

S1 Table. Partial rank correlation coefficients for input parameters in the intrinsic reproduction number estimations.

Symbol	Parameter	PRCC	Lower	Upper
δ	Transmission rate of infected patients	0.921	0.897	0.945
x	Relative transmissibility for colonized patients	0.806	0.769	0.843
α	Rate of antibiotic use	0.379	0.322	0.437
z	Fraction of susceptible patients admitted	0.175	0.114	0.236
Ψ_4	Discharge rate of symptomatic patients	-0.001	-0.063	0.061
γ_1	Reduction constant of transmission due to contact precautions in infected individuals	-0.053	-0.115	0.009
h_1	Bacterial clearance rate due to treatment for infected patients	-0.057	-0.119	0.006
σ_1	Fraction of cured infected patients after treatment	-0.067	-0.129	-0.005
f_1	Diagnosis rate of infected patients	-0.094	-0.156	-0.032
v	Progression rate to symptomatic disease	-0.133	-0.194	-0.071
ε	Fraction of asymptomatic carriers who develop symptomatic disease	-0.175	-0.236	-0.113
Ψ_1	Discharge rate of non-susceptible patients	-0.356	-0.414	-0.298
Ψ_3	Discharge rate of asymptomatic carriers	-0.725	-0.768	-0.682
Ψ_2	Discharge rate of susceptible patients	-0.814	-0.850	-0.778

Partial rank correlation coefficients (PRCC) were obtained after Monte Carlo sampling of parameter values.

The PRCC provides adjusted correlation values between model parameters and the intrinsic reproduction number. A cutoff of three days was used to distinguish CO-CDI from HCA-CDI.

S2 Table. Partial rank correlation coefficients for input parameters in the colonization amplification index estimations.

Symbol	Parameter	PRCC	Lower	Upper
δ	Transmission rate of infected patients	0.912	0.886	0.937
x	Relative transmissibility for colonized patients	0.776	0.737	0.815
α	Rate of antibiotic use	0.381	0.324	0.439
z	Fraction of susceptible patients admitted	0.189	0.128	0.250
v	Progression rate to symptomatic disease	-0.013	-0.075	0.049
f_1	Diagnosis rate of infected patients	-0.029	-0.091	0.033
ε	Fraction of asymptomatic carriers who develop symptomatic disease	-0.033	-0.095	0.029
h_1	Bacterial clearance rate due to treatment for infected patients	-0.038	-0.100	0.024
γ_1	Reduction constant of transmission due to contact precautions in infected individuals	-0.074	-0.136	-0.012
ψ_4	Discharge rate of symptomatic patients	-0.129	-0.191	-0.068
σ_1	Fraction of cured infected patients after treatment	-0.143	-0.204	-0.081
ψ_1	Discharge rate of non-susceptible patients	-0.365	-0.422	-0.307
ψ_3	Discharge rate of asymptomatic carriers	-0.720	-0.763	-0.677
ψ_2	Discharge rate of susceptible patients	-0.794	-0.832	-0.757

Partial rank correlation coefficients (PRCC) for the colonization amplification index were obtained after Monte Carlo sampling of parameter values. A cutoff of three days was used to distinguish CO-CDI from HCA-CDI.