The use of lean principles in healthcare institution is increasingly used to improve the efficiency and quality of care (Toussaint & Berry 2013). The Institute for Healthcare Improvement (IHI) states that many industrial 'lean-organisations' accomplish good results in the domains of work and productivity, cost-reduction, increased process flow, less defects and less stock (Johnson et al., 2012). Some authors are critical with regard to 'lean management'. According to Mazur et al. (2012) more than 90% of the lean initiatives fail or are not lasting. Only few organisations in healthcare succeeded to fundamentally implement lean management (Steed 2012) and less than 4% of the hospitals in the US report an organisation-broad implementation (Crema & Verbano, 2015). Radnor et al. (2012) concluded that most care organisations are in the phase in which the automobile was end the eighties. Other authors argue that lean management in most care organisations is reduced to the use of specific tools and/or elements of the concept (Holden et al. 2015, Dannapfel et al. 2014, Radnor et al. 2012, Filingham 2007, Kim et al. 2006). A possible hypothesis could be the lack of expert in the field. In line with the rest of the world, lean management is increasingly implemented in the care organisations in Flanders and the Netherlands. The prevent 'failure' in Flanders and the Netherlands, there is a need for trained care experts who will be able to correctly translate the principles of lean management in the care context.

In this course, students are given insight into the theoretical background of Business Process Management and lean management more specifically. Also, students are given stools to correctly translate the lean principles into the care practice. After this course, students need to be able to independently describe the different process steps, to identify barriers and formulate suggestions for optimisation.

In this course internationalization is formalized through the frequent use and integration of English learning materials and international scientific publications.
• Modelling processes: theory
2. Time and method study
• Concepts: DPZ - IPZ - EGA
• Measure method: multi-moment measurement, direct time measurement, subjective
time estimation
• Process optimisation and BPM
3. Workload and allocation of personnel
• Concepts: workload and work pressure
• Types of tools
• Influencing factors
• Practice application
• Concept 'missed nursing care'

Initial competences

Final competences
1. Nominating the vision and principles of Lean, and its application in practice.
2. Nominating the different components of Business Process Management.
3. Analysing and optimising independently the clinical process in a specific patient
group.
4. Reflecting critically on the importance to implicate internal and external stakeholders
in the optimisation.

Conditions for credit contract
This course unit cannot be taken via a credit contract

Conditions for exam contract
This course unit cannot be taken via an exam contract

Teaching methods
Excursion, group work, lecture, integration seminar, fieldwork, seminar: coached exercises,
lecture: response lecture

Extra information on the teaching methods
• Seminars in which the theory is linked to practice
• Lean day: students are given the possibility to attend different lectures on the subject
'Lean'
• Visit lean organisation: after the course, student visit an organisation in which the
lean principles are applied. A critical reflection is demanded based on the experience
from internship or own working context.
• Proposal paper: students are asked to choose a care process. The current care
process is presented in a Value Stream Map in which the different process steps,
communication lines, 'value added' and 'non-value added' time are incorporated.
Students critically reflect on the application of the lean principles and its ability to
optimise care processes, and if yes, how. next, the students make a Value Stream
Map for the desired situation.
• Paper: close collaboration with clinical practice with regard to choice of care process,
data collection, suggestions for optimisation. The papers needs to build on the
theoretical principles and content of this course to be a good paper.

Learning materials and price

References

Course content-related study coaching

Evaluation methods
continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Examination methods in case of periodic evaluation during the second examination period

Examination methods in case of permanent evaluation
Assignment
Possibilities of retake in case of permanent evaluation
examination during the second examination period is possible

Extra information on the examination methods
The evaluation consist of (1) a paper in which attention is given to

(Approved)
• The way in which the process is presented
• The data-collection methods
• The suggested optimisation path and the correct application of the theoretical concept of BMP and Lean

The evaluation consists of (2) defending the paper that preferably was done in duo. A presentation is given to college-students.

Calculation of the examination mark

Non-periodical evaluation: paper (75%) and oral defence of the paper (25%). The student needs to pass for both parts to pass for the course.