

2017 Undiagnosed Estimates for King County

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1 Summary of Results

The estimated undiagnosed fraction declined slightly overall, and in every group, since 2015. However, note that the number of both undiagnosed and total cases rose slightly in all groups.

1.1 Base Case

Subgroup	PLWHA	Undiagnosed Cases	True Prevalence	Undiagnosed Fraction (%)
2016				
MSM	5197	236.8	5433.8	4.4
non-MSM	1580	249.6	1829.6	13.6
Total	6777	486.4	7263.4	6.7
2017				
MSM	5291	229.4	5520.4	4.2
non-MSM	1658	249.0	1907.0	13.1
Total	6949	478.4	7427.4	6.4

1.2 Upper Bound

Subgroup	PLWHA	Undiagnosed Cases	True Prevalence	Undiagnosed Fraction (%)
2016				
MSM	5197	475.8	5672.8	8.4
non-MSM	1580	486.8	2066.8	23.6
Total	6777	962.6	7739.6	12.4
2017				
MSM	5291	460.7	5751.7	8.0
non-MSM	1658	485.0	2143.0	22.6
Total	6949	945.8	7894.8	12.0

Table 1: Column Percent shows the composition of the total sample. The Percent Yes, Percent No and Percent Missing columns indicate the row percents of the three possible testing history statuses within each subgroup

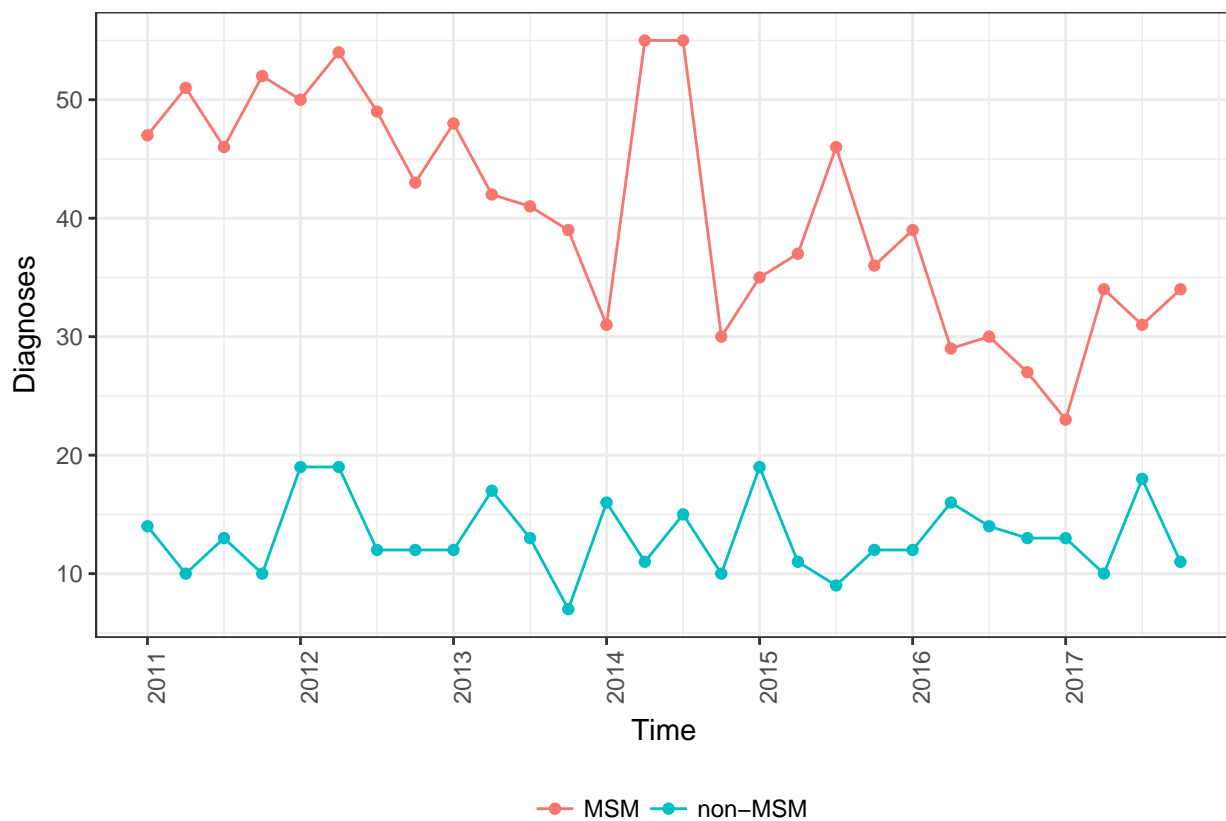
Value	N	Column Percent	Percent Yes	Percent No	Percent Missing
All	1502	100	74	15	11
MSM	1134	75	83	8	9
non-MSM	368	25	45	35	20

2 Diagnoses

2.1 Analytic sample

Analytic data set has 1502 cases for 2005-2016.

