UNIVERSITEIT GENT

Faculty of Medicine and Health Sciences

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AN OVERVIEW OF THE OPPORTUNITIES FOR ENHANCING THE QUALITY OF HANDOVER MOMENTS IN HEALTHCARE: A QUALITATIVE STUDY

A case study on the coordination (clinical pathway and case management) at the department of Medical Oncology) at University Hospital Ghent

Master's thesis submitted to obtain the degree of

Master in Management and policy of healthcare

By Titia Debergh

Promotor: Professor Dr. P. Gemmel

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Abstract

Objective: The aim of this study was to provide an overview of the current research on handover moments performed by healthcare professionals in (oncology) healthcare, combined with suggestions for quality improvement in the aforementioned context.

Background: Theoretically, handover moments are an important potential source of harm in the framework of patient safety. Coordination mechanisms such as case management and clinical pathways combined with patient empowerment may contribute to enhance the quality of these handover moments.

Methods: Data were collected through the database of Gent University, which includes Pubmed, Google Scholar, Web of Science and The European Journal of Oncology Nursing in March 2014 (week 9), September (week 39), October 2014 (week 41) as well as in November (week 45). No time frame was used due to the limited amount of results.

Findings: Three issues in the performance of adequate handovers emerged, namely: the transfer of information, shared responsibility and teamwork. With a view to enhance the quality of handover moments as performed in oncology healthcare the combination of case management, clinical pathways and patient empowerment can contribute in smoothening handover moments. Concluding, this combination of the complementary variables seems like a promising approach to address the challenges the oncology healthcare faces.

Relevance regarding the practice: In 2006, both the World Health Organization and the Joint Commission pointed out the role of standardized processes with a view to increase patient safety. Since then, many hospitals became aware of the need to invest in standardizing handover moments.

This thesis counts 25.000 words

Samenvatting in het Nederlands

Doel: Het doel van deze thesis is een overzicht te bieden van het huidige onderzoek naar overgangsmomenten in de oncologische gezondheidszorg, zoals deze worden uitgevoerd door de zorgverleners. Daarenboven worden suggesties aangereikt in het kader van het verhogen van de kwaliteit in de voornoemde setting.

Achtergrond: Het is bewezen dat overgangsmomenten kunnen leiden tot schade in het kader van patiëntveiligheid. Coördinatiemechanismen, zoals *case management* en zorgpaden in combinatie met *patient empowerment* kunnen bijdragen tot een verhoging van de kwaliteit van de overgangsmomenten.

Methodologie: Gegevens werden opgevraagd in de databank van Universiteit Gent, waaronder *Pubmed, Google Scholar, Web of Science* en The *European Journal of Oncology Nursing* in maart 2014 (week 9), september (week 39), oktober 2014 (week 41), alsook in november (week 45). Er werd geen tijdsbestek vastgelegd door de beperkte beschikbaarheid van publicaties.

Resultaten: Drie probleempunten rond de uitvoering van toereikende overgangsmomenten zijn gebleken, namelijk: de informatieoverdracht, de gedeelde verantwoordelijkheid en teamwork. Met het oog op het verhogen van de kwaliteit van de overgangsmomenten in de oncologische gezondheidszorgsetting kunnen: *case management*, zorgpaden en *patient empowerment* hiertoe bijdragen. De combinatie van voornoemde complementaire variabelen lijkt een veelbelovende insteek om de uitdagingen van de oncologische gezondheidszorg aan te gaan.

Relevantie ten aanzien van de praktijk: In 2006 hebben zowel de *World Health Organization* en de *Joint Commission* de rol van gestandaardiseerde processen benadrukt om de patiëntveiligheid te kunnen verhogen. Sindsdien ontstond er een bewustzijn in de ziekenhuizen rond de noodzaak om overgangsmomenten verder te standaardiseren.

Deze thesis telt 25.000 woorden

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List of abbreviations

CoZo Collectief Zorgplatform

CM Case Management

CPWs Clinical Pathways

EPD Elektronisch Patiënten Dossier/Electronic Patient Database

GP General Practitioner

MDO MultiDisciplinair Overleg

MeSH Medical Subject Headings

MOC Multidisciplinair Oncologisch Consult

PSO PsychoSociaal Overleg

USA United States of America

ZOG Zorgprogramma Oncologie Gent

Preface

Writing a thesis is the final step in order to graduate as well as it is a first step in the research field. It was a unique opportunity to challenge myself to put the theory that I've been taught in practice. This thesis involved unavoidably a process of trial and error, where you need the support and experience of others, for which I would like to express my sincere thanks to a number of people.

First of all I'd like to express my sincere gratitude to my promotor, professor dr. P. Gemmel. Thank you for your support, your boundless enthusiasm and your cooperation.

Secondly, I'd like to express a special word of thanks to dr. V. Kruse of the department of Medical Oncology at the University Hospital Ghent. Thank you for your limitless dedication, support and coordination in the empirical part of this study. Furthermore, I want to thank again all the participants of the interviews that have been conducted at the department of Medical Oncology.

Subsequently, I would also like to express my thanks to Tamara Cornand, Anke Thys, Joost Koentges and Robby Wauters for reviewing my thesis.

Last but not least, I'd like to express my thanks to my parents. Thank you for the support during all those years and thank you for giving me the opportunity to study. I also want to thank my sister for her backing, my friends as well as my roommates for the necessary distraction during this process.

1. INTRODUCTION

This chapter elaborates at first upon the context and the problem statement. Subsequently the research questions will be addressed as well as the structure of this thesis will be presented. This case study on the coordination of handover moments in oncology healthcare took place at the University Hospital Ghent, in Belgium.

1.1. Context

As a result of the complexity of the oncology health care system, combined with increasing financial pressure, a better coordination is required. "*A lack of information and resources as well as deficits in healthcare literacy may affect adherence to treatment and negatively affect clinical outcomes. In this context, the coordination of care and services, emotional support, and education become significant components of patient-centered care in oncology. Patient navigation is an emerging trend to address the complexity of care in oncology"* (Campbell, Craig, Eggert, & Bailey-Dorton, 2010, p. 61). Research from (Schoen, Osborn, How, Doty, & Peugh, 2009) has shown that there is a need to enhance the coordination of care in order to improve the clinical outcomes of patients with chronic and complex diseases. *"As patients increasingly receive care from multiple professionals and organizations, improving continuity of care has become a research priority*" (Haggerty, Roberge, Freeman, & Beaulieu, 2013, p. 262).

In particular the transfer of patients between different care professionals seemed to be a source of potential harm in the coordination of healthcare. Patient handoff is used interchangeably with terms such as handover moments, patient handover and care transitions (Bigham, et al., 2014). In order to avoid confusion, the term handover moments will be used consistently through this thesis. "*Patient handoffs have been consistently identified as safety risks by the world's most influential health care organizations*" (Bigham et al., 2014, p. 573). This is due to the combination of equipment and information transfer leading to an increased probability for errors (Catchpole, Sellers, Goldman, McCulloch, & Hignett, 2010). Research from (Weingart, et al., 2013) supports this vision and adds that these transitions in care are especially hazardous because of the time constraints, disruptions and healthcare professional fatigue. Handover moments refer to the exchange of responsibility, information and authority through patient handoff, from one health care professional to another (Foster & Manser, 2012; Bigham et al., 2014). This aforementioned definition expresses in clear language what constitutes handover moments in this thesis.

An additional level in this thesis is the role of the patients in these handover moments. These handover moments include for example: the referral from the GP to the specialised care, the transfer of information between health care professionals and patient during the treatment phase/ diagnosis as well as the discharge with an important transfer of information from the hospital to the GP and the patient.

In order to ensure safe and reliable handover moments in healthcare, accuracy and efficiency need to be established regarding the transitions of care following a standardized format (Bigham et al., 2014). Both WHO and the Joint Commission pointed out the need for standardizing handover moments to enhance patient safety (Bigham et al., 2014). Weingart, et al. (2013) reported that failures in communication are one of the major causes of adverse events in healthcare. In order to attain transfer of information in an organized, accurate way with complete patient information; the role of health care professionals is extremely important. This emphasizes the need for completeness and accuracy of patient information transferred during the handover moments within the framework of patient safety (Weingart et al., 2013).

Several coordination mechanisms implemented in hospitals can be found in literature, yet to further elaborate these would lead us too far from the scope of this thesis. Hence, this study focuses on case management and clinical pathways as these are commonly used in oncology healthcare. These coordination mechanisms are used to bridge the gap between the different handover moments and thereby to smoothen the care process in (oncology) healthcare.

The case manager can be seen as a person who is the first contact point for patients and he or she guides the patients through the health care chain. Further research is needed to investigate the impact of case management in oncology healthcare. Evidence has shown that case management, if well-implemented, can improve the patient's quality of life (Huws et al., 2008). The case manager facilitates the patient's access to multiple services and thereby intends to improve the continuity as well as the coordination of care (Gilbert et al., 2011). Furthermore, research has shown that providing information decreases the fear of patients and families as well as it increases their sense of control and authority, id est patient empowerment (Wilkes, White, & O'Riordan, 2000). Clinical pathways can help to smooth these handover moments by providing tools that combine the best available evidence with clinical practice.

These pathways include recommendations and processes combined with a timeframe specified for specific health conditions. These clinical pathways are implemented in hospitals on a global base, nevertheless the evidence regarding their impact is conflicting. Optimising patient outcomes and enhancing clinical efficiency are one of the positive consequences of the implementation of clinical pathways in healthcare (Rotter et al., 2010).
To date, the literature does not offer a specific framework regarding the relationship between the improvement of the quality of handover moments in healthcare, case management and/or clinical pathways and patient empowerment. Thereby a conceptual framework had been developed in order to provide more insight in the relationship between handover moments on the one hand and clinical pathways, case management and patient empowerment on the other hand. This figure will be elaborated in chapter eight, namely in 8.3 where the current handover performance is discussed. The proposition of this study is based on the presumed relationship between these different variables.

Proposition: *The quality of handover moments can be improved in oncology healthcare using case management and/ or clinical pathways combined with patient empowerment.*

The objective is to obtain more profound insight in the relation between these different variables by conducting interviews with several stakeholders in the oncology healthcare process.

The aim of this study is firstly to investigate how case management and/or clinical pathways can be used to improve the quality of handover moments. Secondly this study will elaborate upon the experiences, stipulations and needs regarding handovers as described by the health care professionals involved in the oncology care process (such as: patients, nurses, doctors, case managers) at the University Hospital Ghent, namely at the department of Medical Oncology. In order to do that, one in-depth case study will be conducted at the department of Medical Oncology in the University Hospital Ghent. The study population includes the people involved in the care process of the oncology health care chain. The care providers as well as the patients involved in the oncology health care will be subjected to an in-depth interview in order to gain insight into the cooperation between these parties. More specifically the emphasis is put on the perceived quality of the handover moments in this department related to the use of coordination mechanisms: case management on the one hand and clinical pathways on the other hand.

1.2. Problem statement

The problem indication resulted in the problem statement, namely: *How can the University Hospital of Ghent enhance the experienced quality of handover moments at the department of Medical Oncology with the aim of an increased quality of the health care chain as perceived by the different parties involved (such as): patients, nurses, doctors and case managers?*

1.3. Research questions

The abovementioned problem statement resulted in research questions as well as the corresponding operational research questions, as indicated below:

1. How can the quality of handover moments be improved using case management and/or clinical pathways?
    1.1. What are the main issues with regard to the coordination of information and handover moments in healthcare and how can they be addressed adequately?
    1.2. To what extent does case management and/or clinical pathways influence the quality of handover moments?
    1.3. What's the added value of patient empowerment in the successful application of case management and/or clinical pathways with a view to enhance the quality of handover moments in (oncology) healthcare?

2. How can the experiences, stipulations and needs regarding handover moments be described of the different parties involved in the oncology care process (such as: patients, nurses, doctors and case managers) at the department of Medical Oncology in the University Hospital Ghent?
    2.1 How can case management and/or clinical pathways affect the experiences of the different parties involved in the oncology care process?
    2.2 Case management and/or clinical pathways: are they rather substitutes or complements, regarding the improvement of the quality of handovers in (oncology) healthcare?
    2.3 Does patient empowerment function as a complement or as a substitute in the oncology care process?

1.4. Structure of this thesis

This thesis consists of twelve chapters which will be considered in this sequence. Chapter one is called the introduction and discusses several items, such as: the context, the problem statement, research questions and the structure of this thesis. In chapter two the research methodology will be elaborated. An overview of the included studies can be found in chapter three, which is distinguished in two different parts, namely: the description of the studies and the effect findings. Subsequently, an answer to the first research question will be provided in chapter four in conjunction with the first operational research question. The second and third operational research questions will be discussed in chapter five. Thereafter, in chapter six the methodology of the case study will be elaborated upon. In chapter seven, the results arising from the interviews will be considered as well as providing an answer to the aforementioned research questions. Chapter eight includes the discussion of this thesis. By drawing upon the findings obtained by writing this thesis, management and policy implications will be presented in chapter nine. Chapter ten discussed the limitations concerning this study. Chapter eleven of this thesis looks ahead to the future research which should be conducted in the years to come. The conclusion will be elaborated upon in chapter twelve.

2. METHODOLOGY OF THE LITERATURE

Chapter two discusses the methodology of the literature, thereby providing the reader with more insight in the data sources as well as the data extraction. Concluding with the selection process that has been carried out.

2.1 Data sources

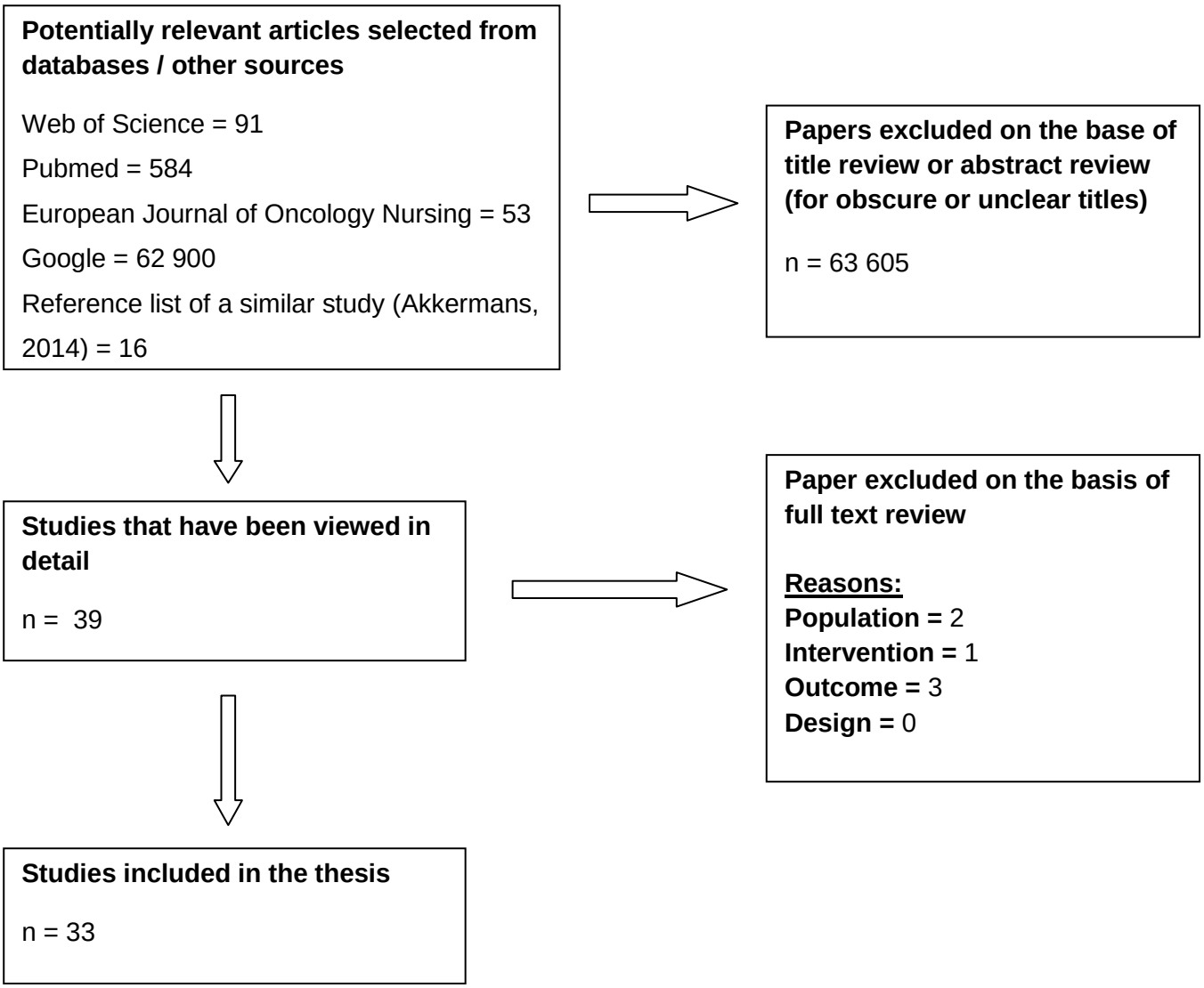
This study is based on an analysis of the literature from a systematic review perspective. Academic literature has been accessed through the database of Gent University, which includes Pubmed, Google Scholar, Web of Science and The European Journal of Oncology Nursing in March 2014 (week 9), September (week 39), October 2014 (week 41) as well as in November (week 45). The initial search strategy was performed using the thesis of a student called J.W.J Akkermans who made a thesis last year on the same subject (Akkermans, 2014). The use of the snowball-effect led to multiple old and new literature regarding this subject. Furthermore, the concepts of handover, case management, clinical pathways, patient empowerment and oncology healthcare were combined into a standardized search string using MeSH and non-MeSH entry terms: [primary health care AND case management], Case management RCT, [case management AND oncology service, hospital OR oncology nursing], improving handover moments, [patient handoff AND quality improvement], [critical pathways AND oncology service, hospital], improving patient handover, patient empowerment oncology and clinical pathways improving handover moments. An overview of the search strategy and their related print screens are presented in exhibit one.

Both primary and secondary data were used in this research. The primary data including the interviews that were conducted regarding various categories of health care professionals and patients. These interviews have been carried out face-to-face by using open-ended questions. The semi-structured character of the interviews allows the interviewees to answer the questions with supplementary data whereby the interviewer can achieve a clear view on the opinion of the interviewee (Polit & Beck, 2011).

2.2 Data extraction

Aforementioned search strategies have been conducted. The first selection of search results were filtered by title and abstract, followed by the inclusion and exclusion criteria based on the research question of this systematic review. Except for the search in the database Google Scholar and within the search in March in the database Pubmed, no time frame was used as a result of the small amount of publications regarding the specific subject.

In addition, the remaining articles were selected for full-text availability. Furthermore, the reference list of the thesis of (Akkermans, 2014) was screened using the snowball-effect in order to find more relevant publications. In the section below an overview is given of the selection process that has been carried out.



3. OVERVIEW OF THE INCLUDED STUDIES

The focus of the third chapter is providing an overview of the literature included in this thesis. Firstly, a description of the studies will be elaborated. Secondly, drawing upon the effect findings, this study will narrow down to the main concepts including handover moments combined with the improvement opportunities, namely: case management and/or clinical pathways combined with patient empowerment. In table 1 displayed below, an overview of the findings between these different variables is given.

3.1 Description of the studies

Thirty-three relevant studies have been identified of a respectable quality. In 2006 an increased focus occurred on ensuring reliable and safe handovers in healthcare due to the 'Joint Commission' and the 'World Health Organization' that emphasized the need for standardization of handovers in order to reduce handoff-related errors and increase patient safety. Consequently since 2006 the number of studies regarding handovers in healthcare increased remarkably. Only three of the included articles were published before 2006, the other thirty-one were published after 2006. Hence, the nature of these publications is very recent.

Fourteen of the thirty-three studies were conducted in the USA, five took place in Canada and another five studies took place in the United Kingdom. Four of the included studies were conducted in Switzerland, three in the Netherlands and two took place in Australia. As for the other articles each of them were conducted in another country, respectively: Japan, Belgium, Germany, Denmark and Italy. Of these studies all of them took place in a hospital, whereof two in a children's hospital, another two were conducted in a primary healthcare setting and one in an emergency department. The studies that were conducted in oncology healthcare setting are limited to fourteen of the thirty-three studies and another two studies took place in a setting of patients with chronic illnesses in general. Four of the included studies are systematic reviews, two are Randomised Controlled Trials, another two are qualitative studies as well as one study is a qualitative meta summery.

3.2 Effect findings

In this section the findings resulting from the thirty-three relevant studies that assessed improvement of handovers will be considered. Three themes emerged from the data to delineate which opportunities can enhance the quality of handover moments in oncology healthcare. The table below intends to provide the reader with a better insight in the opportunities for enhancing the quality of handovers in healthcare.

Table 1 - Opportunities for enhancing the quality of handovers in healthcare			
Barriers to adequate handovers	**Case management**	**Clinical pathways**	**Patient empowerment**
The quality of information exchange (Hesselink et al., 2012)	Patients acknowledged the role of the patient navigator/case manager as the cause of their increased satisfaction regarding the performed care combined with a decreased anxiety concerning their treatment partly due to being well-informed (Gilbert et al., 2011).	"*A significant decrease in handoff-related care failures associated with the implementation of a standard handoff process*" (Bigham et al., 2014, p.576).	Research has shown that providing information decreases the fear of patients and families as well as it increases their sense of control and authority, meaning patient empowerment (Wilkes et al., 2000). This information should consist of details regarding the disease, prognosis, symptoms, treatment side-effects and community resources.
Coordination of care (Hesselink et al., 2012)	The case manager facilitates the patient's access to multiple services and thereby intends to improve the continuity as well as the coordination of care (Gilbert et al., 2011).	Research has stipulated that a systematic format such as for example a clinical pathway/protocol decreases the variability and improves the coordination of care (Weingart et al., 2013).	Within the facilitation navigation model the case manager functions as a consultant regarding the patients, whereby the focus is on patient empowerment (Gilbert et al., 2010). Yet, the primary focus of patient empowerment is not improving the coordination of care.
Communication between health care professionals (Hesselink et al., 2012)	The role of the patient navigator/case manager can be defined as the "*glue that holds it all together*"(Gilbert et al., 2011, p.233). Thereby facilitating adequate communication between the different providers and keeping an overview over the whole care process.	As a result of the strictly defined steps in a clinical pathway also the communication between health care professionals seems to occur more accurate (Rotter et al., 2010).	It is important regarding the healthcare professionals knowing how to help patients becoming more knowledgeable and taking control over their disease, bodies and treatment (Aujoulat, Marcolongo, Bonadiman & Deccache, 2007).

4. BARRIERS TO SEAMLESS COORDINATION

Chapter four addresses the first research question: *How can the quality of handover moments be improved using case management and/ or clinical pathways?* First of all, the concept 'handover moments' will be elaborated through the combination of the three main issues related to this subject; thereby providing an answer to the first operational question derived from the aforementioned key research question. Subsequently the second and third operational research question will be considered in chapter four.

