Parameter name	Value	Parameter description	Parameter type	Source	Further sources or details	Further sources or details	Further sources or details
allow_clinical_diagnosis	1	Commence contact tracing on a hospital clinical diagnosis	App implementation	-			
app_turn_on_time	10000	Time (days) at which to turn on the app	IBM setup	-			
app_users_fraction_0_9	0	Maximum fraction of the population with smartphones aged 0-9	Behavioural assumption	OFCOM			
app_users_fraction_10_19	0.9	Maximum fraction of the population with smartphones aged 10-19	Behavioural assumption	OFCOM			
app_users_fraction_20_29	0.96	Maximum fraction of the population with smartphones aged 20-29	Behavioural assumption	OFCOM			
app_users_fraction_30_39	0.95	Maximum fraction of the population with smartphones aged 30-39	Behavioural assumption	OFCOM			
app_users_fraction_40_49	0.91	Maximum fraction of the population with smartphones aged 40-49	Behavioural assumption	OFCOM			
app_users_fraction_50_59	0.81	Maximum fraction of the population with smartphones aged 50-59	Behavioural assumption	OFCOM			
app_users_fraction_60_69	0.64	Maximum fraction of the population with smartphones aged 60-69	Behavioural assumption	OFCOM			
app_users_fraction_70_79	0.41	Maximum fraction of the population with smartphones aged 70-79	Behavioural assumption	OFCOM			
app_users_fraction_80	0.27	Maximum fraction of the population with smartphones aged 80+	Behavioural assumption	OFCOM			
asymptomatic_infectious_factor	0.29	Infectious rate of asymptomatic individuals relative to symptomatic individuals	covid-19 assumption	Luo et al 2020			
child_network_adults	0.2	Ratio of adults to children in work network for children (0-19)	Network assumption	Mossong et al, 2008			
critical_fraction_0_9	0.05	Fraction of hospitalised individuals aged 0-9 who need critical care	covid-19 assumption	Ferguson et al, 2020			
critical_fraction_10_19	0.05	Fraction of hospiatlised individuals aged 10-19 who need critical care	covid-19 assumption	Ferguson et al, 2020			
critical_fraction_20_29	0.05	Fraction of hospitalised individuals aged 20-29 who need critical care	covid-19 assumption	Ferguson et al, 2020			
critical_fraction_30_39	0.05	Fraction of hospitalised individuals aged 30-39 who need critical care	covid-19 assumption	Ferguson et al, 2020			
critical_fraction_40_49	0.063	Fraction of hospitalised individuals aged 40-49 who need critical care	covid-19 assumption	Ferguson et al, 2020			
critical_fraction_50_59	0.122	Fraction of hospitalised individuals aged 50-59 who need critical care	covid-19 assumption	Ferguson et al, 2020			
critical_fraction_60_69	0.274	Fraction of hospitalised individuals aged 60-69 who need critical care	covid-19 assumption	Ferguson et al, 2020			
critical_fraction_70_79	0.432	Fraction of hospitalised individuals aged 70-79 who need critical care	covid-19 assumption	Ferguson et al, 2020			
critical_fraction_80	0.709	Fraction of hospitalised individuals aged 80+ who need critical care	covid-19 assumption	Ferguson et al, 2020			
daily_fraction_work	0.5	Fraction of people in work network that an individual interacts with each day	Network assumption	Mossong et al, 2008			
daily_non_cov_symptoms_rate	0.002	Daily probability of reporting similar symptoms which are not covid-19, including seasonal flu	UK public health	UK flu survey			
days_of_interactions	10	Length of historic interactions traced (days)	App implementation	-			
elderly_network_adults	0.2	Ratio of adults to elderly in work network for elderly (70+)	Network assumption	Mossong et al, 2008			
end_time	200	End time (total number of simulated days)	IBM setup	-			
fatality_fraction_0_9	0.33	Fraction of fatalities amongst individuals in critical care aged 0-9	covid-19 assumption	Lu et al, 2020	Dong et al, 2020		
