

Global uses of LiST

Who has used LiST?

International donors CHILDREN'S INVESTMENT FUND FOUNDATION Investing in our future The Global Fund To Fight AIDS, Tuberculosis and Malaria BILL MELINDA GATES foundation











How has LiST been used?







Strategic planning

Strategic planning

Which interventions need to be scaled up to have the greatest impact on mortality in a given epidemiological setting?



Strategic planning: example from Burkina Faso, Malawi and Ghana

Burkina Faso, Malawi, and Ghana's national plans proposed scaling up 13-20 interventions to reduce under-five mortality by at least 20% by 2011



Strategic planning: example from Burkina Faso, Malawi and Ghana

- Created LiST projections using the most recent country-specific under-5 deaths by cause and intervention coverage targets from national plan
- Excluded some interventions due to:
 - Evidence of effectiveness in reducing child mortality rates not sufficient to warrant inclusion in LiST (e.g. de-worming)
 - Evidence of effectiveness exists, but intervention not yet incorporated in LiST (e.g. intrapartum care)
 - Country data on coverage not adequate or compatible for use in LiST, or target coverage not set in programme (e.g. complementary feeding)
 - Not part of the Catalytic Initiative to Save a Million Lives acceleration programme (e.g. PMTCT)



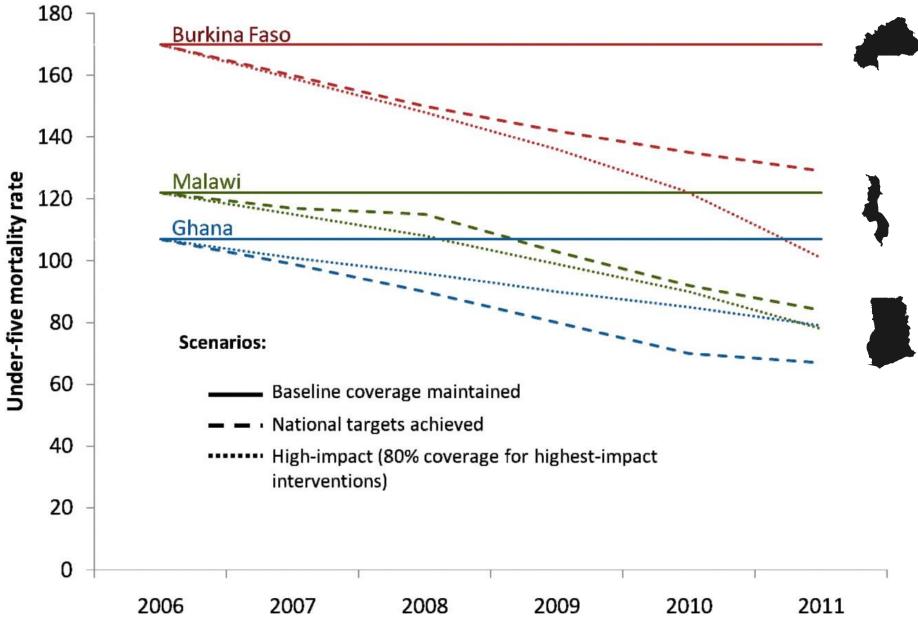
Strategic planning: example from Burkina Faso, Malawi and Ghana

	Malawi	Burkina Faso	Ghana
Number of interventions included in acceleration plan	18	13	20
Number of interventions modelled	13	9	17
Percentage reduction in under-5 mortality if all targets in plan achieved for modelled interventions	36	24	26
Number of interventions required to achieve mortality reduction of ≥20% reduction in under-5 mortality, as modelled by LiST	4	5	5









Bryce J, Friberg IK, Kraushaar D, Nsona H, Afenyadu GY, Nare N, et al. LiST as a catalyst in program planning: experiences from Burkina Faso, Ghana and Malawi. International Journal of Epidemiology. 2010Mar26;39(Supplement 1):140–7. Available from: https://doi.org/10.1093/ije/dyq020



Minimum set of interventions to achieve mortality reduction of 20%, with current and target coverage levels

	Malawi	Burkina Faso	Ghana
Pneumonia treatment with antibiotics	√	√	√
	29% → 67%	30% → 50%	33% → 60%
Diarrhoea treatment with ORS and zinc	✓	\checkmark	√
	55% → 85%	4% → 60%	42% → 60%
Malaria prevention with insecticide-treated nets	✓	\checkmark	√
	23% → 69%	10% → 70%	40% → 55%
Malaria treatment with ACTs	✓	\checkmark	√
	27% → 69%	48% → 57%	65% → 70%
Vitamin A supplementation		\checkmark	
		67% → 90%	
Improved conitation			√
Improved sanitation			$18\% \rightarrow 70\%$







