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## Exploring the Benefits and Challenges of Tele-Healthcare

*A Multiple Case Study of the Use of individual Video-Consultations in Alcohol Addiction Undergoing Withdrawal Treatment and Sexual Counselling in Denmark*

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# Exploring the Benefits and Challenges of Tele-Healthcare: A Multiple Case Study of the Use of individual Video-Consultations in Alcohol Addiction Undergoing Withdrawal Treatment and Sexual Counselling in Denmark

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## Introduction

Tele-healthcare has been growing rapidly because it promises fundamental benefits as improved access, reducing the cost of healthcare and increasing efficiency, improving quality and reducing travel time and related stresses for the patient [1].

This paper is about a multiple-case study in the development and implementation of two digitally supported health services in the treatment of patients suffering from alcohol addiction undergoing withdrawal symptoms and in patients who engage in sexual counselling.

## Methods/Design

This study is a mixed methods multiple case study. Qualitative data include observations during the participatory design processes, semi-structured interviews with organizational health professionals and a review of documents (e.g., implementation and quality improvement plans, program manuals, etc.) that will shed light on the innovation process and specific implementation strategies that are used to implement the new intervention and practices. Additionally, focus groups with clinicians will explore their perceptions of the use of video-consultations [2,3,4].

We pursue a hypothesis that video consultations for and with patients suffering from alcohol withdrawal symptoms and people undergoing sexual counselling can empower the patient whilst freeing administratively bound resources to enable higher-quality care. The case-studies are based on theories of co-creation, specifically, we use elements from Participatory Design and User Innovation Management theory to co-create new, tele-medically inspired solutions that better patient treatment outcomes, compliance and engagement.

## Results

The study shows that new technologies within healthcare can enhance public value particularly seen from a patient/user perspective. We also observe that the implementation of co-cre-

ation derived methodologies has fostered a more innovative culture within the work-environments. The participatory design process with high user-involvement turned out to be a viable and feasible solution developing the video-consultations despite two clinical contexts marked by taboo and reluctance to deal with technologies.

## Discussion

Technological innovation within healthcare does not always show cost effectiveness immediately. It is important to see development and implementation of tele-healthcare as a process that can improve the quality of care and eventually save money in the organisation. Working with tele-healthcare-innovation can, as in our cases, lead to changes within the culture in the organisation, so the innovation process create value in itself.

However, tele-healthcare in this field still poses some technical and practical problems for healthcare providers, such as worries about technology's limitations, lack of training and routinization. Yet, a faster and more responsive societal and political adoption curve and willingness to adopt video consultations on par with regular consultations is necessary, in order for this practice to become economically viable, sustainable and scalable for practitioners.

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