



**S6 Fig. A theoretical Ct trajectory.**  $E[Ct]$  is the expected Ct value on a given day. The Ct begins at the limit of detection, then declines from the time of infection ( $t_o$ ) to the peak at  $\chi$  cycles below the limit of detection at time  $t_p$ . The Ct then rises again to the limit of detection after  $t_r$  days. The model incorporating these parameter values used to generate this piecewise curve is given in Equation S1 (**Methods**).