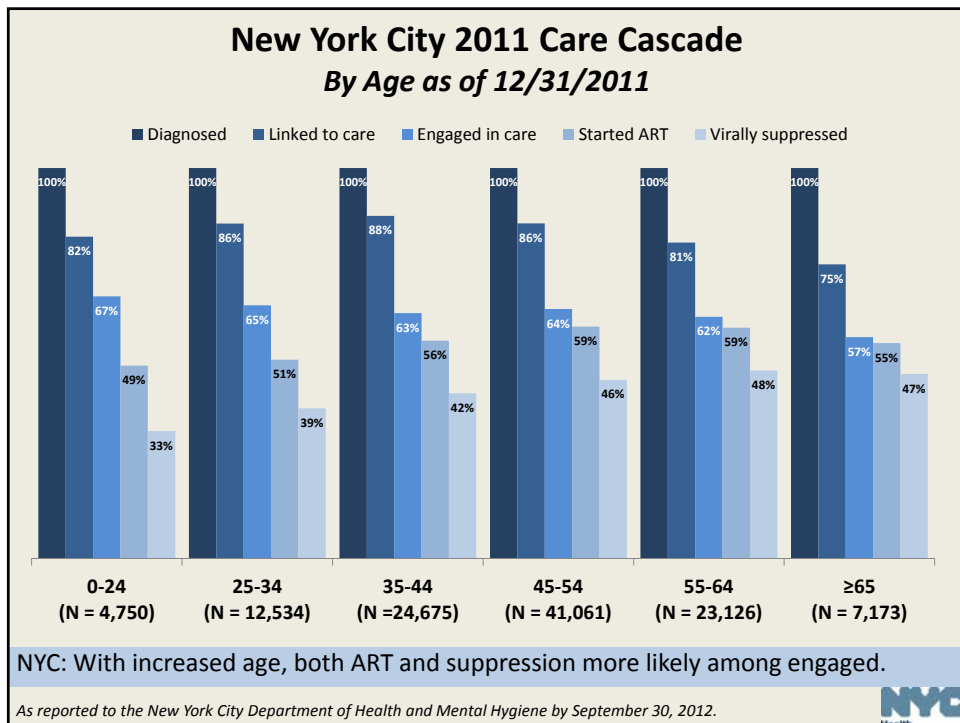
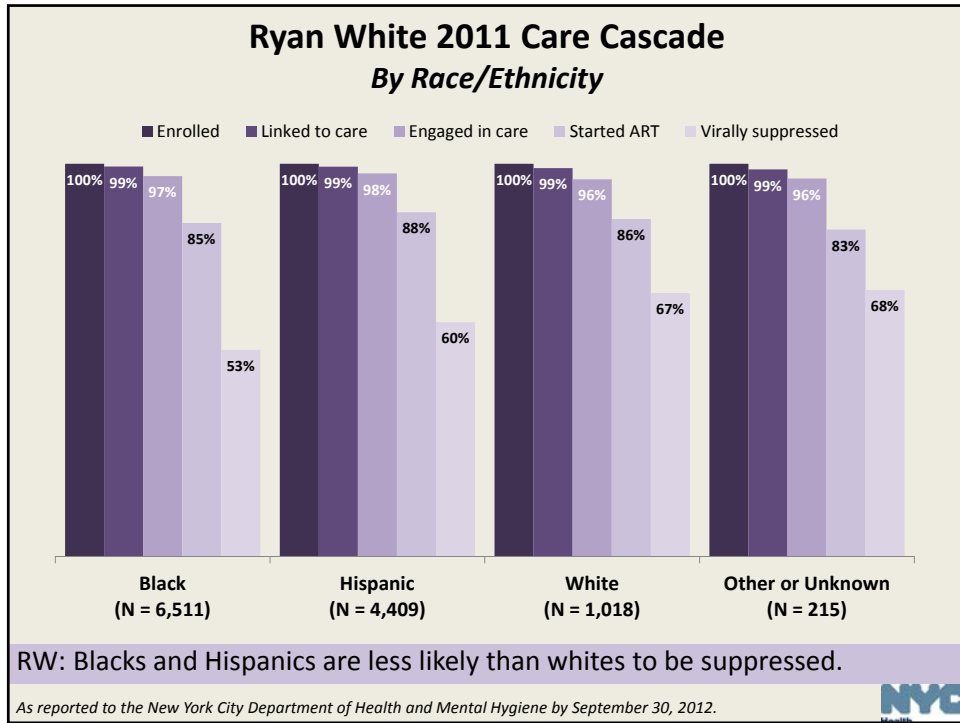
**POPULATION-WIDE CASCADES**



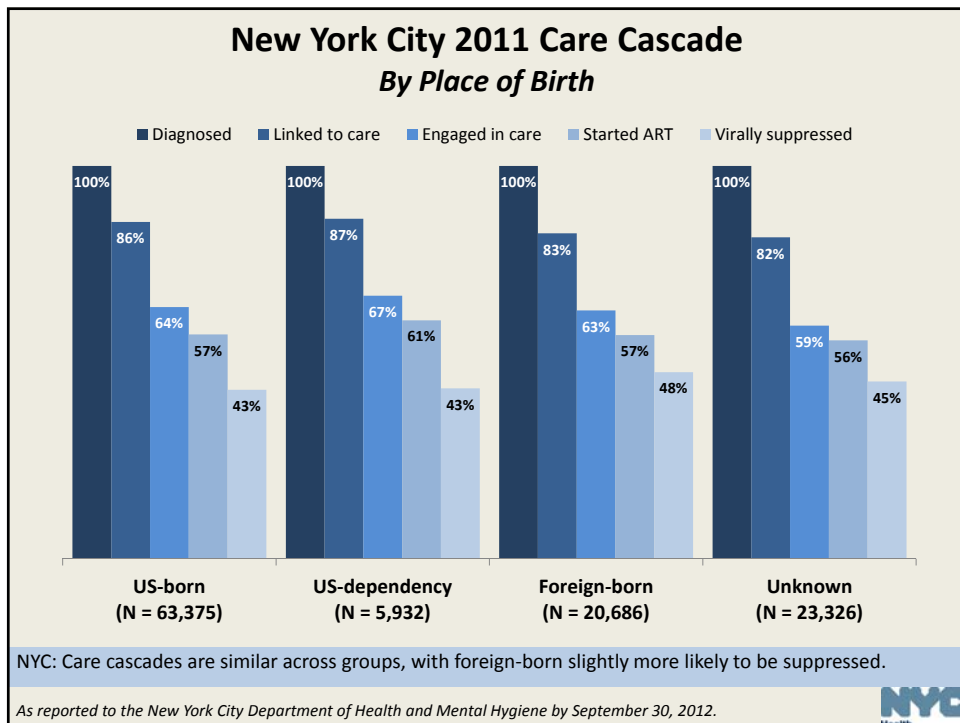
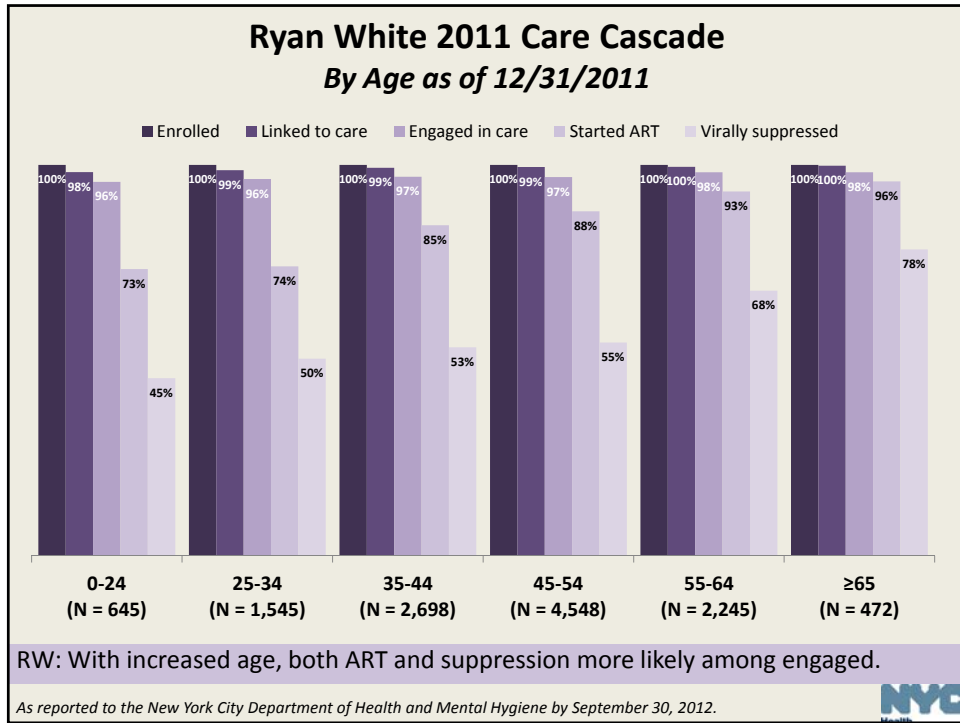
# SUBGROUP CASCADES