4.1 Handover moments and their issues

Handover moments refer to "*the transfer of information, responsibility, and authority from one health care provider to another*" (Bigham et al., 2014, p. 573). This aforementioned definition expresses in clear language what constitutes handover moments in this thesis. An additional level in this thesis is the role of the patients in these handover moments. These handover moments include for example: the referral from the GP to the specialised care, the transfer of information between health care professionals and patient during the treatment phase/ diagnosis as well as the discharge with an important transfer of information from the hospital to the GP and the patient.

Another definition was presented by (Manser & Foster, 2011, p. 181): "*Clinical handover refers to the transfer of professional responsibility and accountability for some or all aspects of care for a patient, or groups of patients, to another person or professional group on a temporary or permanent basis.*"

In order to ensure safe and reliable handovers in healthcare, accuracy and efficiency need to be established regarding the transitions of care following a standardized format (Bigham et al., 2014). In 2007 the World Health Organization as well as the Joint Commission emphasized the role of standardized processes in order to decrease the amount of handoff-related errors. Subsequently in 2008, the Institute of Medicine suggested an increased focus on handoff processes in order to improve patient safety (Bigham, et al., 2014). "*Handover is far from being a foolproof method for ensuring informational continuity; practice is highly variable and little is known about what makes an effective handover*" (Randell, Wilson, Woodward, & Galliers, 2010, p. 272).

Furthermore there are four phases that can be distinguished identifying handover moments, namely the pre-handover phase, the arrival, handover meeting and the post-handover phase.

On the one hand, these phases consist of updating documents prior to the handover and on the other hand of collecting information from documents after the handover moment (Manser & Foster, 2011). Research has shown that in particular the pre-handover preparation is often insufficient and therefore deserves special attention in the analysis of handovers. Furthermore the handover process seems to be unstructured, error prone and variable. Outcomes of handover moments usually consist of satisfaction regarding the handover and should also question the safety-related consequences on subsequent patient care (Manser & Foster, 2011). Within the framework of the evaluation of the quality of handover moments, the focus is in general on the accuracy and completeness of the information, related to medical errors caused by information transfer (Manser & Foster, 2011).

"*While training for handover skills is a promising approach to improve the quality of handovers, the need for handover training in medical education has not been clearly stated and present training methods have not been validated*" (Drachsler et al., 2012, p. 114). In particular the final handover moment leading to hospital discharge is crucial. Insufficient communication at this point causes a risk of poor outcomes regarding the patients (Shen et al., 2013).

As a result of the fact that clinicians are working in different silos they seem not to have a full picture of the whole care process of each patient (Jeffs, Lyons, Merkley, & Bell, 2013). It should be noted that the dysfunctional financing is also an important barrier in order to enhance the quality of handover moments (Bodenheimer, 2008). "*Neither hospitals nor primary care physicians have a financial incentive to offer the discharge care needed to smooth the transition between hospital and home*" (Bodenheimer, 2008, p. 1066).

In the next paragraph these items, also known as the issue themes of handover moments, will be discussed thoroughly.

1.1"What are the main issues with regard to the coordination of information and handover moments in healthcare and how can they be addressed adequately?"

4.1.1 Transfer of information

"Informational continuity ensures connectedness and coherence by the uptake of information on past events and is most emphasized in the nursing sciences" (Haggerty et al., 2013, p. 262).

(Weingart, et al., 2013) reported that failures in communication are one of the major causes of adverse events in healthcare. In order to attain transfer of information in an organized, accurate way with complete patient information; the role of health care professionals is extremely important. Moreover due to the absence of an universal electronic medical record across all continuums of care, the information obtained during handover moments is often used to make critical and acute decisions concerning patient management. This emphasizes the need for completeness and accuracy of patient information transferred during the handoff within the framework of patient safety (Weingart, et al., 2013). Randell et al. (2010) stated that the content of handovers can be distinguished in three variables. First of all, being aware of the local context concerning the health care setting is important. Whether information is acknowledged to be essential or necessary depends on the medical specialty. Secondly, the handover contains information about the patient's condition, seriousness and stability; as well as information regarding the workload of staff members. Thirdly, the content of the information also depends on the health care professional who is being handed over to. For instance, if the staff member has previously cared for the patient (Randell et al., 2010). To this extent, handovers should rather be established as conversations then as reports "*where the speaker designs their talk in ways which display an orientation to the listeners*" (Randell et al., 2010, p. 272). Evidence has pointed out that in the period following the diagnosis people often consulted their GPs. Unfortunately, studies have reported that the transfer of information in regard to the GP occurs slowly and the content is often insufficient (Walsh et al., 2010). In particular the exchange of information on care support facilities and medication where stipulated as poor, which are required in the follow-up treatment after discharge (Hesselink, Schoonhoven, Plas, Wollersheim, & Vernooij-Dassen, 2013).

The case manager can assist in offering timely and complete patient information transfer between specialists and GPs (Walsh et al., 2010).

4.1.2 Shared responsibility

"*In addition to learning problems with coordination, several educators are concerned that discontinuity undermines physician allegiance to patients, resulting in an erosion of physician professionalism*" (Arora, Johnson, Meltzer, & Humphrey, 2008, p. 12). This erosion of professionalism can be explained by an agency problem. This agency problem was acknowledged by the Nobel Prize-winning economist, Kenneth Arrow. This theory considers that physicians (agents) act in the favour of their patients (principals). Moreover, patients cannot control if the agents are behaving in their best interest, giving rise to the 'agency problem' (Arora et al., 2008). This problem results in 'shift-work mentality' and a lack of responsibility to cross-cover patients. A possible solution to face this problem is to establish handoffs as a transfer of professional responsibility which can be presented by the quote "*every patient is your patient*" emphasizing the shared responsibility of healthcare providers (Arora et al., 2008).

4.1.3 Getting everyone in the same movie - teamwork

Arora et al. (2008) stated that due to the fragmentation of today's healthcare system, the cost of coordination, including information management and communication tends to increase. These costs include the direct monetary costs as well as the other types of costs, such as time. This means the costs are necessary to perform effective coordination between different care providers. As a result of inaccurate medical documentation and unrecorded medical data major problems can arise during these handover moments, which can result in uncertainty during medical decision-making (Arora et al., 2008). To this extent additional work or even re-work needs to be done, for example: spending time to obtain information from other healthcare professionals or the need to run additional tests (Arora et al., 2008). Performing effective communication and teamwork is focused on creating a common mental model, or "*getting everyone in the same movie*" (Leonard, Graham, & Bonacum, 2004, p. 86). However information systems can form a partly solution to this problem, healthcare providers still need to be responsible for ensuring that the information is accurate, updated and received so that uncertainty during medical decision-making can be minimized (Arora et al., 2008).

5. QUALITY IMPROVEMENT OF HANDOVER MOMENTS

Chapter five provides an answer to both the second and the third operational research question as mentioned in the following paragraph. Initially, all the coordination of healthcare will be discussed in general, thereafter narrowing down to oncology healthcare.

5.1 Coordination in healthcare

"*Care coordination has been defined as the deliberate integration of patient care activities between two or more participants involved in a patient's care to facilitate the appropriate delivery of health care services*" (Bodenheimer, 2008, p. 1064). As hospitals are open twenty-four hours a day they are obliged to operate as a continuous system, because patient care cannot be postponed. Hence, hospital work requires continuous coverage, meaning the permanent availability of health care providers to perform the activities involved in patient care. Continuity of care can be seen as a whole of health care services that are perceived as being coherent and connected, corresponding with the patient's health needs (Haggerty et al., 2013). As a result of continuous coverage, healthcare institutions are challenged with the coordination of hospital work. "*Shift handover, a brief handover period of synchronous collaboration allowing for two-way communication between teams on consecutive shifts, is seen as a key tool in ensuring continuous coverage*" (Randell et al., 2010, p. 271).

The Handover Toolbox was developed as a European HANDOVER project and is a web-based environment where professionals are enabled to exchange knowledge and can be seen as an state of the art expertise on practical tools in order to improve handover moments in healthcare (Drachsler et al., 2012).

In the section below the three variables will be considered in following sequence. Firstly the coordination mechanism clinical pathways will be presented in general followed by a specification to clinical pathways in oncology healthcare. Secondly the coordination mechanism case management will be discussed in general, subsequently we will narrow down to case management in oncology healthcare. Thirdly patient-centred care and patient empowerment will be elaborated upon in the same order.

1.2 "To what extent does case management and/or clinical pathways influence the quality of handover moments?"

5.1.1 Coordination mechanism - clinical pathways

Clinical pathways in general

(Rotter et al., 2010, p. 2) aimed to provide a definition regarding clinical pathways, as follows: "*Clinical pathways (CPWs) aim to link evidence to practice for specific health conditions and, therefore, optimise patient outcomes and maximise clinical efficiency.*"

These pathways facilitate the translation of evidence-based guidelines into specific protocols which have to be applied in clinical practice. There are several synonyms available of clinical pathways, such as: care maps, (critical) pathways, (integrated) care pathways, care plans, clinical practice guidelines, and care pathways and care paths (Rotter et al., 2010). Research has shown that standardized handoff processes lead to improvements in the perception of communication of providers as well as the general satisfaction on handover moments (Weingart et al., 2013).

Clinical pathways applied to oncology healthcare

Clinical pathways can be defined as evidence-based treatment protocols used by payers and clinicians in order to manage patient care. Payers tend to choose for using pathways in oncology healthcare when contracting with health care professionals in order to reduce variability, improve quality and thereby reducing costs (DeMartino & Larsen, 2012). Patton & Katterhagen (1995) added that a successful implementation of clinical pathways can lead to reduced mortality, morbidity as well as a decreased redundancy and costs, increased patient satisfaction and better patient outcomes. Cancer care is a popular target for CPWs as it is an specialism accompanied with high costs and costly technology as well as it is characterized by varying physician practice patterns and patient outcomes. The multidisciplinary character of the oncology care process contributes to the collaborative culture that is necessary in a successful implementation of CPWs (Patton & Katterhagen, 1995). Given the fact that clinical treatment guidelines and pathways are more implemented in oncology healthcare, they are increasingly important with regard to the quality of treatment and the way of care delivery (DeMartino & Larsen, 2012).

DeMartino & Larsen (2012) stated that nowadays developers and users of clinical pathways tend to focus on the higher-incidence malignancies, namely: colon, prostate, lung and breast cancers as well as various types of blood cancers. In general the pathways used to focused on chemotherapy, however they have started to include more of the care continuum, such as: surveillance, palliative care, imaging and supportive care. It should be noted that every patient is unique, therefore US oncology based their pathways on the 80/20 rule which forms therapies that work for about 80% of the patients while 20% will be treated off-pathway. In that way they take into account the patient's needs and his clinical condition (DeMartino & Larsen, 2012).

Wulff, Thygesen, Sondergaard, & Vedsted (2008) pointed out that it is of the utmost importance to have a smooth transfer of information as well as good coordination and communication are also crucial. Wulff et al. (2008) added that patient involvement and shared decision-making contribute in obtaining that the patients' experience a consistent and patient-customized clinical pathway, taking into the count the current health care system.

5.1.2 Coordination mechanism - case management

Case management in general

The Case Management Society of America defines CM as "*a collaborative process of assessment, planning facilitation, care coordination and advocacy for options and services to meet an individual's and family's comprehensive health needs through communication and available resources to promote quality cost-effective outcome*" (Khanassov, Vedel, & Pluye, 2014, p. 916). Under the umbrella of case management several terms are used synonymously, such as care coordinator, nurse navigator and patient navigator (Campbell et al., 2010).

Case manager refers to: "*A system or professional role intended to facilitate a patient's access to services and resources, and improve continuity and coordination of care*" (Gilbert et al., 2011, p. 230). "*Having a continuous relationship with a care provider enables the delivery of care that is timely, informed by knowledge of patient's medical histories, and, potentially, coordinated across providers and settings*" (Schoen et al., 2009, p. 5). Case management and care plans were perceived to be key elements in care continuity. A reduced prevalence of functional loss and an improved satisfaction and quality of life were acknowledged on the part of the patients and their families. Coordinating care and integrating the services network are necessary in creating continuity in care (Bachmann-Mettler et al., 2011).

Research from (Bodenmann et al., 2014) has proven that the process of case management can be summed up in five steps, including: (1) identification, (2) assessment, (3) planning, (4) implementation, (5) evaluation and monitoring. Usually case management is patient-centred and holistic in nature, reckoning with patient empowerment (Bodenmann, et al., 2014). Furthermore the locus of intervention is not restricted to the hospital and frequently extends into the community. The key points of patient navigation consist of "*facilitating access and improving continuity of care; proactive guidance; assistance in overcoming barriers and/or disparities; advocacy and coordination; and assistance in achieving efficiencies*" (Gilbert et al., 2011, p.230). The role of the patient navigator/case manager can be defined as the "*glue that holds it all together*" or more specific "*a way of keeping the patients from falling through the cracks*" (Gilbert et al., 2011, p.233).

To this extent Bachmann-Mettler et al. (2011) stipulated that the case manager functions as a kind of liaison between care providers from different disciplines. The case manager supports the role of the primary nurse, the physician in attendance and specialty based clinical nurse specialists. Nurse case managers are responsible for defining the level of care required by the patient, namely: acute care, rehabilitative care and home care. Moreover, they would be responsible for determining and following up with patients who required services at home (Bachmann-Mettler et al., 2011). Gilbert et al. (2011) stressed that the role of the patient navigator can help to improve the patient's experience by providing timely information and thereby reducing anxiety.

Khanassov et al. (2014) discussed that the nurse case manager performs in-depth admissions screening and continues to reconsider the care process of patients admitted to an allocated unit. They need to determine the needs and cooperate with the interdisciplinary team in order to develop, manage and evaluate the integration of patient care. Clinical experience as well as knowledge of the managed care environment of the case manager are addressed (Khanassov et al., 2014). It's also important that the case managers themselves recognize the importance of their role. When the case managers misinterpreted their role this led them to resisted collaborating. In these conditions, health care professionals and patient-caregiver dyads develop doubts about the utility of the CM intervention. Whether individuals cooperate in the process of case management is subject to the communication between case managers, health care professionals, patient-caregiver dyads and their personal influence. (Khanassov et al., 2014) As a result of the importance of ensuring smooth transitions in hospitals in order to increase the patient's safety as well as the quality of care, many countries have national accreditation standards to define how they can accomplish in enhancing the quality of handover moments (Jeffs et al., 2013).

Case management applied to oncology healthcare

Patient navigation as a coordination mechanism is an emerging trend in oncology healthcare (Campbell et al., 2010). As patients go through an emotional rollercoaster and are being confronted with an endless amount of information and medical terminology, a patient navigator (case manager) functions as a close attendant in making sense of what they are being told by the professional care providers whereby the risk of a crisis can be reduced.

Thereby they are ensuring the continuity of care in oncology (Gilbert et al., 2011). The position of case manager is assumed by an experienced, qualified nurse with supplementary training in oncology care and further training in case management. With regard to the requirements to become a case manager, a master's degree is preferred but a bachelor's degree is necessary (Khanassov et al., 2014).

Jeffs et al. (2013) stated that unfortunately, the research regarding handover moments from acute care to complex medical care and rehabilitation settings as well as the evidence related to enhancing inter-organizational handover moments is rather limited. This study concluded with the need for a collaborative approach amongst clinicians to guarantee the safe handover of patients across health care organizations (Jeffs et al., 2013). Furthermore Gilbert et al. (2011) added that the evidence with regard to the effect of case management is rather limited, especially in the field of oncology healthcare. Nevertheless patients acknowledged the role of the patient navigator/case manager as the cause of their increased satisfaction regarding the performed care combined with a decreased anxiety concerning their treatment partly due to being well-informed (Gilbert et al., 2011).

This inquiry has shown that regarding oncology rehabilitation, the effect of case management has not yet been proven. Therefore further research on case management in the oncology healthcare is needed (Bachmann-Mettler et al., 2011).

5.2 Patient centred care - patient empowerment

1.3 "What's the added value of patient empowerment in the successful application of case management and/or clinical pathways with a view to enhance the quality of handover moments in (oncology) healthcare?"

Patient empowerment in general

The current health care systems are evolving towards a more patient-centered approach, which includes that patients are actively involved in their care process (Komatsu & Yagasaki, 2014). "*Many patients want and expect to be involved in their care, specifically in communicating, monitoring, and self-management. They want their role and ideas to be acknowledged, however, especially from their most trusted clinician*" (Haggerty et al., 2013, p. 266).

The empowerment-oriented approach considers patients as responsible for their choices as well as for the related consequences (Aujoulat et al., 2007). In the search for ways to improve quality of healthcare two topics have become more and more important, namely patient-centred care and the communication among patient-provider and provider-provider. Literature has shown that the attention received from care providers to their psychosocial needs is an important factor predicting cancer patient's satisfaction with care (Wiederholt, Connor, Hartig, & Harari, 2007). In accordance with the previous the WHO emphasized the focus on the psychosocial needs of the patient within the bio psychosocial model. Subsequent ICF is based on this model aiming to integrate the medical and the social part (WHO, 2002).

In addition, educating patients about health, disease and symptom management makes them more powerful and confident to make informed decisions and prepares them for the treatments in the near future. In some way patient education is a therapy in itself (Wiederholt et al., 2007). Patient empowerment is defined as a process of behavioural change. Hence, it is important regarding the healthcare professionals to know how to help patients becoming more knowledgeable and taking control over their disease, bodies and treatment (Aujoulat et al., 2007).

Furthermore, research has shown that providing information decreases the fear of patients and families as well as it increases their sense of control and authority, meaning patient empowerment (Wilkes et al., 2000). This information should consist of details regarding the disease, prognosis, symptoms, treatment side-effects and community resources. Research from Wilkes et al. (2000) pointed out that families expected all doctors, from specialists to general practitioners, to offer them all the information required to manage their disease, treatment as well as the community services available to them. In addition, families stated that this information enables them to prepare themselves for caring for unable to make decisions (Wilkes et al., 2000). To this extent, the sense of being empowered has been pointed out as a crucial aspect of the family's journey and therefore needs to be supported. This, combined with the fact that families also experienced a need to be supported in the coordination of the treatment, the organization and accommodation subsequent to their treatment (Wilkes et al., 2000).

The abovementioned paragraph refers to the implementation of the patient empowerment approach which tends to address two issues with regard to the experience of patient's illness, namely managing their treatment and relating to healthcare providers (Aujoulat et al., 2007). Addressing these issues of patient empowerment can be seen as a process of behaviour change, focusing on how to help patients in order to become more competent and take control over their disease, bodies and treatment. Literature has shown that in order to achieve a successful process of patient empowerment, the patients should reconcile themselves with their threatened identity and security, not only with their treatment (Aujoulat et al., 2007).

The Care Transitions Program was developed by Eric Coleman and addresses the problems that arise with patients who are discharged from hospital to home. Eric Coleman suggested that two things are required to enhance the coordination of healthcare, namely patient activation and coaches. In this model the role of the coach (an advanced-practice nurse) is assumed to be training of patients and their families to coordinate care for themselves in order to increase their independence, meaning assisting them in the development of self-care skills (Bodenheimer, 2008).

Patient empowerment applied to oncology healthcare

Survivorship has been acknowledged as a phase of the cancer control continuum. This term refers to "*the period after completing primary and adjuvant treatment until recurrence or death*" (Grunfeld & Earle, 2010, p. 25). Due to an increasing number of cancer survivors, survivorship as a phase in the cancer control continuum, has become important to determine the stage for subsequent care (Grunfeld & Earle, 2010).

Grunfeld & Earle (2010) stressed the importance of patient empowerment with regard to survivorship in the care process of the oncology patient. Patient empowerment can contribute in addressing the current gaps in the communication between primary and specialised care, namely during the transition from active treatment to survivorship. This can be accomplished by letting them take responsibility for their care process "*and ensuring clarity around where responsibility for cancer surveillance, general preventive care, screening for other cancers, and management of comorbid conditions lies*" (Grunfeld & Earle, 2010, p. 28). This requires a collaborative relationship between patients and care providers, instead of a short, normative relationship (McCorkle et al., 2011).

Self-management can be defined as a model of cancer care that includes the forming of partnerships between healthcare professionals and patients as well as with their family. These partnerships lead to empowerment of the patients and their family in achieving their own goals of care at all phases in the cancer care continuum (McCorkle et al., 2011).

In the following chapters an overview is given of the methodology of the case study as well as the results derived from the interviews. Furthermore, the discussion, management and policy implications, limitations, future research and the conclusion will be presented.

6. METHODOLOGY OF THE CASE STUDY

Chapter six elaborates upon the case study that has been conducted. A clear and succinct description of the place where the case study took place is given as well as a rationale for the research design that was used. Finally the reliability and the validity will be discussed.

6.1. Coordination of healthcare as performed at the department of Medical Oncology

The information in the section below has been obtained from the website of the Oncology Centre of the University Hospital Ghent. In 2003 the law stated that each hospital should have a care program for oncology. In order to ensure the full compliance with the legal requirements in 2003 University Hospital Ghent established ZOG (Zorgprogramma Oncologie Gent). In addition, in 2009 the ZOG became the Oncology Centre, as it is now publicly known. In order to meet the requirements for coordination, the Oncology Centre applied an 'oncology consultation hour with a nurse' as well as standardized care paths/clinical pathways (Oncologisch Centrum UZ Gent, n.d.). Clinical pathways can be seen as a whole of successive steps in the treatment that defines a patient's care for a specified clinical problem. These pathways are developed by combining evidence-based literature with the clinical practice, resulting in optimised clinical outcomes as well as increasing clinical efficiency (Rotter et al., 2010). The case study took place in particular at the department of Medical Oncology, which forms part of the Oncology Centre.

6.2. Research design

The research design applied in this study is a case study with an explanatory character. Case study research was chosen because this research intends to focus on a case in order to understand a complex real-world case with a contemporary character over which the researcher has no or little control. But firstly a literature search will take place with a view to gain insight in theoretical models that are relevant to this study (Yin, 2014). The research questions were formulated as much as possible as "how" and "why" questions, since the case study focuses on operational links needing to be traced over time instead of incidence or frequencies.

This, combined with the intention to explore the experience of the different parties involved in the oncology healthcare process leads inevitably to the collection of qualitative data. Quantitative data are in this case practically unavailable. Thus an explanatory, single case study will be performed at the department of Medical Oncology in the University Hospital Ghent (Yin, 2014). Therefore the different parties involved in the oncology process will be interviewed in a semi-structured way and these results will be discussed in chapter five of this study. These interviewees will be sampled by purposive sampling, also known as judgmental sampling (Yin, 2014). The subjects have been selected because they meet a certain characteristic; such as being a nurse, a patient, a doctor or a case manager (Yin, 2014). In consultation with dr. Vibeke Kruse the interviewees were selected. The qualitative data was collected at one moment, therefore this is called a cross-sectional study (Polit & Beck, 2011). Exhibit two provides an overview of the questions regarding the interviewees (interview guide). Twelve interviews have been conducted, whereof three nurses, three patients, three doctors and three case managers. In order to be able to remember the content of all of these interviews, have they been recorded and written down afterwards. In total 5 hours and 15 minutes of interviews have been conducted. According to the analysis of the interviews six major themes have been distinguished, namely: the experiences on handover moments, handover moments with regard to the GP, improving quality of handover moments, issue themes of handover moments, most crucial handover moments as well as roles in handover moments. In addition the interviews have been coded with regard to gain more insight in the information derived from the interviews. In exhibit four the coding system will be presented.

