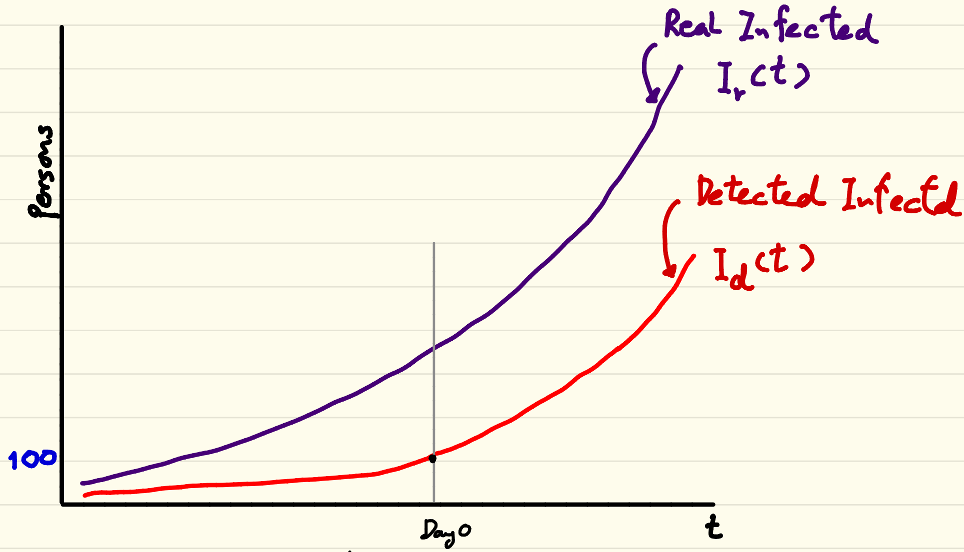

First assumption @ day 0 ($t=0$)

$$\Rightarrow \quad I_{r\phi} = I_r(0) = 10 \cdot I_d(0)$$

This allows the model to get started.

The next day ($t=1$) new detected case $= I_d(1) - I_d(0)$

These cases are removed from the community, hence they should be removed from the calculated $I_r(1)$.

At the first cycle, try to find best fit R_H, R_m, R_R for

$$I_r(t) = 10 \cdot I_d(t)$$

After we get the best fit $R_H, R_m, R_r \Rightarrow$ we can calculate again how far back from $t=0$ (negative day) where it all started (day $I_r = 1$).

Self Consistent Cal.

$$I_r(t) = 10 \cdot I_d(t) = f \cdot I_d(t)$$

After we get the best fit in cycle 1;

we can further calculate "f." to see how close it is to "10."

$$\frac{I_r(t)}{I_d(t)} = f(t) \Rightarrow \text{Plot } f(t)$$

and see if it is a simple f^n
perhaps linear or 2^{nd} degree

$f(t)$ describe the ratio between the Real Infected cases and detected cases.

Plot this $f(t)$ and we will see if we can define self-consistent Calc.