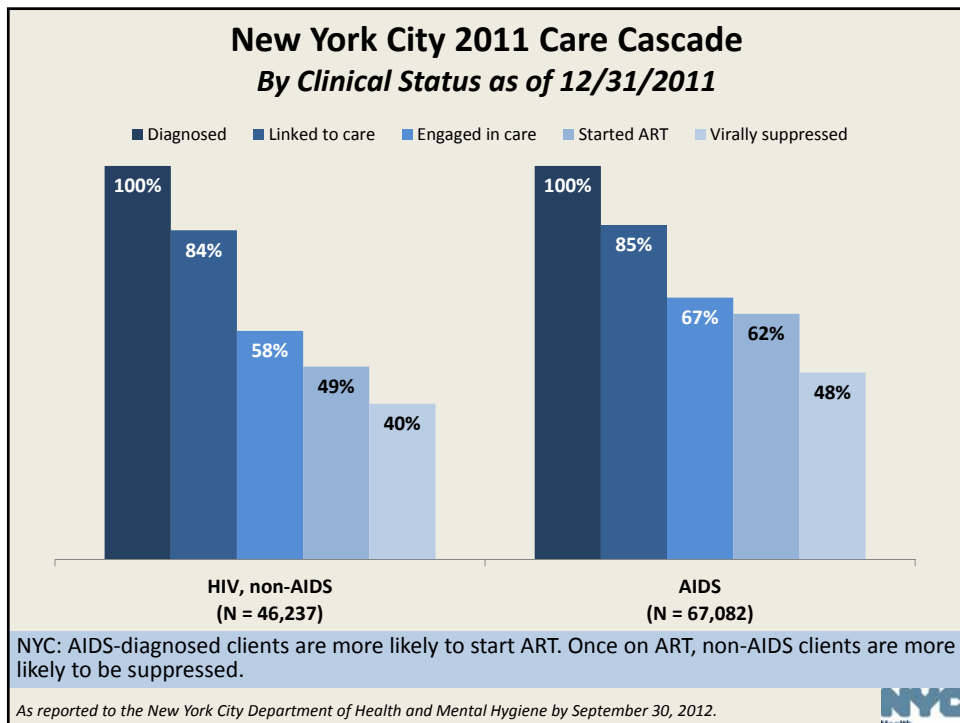
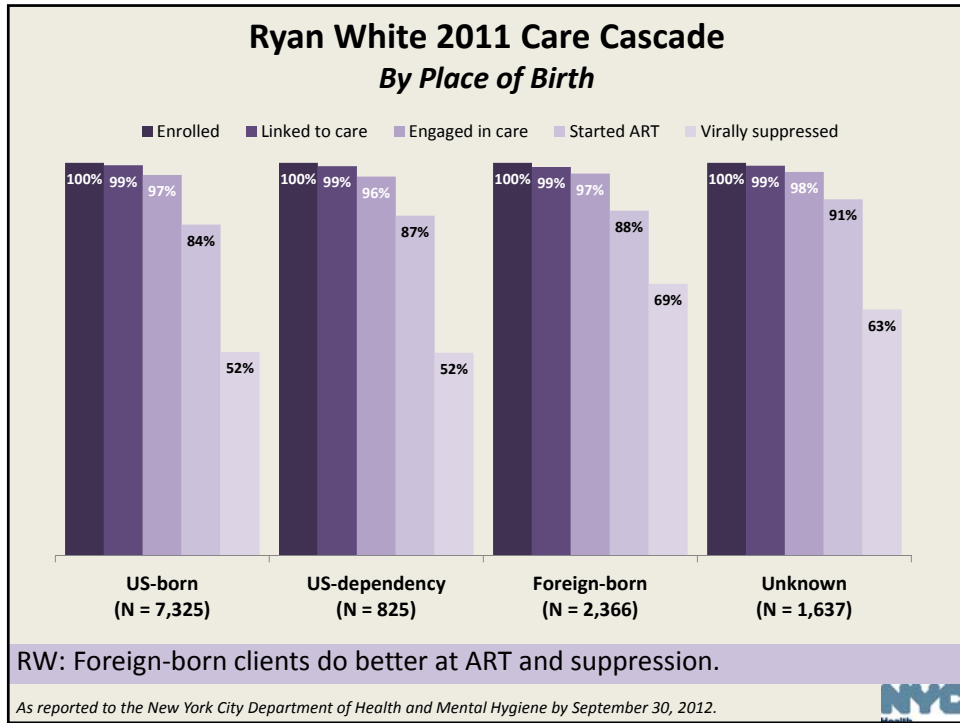


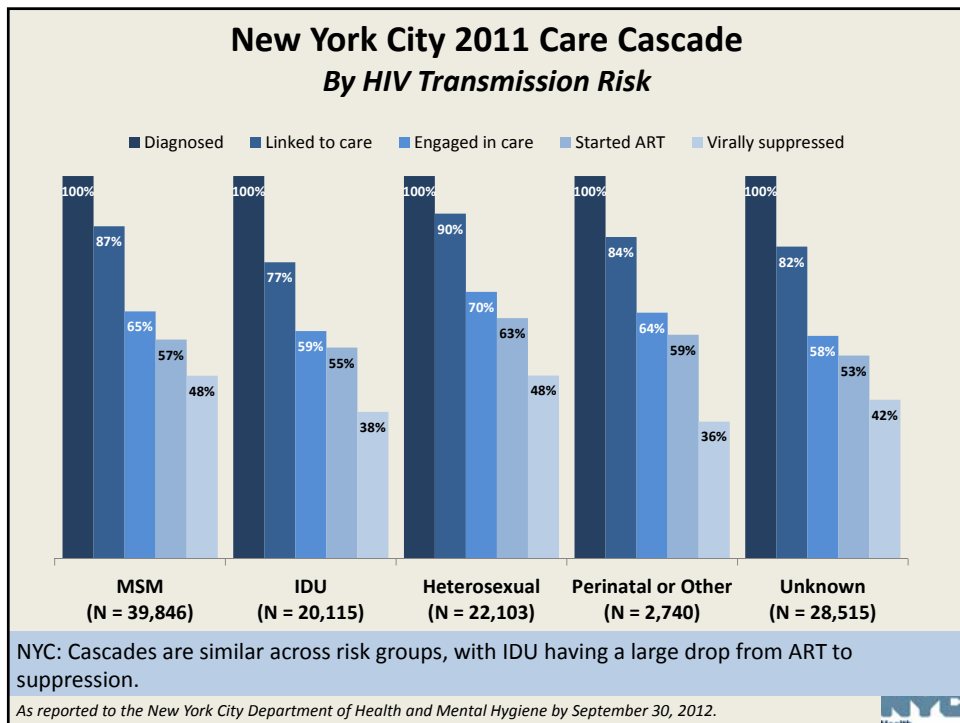
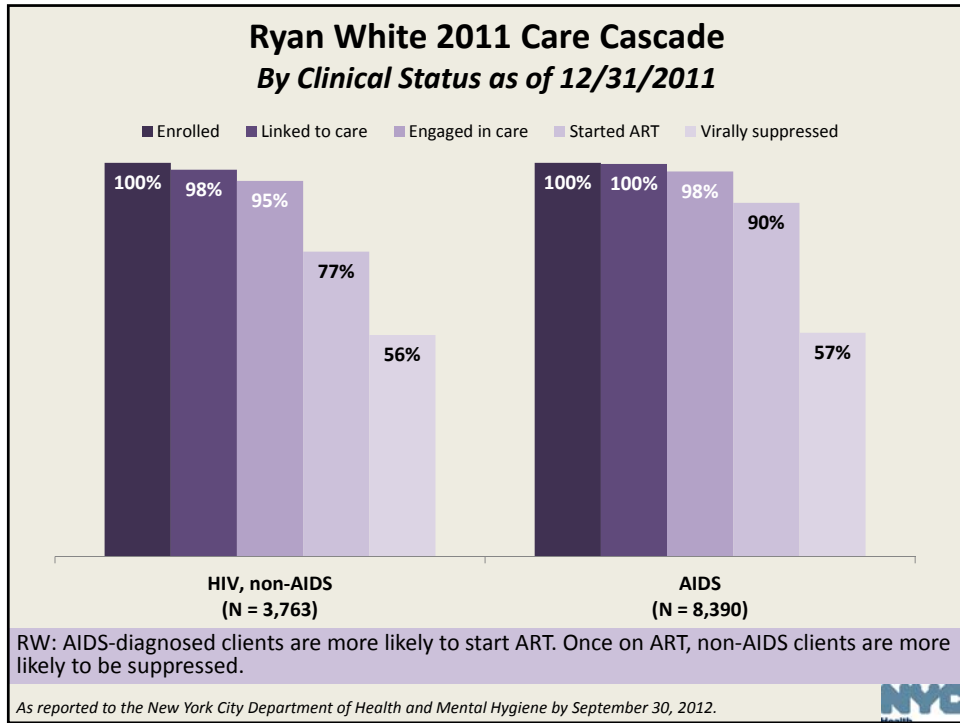


