Improving Source Transparency of Health Data Visualizations

THE SPONSOR

The Institute for Health Metrics and Evaluation (IHME) is a global health organization that collects health data and creates publications, visualizations, and tools that inform public health policy. IHME recently launched the Local Burden of Disease tool - an interactive five-by-five km map viewer with various global health indicators.

THE PROBLEM

While powerful, the original LBD tool lacked transparency in the data source documents that were being used in the visualization. It was also unclear how the geospatial data points were being produced. This was a major problem for the tool's key potential users, who need to verify and cite research they do.

THE SOLUTION

Our design updates improve the availability and transparency of the LBD's source data with a new "Data Sources" page, and a better contextualized landing page and visualization. Additionally, we clearly summarize the process IHME uses to produce geospatial estimations in the tool.

Designing for Potential Users

RESEARCH

We conducted focus groups with individuals from BMGF and the WGHA NGO partners to understand potential users of the tool
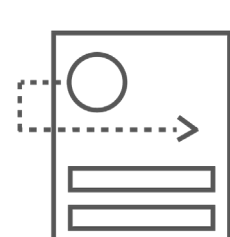
DESIGN

We combined key insights from our research to focus on improving the transparency of how the visualizations are made

USABILITY TEST

We conducted five usability tests, which helped us see areas where the designs could balance source data with process
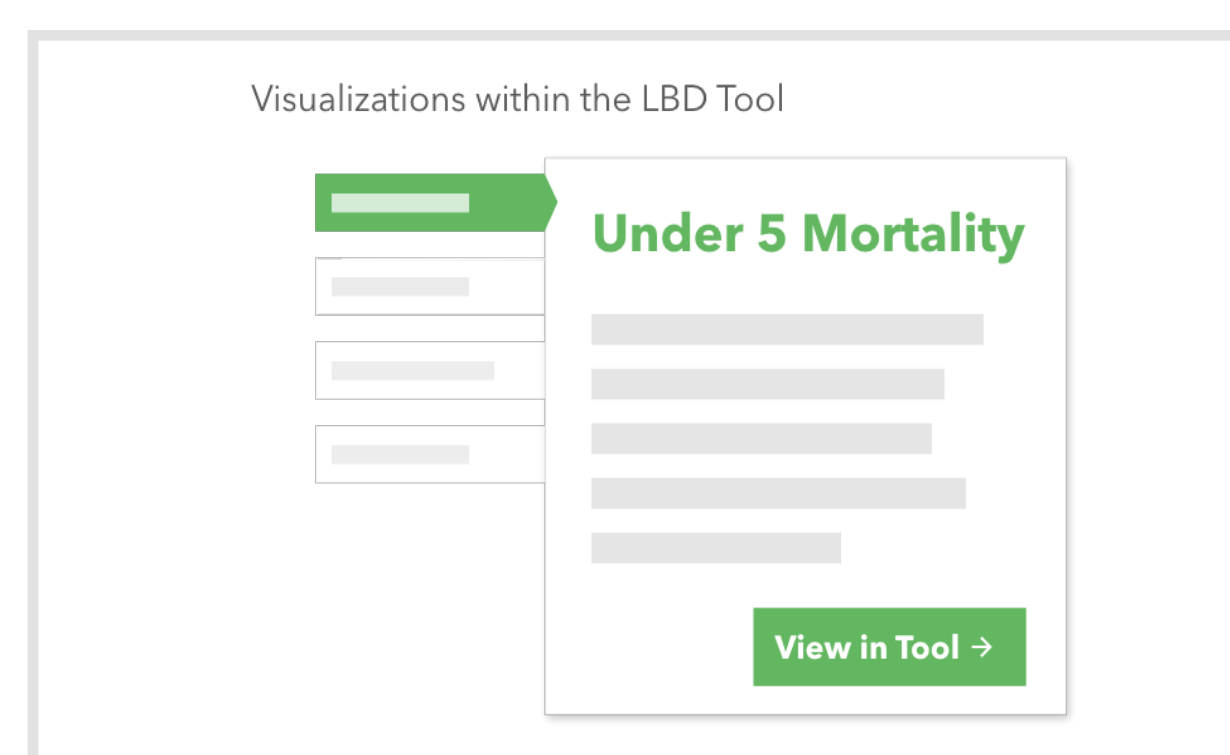
DESIGN ITERATION

