

Text S3. Sensitivity using gamma distributed waiting time

Ordinary differential equation models implicitly assume exponentially distributed dwelling times within compartments. We conducted a sensitivity analysis where an additional active disease, pre-diagnosis seeking compartment was created (resulting in gamma-distributed times). We calculated the impact of Xpert across all rollout scenarios and compared it to the base model where there was only a single such compartment.

In all six different scenarios, the population level impact of Xpert was identical to the original model with exponential distributed dwelling times.