

Healthcare supply chain collaboration: a systematic literature review

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Topic area

Healthcare supply chain collaboration (HCSCC) is one of the increasing research topics. Although there are a number of academic studies on HCSCC, the systematic literature review on it is limited. Therefore this systematic literature aims to explore the development of HCSCC and identify the current research trends and limitations in this field from both theoretical and practical aspects in order to identify research gaps for future research.

Supply chain collaboration is a process in which two or more independent parties work together to plan and execute a common goal and mutual benefits (Xu, 2014). Its importance has been demonstrated by many researchers (e.g. Al-Refaie 2014; Vuletic et al. 2017). A more efficient and effective supply chain can be achieved through collaboration between supply chain partners (Ramanathan and Gunasekaran 2014). Cooperation processes include both internal and external collaboration (Slack et al, 2018).

Healthcare Supply Chain (HSC) management has become increasingly essential in recent years. The Organization for Economic Co-operation and Development has estimated that hospitals account for approximately 40% of total health expenditures (OECD, 2017). Between 30% and 40% of a hospital's budget is dedicated to supply chain costs (Landry et al, 2016). HSC management will make major contributors to the healthcare sector.

HSC collaboration has become a strategic issue for HSC management that wish to achieve economy, environment, social sustainability goals. However, supply chain and logistics management practices of the healthcare industry are ten years behind retail and manufacturing industry (Uthayakumar, Priyan 2013). It has been reported that inadequate health service coverage for access and delivery is a global issue (Duque-Uribe et al., 2019). Previous studies on HSC sustainability collaboration highlighted that collaboration can increase organizations' competitive advantage (Soylu et al, 2006). Nowadays HSC have to address multi-level concern to be more environmentally and socially responsible while maintain their responsibility towards sustainability.

Although there is a rising trend in HCSCC, the research about multi-level collaboration is few. Moreover, the horizontal research on supply chain collaboration is remain largely unexplored. Therefore, this systematic literature review as guided by Tranfield et al. (2003) to explore the current state of the literature. Moreover, this study answers the following research questions (RQs).

RQ (1) What are the different collaboration practices adopted in healthcare supply chain?

RQ (2) What gaps exist in the research, and what may be done to contribute to

future research?

Review Methodology

According to Pittaway et al. (2004), there are ten steps to propose a systematic literature review: identify key words, construction of search strings, initial search and identification further key words, select databases, a review of the citation databases using search strings; a review of the citation abstracts and separation into different lists; citation of abstracts and separation into different lists; encoding the abstracts; significant paper review; added or additional papers in professional recommendations and references from review papers.

Comprehensive search of papers. This step includes the identification of key words, forming search strings, database choice (EBSCO, Scopus, Pubmed, web of science). Keywords included related words to supply chain collaboration, and related words to healthcare.

Paper selection standard: Inclusion criteria includes English journal papers or conference papers which focus on healthcare collaboration; Exclusion criteria includes newspapers or reports which only focus on healthcare or supply chain collaboration (Table1).

Table1 Research protocol of the systematic literature review

Research protocol conducts of review	Context
Publishers and database	EBSCO, Scopus, Pubmed, web of science
document type	peer-reviewed journals only:
Language	English
Key words (2 categories)	supply chain collaboration, healthcare
Search terms and search fields	operation management, supply chain management, healthcare management, business management and social science.
Inclusion criteria	journal, conference paper; focus on healthcare collaboration.
Exclusion criteria	newspaper, report; only focus on healthcare or supply chain collaboration

Contribution to theory building

Conducting a systematic literature review aims to have a comprehensive understanding of the theoretical perspectives and the practices (building, testing, absence) prevailing in the field (Touboulic et al, 2015).

This systematic literature review makes two potential contributions: Initially, this study presents a framework for multi-level collaboration in healthcare supply chain. Besides, this systematic literature review identifies theoretical support for different levels of HCSCC towards different aspects of sustainability. From the scholar point of view, this study contributes to theory development in connecting

HCSCC in multi-level and sustainability, and fill the gap of HCSCC.

Journal destination

Healthcare Management Forum

Supply Chain Management: an International Journal

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