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CARING MACHINES
EMERGING PRACTICES OF WORK AND COORDINATION IN THE USE OF MEDICAL EMERGENCY COMMUNICATION TECHNOLOGY

Abstract

The study of technology has recently become more focused in various schools of sociology. However, Marxist, functionalist, social constructivist, and ethnographic research, have tended to explain technological development either from macro or micro perspectives. Further research is needed to increase our understanding of technology as situated in its social and institutional contexts, where individual and professional relations are considered. In this thesis, elements from several approaches are applied to the study of communication technology in Norwegian medical emergency communication centres.

About ten years ago, LV (doctor-on-call) centres, each manned by one nurse to handle local requests for a doctor, were established in nursing homes. AMK (acute medical communication) centres were introduced in hospitals, and are manned by teams of two to four nurses and ambulance coordinators to handle medical emergency calls (113), internal hospital alarms and local requests for a doctor. Even though the intensity and work loads are very different between the LV and AMK centres, the technical artefacts that are used are basically similar in both types of centre.

Using a comparative case approach, the use of technology was studied through interviews with nurses, doctors and administrative personnel and by observations of the work in six LV and three AMK centres.

There are three main findings in this thesis. First, the operation of LV centres in nursing homes conflicts with the general nursing home practice, and many LV centres are redefined by its users as switchboards to decrease the burden that is placed upon them.

Second, the nurses who work with requests for doctors in a similar way in the AMK centres in fact manage to solve many problems on the phone. The thesis discusses how these differences have emerged from performing the same job with the same technological tools.

Third, the handling of emergency calls at the AMK centres is accomplished through intense social and technically coordinated work. An ideal model of this kind of coordination, “the coordinated climate”, is developed from the observations in the AMK centres, and results from control room studies are applied.

The three findings are summarised in a discussion of how structures constrain and facilitate social and technological practice.