

ANALYSIS OF INFLUENZA VACCINE SUPPLY CHAIN SHARING STRATEGIES

UNDER SECURED SERVICE LEVEL: CASE IN JAPAN

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Abstract

This paper aims to analyze the performance differences of different influenza vaccine sharing strategies from non-sharing to full-sharing among medical institutions, based on the background information of Japan. We will use the newsvendor model to assess, under the same service level, the performances including expected shortage, expected waste, expected profit, expected profit gap and expected profit mismatch. We will use k-means clustering simulation to reveal the effects of different clustering and different costs on those performances. The assessment results suggest that under different cost coefficients, different decision of priority will lead to different selection of optimal strategy.