Workshop 1: Intersection of implementation science and e-Health

Faculty:
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Introduction:

The 2019 ESPACOMP annual meeting in Porto will be preceded by a day-long workshop on 21 November addressing the intersection of implementation science and e-Health. Building upon prior ESPACOMP implementation science workshops, the goal of this advanced workshop is to delve deeply into how implementation science support intervention development and implementation with the goal of creating programs that can be adapted to local context, disseminated or translated to other settings, and sustained over time. To accomplish this goal, we will learn to apply knowledge and understanding gained by experience in an international best practice case study in stem cell transplantation. Balancing theoretical discussion, and practical hands-on learning, this workshop will be comprised of interactive presentations, group work, and discussion. The workshop will be facilitated by an international, multidisciplinary team: Bart van den Bemt (Netherlands), Sabina De Geest (Switzerland & Belgium), Leah Zullig (USA), Lynn Leppla and Janette Ribaut (Switzerland).

This workshop is intended for health services researchers, clinicians, educators, and policy makers who have some experience in the design, implementation, testing and/or dissemination of (adherence-/e-health-) interventions. Participants should have knowledge of evidence-based behavioural and organizational theories relevant to intervention implementation. Balancing theoretical discussion and practical, hands-on learning, the workshop will comprise interactive presentations, group work, and discussion. The case study on stem cell transplantation will provide concrete examples to guide and stimulate the application of new content learned.

Learning objectives:

- To discuss theoretical underpinnings and methodological approaches for developing, implementing and evaluating eHealth applications for real world settings based on user centered design;
- Apply learned theory/methodologies on a case study.

Learning methods:

Interactive presentations; case study analysis; critical reflection; discussion; small group work.

Best practice case study

This year's case study will build on the SMILe study: Development and Testing of an Integrated Model of Care in the Continuum of Allogeneic Hematopoietic SteM Cell TransplantatIon (HSCT) faciLitated by eHealth. The aim of the SMILe

study is to create, implement and evaluate an eHealth-powered integrated care model for follow-up of patients after HSCT. Based on the principles of Chronic Care Model, the SMILe intervention should realize a continuous feedback loop of information (e.g., linking medical parameters, symptom burden, and health behaviors) between the home health setting and the HSCT center, as well as the delivery of specific intervention bundles (e.g., support for self-management). Before implementing the SMILe-intervention a good understanding of practice patterns and context of HSCT follow-up care and the level of technology openness of HSCT patients and clinicians is needed.

Therefore, the SMILe study had the following **aims**:
1. To identify practice patterns and context of HSCT follow-up care with special focus on chronic illness management and to assess technology openness of HSCT patients and clinicians.
2. To develop a SMILe-Prototype
3. To develop implementation strategies in parallel to the prototype development as a basis for future implementation of the SMILe care model in other HSCT centres.
4. To test the SMILe-prototype in view of health care utilization (primary outcome), treatment burden, medication adherence, GvHD episodes, and survival (secondary outcomes) in the first year after HSCT as well as to evaluate the acceptability, feasibility, adoptability and fidelity of the SMILe-prototype

***Design/Methods**:* A Type 1 Mixed Methods Effectiveness Implementation Hybrid Design was used. This latter methodological approach combines evaluation of clinical effectiveness with attention for implementation strategies in order to speed the translation of research findings in clinical practice.
For aim 1 and 2, an explanatory sequential mixed method design (combination survey design & focus groups) for contextual mapping of practice patterns in view of chronic illness management (BRIGHT study) and technology assessment in end-users (PICASSO-Tx (KU Leuven)) was used.
Aim 3: Information's gathered for aim 1, will be used for the development of the SMILe prototype as well as the development of implementation strategies.
Aim 4: After development of the SMILe prototype (theory-based intervention development, user-centered design), the prototuype will be tested by an RCT design.

Bibliography:

Participants must be well prepared in order to get the maximum benefit from the workshop. A limited list of journal articles and workshop case studies (mandatory reading) will be sent to participants approximately one month prior to the meeting.

Maximum number of participants: 50

Requirements for participation: Experience in the design of formal implementation & dissemination strategies, and/or testing of adherence interventions. Knowledge in behavioural theory and interventions. Reading of preparatory materials.

All participants need to print out the materials themselves.
Hard copies will <u>not</u> be provided at the conference!

AGENDA

09:30-09:50	**Welcome and Review of the Workshop Program**	Bart van den Bemt
	General overview and welcome. Participants will introduce themselves, and their previous experiences with e-health implementation, with their small groups.	
09:50-10:20	**Overview of Implementation Science & Digital Health**	Leah Zullig
	Quick refreshment review of implementation theory (general)	
10:20-11:20	**Small Group Work 1** How to design an intervention already anticipating on implementation?	Leah Zullig/Bart van den Bemt
	Based on a case-study, participants will discuss in small groups which aspects should be considered during the design of an intervention, enabling successful implementation/evaluation of an intervention.	All
11:20:11:35	***BREAK***	
11:35-12:15	**Development and Testing of an Integrated Model of Care in the Continuum of Allogeneic Hematopoietic SteM Cell Transplantation facilitated by eHealth: the SMILe-project**	Sabina De Geest Lynn Leppla Janette Ribaut
12:15-13:00	***LUNCH***	
13:00-14:00	**Small Group Work 2:** Learning from the SMILe-project	Leah Zullig/Bart van den Bemt
	Participants will reflect in small groups on the different steps of the SMILe-project methodologies and the reasons behind each step	
14:00-14:30	**Break**	all
14:30-15:30	**Small Group Work 3:** **Translation of the lessons learned from the SMILe-project to the real life case study**	Leah Zullig/Bart van den Bemt
	Application of the SMILe-project methodology on the case study (used in Small Groupwork 1)	all
15:30-16:00	**Discussion and Evaluation of Workshop & Conclusion**	Sabina De Geest
	Review current workshop and discuss improvements in future workshops.	