fatality_fraction_10_19	0.25	Fraction of fatalities amongst individuals in critical care aged 10-19	covid-19 assumption	Lu et al, 2020	Dong et al, 2020		
fatality_fraction_20_29	0.5	Fraction of fatalities amongst individuals in critical care aged 20-29	covid-19 assumption	Ferguson et al, 2020			
fatality_fraction_30_39	0.5	Fraction of fatalities amongst individuals in critical care aged 30-39	covid-19 assumption	Ferguson et al, 2020			
fatality_fraction_40_49	0.5	Fraction of fatalities amongst individuals in critical care aged 40-49	covid-19 assumption	Yang et al 2020			
fatality_fraction_50_59	0.69	Fraction of fatalities amongst individuals in critical care aged 50-59	covid-19 assumption	Yang et al 2020			
fatality_fraction_60_69	0.65	Fraction of fatalities amongst individuals in critical care aged 60-69	covid-19 assumption	Yang et al 2020			
fatality_fraction_70_79	0.88	Fraction of fatalities amongst individuals in critical care aged 70-79	covid-19 assumption	Yang et al 2020			
fatality_fraction_80	1	Fraction of fatalities amongst individuals in critical care aged 80+	covid-19 assumption	Yang et al 2020			
fraction_asymptomatic_0_9	0.18	Fraction of infected individuals who are asymptomatic, aged 0-9	covid-19 assumption	Mizumoto et al, 2020			
fraction_asymptomatic_10_19	0.18	Fraction of infected individuals who are asymptomatic, aged 10-19	covid-19 assumption	Mizumoto et al, 2020			
fraction_asymptomatic_20_29	0.18	Fraction of infected individuals who are asymptomatic, aged 20-29	covid-19 assumption	Mizumoto et al, 2020			
fraction_asymptomatic_30_39	0.18	Fraction of infected individuals who are asymptomatic, aged 30-39	covid-19 assumption	Mizumoto et al, 2020			
fraction_asymptomatic_40_49	0.18	Fraction of infected individuals who are asymptomatic, aged 40-49	covid-19 assumption	Mizumoto et al, 2020			
fraction_asymptomatic_50_59	0.18	Fraction of infected individuals who are asymptomatic, aged 50-59	covid-19 assumption	Mizumoto et al, 2020			
fraction_asymptomatic_60_69	0.18	Fraction of infected individuals who are asymptomatic, aged 60-69	covid-19 assumption	Mizumoto et al, 2020			
fraction_asymptomatic_70_79	0.18	Fraction of infected individuals who are asymptomatic, aged 70-79	covid-19 assumption	Mizumoto et al, 2020			
fraction_asymptomatic_80	0.18	Fraction of infected individuals who are asymptomatic, aged 80+	covid-19 assumption	Mizumoto et al, 2020			
hospitalised_daily_interactions	0	Daily random interactions of a hospitalised individual	Behavioural assumption	-			
hospitalised_fraction_0_9	0.01	Fraction of infected individuals aged 0-9 who are hospitalised	covid-19 assumption	Ferguson et al, 2020	Their raw values for prob(hosp | symptomatic) adjusted by our separation of all symptomatics into mild and not mild.		
hospitalised_fraction_10_19	0.03	Fraction of infected individuals aged 10-19 who are hospitalised	covid-19 assumption	Ferguson et al, 2020	Their raw values for prob(hosp | symptomatic) adjusted by our separation of all symptomatics into mild and not mild.		
hospitalised_fraction_20_29	0.04	Fraction of infected individuals aged 20-29 who are hospitalised	covid-19 assumption	Ferguson et al, 2020	Their raw values for prob(hosp | symptomatic) adjusted by our separation of all symptomatics into mild and not mild.		
hospitalised_fraction_30_39	0.06	Fraction of infected individuals aged 30-39 who are hospitalised	covid-19 assumption	Ferguson et al, 2020	Their raw values for prob(hosp | symptomatic) adjusted by our separation of all symptomatics into mild and not mild.		
hospitalised_fraction_40_49	0.08	Fraction of infected individuals aged 40-49 who are hospitalised	covid-19 assumption	Ferguson et al, 2020	Their raw values for prob(hosp | symptomatic) adjusted by our separation of all symptomatics into mild and not mild.		