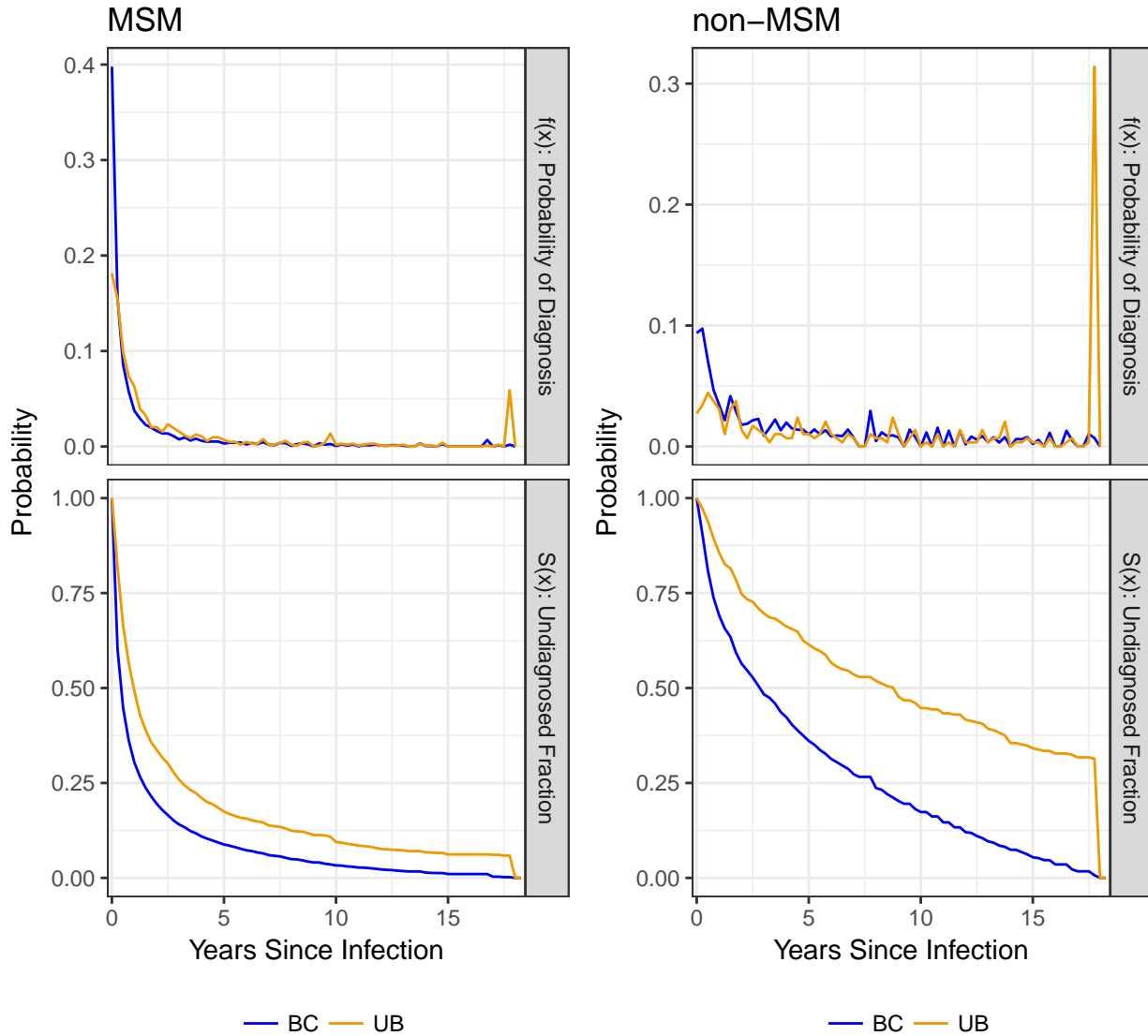
2.2 Diagnoses over time by MSM/Area subgroups



