

# 2018 Undiagnosed Estimates for King County

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## Contents

<b>1</b>	<b>Summary of Results</b>	<b>2</b>
1.1	Base Case . . . . .	2
1.2	Upper Bound . . . . .	2
<b>2</b>	<b>Diagnoses</b>	<b>3</b>
2.1	Analytic sample . . . . .	3
2.2	Diagnoses over time by MSM/Area subgroups . . . . .	3
<b>3</b>	<b>Subgroup Sizes and Testing Histories</b>	<b>4</b>
<b>4</b>	<b>Time from Infection to Diagnosis (TID)</b>	<b>4</b>
<b>5</b>	<b>Incidence and undiagnosed counts</b>	<b>4</b>
<b>6</b>	<b>Undiagnosed fractions</b>	<b>5</b>

# 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 (%)
<b>2017</b>				
MSM	5320	226.7	5546.7	4.1
non-MSM	1658	268.2	1926.2	13.9
Total	6978	494.9	7472.9	6.6
<b>2018</b>				
MSM	5321	216.0	5537.0	3.9
non-MSM	1702	303.5	2005.5	15.1
Total	7023	519.5	7542.5	6.9

## 1.2 Upper Bound

Subgroup	PLWHA	Undiagnosed Cases	True Prevalence	Undiagnosed Fraction (%)
<b>2017</b>				
MSM	5320	456.1	5776.1	7.9
non-MSM	1658	611.7	2269.7	27.0
Total	6978	1068.0	8046.0	13.3
<b>2018</b>				
MSM	5321	435.7	5756.7	7.6
non-MSM	1702	647.3	2349.3	27.6
Total	7023	1083.0	8106.0	13.4

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

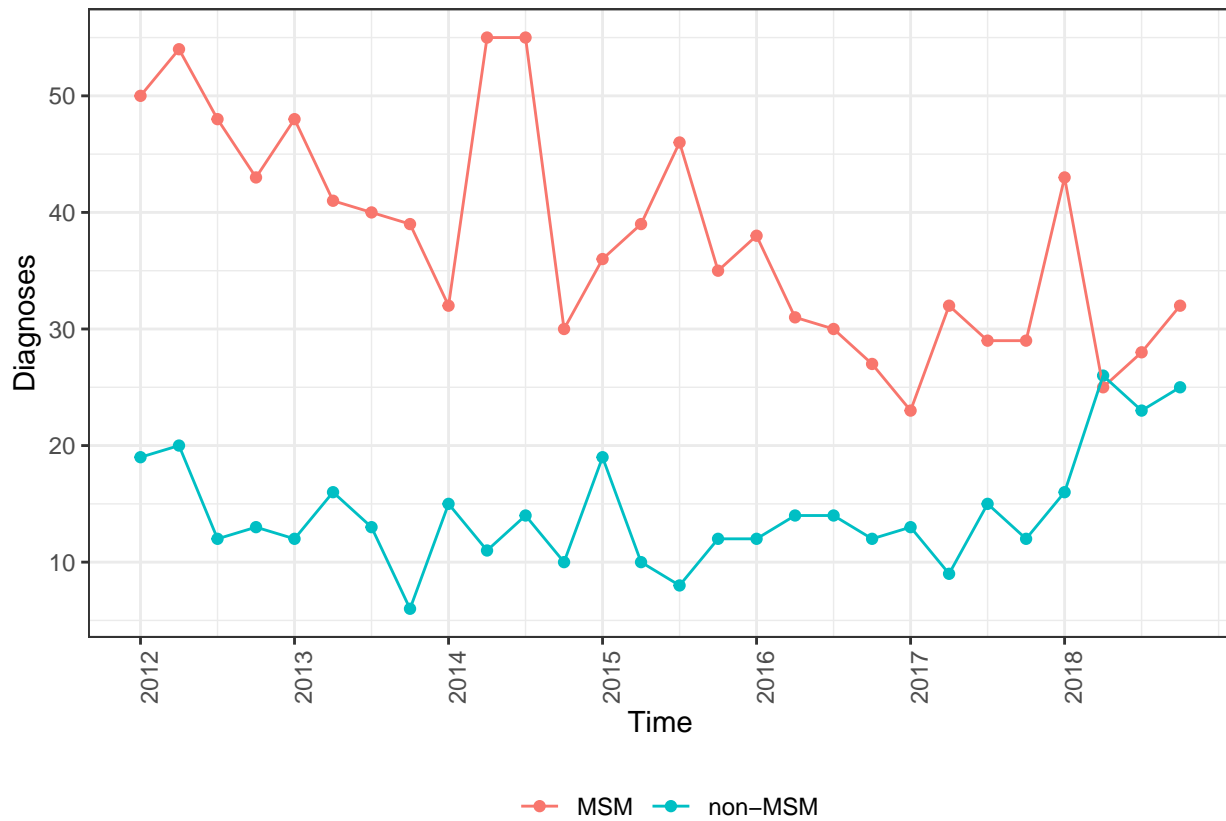
Value	N	Column Percent	Percent Yes	Percent No	Percent Missing
All	1459	100	69	15	16
MSM	1058	73	79	9	12
non-MSM	401	27	40	31	28