hospitalised_fraction_50_59	0.12	Fraction of infected individuals aged 50-59 who are hospitalised	covid-19 assumption	Ferguson et al, 2020	Their raw values for prob(hosp | symptomatic) adjusted by our separation of all symptomatics into mild and not mild.		
hospitalised_fraction_60_69	0.15	Fraction of infected individuals aged 60-69 who are hospitalised	covid-19 assumption	Ferguson et al, 2020	Their raw values for prob(hosp | symptomatic) adjusted by our separation of all symptomatics into mild and not mild.		
hospitalised_fraction_70_79	0.16	Fraction of infected individuals aged 70-79 who are hospitalised	covid-19 assumption	Ferguson et al, 2020	Their raw values for prob(hosp | symptomatic) adjusted by our separation of all symptomatics into mild and not mild.		
hospitalised_fraction_80	0.14	Fraction of infected individuals aged 80+ who are hospitalised	covid-19 assumption	Ferguson et al, 2020	Their raw values for prob(hosp | symptomatic) adjusted by our separation of all symptomatics into mild and not mild.		
household_size_1	7452	Number of UK households with 1 person (thousands)	UK demographics	ONS UK	Calculated as 0.27 * 27600000 / 1000: 27% of the 27.6 million households are of size 1. Result given in thousands.		
household_size_2	9936	Number of UK households with 2 people (thousands)	UK demographics	ONS UK	Calculated as 0.36 * num_households / 1000		
household_size_3	4416	Number of UK households with 3 people (thousands)	UK demographics	ONS UK	Calculated as 0.16 * num_households / 1000		
household_size_4	4140	Number of UK households with 4 people (thousands)	UK demographics	ONS UK	Calculated as 0.15 * num_households / 1000		
household_size_5	1104	Number of UK households with 5 people (thousands)	UK demographics	ONS UK	Calculated as 0.04 * num_households / 1000		
household_size_6	552	Number of UK households with 6 people (thousands)	UK demographics	ONS UK	Calculated as 0.02 * num_households / 1000		
icu_allocation_0_9	1	Probability of getting an ICU place if needed, aged 0-9	covid-19 assumption	-			
icu_allocation_10_19	1	Probability of getting an ICU place if needed, aged 10-19	covid-19 assumption	-			
icu_allocation_20_29	1	Probability of getting an ICU place if needed, aged 20-29	covid-19 assumption	-			
icu_allocation_30_39	1	Probability of getting an ICU place if needed, aged 30-39	covid-19 assumption	-			
icu_allocation_40_49	1	Probability of getting an ICU place if needed, aged 40-49	covid-19 assumption	-			
icu_allocation_50_59	1	Probability of getting an ICU place if needed, aged 50-59	covid-19 assumption	-			
icu_allocation_60_69	1	Probability of getting an ICU place if needed, aged 60-69	covid-19 assumption	-			
icu_allocation_70_79	1	Probability of getting an ICU place if needed, aged 70-79	covid-19 assumption	-			
icu_allocation_80	0.5	Probability of getting an ICU place if needed, aged 80+	covid-19 assumption	-			
infectious_rate	5.75	Mean number of individuals infected by each infectious individual with moderate to severe symptoms	covid-19 assumption	-	Using a doubling time of 3.5 days (see "Infectious rate" tab)		
intervention_start_time	0	Time (days) after which interventions can be turned on	Policy choice	-			
lockdown_elderly_time_off	10000	Time (days) at which lockdown ends for elderly people	Policy choice	-			
lockdown_elderly_time_on	10000	Time (days) at which lockdown starts for elderly people	Policy choice	-			
lockdown_house_interaction_multiplier	1.5	Relative change in household network contacts on lockdown	Network assumption	-			
lockdown_random_network_multiplier	0.2	Relative change in random network contacts on lockdown	Network assumption	-			

