Brazil

### Institutional Partner
Municipal Health Departments, Federal University of Minas Gerais (UFMG)

### Project dates
July 1, 2019 – January 31, 2021

### Project Title
Improving the Quality of Mortality Data and Analysis Skills in Belo Horizonte, Natal, and Salvador

#### Project Objectives
- Improve quality of mortality data.
  - Improve medical certification of cause of death (MCCD) practices by reducing the proportion of unusable codes in death certificates by 30%.
  - Train 20% of physicians from selected hospitals on MCCD.
  - Train 40% of municipal teams collecting mortality data on epidemiological analysis.
- Introduce lessons on MCCD within the medical school curriculum of selected universities.
- Shorten verbal autopsy questionnaire for community deaths.

#### Project Outcomes and Impact
- Identified hospitals with high rates of unusable codes among death certificates and established hospital committees responsible for improving the quality of mortality data by curbing the prevalence of unusable codes.
  - Reduced the use of unusable codes by 24% between February and June of 2020.
- Trained 220 physicians from private and public hospitals in MCCD.
- Applied ongoing investigations on the quality of mortality data to the COVID-19 pandemic:
  - Provided virtual technical guidance to 18 municipality technicians on how to investigate hospital deaths with COVID-19 diagnoses.
  - Tailored the Investigation of Death from Ill-Defined Cause (IOCMD) form to detect COVID-19 in deaths due to unspecified pneumonia, SARS, respiratory failure, sepsis and others.
  - Taught a course on COVID-19 Epidemiological Surveillance to 58 health practitioners.
- Introduced formal training in MCCD within the School of Medicine curriculum at the Federal University of Minas Gerais.
  - Organized an online course for training over 200 medical students in MCCD.
  - Introduced a COVID-modified shortened verbal autopsy questionnaire as a safer alternative to physical autopsies for home deaths due to ill-defined causes of death.

#### Project Sustainability
- Partnered with a local health department in the creation of a Municipal Committee of Death Revision in Salvador, enabling members of the committee to monitor the quality of mortality data throughout local hospitals.
- Organized training material on MCCD within the medical school curriculum at the Federal University of Minas Gerais.
- Transferred the oversight of mortality data quality to municipal health department and hospital physicians.

#### Project Outputs
- “Deaths due to COVID-19 in Brazil: how many are there and which are being identified?” ([Link](#))
- “The importance of COVID-19 surveillance for epidemic control measures: the experience of Belo Horizonte, Minas Gerais, Brazil.”([Link](#))

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The involvement of local teams and hospital doctors has been decisive for the incorporation of procedures aimed at improving the quality of information on causes of death, especially for deaths from causes related to COVID-19.

- Elisabeth França, MD, ScD
  Visiting Professor of Epidemiology, UFMG

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Improvement of Quality of Mortality Information

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Course on MCCD