

Ensuring availability of pharmaceuticals

Interorganizational Learning & Resilience: A Case Study of the Swedish Pharmaceuticals Supply Chain, under Normal Circumstances and in a Crisis.

Emelie Craft and Elin Håkansson, Department of Industrial Management and Logistics, LTH

Stockholm. A hijacked truck has just turned down the popular walking street and are plowing down innocent pedestrians. Sweden's first terror attack has occurred. Meanwhile the alarm has reached nearby hospitals, starting to prepare. Doctors, nurses, surgery rooms and medical materials need to be located, fast. Where can they get additional supplies within a matter of hours? Who is coordinating the resources between the hospitals? Who is responsible if they cannot get enough?

Despite the pharmaceuticals supply chain being critical to provide hospitals and pharmacies with needed pharmaceuticals, Sweden is lacking a clear overview over the supply chain's structure and the involved actors' interdependencies. Not having a clear overview and understanding of interdependencies makes the system vulnerable to disruptions, disruptions affecting Sweden's ability to provide needed healthcare to its people.

A potential strategy to meet the complexity of dependencies and manage the fragmentation within the pharmaceuticals supply chain, is to work with interorganizational learning with the aim of increasing resilience. By increasing its resilience, the supply chain could be better prepared to manage disruptions. For this specific supply chain, it means that medicines will reach the patients in time and potentially save lives.

The purpose of this study has therefore been twofold: Firstly, to map the Swedish pharmaceuticals supply chain to create an overview over the involved actors and their interdependencies. Secondly, to investigate how interorganizational learning between the actors can increase the supply chain's resilience.

The study was conducted as a case study including initial literature studies followed by interviews with actors in the Swedish pharmaceutical supply chain. The two parts of the purpose were investigated in parallel allowing the interviews to cover both topics.

The study presented two main results: First a strategic map over the Swedish pharmaceutical supply chain consisting of three key processes: the material flow, the legal frames, and the collaborations. The process maps reveal weaknesses in the system including just in time deliveries creating sensitivity to disruptions; unbalance of power between distributors and subsequent actors in the supply chain; prohibition to move pharmaceuticals between healthcare providers as well as lack of clear responsibilities during crises. This must be managed going forward and the study presents suggestions for development.

The second result is a theoretical framework of eight interorganizational learning methods to increase resilience and a gap analysis comparing the current actions conducted in the supply chain to theory. The gap analysis enables identification of potential learning methods that could be used to a higher degree going forward. The findings include a need to focus more on joint assessments, to conduct more simulations, on both a strategic and an operational level, and lastly to increasingly analyze experiences on a strategic level.

Why is it important to manage the weaknesses and continue to develop the resilience of the Swedish pharmaceutical supply chain? Reread the first few sentences, and the answer will be simple. To make sure that we have the pharmaceuticals needed when lives are at stake.