

Use of Information Systems in an Intensive Form of Mental Health Home Treatment

Stefan HOCHWARTER^{a,b,1}, Andreas BECHDOLF^d, Martin HEINZE^b, Sebastian VON PETER^b, Stefan WEINMANN^{c,d} and Julian SCHWARZ^b

^a Norwegian University of Science and Technology, Trondheim

^b Brandenburg Medical School Theodor Fontane, Rüdersdorf

^c Clinic for Psychiatry, Psychotherapy and Psychosomatic, Rudolf-Sophien-Stift
Stuttgart

^d Vivantes Clinic for Psychiatry, Psychotherapy and Psychosomatics Am Urban, Berlin

Abstract. This paper reports findings from a case study on the use of information systems in Germany's mental health home treatment. Data were collected following an ethnographic approach, three themes were identified: (i) misfit of systems, (ii) whiteboards as central planning tools, and (iii) patients and their environment. We conclude by highlighting the specific nature of home treatment.

Keywords. case study, health ICT, home treatment, mental health, work practice.

1. Introduction

Home treatment for mental health patients has been around for some time now. In an international context, psychiatric reform ideas were discussed from the middle of the twentieth century. European countries have picked up these early approaches, and they have implemented forms of home treatment. Germany's first trial on home treatment started in 1998. The first form of a specialist, intensive home treatment in Germany was introduced by 2018, called Inpatient Equivalent Home Treatment (IEHT) [1]. This form of treatment at a patients' home poses new requirements to information systems, in addition to an already complex field [2,3]. We aim to investigate the use of current systems in place and contribute with our findings to the design of future systems.

2. Method

The study took place at two German clinics, which have implemented IEHT. Clinic A is located in a tense district in a major city, while Clinic B is located on the outskirts of the same city, serving a rural area. Data were collected by go-alongs, a form of participant observation that follows the actor(s) of interest and gives space for questions while observing [4]. Data were collected in two weeks in March and August 2020. Field notes were analyzed following the Constructive Grounded Theory approach [5].

¹ Corresponding Author, Stefan Hochwarter, NTNU, Department of Computer Science, NO-7491 Trondheim, Norway; E-mail: stefan.hochwarter@ntnu.no.

3. Results

The home treatment teams in both clinics have a different approach to manage their work and use information systems. Three themes were identified.

Misfit of systems: While the home treatment teams in the two clinics use different systems and have different ways to organize their work, they both depend on the infrastructure provided by their clinics. For example, their Electronic Health Record (EHR) systems are not designed for mobile documentation. The home treatment teams in clinic A are taking mainly notes by hand and enter the documentation in the EHR system after they have completed the visits. In clinic B, they decided to use a laptop to document the treatment and import a generated report into the EHR system once they returned to the office.

Whiteboards as central planning tools: In clinic A, the whiteboard was notably the most prominent artifact in the office. The home treatment teams are consulting the table on the whiteboard in the morning when planning their tours, refer to it during handover meetings, and often take a photo before the visits. Colored magnets, some with their names on them, are moved around, and printouts and Post-its with handwritten notes are pinned to the board. The absence of a similar coordination artifacts in the other clinic is a strong indication of how the work varies within the field of home treatment.

Patients and their environment: In both clinics, the home treatment teams know their patients well. They discussed the patient's history and medication in detail during meetings without looking at their notes or consulting the EHR system. They know how the patients want their medication dispenser arranged, adjust their tour planning based on the patients' preferences, and support them with tasks not directly related to therapy. Visiting patients at home allows them to get a more intimate picture of the situation, and persons close to the patient are sometimes consulted during therapy.

4. Discussion and Conclusions

The results show that there are specific requirements for systems that support the work of home treatment. While both clinics offer the same service to their patients, implementation differences are evident. Also, the site where the home treatment takes place is of significance. The team of clinic B, situated in a rural area, spends much time driving to or from patients. They use the time to reflect on the patients and write the treatment documentation, even when this entails a workaround.

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