6.3. Reliability and validity

Conclusions concerning the reliability and validity are especially important in the framework of the quality of the research design. Several tactics are available with regard to the validity and the reliability of this research. Considering the *construct validity* three tactics can be used, firstly there is the use of multiple sources of evidence also known as triangulation. By using triangulation the incidence of biases in the case study can be minimized. In this study, literature has been reviewed as well as interviews have been conducted with different actors (patients, nurses, doctors and case managers).

The second tactic that can be used is establishing a chain of evidence (which means that an external observer should be able to follow the derivation of any evidence from research questions to case study conclusions) and having the draft case study report reviewed by key informants.

These tactics will be accurately followed up. As for the *internal validity,* especially for explanatory case studies this item can be a concern when the investigator is trying to explain how and why event x led to event y (Yin, 2014).

In this study for example the aim is to determine how the performance of handovers in healthcare, namely at the department of Medical Oncology (x) can be improved (y). Subsequently, the concern over internal validity covers the problem of making inferences. Pattern matching can be used as an analytic technique to increase the internal validity by comparing the empirically based pattern, that is based on the results from the case study, with the predicted pattern that was made before the data was collected. *External validity* can be directly influenced by the form of the initial research questions. It can be extremely helpful if the research questions are formed as "how" and "why" questions in striving for external validity and thereby also the analytical generalisation. Though, in qualitative studies transferability is a more common used term in order to refer to the extent to which results can be transferred to other settings. (Polit & Beck, 2011) Besides, external validity is very difficult to achieve in a single-case study in the framework of comparing the results of a case study to a previously developed theory (Yin, 2014). Finally the *reliability* of this study can be increased by minimizing the amount of errors and biases in a study. In general reliability can be achieved by making the different steps in the study as operational as possible as well as by the aforementioned use of triangulation. (Yin, 2014)

7. RESULTS

In this chapter, the results arising from the twelve interviews will be discussed. The questions of the interviews are based on the questions of (Akkermans, 2014) who made a similar study last year. The results will be elaborated upon in the following section in the following order: patients, nurses, doctors and case managers. Subsequently, the results will be summarised, which in turn offers an answer to the aforementioned research questions and their corresponding operational research questions.

7.1. Results of patient interviews

Three patients with skin cancer, namely melanoma, were subjected to an interview in order to gain more insight in their experiences and needs with regard to the oncology healthcare process. The first part of the interview questioned the overall experience with the care process. The second part of the interview discussed the patient's experience on case management. The third part of the interview focused on their opinion regarding patient empowerment. Finally the patients were asked if they had any suggestions on further improvement regarding the perceived quality of handover moments. The results arising from the interviews will be elaborated by subject.

7.1.1. Experiences on handover moments and the care process in general

Patient's satisfaction regarding the care process

All patients were unanimous that they are pleased with the perceived quality of their care process. One patient added that his perception might be influenced by the fact that he has a good prognosis and that everything is well managed in the department. They all agreed that the caregivers are well-informed as well as they are well-informed by their doctor, nurse and case manager about their diagnosis, treatment, etc. The question on how they experienced the speed of planning tests and appointments, was replied as very good by all of them. They had the feeling that everything runs very smoothly. One patient stated that sometimes he had to wait for a long while in the waiting room, but he didn't bother because he understands that the caregivers are very busy. All of the patients had the feeling that they are closely monitored. Furthermore they emphasized that the caregivers are able to assess their situation and to take this assessment into count when informing the patient stepwise.

Most of the patients are accompanied by someone when they see the oncologist, because they experience that it helps to process the information and their diagnosis when they are not alone. As a result of the fact that they only have to visit the outpatients' clinic, their general practitioner functions as a very important point of contact for all of them. Their general practitioner is in fact the person they see the most, they said.

7.1.2. Experiences with case management

Experiences regarding the case manager from the patients point of view

The second part of the interview questioned whether they had a case manager and if so, what their experience was with regard to the case manager who guides them through their care process. All of the patients confirmed that they are guided by a case manager. With respect to the appointments, the patients confirmed that they are made by either the doctor, the case manager or by themselves. They all agreed that the case manager has an essential added-value in the oncology care process. During the consult with the oncologist/doctor the patients are accompanied by the case manager and afterwards they have a consultation/conversation with only the case manager. The three patients stressed that they experience this consultation with only the case manager as very helpful, because they can hear the diagnosis and/or treatment the doctor earlier explained in understandable words. They experience that the case manager makes it possible to address all questions that bother them as well as the difficulties that they experience during the care process. These are frequently questions that they don't dare to ask their doctor, because they think that he/she is too busy. One patient stated, that he experienced that the case manager is able to assess him. He acknowledged that it is also a surplus, having a confidant that follows you through the whole care process. All of the patients perceive the case manager as more approachable. One patient pointed out that he presumed that the case manager can improve the continuity in the care process. In addition, the crucial role of the general practitioner was a recurring theme during the interviews. The patients pointed out that they experienced that their general practitioner was well-informed about their diagnosis, treatment, etc.

7.1.3. Patient empowerment from a patient's point of view

Willingness to become empowered

The third part discussed the opinion of the interviewees on patient empowerment. In order to avoid confusion the term patient empowerment was clarified using a scheme (exhibit three - scheme of patient empowerment). Two of the patients indicated that there's no need for them to gain more control over their care process. One patient pointed out that he wants to become partly empowered. The other patients motivated their statement on not wanting to become more empowered as follows: they rely on their doctor for important decisions on the one hand as well as they feel that they aren't able to become empowered due to their age or due to their health condition on the other hand. One patient stated that he likes to search through the internet to acquire more knowledge about his diagnosis and treatment, etc. Some of his questions are formed due to the information he found on the internet. He experiences that he is able to comprehend the information he is been told. Therefore he is able to gain more control over his care process, to participate as well as it makes him feel more confident in making decisions. This patient added that he thinks that there are some phases in the process where the patient is not able to be empowered and that it is necessary to be guided through this process. He emphasized the importance of a balanced interaction between the patient and his caregivers during this care process.

7.2. Results of nurse interviews

Three nurses have been interviewed, two of them are working in the outpatient clinic and one of them is working in the inpatient clinic. The interviews contributed to gain a better insight in the needs, experiences and stipulations of nurses in oncology healthcare regarding the quality of handover moments. The first part of the interview contained questions on the overall experience with the care process and case management. The second part of the interview addressed the relation between the different variables, namely: case management, clinical pathways and patient empowerment. The third part of the interview assessed the suggestions of the nurses with regard to further improvements on the perceived quality of handover moments in oncology healthcare.

7.2.1. Experiences on handover moments and the care process in general

Most crucial handover moments

The answers on the question of the most crucial moments in the oncology care process varied from person to person. The nurses stated that the referral is a very important moment, because it is the starting point of the care process. If there occur errors in this phase it is detrimental for the further care process of the individual patient. Furthermore the diagnosis as well as the treatment were also recognized as crucial handover moments, were a large amount of information is being handed over. The treatment phase was especially important from the point of view of the nurse working in the inpatient clinic. She stated that this phase is very important because of the large amount of information that is being handed over from the nurses to the patients, namely about: the content of the treatment, the side effects, etc. The nurses function as an interpreter between the doctor and the patient in further clarifying what has been told to the patients.

Experiences regarding handover moments at the department of Medical Oncology

All of the nurses indicated that they had a clear feeling that the handover moments, id est the transfer of information from one person to another, run smoothly at most of the times. They stated that is partly due to the fact that the patients are well-informed as well as they are informed by several caregivers at different times. The repetition of this information was emphasized as very important in order to check if the patient understood everything correctly. All three nurses confirmed an open communication between the different actors involved in the care process. A point specified for improvement is the communication with the general practitioner as he's a significant confidant for the patients and thereby needs to be well-informed. One nurse pointed out that it is of the utmost importance to give feedback face-to-face instead of reporting each other by writing a note or by e-mail. She added that in the latter instance, there is a larger risk of losing information.

Role of the nurses within handover moments

The question about their role within these handover moments, was answered as follows. They all underlined their role of informing the patients during treatment and at the end of the treatment (discharge) in clarifying what's been told by the doctor. Moreover they act as an intermediary between the patient and the other caregivers. In fact, they are an important point of contact for the patients, especially in the inpatient clinic. One nurse indicated that it is essential that they try to make the patients feel at ease.

Patient's experiences from the nurses point of view

Subsequently, with regard to their impression of the patient's experiences on the handover moments one nurse of the outpatient clinic indicated that she feels that the nurses are more approachable to the patients. The other nurses pointed out that it depends on the patient how he experiences the handover moments. They added that the patient's experience can be influenced for example by a delayed referral of the GP. Furthermore, some patients have a difficult time in processing the information that has been told to them. In these cases it is helpful to include the partner or family of the patient in order to ensure that the transfer of information is properly monitored.

Stipulations with regard to the performance of smooth handover moments

The stipulations of the nurses with respect to the performance of smooth transitions in oncology healthcare focused mostly on the EPD (In Dutch: Electronisch Patiënten Dossier). A nurse from the outpatient clinic considered CoZo (Collaboratief Zorgplatform) as contributing to the information flow between primary healthcare (especially the general practitioner) and the specialised healthcare. Yet, CoZo is mostly used by the doctors. Another nurse from the inpatient clinic discussed the case manager as a condition for the performance of smooth handover moments, because she monitors them very closely. The nurse from the inpatient clinic emphasized the utmost importance of the MDO (Multidisciplinary Meeting), where both the medical part and the psychosocial part of the patient are discussed. In the MDO many actors of the oncology healthcare chain are present, such as: the nurses, the psychologist, the social worker, the case manager, the residents.

Experiences regarding the case manager from the nurses point of view

In the following paragraph the questions with respect to the case manager will be presented. The first question asked for their perceived added-value of the case manager in the oncology care process. They all agreed that the case manager functions as an important point of contact for the patients. Furthermore, she is indispensable as a result of the large amount of actors involved in the care process with a view to the coordination of all the actors as well as the patients. The nurses also discussed the fact that the case manager knows the patient very well and that they might be even more approachable than the nurses, because they follow them from the first consultation with the doctor until the end. The communication between them and the case manager takes place via the EPD, e-mail, MDO or via face-to-face communication after visiting the patient for example.

What is being handed over - content and amount

The last question of this part discussed the content and amount of the exchanged information and how they determine whether the information is relevant or not. They pointed out that they communicate the information of which they think that it is most relevant to exchange with the other caregivers. What is being exchanged can be summarised as follows: diagnosis, therapy and the start of this therapy, medication, vital signs, possible complaints of the patient, as well as the psychosocial context of the patient. Due to the large amount of patients they are obliged to give only a limited prognosis of the different patients. The nurses stated that most of the information is requested from the EPD, but the psychosocial context is mainly discussed verbally. The nurse from the inpatient clinic added that when the patient is admitted for a while the information exchange on these patients occurs mostly by shift handover as well as in the MDO. It also depends on which person is being informed. She stated that it is in fact a personal consideration on which information will be exchanged. In order to obtain a full picture of the patient the nurses try to give as much as possible information. In the transfer of information the emphasis is always put on the new problems, while the other problems will be mentioned but concise. In this way, the transfer of information is depending on the person who is been informed as well as the context.

7.2.2. Case management - clinical pathways -patient empowerment: substitutes or complements?

Clinical pathways as perceived by the nurses

In the second part of the interview the first topic that has been covered is their experience with regard to clinical pathways. All of the interviewees agreed that clinical pathways function as a guidance, however provision should be made against strict compliance of these pathways. One nurse stated that developing a clinical pathway requires a lot of work. The clinical pathway of breast cancer as well as the clinical pathway of head and neck cancer are already developed, because these cancers represent the largest group of patients as well as they are featured by a predictable path.

Patient empowerment as perceived by the nurses

In order to provide clarity on the concept of patient empowerment, this concept has been explained using a scheme (exhibit three - scheme of patient empowerment) that visualizes the process of patient empowerment. Afterwards the nurses were asked for their opinion with respect to patient empowerment. They all agreed that it is a good thing for the patients who are able to become empowered, however you cannot expect every patient to become empowered. Having cancer is already very exhausting for the patients, whereby being more involved in their care process is out of the question for some of them. A nurse from the outpatient clinic indicated that it is positive that they can take more responsibility for their care process. The patients are always well-informed by the nurses as well as they receive a brochure to read at home, but it's up to them to process the information which can help them to control their health condition. However the nurses had a feeling that some patients are willing to become more involved in their care process. Most of the patients search through the internet in order to obtain more information concerning their diagnosis, treatment, etc. Without question, all nurses agreed that the patients need guidance in this process in becoming more empowered. They play a crucial role in making sense of what they have been told or what they read on the internet. The nurse from the inpatient clinic added that clear information is very important in order to have realistic expectations. Some patients feel at ease when they get more informed or empowered, however other patients could get even more anxious by knowing too much.

Complements or substitutes

Finally the question on their opinion with respect to the relation between the three variables, namely: case management, clinical pathways and patient empowerment will be discussed. The three interviewees shared the opinion that these aforementioned variables are complementary to each other. The combination of case management, clinical pathways and patient empowerment can contribute to an improved quality of the handover moments.

7.2.3. Suggestions for further improvement of the quality of handover moments

In the third part of the interview the suggestions for further improvement of the quality of handover moments have been explored. The nurses stated that it is a continuous journey to search for ways to improve the communication between the different caregivers.

7.3. Results of doctor interviews

Within the scope of this thesis three doctors, three residents more specifically, have been conducted to an interview. The questions were similar as those with the nurses. Two of the residents are working at the outpatient clinic of the department of Medical Oncology and the other resident works at the inpatient clinic. The first part of the interview discussed their experiences with respect to the combination of the overall care process and case management. The second part questioned their opinion regarding the different variables, namely: case management, clinical pathways and patient empowerment. The third part of the interview concluded with their suggestions for further improvements with regard to their perceived quality of the handover moments.

7.3.1. Experiences on handover moments and the care process in general

Most crucial handover moments

Initially, the residents were asked to nominate the most crucial handover moments, from their point of view. The residents all agreed that, according to them, the moment of the diagnosis is the most crucial handover moment. Due to the large amount of information that is being handed over in this phase. Furthermore the treatment as well as discharge were acknowledged as being crucial handover moments, including a large amount of information transfer between all of the actors involved in this process.

Experiences regarding handover moments at the department of Medical Oncology

Subsequently, the experiences on the handover moments were discussed. The residents had a clear feeling that the handover moments run smoothly at the department of Medical Oncology. A resident from the outpatient clinic stressed the importance of being well prepared before starting the consultation. Most of the consultations are performed with both the doctor/resident and the case manager. A resident from the outpatient clinic stated that it is beneficial when the case manager accompanied her during the consultation with the patient, because she knows exactly what's been said. After the consultation the patient has a conversation/consultation with the case manager where the case manager further clarifies the information that's been told by the doctor. One week after the announcement of the diagnosis, the case manager calls the patient in order to examine the patient's state of mind as well as to check whether they understood everything clearly. This follow-up contributes to the continuity of the patient's care process. The doctors always recommend the patients to bring someone with them, because this person can assist them in processing the information. People are often very anxious during the consultation, whereby they don't hear everything that's been said. The combination of the case manager and the brochure are contributing to the transfer of information to the patients. During the care process the information is repeated by several caregivers, this is essential to make sure that the patient understood everything. A resident of the inpatient clinic pointed out that she believes that the emotional support may be reinforced. Some patients might need a psychologist, but they often don't indicate it themselves that there's a problem. She stated that they can improve this emotional support by improving the assessment of the patient's needs. They emphasized that it requires teamwork as well as empathy in order to deal with cancer patients.

Role of the doctors within handover moments

The role of the residents in the oncology care process can be summarised as follows. The doctors play obviously a very important role in this care process. The residents coordinate the other actors as well as they have a steering role with regard to the patients. The doctor is the first point of contact for the patients as they communicate the diagnosis. Within these consultations they aim to assess the patients as good as possible as well as they include the necessary actors (such as: the case manager, but possibly also the psychologist, social worker, etc.).

In conclusion, we can state that the residents have different roles in the oncology care process: a steering role with respect to the patients, a coordinating role with regard to the other actors as well as to inform, assess and support the patients. Thereafter they also inform the general practitioners so that the patient can be monitored well during the care process, even when he/she is not hospitalised. Furthermore the GP is often the first contact point for the patient in the extramural care.

Patient's experiences from the doctors point of view

The next question assessed their point of view regarding the patients' experiences on handover moments in oncology healthcare. They shared the view that the patients are pleased with the handover moments at the department of Medical Oncology. A resident from the outpatient clinic indicated that they try to provide overlap in order to obtain smooth handovers. For example, the case manager that accompanies them during their consultation. They all agreed that "*handover moments are always error prone, because information can get lost or be misunderstood*". A resident from the inpatient clinic pointed out that she thinks that the patients experience connectedness as well as they feel that all of the actors are willing to support them. Some of them might experience negative feelings due to delayed information transfers with regard to the general practitioner.

Stipulations with regard to the performance of smooth handover moments

In order to realise smooth handover moments a number of conditions were put forward, namely: sufficient as well as clear communication between the different actors in the oncology care process and also regarding the patients. At the hospital itself it is of the utmost importance that the patient is referred to the right person. Outside the hospital, a concise letter or a telephone call to the general practitioner is essential. Moreover, informing the patients guided by a brochure with a couple of numbers which they can contact in case of troubles. Last but not least, a resident from the inpatient clinic pointed out that the EPD is also crucial with a view to obtaining smooth handover moments. She added that it is preferable that the patients sees, to the greatest extent possible, recognizable caregivers during the care process. In conclusion they emphasized that "*you have to ensure transparency through the whole care process*".

Experiences regarding the case manager from the doctors point of view

Thereafter their cooperation with the case manager was questioned to the interviewees as well as their perceived added value of the case manager. All of the residents acknowledged the added value of the case manager, especially with a view to increase the continuity for the patients. A resident from the inpatient clinic compares the case manager with "*the glue between all actors in the oncology care process*". If the patients wouldn't have a case manager, the coordination of the care process would be another responsibility of the doctors, yet these are already very busy. A resident from the inpatient clinic added that the case manager is able to oversee the whole care process as well as the psychosocial wellbeing of the patient as a vital part of care. As indicated before, the case manager is more approachable for the patients. The communication between the residents and the case managers occurs mostly face-to-face as well as by telephone or by e-mail.

What is being handed over - content and amount

Subsequently, the next question asked for the content and the amount of the information that is exchanged between the several caregivers. The residents agreed that obviously the diagnosis should be exchanged as well as the chosen treatment (dose + side-effects), the prognosis and the next appointment of the patient. This data can be retrieved from the EPD. In the MDO (In Dutch: MultiDisciplinair Overleg) the medical part as well as the psychosocial context of the patient receives attention, however the latter are mostly discussed orally and not electronically. With regard to the amount, they try to provide a complete picture of the patients and they let the receivers filter in what is necessary for them. In order to avoid information overload as well as to determine whether the information is relevant or not, the residents pointed out that it is quite easy to limit the medical information however it's not so easy to restrict the psychosocial context of the patient. In the near future, they would implement a PSO (In Dutch: PsychoSociaal Overleg), a meeting in particular to discuss the psychosocial context and possible difficulties of the patients.

Communication with regard to the GP

Regarding the information transfer to the general practitioners the residents detected an area for improvement.

The general practitioners always receive a letter when the patient has been diagnosed at the department of Medical Oncology as well as they try to reach them by telephone. Furthermore, every two weeks the MOC (In Dutch: Multidisciplinair Oncologisch Consult) occurs, where the patients are discussed medically. The GP is also invited for the MOC of one of his patients, however they experience very little response to these invitations to the MOC. A resident from the inpatient clinic assumes that it is because this is a University Hospital as she heard from a colleague that there are more GP's coming to the MOC in the General Hospital, because it is more approachable for them.

7.3.2. Case management - clinical pathways -patient empowerment: substitutes or complements?

In the second part of the interview the residents were asked for their opinion with regard to clinical pathways and patient empowerment. Furthermore they were able to reflect on the relation between the several variables, namely: case management, clinical pathways and patient empowerment.

Clinical pathways as perceived by the doctors

A resident from the outpatient clinic pointed out that there are already clinical pathways developed for breast cancer as well as for head and neck cancer, because these are relatively standard and predictable paths. However, metastatic melanoma does not have a clinical pathway, but in the near future they will develop a pathway in order to provide a psychologist earlier in the care process. Some patients might need a psychologist, but they often don't indicate it themselves that there's a problem, by implementing this specific pathway the perceived quality of the care process could be enhanced. It should be noted that developing a clinical pathway is a laborious task that includes many different actors, such as: specialist nurses, doctors and psychologists. When the clinical pathway is finished, they check if predetermined terms are consistent in practice. A resident of the inpatient clinic added that it should definitely be possible to deviate from the original clinical pathway, for example when a patient needs to get a therapy that is not included in the pathway.

Patient empowerment as perceived by the doctors

With a view to ensure clarity around the concept of patient empowerment amongst all interviewees, the concept was explained to them using a scheme (exhibit three - scheme of patient empowerment). Patient empowerment is considered to be beneficial for the patients as well as for the caregivers. A resident from the outpatient clinic indicated that it would be easier for her to make decisions if the patients are empowered as she would be more confident about the decision. They all agreed that the doctor should play a guiding role in this process of patient empowerment. The residents try to stimulate some form of patient empowerment by informing them, including on what to do when they present side-effects, etc. The patients themselves search through the internet for more information regarding their diagnosis, treatment, etc. This generates questions with the patients and it's the role of the caregivers to make adjustments, whereby they would have realistic expectations. Patient empowerment is a process that requires time in order to become empowered. In this process the doctors emphasized that "*the dialogue between the patient and the caregivers (doctor, nurse, case manager, etc.) also plays an important role*". Not every patient is able to become empowered, it's highly dependable from person to person. Some people could even get more anxious when becoming more empowered, therefore they rather want the caregivers to be in control of their care process. Other patients are willing to become more empowered and if so, the residents are willing to support them in this process.

Complements or substitutes

In conclusion the doctors were asked for their reflections regarding the relations between the several variables, namely: case management, clinical pathways and patient empowerment. They stressed unambiguously that these variables are complements to each other and not substitutes. A resident from the inpatient clinic stated that using only clinical pathways would miss a lot of sensitivities. Clinical pathway is a guidance and the case manager is able to coordinate the whole care process for the patients as for the caregivers. Patient empowerment is complementary to the aforementioned variables.