lockdown_time_off	10000	Time (days) at which to model lockdown ending	Policy choice	-			
lockdown_time_on	10000	Time (days) at which to model lockdown starting	Policy choice	-			
lockdown_work_network_multiplier	0.2	Relative change in work network contacts on lockdown	Network assumption	-	Based on an estimate of the number of key workers		
mean_asymptomatic_to_recovery	15	Mean time from infection to recovery (and no longer infectious) for an asymptomatic individual (days)	covid-19 assumption	Yang et al 2020			
mean_infectious_period	6	Mean of the generation time distribution (days)	covid-19 assumption	Ma et al. 2020	Ganyani et al. 2020	Ferretti & Wymant et al. 2020	Intermediate value between these sources
mean_random_interactions_adult	4	Mean number of daily random interactions for adults (20-69)	Network assumption	Mossong et al. 2008			
mean_random_interactions_child	2	Mean number of daily random interactions for children (0-19)	Network assumption	Mossong et al. 2008			
mean_random_interactions_elderly	3	Mean number of daily random interactions for the elderly (70+)	Network assumption	Mossong et al. 2008			
mean_time_critical_survive	4	Mean time to survive if critical (days)	covid-19 assumption		ICNARC report Table 5 gives mean time in ICU for survivors = 4 (2,8)		
mean_time_hospitalised_recovery	8	Mean time to recover if hospitalised (days)	covid-19 assumption		ICNARC report Table 5 gives mean time in ICU for survivors = 4 (2,8)		
mean_time_to_critical	2.5	Mean time from hospitalisation to critical care admission (days)	covid-19 assumption	ISARIC			
mean_time_to_death	6	Mean time to death after hospitalisation (days)	covid-19 assumption		ICNARC report Table 5 gives mean time in ICU for non-survivors = 6 (3,9)		
mean_time_to_hospital	5.14	Mean time from symptom onset to hospitalisation (days)	covid-19 assumption	Pellis et al. 2020			
mean_time_to_recover	12	Mean time to recovery if hospitalisation is not required (days)	covid-19 assumption	Yang et al 2020			
mean_time_to_symptoms	6	Mean time from infection to onset of symptoms (days)	covid-19 assumption	Lauer et al. 2020	Backer et al. 2020		
mean_work_interactions_adult	7	Mean daily interactions at work for adults (aged 20-69)	Network assumption	Mossong et al. 2008			
mean_work_interactions_child	10	Mean daily interactions at work (school) for children (aged 0-19)	Network assumption	Mossong et al. 2008			
mean_work_interactions_elderly	3	Mean daily interactions at work (or similar) for the elderly (aged 70+)	Network assumption	Mossong et al. 2008			
mild_fraction_0_9	0.79	Fraction of infected individuals with mild symptoms, aged 0-9	covid-19 assumption	de Souza et al. 2020	Merged their categories mild or moderate. Values quoted for under 18s; assume uniform across 0 – 19		
mild_fraction_10_19	0.79	Fraction of infected individuals with mild symptoms, aged 10-19	covid-19 assumption	de Souza et al. 2020	Merged their categories mild or moderate. Values quoted for under 18s; assume uniform across 0 – 19		
mild_fraction_20_29	0.73	Fraction of infected individuals with mild symptoms, aged 20-29	covid-19 assumption	Yang, Lu et al. 2020	Merged their categories mild pneumonia or no pneumonia		
mild_fraction_30_39	0.68	Fraction of infected individuals with mild symptoms, aged 30-39	covid-19 assumption	Yang, Lu et al. 2020	Merged their categories mild pneumonia or no pneumonia		
mild_fraction_40_49	0.65	Fraction of infected individuals with mild symptoms, aged 40-49	covid-19 assumption	Yang, Lu et al. 2020	Merged their categories mild pneumonia or no pneumonia		
mild_fraction_50_59	0.59	Fraction of infected individuals with mild symptoms, aged 50-59	covid-19 assumption	Yang, Lu et al. 2020	Merged their categories mild pneumonia or no pneumonia		