Changes to strategy

 Stakeholders realized that more interventions were included in the scale-up plans than was necessary to achieve the mortality reduction target

 Chose to focus on highest-impact interventions to achieve the greatest impact, while at the same time increasing feasibility of implementation





Strategic planning: additional examples

- In KwaZulu-Natal, South Africa the team used LiST to identify key interventions and cost for highest impact inverventions
- Created two scale-up scenarios:
 - Full coverage scenario of 95% coverage for all interventions
 - Achievable coverage scale-up based on target coverage levels determined by province experts
- LiST costing used to determine cost-effectiveness of key interventions.
 - Revised the medical staff salary estimates in the software, but used the default costs for medicine and supplies
- Conclusion: seventeen interventions plus family planning were both impactful and cost effective for averting deaths in the KwaZulu-Natal province



"One of the things we also are challenged with regularly is how to make strategic decisions for design. When you have a context where there are so many issues, how to prioritize, what to focus, you know kind of step by step, what is our highest priority and our secondary priorities. LiST can really help to make those decisions. It can help show empirically what is going to make the greatest impact on lives saved when otherwise it is quite hard to make those decisions."



Program coordinator at an NGO





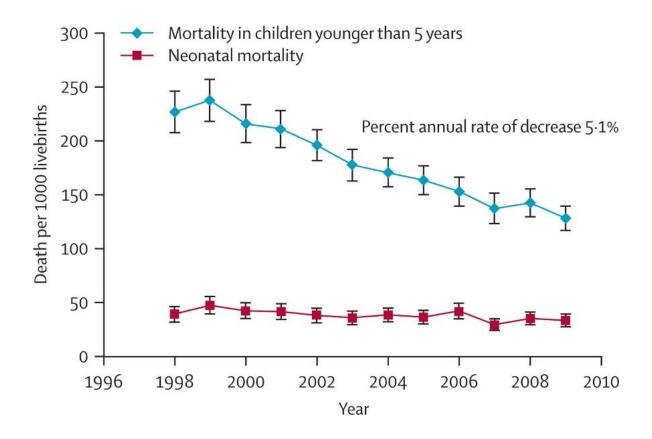
Evaluation

Evaluation

What interventions had the greatest impact on declines in mortality?



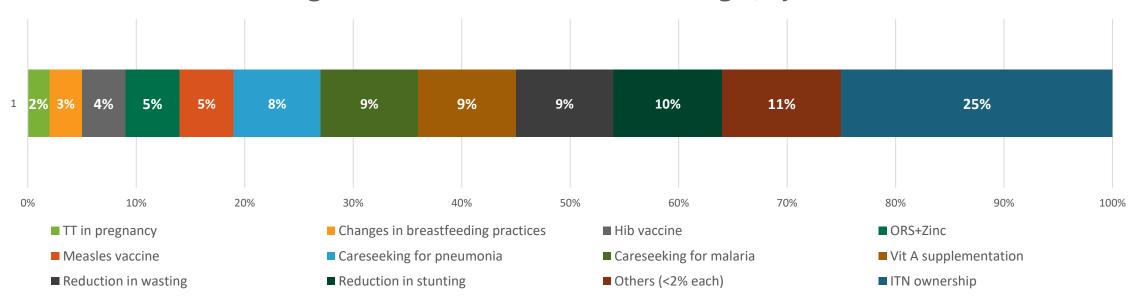
Evaluation: a case study from Niger





Evaluation: a case study from Niger

Percentage of child lives saved in 2009 in Niger, by intervention



"LiST added value by allowing us to examine the contribution of specific interventions and nutritional status to overall mortality reduction."



Evaluation

Did my project even have an impact?



Evaluation example: subnational Care Groups Projects evaluation

 Care Group: mothers' groups of Care Group volunteers who are each responsible for visiting households closest to their home to promote maternal and child health and health-care utilization

Evaluation:

 Compare Care Group projects with non-Care Group projects implemented in the same country around the same time in Cambodia (6), Kenya (3), Malawi (3), Mozambique (3), and Rwanda (3)

Inclusion criteria:

- DHS or MICS available for the country where the Care Group project was implemented within 3 years of both the project baseline and endline household surveys.
- At least one non-Care Group child survival project funded by CSHGP that was implemented in the same country within 3 years of the Care Group project that met criterion 1 to match Care Groups and non-Care Groups by country.
- Baseline and endline Knowledge, Practices, and Coverage (KPC) data for a clearly defined subnational area in which it was intervening



Evaluation example: subnational Care Groups Projects evaluation

Data source:

