



Subnational models

<Location>

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Why create a subnational projection?

- Not every district/sub-area is the same as the national average in terms of MNCH
 - Coverage of health interventions
 - Cause of death structure
 - Mortality rates
- Can be used multiple times for different projections

Subnational can mean:

- Geographic region
- Wealth quintile
- Urban vs. rural
- Any additional sub-group for which you have data

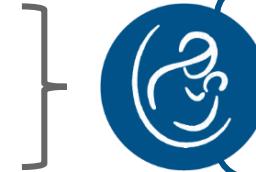
Necessary data for a national projection

- What data is necessary for a projection?
 - Population
 - Total fertility rate
 - HIV prevalence
 - Contraceptive prevalence rate (if using FamPlan)
 - Coverage of MNCH&N interventions
 - Cause of death profile
 - Mortality rates
- Generally available from household surveys and population census
- Should be from the base year of the projection (or as close as possible)

Necessary data for a national projection

- Population
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- HIV prevalence
- Contraceptive prevalence rate (if using FamPlan)
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**Imported directly using
the subnational wizard**



**Can estimate
using LiST**

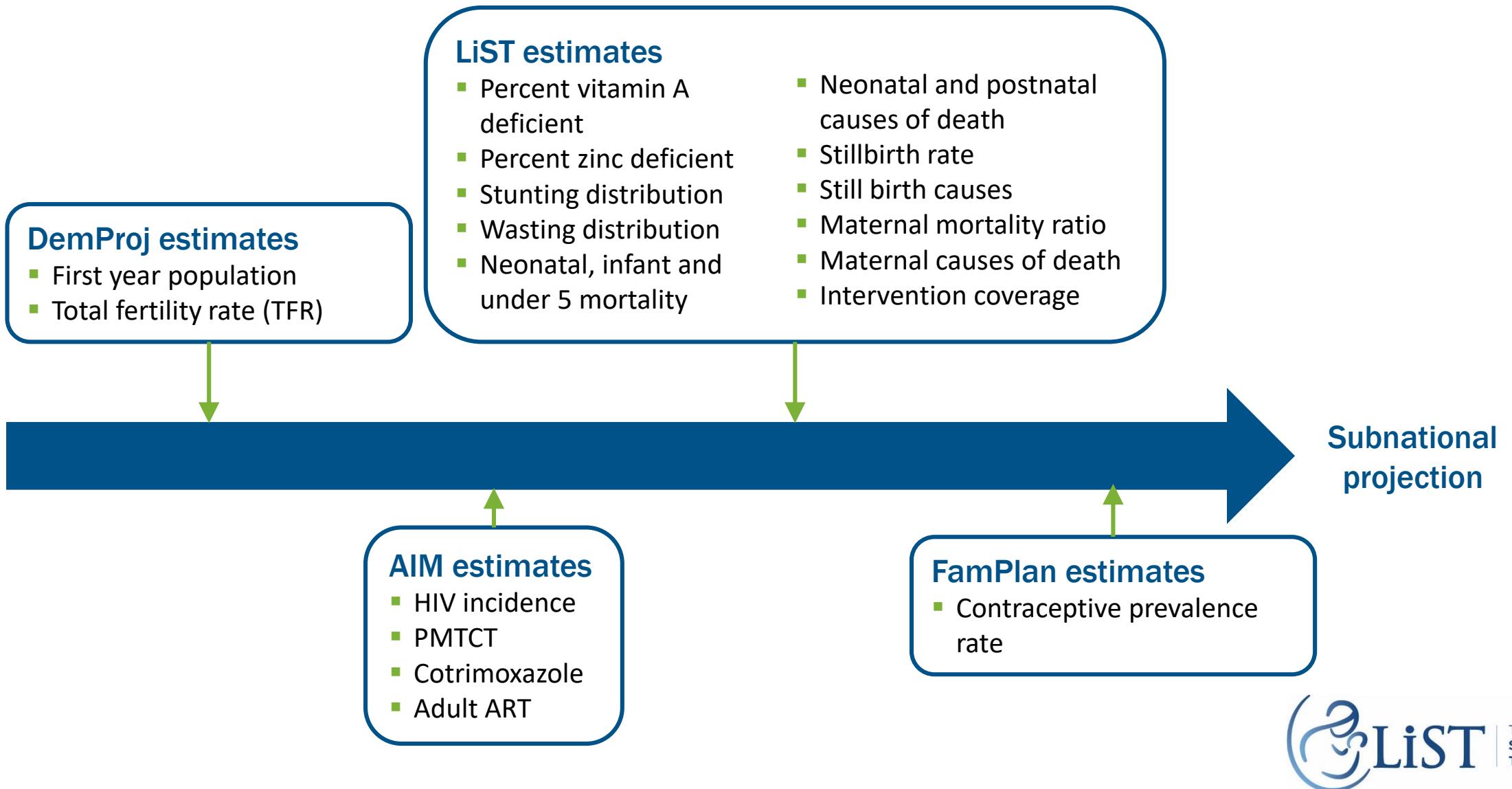
Purposes of the subnational wizard

- To transfer user-entered **health status** data to the final subnational projection
- To use any **coverage changes** that were user-entered or extracted from the subnational database in the wizard to **calculate any health status** data that the user did NOT put in the wizard

Subnational wizard conceptual walkthrough



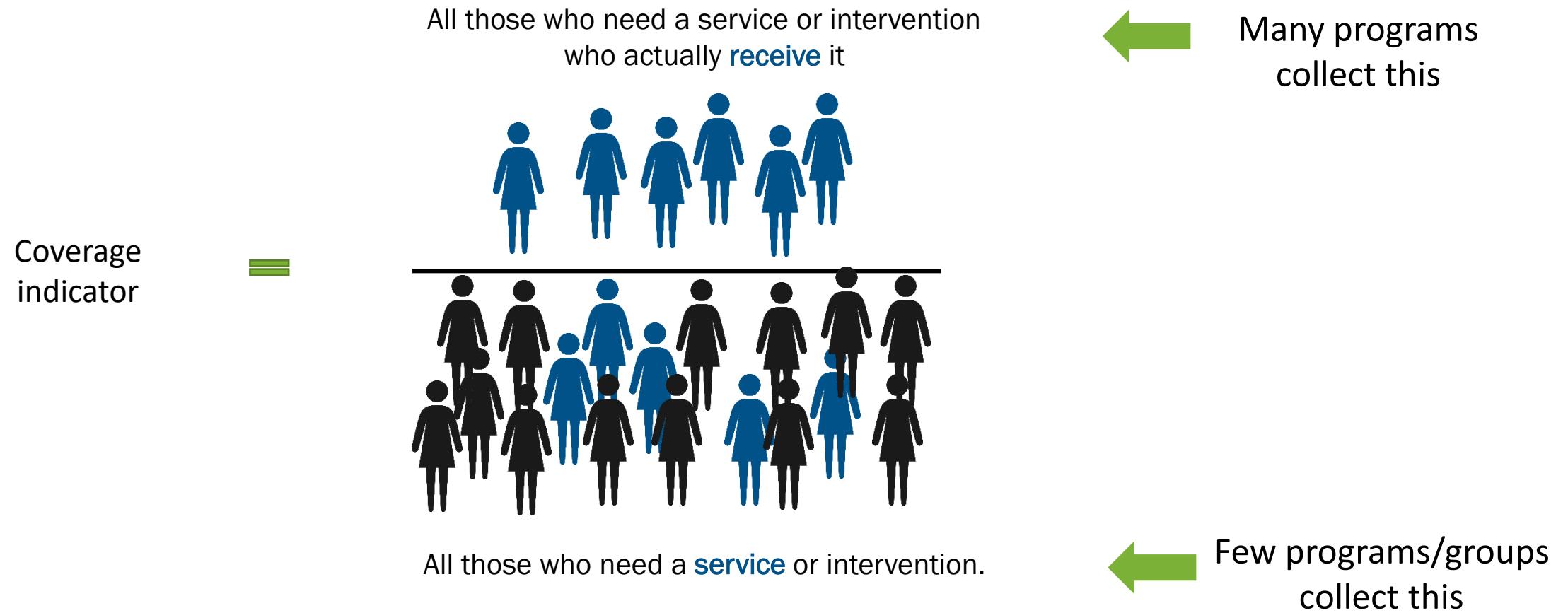
Subnational wizard conceptual walkthrough



Gathering data

- Blank template comparing national/subnational available for use
- **Note on creating ratios:** Necessary where your data source (household survey) is different from LiST default data source
 - AIM, FamPlan, DemProj data
 - Vaccines (including TT vaccine)
 - Vitamin A supplementation
 - 3 WASH indicators

A note of caution...