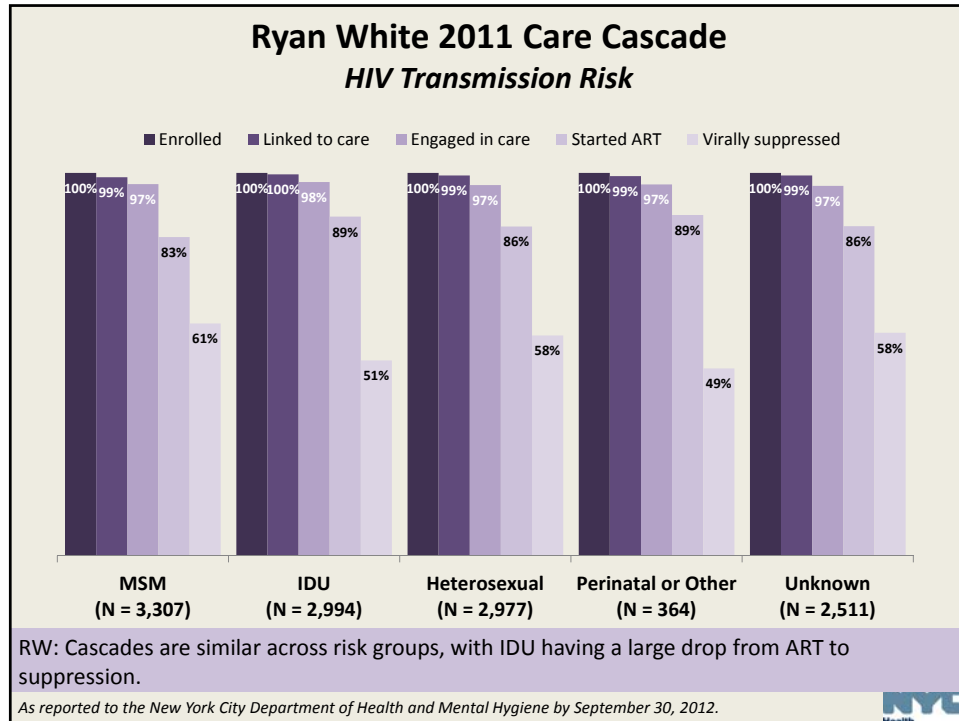












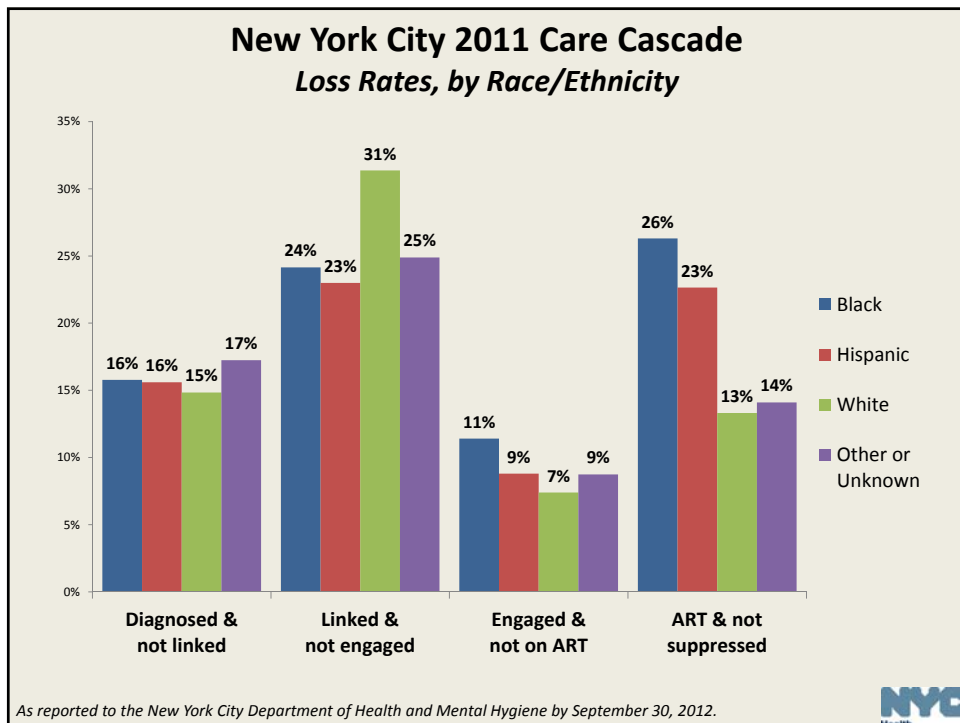
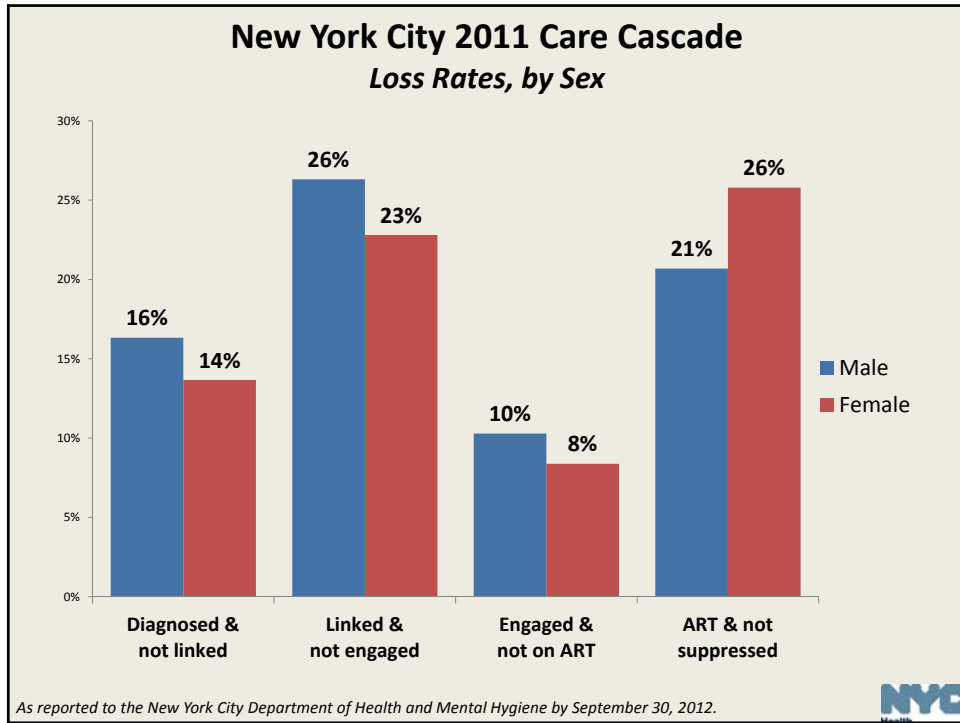
## Discussion