- Project household KPC surveys
- If project coverage data were not available for specific indicators at baseline or endline, DHS or MICS coverage data for the subnational region was used

Method:

 Used the subnational coverage values and LiST subnational projections to estimate U5MR reductions was used to determine the annual percentage change in U5MR over the project period

Results:

- Care Group child survival project implemented 10 out of the 17 high-impact interventions modeled in LiST compared to 7 for the non-Care Group projects (on average)
- In Care Group project areas, coverage increases for high impact interventions were more than double those in non-Care group project areas
- Conclusion: the Care Group model is effective in significantly expanding coverage of key child survival interventions, reducing undernutrition, reducing childhood diarrhea, and lowering under-5 mortality

Evaluation

Did my project even have an impact, even though its implementation period was short?



Evaluation of Integrated Community Case Management in Eight Districts of Central Uganda

- Looking to evaluate whether iCCM had an impact on treatment coverage of the top causes of childhood mortality (ARI, malaria, and diarrhea) in 8 districts in Uganda from 2010-2012
- Carried out a baseline and end line survey in intervention and comparison regions to determine coverage levels before and after implementation
- LiST was used to estimate the number of lives saved and mortality impact. To compare the intervention and comparison areas a separate projection was created for each area using baseline and end line surveys.
- The lives saved, under-five mortality rates, and causes of death in the intervention and comparison areas from 2010 to 2012 were then modeled.



Evaluation of Integrated Community CaseManagement in Eight Districts of Central Uganda

Results

- Under-five mortality in the intervention area slightly decreased from 50 deaths per 1000 live births to 49. However, mortality in the comparison arm increased from 63 to 69 deaths per 1000 live births.
- In addition, the model indicates that 106 child lives were saved the intervention area, whereas in the comparison area 311 child lives were lost.
- At the end of the study period in 2012, there was a slight decrease in the proportion (26%) of deaths due to ARI, malaria, and diarrhea in the intervention area. However, in the comparison area there was an increase in the proportion of deaths (38%) due to ARI, malaria and diarrhea.
- Among the lives saved in the intervention area, 57% was due to antimalarial treatment, 21% was due to treatment with ORS and zinc, 9% was due to use of insecticide treated nets, and the remaining 20% was due to other maternal, newborn, and child health interventions.



"LiST provides us with information for evaluation, lives saved, deaths averted for a 3-5 year health program. It is hard to have mortality data from this. It is impossible to measure for one intervention over such a short period. LiST helps give mortality data."



Monitoring and evaluation officer at an NGO





Advocacy

Advocacy

 Advocacy analyses seek to highlight the potential benefits of scaling-up of key health interventions

 Allows MNCH experts to communicate in a way that general audiences can understand.

"Lives saved" is a tangible metric that enables donors to understand the impact of their investments.



Advocacy: Scaling Up Diarrhea Prevention and Treatment Interventions

How much of a reduction in diarrhea-specific mortality (DSMR*) would we see if different packages of interventions were scaled up?



Advocacy: Scaling Up Diarrhea Prevention and Treatment Interventions

- Created LiST models for each of the 68 priority countries to project potential reductions in diarrhea mortality (2010-2015)
- Intervention packages of ten interventions proven to reduce diarrheal mortality were modeled in one of two scenario:

Scenario 1 - Ambitious scenario

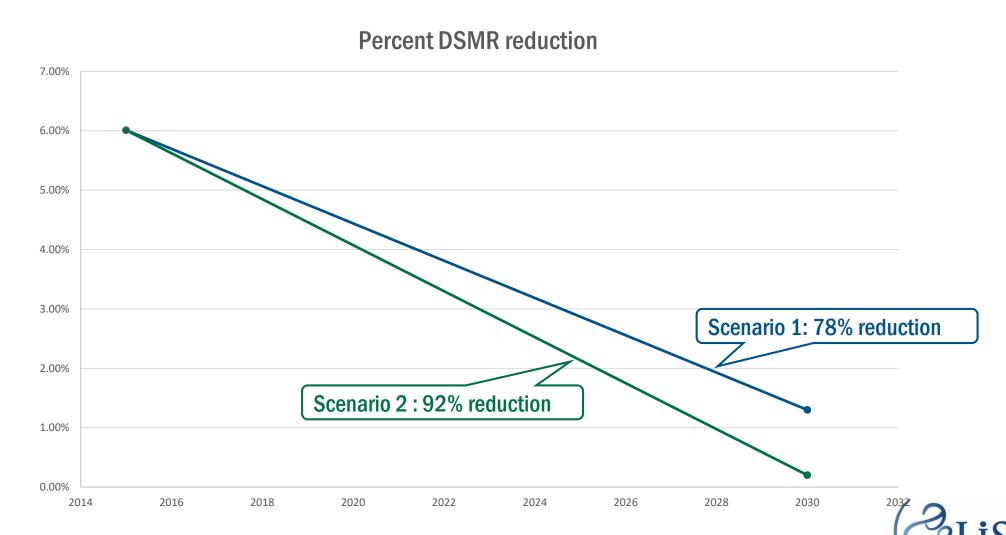
Essential and realizable scale-up strategy (feasible but ambitious)

