

Late diagnoses in WA State, 2005-2014

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1 Overview

Sample size: 5176. This is the formatted dataset used for analysis.

2 Testing history by late diagnosis

In the tables below, the rows show late diagnosis vs other diagnoses, and the columns give the testing history responses to “Ever had a negative test?”. The NonMissing column is the sum of Yes+No, so the Yes+No+Missing columns sum to the Total column *and* the Missing+NonMissing columns sum to the Total column.

Table 1: Testing history responses (columns) by late diagnosis status (rows)

	Yes	No	Missing	NonMissing	Total
AIDS w/in 1yr of HIV	567	320	834	887	1721
no AIDS or not w/in 1yr of HIV	1827	299	1329	2126	3455
Total	2394	619	2163	3013	5176

Table 2: As row percentages

	Yes	No	Missing	NonMissing	Total
AIDS w/in 1yr of HIV	33	19	48	52	100
no AIDS or not w/in 1yr of HIV	53	9	38	62	100
Total	46	12	42	58	100

Table 3: As column percentages

	Yes	No	Missing	NonMissing	Total
AIDS w/in 1yr of HIV	24	52	39	29	33
no AIDS or not w/in 1yr of HIV	76	48	61	71	67
Total	100	100	100	100	100

Our MAR assumption for testing histories implies that the breakdown of Yes vs No among the observed data apply to the missing data. When we stratify by late diagnosis status, however, we see very different ratios of Yes:No in the observed data. From Table 1, the ratio of Yes:No in late diagnoses is 567:320 or 1.8. In other diagnoses, it is 1827:299 or 6.1. The marginal ratio, not stratified by late diagnosis status, is 2394:619 or 3.9.

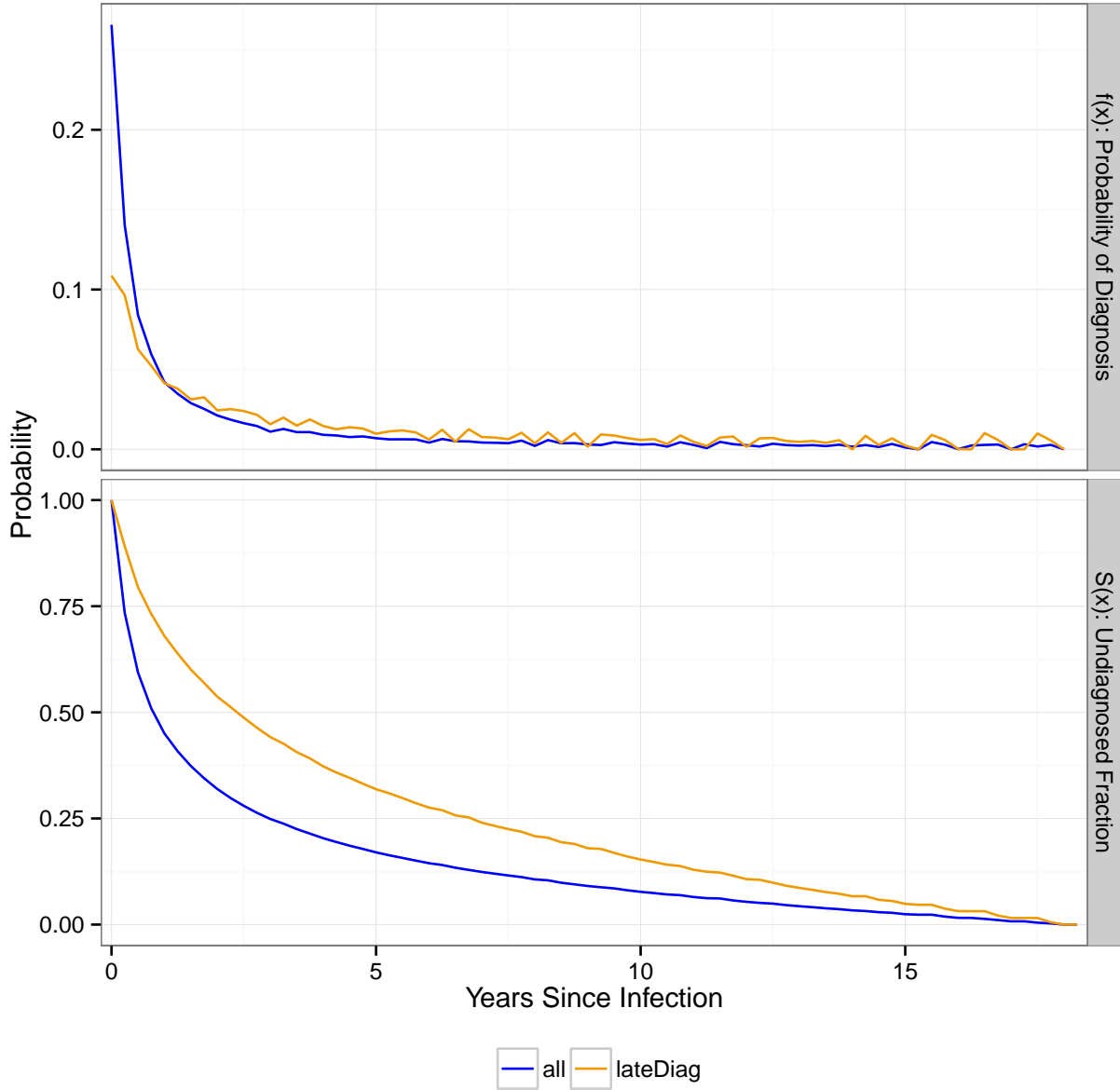
I think the key group here is the 834 late diagnoses with missing testing histories (16.1%). For them, we are effectively assuming a 3.9 ratio of Yes:No but that is probably too high.

3 TID in late diagnoses versus all diagnoses

When we translate the data into the TID, there is a substantial difference between all diagnoses and late diagnoses. Median undiagnosed time is around 1 yr versus 2.5 yrs. Remember this is WITH the assumption for No's being applied.

Table 4: infPeriod by late diagnosis

	Late Diag	Min	Mean	Max	Perc Missing
1	AIDS w/in 1yr of HIV	0.025	8.697	17.984	48.000
2	no AIDS or not w/in 1yr of HIV	0.003	3.663	17.984	38.000



Now looking at the TIDs excluding the No's, so just the Yes's, we see there is still a substantial difference.

