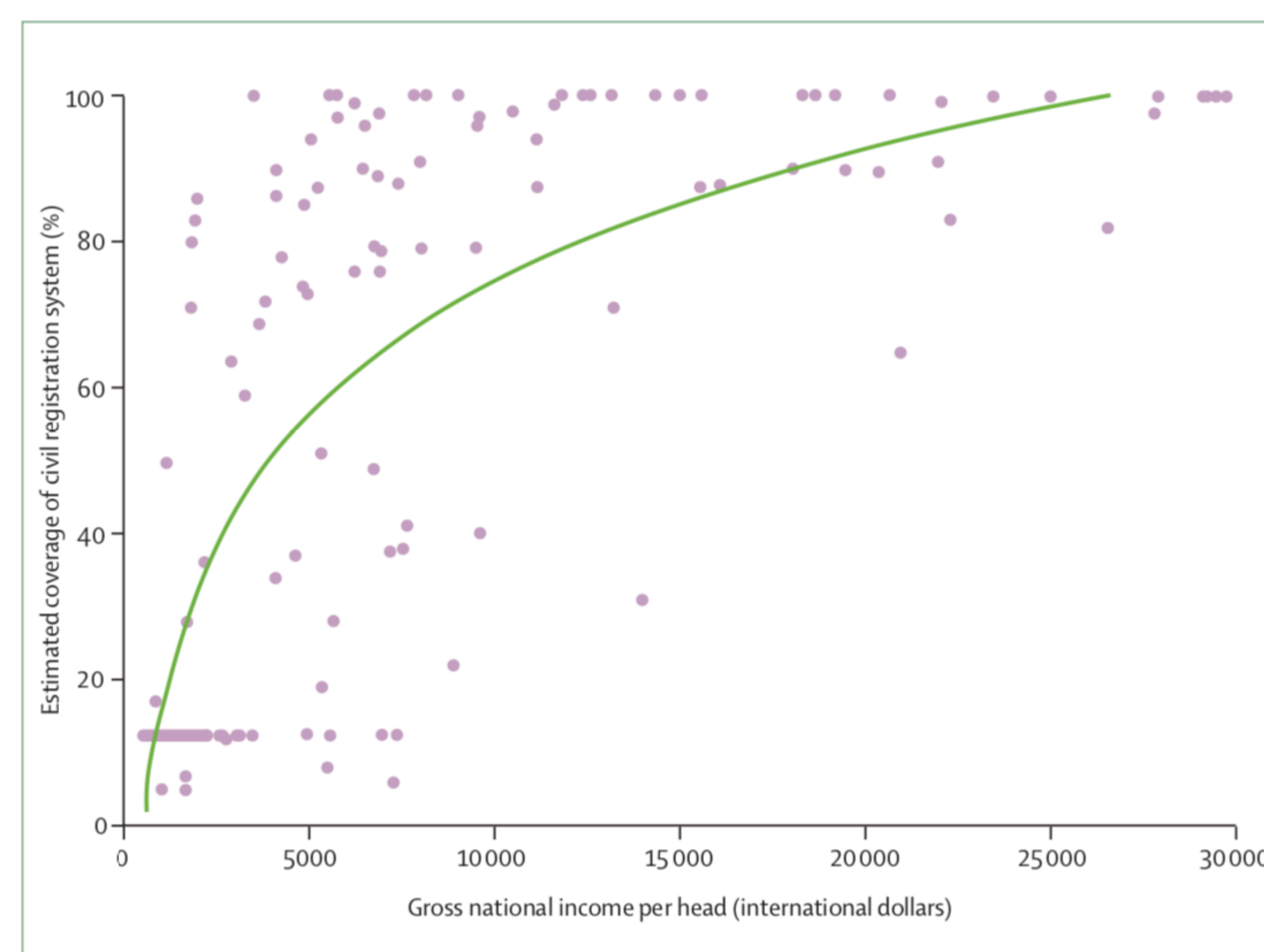


# Verbal Autopsy

Institute for Population Research

## Who Counts?

- Fewer than one-third of deaths worldwide are assigned a cause, with the most impoverished nations having the least information.
- Information about the top causes of death is crucial for monitoring public health, as well as for monitoring and evaluating effective interventions in a timely way.
- Given the complexity and resources needed for establishing comprehensive civil registration systems, new sources of data are needed to inform public health official and policy makers.



## Verbal Autopsy

- Interviews are conducted with someone knowledgeable of the circumstances of a recent death.
- The World Health Organization has developed (and continues to update) a questionnaire for collecting verbal autopsy (VA) data.
- VA data are being implemented around the world, including Bangladesh, Columbia, Ghana, India, Indonesia, Morocco, Myanmar, Peru, Philippines, Rwanda, Sri Lanka, Zambia, and others countries.



## Open VA Tools for Verbal Autopsy

openVA - developed by our team - is software to run automated verbal autopsy coding algorithms. Development is ongoing, and things are changing rapidly. This site provides information useful for installing and running openVA. All of the software itself is contained in 'packages' written for the free, open-source statistical programming environment R. The packages are available through the Comprehensive R Archive Network (CRAN).