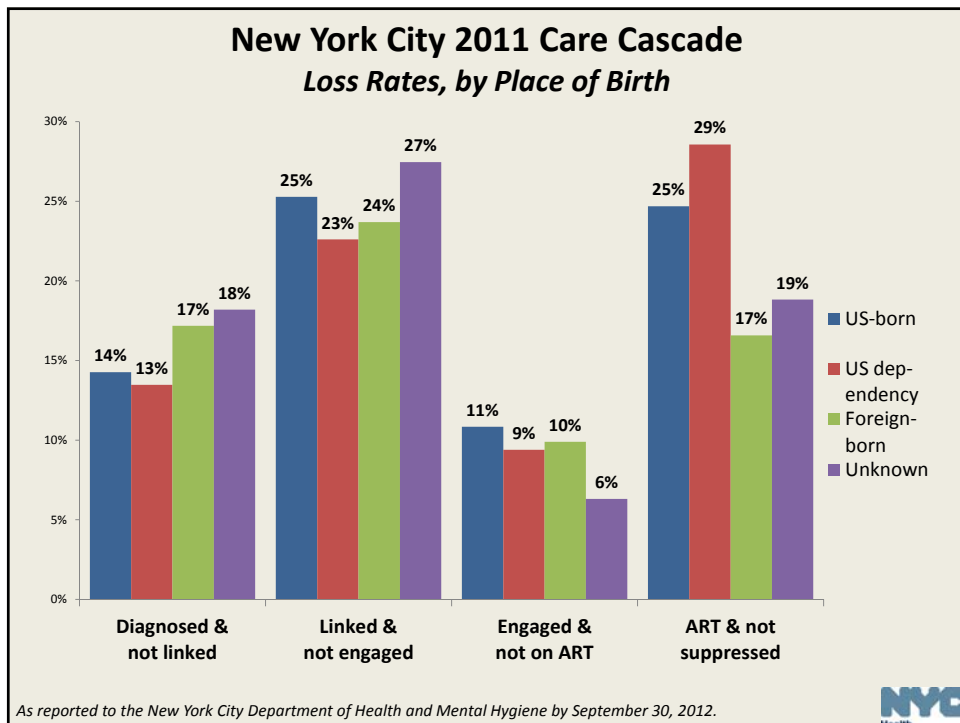
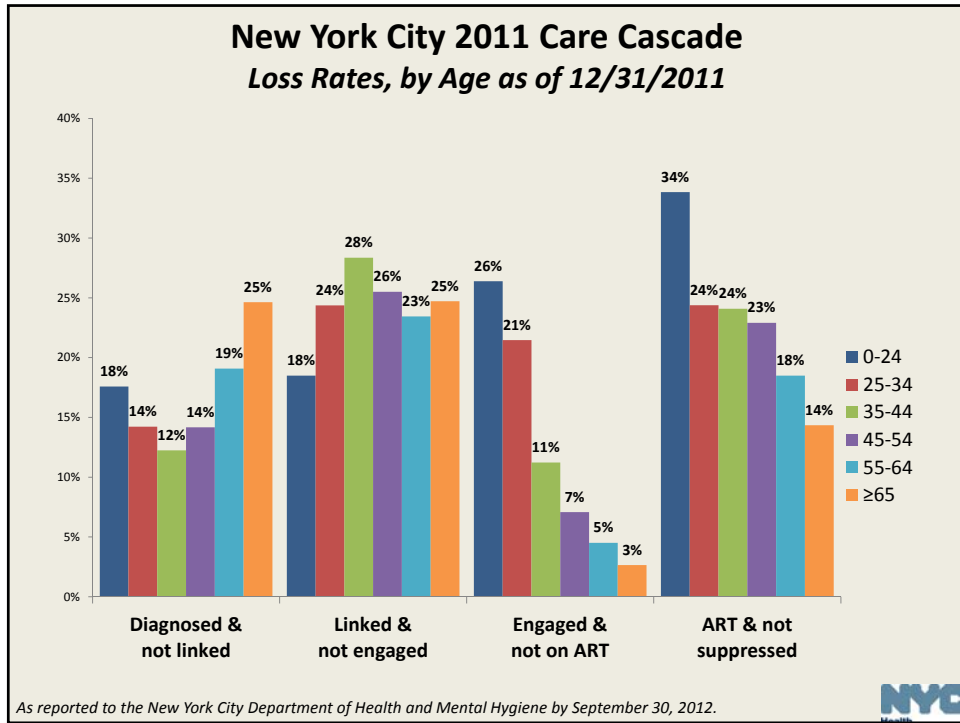
- RW clients have high linkage and engagement in care, and are most likely to fall off at ART and suppression
- Overall in NYC, PLWH fall off at the linkage step, which may reflect unascertained moves and deaths
- Compared to NYC overall, those RW clients who were started on ART were less likely to achieve VL suppression in 2011
- In both populations, the shape and distribution of the cascades is similar when broken down by subgroup
- Younger, black, and IDU PLWH showed the greatest drops in the cascade for NYC overall and RW

