Improving Radiographic Data Capture for the Prisma Health Comprehensive COVID-19 Registry

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Introduction

COVID-19 is a highly contagious acute respiratory disease that was declared a global pandemic by the World Health Organization (WHO) in March 2020.

The Prisma Health Comprehensive COVID-19 Registry (PHCCR) was created to allow for analysis of COVID-19 related data. This registry supports local research efforts and allows for collaboration with external partners, such as Viral Infection and Respiratory Illness Universal Study (VIRUS), an international COVID-19 registry with over 300 participating sites in 24 countries.

Radiographic data are essential to understanding COVID-19. However, the narrative-like reports generated from radiographs are difficult to incorporate into patient registries since they require manual abstraction.

Aims

The purpose of this project is to implement quality improvement practices to make the process of radiology data abstraction more uniform and systematic to contribute to the Prisma Health Comprehensive COVID-19 Registry.

- Aim 1: Improve the accessibility, availability, and quality of radiology data related to COVID-19 patients captured in the PHCCR.
- Aim 2: Perform quality assessment of radiology data and implement quality metrics in the PHCCR.

Method

- A REDCap Survey was created using variables from the VIRUS Data Dictionary Codebook.

Results to date

- 5,220 COVID-19 positive patients received a total of 5,676 radiographic imaging between March 1, 2020 and August 31, 2020.
- 2,584 of these images have had their interpretations extracted.

Conclusion

- Given its novelty, it is important to collect radiographic data about COVID-19 to understand how the disease process affects patient populations, its progression, and to evaluate patient outcomes.
- The data collected from the PHCCR can be used in the future to answer novel research questions to increase the knowledge base on COVID-19.

Are you interested in using data from the PHCCR?

Scan this QR code to find out more information about how you can use COVID-19 data collected through Prisma Health for your own research.

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