## 2 Diagnoses

### 2.1 Analytic sample

Analytic data set has 1459 cases for 2012-2018.

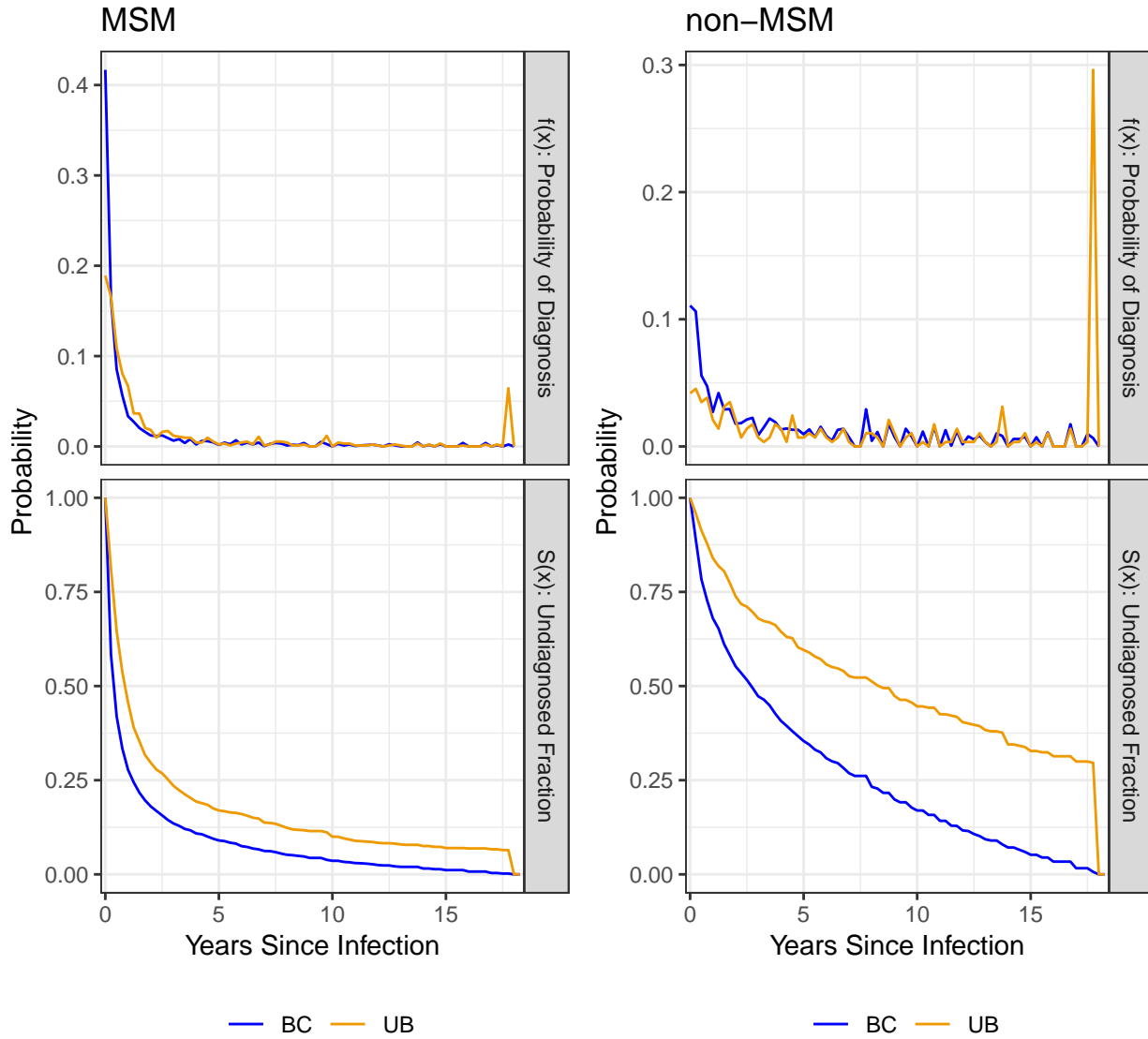
### 2.2 Diagnoses over time by MSM/Area subgroups