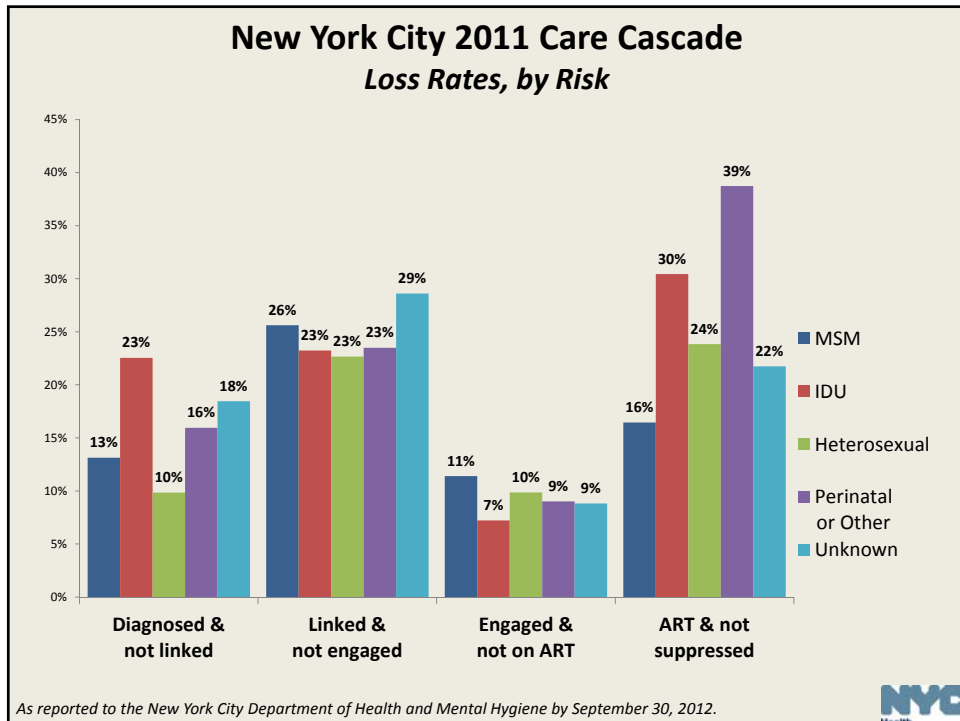
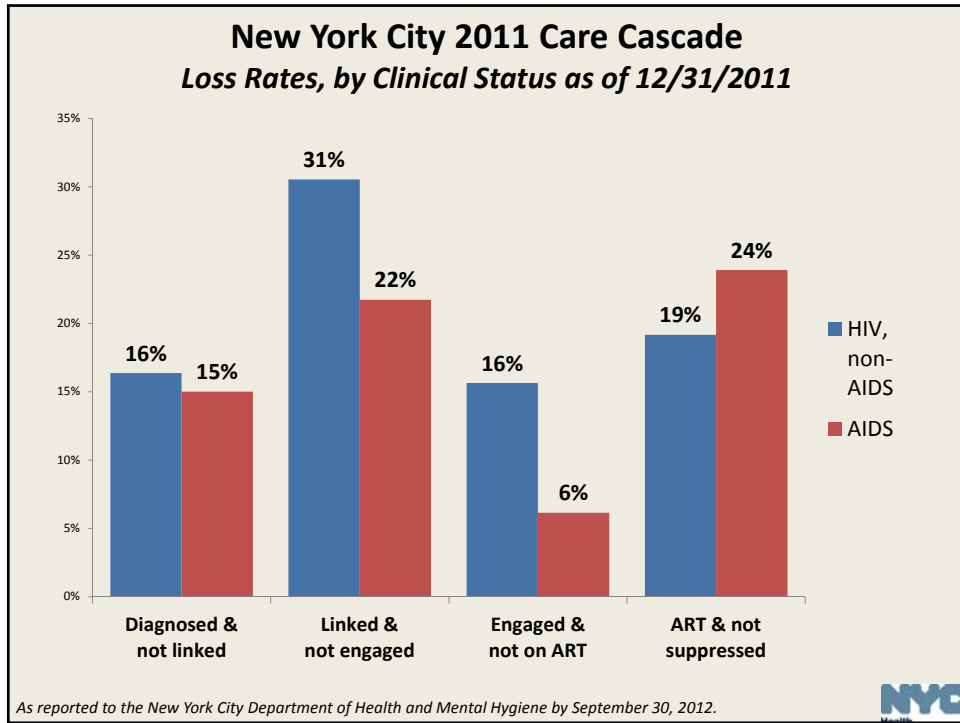
**THANK YOU**

## Appendix I-A: Cascade Loss Rates by Subgroup, NYC

Loss Rates are a way of understanding what proportion of people within a given subgroup fell off the cascade at various stages. When looking at the cascade it can sometimes be difficult to determine the magnitude of a drop within each subgroup in comparison to the drop for another group at the same stage. The loss rates are calculated by dividing the number of individuals lost at the current step by the number of individuals in the previous step .



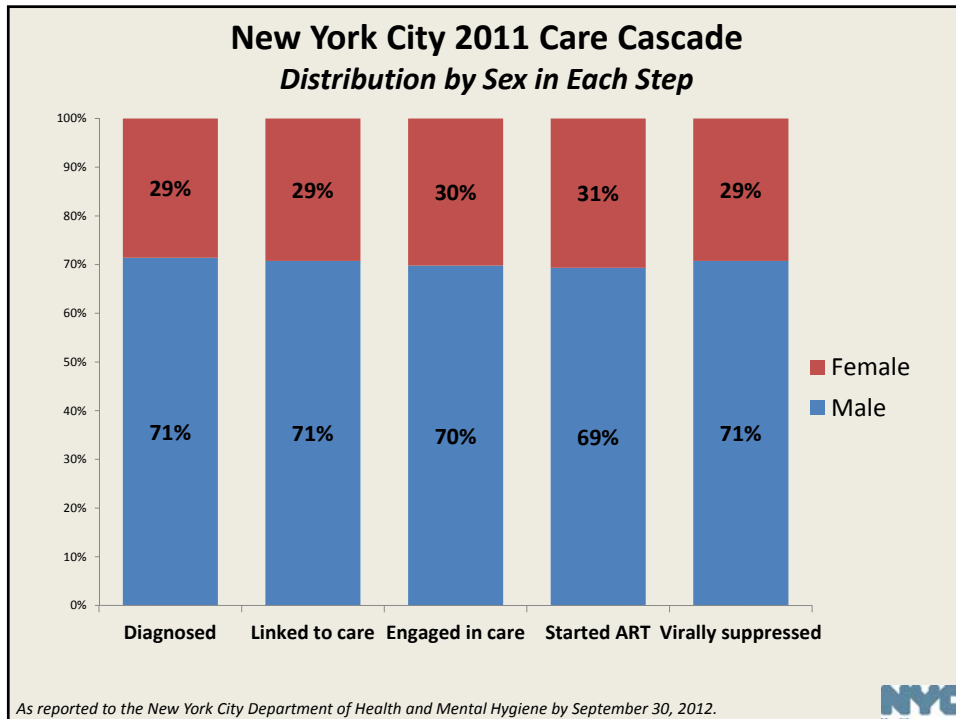


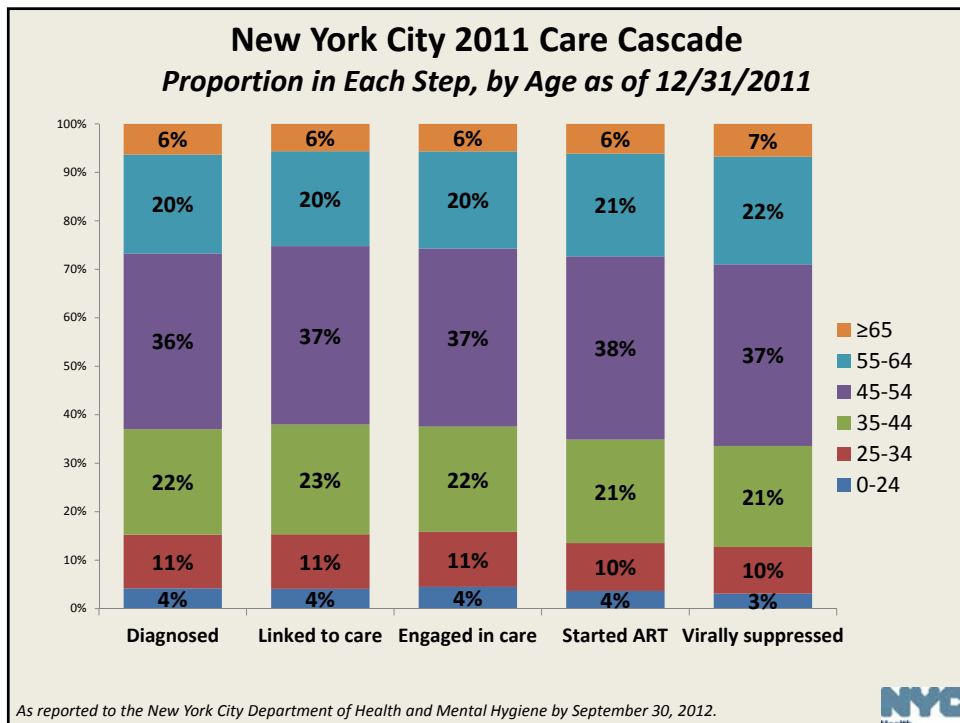
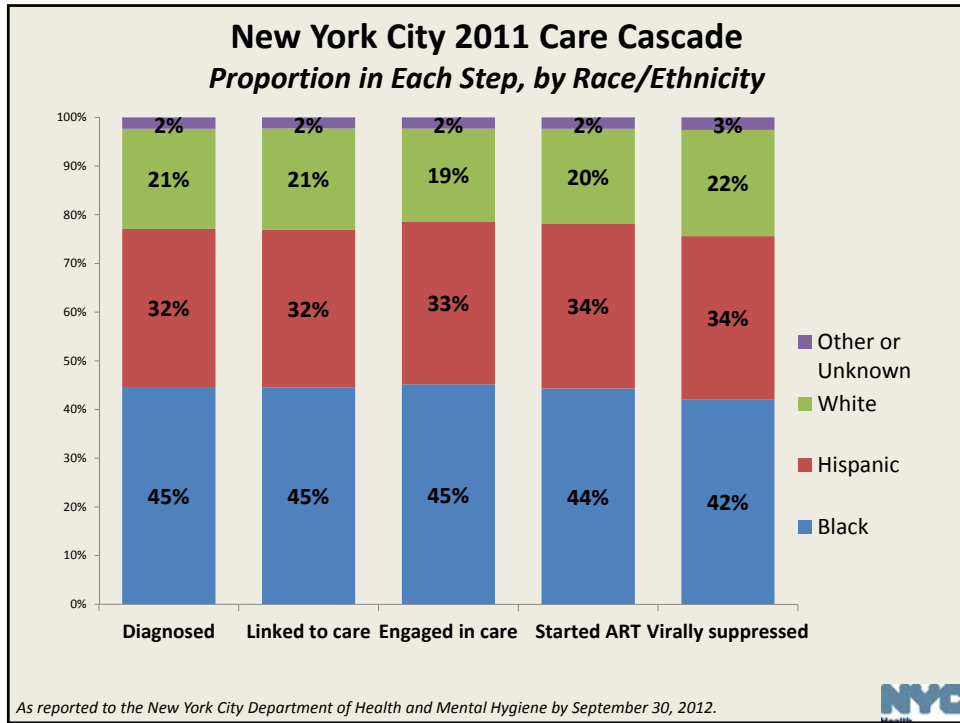