7.3.3. Suggestions for further improvement of the quality of handover moments

In the third part of the interview the suggestions for further improvement of the quality of handover moments as performed at the department of Medical Oncology have been assessed. As mentioned before, in the near future they will format a clinical pathway for metastatic melanoma as well as they will implement a PSO (Psycho-Sociaal Overleg) in order to pay more attention to the psychosocial context of the patients in the form of a meeting. Another intervention is that they will review the role of the case manager as they want her to become more involved in the future. A resident from the inpatient clinic pointed out that the EPD needs to become more universal, more operable.

7.4. Results of case manager interviews

In order to gain more insight in the experiences, needs and stipulations of the case managers (In the University Hospital of Ghent, they are called: Verpleegkundig Consulenten) three of them have been conducted to an interview. One of the case managers works at the breast clinic and she is specialised in breast cancer. Another case manager works at the outpatient clinic, who is specialised in melanoma and skin cancer. The last interviewee works at the inpatient clinic and is specialised in head and neck cancer. The first part of the interview covers the experiences of the case managers on handover moments and the care process in general. The second part is focused on clinical pathways and patient empowerment as well as the relation between the three variables, namely clinical pathways, case management and patient empowerment. The third part of the interview discussed their suggestions on further enhancing the quality of the handover moments as performed at the department of Medical Oncology.

7.4.1. Experiences on handover moments and the care process in general

Most crucial handover moments

The first theme covered their experiences on handover moments and the care process in general. The question on what they define as the most crucial handover moment resulted in the diagnosis, discharge and the referral. The diagnosis, because of the large amount of information that is been exchanged between the caregivers and the patient. The discharge, because of the utmost importance of the communication towards the general practitioner.

This section concludes with the referral from the general practitioner to the hospital, where it is essential to refer the patient at the right time as well as there needs to be a confidant that guides the patient through this process.

Experiences regarding handover moments at the department of Medical Oncology

The question regarding their experiences on the handover moments as performed at the department of Medical Oncology led to the answers, as follows. The case manager from the breast clinic stated that within 80% of the diagnoses the case manager accompanies the doctor, and this was considered as positive.

A disadvantage of the large group of patients is that there are sometimes patients that slip through the net. The case manager from the outpatient clinic pointed out that, nevertheless the handover moments run smoothly most of the time. In the future they'll do an effort for improved teamwork with more meetings in order to be on the same wavelength. The case manager from the inpatient clinic stressed that "*the case managers are the common thread through the oncology care process as they support the patient, his/family as well as the caregivers*". The MOC is also a very important meeting, where the nurses, the doctors, the social worker, the psychologist and the residents are present. This meeting contributes to obtaining improved teamwork and being on the same wavelength.

Role of the case managers

The role of the case managers can be defined as follows. As indicated before, the case manager functions as the common thread/liaison between the patient, his/her family and the caregivers. They also play an important role in the referral to other caregivers, in fact they coordinate the care process of the patient as they oversee it. In order to coordinate the process of the patient they need to know them very well, whereby they can assess the patient as well as their family situation. In addition, they set appointments with the patients on specific moments in the clinical pathway as well as they ask them to give a sign when they are in trouble. Moreover, they are a confidant for the patient as well as for the caregivers. The case manager from the inpatient clinic added the requirements in order to become a case manager: being a nurse as well as having the professional qualification of being a nurse specialised in oncology.

She stressed that it is regrettable that they didn't receive a specific training in case management, because she would prefer more guidance in the interpretation of case management. Subsequently, the interviewees were asked for their opinion regarding the patients' experiences on the handover moments as performed at the department of Medical Oncology.

Patient's experiences from the case managers point of view

They all assumed that the patients are pleased. The contributing factors are, among other things, the follow-up by the case manager, the case manager being the intermediary between the patient and the doctors. Furthermore, the team gets a complete picture of the patient as a result of the fact that the case manager is more approachable for the patients to talk to.

Stipulations with regard to the performance of smooth handover moments

With regard to the stipulations several suggestions have been made. The case manager from the outpatient clinic acknowledged that it is very important to see the patient during the first consultation with the doctor. When they see the case managers from the first contact, they will be more likely to bond with their case manager. The patients see them as a central contact point through the whole care process. Communication was also emphasized being of the utmost importance in order to enhance the quality of handover moments. The case manager from the inpatient clinic added that: "*the case managers function as an interpreter to the doctors, but to the patients we are in fact their lawyer"*. For example when the patient does not agree with the chosen treatment, the case manager supports the patient in his statement and tries to obtain a treatment where the patient as well as the oncologist can agree with. Teamwork, mutual confidence as well as training were also put forward as contributing to smooth handover moments.

What is being handed over - content and amount

The following question discussed the information that is been exchanged (meaning the content) as well as the specific amount of this information. Most of the information is retrieved from the EPD (In Dutch: Electrionisch Patiënten Dossier), especially concerning the medical information. The psychosocial information with regard to the patients is mostly exchanged orally, by shift handover.

Where the transfer of information takes place the case managers try to give a full picture of the patient, whereby they let the receiver filter the content on relevance with regard to their own profession. The psychosocial information with respect to the patient is not always discussed entirely, because some patients say things to for example the psychologist in confidence. Moreover the case managers have a consultative platform that is called CHiCom, that enables them to learn more about psychosocial support in oncology healthcare.

Communication with regard to the GP

Finally, their opinion regarding the transfer of information to the general practitioners was asked for. As mentioned before, the general practitioner receives a letter, but when the situation is severe they call the GP immediately. The case managers acknowledged that the communication between the hospital and the GP's can be improved. The general practitioner is also invited to the MOC as well as afterwards he receives a letter with the diagnosis and the agreed therapy. When the patient is included in a clinical pathway, the GP acts behind the scenes. It should be noted that when the patient gets discharged, the GP is a very important confidant for them. That's why they emphasized the importance of a proper transfer of information with regard to the GP.

7.4.2. Case management - clinical pathways -patient empowerment: substitutes or complements?

Clinical pathways as perceived by the case managers

In the third part of the interview their experiences with regard to clinical pathways on the one hand as well as patient empowerment on the other hand were explored. Clinical pathways were considered to be an important guideline to work with, but when the CP does not correspond with the patient needs, there should be deviated from the original plan. For example when the patient experiences a lot of difficulties and the clinical pathway prescribed a multidisciplinary follow-up after nine weeks, it is possible that the patient gets this follow-up instead three days at the end of the radiotherapy. The case manager from the inpatient clinic stated that they were very closely involved in developing the clinical pathways. This process starts with performing a literature search for relevant information with regard to the difficulties they experience within a specific group of patients, for example the patients with metastatic melanoma.

Afterwards the different actors hold several meetings in order to find a solution for the problems they acknowledged. Starting with the problem, they verify the solutions with a cost-benefit analysis as well as referring to the literature they found and afterwards they draw a conclusion from the meetings. This conclusion is reviewed after several months in conjunction with their experiences in practice. The clinical pathway ends with the outpatient follow-up as well as the communication with the GP, meaning that these are considered as individual.

Patient empowerment as perceived by the case managers

Furthermore they were asked for their opinion regarding patient empowerment. In order to avoid confusion and to ensure homogeneity between the different interviewees, they were explained the concept of patient empowerment using a scheme of patient empowerment. This scheme can be found in exhibit three.

All of the case managers considered patient empowerment as contributing to the quality of handover moments. The case manager from the breast clinic pointed out that it is positive when the patient is well-informed, because he/she is able to ask more targeted questions. Concerning the treatment, the patients also receive clear information. The case managers stated that "*when the patient is empowered he/she can give a sign to the caregivers when he/she experiences that something is wrong*". This is good, because everyone makes mistakes or overlooks something in the patient's care process. The case manager of the outpatient clinic emphasized that "*patient empowerment contributes to better care, because less patients slip through the net*". Patients also feel more at ease as well as less anxious when they feel that they are in control of themselves and their care process. Although, most of the patients search through the internet, there are some patients that prefer not to know that much or not to become more empowered. This depends on their health condition, cognition as well as their capacity in order to participate in their care process. It should be noted that there is a need to give the information dosed and patient-customized. Yet, the majority wishes to hear detailed information with regard to their diagnosis and treatment, which is not that easy in oncology healthcare. When patients become more empowered there is a risk of misjudgements as well as there is a risk that they don't want to listen to the physician's rationale anymore. It is of the utmost importance to seek a balance within this process as well as there should remain a healthy interaction between the patient and his doctor.

Complements or substitutes

Thereafter the case managers reflected on their opinion with respect to the relations between the different variables, namely: case management, clinical pathways and patient empowerment. There was a striking consensus between all of them, as they all agreed that these variables are complementary to each other. Clinical pathways can be seen as a guideline, where case management complements to CPWs as a person who coordinates the care process of the patient as well as the actors around the patient. Concluding with patient empowerment that enables the patient to become more involved in his/her care process. The case managers stated that patient empowerment is complementary to the other variables, because the patient cannot control the whole care process as he/she needs guidance through this journey. Furthermore when the patient becomes more empowered, he/she can become frustrated noticing that not everything goes the way it should be and the patients need responsiveness to these possible frustrations. Patient empowerment however would have added-value in the oncology care process, taking account of the capacities of the patient.

7.4.3. Suggestions for further improvement of the quality of handover moments

The third part of the interview explored their suggestions for further enhancing the quality of handover moments at the department of Medical Oncology. The first suggestion considered the further involvement of the case manager in the care process, for example a consultation with the case manager before having a consultation with the doctor. Concerning the psychosocial context of the patient the case manager of the outpatient clinic suggested the use of a scale/list in order to be able to assess the patient's mental state more accurately. Concluding with the words that they try to improve on a daily basis.

7.5. Summary of the results

This summary provides the reader with an answer to the operational research questions retrieved from the interviews that have been carried out with either patients, as with the caregivers: nurses, doctors as well as case managers.

1.1"What are the main issues with regard to the coordination of information and handover moments in healthcare and how can they be addressed adequately?"

Coordination of information - main issues & options to avoid these issues

In this paragraph, the main issues regarding the coordination of information and handover moments will be discussed, as perceived by the different parties involved in the oncology care process. The nurses indicated that they had a clear feeling that everything runs smoothly, most of the time. They acknowledged that this is partly due to the fact that the patients are well-informed as well as they are informed by several caregivers at different times. The repetition of this information was stressed as crucial in ensuring that the patients understood everything correctly. A point specified for improvement is the communication with the GP as he is a significant confidant for the patients and thereby needs to be well-informed. The residents stipulated that some of the patients might experience negative feelings due to delayed information transfers regarding the GP. The residents pointed out that it is crucial to send them a concise letter or to give the general practitioners a telephone call.

Handover moments - main issues & options to avoid these issues

The residents all agreed that "*handover moments are always error prone, because information can get lost or be misunderstood*". In order to obtain smooth handover moments, the nurses have a crucial role in clarifying to the patients what's been told by the doctors. Moreover, they act as an intermediary between the patients and the other caregivers. They are an important point of contact, especially for the hospitalized patients. Furthermore, some patients have a difficult time in processing the information that has been told to them. In these cases it is helpful to include the partner or family of the patient in order to ensure that the transfer of information is properly monitored. One nurse of the inpatient clinic stated that it is very important to give feedback face-to-face instead of reporting by writing a note or by e-mail. She added that in the latter instance there is a larger risk of losing information. The information that has been exchanged is the information that the speaker judges as complete as possible, whereby they let the receivers filter the information on relevance. Due to the large amount of patients they are obliged to give only a restricted prognosis of the different patients.

1.2 "To what extent does case management and/or clinical pathways influence the quality of handover moments?"
2.1 *"How can case management and/or clinical pathways affect the experiences of the different parties involved in the oncology care process?"*

Both operational questions have been combined as they are quiet similar. These questions discuss the impact of case management as well as clinical pathways on the quality of handover moments. Moreover, the experiences of the different parties involved in the oncology healthcare chain will be enunciated.

Experiences regarding case management

All of the patients confirmed that they are guided by a case manager as well as they all agreed that the case manager has a clear added-value in the oncology care process. The other caregivers also stressed the surplus of a case manager in the patient's care process. The case manager is considered to be the common thread through the care process as well as the glue between all actors in the oncology care process. From a patient's point of view, the case manager is more approachable to them as they follow them through the whole process. One patient considered the case manager as a confidant that follows you through the whole care process. Another patient assumed that the case manager can enhance the continuity in the care process. A resident from the inpatient clinic added that the case manager is able to oversee the whole care process.

Experiences regarding clinical pathways

A resident from the outpatient clinic pointed out that there are already clinical pathways developed for breast cancer as well as for head and neck cancer, because these are relatively standard and predictable paths. However, metastatic melanoma does not have a clinical pathway, but in the near future they will develop a pathway in order to provide a psychologist earlier in the care process. Some patients might need a psychologist, but they often don't indicate it themselves that there's a problem, by implementing this specific pathway the perceived quality of the care process could be enhanced.

These variables were discussed briefly in the aforementioned paragraph, yet in the following chapter they will be further elaborated upon.

1.3 "What's the added value of patient empowerment in the successful application of case management and/or clinical pathways with a view to enhance the quality of handover moments in (oncology) healthcare?"

Within the scheme of patient empowerment of (Sijnave, 2014) the process of becoming empowered is visualised. Starting with the patient's knowledge, representing the correlation between the patient and his/her understanding and use of health information. Thereafter the patient is enabled to gain more control, which includes the relationship between the patient and the management of his/her health condition. The last step in this process is the participation in his/her care process supported by his/her caregivers through the whole care process. The aim of this process of patient empowerment is for the patient to obtain more meaningful patient involvement in healthcare. All of the interviewees were explained this concept using the scheme of patient empowerment.

Drawing upon the results of the interviews, an answer to this operational research question could be enunciated. Only one of the patients indicated that he wants to become partly empowered, as he feels that he is able to gain more control in his care process and it makes him feel more confident in making decisions. This patient pointed out that there are some phases in the care process where patients are not able to become empowered and that it is necessary for the patients to be guided through this process. The other patients don't want to become more empowered, because they rely on their doctor for important decisions on the one hand as well as they feel that they aren't able to become empowered due to their age or due to their health condition on the other hand. The case managers added the utmost importance of the cognition as a condition in order to be able to become empowered. It should be noted, that there is a need to give the information dosed and patient-customized. Along similar lines as the arguments described above, the nurses all claimed that it is a good thing when patients become more empowered, however they stated that you cannot expect all the patients to become empowered. Yet, the majority wishes to hear detailed information regarding their diagnosis and treatment, which is not that easy in oncology healthcare. The patients are always well-informed by the nurses as well as they receive a brochure to read at home, but it's up to them to process the information which can help them to control their health condition.

The case managers added that they consider patient empowerment as contributing to the quality of handover moments, "*because it leads to better care due to less patients that slip through the net*". A resident from the outpatient clinic indicated that it would be easier for her to make decisions if the patients are empowered as she would be more confident about the decision. In addition, the case managers stated that empowering the patients is beneficial, because it enables them to give a sign when something is wrong in their care process. Patient empowerment is a process that requires time in order to become empowered. In this process the doctors emphasized that "*the dialogue between the patient and the caregivers (doctor, nurse, case manager, etc.) also plays an important role*". When patients become more empowered there is a risk of misjudgements as well as there is a risk that they don't want to listen to the physician's rationale anymore. It is of the utmost importance to seek a balance within this process as well as there should remain a healthy interaction between the patient and his doctor.

2.2 *"Case management and/or clinical pathways: are they rather substitutes or complements, regarding the improvement of the quality of handovers in (oncology) healthcare?"*
2.3 *"Does patient empowerment function as a complement or as a substitute in the oncology care process?"*

Both operational research questions have been allied, whereby an answer to these questions have been drafted together. Both questions assess the experiences of the caregivers with respect to the relation between case management and clinical pathways on the one hand as well as patient empowerment on the other hand.

Interviews have been carried to gain more insight in the views of the caregivers at the department of Medical Oncology regarding the relation between case management and clinical pathways on the one hand and patient empowerment on the other hand. Remarkably, they all agreed that these variables are complements to each other and not substitutes in contributing to an increased quality of the handover moments. A resident from the inpatient clinic stated that using only clinical pathways would miss a lot of sensitivities. Clinical pathways can be seen as a guidance and the case manager complements to CPWs by coordinating the whole care process for the patients as well as the actors around them. The case managers stated that patient empowerment is complementary to the other variables, because the patient cannot control the whole care process as he/she obviously needs guidance through this journey. Furthermore when the patient becomes more empowered, he/she can become frustrated noticing that not everything goes the way it should be and the patients need responsiveness to these possible frustrations. Patient empowerment however would have added-value in the oncology care process, considering the capacities of the patient.

In the following chapter the results arising from the literature study as well as those from the interviews will be discussed together.

8. DISCUSSION

Chapter eight combines the literature with the empirical part of this study. The focus will be put on identifying the main issues with respect to handover moments, whereby opportunities for enhancing the quality of handover moments can be enunciated. Initially, the current design of case management will be elaborated. Subsequently, the current design of clinical pathways will be discussed. Furthermore, the current handover performance will be outlined. Thereafter, the options for patient empowerment applied to oncology healthcare will be discussed. The next paragraph covers the opportunities for further enhancing the quality of handover moments. Concluding with an overview of the opportunities for enhancing the quality of handover moments, arising from the interviews that have been carried out. This overview intends to provide an answer to the problem statement of this study, namely: *How can the University Hospital Ghent enhance the experienced quality of handover moments at the department of Medical Oncology with the aim of an increased quality of the health care chain as perceived by the different parties involved (such as): patients, nurses, doctors and case managers?*

8.1. Current design of case management

In this section, case management will be presented as performed at the department of Medical Oncology combined with the findings from the literature study, which are elaborated in chapter five of this thesis. The role of the case manager was described quiet similar by all of the actors in the oncology care process. Without a question, they play a crucial role in the care process of the oncology patient. At the department of Medical Oncology they are named as nurse consultants (In Dutch: Verpleegkundig Consulenten). They try to follow all the patients from the beginning, starting with the consultation together with the doctor. After the consultation with the doctor the case manager clarifies the information that's been told by the doctor in clear language. Moreover, they assess the psychosocial condition of the patient as well as they provide an answer to their questions. In fact, they act as an interpreter for the physicians and as a lawyer for the patients. Enabling improved continuity for the patients as well as for the actors around the patients. They function as a liaison/common thread for the patients and their caregivers as well as they are referred at as the glue between all the actors.

The case managers coordinate the whole care process as well as they refer patients when necessary, for further support, towards for example the psychologist. The case manager supports the patients, being a confidant for both the patients and their caregivers. Gilbert et al. (2011) stated that a patient navigator (case manager) functions as a close attendant in making sense of what they are being told by the professional care providers (...). It's also noteworthy, that it is of the utmost importance to form a good team, when dealing with such loaded issues. Due to the fact that case managers are more approachable to patients, they contribute in obtaining a full picture of the patients. During the patient's care process the case manager sets several appointments in the clinical pathway of the patient. Exhibit five visualises the clinical pathway of a patient with head and neck cancer who gets surgery treatment as well as it shows the moments where the case manager sets appointments with the patients.
Most of the time the doctor informs the patient's general practitioner, but sometimes the case managers do this too. With regard to the discharge of the patient, they contact the GP as well as the services the patient will need when coming home. Moreover, when their daily tasks are completed they also do research, make brochures as well as they give lectures from time to time.

When analyzing the interviews, it should be noted, that the case managers didn't receive a specific training regarding case management. Thereby, the job description is filled in by the case managers themselves, leaving it open for interpretation. However, the role of the case manager is reviewed frequently, whereby they intend the case managers to be more involved in the future. With the aim of letting less patients slip through the net by seeing more patients at the beginning of their care process. Due to the large amount of patients as well as due to the fact that not all the case managers work fulltime, it sometimes happens that patients aren't seen by the case manager from the beginning. In addition, Bodenmann et al. (2014) stressed that case management is usually patient-centred and holistic in nature, reckoning with patient empowerment.

The observations from the interviews led to the following. Case managers try to obtain a full picture of the patient, in that way they have a holistic approach. Due to the fact that they are more approachable to the patients, they are able to obtain more information. Obviously their approach is patient-centred. In comparison to chapter five, all of the case management tasks are covered.

Subsequently, in the table below an overview is given of the literature findings on the role of the case manager with feedback from the results, arising from the interviews.

Table 2 - Current design of case management

Case management according to the literature study	CM at University Hospital Ghent	Degree of adaptation
"*A system or professional role intended to facilitate a patient's access to services and resources, and improve continuity and coordination of care*" (Gilbert et al., 2011, p. 230). "*Having a continuous relationship with a care provider enables the delivery of care that is timely, informed by knowledge of patient's medical histories, and, potentially, coordinated across providers and settings*" (Schoen et al., 2009, p. 5).	Corresponding	The case managers play an important role in referring the patients to the right services and resources as well as all the caregivers agreed that they improve the continuity and the coordination as performed at the department of Medical Oncology. To this extent, their role is fully implemented. It should be noted, that due to the continuous relationship with their case manager it leads to a more complete picture of the patients.
(...) a patient navigator (case manager) functions as a close attendant in making sense of what they are being told by the professional care providers (...) (Gilbert et al., 2011).	Corresponding	Starting with the first consultation, the case managers accompanies the patient as well as the doctor. Thereafter the case manager clarifies what's been told. A case manager acknowledged that they function as an interpreter for the doctors and as a lawyer for the patients.
In particular the exchange of information on care support facilities and medication where stipulated as poor, which are required in the follow-up treatment after discharge (Hesselink et al., 2013). The case manager can assist in offering timely and complete patient information transfer between specialists and GPs (Walsh et al., 2010).	Partly corresponding	The patients are pleased with the information they received from the caregivers as well as the follow-up from their GP. Due to the fact that case managers are more approachable to patients, they contribute in obtaining a full picture of the patients. The clinical pathway ends with the outpatient follow-up as well as the communication with the GP, meaning that these are considered as individual.
The role of the patient navigator/case manager can be defined as the "*glue that holds it all together*" or more specific "*a way of keeping the patients falling through the cracks*" (Gilbert et al., 2011, p.233).The case manager functions as a kind of liaison between care providers from different disciplines (Bachmann et al., 2011).	Corresponding	The interviewees confirmed that the case manager can be seen as 'the glue between the different caregivers', the common thread, a liaison between the different actors in the oncology care process.
Patients acknowledged the role of the patient navigator/case manager as the cause of their increased satisfaction regarding the performed care combined with a decreased anxiety concerning their treatment partly due to being well-informed (Gilbert et al., 2011)	Partly corresponding	The patients could confirm that they experience that everything runs smoothly as well as they are pleased with the support from the case manager. However, the causal relation between the case manager and an increased satisfaction could not be confirmed. Nevertheless, being well-informed has been confirmed by a patient leading to a feeling of being in control as well as being less anxious.