### 3 Subgroup Sizes and Testing Histories

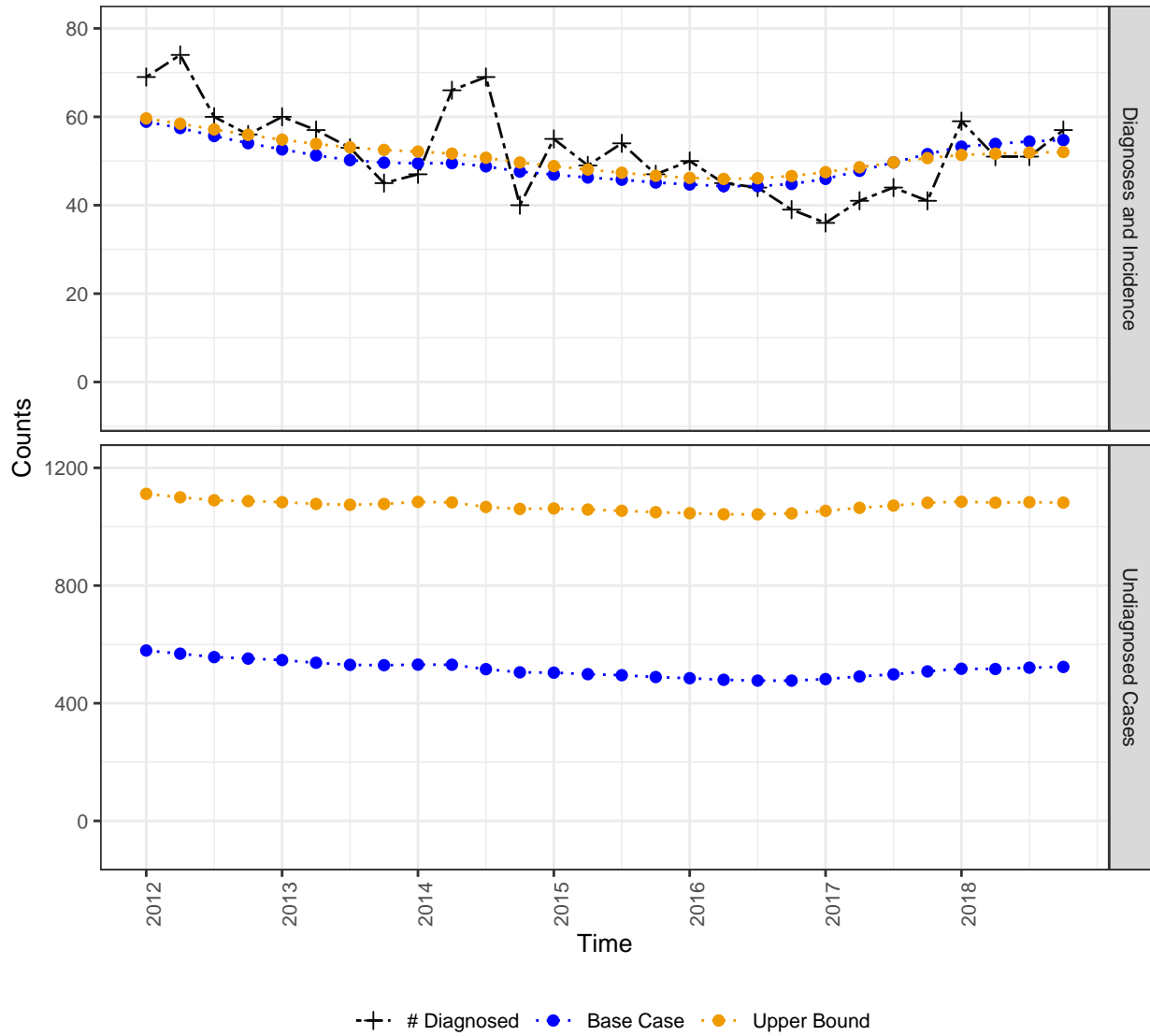
### 4 Time from Infection to Diagnosis (TID)

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.