mild_fraction_60_69	0.53	Fraction of infected individuals with mild symptoms, aged 60-69	covid-19 assumption	Yang, Lu et al. 2020	Merged their categories mild pneumonia or no pneumonia		
mild_fraction_70_79	0.41	Fraction of infected individuals with mild symptoms, aged 70-79	covid-19 assumption	Yang, Lu et al. 2020	Merged their categories mild pneumonia or no pneumonia		
mild_fraction_80	0.27	Fraction of infected individuals with mild symptoms, aged 80+	covid-19 assumption	Yang, Lu et al. 2020	Merged their categories mild pneumonia or no pneumonia		
mild_infectious_factor	0.48	Infectious rate of mildly symptomatic individuals relative to symptomatic individuals	covid-19 assumption	Luo et al 2020			
n_seed_infection	5	Number of infections seeded at simulation start	IBM setup	-			
n_total	1000000	Total population simulated	IBM setup	-			
param_id	1	Parameters identifier	IBM setup	-			
population_0_9	8054000	UK population aged 0-9	UK demographics	ONS UK	Sum of two categories in the table linked here, for 2018		
population_10_19	7528000	UK population aged 10-19	UK demographics	ONS UK	Sum of two categories in the table linked here, for 2018		
population_20_29	8712000	UK population aged 20-29	UK demographics	ONS UK	Sum of two categories in the table linked here, for 2018		
population_30_39	8835000	UK population aged 30-39	UK demographics	ONS UK	Sum of two categories in the table linked here, for 2018		
population_40_49	8500000	UK population aged 40-49	UK demographics	ONS UK	Sum of two categories in the table linked here, for 2018		
population_50_59	8968000	UK population aged 50-59	UK demographics	ONS UK	Sum of two categories in the table linked here, for 2018		
population_60_69	7069000	UK population aged 60-69	UK demographics	ONS UK	Sum of two categories in the table linked here, for 2018		
population_70_79	5488000	UK population aged 70-79	UK demographics	ONS UK	Sum of two categories in the table linked here, for 2018		
population_80	3281000	UK population aged 80+	UK demographics	ONS UK	Sum of the over 80 categories in the table linked here, for 2018		
quarantine_days	7	The number of previous days' contacts to be traced and contacted	App implementation	-			
quarantine_dropout_positive	0.02	Daily probability of drop out for an individual quarantining after a positive test result	Behavioural assumption	-			
quarantine_dropout_self	0.02	Daily probability of drop out for an individual quarantining after self-reporting symptoms	Behavioural assumption	-			
quarantine_dropout_traced	0.02	Daily probability of drop out for an individual quarantining after being traced	Behavioural assumption	-			
quarantine_household_contacts_on_positive	0	Quarantine the contacts of each household member of a person who tests positive (0=no, 1=yes)	App implementation	-			
quarantine_household_contacts_on_symptoms	0	Quarantine the contacts of other household members when someone gets symptoms	App implementation	-			
quarantine_household_on_positive	0	Quarantine household members of a person with a positive test (0=no, 1=yes)	App implementation	-			
quarantine_household_on_symptoms	0	Quarantine household members of a person with symptoms (0=no, 1=yes)	App implementation	-			
quarantine_household_on_traced	0	Quarantine household members of a person who has been traced (0=no, 1=yes)	App implementation	-			
quarantine_length_positive	14	Maximum number of days quarantine for individuals with a positive test result	Behavioural assumption	-			
quarantine_length_self	7	Maximum number of days quarantine for individuals self-reporting symptoms	Behavioural assumption	-			
quarantine_length_traced	14	Maximum number of days quarantine for individuals who are traced	Behavioural assumption	-			