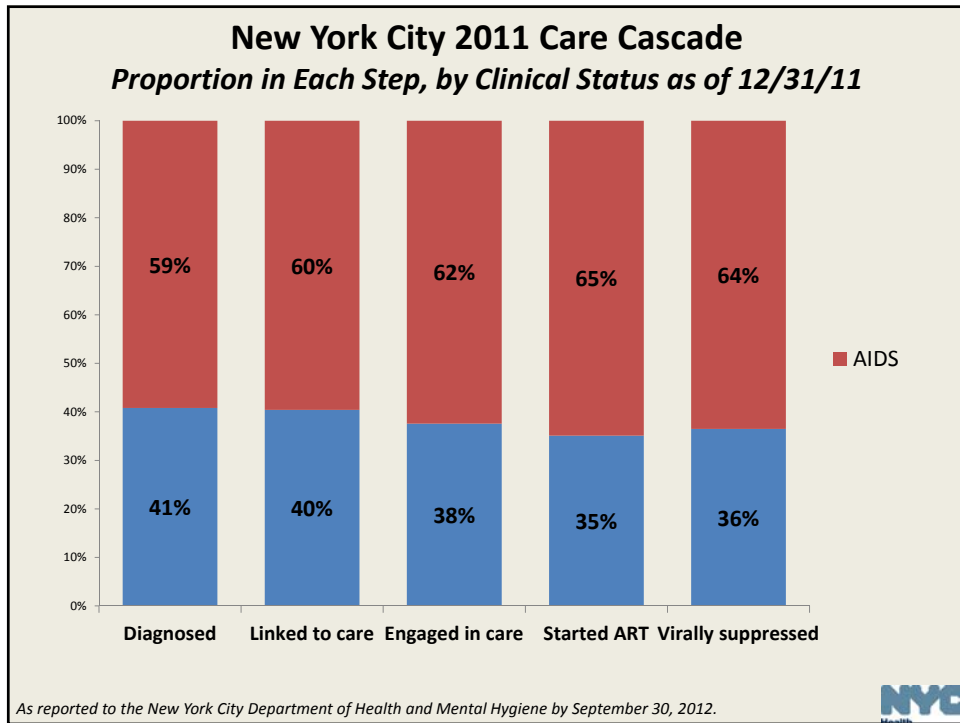
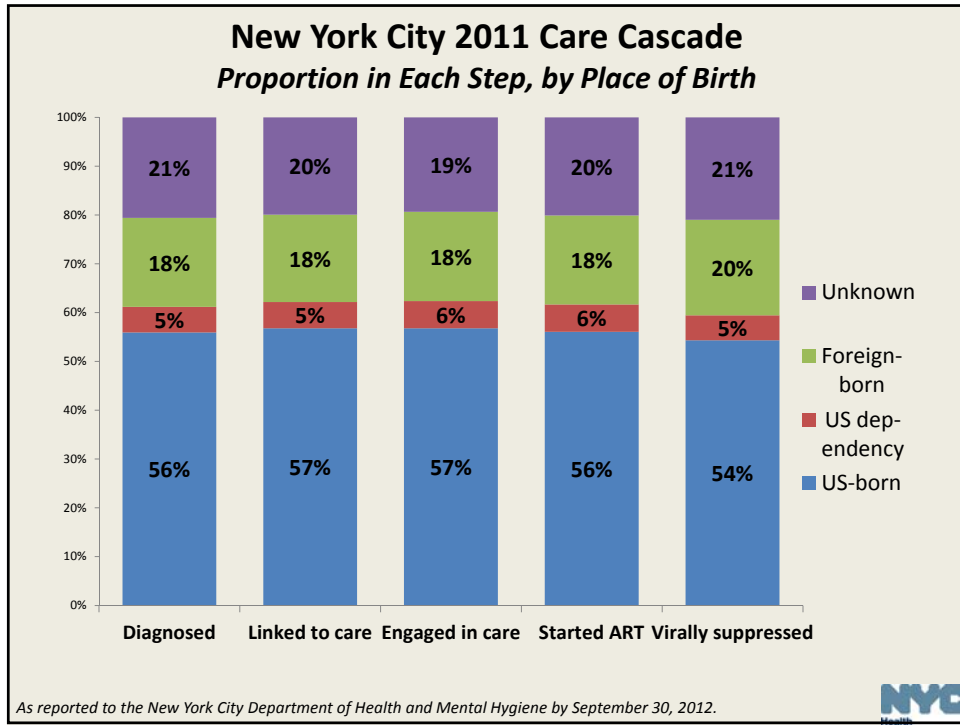


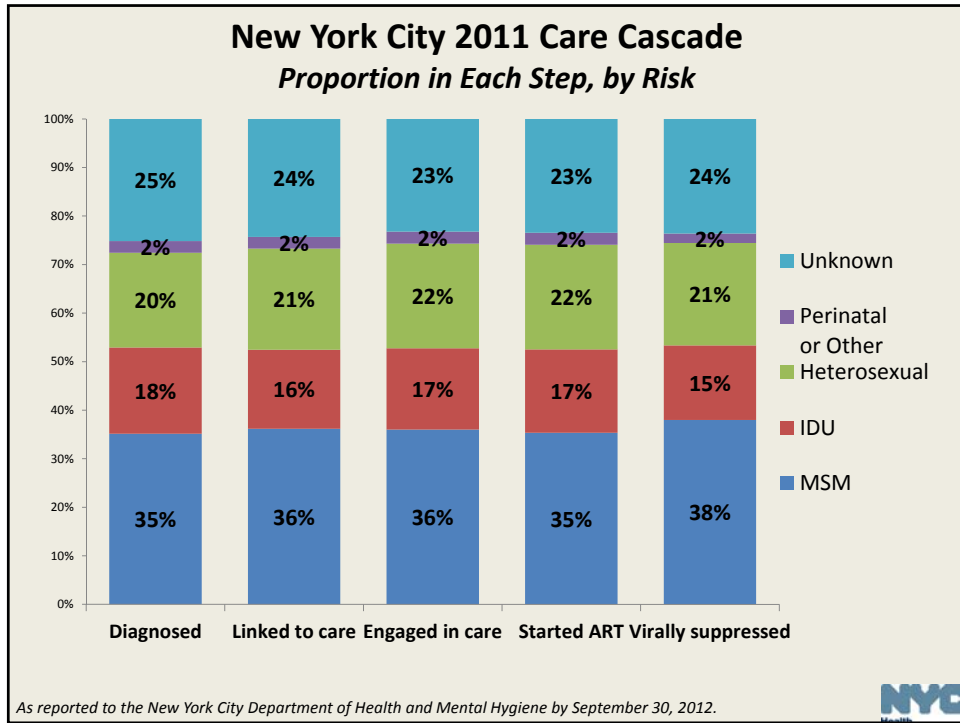
## Appendix I-B: Subgroup Distribution in Each Cascade Step, NYC

The stacked bar graphs demonstrate the demographic breakdown of the people who are in each step of the cascade. By looking at the proportion of subgroups in each step of the cascade we can get an idea about the composition of the population that succeeds in each step of the cascade. A large difference in the distribution of subgroups in the stacked bar graphs in this section might indicate that the population that is succeeding or failing along the cascade is demographically different from the population at other steps. For a sense of the overall population breakdown by subgroup you can simply look at the first bar in each chart.



