



**KTH Technology
and Health**

Ledning av komplexa operationer i en komplex vårdform

–om ledning, ledningsbehov och möjligheter till ledning för
säkrare vård i hemmet

Command and control in a complex form of care – about needs and
possibilities of command and control for a safer care in the home

Marianne Lagerstedt

KTH Royal Institute of Technology
School of Technology and Health

Licentiate Thesis

Akademisk uppsats

Akademisk uppsats som med tillstånd av Kungliga Tekniska högskolan framlägges fredagen
den 15 juni kl 13.00, Centrum för hälsa och byggande, Hanninge.

Stockholm 2012

Abstract

Advanced home care (ASIH) enables the patient to stay at home rather than to stay hospitalized in connection with severe medical conditions, while simultaneously this Thesis demonstrates that this is in fact not completely unproblematic and without risk. This partly because ASIH proves to be a complex form of care with many different kind of collaterally ongoing care contacts and efforts of care and concern, partly since ASIH concurrently can assume an overview over the treatment process and collaboration or cooperation between several treatment agents from different kinds of organizations and/or operations during all hours. This composes a relatively new heterogenetic and multifaceted context of care which to the professional practice means both new and less known problems within patient safety, which substantially can obstruct and rule out both the completion and the implementation of a safe home care.

The Thesis is based upon an exploratory case study of problems within patient safety in correlation with an advanced home care, and where the research study has had its starting position in the professional practice with an interactive and qualitative research approach. The case study houses two part studies which show that the patient safety problems can be related to an intermediary and multi-organizational form of care, rather than an single operation. A command and control view upon the problems of patient safety, which the professional practice faces, show that missions within the frame of the care form ASIH can be regarded as either a complicated and not rarely a complex operation consistent with Alberts & Hayes (2007) and Brehmers (2008a; 2009c) terminology and where the assignments includes dynamic decision tasks. The case study reveals that the patient safety problems which concretely can obstruct and rule out the completion or implementation of the assignments in a safe way, can be considered related to the layout of the description of the assignments and also a lack of operative and tactical command and control level (of the handling and care of patients) in correlation with the different sorts of assignments that prevails – coincidentally as there is no suitable organization (forums of cooperation) and no appropriate IT-resources for the liaisons which effectively manages to promote and support the forms of cooperation that the character of the assignments also needs. The implicit system of conduct which comes forth through the analysis indicates that there is a need of improvement in order to enable effective command and control for a safer care, since the form of the system of conduct according to Brehmer's (2006a,b; 2007a,b; 2008a,b; 2009c, 2010, 2011) model fails to satisfy the needs set by the function of command and control.

The conclusion of the case study is that advanced home care should be regarded as an intermediary and multi-organizational care form which includes dynamic decision tasks and character wise complex operations contemplated per patient, thus demanding substantial command and control resources, a new point of view upon management and new auxiliary means of management in order to maintain a safe care during the implementation. The hypothesis which has been crystallized during the conclusions of the case study is that a more effective control and command and appropriate auxiliary means of command and control in real time, concerning primarily the handling of patients at the time of a change in care form, can improve the conditions of work in the professional practice and also result in more patient time, which consequently can be expected to contribute to concept of "Good care" i.g. cost effective, patient safe and dignified care.

Keywords: advanced home health care, careform, command and control, complex endeavor, digital medical patient record, patient safety, referral, shared situational awareness