quarantine_on_traced	0	Quarantine individuals who are traced (0=no, 1=yes)	App implementation	-			
quarantine_smart_release_day	0	Release a chain of quarantined people if after this number of days nobody has shown symptoms on the chain	App implementation	-			
quarantined_daily_interactions	0	Daily random interactions of a quarantined individual	Behavioural assumption	-			
random_interaction_distribution	1	Distribution used for random interactions (0=fixed, age dep, 1=negative binomial)	Network assumption	-			
relative_susceptibility_0_9	0.71	Relative susceptibility to infection, aged 0-9	covid-19 assumption		Derivation in documentation, normalised by population size		
relative_susceptibility_10_19	0.74	Relative susceptibility to infection, aged 10-19	covid-19 assumption		Derivation in documentation, normalised by population size		
relative_susceptibility_20_29	0.79	Relative susceptibility to infection, aged 20-29	covid-19 assumption		Derivation in documentation, normalised by population size		
relative_susceptibility_30_39	0.87	Relative susceptibility to infection, aged 30-39	covid-19 assumption		Derivation in documentation, normalised by population size		
relative_susceptibility_40_49	0.98	Relative susceptibility to infection, aged 40-49	covid-19 assumption		Derivation in documentation, normalised by population size		
relative_susceptibility_50_59	1.11	Relative susceptibility to infection, aged 50-59	covid-19 assumption		Derivation in documentation, normalised by population size		
relative_susceptibility_60_69	1.26	Relative susceptibility to infection, aged 60-69	covid-19 assumption		Derivation in documentation, normalised by population size		
relative_susceptibility_70_79	1.45	Relative susceptibility to infection, aged 70-79	covid-19 assumption		Derivation in documentation, normalised by population size		
relative_susceptibility_80	1.66	Relative susceptibility to infection, aged 80+	covid-19 assumption		Derivation in documentation, normalised by population size		
relative_transmission_household	2	Relative infectious rate of household interaction	covid-19 assumption	-			
relative_transmission_random	1	Relative infectious rate of random interaction	covid-19 assumption	-			
relative_transmission_workplace	1	Relative infectious rate of workplace interaction	covid-19 assumption	-			
rng_seed	1	Random starting seed	IBM setup	-			
sd_asymptomatic_to_recovery	5	Standard deviation from infection to recovery for an asymptomatic individual (days)	covid-19 assumption	Yang et al 2020			
sd_infectious_period	2.5	Standard deviation (days) of infectious period	covid-19 assumption	Ma et al. 2020	Ganyani et al. 2020	Ferretti & Wymant et al. 2020	Intermediate value between these sources
sd_random_interactions_adult	4	Standard deviation for daily random interactions for adults (20-69)	Network assumption	Mossong et al. 2008			
sd_random_interactions_child	2	Standard deviation for daily random interactions for children (0-19)	Network assumption	Mossong et al. 2008			
sd_random_interactions_elderly	3	Standard deviation for daily random interactions for the elderly (70+)	Network assumption	Mossong et al. 2008			
sd_time_critical_survive	2	Standard deviation of time to survive if critical (days)	covid-19 assumption		ICNARC report Table 5 gives mean time in ICU for survivors = 4 (2,8)		
sd_time_hospitalised_recovery	3	Standard deviation of time to recover if hospitalised (days)	covid-19 assumption		ICNARC report Table 5 gives mean time in ICU for survivors = 4 (2,8)		
sd_time_to_death	2	Standard deviation of time to death after hospitalisation (days)	covid-19 assumption		ICNARC report Table 5 gives mean time in ICU for non-survivors = 6 (3,9)		

