Visual Basic User Interface (III)
Select province(s)/district(s); choose pandemic scenario; change resource parameter values

Menu manually
Select country and province (from the those made available in 'country prov' sheet)

Menu automated
Select province(s) / district(s)

Choose pandemic scenario: (mild scenario, moderate scenario or severe scenario)

Choose Basic Reproduction Number ($R_0$)

Fill in population size and total resource availability

Fill in total resource availability

Option to change depletion rates materials (per capita use)

Option to change occupancy ratios human resources / equipment (per capita use)

Option to change other resource parameter values (absenteeism, surge capacity duration day/night shift)

Run Simulation

Run Simulation(s)

Data provinces/districts (on population sizes and total availability of 28 health care resources)

'Seir Model' Sheet

SEIR model

Mild scenario parameters values based on pandemic influenza H1N1v

Moderate scenario parameter values based on average of mild and severe scenario

Severe scenario parameter values based on avian influenza virus: HPAI A(H5N1)

Actual availability of hospital beds, ventilators and antivirals

Peak number hospitalised cases

Total hospitalised cases

SEIR structure

Sufficient availability of hospital beds, ventilators and antivirals

'Seir Model' Sheet

Option to change occupancy ratios human resources / equipment (per capita use)

Option to change other resource parameter values

Run Simulation

Visual Basic Functions (IV): saving and exporting

Export all results as .dbf-IV file and replace old dbf in ESRI shapefile

Overview output simulations per province/district

'GIS output 2' sheet

Shapefile (.shp, .dbf and .shx files)

Geographical Information Systems (GIS) software (to display simulation results in maps)