

Modeling COVID-19 Pandemic and Allocation of Vaccine Distribution [†]

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Abstract: We discuss the problem of vaccinating the individual who is at the front levels. In this model, we are combining a COVID-19 spread and network design model for vaccine planning. First, we formulate a disease spread and then construct a vaccine distribution network. Modeling is based on Capacitated Multi-period, Multi-echelon Facility Location Problem (CMF) for the vaccine distribution.

Keywords: COVID-19; capacitated multi-period; multi-echelon facility location problem (CMF).

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Conflicts of Interest

The authors declare no conflict of interest.