Supporting a high quality Diagnostic Procedure through Multidisciplinary Collaboration between Medical Specialists

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Disease and illness in the upper gastrointestinal tract often requires a multidisciplinary medical approach in order to provide high quality health care. At Karolinska University Hospital, a coherent healthcare process has been developed and implemented in order to provide the best possible care for patients based on a multidisciplinary approach. The process starts when the patient is remitted to this highly specialised care unit and ends when the patient leaves for aftercare. Throughout the process, a number of decisions and diagnoses need to be made, which requires collaboration between medical specialists with different competencies. These specialists may be located at other care units in Sweden.

The manner and speed in which the diagnoses are made are crucial for the success of the treatment of the patient. By using ethnographic methods, we describe the details in how the medical specialists cooperate to make diagnoses and decisions (medical as well as administrative). Such descriptions, rich in details, make it possible to propose methods and technologies that support the diagnostic procedure.

When a patient enters the healthcare process he/she is accompanied by a first, sometimes preliminary, diagnosis of the cause of the patient's illness. The surgeon responsible for coordinating the incoming patients at the specialized care unit, decides if complementary samples, X-rays, etc. are needed, on which an accurate diagnosis should be made. The next step is a multidisciplinary video mediated meeting. During the one hour meeting the responsible surgeon introduces the patient, the radiologist communicates the diagnosis through MRI, CT and other X-ray pictures, and the pathologist explains the results from samples made. Together, specialists with competence in radiology, surgery, transplantation surgery, pathology, oncology, internal medicine, and anaesthesiology, from different hospitals, with knowledge about the patient and experience from similar cases within their field, come to a consensus about how to proceed with the treatment. The meeting decides if an additional investigation is needed and if and when to operate. After surgery, complications may occur making a new diagnosis necessary. Here, two or three specialists, including the surgeon, may be involved in the diagnostic procedure.

To summarise, the diagnostic work within the described healthcare process requires collaboration, on many levels and in many forms, between medical specialists with different competencies. To understand how these specialists, sometimes geographically distributed and always with a limited time to their disposal, interact and collaborate is fundamental for proposing methods and technologies that support the diagnostic procedure. We are especially interested in collaborative aspects, e.g., awareness, work and effort, communication mechanisms, etc., of work and technology within this medical setting

This work in progress is part of an interdisciplinary project with participants from Karolinska, KI and KTH. The results presented in this workshop paper are based on initial field studies, including observations and interviews, performed within the medical setting, as well as experiences from the in the project participating medical specialists.