

Appendix 5 (as supplied by the authors): Exploratory analysis

NMB vs Prevalence

To find the prevalence at which the regression lines intersect for NMB of presumptive treatment and NMB of watchful waiting, first we use the results of the regression to write the linear equations.

$$\text{Presumptive treatment:} \quad \text{NMB} = -112.09018 * \text{Prevalence} + 1627769$$

$$\text{Watchful waiting:} \quad \text{NMB} = -484.6795 * \text{Prevalence} + 1627889$$

Then we make the two functions equal and solve for Prevalence.

Let:

$$-112.09018 * \text{Prevalence} + 1627769 = -484.6795 * \text{Prevalence} + 1627889$$

$$\text{Prevalence} = (1627889 - 1627769) / (484.6795 - 112.09018)$$

$$= 0.3 \%$$

Cost vs Prevalence

We can use the same method to find the prevalence at which the cost lines intersect for presumptive treatment and watchful waiting.

$$\text{Presumptive treatment:} \quad \text{Cost} = 5.818063 * \text{Prevalence} + 41.94105$$

$$\text{Watchful waiting:} \quad \text{Cost} = 25.52577 * \text{Prevalence} - 0.2977395$$

Let:

$$5.818063 * \text{Prevalence} + 41.94105 = 25.52577 * \text{Prevalence} - 0.2977395$$

$$\text{Prevalence} = (-41.94105 - 0.2977395) / (5.818063 - 25.52577)$$

$$= 2.1 \%$$