8.2. Current design of clinical pathways

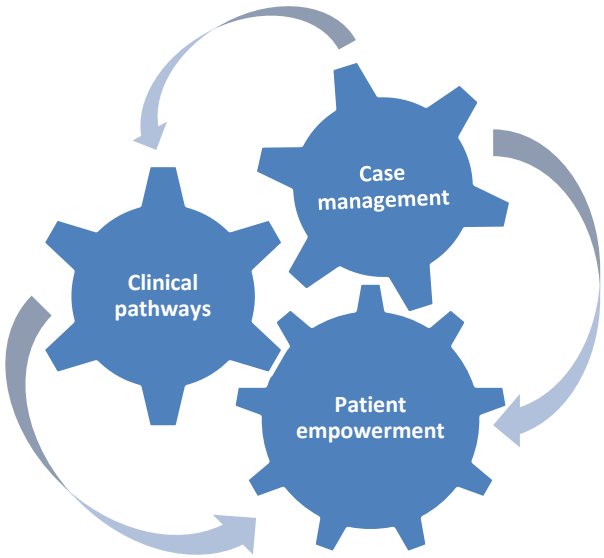
The following paragraph illuminates the current design of clinical pathways at the department of Medical Oncology. Exhibit five shows a clinical pathway as implemented at the department of Medical Oncology. There was a prominent consensus on the fact that clinical pathways provide guidance through the oncology care process. However, provision should be made against strict compliance of these pathways as every patient is unique as well as his or her care process. For example when the patient experiences a lot of difficulties and the clinical pathway prescribed a multidisciplinary follow-up after nine weeks, it's possible that the patient gets this follow-up instead three days after the end of the radiotherapy. When the patient's condition requires another treatment, there should be deviated from this original pathway, whereby the application depends on the individual patient. In comparison to the literature study, most of the findings have been confirmed. However, the 80/20 rule as described by (DeMartino & Larsen, 2012) has not been confirmed, especially with patients with melanoma the care process differs a lot form patient to patient. They emphasized that they attach a great value to the patient's needs and his specific clinical condition. A resident of the inpatient clinic added that it should definitely be possible to deviate from the original clinical pathway, for example when a patient needs to get a therapy that is not included in the pathway. A resident from the outpatient clinic pointed out that there are already clinical pathways developed for breast cancer as well as for head and neck cancer, because these are relatively standard and predictable paths. However, metastatic melanoma does not have a clinical pathway, nevertheless in near future they will develop a pathway in order to standardise and optimise the care process of these patients. A lot of patients deny that they need further support, by doing so this could contribute to the perceived quality of the care process. By analysing the interviews that have been carried out, there can be assumed that they agree that CPWs contribute to increasing the quality of treatment and the way of care delivery. However, the causal relation between clinical pathways and an increased quality of the care process, as described by (DeMartino & Larsen, 2012), has not been confirmed explicitly. Concerning the communication, no considerable complaints were put forward, except the communication towards the general practitioner. It should be noted that developing a clinical pathway is a laborious task that includes many different actors, such as: specialist nurses, doctors and psychologists. Starting with defining the problem that is been acknowledged by different caregivers combined with a cost-benefit analysis of the proposed solutions to this problem as well as referring to the literature. In the table below, the major comparisons are discussed.

Table 3 - Current design of clinical pathways

Clinical pathways according to the literature study	Clinical pathways at the department of Medical Oncology
These pathways facilitate the translation of evidence-based guidelines into specific protocols, which have to be applied in clinical practice (Rotter et al., 2010).	Corresponds obviously with the clinical pathways at the department of Medical Oncology. The pathways of both breast as well as head and neck cancer are developed, resulting from evidenced-based guidelines into specific protocols. The aforementioned clinical pathways are already applied in clinical practice. In the near future they will hold meetings in order to develop a clinical pathway for metastatic melanoma as well.
Given the fact that clinical treatment guidelines and pathways are more implemented in oncology healthcare, they are increasingly important with regard to the quality of treatment and the way of care delivery (DeMartino & Larsen, 2012).	Partly corresponding. The caregivers stated that clinical pathways provide guidance during the care process as these visualise the path of a patient specified by diagnosis. By analysing the interviews that have been carried out, there can be assumed that they agree that CPWs contribute to increasing the quality of treatment and the way of care delivery. However, the causal relation between clinical pathways and an increased quality of the care process has not been confirmed explicitly.
Research has shown that standardized handoff processes lead to improvements in the perception of communication of providers as well as the general satisfaction on handover moments (Weingart et al., 2013). "*A significant decrease in handoff-related care failures associated with the implementation of a standard handoff process*" (Bigham et al., 2014, p.576).	Partly corresponding. The patients as well as the caregivers pointed out that they had a clear feeling that the handover moments run smoothly. Concerning the communication, no considerable complaints were put forward, except the communication towards the general practitioner. The interviewees emphasized that they need the clinical pathways as a guidance, the relation between CPWs. Decreased handoff-related care failures has not been confirmed.
It should be noted that every patient is unique, therefore US oncology based their pathways on the 80/20 rule which forms therapies that work for about 80% of the patients while 20% will be treated off-pathway. In that way they take into account the patient's needs and his clinical condition (DeMartino & Larsen, 2012). Wulff et al. (2008) added that patient involvement and shared decision-making contribute in obtaining that the patients' experience a consistent and patient-customized clinical pathway, taking into the count the current health care system.	Partly corresponding. All of the interviewees agreed that clinical pathways function as a guidance, however provision should be made against strict compliance of these pathways. When the patient's condition requires another treatment, there should be deviated from this original pathway. In conclusion, the application depends on the patient. However, the 80/20 rule has not been confirmed, especially with patients with melanoma. They emphasized that they attach a great value to the patient's needs and his specific clinical condition.

8.3. Current handover performance

In the introduction of this thesis a proposition was enunciated, namely: *The quality of handover moments can be improved in oncology healthcare using case management and/ or clinical pathways combined with patient empowerment.* Within the case study one of the objectives was to obtain more profound insight in the relation between these different variables by conducting interviews with several stakeholders in the oncology healthcare process. To date, the literature does not offer a specific framework, thereby a conceptual framework was developed in order to expose the relation between the researched variables. In the framework below (conceptual framework of improvement opportunities), the relation between case management and clinical pathways on the one hand as well as patient empowerment on the other hand is visualised. All of the interviewees considered the variables as complementary in order to increase the quality of the handover moments in the oncology care process. The rationale for their statement was that they simply cannot function without each other. Clinical pathways as a guidance need case management to coordinate the whole care process as well as to improve the continuity. Furthermore, patient empowerment leads to patients, who feel less anxiety as well as they experience being more in control of their health condition. In conclusion, this combination seems like a promising approach to address the challenges the oncology healthcare faces.



In the next paragraph the observations made by doing a literature study will be examined against the testimonials from the interviewees. Randell et al. (2010, p. 272) quoted: "*Handover is far from being a foolproof method for ensuring informational continuity; practice is highly variable and little is known about what makes an effective handover*". They all agreed that "*handover moments are always error prone, because information can get lost or be misunderstood*". However, they aim to obtain continuity in the care process as well as in the information that is being exchanged.

Subsequently, research from (Manser & Foster, 2011) has shown that in particular the pre-handover preparation is often insufficient and therefore deserves special attention in the analysis of handovers.

The caregivers didn't confirm an insufficient pre-handover preparation. Most of the information is retrieved from the EPD, however the psychosocial context of the patient is mostly discussed orally. One of the interviewees stressed the importance of a good preparation with regard to the handover moments, whereby the others might find it self-evident as they didn't mentioned the pre-handover preparation. Manser & Foster (2011) pointed out that within the framework of the evaluation of the quality of handover moments, the focus is in general on the accuracy and completeness of the information, related to medical errors caused by information transfer. By analysing the interviews, it can be concluded that they try to provide the reader with as much as possible information regarding the patients, whereby they let the receiver filter the content on relevance with regard to their own profession.

Randell et al. (2010) stated that to this extent, handovers should rather be established as conversations than as reports "*where the speaker designs their talk in ways which display an orientation to the listeners*" **(**Randell et al., 2010, p. 272). Out of the nurse interviews can be inferred that they communicate the information of which they think that it is most relevant to exchange with the other caregivers. What is being exchanged can be summarised as follows: diagnosis, therapy and the start of this therapy, medication, vital signs, possible complaints of the patient, as well as the psychosocial context of the patient. Due to the large amount of patients they are obliged to give only a limited prognosis of the different patients. The nurses stated that most of the information is requested from the EPD, but the psychosocial context is mainly discussed verbally. The nurse from the inpatient clinic added that when the patient is admitted for a while the information exchange on these patients occurs mostly by shift handover as well as in the MDO. It also depends on which person is being informed. She stated that it is in fact a personal consideration on which information will be exchanged. In order to obtain a full picture of the patient the nurses try to give as much as possible information. In the transfer of information the emphasis is always put on the new problems, while the other problems will be mentioned but concise. In this way, the transfer of information is depending on the person who is been informed as well as the context. Shen et al. (2013) pointed out that in particular the final handover moment leading to hospital discharge is crucial.

Insufficient communication at this point causes a risk of poor outcomes regarding the patients. All of the interviewees acknowledged the transfer of information regarding the GP as an important area for improvement.

The residents stipulated that some of the patients might experience negative feelings due to delayed information transfers regarding the GP. The residents pointed out that it is crucial to send them a concise letter or to give the general practitioners a telephone call. Nevertheless, the patients expressed that they had a clear feeling that their GP was well-informed.

Subsequently, the interviews were established following the issue themes of handover moments as indicated by (Hesselink et al., 2013), namely: getting everyone in the same movie, shared responsibility as well as the transfer of information. These aforementioned are necessary to be attended in order to obtain smooth handover moments. In the table below these issue themes are elaborated.

Table 4 - Current handover performance	
1. Getting everyone in the same movie - teamwork	
According to the literature study	**As experienced at the department of Medical Oncology**
As a result of inaccurate medical documentation and unrecorded medical data major problems can arise during handover moments, which can result in uncertainty during medical decision-making (Arora et al., 2008). To this extent additional work or even re-work needs to be done, for example: spending time to obtain information from other healthcare professionals or the need to run additional tests (Arora et al., 2008).	Corresponding. In order to obtain information that is accurate, several meetings are held at the department of Medical Oncology. Once a week there is the MDO (MultiDisciplinair Overleg) as well as every two weeks there is the MOC (Multidisciplinair Oncologisch Consult). The doctors want to ensure continuity in the information by having the consults together with the case manager, whereby the case manager hears exactly what's been told to the patients. No additional work or re-work were observed by the interviewees.
"*Shift handover, a brief handover period of synchronous collaboration allowing for two-way communication between teams on consecutive shifts, is seen as a key tool in ensuring continuous coverage*" (Randell et al., 2010, p. 271).	Corresponding. During shift-handovers the caregivers inform each other with up-to-date information regarding the patients. In the future they'll do an effort for improved teamwork with more meetings in order to be on the same wavelength. Ensuring more continuity.
2. Shared responsibility	
According to the literature study	**As experienced at the department of Medical Oncology**
"*In addition to learning problems with coordination, several educators are concerned that discontinuity undermines physician allegiance to patients, resulting in an erosion of physician professionalism*" (Arora et al., 2008, p. 12).	Confirmed. A resident stressed that it is preferable that the patients sees, to the greatest extent possible, recognizable caregivers during the care process. Concluding with the quote that "*you have to ensure transparency through the whole care process*".
Patients cannot control if the agents are behaving in their best interest, giving rise to the 'agency problem' (Arora et al., 2008). This problem results in 'shift-work mentality' and a lack of responsibility to cross-cover patients.	Not confirmed. The patients stated that they had a clear feeling that everything runs smoothly as well as the caregivers emphasized that they act in the best interest of the patients. No 'shift-work mentality' or 'a lack to cross-over patients' was mentioned during the interviews.

3. Transfer of information	
According to the literature study	**As experienced at the department of Medical Oncology**
(Weingart et al., 2013) reported that failures in communication are one of the major causes of adverse events in healthcare.	Not confirmed in the results arising from the interview. They did emphasized the utmost importance of sufficient communication between all the actors.
Moreover due to the absence of an universal electronic medical record across all continuums of care, the information obtained during handover moments is often used to make critical and acute decisions. (Weingart et al., 2013).	Confirmed. One of the residents stressed the utmost importance of a universal electronic medical record as well as a more operable one.
Being aware of the local context concerning the health care setting is important. Whether information is acknowledged to be essential or necessary depends on the medical specialty (Randell et al., 2010).	Corresponding. With regard to the amount, they try to provide a complete picture of the patients and they let the receivers filter in what is necessary for them. Where the transfer of information takes place, the case managers try to give a full picture of the patient, whereby they let the receiver filter the content on relevance with regard to their own profession.
The handover contains information about the patient's condition, seriousness and stability; as well as information regarding the workload of staff members (Randell et al., 2010).	Partly corresponding. What is being exchanged can be summarised as follows: diagnosis, therapy (dose + side-effects) and the start of this therapy, medication, vital signs, possible complaints of the patient, prognosis as well as the psychosocial context of the patient. Due to the large amount of patients they are obliged to give only a limited prognosis of the different patients. The workload wasn't confirmed.
The content of the information also depends on the health care professional who is being handed over to. For instance, if the staff member has previously cared for the patient. (Randell et al., 2010).	Corresponding. In order to obtain a full picture of the patient the nurses try to give as much as possible information. In the transfer of information the emphasis is always put on the new problems, while the other problems will be mentioned but concise. In this way, the transfer of information is depending on the person who is been informed as well as the context.
Unfortunately, studies have reported that the transfer of information in regard to the GP occurs slowly and the content is often insufficient (Walsh et al., 2010).	Corresponding. All of the interviewees acknowledged the transfer of information regarding the GP as a point for improvement. The residents stipulated that some of the patients might experience negative feelings due to delayed information transfers regarding the GP. The residents pointed out that it is crucial to send them a concise letter or to give the general practitioners a telephone call.

8.4. Patient empowerment applied to oncology healthcare

As a result of the interviews that have been carried out, we were enabled to gain insight in the experiences as well as the opinion from the interviewees regarding patient empowerment in the oncology care process. Patient empowerment as a concept was explained to the interviewees using a scheme, which is included in exhibit three. The concept of patient empowerment can be summarised as follows. Within the scheme of patient empowerment of (Sijnave, 2014) the process of becoming empowered is visualised. Starting with the patient's knowledge, representing the correlation between the patient and his/her understanding and use of health information. Thereafter the patient is enabled to gain more control, which includes the relationship between the patient and the management of his/her health condition. The last step in this process is the participation in his/her care process supported by his/her caregivers through the whole care process. The aim of this process of patient empowerment is for the patient to obtain more meaningful patient involvement in healthcare.

Drawing upon the results of the interviews, it can be concluded that only one of the patients wants to become empowered. The other patients don't want to become more empowered, because they rely on their doctor for important decisions on the one hand as well as they feel that they aren't able to become empowered due to their age or due to their health condition on the other hand. The case managers added the utmost importance of the cognition as a condition in order to be able to become empowered. It should be noted, that there is a need to give the information dosed and patient-customized. Along similar lines as the arguments described above, the nurses all claimed that it is a good thing when patients become more empowered, however they stated that you cannot expect all the patients to become empowered. Yet, the majority wishes to hear detailed information regarding their diagnosis and treatment, which is not that easy in oncology healthcare. The patients are always well-informed by the nurses as well as they receive a brochure to read at home, but it's up to them to process the information which can help them to control their health condition.

Grunfeld & Earle (2010) emphasized the importance of patient empowerment with regard to survivorship in the care process of the oncology patient. Patient empowerment can contribute in addressing the current gaps in the communication between primary and specialised care, namely during the transition from active treatment to survivorship. This can be accomplished by letting them take responsibility for their care process "*and ensuring clarity around where responsibility for cancer surveillance, general preventive care, screening for other cancers, and management of comorbid conditions lies*" (Grunfeld & Earle, 2010, p. 28).

This requires a collaborative relationship between patients and care providers, instead of a short, normative relationship (McCorkle et al., 2011). In similar lines with the literature study, the interviewees also stressed the beneficial impact of patient empowerment. In addition, they feel that most of the patients are willing to become more empowered, on condition that they are able to become more empowered. The relation between patient empowerment and addressing the current gaps in the communication between primary and specialised care has not been confirmed.

Subsequently, since the communication between the general practitioner is acknowledged as a point for improvement in the oncology care process, the meaningful involvement of the patient in his/her care process could help to bridge the gap between the hospital and primary care. Yet, more research is needed to further clarify the relation between patient empowerment and the current gaps between primary and specialised care. Concluding with the table below.

Table 5 - Patient empowerment applied to oncology healthcare	
Patient empowerment according to the literature study	**Patient empowerment at the department of Medical Oncology**
"Many patients want and expect to be involved in their care, specifically in communicating, monitoring, and self-management. They want their role and ideas to be acknowledged, however, especially from their most trusted clinician"(Haggerty et al., 2013, p.266)	Partly corresponding. Only one of the patients indicated that he wants to become partly empowered, because he feels that he is able to gain more control in his care process as well as it makes him feel more confident in making decisions. This patient pointed out that there are some phases in the care process where patients are not able to become empowered and that it is necessary for the patients to be guided through this process.
Educating patients about health, disease and symptom management makes them more powerful and confident to make informed decisions and prepares them for the treatments in the near future (Wiederholt et al., 2007).	Confirmed. A resident from the outpatient clinic indicated that it would be easier for her to make decisions if the patients are empowered as she would be more confident about the decision.
Research from Wilkes et al. (2000) has shown that providing information decreases the fear of patients and families as well as it increases their sense of control and authority, meaning patient empowerment.	Corresponding. Some patients feel at ease when they get more informed, feeling in control and/or empowered. Other patients could even get more anxious when becoming more empowered, therefore they rather want the caregivers to be in control of their care process.
Eric Coleman suggested that two things are required to enhance the coordination of healthcare, namely patient activation and coaches. In this model the role of the coach (an advanced-practice nurse) is assumed to be training patients and their families to coordinate care for themselves in order to increase their independence, meaning assisting them in the development of self-care skills (Bodenheimer, 2008).	Corresponding. Most of them are accompanied by their partner/family when they see the oncologist, because they experience that it helps to process the information and their diagnosis as well as they are able to support the patient through this process. The residents try to stimulate some form of patient empowerment by informing them, including on what to do when they present side-effects, etc. The patients themselves search through the internet for more information regarding their diagnosis, treatment, etc. Thereafter they have questions and it's the role of the caregivers to make adjustments, whereby they would have realistic expectations.

8.5. Opportunities for enhancing the quality of handover moments

This section elaborates the indicated opportunities for further enhancing the quality of handover moments as indicated by the interviewees at the department of Medical Oncology. The patients had a clear feeling that everything runs smoothly, whereby they didn't had any suggestions for further improvement of their perceived quality of the handover moments. All of the caregivers agreed that it is a continuous journey to search for ways to improve the communication between the different caregivers. Therefore they try to improve the communication as well as the coordination in the oncology care process on a daily basis. Subsequently, they pointed out that they are searching for different ways to review the role of the case manager as they want her to become more involved in the future. The first suggestion considered the further involvement of the case manager in the care process, for example a consultation with the case manager before having a consultation with the doctor. In the near future they will develop a clinical pathway for metastatic melanoma in order to provide a psychologist earlier in the care process of these patients. A lot of patients deny that they need further support, by implementing this clinical pathway with special attention for the psychosocial needs for these patients could contribute to their perceived quality of their care process. Moreover, they will implement a PSO (Psycho-Sociaal Overleg) at the department of Medical Oncology in order to pay more attention to the psychosocial context of the patients in the form of a specific meeting. Correspondingly, research from Wiederholt et al. (2007) has shown that the attention received from care providers to their psychosocial needs is an important factor predicting cancer patient's satisfaction with care. In accordance with the previous the WHO emphasized the focus on the psychosocial needs of the patient within the bio psychosocial model. Subsequent ICF is based on this model aiming to integrate the medical and the social part (WHO, 2002). Concerning the psychosocial context of the patient the case manager of the outpatient clinic suggested the use of the scale/list in order to be able to assess the patient's mental state more accurately. Weingart et al. (2013) stressed that moreover due to the absence of an universal electronic medical record across all continuums of care, the information obtained during handover moments is often used to make critical and acute decisions. Accordingly, a resident from the inpatient clinic pointed out that the Electronic Patient Database needs to become more universal, more operable.

9. IMPLICATIONS FOR PRACTICE & RECOMMENDATIONS

Despite the limitations of this study, some of our findings remain meaningful for healthcare professionals. Building on the conclusions of the World Health Organization and the Joint Commission it is required that there is a growing awareness regarding the performance of handovers as these include a high risk moment of patient safety. Research has shown that by using standardized protocols, such as clinical pathways, based on the current evidence and implemented in practice, variability in clinical practice can be reduced whereby patient safety increases. As a result of these findings case management can be seen as a person who cooperates with the various health care professionals as well as provides guidance and facilitates access to the patients and thereby enhances the continuity of care. The implementation of case management enables the healthcare professionals to improve the information that is being exchanged by enhancing the mutual communication. Finally research pointed out that empowering the patient enables them to be more knowledgeable about their treatment by being well-informed as well as it increased their sense of control. However, it should be noted that to date the evidence regarding this topic is too thin to recommend a widespread policy regarding the improvement of the quality of handover moments. More research is needed to further clarify the added-value of the implementation of case management and/ or clinical pathways in oncology healthcare combined with patient empowerment.

10. LIMITATIONS

In chapter eleven, the limitations related to this thesis will be elaborated. In the paragraph below, the included studies as well as the reliability and validity of this thesis will be reconsidered. With a view to provide the reader with the limitations related to this study.

Regarding the included studies in the literature review, a few limitations could be enunciated. The transferability of these findings to oncology healthcare in Belgium could be questioned as there is only one study included that took place in Belgium, namely the study of (Aujoulat et al., 2007). We further stipulated that two of the studies were conducted by the same research groups. Possible relations between these studies are feasible and are not accounted in this thesis. Subsequently, most of the studies regarding this subject took place in the USA. The poverty of European studies on the improvement of the quality of handover moments in oncology healthcare emphasizes a research priority. Another limitation is that the studies that were conducted in oncology healthcare setting are limited to fourteen of the thirty-three studies as well as another two studies took place in a setting of patients with chronic illnesses in general.

Furthermore, the reliability and the validity will be discussed. Yin (2014) stated that considering the *construct validity* three tactics can be used. Firstly, there is the use of multiple sources of evidence also known as triangulation. By using triangulation the incidence of biases in the case study can be minimized. In this study literature has been searched through as well as interviews have been carried out with different actors (patients, nurses, doctors and case managers) in order to obtain as much as possible information from different sources. During the literature search several databases have been searched, namely: Google Scholar, Pubmed, Web of Science as well as European Journal of Oncology Nursing has been consulted. The second tactic that can be used is establishing a chain of evidence and having the draft case study report reviewed by key informants (Yin, 2014). In order to establish a chain of evidence, all of the several steps have been described accurately, such as: the selection process, the search strategy, the interview guide, the coding system, etc. In addition, the thesis has been read by different key informants, with the aim of ensuring transparency.

