Data Task - NRHM

Problem Statement

What analyses should be undertaken by SocialCops to help the Government of Maharashtra's Health Department to identify the root causes of the extreme Health trends in Nagpur?

Background

You have been contacted by the Government of Maharashtra's Health Department to build the Analytics engine using the data recorded under the flagship program: National Rural Health Mission (NRHM). The dashboard is targeted for the respective state decision making bodies (Chief Minister's Office). A sample of the data for NRHM Maharashtra, Public Healthcare Centre (PHC), has been shared (Excel). Data Download Link: https://drive.google.com/open?id=oB7 chiwcn-qBSVVKcDhsaXNZeEU

Chief Minister's Office is very keen to understand the possible reasons associated to these health trends, in order to realign scheme implementation efforts to quality of services vs. extent of coverage.

Task

As a data analyst in the team, you are requested to do the following:

- 1. Clean, structure, and prepare the data for the analysis so that you can compare all the files together.
- 2. Prepare a methodology to analyse the data and report 5 important health trends and figure out the reasons behind at least 1 of them.
- 3. Figure out the variables that will help you study the health trends, as well as the explanatory variables that will help you understand the reasons for the current health trends. Give us the list of indicators that you decide to use for the analysis.

Submissions:

- 1. Final cleaned file(s).
- 2. Indicators that you are using as an Excel Sheet.
- 3. Word doc around the methodology, analysis, and final results that you want to share with the Government of Maharashtra.
- 4. Script(s).

Notes:

• An internal document on scheme can be found here: NRHM NRHM

- You will get an overview of the central scheme here: http://nrhm.gov.in/nhm.html
- It's crucial to understand the decentralized healthcare framework in India (Sub-Centre, PHC, District Hospital, Rural Hospital, Referral hospitals), and the care-givers (ASHA, ANM) involved.
- The focus of the scheme is documented here: http://nrhm.gov.in/nhm/about-nhm/goals.html
- Follow this link to get an idea of what of the Maternal Health status and care-giving framework is: http://nrhm.gov.in/nrhm-components/rmnch-a/maternal-health/background.html
- The following links will give you an idea about the current reports generated for monitoring purposes by the Ministry: (1) https://nrhm-mis.nic.in/hmisreports/analyticalreports.aspx (3) ; https://nrhm-mis.nic.in/Pages/HMIS-PeriodicReport.aspx
- Ensure that you understand what are important health indicators globally read up on UN and World Bank reports.
- The task focus is to answer questions such as: What are possible causes of an increasing Maternal Mortality Rate in Maharashtra? Is there an impact of Anemia on Maternal Mortality? Does increasing Immunization coverage during AnteNatal Care (ANC) help in reducing # maternal deaths during/post pregnancy?
- Cover recent news articles to find recent metrics that were quoted and their trends this will give you an idea on what is crucial to assess the scheme's progress.
- The Ministry officials are very well versed with NRHM implementation. Your suggestions should be fine tuned to technicalities of scheme implementation.