

Managing Concurrency in Cyclical Projects under Stochastic Task Environments: Vaccine Development Projects during Pandemics

Nagesh N. Murthy, Lundquist College of Business, University of Oregon, Email: nmurthy@uoregon.edu

Haikady N. Nagaraja, College of Public Health, The Ohio State University, Email: nagaraja.1@osu.edu

Hossein Rikhtehgar Berenji, College of Business, Pacific University, Email: hossein@pacificu.edu

ABSTRACT

Aggressive overlapping of activities associated with vaccine development, approval, and gearing up for its manufacturing and distribution during the COVID-19 pandemic has been one of the major levers to make effective vaccines available to the public at “pandemic” speed. We provide a framework to manage the overlapping of stochastic tasks.

KEYWORDS: Project Management, Stochastic Tasks, Concurrency, COVID-19 Pandemic, Vaccine Development