As for the *internal validity,* especially for explanatory case studies this item can be a concern when the investigator is trying to explain how and why event x led to event y (Yin, 2014).

In this study for example the aim is to determine how the performance of handovers in healthcare, namely at the department of Medical Oncology (x) can be improved (y). Subsequently, the concern over internal validity covers the problem of making inferences. In replying to the *internal validity* of this study, inferences are carried out with due care. Pattern matching can be used as an analytic technique to increase the internal validity by comparing the empirically based pattern, that is based on the results from the case study, with the predicted pattern that was made before the data was collected. Chapter eight, the discussion attempts to compare the empirically based pattern with the predicted pattern, which can be considered as a first step in pattern matching.

External validity can be directly influenced by the form of the initial research questions. Thereby the research questions are formed as much as possible as "how" and "why" questions in striving for external validity and thereby also the transferability of the results (Polit & Beck, 2011). It's also noteworthy, that external validity or analytical generalisation is more difficult to achieve in a single-case study in the framework of comparing the results of a case study to previously developed study (Yin, 2014).

Finally the *reliability* of this study can be increased by minimizing the amount of errors and biases in a study. In general, reliability can be achieved by making the different steps in the study as operational as possible as well as by the aforementioned use of triangulation. (Yin, 2014) As indicated above, all of the several steps have been described accurately, such as: the selection process, the search strategy, the interview guide, the coding system, etc. In conclusion, several interventions have been conducted to increase the reliability and the validity of this case study, nevertheless not all errors and biases could be avoided.

11. FUTURE RESEARCH

In future research, however, it would be good to focus on investigating the impact of coordination mechanisms in order to improve the quality of handover moments. Since many studies have been conducted regarding handover moments, yet few studies considered the impact of coordination mechanisms in order to improve the quality of these handover moments. Especially in the field of oncology healthcare, the evidence with respect to the improvement of handover moments as well as on the impact of coordination mechanisms in order to improve these handover moments, is rather restricted. Therefore it is desirable that more research is done regarding the impact of coordination mechanisms in order to be able to further enhance the quality of oncology healthcare. Since there was only one article found that was specified to Belgium, especially in Belgium there should be more research done in this field.

In addition, since the communication between the general practitioner is acknowledged as a point for improvement in the oncology care process, the meaningful involvement of the patient in his/her care process could help to bridge the gap between the hospital and primary care. Yet, more research is needed to further clarify the relation between patient empowerment and the current gaps between primary and specialised care.

Unfortunately, the research regarding handover moments from acute care to complex medical care and rehabilitation settings as well as the evidence related to enhancing inter-organizational handover moments is rather limited. Nevertheless, this subject also deserves more attention.

12. CONCLUSION

The main focus in this chapter is providing the reader with an overview of the most important conclusions of this study. These conclusions intend to provide an answer to the problem statement of this study, namely: *How can the University Hospital Ghent enhance the experienced quality of handover moments at the department of Medical Oncology with the aim of an increased quality of the health care chain as perceived by the different parties involved (such as): patients, nurses, doctors and case managers?*

In 2006, both the World Health Organization and the Joint Commission pointed out the role of standardized processes with a view to increase patient safety. Since then, many hospitals became aware of the need to invest in standardizing handover moments. In this thesis, the available evidence on improvement of the quality of handovers in oncology healthcare was discussed. This study focused on case management and clinical pathways as these are commonly used in oncology healthcare. These coordination mechanisms are used to bridge the gap between the different handover moments and thereby to smoothen the care process in (oncology) healthcare. The main conclusion of this study is that the proposition, namely: *The quality of handover moments can be improved in oncology healthcare using case management and/ or clinical pathways combined with patient empowerment,* can be confirmed. The interviewees stated that case management contributes to an increased continuity within the oncology care process. One resident stressed that the case manager can be seen as "*the glue between all the actors*". Accordingly, a case manager acknowledged that "*they function as an interpreter for the physicians, but as a lawyer for the patients*". In conclusion, the case manager contributes to an improved continuity, coordination as well as they play an important role in functioning as a close attendant to the patients in making sense of what they are being told. In addition, the case managers support the patient as well as the caregivers during the whole care process. As the clinical pathways alone would miss a lot of sensitivities in meeting the patients' needs, they are used complementary. In the future they aim to further involve the case manager in the care process as they want her to have, for example consultations with the patients before seeing the doctor. It should be noted, that with regard to the communication towards the GP's they acknowledged that this handover moment doesn't occur faultless.

Accordingly, the meaningful involvement of the patient in his/her care process could help to bridge the gap between the hospital and primary care. Yet, more research is needed to further clarify the relation between patient empowerment and the current gaps between primary and specialised care. In conclusion, at the department of Medical Oncology at the University Hospital Ghent the handover moments are perceived as smooth. There is, however, always scope for improvement.

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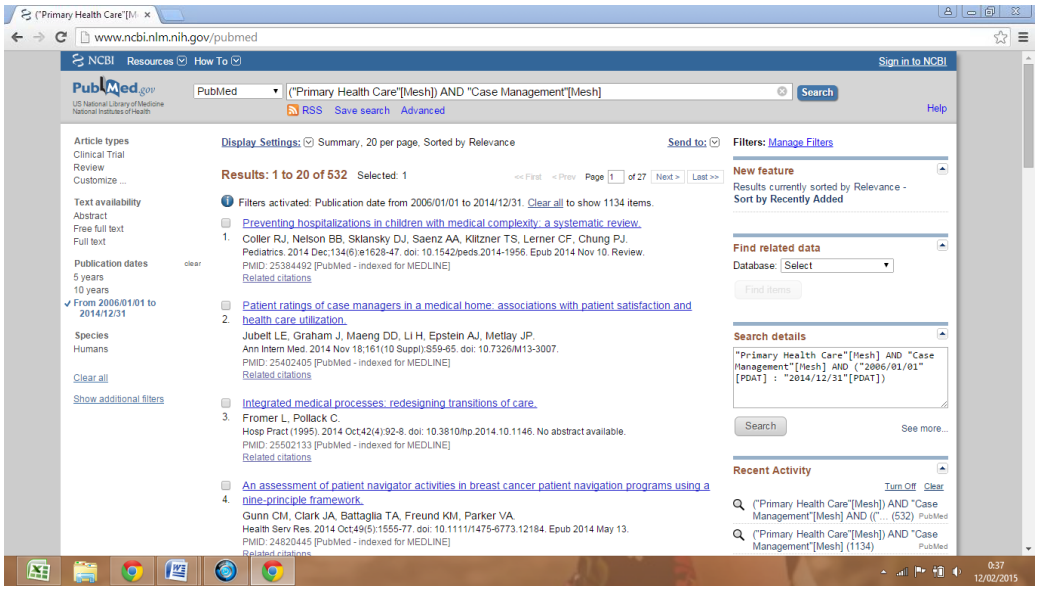
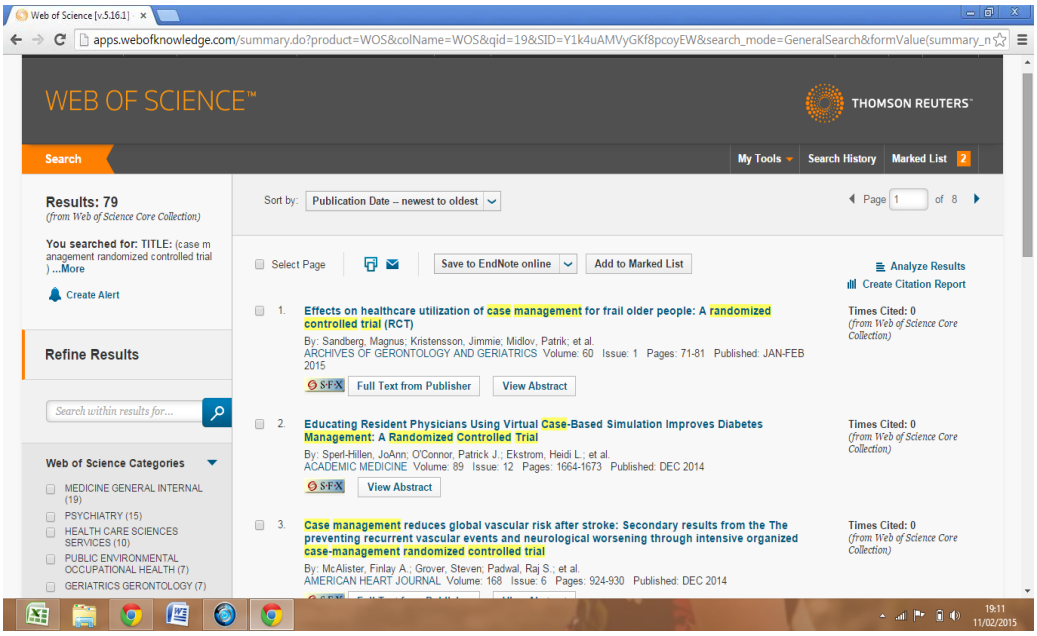
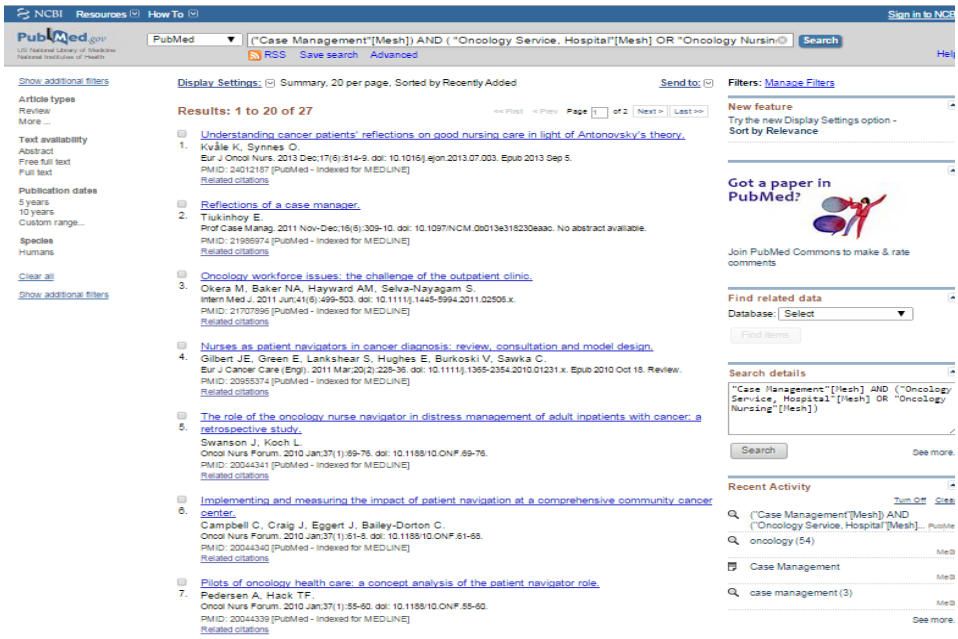
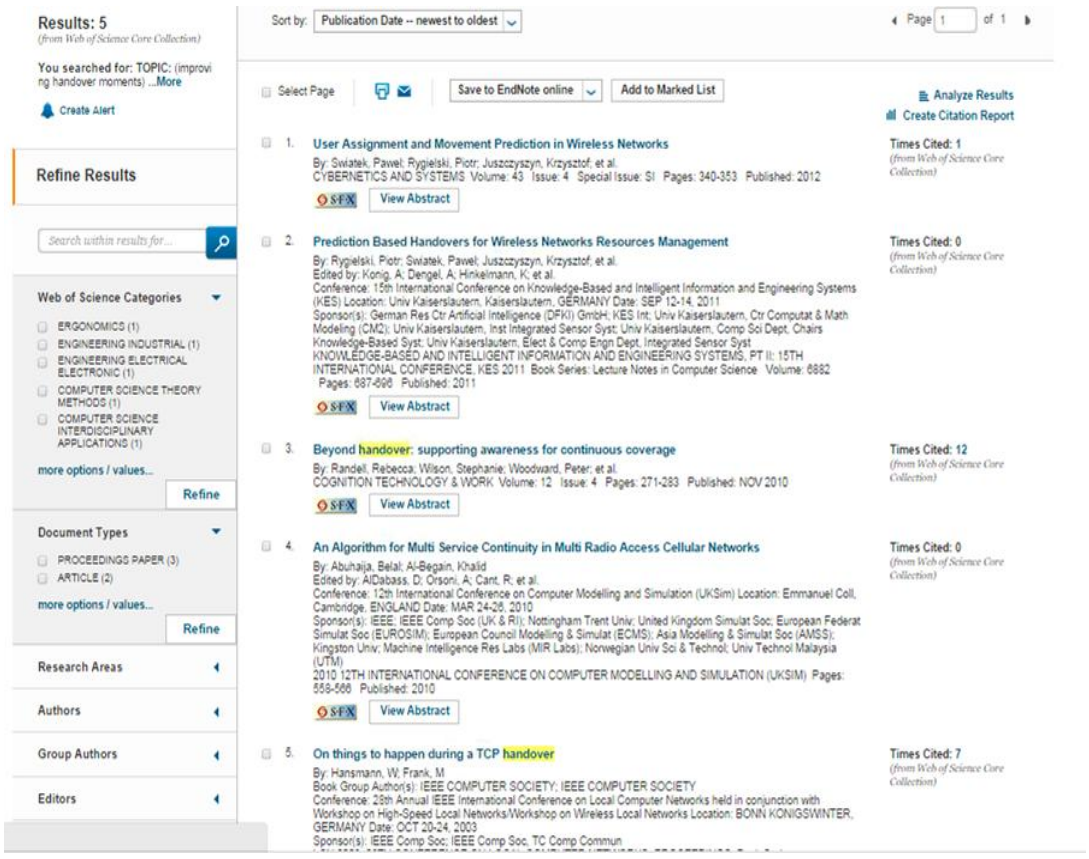
13. EXHIBITS

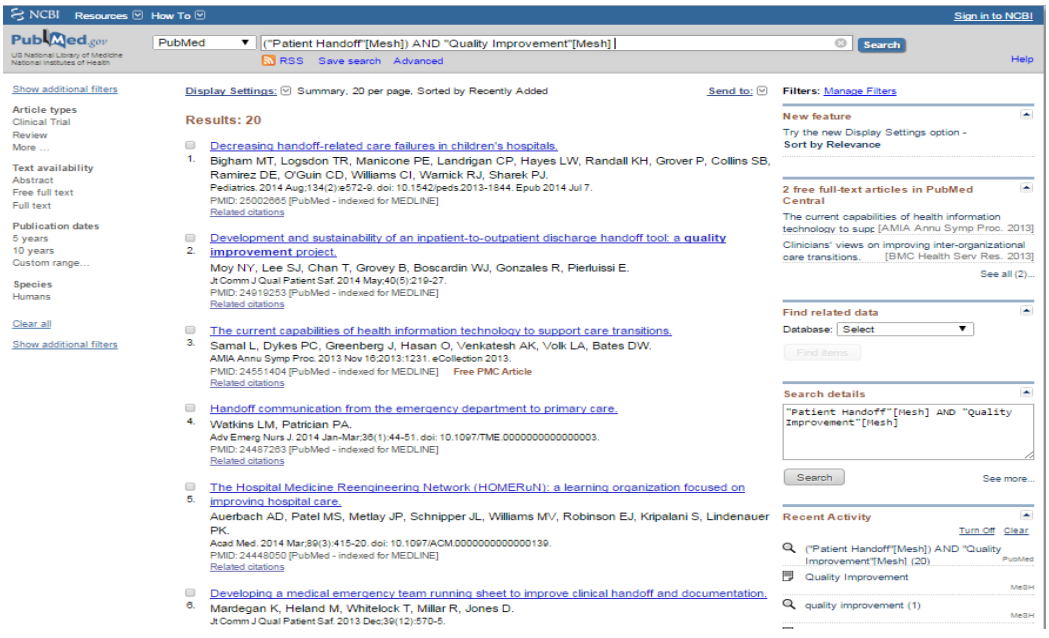
12.1. Exhibit 1 - Search strategy and print screens

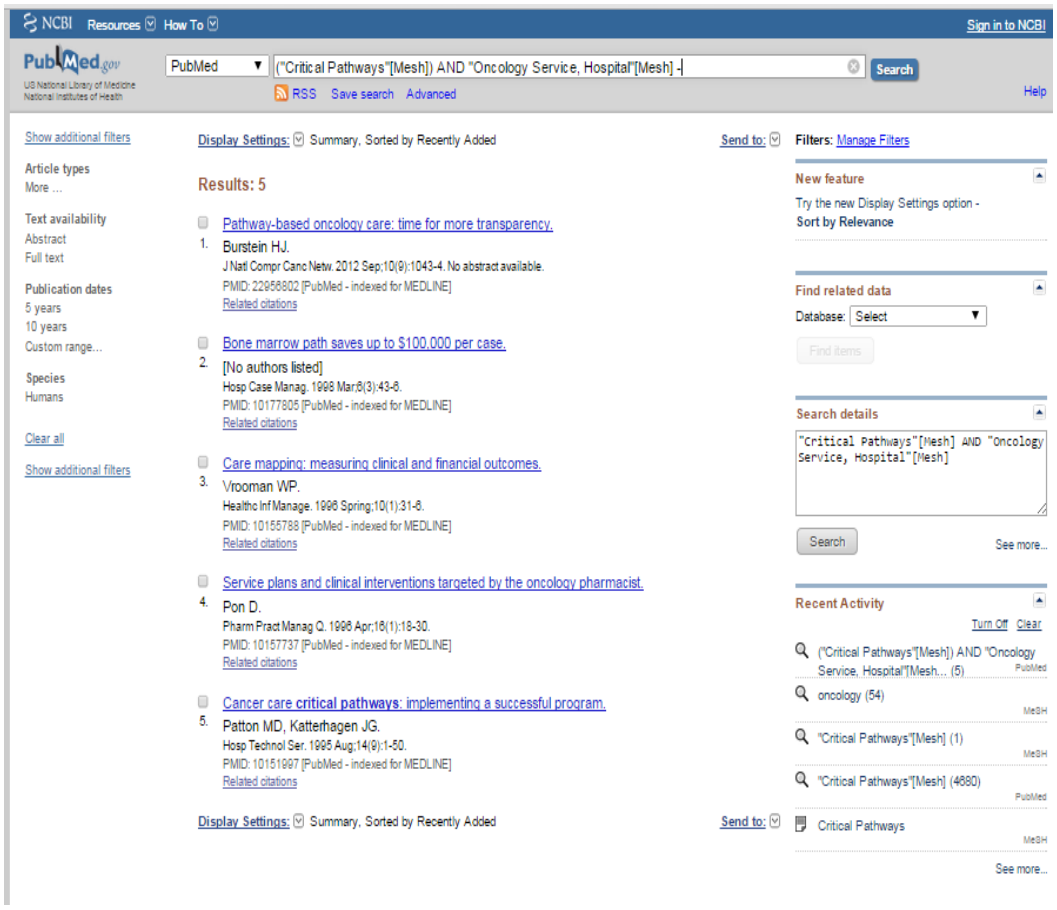
Date	1/03/2014
Database	Pubmed
Search string	*Primary health care* AND *Case management*
Inclusion criteria	The timeframe started from 2006 till 2014. This limitation was used because of the large amount of results in this search.
Results	This search resulted in 532 publications, whereof 2 were included in this study, namely: 1) Khanassov, V., Vedel, I., & Pluye, P. (2014). Case management for dementia in primary health care: a systematic studies review based on the diffusion of innovation model. Clinical interventions in aging , 915-928. 2) Huws, D. W., Cashmore, D., Newcombe, R. G., Roberts, C., Vincent, J., & Elwyn, G. (2008). Impact of case management by advanced practice nurses in primary care on unplanned hospital admissions: a controlled intervention study. BMC Health Services Research , 1-7.
Print screen	

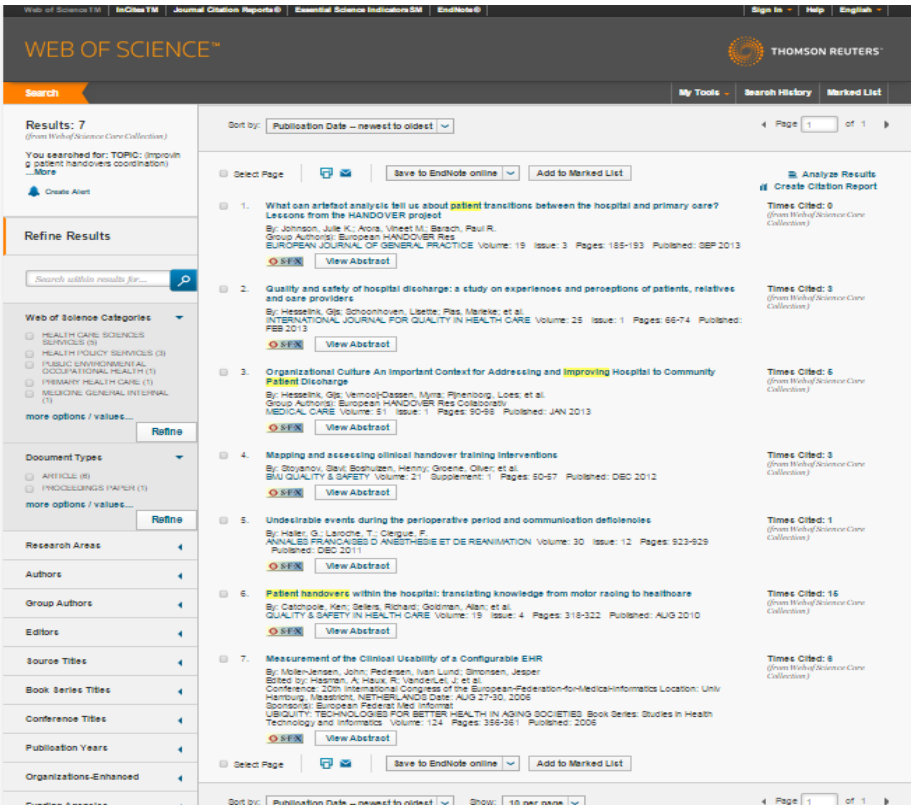
Date	1/03/2014
Database	Web of Science
Search string	Case management RCT
Inclusion criteria	No timeframe was used.
Results	This search resulted in 79 publications, whereof 2 were included in this study, namely: 1) Bachmann-Mettler, I., Steurer-Stey, C., Senn, O., Wang, M., Bardheci, K., & Rosemann, T. (2011). Case management in oncology rehabilitation (CAMON): The effect of case management on the quality of life in patients with cancer after one year of ambulant rehabilitation. A study protocol for a randomized controlled clinical trial in oncology rehabilitat. Institute of General and Health Services Research , 1-7. 2) Bodenmann, P., Velonaki, V.-S., Ruggeri, O., Hugli, O., Burnand, B., Wasserfallen, J.-B., et al. (2014). Case management for frequent users of the emergency department: study protocol of a randomised controlled trial. BMC Health Services Research , 1-11.
Print screen	