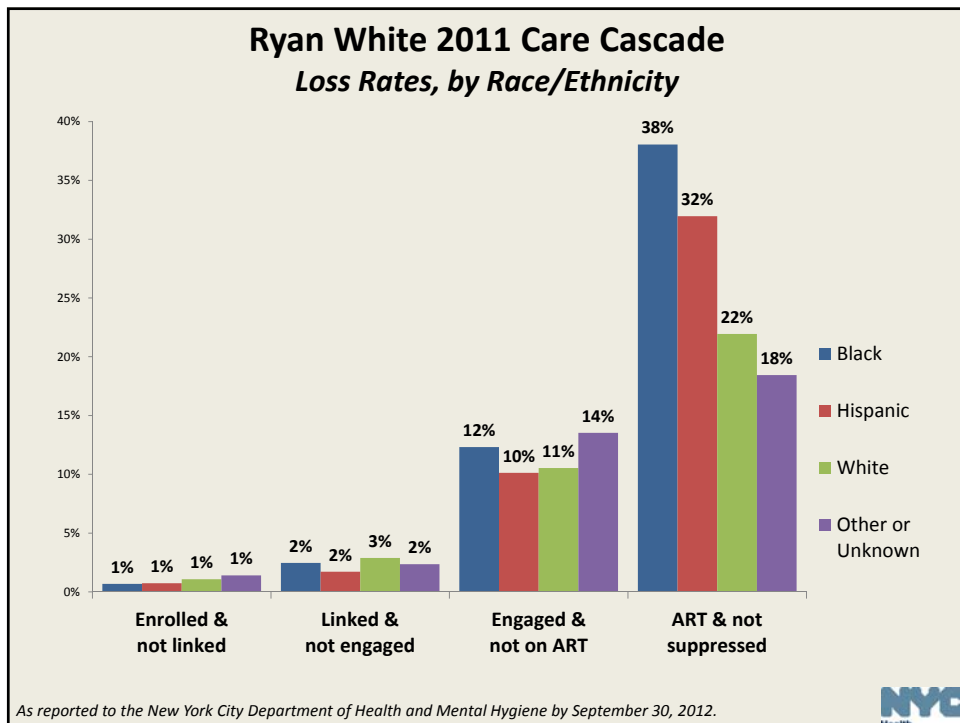
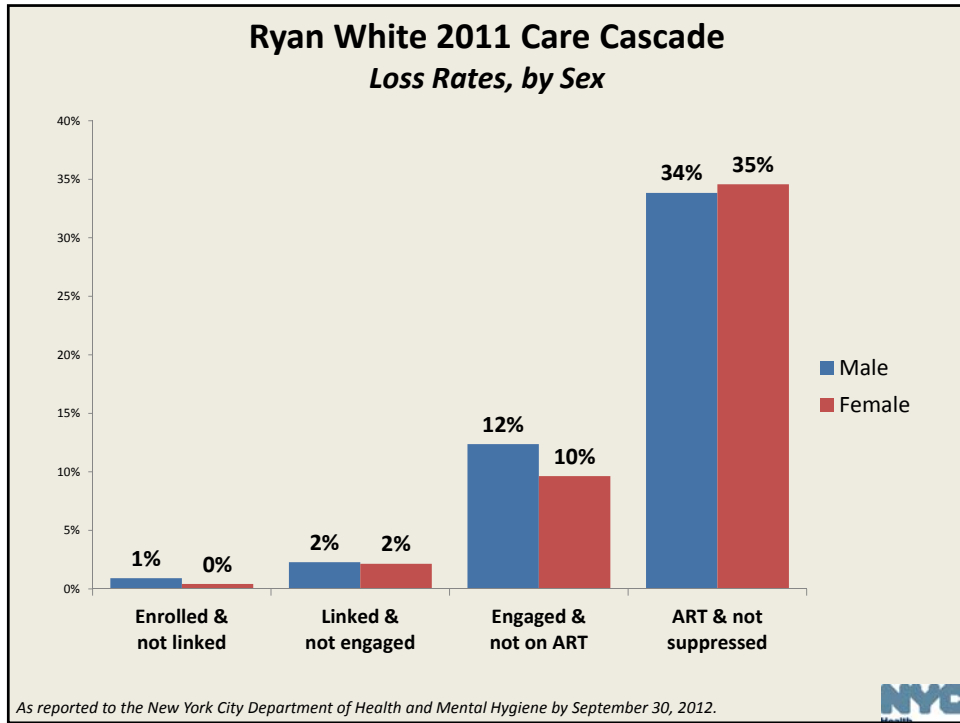


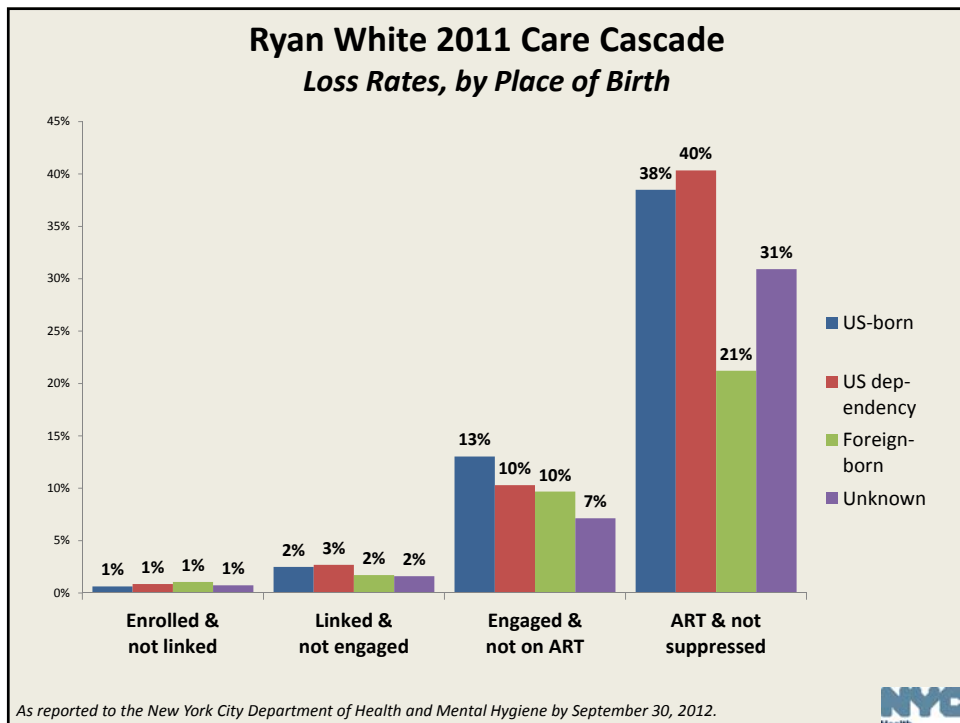
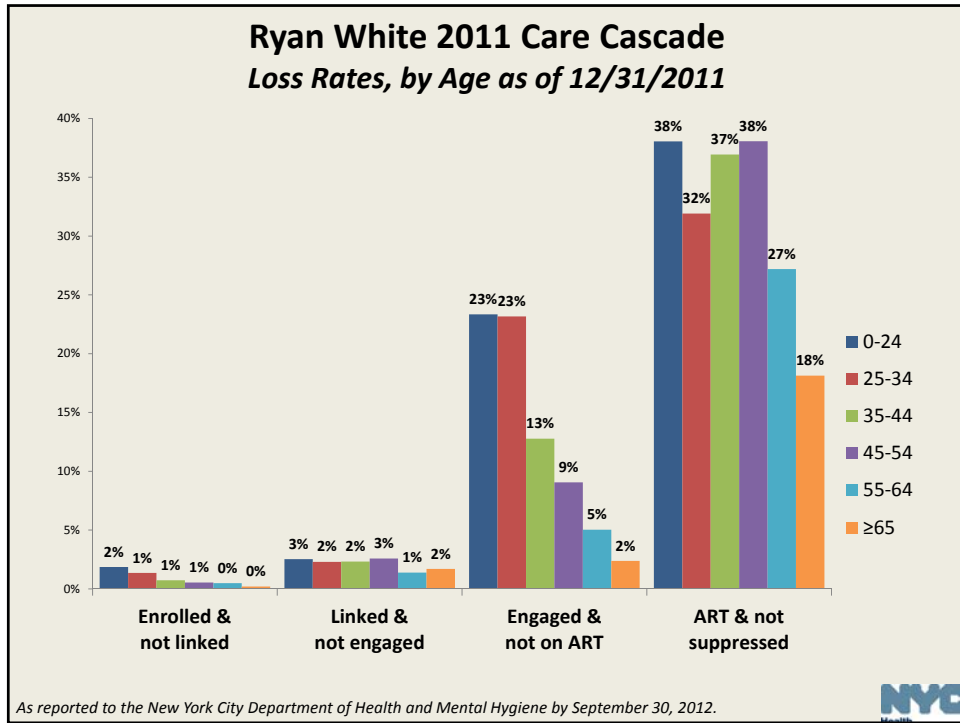


