



## **Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable interventions**

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The majority of behavioral, biobehavioral, and biomedical interventions in use today have been evaluated as a treatment package using a two-arm randomized controlled trial (RCT). This approach is an excellent way to determine whether an intervention is effective. However, the treatment package approach is less helpful in providing empirical information that can be used to optimize the intervention to achieve improved effectiveness and efficiency, while maintaining a desired level of economy and/or scalability. In this seminar an innovative methodological framework for optimizing behavioral interventions, the multiphase optimization strategy (MOST), will be presented. MOST is based on ideas inspired by engineering methods, which stress both ongoing improvement of products and careful management of research and implementation resources. MOST is a comprehensive strategy that includes three phases: preparation, optimization, and evaluation. MOST can be used to build a new intervention or to improve an existing intervention. Using MOST it is possible to engineer an intervention to meet a specific criterion; for example, the objective might be to identify the intervention that achieves the best outcome obtainable for less than a specified implementation cost. MOST can be applied to any type of intervention, but it is a particularly natural fit with internet-delivered interventions.

This workshop will provide an introduction to MOST. A substantial amount of time will be devoted to experimental design, which is an important tool in MOST. Time will be reserved for open discussion of how the concepts presented can be applied in the research of attendees.

**Seminar and workshop:** Is there an alternative to the RCT?

**Date:** Thursday 7 February, 2019

**Venue:** Seminar room, Department of Medicine, University of Otago, Dunedin

**Time:** 10am-4pm (lunch provided)

Numbers are limited for this free workshop, so please email [diabetes@otago.ac.nz](mailto:diabetes@otago.ac.nz) to reserve your place.