After conducting the usability tests, we improved the designs to acco-modate better supporting citations and an expanded table section

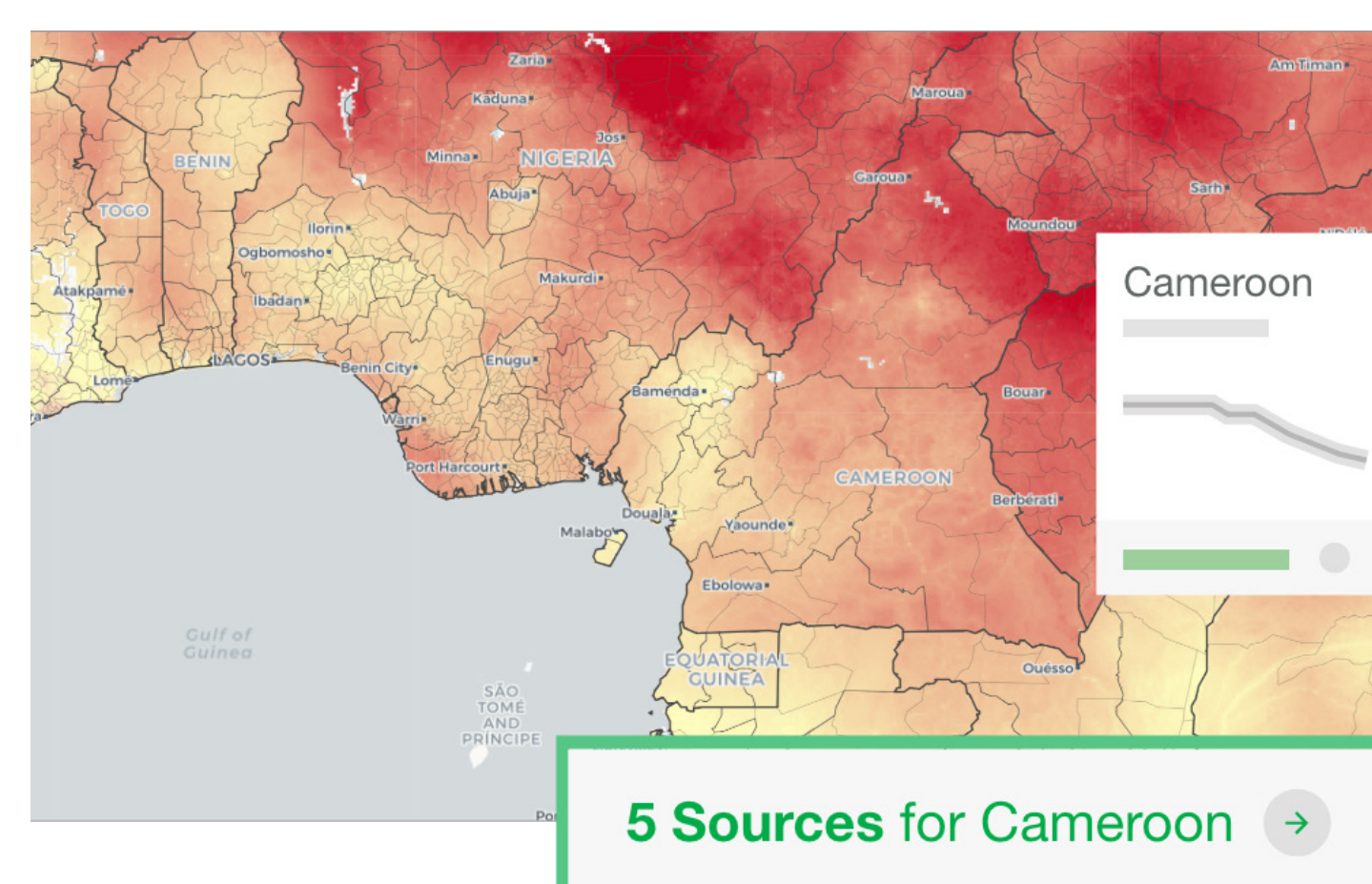## Recommendations for The Local Burden of Disease Tool
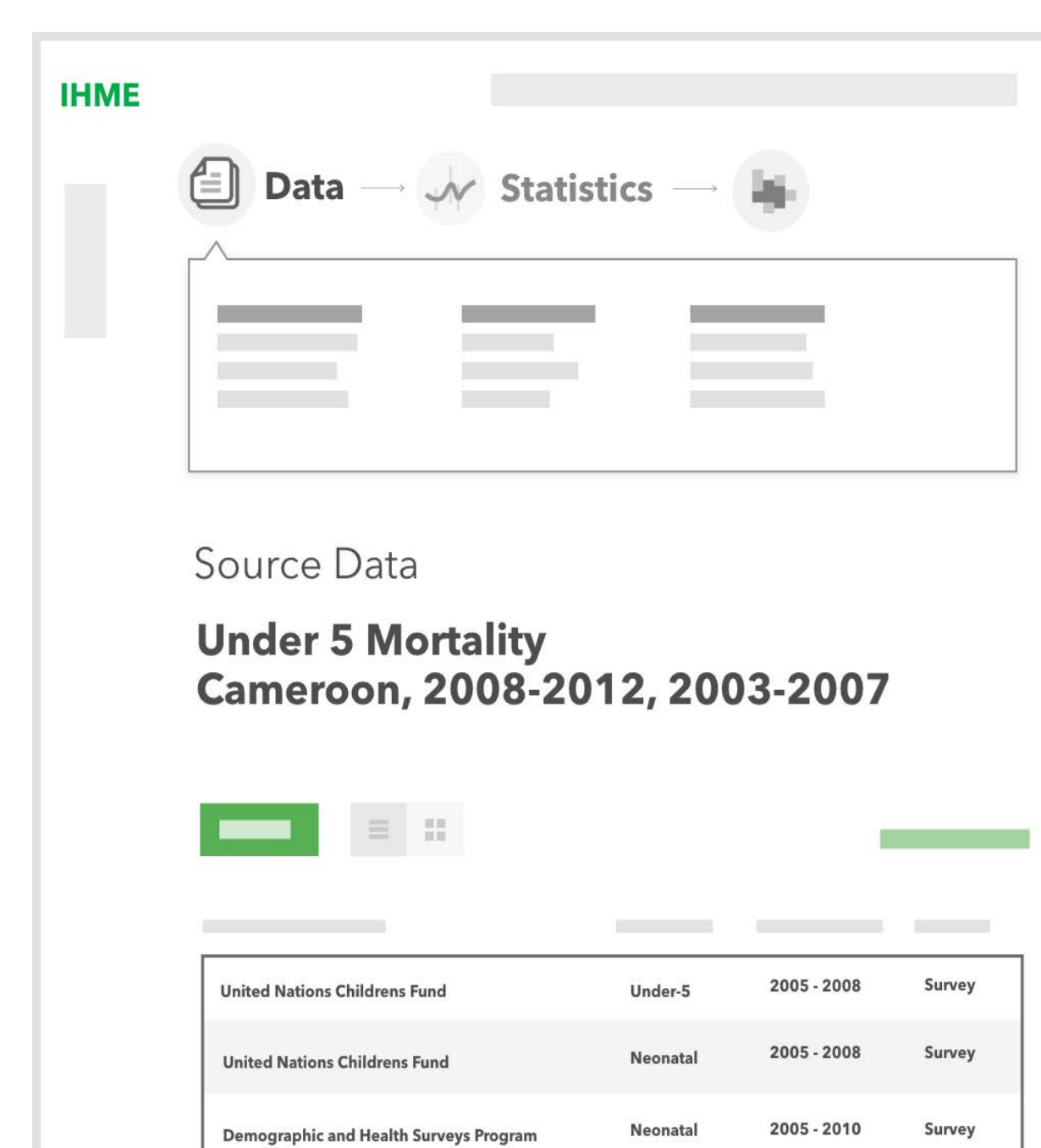
Landing Page

Tabs with individual calls to action give context for each visualization while still framing them within the LBD Tool

A dynamic link from the map page lets users explore source data related to each location

Visualization Page

Source Data Page

An interactive diagram contextualizes source data within IHME algorithms

A filtered "Source Section" shows relevant source data and lets users search by location, age, and health indicator

Molly Donohue
Noah Eisfelder
Wil Sanctis

IHME · COLLEGE OF ENGINEERING UNIVERSITY of WASHINGTON · BILL & MELINDA GATES foundation · Washington Global Health Alliance