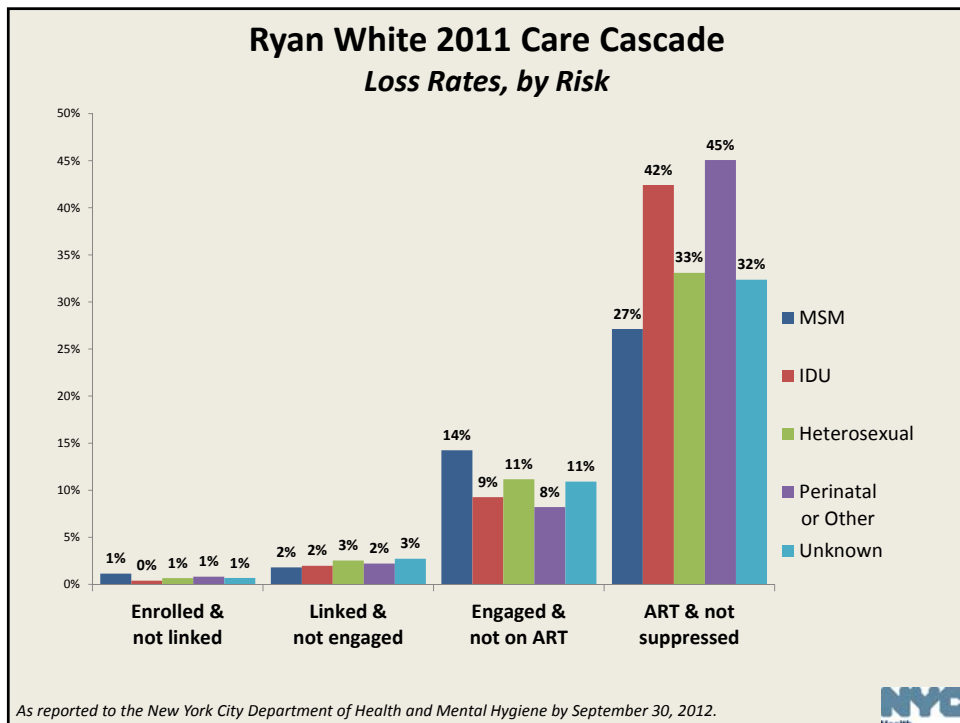
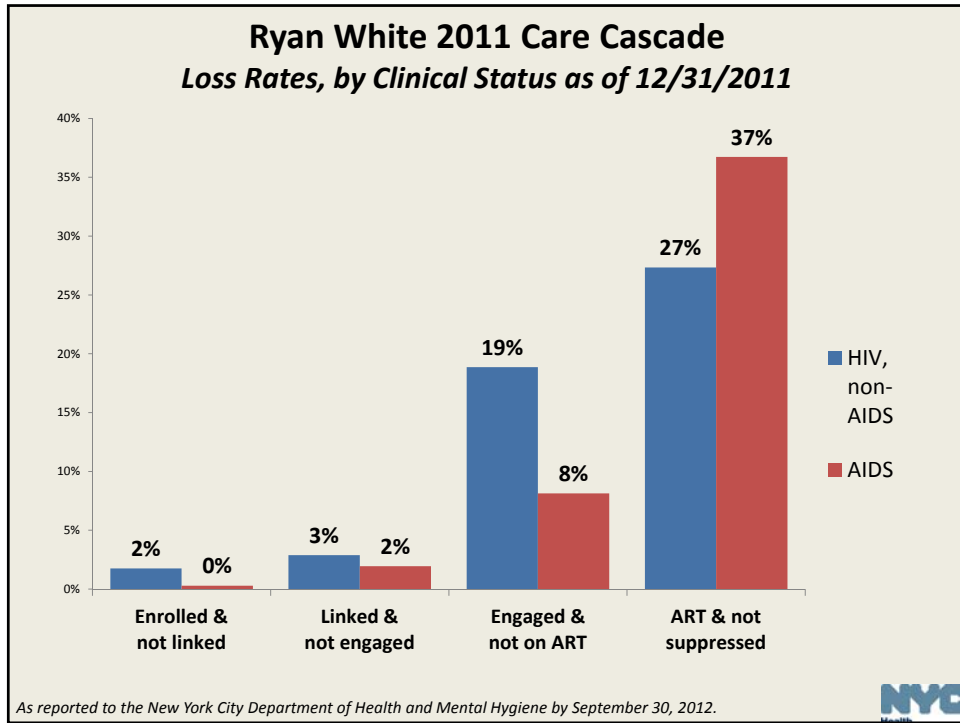


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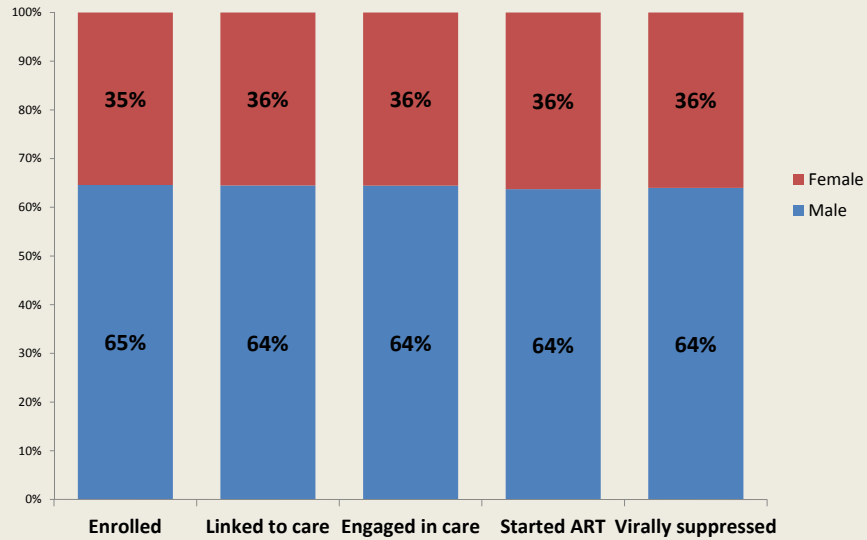


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### Ryan White 2011 Care Cascade Proportion in Each Step, by Sex



As reported to the New York City Department of Health and Mental Hygiene by September 30, 2012.





