Notes on Open Malaria

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1 Simulation Options

The *OpenMalaria*simulator is designed for simulating individual scenarios. In order to simulate a study covering variations in several factors, one would have to design a fully *factorial* experiment.

- ***Sweep*** : A sweep is one of more covarying factors, and set of all *arms* of this sweep.

- ***Arm***: Each sweep must have one or more values for each of its factors. An *arm* is one of these combinations of values - a configuration assigning a value to each factor on the sweep.

- ***Experiment***: Largely synonymous with a study, an *experiment* is the complete description of all sweeps and arms used, together with the scenarios generated and results produced. Each scenario is generated by choosing one arm for each sweep in the experiment.

- ***Full factorial design*** : A *full factorial experiment* is one where all possible scenarios are generated: all combinations of one arm per sweep are used.

- ***Seed***: Each time a scenario is simulated, the random number generated must be started from some *seed*.