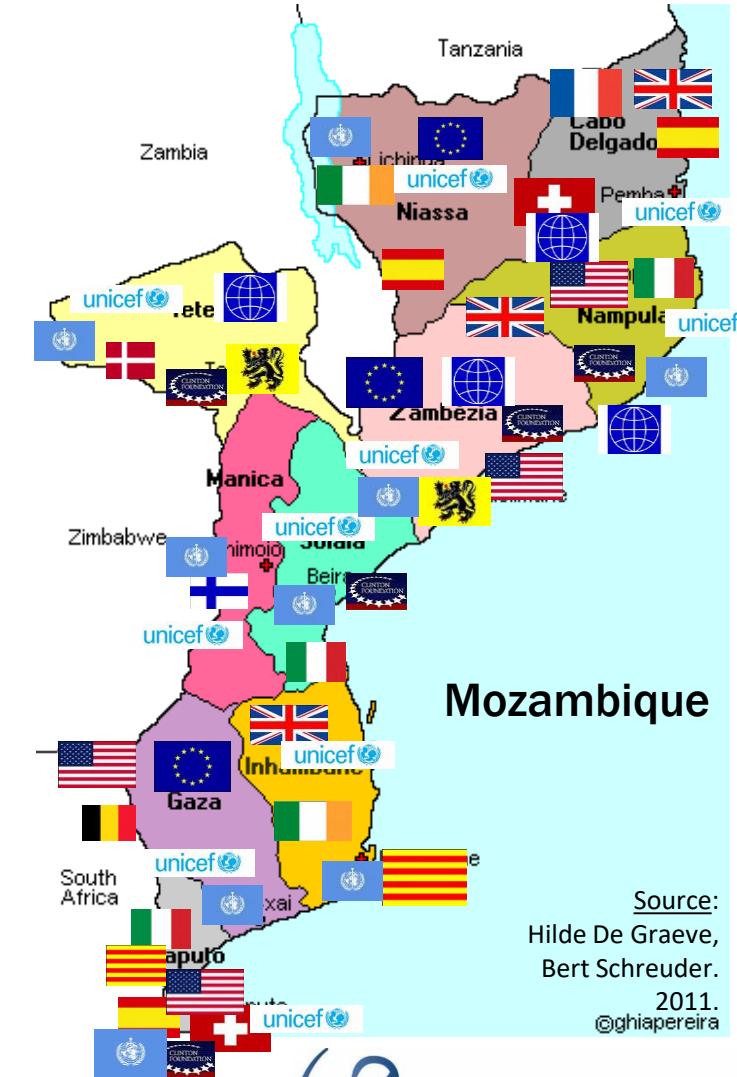
When has LiST been used for subnational analyses?

- Strategic planning at the Bill and Melinda Gates Foundation
 - State level modeling in India and Nigeria
- Countdown to 2015 case studies
 - District level modeling in Malawi
- Program evaluation at World Vision
 - Area development program (ADP) level modeling in Tanzania, Malawi, Zambia, and other countries in Africa
- Province-level planning in DR Congo
 - List of most impactful interventions in each of 26 provinces for USAID Mission and MOH

Subnational modeling issues

Attribution

- Multiple known programs co-exist in subnational area
- Multiple unknown programs which can have an impact on health
- Program-based or funding based attribution?
- How to get at composite coverage of all known programs?



Source:
Hilde De Graeve,
Bert Schreuder.
2011.
@ghiapereira

Program data

- How are interventions defined?
- What assumptions to make to use program data as coverage of interventions?
- Data quality?
- Data availability?

What subnational level?

- Rural areas?
- Composite intervention and composite comparison areas?
- Regions?
- State?
- District?
- Program level?

Emergency situations

- Estimate the number of additional deaths due to disruption to routine health services
 - Floods in Pakistan in 2010
 - Ebola in Africa in 2014



Help files



Training material



User forum



Webinars

www.livessavedtool.org

info@livessavedtool.org



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH