



Figure S10. Out-of-sample prediction of December 2014 prevalence by RDT with the full spatial simulation. Surveillance data was available for 8 out of 12 HFCAs. Dot size in scatter plot indicates relative cluster population. Line is  $y = x$ . To mirror interventions conducted in the area, simulations included ramp-up in case management, ITN mass distribution in July 2014, and a rudimentary reactive case detection where a random 10 individuals in a cluster are given AL when someone in the cluster receives treatment for clinical malaria.