

PERFORMANCE MEASUREMENT IN THE HEALTHCARE SUPPLY CHAIN

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M.Eng. (INDUSTRIAL ENGINEERING)

THESIS ADVISORY COMMITTEE: THANAKORN NAENNA, Ph.D., THNAWUT TANTIMONGCOLWAT, Ph.D.

ABSTRACT

Nowadays, the critical role played by healthcare supply chain performance measurement in achieving competitive success is increasingly recognized by those involved and yet it has still not undergone a measureable improvement. A successful supply chain (SC) is not only concerned about the quality of the products for customers, but also with the organization of the supply chain management in order to gain a competitive advantage. Thus, it is recognized that performance measurement (PM) is a way to improve the SC. The purpose of this study is to study related criteria, which have an impact on the healthcare supply chain performance and aims to establish a PM framework for healthcare supply chain. There is an important new area of collaboration that is a part of driving SC performance and it has not been researched in the past. This framework consists of numerous performance related criteria gathering by the iterative and more reliable processes of the modified Delphi method that are evaluated by the eligible experts. Then, all criteria are built through the complexity of the Analytic Network Process (ANP) processes and total of 153 pairwise is weighed by eligible experts. The results show that the collaboration issues are attracting by the highest weighting scores of 23.4 percent. The outcomes indicated quality, time, and innovativeness by green light, which implies that the performance is excellent and cost, flexibility, and collaboration are indicated by yellow light, which implies that performance needs to improve in these areas. The results of adopting a particular SC should give an incentive to SC members to review their performance. However, this framework can be provided benefits for SC members as using this model to gauge their SC and compare with others in the future.

**KEY WORDS: ANALYTIC NETWORK PROCESS/ HEALTHCARE SUPPLY CHAIN/
PERFORMANCE MEASUREMENT/ COLLABORATION**

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