Introduction

• The MAP team was tasked by the Gates Foundation + the Burkina Faso Ministry of Health.
• The ultimate goal of this project is to understand the impact of Community Health Worker (CHW) scale-up on malaria prevalence in Burkina Faso (BF).

Objective of Internship

• The objective of this internship was to perform an Exploratory Data Analysis (EDA) of malaria routine case data from BF and clean/impute missing data.

Work Profile

• I began by putting together a country profile of BF.
• Then, I used the R programming language to perform an EDA on the incomplete malaria routine case data provided by the BF Ministry of Health.
• By using a model provided by the team, I imputed the missing data.

Challenges

• This project is faced with a variety of challenges that are difficult to control for:
  • (1) Malaria is not the only disease highly prevalent in BF; meningitis, measles, cholera, and malnutrition are all alarmingly high.
  • (2) There is a humanitarian crisis & security issues, displacing +560,000 citizens, closing +8% of health facilities, and depriving +1 million people of access to healthcare.
  • (3) No case data was reported in 2019 due to a major healthcare strike.

Reflection

• This project introduced me to a field of research I never knew existed before.
• This internship further solidified my passion in global health.
• Improved my coding, communication, and presentation skills.
• I am grateful for the welcoming and collaborative environment that the team provided.
• Greatly appreciative of TKI’s dedication and mission towards happy, healthy kids.

Next Steps

• Up next is an impact analysis of CHWs in BF to be published in a paper, which will be presented to the BF Ministry of Health.

Questions

• Does introducing more CHWs decrease malaria cases in BF?
• If not, what are some alternative methods to continue to decrease malaria prevalence in BF?

Conclusion

• While no conclusions can be drawn just yet, the data is cleaned up and ready for an impact analysis.

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