

Al-Taher, M. "Determining and Improving Patient Flow Efficiency at the Operation Theatre"

SAMENVATTING

1) Hoe draagt het doelmatigheidsinitiatief bij aan het verbeteren van de kwaliteit van zorg op afdelings- en/of instellingsniveau?

The aim of this project was to achieve more insight in the patient logistics with respect to peripheral and central line placement at the department of surgery. This insight may be used to address shortcomings in this process with suggestions for possible solutions to reduce the frequent delays.

2) Hoe worden de algemene competenties (o.a. management, organisatie, samenwerken, communicatie, professionaliteit, maatschappelijk handelen) op de werkvloer getraind door het opzetten en uitvoeren van het doelmatigheidsinitiatief?

This project aims at improving the patient logistics as well as the cooperation and communication between all those involved in this process in order to increase efficiency and decrease waiting times for patients and staff. This may lead to a better use of the operation time and reduce the waiting times for patients.

3) Hoe kan het doelmatigheidsinitiatief geborgd worden op de afdelingen en/of binnen de instelling?

This project addressed several shortcomings in the patient flow process and may also be extrapolated to patient flow insufficiencies in other surgical sub-departments. Results will be soon presented. Partly due to this project a major change in the peripheral line placement will be implemented.

Instelling: MUMC+, afdeling Chirurgie

Probleemstelling: The MUMC+ department of surgery has one of the highest volume of peripheral and central line placements in the Netherlands. The surgeons of this department often experience delays in the operation schedule. Since the chain of patient flow from the ward to the operation theater and back to the ward again is not fully understood, it is yet not possible to address the causes for this delay.
The Surgical Day Care department often experiences delays at operation theaters where the central and peripheral catheter insertions is performed.
→ The underlying research question was: "To what extent can the patient flow of the department of surgery of the MUMC+ be improved for the operation theatres 24, 25 and 26 where the central and peripheral line placements are performed?"

Doel van het initiatief:

- To determine the patient flow and efficiency in the operation theater of the department of surgery:
 - (1) What is the current patient flow of the patient following the procedure at the surgical department?
 - (2) How are the patient transport services organized?
 - (3) How is the scheduling of the operation theater determined and developed?
- To improve the patient flow and efficiency in the operation theater of the department of surgery:
 - (4) Where is the waste in the process identified?
 - (5) How can the waste be reduced?

Plan van aanpak: A case study was conducted, which is an analysis of persons, projects and systems. To get more insight in the current situation of the surgical department, the following was studied:

- Current patient flow
 - with performance indicators of the current patient flow, including process time, transport time, total waiting time and service level
- Patient transport services

The method of scheduling of the operation theater was described and information about the scheduling of the operation theaters in other hospitals is provided. Eventually the waste in the process was identified and solutions were proposed to reduce this waste.

Beoogde resultaten:	Aim was to analyze the patient flow in the surgery daycare in order to: <ol style="list-style-type: none"> 1. understand the reasons for delays 2. detect ways in avoiding these delays in the future
Behaalde resultaten:	<ol style="list-style-type: none"> a) Getting insight in the current patient flow <ul style="list-style-type: none"> - with performance indicators of the current patient flow, including process time, transport time, total waiting time and service level b) Insight in the patient transport services c) Insight in the schedule of the operation theater d) Information about the scheduling of the operation theaters in other hospitals e) Insight in the total procedure times as well and identification of causes of delays f) Identification of the waste in the process g) Possible solutions to reduce this waste
Borging:	<p>This project showed the insights in the patient logistics in the surgical department with respect to the peripheral and central line placements which can be used to reduce waiting times and address the shortcomings in this process.</p> <p>This project can also serve as an example for future projects that can be commenced in cooperation with (HPIM) master students. Main achievement in this project is providing an example of excellent cooperation between an AIOS and a Master student. Even though AIOS may have excellent ideas to improve their working environment, they often find the lack of time due to their tight residency program as a big challenge to find time to put these ideas into practice. A cooperation with Master students, who in their turn do have the time and theoretical knowledge may be a solution to ultimately make these projects successful.</p>
Evaluatie:	The analysis of this project has been performed. Parts of this study have co led to a change in the peripheral catheter placement process in order to reduce total procedure times. Further discussion with the surgical day care and surgical department will follow for the implementation of the proposed solutions.
Rol AIOS:	This project was a cooperation between J. Hamersma (Master student HPIM) and M. Al-Taher (AIOS general surgery) in which M. Al-Taher determined the problem statement, supervised the master student, conducted co-analyses and translated the results to the clinical practice.
Begeleiding AIOS:	Prof. Dr. L.P.S. Stassen