Course: Preparing patients for surgery: diagnostics and care at Nij Smellinghe credits: 5

Course code	LSVX25PATIENT
Name	Preparing patients for surgery: diagnostics and care at Nij Smellinghe
Study year	2026-2027
ECTS credits	5
Language	Dutch, with parts in English
Coordinator	M. de Looff
Modes of delivery	Guest lecture Lecture Project-based learning Tutorial
Assessments	The patient is fit and prepared for surgery - Other assessment

Learning outcomes

- You will design an interprofessional treatment plan to optimally prepare the patient for surgery and improve their recovery. In doing so, you will take into account the applicable standards, POCT possibilities, ethical aspects, and current laws and regulations.
- You share your knowledge of POCT and prehabilitation in a multidisciplinary team and, based on your own profession, identify your role in preparing the patient to be fit, taking into account the current principles within NijSmellinghe.
- You determine interprofessionally what role POCT can play in the patient's health status within prehabilitation and incorporate this into the treatment plan.
- You are able to critically analyze the process and product, reflect on your own contribution and the choices made by the group, and you can report this back to the client (Nij Smellinghe) by means of a presentation.

Content

Surgery has a major impact on patients, and complications during and after the operation can further disrupt their lives. Previously, preparation for surgery consisted of explaining the procedure, mentioning possible complications, the length of the hospital stay, and providing guidelines for life after the operation. Patients waited passively for the surgery and were not encouraged to remain active. We now know that the risk of complications after surgery is lower and that patients recover more quickly when we actively prepare them and ensure they are as fit as possible going into surgery. This is an important aspect of prehabilitation. This is achieved through a prehabilitation program with a customized training and diet plan.

In order to measure the effect of prehabilitation, it is necessary to have as complete a picture as possible of the patient's mental and physical health status. The effect of prehabilitation can be measured using physical measurements, psychological tests, and analyses of the patient's body fluids before, during, and after the procedure using point-of-care technology (POCT). POCT allows rapid and accurate measurements and tests to be carried out close to the patient, both at home and in the hospital, by the patient themselves or by healthcare providers. A well-known example of POCT is the COVID-19 self-test, which allowed us to quickly test for COVID-19 at home.

The collection, interpretation, and analysis of data from the measurements is carried out by various disciplines, including nurses, physical therapists, nutritionists, diagnostic laboratory technicians, and imaging technicians, who work together interprofessionally to care for the patient so that a personalized prehabilitation plan can be created.

POCT, prehabilitation, and the patient are central to this elective module. Students from various health care programs will collaborate on a real patient case at Nij Smellinghe Hospital and will be supported by lectures and seminars at Hanze University of Applied Sciences. During the meetings, students will come into contact with various (para)medical disciplines involved in prehabilitation. This will create close contact with medical professionals (including doctors and nurses), paramedics (analysts, physiotherapists, etc.) and the patients and their loved ones.

The course is held on Tuesday evenings from 5:30 p.m. to 8:30 p.m. and is also partly taught at Nij Smellinghe in Drachten. It is a parallel module; the elective module is taught throughout the entire fourth quarter.

Included in programme(s)

Major Medical Diagnostics
Major Biology and Medical Research
Bio-Informatics
Chemistry
Chemical Engineering

School(s)

Engineering, Life Sciences & ICT

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