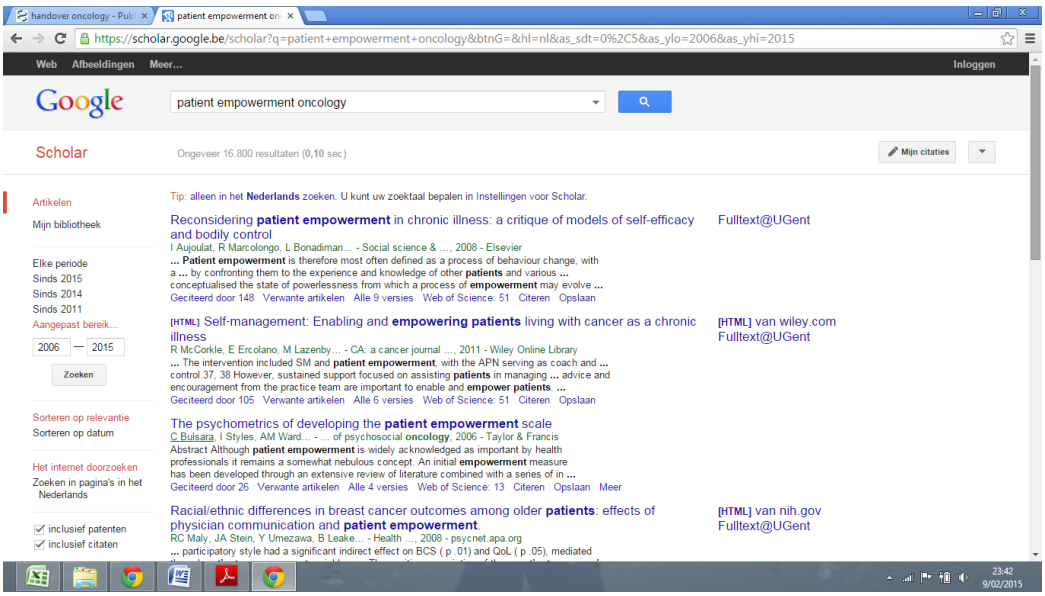
Date	25/9/2014
Database	Pubmed
Search string	*Case management* AND *Oncology service*, *hospital* OR *Oncology nursing*
Inclusion criteria	No timeframe was used
Results	This search resulted in 27 publications, whereof 21 where excluded after review of the title and abstract or on the base of absence of full text review. Subsequently 2 articles were excluded on the base of the size of the population. Finally 3 articles where included in the thesis. 1) Campbell, C., Craig, J., Eggert, J., & Bailey-Dorton, C. (2010). Implementing and measuring the impact of patient navigation at a comprehensive community cancer center. Oncology Nursing Forum , 61-68. 2) Gilbert, J. E., Green, E., Lankshear, S., Hughes, E., Burnoski, V., Sawka, C. (2011). Nurses as patient navigators in cancer diagnosis: review consulation and model design. European Journal of Cancer Care, 20, 228-236 3) Wiederholt, P. A., Connor, N. P., Hartig, G. K., & Harari, P. M. (2007). Bridging gaps in multidisciplinary head and neck cancer care: nursing coordination and case management. International Journal of Radiation Oncology Biology Physics , 88-91.
Print screen	

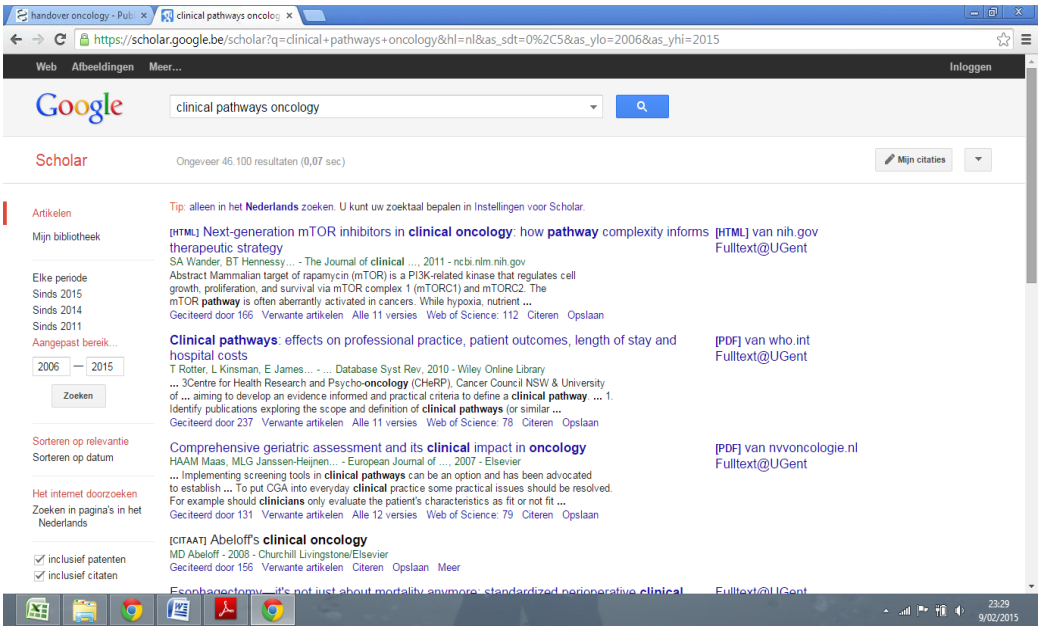
Date	11/10/2014
Database	Web of Science
Search string	*Improving handover moments*
Inclusion criteria	No timeframe was used
Results	This search resulted in 5 publications, whereof 1 was included in this study, namely: Randell, R., Wilson, S., Woodward, P., Galliers, J. (2010). Beyond handover: supporting awareness for continuous coverage. *Cognitive Technological Journal, 12,* 271-283. This article was cited 12 times in the WOC core collection with a corresponding impact factor of 1.0 in 2013. The other articles did not correspond with the initial research question of this systematic review.
Print screen	

Date	11/10/2014
Database	Pubmed
Search string	*Patient handoff* AND quality improvement
Inclusion criteria	No timeframe was used
Results	This search resulted in 20 publications, whereof 4 were used for this thesis. Namely: 1. Bigham, M. T., Logsdon, T. R., Manicone, P. E., Landrigan, C. P., Hayes, L. W., Randall, K. H., Grover, P., Collins, S. B., Ramirez, D. E., O'Guin, C. D., Williams, C. I., Warnick, R. J., Sharek, P. J. (2014). Decreasing handoff-related care failures in children's hospitals. *Pediatrics, 134*, 572-579 2. Jeffs, L., Lyons, R. F., Merkley, J., Bell, C. M. (2013). Clinicians' views on improving inter-organizational care transitions. *BMC Health Services Research, 13*, 1-8 3. Shen, M. W., Hershey, D., Bergert, L., Mallory, L., Fisher, S., Cooperberg, D. (2013). Pediatric hospitalists collaborate to improve timeliness of discharge communication. *Hospital Pediatrics, 3*, 258-265 4. Weingart, C., Herstich, T., Baker, P., Garrett, M. L., Bird, M., Billock, J., Schwartz,H.P., Bigham, M. T. (2013). Making good better: Implementing a standardized handoff in pediatric transport, *Air Medical Journal, 32*, 40-46
Print screen	

Date	5/11/2014
Database	Pubmed
Search string	*Critical pathways* AND *Oncology service, hospital*
Inclusion criteria	No timeframe was used
Results	This search resulted in 5 publications, whereof 1 article was found by using the snowball method and another was found due to this search, namely: DeMartino, J. K., Larsen, J. K. (2012). Equity in cancer care: Pathways, protocols, and guidelines. *Journal of National Comprehensive Cancer Network, 10,* 1-9 Patton, M. D., & Katterhagen, J. G. (1995). Cancer care critical pathways: implementing a successful program. *Hospital technology series*, 14 (9), 1-50. Unfortunately the article of Burstein (2012) did not offer a full text review. Burstein, H. J. (2012). Pathway-based oncology care: time for more transparency. *Journal of National Comprehensive Cancer Network, 10*, 1043-1044
Print screen	

Date	5/11/2014
Database	Web of Science
Search string	*Improving patient handover*
Inclusion criteria	No timeframe was used.
Results	This search resulted in 7 publications, whereof 3 were used for further analysis and one of them was excluded on the base of the outcome of the study. Finally 2 articles where included, namely: 1. Catchpole, K., Sellers, R., Goldman, A., McCulloch, P., Highnett, S. (2010). Patient handovers within the hospital: translating knowledge from motor racing to healthcare. *Quality & Safety in Health Care, 19*, 318-322 2. Hesselink, G., Schoonhoven, L., Plas, M., Wollersheim, H., Vernooij-Dassen, M. (2012). Quality and safety of hospital discharge: A study on experiences and perceptions of patients, relatives and care providers. *International Journal for Quality in Health Care, 25*, 66-74 The first article was cited 15 times in the WOC core collection and the second article was cited 3 times, with a corresponding impact factor of 1.584 in 2013.
Print screen	

Date	5/11/2014
Database	Google scholar
Search string	Patient empowerment oncology
Inclusion criteria	The timeframe was set from 2006 till 2014 as a result of the large amount of publications.
Results	This search resulted in 16 800 publications, whereof 4 were included in the thesis, namely: 1) Aujoulat, I., Marcolongo, R., Bonadiman, L., & Deccache, A. (2007). Reconsidering patient empowerment in chronic illness: A critique of models of self-efficacy and bodily control. *Social science and medicine* , 1228-1239. 2) Bodenheimer, T. (2008). Coordinating care - A perilous journey through the health care system. *The New England journal of medicine* , 1064-1071. 3) Grunfeld, E., & Earle, C. C. (2010). The interface between primary and oncology specialty care: treatment through survivorship. Journal of the National Cancer Institute Monographs , 25-30. 4) McCorkle, R., Ercolano, E., Lazenby, M., Schulman-Green, D., Schilling, L. S., Lorig, K., et al. (2011). Self-management: Enabling and empowering patients living with cancer as a chronic illness. *Cancer journal for clinicians* , 50-62. 5) Wilkes, L., White, K., & O'Riordan, L. (2000). Empowerment through information: supporting rural families of oncology patients in palliative care. *Journal of rural health* , 41-46.
Print screen	

Date	5/11/2014
Database	Google scholar
Search string	Clinical pathways oncology
Inclusion criteria	The timeframe was set from 2006 till 2014 as a result of the large amount of publications.
Results	This search resulted in 46 100 publications, whereof 1 was included in the thesis, namely: Rotter, T., Kinsman, L., James, E. L., Machotta, A., Gothe, H., Willis, J., et al. (2010). Clinical Pathways: effects on professional practice, patient outcomes, length of stay and hospital costs. *The Cochrane Collaboration* , 1-173.
Print screen	

Date	5/11/2014
Database	European Journal of Oncology Nursing
Search string	Nursing care coordination
Inclusion criteria	No timeframe was used.
Results	This search resulted in 53 publications, whereof 1 was included in the thesis, namely: Komatsu, H., & Yagasaki, K. (2014). The Power of nursing: Guiding patients through a journey of uncertainty. *European Journal of Oncology Nursing* , 419-424.
Print screen	

12.2. Exhibit 2 - Interview guide

1. Interview - vragen ten aanzien van de patiënten

1.1. Algemene ervaringen in verband met uw behandeltraject op oncologie

- Bent u in het algemeen tevreden over uw behandeltraject?
- Hebt u de ervaring dat alle artsen, verpleegkundigen en andere medewerkers goed op de hoogte zijn van uw behandeltraject en de zorg die u nodig heeft? Of had u eerder de indruk dat informatie soms niet goed werd overgedragen? *(Graag motiveren met een voorbeeld)*
- Was er voldoende continuïteit in de onderzoeken en behandelingen? Verliep alles vlot?
- Hebt u de indruk dat u en uw familie voldoende geïnformeerd en begeleid werden tijdens het behandeltraject? Zoja, door wie gebeurde dit?
- Kunt u verder nog voorbeelden geven van wat minder goed verlopen is en wat is de reden hiervan volgens u?

1.2. Case management

- Kunt u een objectief beeld weergeven van hoe het behandeltraject eruit ziet voor u?
  - ✓ Meer specifiek: 'Regelt u zelfstandig uw afspraken, of wordt u hierbij geholpen? Of wordt dit integraal voor u geregeld?
- Nu volgen enkele vragen mbt de samenwerking met de verpleegkundige consultent/case manager.
  - ✓ Hoe ervaart u deze begeleiding? Bent u tevreden hierover?
  - ✓ Waarmee werd u vooral geholpen tijdens deze begeleidingsmomenten?
  - ✓ Naast de case manager waren er nog zorgverleners die u begeleid hebben doorheen het behandeltraject; door wie werd u ook nog mee begeleid?
  - ✓ Hebt u een tekort ervaren in de begeleiding tijdens diagnostiek en/of behandeling? Indien ja, kunt u dit duiden met een voorbeeld?

1.3. Patient empowerment

- Indien u de keuze zou hebben, zou u dan meer begeleiding wensen vanuit het ziekenhuis of verkiest u om zelf meer controle te hebben over uw behandeltraject?
- Uitleg patient empowerment ahv schema.
  Indien u meer controle wenst te hebben (patient empowerment):
  - ✓ Bedoelt u dan dat u meer inbreng zou willen hebben in het behandeltraject?
  - ✓ Wenst u meer directe communicatie met een arts/verpleegkundige/CM? (via internet bijvoorbeeld)
  - ✓ Verkiest u om zelf afspraken vast te kunnen leggen en bijgevolg ook het tijdstip van de afspraak en de behandeling te kunnen kiezen?
  - ✓ Hebt u hierbij nog verdere aanvullingen?

1.4. Verbetering van de kwaliteit van het zorgtraject

- Hebt u nog suggesties over hoe de door u ervaren kwaliteit van het zorgtraject nog zou kunnen verbeterd worden? (*Dit wil niet zeggen dat u de kwaliteit als slecht zijnde hebt ervaren, maar dat er nog ruimte is voor verbetering.*)

2. Interview - vragen ten aanzien van de artsen

2.1 Algemeen zorgproces en case management

- Wat zijn volgens u de meest cruciale overgangsmomenten in het oncologisch zorgproces?
  Zoals bijvoorbeeld:
  (1) Doorverwijzing van huisarts naar specialist
  (2) Diagnose: specialist - patiënt - case manager
  (3) Behandeling: specialist - verpleegkundige - patiënt - huisarts
  (4) Ontslag: specialist - patiënt - huisarts - patiënt
  - ✓ Hoe ervaart uzelf deze overgangsmomenten (cfr. CM+CP)? Wat verloopt volgens u goed en wat verloopt minder goed? Welke rol heeft u als (behandelend) arts bij deze overgangsmomenten?
  - ✓ Hoe ervaart de patiënt deze overgangsmomenten volgens u?
- Wat zijn volgens u de voorwaarden tot het realiseren van continuïteit/goeie overgangen tussen de verschillende actoren die betrokken zijn in het zorgproces?
- Nu volgen enkele vragen mbt de samenwerking met de verpleegkundige consultent/case manager.
  - ✓ Wat is volgens u de grootste meerwaarde van een case manager in het behandelingstraject van de oncologische patiënt?
  - ✓ Hoe verloopt de onderlinge communicatie tussen u en de case manager? Verloopt deze vooral mondeling of vooral schriftelijk?
- Welke informatie wordt concreet uitgewisseld met de verschillende actoren in het oncologisch zorgproces (inhoud + hoeveelheid)? Hoe wordt bepaald wat wel en wat niet wordt doorgegeven in het overdrachtsmoment?
- Welke knelpunten identificeert u in de onderlinge informatieoverdracht?
- Hoe verloopt de informatieoverdracht ten aanzien van huisartsen?

2.2 Case management - zorgpaden - patient empowerment: substituten of complementen

- Past elke patiënt binnen het zorgpad horend bij zijn/haar diagnose of dient hiervan afgeweken te worden in sommige omstandigheden?
- Ziet u case management (cfr. verpleegkundig consulent) en zorgpaden eerder als aanvullend of als vervangend ten opzichte van elkaar in het kader van het optimaliseren van de overgangsmomenten?
  - ✓ Indien vervangend: verklaar nader + naar welk coördinatiemechanisme gaat uw voorkeur uit vanuit uw ervaring op het werkveld?
- Uitleg rond het begrip patient empowerment ahv schema.
- Wat is uw opinie/ervaring ten aanzien van *patient empowerment* om de kwaliteit van de overgangsmomenten te verbeteren? Ziet u *patient empowerment* als aanvullend of eerder als vervangend ten aanzien van voornoemde coördinatiemechanismen (respectievelijk: case management en/of zorgpaden)?

2.3 Verbetering van de kwaliteit van overgangsmomenten

- Op welke manier wordt in de huidige situatie gewerkt naar verbetering van de uitvoering van de overgangsmomenten toe? (*Dit wil niet zeggen dat u de kwaliteit ervaart als slecht zijnde, maar dat er nog ruimte is voor verbetering.*)
- Hebt u nog verdere aanvullingen met betrekking tot factoren die cruciaal zijn om de kwaliteit van de overgangsmomenten in het oncologisch zorgproces te verbeteren?
  - ✓ Hebt u concrete voorbeelden ten aanzien van de praktijk?

3. Interview - vragen ten aanzien van de verpleegkundigen

3.1 Algemeen zorgproces en case management

- Wat zijn volgens u de meest cruciale overgangsmomenten in het oncologisch zorgproces?
  Zoals bijvoorbeeld:
  (1) Doorverwijzing van huisarts naar specialist
  (2) Diagnose: specialist - patiënt - case manager
  (3) Behandeling: specialist - verpleegkundige - patiënt - huisarts
  (4) Ontslag: specialist - patiënt - huisarts - patiënt
  - ✓ Hoe ervaart uzelf deze overgangsmomenten (cfr. CM + CP)? Wat verloopt volgens u goed en wat verloopt minder goed? Welke rol heeft u als verpleegkundige bij deze overgangsmomenten?
  - ✓ Hoe ervaart de patiënt deze overgangsmomenten volgens u?
- Wat zijn volgens u de voorwaarden tot het realiseren van continuïteit/ goeie overgangen tussen de verschillende actoren die betrokken zijn in het zorgproces?
- Nu volgen enkele vragen mbt de samenwerking met de verpleegkundige consultent/case manager.
  - ✓ Wat is volgens u de grootste meerwaarde van een case manager in het behandelingstraject van de oncologische patiënt?
  - ✓ Hoe verloopt de onderlinge communicatie tussen u en de case manager? Verloopt deze vooral mondeling of vooral schriftelijk?
- Welke informatie wordt concreet uitgewisseld met de verschillende actoren in het oncologisch zorgproces (inhoud + hoeveelheid)? Hoe wordt bepaald wat wel en wat niet wordt doorgegeven in het overdrachtsmoment?
- Welke knelpunten identificeert u in de onderlinge informatieoverdracht?

3.2 Case management - zorgpaden - patient empowerment: substituten of complementen

- Past elke patiënt binnen het zorgpad horend bij zijn/haar diagnose of dient hiervan afgeweken te worden in sommige omstandigheden?
- Ziet u case management (cfr. verpleegkundig consulent) en zorgpaden eerder als aanvullend of als vervangend ten opzichte van elkaar in het kader van het optimaliseren van de overgangsmomenten?
  - ✓ Indien vervangend: verklaar nader + naar welk coördinatiemechanisme gaat uw voorkeur uit vanuit uw ervaring op het werkveld?
- Uitleg rond het begrip patient empowerment ahv schema.
- Wat is uw opinie/ervaring ten aanzien van *patient empowerment* om de kwaliteit van de overgangsmomenten te verbeteren? Ziet u *patient empowerment* als aanvullend of eerder als vervangend ten aanzien van voornoemde coördinatiemechanismen (respectievelijk: case management en/of zorgpaden)?

3.3 Verbetering van de kwaliteit van overgangsmomenten

- Op welke manier wordt in de huidige situatie gewerkt naar verbetering van de uitvoering van de overgangsmomenten toe? (*Dit wil niet zeggen dat u de kwaliteit ervaart als slecht zijnde, maar dat er nog ruimte is voor verbetering.*)
- Hebt u nog verdere aanvullingen met betrekking tot factoren die cruciaal zijn om de kwaliteit van de overgangsmomenten in het oncologisch zorgproces te verbeteren?
  - ✓ Hebt u concrete voorbeelden ten aanzien van de praktijk?

4. Interview - vragen ten aanzien van de case managers

4.1 Algemeen zorgproces en case management

- Wat zijn volgens u de meest cruciale overgangsmomenten in het oncologisch zorgproces?
  Zoals bijvoorbeeld:
  (1) Doorverwijzing van huisarts naar specialist
  (2) Diagnose: specialist - patiënt - case manager
  (3) Behandeling: specialist - verpleegkundige - patiënt - huisarts
  (4) Ontslag: specialist - patiënt - huisarts - patiënt
  - ✓ Hoe ervaart uzelf deze overgangsmomenten (cfr. CM/CP)? Wat verloopt volgens u goed en wat verloopt minder goed? Welke rol heeft u als case manager bij deze overgangsmomenten?
  - ✓ Hoe ervaart de patiënt deze overgangsmomenten volgens u?
- Welke zijn de belangrijkste knelpunten in de overgang van zorg van de ene naar de andere zorgverlener? Wat verloopt wel goed?
- Wat zijn volgens u de voorwaarden tot het realiseren van continuïteit/ goeie overgangen tussen de verschillende actoren die betrokken zijn in het zorgproces?
- Hoe wordt hierop geanticipeerd door middel van case management? Met andere woorden: "Hoe wordt dit concreet georganiseerd voor de patiënt?"
  - ✓ Wat is de mate van de betrokkenheid van de case manager ten opzichte van de andere actoren in het zorgproces?
  - ✓ Wat zijn de hoofdtaken van u als case manager? Is er voldoende tijd in de realiteit om deze taken uit te voeren?
- Welke informatie wordt concreet uitgewisseld met de verschillende actoren in het oncologisch zorgproces (inhoud + hoeveelheid)? Hoe wordt bepaald wat wel en wat niet wordt doorgegeven in het overdrachtsmoment?
- Welke knelpunten identificeert u in de onderlinge informatieoverdracht?
- Hoe verloopt de informatieoverdracht ten aanzien van huisartsen?

