## **PUBLIC SUMMARY**

## **Optimising Nedap Ons for Disability Care**

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This bachelor's thesis focused on improving the electronic health record (EHR) software suite by Nedap called Ons. It was improved specifically for disability care (gehandicaptenzorg in Dutch, GHZ). The study centred on optimising communication between two important roles in intramural care within the GHZ: residential support workers and activity coordinators. Residential support workers help clients within their residences, and activity coordinators manage daytime activities. Effective communication between these roles is important for maintaining a seamless care experience for clients. The main research question guiding this study was: "How can interaction with Nedap Ons be tailored to the specific needs of residential support workers and activity coordinators in disability care, to enhance communication between these roles and support resident care?"

To answer this question, the research followed a design thinking approach, as presented by the *Interaction Design Foundation* (2024). The research was divided into three phases: problem scoping, problem definition, and (conceptual) design suggestions.

The first phase focused on expert interviews to identify key areas of concern in current workflow and information-sharing practices. The second phase involved user interviews with residential support workers and activity coordinators to understand their specific needs, challenges, and interactions with Nedap Ons. The work from these phases was used to develop design concepts in the last phase. These were evaluated, to arrive at a final design.

It was found that even though both roles access the same client information through Ons, the system was more based on the needs of the residential support workers. Activity coordinators had more difficulties with accessing relevant information, which could lead to gaps in care continuity.

The research proposed a new feature called the Client Handover Hub (CHH) to address these issues. The CHH is an application that focuses on streamlining the client handover process between the residential support workers and the activity coordinators. By reducing the number of steps needed to access client information, enhancing the accessibility of relevant data through improved filtering and search functionalities, and integrating seamlessly with existing Ons applications, the CHH improves the efficiency of activity coordinators

A prototype of the CHH was developed and validated using expert evaluations and user testing. The design was guided by the NASSS (Non-adoption, Abandonment, Scale-up,

Spread, and Sustainability) framework by Greenhalgh et al. (2017). It was used to ensure the CHH addressed important factors influencing technology adoption in healthcare environments.

The CHH features a main client group page displaying group reports and a participants lists. Users are able to navigate to the individual client pages by using a sidebar. These individual client pages highlight important information such as medication, care plans, and quick access to specific client reports and full health records. The CHH is designed to function as a standalone application within the Ons suite, but also as a pop-up within existing Ons applications like *Groepszorg* ('Group care', translated from Dutch). By focusing on the needs of activity coordinators, the CHH is designed to support more efficient and effective care in disability care settings.

Future research could add more functionality to the CHH, to support activity coordinators throughout their entire workday besides the handover, investigate potential benefits for other healthcare roles, and explore integration with the Ons mobile application. Also, more user testing of alternative designs can be done, as well as research into colour usage within the CHH.

In conclusion, the important role of user-centred design in healthcare technology is shown by this research. To improve workflow efficiency, communication, and to ultimately deliver better care, it is important that software solutions are tailored to the specific needs of user groups and healthcare providers. In this modern day and age, the world gets more digital per minute. It is therefore important to create well-implemented and adapted ICT solutions for the healthcare sector while understanding the user's needs. This leaves time for what is actually important, providing quality care.

## References

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