

Assumptions and methods in the Lives Saved Tool (LiST)

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The Lives Saved Tool (LiST) is a computer-based model that estimates the impact of increasing coverage of interventions on maternal, neonatal and child mortality. The model has its origins in earlier work from the Lancet Series papers that looked at estimating the impact of increasing coverage of proven interventions on child mortality [1] and neonatal mortality [2] as well as the impact of interventions related to nutrition and nutritional status of mothers and children [3]. During the past four years, LiST has been developed into a free, publicly available software tool that has been used by programs or organizations to estimate the impact of scaling up different interventions and thereby help in the health planning process [4-6].

The development of LiST is closely linked to the work of the Child Health Epidemiology Reference Group (CHERG) of WHO and UNICEF. The CHERG provides technical inputs to the assumptions and procedures used in the model and also guides the on-going development of the model. As part of this process, this journal issue, along with a previous supplement [7], is being published to ensure that the methods and assumptions in the model are peer reviewed and made publicly available for comments, criticism and feedback.

In addition to the fact that the model now includes 75 interventions, LiST also continues to expand in terms of the scope of the program, including two major functionality additions in the current version. First, the new version of LiST estimates the impact of interventions on stillbirths. Second, the new version of LiST allows users the ability to add future interventions, thereby judging the impact of these interventions in conjunction with existing interventions. For example, one could put in a vaccine for malaria, set the efficacy of the vaccine and then estimate the impact that this vaccine would have on malaria deaths with or without the scale up of an existing

malaria intervention, such as insecticide-treated nets or indoor residual spraying. More details about the Lives Saved Tool, (LiST) including documentation, training materials, and background information is available at <http://www.jhsph.edu/IIP>.

This supplement includes 35 articles, the majority of which present reviews and meta-analyses that are used to estimate the effectiveness of interventions. In addition there are several articles that either look at the possible impact of future interventions or deal with methodological issues related to the Lives Saved Tool.

The effectiveness review articles in the supplement are organized into three broad categories. First, there are seven papers proven interventions, they are not included in LiST. The most recent version of LiST, however, allows users to enter new or future interventions into the LiST model and then see what additional impact these new interventions would have in conjunction with existing interventions.

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The final section of the supplement presents 4 articles that look at methodological issues related to LiST. These papers either compare LiST to other models or measured

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