sd_time_to_recover	5	Standard deviation of time to recovery after hospitalisation (days)	covid-19 assumption	Yang et al 2020			
sd_time_to_symptoms	2.5	Standard deviation of time from infection to onset of symptoms (days)	covid-19 assumption	Lauer et al. 2020	Backer et al. 2020		
self_quarantine_fraction	0	Proportion of people who self-quarantine upon symptoms	Behavioural assumption	-			
successive_lockdown_duration	21	Length of successive lockdowns (days)	Policy choice	-			
successive_lockdown_gap	7	Length between successive lockdowns (days)	Policy choice	-			
successive_lockdown_time_on	10000	Successive lockdowns are turned on at this time (integer, default 10000)	Policy choice	-			
TEMP_intervention_trigger_n_infected	0	Start interventions when n_infected is above a threshold	Policy choice	-			
TEMP_lockdown_trigger_app_on_end	1	Start the app at the end of lockdown	Policy choice	-			
TEMP_lockdown_trigger_keep_elderly	1	Keep elderly lockdown after the main triggered lockdown	Policy choice	-			
TEMP_lockdown_trigger_length	25	Length of lockdown after a trigger	Policy choice	-			
TEMP_lockdown_trigger_n_infected	0	Start lockdown when n_infected is above a threshold	Policy choice	-			
TEMP_lockdown_trigger_time_to_test	10000	Start testing symptomatic at a time after testing	Policy choice	-			
test_insensitive_period	3	Number of days following infection the test is insensitive	covid-19 assumption	Woelfel et al. 2020			
test_on_symptoms	0	Test individuals who show symptoms (0=no, 1=yes)	App implementation	-			
test_on_traced	0	Test individuals who have been contact-traced (0=no, 1=yes)	App implementation	-			
test_order_wait	1	Minimum number of days to wait to take a test	App implementation	-			
test_result_wait	1	Number of days to wait for a test result	App implementation	-			
testing_symptoms_time_off	10000	Time (days) at which to stop testing on symptoms	Policy choice	-			
testing_symptoms_time_on	10000	Time (days) at which to start testing on symptoms	Policy choice	-			
trace_on_positive	0	Trace contacts of an individual who tests positive (0=no, 1=yes)	App implementation	-			
trace_on_symptoms	0	Trace contacts of individuals who show symptoms (0=no, 1=yes)	App implementation	-			
traceable_interaction_fraction	0.8	Fraction of interactions that are captured if both users have the app	App implementation	-			
tracing_network_depth	0	Depth of interaction network to contact	App implementation	-			

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6	Scenario 4, no shielding
parameter_name	scenario1	scenario2	scenario3	scenario4	scenario5	scenario6	scenario4_noshielding
self_quarantine_fraction	0.8	0.8	0.8	0.8	0.8	0.8	0.8
quarantine_household_on_positive	1	1	1	1	1	1	1
quarantine_household_on_symptoms	1	1	1	1	1	1	1
intervention_start_time	10000	10000	10000	10000	10000	10000	10000
trace_on_positive	0	1	1	1	1	1	1
trace_on_symptoms	0	1	1	1	1	0	1
quarantine_on_traced	0	1	1	1	1	1	1
test_on_traced	0	0	0	0	0	0	0
tracing_network_depth	1	1	1	1	1	1	1
quarantine_household_on_traced	0	0	1	1	1	1	1
quarantine_household_contacts_on_positive	0	0	0	0	0	0	0
traceable_interaction_fraction	0	0.8	0.8	0.8	0.8	0.8	0.8
quarantine_household_contacts_on_symptoms	0	0	0	0	0	0	0
TEMP_intervention_trigger_n_infected	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
TEMP_lockdown_trigger_n_infected	0.01	0.01	0.01	0.01	0.01	0.01	0.01
TEMP_lockdown_trigger_length	35	35	35	35	35	35	35
TEMP_lockdown_trigger_keep_elderly	1	1	1	1	1	1	0
TEMP_lockdown_trigger_app_on_end	0	1	1	1	1	1	1
quarantine_smart_release_day	0	0	0	5	0	0	5
TEMP_lockdown_trigger_time_to_test	10000	10000	10000	10000	14	14	10000
