

**A distributed decision making process  
from a systems perspective:  
following 33 patients at an emergency department**

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# **A distributed decision making process from a systems perspective: following 33 patients at an emergency department**

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## **Abstract**

Decision making is at the core of our everyday lives, as well as of this thesis. Specifically, the focus of the thesis is the complex and dynamic decision making process taking place at an emergency department. The research idea stemmed from previous work where a mismatch between literature on decision making and reality was found, and resulted in the first research question: how does a complex and dynamic decision making process at an emergency department work?

In order to capture as much as possible of the decision making process, a systems view was chosen, using distributed cognition as the theoretical foundation. This led to the second research question: what are the possible advantages of taking a systems perspective on such a process?

33 patients were followed through their visit at the emergency department. All communication was audio recorded and selected clips were transcribed. The results are described through event chain models, patient scenarios and an information node network. Describing the decision making process in these three different ways went beyond what other methods offer in terms of detail, holism, and having multiple perspectives. This method allowed for different process aspects to be highlighted, and the distributed nature of decision making could be visualised with the information node network model.

In regard to the first research question: five observations concerning practical work stood out, among these that changes of responsibility occur due to time of the day, and that numerous problems exist in connection with computerised artefacts. As for the second research question: a systems view facilitates visibility of all system components and their information exchange paths, which is important when designing artefacts, work processes and decision support systems.

**Keywords:** decision making, process, decision support, distributed cognition

**Language:** English with a Swedish summary