3 Subgroup Sizes and Testing Histories

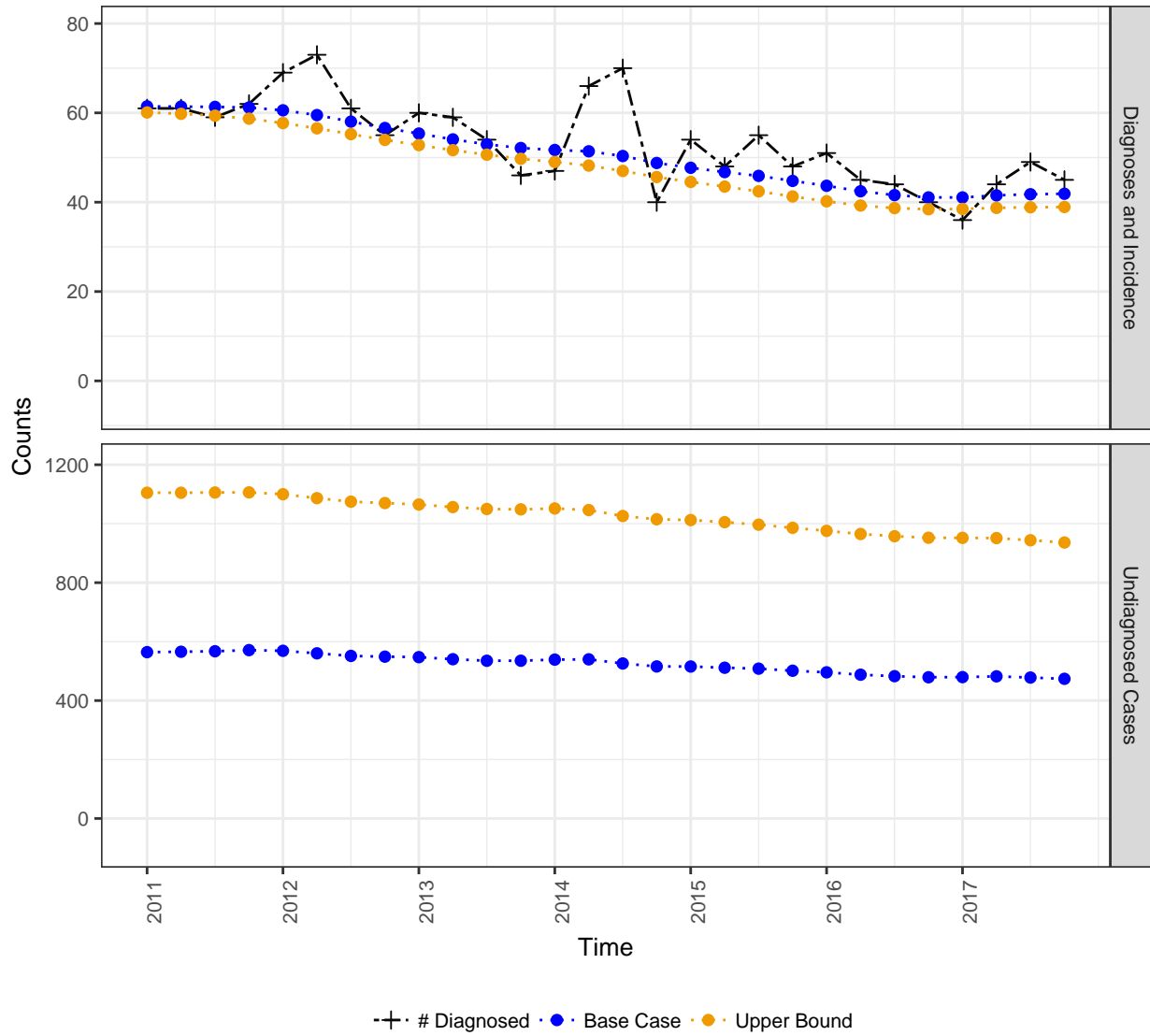
4 Time from Infection to Diagnosis (TID)

The plots below show the TID curves for the MSM subgroups. BC=Base Case and UB=Upper Bound. For each subgroup, the upper plot panel is the probability of diagnosis curve (the pdf) and the lower plot panel is the survivor curve (1-cdf). The lower plot panel's y-axis thus indicates the fraction remaining undiagnosed at a given number of years since infection (x-axis).



5 Incidence and undiagnosed counts

The upper plot panels show diagnoses and estimated incidence, while the lower plot panels show undiagnosed cases. The upper panels have different y-scales.



6 Undiagnosed fractions

These plots show the total number of PLWH (x-axis) broken down by diagnosed and undiagnosed (colors) for the Base Case versus Upper Bound estimates (panels). Undiagnosed fractions are indicated by the percent labels.