test_order_wait	1	1	1	1	1	0	1
test_result_wait	1	1	1	1	1	0	1
app_turn_on_time	10000	10000	10000	10000	10000	10000	10000
app_users_fraction_0_9	0	0	0	0	0	0	0
app_users_fraction_10_19	0.72	0.72	0.72	0.72	0.72	0.72	0.72
app_users_fraction_20_29	0.768	0.768	0.768	0.768	0.768	0.768	0.768
app_users_fraction_30_39	0.76	0.76	0.76	0.76	0.76	0.76	0.76
app_users_fraction_40_49	0.728	0.728	0.728	0.728	0.728	0.728	0.728
app_users_fraction_50_59	0.648	0.648	0.648	0.648	0.648	0.648	0.648
app_users_fraction_60_69	0.512	0.512	0.512	0.512	0.512	0.512	0.512
app_users_fraction_70_79	0.328	0.328	0.328	0.328	0.328	0.328	0.328
app_users_fraction_80	0.216	0.216	0.216	0.216	0.216	0.216	0.216
n_replicates	65	65	65	65	65	65	65

Parameter name	Baseline value	High asymptomatic rate in children	High asymptomatic rate for all ages	Low susceptibility in children	Equal susceptibility across ages	Low reporting of non-covid illness	High reporting of non-covid illness	Low relative household transmission	Generation time 5 days	Generation time 7 days
fraction_asymptomatic_0_9	0.18	0.4	0.4	0.18	0.18	0.18	0.18	0.18	0.18	0.18
fraction_asymptomatic_10_19	0.18	0.4	0.4	0.18	0.18	0.18	0.18	0.18	0.18	0.18
fraction_asymptomatic_20_29	0.18	0.18	0.4	0.18	0.18	0.18	0.18	0.18	0.18	0.18
fraction_asymptomatic_30_39	0.18	0.18	0.4	0.18	0.18	0.18	0.18	0.18	0.18	0.18
fraction_asymptomatic_40_49	0.18	0.18	0.4	0.18	0.18	0.18	0.18	0.18	0.18	0.18
fraction_asymptomatic_50_59	0.18	0.18	0.4	0.18	0.18	0.18	0.18	0.18	0.18	0.18
fraction_asymptomatic_60_69	0.18	0.18	0.4	0.18	0.18	0.18	0.18	0.18	0.18	0.18
fraction_asymptomatic_70_79	0.18	0.18	0.4	0.18	0.18	0.18	0.18	0.18	0.18	0.18
fraction_asymptomatic_80	0.18	0.18	0.4	0.18	0.18	0.18	0.18	0.18	0.18	0.18
mild_fraction_0_9	0.79	0.58	0.58	0.79	0.79	0.79	0.79	0.79	0.79	0.79
mild_fraction_10_19	0.79	0.58	0.58	0.79	0.79	0.79	0.79	0.79	0.79	0.79
mild_fraction_20_29	0.73	0.73	0.53	0.73	0.73	0.73	0.73	0.73	0.73	0.73
mild_fraction_30_39	0.68	0.68	0.50	0.68	0.68	0.68	0.68	0.68	0.68	0.68
mild_fraction_40_49	0.65	0.65	0.48	0.65	0.65	0.65	0.65	0.65	0.65	0.65
mild_fraction_50_59	0.59	0.59	0.43	0.59	0.59	0.59	0.59	0.59	0.59	0.59
mild_fraction_60_69	0.53	0.53	0.38	0.53	0.53	0.53	0.53	0.53	0.53	0.53
mild_fraction_70_79	0.41	0.41	0.30	0.41	0.41	0.41	0.41	0.41	0.41	0.41
mild_fraction_80	0.27	0.27	0.20	0.27	0.27	0.27	0.27	0.27	0.27	0.27
daily_non_cov_symptoms_rate	0.002	0.002	0.002	0.002	0.002	0.0005	0.005	0.002	0.002	0.002
relative_susceptibility_0_9	0.71	0.71	0.71	0.13	1	0.71	0.71	0.71	0.71	0.71
relative_susceptibility_10_19	0.74	0.74	0.74	0.13	1	0.74	0.74	0.74	0.74	0.74
relative_susceptibility_20_29	0.79	0.79	0.79	1.27	1	0.79	0.79	0.79	0.79	0.79
relative_susceptibility_30_39	0.87	0.87	0.87	1.27	1	0.87	0.87	0.87	0.87	0.87
relative_susceptibility_40_49	0.98	0.98	0.98	1.27	1	0.98	0.98	0.98	0.98	0.98
relative_susceptibility_50_59	1.11	1.11	1.11	1.27	1	1.11	1.11	1.11	1.11	1.11
relative_susceptibility_60_69	1.26	1.26	1.26	1.27	1	1.26	1.26	1.26	1.26	1.26
relative_susceptibility_70_79	1.45	1.45	1.45	1.27	1	1.45	1.45	1.45	1.45	1.45
relative_susceptibility_80	1.66	1.66	1.66	1.27	1	1.66	1.66	1.66	1.66	1.66
mean_infectious_period	6	6	6	6	6	6	6	6	5	7
relative_transmission_household	2	2	2	2	2	2	2	1	2	2

The infectious_rate should be adjusted according to the doubling time as follows:

Doubling time	Baseline value	High asymptomatic rate in children	High asymptomatic rate for all ages	Low susceptibility in children	Equal susceptibility across ages	Low reporting of non-covid illness	High reporting of non-covid illness	Low relative household transmission	Generation time 5 days	Generation time 7 days
3	6.75	6.75	8	6	7	6.75	6.75	6.25	5	8
3.5	5.75	5.75	6.5	5	5.75	5.75	5.75	5	4.25	6.75