Scenario 2 – Universal scenario

Maximum levels that could be achieved (aspirational)



Preliminary results



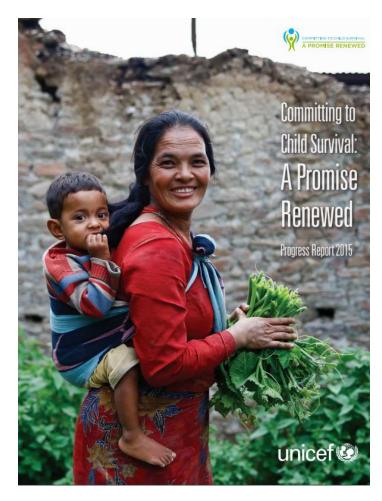
Advocacy

Achieving universal coverage of diarrhea interventions by 2015 in high burden countries would reduce diarrhea mortality by 92%

Achieving universal coverage of nutrition and/or WASH interventions would reduce DSMR to less than one diarrhea death per 1,000 live births



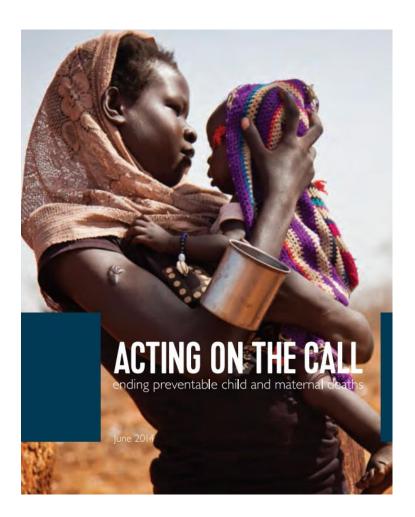
UNICEF





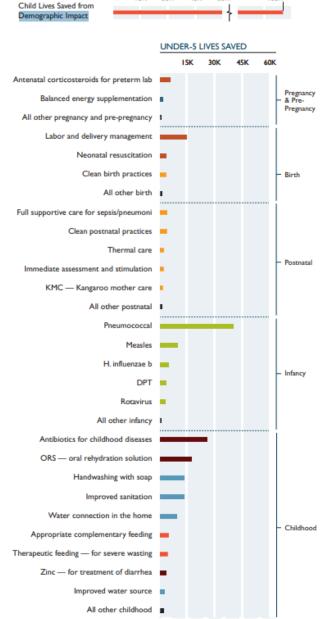


USAID

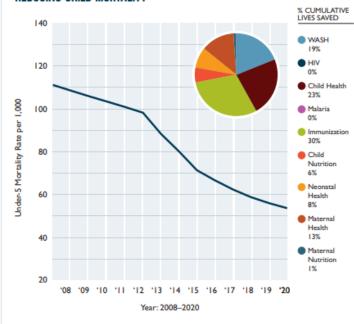


PROJECTED INTERVENTION IMPACTS OVER FIRST 5 YEARS OF LIFE: 2012-2020

45K



BENDING THE CURVE: REDUCING CHILD MORTALITY



WORKING TOGETHER, WE CAN REACH THESE GOALS

	Under-5 Mortality Rate per 1,000	Maternal Mortality Ratio per 100,000
2012	98	400 [*]
2020	54	293
2035	20	50
		*2013

470,000 CHILD LIVES SAVED

BY 2020

OF WHICH 170,000 ARE DEATHS AVERTED DUE TO FAMILY PLANNING INTERVENTIONS

19,000 WOMEN'S LIVES SAVED

OF WHICH 13,000 ARE DEATHS AVERTED DUE TO FAMILY PLANNING INTERVENTIONS

USAID. Acting on the Call: Ending Preventable Child and Maternal Deaths. Available from: https://www.usaid.gov/sites/default/files/documents/1864/USAID ActingOnTheCall 2014.pdf

"You are not going to get anyone to buy in unless you have **real data that can encourage them to step up** and do something about the issue."

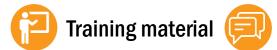


Program associate at an NGO













www.livessavedtool.org