### VA Algorithms

- InSilicoVA
- InterVA4
- InterVA5
- Tariff
- NBC

### Other Software

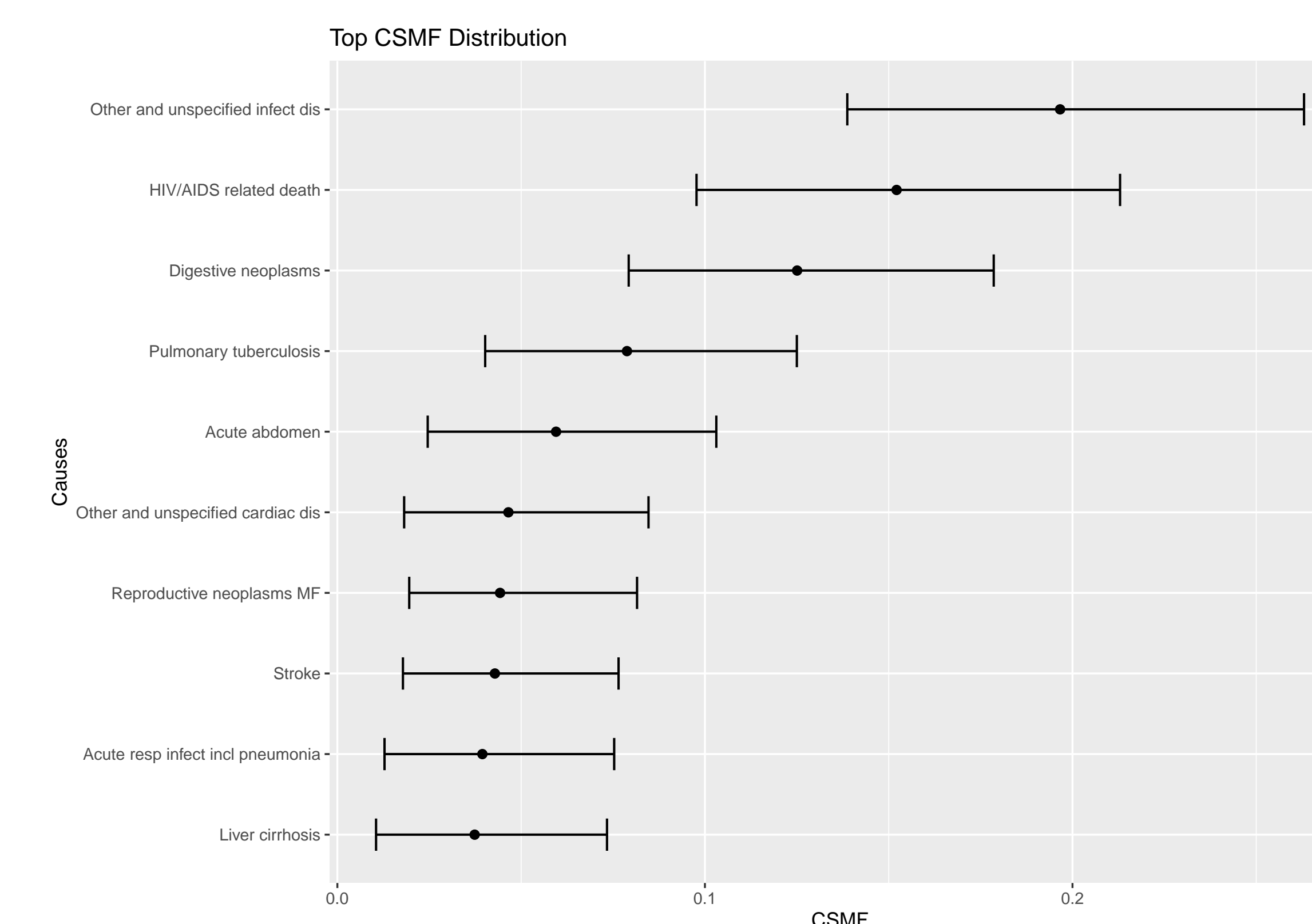
- crossVA
- pycrossVA
- ShinyVA



Scan QR code  
for more details

## Illustration

- Of primary concern is the Cause-Specific Mortality Fraction (CSMF), or the percent of all deaths due to each cause. Algorithms also assign causes to each individual death included in the data. The following figure contains an estimated CSMF from the InSilicoVA algorithm.



- InSilicoVA is unique in that it quantifies uncertainty around the point estimates. This feature is particularly useful when adjudicating between causes (for an individual death) and determining the amount of confidence we should have in assessing the relative importance of particular causes (at the population level).
- The openVA software provides a single tool that allows analysts to assign causes of death using a wide variety of algorithms; and also facilitates the comparison of results from these different methods.
- The openVA team is lead by Samuel J. Clark (Professor of Sociology, OSU) and includes Eungang Choi (OSU), Zehang Li (Yale), Tyler McCormick (Univ. of Washington, Clarissa Surek-Clark (OSU), and Jason Thomas (OSU)
- Our work is supported by the National Institutes of Health, Bloomberg Philanthropies, the Center for Disease Control, and the World Health Organization.

