

Personalized outcomes forecasts in supervised exercise therapy for patients with intermittent claudication

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OBJECTIVE AND OUTLINE

This thesis aims to create and implement personalized outcomes forecasts to improve physical therapy care for patients with intermittent claudication by advancing the application of evidence-based treatment at the individual level. In the Netherlands, evidence-based guideline recommendations for patients with intermittent claudication are widely implemented through the stepped care model. Successful implementation of the stepped care model, in which SET is provided as an initial treatment approach, has been made possible by the network of Chronic CareNet. This guideline-based medicine seeks to reinforce evidence-based practice, but additional innovations are needed to assist clinicians in adapting and applying group-level evidence with individual patients. We propose personalized outcomes forecasts as mechanism for advancing personalized care, without losing the 'evidence' in evidence-based practice.

Chapter 2 explores whether patient characteristics and functional outcomes of SET are related freedom from revascularization in patients with intermittent claudication.

Chapter 3 describes the use of routinely collected health outcomes to facilitate continuous learning among physical therapists. An example of a learning health system is provided as blueprint for physical therapists to distill meaning from routinely collected clinical data. **Chapter 4** describes the methodological development of personalized outcomes forecasts. **Chapter 5** explores the use of personalized forecasts by physical therapists through a vignette study. This first use provides us with valuable lessons to improve upon the clinical tool and to optimally facilitate implementation and use in daily practice. **Chapter 6** describes the protocol of the methods of implementation and the study design to evaluate process and impact of the implementation of the personalized outcomes forecasts. **Chapter 7** provides a general discussion and conclusion of this thesis.