Course plan: Implementation of complex interventions in healthcare: 7,5 ECTS

Aim: To provide qualified insights in practical implementation of different healthcare interventions such as new interventions and clinical guidelines and a broad overview of research on how to improve healthcare.

Eligibility: Enrolled as PhD student, Good command in English. All lectures, assignments, and examinations will be in English.

General information: The course is open to PhD students in different fields relevant to implementation of new knowledge in healthcare practice such as caring sciences, medicine, psychology, and public health.

Credits: 7,5 ECTS

Grading: Approved/Not approved

Level of education: Postgraduate

Course type: Subject course

Main field: Medical science

Language: English

Course length: Weeks 4-11, 2018

Responsible department: Department of Women’s and Children’s Health, Uppsala University

Number of participants: 10-25

Course plan valid from: Autumn 2017

Education goals

After finishing the course the students should be able to:

- Understand and describe the complexity of implementation of interventions and clinical guidelines in healthcare practice
- Have in-depth knowledge of different theoretical perspectives, methods, and strategies with regard to implementation science and the relevance and usefulness of these for healthcare practice
- Understand and describe how implementation of interventions and guidelines can be measured and how to design studies with such a focus
- Explain and analyze what implementation of new knowledge in healthcare practice demands with regard to strategies, resources, and actors
- Apply all of the above mentioned in writing a research proposal to study implementation of an innovation in healthcare practice

Content

1. Implementation of change: introduction and concepts
3. Characteristics of successful implementation strategies
4. Evaluation of implementation: designs and methods
5. Interactive session
6. Implementation in healthcare practice and the role of different actors
7. Implementation and evaluation of a community based participatory intervention
8. Workshop on intervention mapping
9. Final seminar (please see Examination)

Examination

Active participation at lectures, one interactive session, one workshop, and one final seminar is required. The format for the final seminar is a live video conference. Examination includes
three written assignments; one concerning lectures 1-4 and, one concerning lectures 6-7, and one concerning the workshop. Before the final seminar each student writes a paper and reads other students’ papers. At the final seminar there is one discussant for each paper. Each student presents his/her paper and functions as a discussant concerning one other paper. Students are expected to prepare well before lectures and read three core articles before each lecture. Attendance is mandatory.

**Literature**
The literature consists of articles and handouts.

**Teaching staff**
Prof.dr. Theo van Achterberg, KU Leuven, Leuven
Prof.dr. Marlies Hulscher, Radboud University Nijmegen Medical Centre, Nijmegen
PhD, Lecturer, Leif Eriksson, Uppsala University, Uppsala
PhD Anders Brantnell, Uppsala University, Uppsala

**Location**
Department of Women’s and Children’s Health, Uppsala University (detailed schedule will be announced).

**Course leaders**
Professor Louise von Essen, louise-von.essen@kbh.uu.se
Anders Brantnell, anders.brantnell@kbh.uu.se

**Course administration**
Hanna Taylor, hanna.taylor@kbh.uu.se

**Outline of the course**
Lecture 1: Implementation of change: introduction and concepts – (Prof.dr. Marlies Hulscher, Radboud University Nijmegen Medical Centre and Prof.dr. Theo van Achterberg, KU Leuven) *(January 23, 9.00-12.00)*
- Focus and main questions of the field
- History and positioning of the field in the health sciences
- Terminology and different theoretical perspectives
- Guidelines and innovations from an implementation perspective

Lecture 2: Measuring quality of care: performance indicators – (Prof.dr. Marlies Hulscher, Radboud University Nijmegen Medical Centre and Prof.dr. Theo van Achterberg, KU Leuven) *(January 24, 9.00-12.00)*
- What is high quality care
- Measurement of quality of care, using performance indicators
- What is important for clinicians and policy makers

Lecture 3: Characteristics of successful implementation strategies – (Prof.dr. Theo van Achterberg, KU Leuven) *(January 25, 9.00-12.00)*
- What is the route to successful change?
- How to prepare for successful improvement?
• The range of implementation strategies – tailoring strategies
• Which strategy to choose and the effectiveness of different strategies

Lecture 4: Evaluation of implementation: designs and methods – (Prof.dr. Marlies Hulscher, Radboud University Nijmegen Medical Centre and Prof.dr. Theo van Achterberg, KU Leuven) (January 26, 9.00-12.00)
• Designs and methods for evaluation of implementation interventions
• Design of randomized controlled studies from an implementation perspective
• Process evaluations (mechanisms, fidelity, context)
• Economic evaluation of implementation interventions

Lecture 5: Interactive session – Prof.dr. Marlies Hulscher Radboud University Nijmegen Medical Centre and Prof.dr. Theo van Achterberg, KU Leuven) (January 26, 13.00-16.00)
• Interactive discussion of participants questions or projects
• Examples of projects at Radboud University
• Introduction to examination papers and structure of the seminar

Lecture 6: Implementation in practice and the role of different actors – (PhD Anders Brantnell, Uppsala University) (February 6, 9-12)
• The role of different actors

Lecture 7: Implementation and evaluation of community based participatory interventions – (PhD, Lecturer Leif Eriksson, Uppsala University) (February 7, 9-12)
• Facilitation as an implementation strategy (PARIHS and i-PARIHS)
• Examples of process evaluations
• Introduction to written assignment (hand in deadline February 22)

Occasion 8: Workshop on intervention mapping – (PhD Anders Brantnell, Uppsala University) (February 8, 9-16)
• Introduction to intervention mapping
• Group work to apply intervention mapping to one specific health promotion program
• Introduction to written assignment (hand in deadline March 5)

Occasion 9: Final seminar – (Prof.dr. Marlies Hulscher Radboud University Nijmegen Medical Centre, Prof.dr. Theo van Achterberg, KU Leuven, and PhD Anders Brantnell) (March 1-2, 9-17)
• Presentations
• Live video seminar, where the students will be in Uppsala and the main teachers will participate through a video link.
• Hand in the preliminary papers: 23 February
• Circulate the papers to other students: 23 February
• Hand in the final papers: March 16

Literature
The literature consists of two parts: the first section outlines core papers. Students should read three core papers before each lecture. The second section outlines literature which can be consulted in addition to the core papers.
In addition to the literature mentioned here, you can scan recent content of the open access journal Implementation Science (www.implementationscience.com).

Core papers

**Implementation of change: introduction and concepts**

**Measuring quality of care: performance indicators**

**Characteristics of successful implementation strategies**
- Effective Practice and Organisation of Care (EPOC). EPOC Taxonomy; 2015. Available at: [https://epoc.cochrane.org/epoc-taxonomy](https://epoc.cochrane.org/epoc-taxonomy)

**Evaluation of implementation: designs and methods**

**Implementation in healthcare practice and the role of different actors**


**Implementation and evaluation of community based participatory interventions**


**Workshop on intervention mapping**


**Additional literature**

**Implementation of change: introduction and concepts**


**Measuring quality of care: performance indicators**


**Characteristics of successful implementation strategies**


**Evaluation of implementation: designs and methods**


**Implementation in healthcare practice and the role of different actors**


**Implementation and evaluation of community based participatory interventions**


Workshop on intervention mapping