

Last updated: 20/10/16

Summary of model used in flu vaccine calculator

Variable Type	Variable Name	Definition	Equation	Default value (if given)	Evidence source type
User entered	staff_tot	Number of staff eligible for vaccination	N/A	N/A	Workforce records
User entered	daily_cost	Average daily cost per full time equivalent as UK£ per day	N/A	60	Workforce records
User entered	vax_uptake	Vaccine uptake rate estimate	N/A	25%/50%/75%	Management estimate
Constant	AR	Anticipated attack rate in workforce over season	N/A	10%	Systematic review
Constant	absence_case	Days absent per case	N/A	3	Systematic review
Constant	vax_unit_cost	Vaccine unit cost estimate as UK£ per person	N/A	6	Market research
Constant	adv	Days absent per vaccinated employee due to adverse reactions	N/A	0.05	Observational studies
Constant	admin_cost	Programme administration and management costs	N/A	0	N/A
Intermediate	absence_cost	Total cost of anticipated staff absence if no vaccination	$staff_tot * AR * absence_case * daily_cost$	N/A	N/A
Intermediate	vax_tot_cost	Total cost of vaccinations	$staff_tot * vax_uptake * vax_unit_cost$	N/A	N/A
Intermediate	cases_novax	Anticipated cases if no vaccination	$staff_tot * AR$	N/A	N/A
Intermediate	cases_vax	Anticipated cases if vaccination	$cases_novax - (vax_eff * vax_uptake * cases_novax)$	N/A	N/A
Intermediate	adv_cost	Additional costs due to staff absence for adverse reactions to vaccination	$staff_tot * uptake * adv * daily_cost$	N/A	N/A
Reported	tot_saved	Anticipated reduction in costs due to staff absence for flu	$(cases_novax - cases_vax) * absence_case * daily_cost$	N/A	N/A
Reported	tot_cost	Total costs of running programme	$vax_tot_cost + adv_cost + admin_cost$	N/A	N/A
Reported	net_saved	Total savings having accounted for costs of running programme	$tot_saved - tot_cost$	N/A	N/A

Note that constant values could be added as user entered variable in an advanced interface.