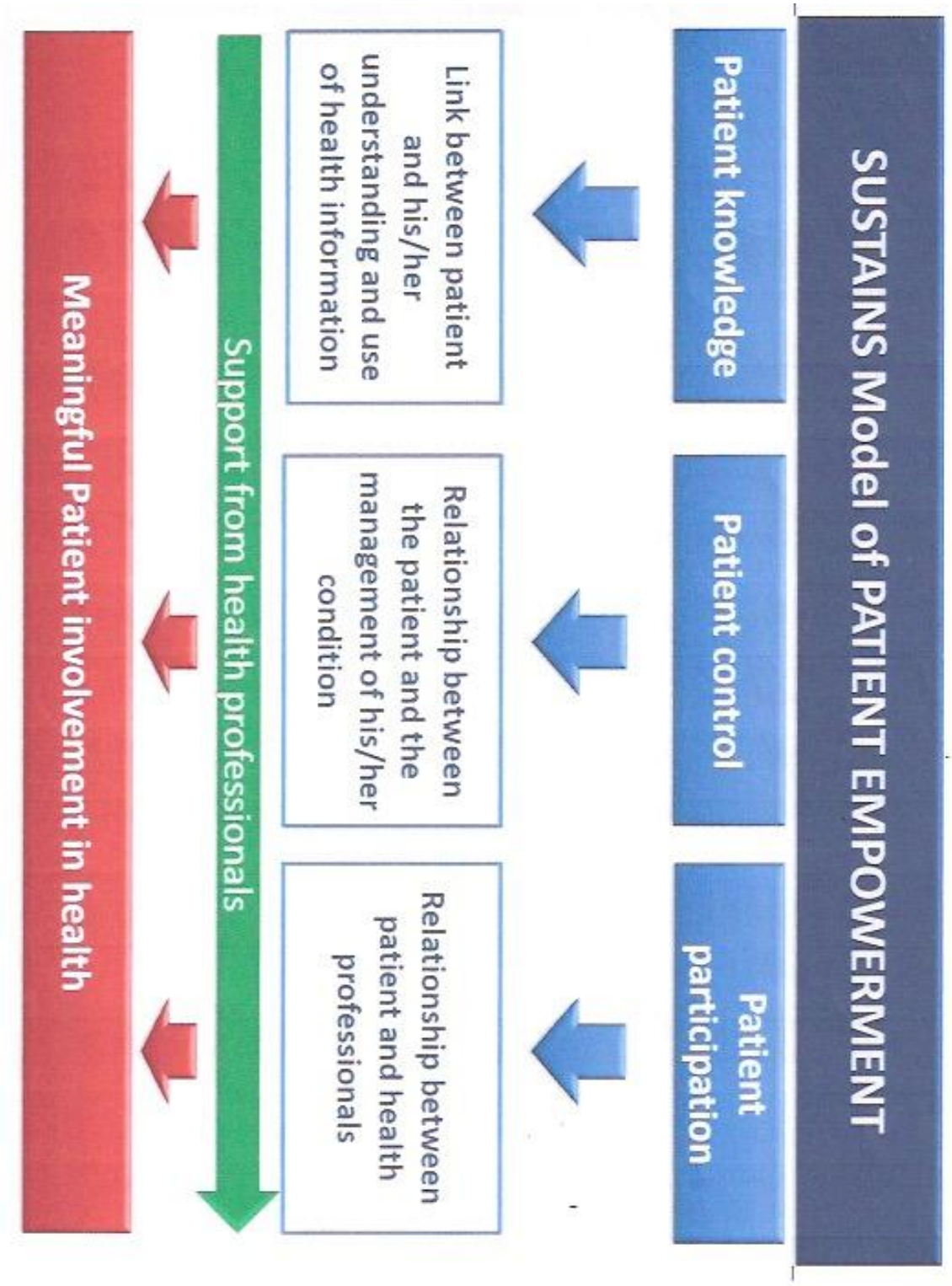
4.2 Case management - zorgpaden - patient empowerment: substituten of complementen

- Past elke patiënt binnen het zorgpad horend bij zijn/haar diagnose of dient hiervan afgeweken te worden in sommige omstandigheden?
- Ziet u case management (cfr. verpleegkundig consulent) en zorgpaden eerder als aanvullend of als vervangend ten opzichte van elkaar in het kader van het optimaliseren van de overgangsmomenten?
  - ✓ Indien vervangend: verklaar nader + naar welk coördinatiemechanisme gaat uw voorkeur uit vanuit uw ervaring op het werkveld?
- Uitleg rond het begrip patient empowerment ahv schema.
- Wat is uw opinie/ervaring ten aanzien van *patient empowerment* om de kwaliteit van de overgangsmomenten te verbeteren? Ziet u *patient empowerment* als aanvullend of eerder als vervangend ten aanzien van voornoemde coördinatiemechanismen (respectievelijk: case management en/of zorgpaden)?

4.3 Verbetering van de kwaliteit van overgangsmomenten

- Op welke manier wordt in de huidige situatie gewerkt naar verbetering van de uitvoering van de overgangsmomenten toe? (*Dit wil niet zeggen dat u de kwaliteit ervaart als slecht zijnde, maar dat er nog ruimte is voor verbetering.*)
- Hebt u nog verdere aanvullingen met betrekking tot factoren die cruciaal zijn om de kwaliteit van de overgangsmomenten in het oncologisch zorgproces te verbeteren?
  - ✓ Hebt u concrete voorbeelden ten aanzien van de praktijk?

12.3. Exhibit 3 - Scheme of patient empowerment



(Sijnave, 2014)

12.4. Exhibit 4 - Coding system

Nodes

Name	Sources	References	Created On	Created By	Modified On	Modified By
Experiences on handover moments	0	0	9/04/2015 16:07	TD	11/04/2015 19:19	TD
Case manager's experience	1	1	9/04/2015 16:12	TD	11/04/2015 19:24	TD
Nurse's experience	3	3	9/04/2015 16:12	TD	9/04/2015 18:46	TD
Patient's experience	11	13	8/04/2015 17:25	TD	11/04/2015 19:59	TD
Physician's experience	3	4	9/04/2015 16:11	TD	10/04/2015 17:53	TD
Handover moments with regard to the GP	9	14	9/04/2015 16:40	TD	11/04/2015 20:33	TD
Delayed information	1	1	10/04/2015 18:00	TD	10/04/2015 18:00	TD
General hospital more approachable	1	1	10/04/2015 16:43	TD	10/04/2015 16:43	TD
GP - Important confidant for patient	1	1	11/04/2015 18:55	TD	11/04/2015 21:02	TD
GP behind the scenes when patient is hospitalised - 1st point of contact when patient is discharged	1	1	11/04/2015 18:53	TD	11/04/2015 20:45	TD
Increased involvement of the GP	2	4	10/04/2015 17:46	TD	10/04/2015 17:59	TD
MOC	0	0	11/04/2015 18:51	TD	11/04/2015 18:52	TD
Improving quality of handover moments	0	0	8/04/2015 17:10	TD	11/04/2015 19:19	TD
Case management	7	12	8/04/2015 17:09	TD	11/04/2015 19:34	TD
Improved continuity	2	2	9/04/2015 16:17	TD	11/04/2015 20:17	TD
More involvement of the CM	1	1	10/04/2015 17:49	TD	10/04/2015 17:49	TD
Patient's experience	3	3	9/04/2015 16:17	TD	9/04/2015 17:47	TD
Requirements	1	1	11/04/2015 18:37	TD	11/04/2015 20:41	TD
Surplus of a case manager	2	2	11/04/2015 18:36	TD	11/04/2015 20:40	TD
Clinical pathways	8	9	8/04/2015 17:09	TD	11/04/2015 20:46	TD
CP for patients with breast cancer	1	1	10/04/2015 16:45	TD	10/04/2015 16:45	TD
CP for patients with melanoma	1	2	10/04/2015 16:44	TD	10/04/2015 16:45	TD

Nodes

Name	Sources	References	Created On	Created By	Modified On	Modified By
Clinical pathways	8	9	8/04/2015 17:09	TD	11/04/2015 20:46	TD
CP for patients with breast cancer	1	1	10/04/2015 16:45	TD	10/04/2015 16:45	TD
CP for patients with melanoma	1	2	10/04/2015 16:44	TD	10/04/2015 16:45	TD
Depending on the patient	4	4	10/04/2015 18:09	TD	11/04/2015 20:47	TD
Follow-up & communication with GP - off-pathway	1	1	11/04/2015 18:24	TD	11/04/2015 21:05	TD
Formatting a clinical pathway	2	2	10/04/2015 16:47	TD	11/04/2015 20:30	TD
1. Defining the problem	1	1	11/04/2015 18:19	TD	11/04/2015 20:30	TD
2. Cost-benefit analysis	1	1	11/04/2015 18:20	TD	11/04/2015 20:30	TD
3. Literature versus clinical practice	1	1	11/04/2015 18:20	TD	11/04/2015 21:06	TD
Provides guidance	3	3	9/04/2015 16:20	TD	11/04/2015 20:47	TD
Patient empowerment	8	8	8/04/2015 17:10	TD	11/04/2015 20:13	TD
Contributes to better care	2	2	11/04/2015 20:15	TD	11/04/2015 20:49	TD
Depending on the patient	6	7	9/04/2015 16:27	TD	11/04/2015 20:50	TD
Dialogue	2	3	9/04/2015 16:24	TD	10/04/2015 18:12	TD
Easier when making decisions with regard to the patient	1	2	10/04/2015 18:11	TD	11/04/2015 15:43	TD
Guidance needed	6	8	9/04/2015 16:31	TD	11/04/2015 20:49	TD
Less anxiety	3	4	9/04/2015 16:32	TD	11/04/2015 20:15	TD
Less patients slip through the net	2	2	11/04/2015 18:58	TD	11/04/2015 20:49	TD
More involvement	5	6	9/04/2015 16:32	TD	11/04/2015 20:16	TD
More targeted questions	1	1	11/04/2015 19:44	TD	11/04/2015 19:44	TD
Patients able to detect errors	2	2	11/04/2015 15:44	TD	11/04/2015 20:16	TD
Patient's experience	3	3	9/04/2015 16:22	TD	9/04/2015 17:50	TD

Nodes

Name	Sources	References	Created On	Created By	Modified On	Modified By
Interventions on increasing the quality of HOM at the department of Medical Oncology	9	9	9/04/2015 16:42	TD	11/04/2015 20:51	TD
Issue themes of handover moments	0	0	8/04/2015 17:12	TD	11/04/2015 19:19	TD
Getting everyone in the same movie - teamwork	5	6	8/04/2015 16:45	TD	11/04/2015 20:24	TD
Stipulations for good handover moments	7	7	8/04/2015 17:42	TD	11/04/2015 20:04	TD
Case manager	1	1	9/04/2015 16:08	TD	9/04/2015 18:34	TD
CoZo platform	1	1	9/04/2015 18:17	TD	9/04/2015 18:17	TD
EPD	6	8	9/04/2015 16:07	TD	11/04/2015 20:05	TD
Good preparation	1	2	10/04/2015 17:21	TD	10/04/2015 17:27	TD
MDO	3	3	9/04/2015 16:08	TD	9/04/2015 18:50	TD
MOC	2	3	9/04/2015 16:08	TD	11/04/2015 20:45	TD
Promoting transparency through the process	2	2	10/04/2015 17:36	TD	11/04/2015 20:22	TD
PSO	2	6	9/04/2015 16:08	TD	11/04/2015 20:06	TD
Recognizable caregivers for the patients	1	1	10/04/2015 17:39	TD	10/04/2015 17:39	TD
Shift handover	5	7	9/04/2015 16:08	TD	11/04/2015 19:38	TD
Sufficient communication	2	2	10/04/2015 18:03	TD	11/04/2015 20:05	TD
Teamwork	1	1	11/04/2015 18:26	TD	11/04/2015 20:35	TD
Training	1	1	11/04/2015 18:28	TD	11/04/2015 20:36	TD
Shared responsibility	5	12	8/04/2015 16:44	TD	11/04/2015 20:07	TD
Patients slip through the net - every patient is your patient	3	4	11/04/2015 19:25	TD	11/04/2015 21:08	TD
Transfer of information	5	6	8/04/2015 16:44	TD	10/04/2015 18:06	TD
Assessing patients	1	2	9/04/2015 17:01	TD	9/04/2015 17:48	TD
Brochures for patients	2	3	10/04/2015 16:35	TD	10/04/2015 17:27	TD
Consultation with patient + partner	4	4	9/04/2015 17:05	TD	11/04/2015 20:20	TD

Nodes

Name	Sources	References	Created On	Created By	Modified On	Modified By
Transfer of information	5	6	8/04/2015 16:44	TD	10/04/2015 18:06	TD
Assessing patients	1	2	9/04/2015 17:01	TD	9/04/2015 17:48	TD
Brochures for patients	2	3	10/04/2015 16:35	TD	10/04/2015 17:27	TD
Consultation with patient + partner	4	4	9/04/2015 17:05	TD	11/04/2015 20:20	TD
Content + amount	7	7	9/04/2015 16:39	TD	11/04/2015 20:41	TD
Receiver filters the content on relevance	1	1	11/04/2015 14:36	TD	11/04/2015 20:10	TD
Difficulties	9	12	9/04/2015 17:02	TD	11/04/2015 20:43	TD
Perceived quality influenced by perception	3	4	9/04/2015 17:04	TD	11/04/2015 19:23	TD
Most crucial handover moments	5	5	9/04/2015 16:08	TD	11/04/2015 19:52	TD
Diagnosis	7	7	9/04/2015 16:11	TD	11/04/2015 20:20	TD
Discharge	4	4	9/04/2015 16:11	TD	11/04/2015 20:23	TD
Referral	2	2	9/04/2015 16:09	TD	11/04/2015 20:21	TD
Treatment	3	3	9/04/2015 16:11	TD	10/04/2015 17:20	TD
Relations between CP-CM-PE	9	18	9/04/2015 16:41	TD	11/04/2015 20:50	TD
Roles in handover moments	0	0	9/04/2015 16:07	TD	11/04/2015 19:19	TD
Role CM in HOM	1	1	8/04/2015 22:29	TD	11/04/2015 19:26	TD
Appointments	4	4	9/04/2015 16:33	TD	11/04/2015 20:26	TD
Assessing patients	2	2	10/04/2015 18:05	TD	11/04/2015 19:58	TD
Consultation together with physician	1	1	11/04/2015 17:22	TD	11/04/2015 20:25	TD
Support of case managers	1	2	11/04/2015 18:50	TD	11/04/2015 20:44	TD
Contacting the patient's GP	2	3	11/04/2015 19:41	TD	11/04/2015 20:12	TD
Coordination	4	4	10/04/2015 16:48	TD	11/04/2015 20:19	TD

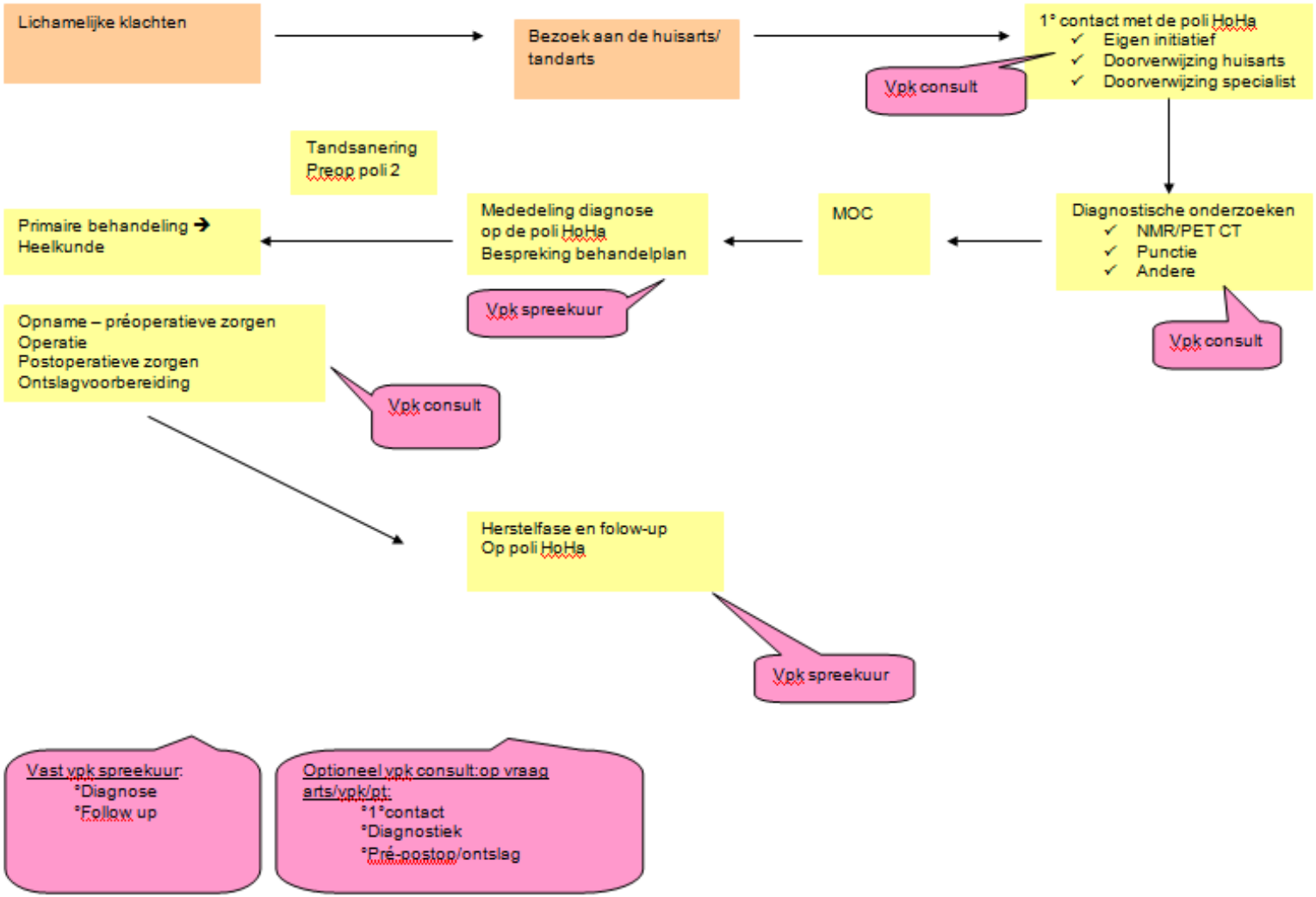
Nodes

Name	Sources	References	Created On	Created By	Modified On	Modified By
Roles in handover moments	0	0	9/04/2015 16:07	TD	11/04/2015 19:19	TD
Role CM in HOM	1	1	8/04/2015 22:29	TD	11/04/2015 19:26	TD
Appointments	4	4	9/04/2015 16:33	TD	11/04/2015 20:26	TD
Assessing patients	2	2	10/04/2015 18:05	TD	11/04/2015 19:58	TD
Consultation together with physician	1	1	11/04/2015 17:22	TD	11/04/2015 20:25	TD
Support of case managers	1	2	11/04/2015 18:50	TD	11/04/2015 20:44	TD
Contacting the patient's GP	2	3	11/04/2015 19:41	TD	11/04/2015 20:12	TD
Coordination	4	4	10/04/2015 16:48	TD	11/04/2015 20:19	TD
Follow-up	4	6	10/04/2015 16:28	TD	11/04/2015 20:08	TD
Getting a full picture of the patients	1	1	11/04/2015 17:27	TD	11/04/2015 20:26	TD
Improved continuity - glue between all actors	6	10	10/04/2015 16:36	TD	11/04/2015 20:27	TD
Informing patients	2	2	11/04/2015 17:23	TD	11/04/2015 20:26	TD
Interpreter for the physicians & lawyer for the patients	1	3	11/04/2015 18:30	TD	11/04/2015 20:39	TD
More approachable for patients	7	8	9/04/2015 16:37	TD	11/04/2015 20:27	TD
Referral	2	3	11/04/2015 19:31	TD	11/04/2015 19:57	TD
Research, brochures & giving a lecture	1	1	11/04/2015 20:09	TD	11/04/2015 20:09	TD
Support	4	9	10/04/2015 16:27	TD	11/04/2015 20:39	TD
Being a confidant with regard to patients & caregivers	1	2	11/04/2015 18:33	TD	11/04/2015 20:39	TD
Importance of a team	1	1	11/04/2015 18:35	TD	11/04/2015 20:39	TD
Role nurse in HOM	0	0	8/04/2015 22:29	TD	8/04/2015 22:29	TD
Encouraging patients	1	1	9/04/2015 18:32	TD	9/04/2015 18:32	TD
Individually	1	1	9/04/2015 18:41	TD	9/04/2015 18:41	TD
More approachable for patients	3	3	9/04/2015 16:33	TD	10/04/2015 17:42	TD

Nodes

Name	Sources	References	Created On	Created By	Modified On	Modified By
Informing patients	2	2	11/04/2015 17:23	TD	11/04/2015 20:26	TD
Interpreter for the physicians & lawyer for the patients	1	3	11/04/2015 18:30	TD	11/04/2015 20:39	TD
More approachable for patients	7	8	9/04/2015 16:37	TD	11/04/2015 20:27	TD
Referral	2	3	11/04/2015 19:31	TD	11/04/2015 19:57	TD
Research, brochures & giving a lecture	1	1	11/04/2015 20:09	TD	11/04/2015 20:09	TD
Support	4	9	10/04/2015 16:27	TD	11/04/2015 20:39	TD
Being a confidant with regard to patients & caregivers	1	2	11/04/2015 18:33	TD	11/04/2015 20:39	TD
Importance of a team	1	1	11/04/2015 18:35	TD	11/04/2015 20:39	TD
Role nurse in HOM	0	0	8/04/2015 22:29	TD	8/04/2015 22:29	TD
Encouraging patients	1	1	9/04/2015 18:32	TD	9/04/2015 18:32	TD
Individually	1	1	9/04/2015 18:41	TD	9/04/2015 18:41	TD
More approachable for patients	3	3	9/04/2015 16:33	TD	10/04/2015 17:42	TD
Point of contact	2	2	9/04/2015 16:36	TD	9/04/2015 18:33	TD
Providing information for patients	3	4	9/04/2015 16:37	TD	9/04/2015 18:48	TD
Role physician in HOM	3	4	8/04/2015 17:24	TD	10/04/2015 17:58	TD
Appointments	3	3	9/04/2015 16:33	TD	9/04/2015 17:23	TD
Assessing patients	1	1	10/04/2015 17:58	TD	10/04/2015 17:58	TD
Contacting the patient's GP	4	5	10/04/2015 16:41	TD	11/04/2015 20:23	TD
Coordination	1	1	10/04/2015 17:30	TD	10/04/2015 17:30	TD
First point of contact	1	1	10/04/2015 16:01	TD	10/04/2015 17:57	TD
Guiding	1	1	10/04/2015 16:31	TD	10/04/2015 16:31	TD
Support	1	2	10/04/2015 17:29	TD	10/04/2015 17:30	TD

12.5. Exhibit 5 - Patient flow of surgery treatment - head and neck cancer



(Carine Venneman, 2015)