

# 12 November 15:00-18:00 CET

### Workshop 1: Basics of Implementation Science and an Introduction to Effectiveness-Implementation Hybrid Designs

### Faculty:

Prof. dr. Geoffrey Curran, PhD, (University of Arkansas for Medical Sciences, USA)
Prof. dr. Bart van den Bemt, PhD, PharmD (Radboud university medical center, The Netherlands)
Dr. Charlotte Bekker, PhD (Radboud university medical center, The Netherlands)
Prof. Dr. Leah Zullig, PhD, MPH, (Duke University and Durham Veterans Affairs Centre for Health Services Research in Primary Care, USA)
Prof. Dr. Sabina De Geest, PhD, RN (University of Basel, Switzerland & KU Leuven, Belgium)
Prof. Dr. Liset van Dijk, PhD, (University of Groningen & NIVEL Utrecht, The Netherlands)

# Introduction:

Implementing evidence-based practices into routine care is difficult and requires strategies that address contextual factors including the complexity of systems of care, including individual practitioners, senior leaders and local culture. From the time evidence is generated to the time it becomes part of everyday practice, the timeline often exceeds 17 years. Traditionally, much attention has been given to developing evidence about the effectiveness and safety of an intervention. This requires a focus on internal validity with highly selected patients in highly selected environments. However, the ultimate impact of health innovations depends not only on the effectiveness of the intervention, but also on external validity and its reach in the population and the extent to which it is implemented properly.

Hybrid designs are an approach to streamline the research process by gathering information about effectiveness and implementation in tandem. Instead of first ensuring an intervention works, followed by testing whether an intervention can be translated into the real world, the impact of an intervention introduced in real world settings and the implementation strategy can also be tested simultaneously. As a result, the time lag between development of an evidence-based intervention and routine uptake in the community can be reduced. Blending effectiveness and implementation research in one trial will result in more rapid translational gains in clinical intervention uptake, more effective implementation strategies, and more useful information for researchers and decision makers.

This introductory workshop will learn participants the basics of implementation science and will learn participants more about the theoretical background of the application of type I, II, and III hybrid design studies.

### Agenda and learning objectives:

# Session 1: Basics of Implementation Science (30 minutes)

Learning objectives:

- Differentiate implementation science from clinical effectiveness research, improvement science, and quality improvement.
- Understand common measurement approaches and frameworks used in implementation research.
- Identify categories of implementation strategies and discrete evidence-based implementation strategies, especially those relevant to medication adherence.

# Session 2: Introduction to Effectiveness-Implementation Hybrid Designs (45 minutes)

Learning objectives:

- Understand the rationale for blending clinical effectiveness and implementation research approaches/questions within the same study.
- Differentiate between three types of effectiveness-implementation hybrid designs.
- Become familiar with approaches to study and understand implementation context.
- Understand how effectiveness-implementation hybrid designs can be used when adapting and/or blending evidence-based interventions.

### Session 3: Hybrid Design Exercise (45 minutes)

Learning objective:

• Recognize the different types of effectiveness-implementation hybrid designs in study protocols.

Participants will break into small groups and analyse two study protocol papers which proposed hybrid designs, but did not specify which type. The groups will determine which hybrid design type is most reflected by each protocol and why.

### Session 4: Questions and Open Discussion (30 minutes)

Plenary discussion for a final questions and answers. Participants can also discuss their project ideas and receive feedback from the speaker and the group about whether and how a hybrid design could be useful.

### Learning methods:

Interactive webinars; case study analysis; discussion; small group work.

Maximum number of participants: 30