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BUILDING CUSTOMER CENTRIC OPERATIONS

Defining the core processes for customer orientation

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<p>The health care sector in Finland is going through a period of changing structures because of growing demand and shrinking resources. HUS is responding this change by setting up center of excellences and organizing operations into services.</p> <p>This thesis aims to find the possible integration points from the current care processes for the Cancer Center in a way that the defined cancer-core process will meet the set requirements regarding customer centricity and scalability. Processes under investigation are breast cancer process and neuro-oncological process.</p> <p>The theoretical framework of the work is built on the value co-creation model where the customer is defining how his/her needs are encountered under the circumstances. Yet considering the rigid bureaucracy, hierarchy and economical requirements finding the correct balance and way of meeting the customer needs is crucial. From theoretical perspective the framework seeks answer from lean methodologies, relational bureaucracy, scalability and balanced metrics.</p> <p>The current status analysis reveals the multiple contact points that customer needs to be able to manage just inside the clinical process leaving out all support contacts and other networks relevant for the everyday life. Another findings are the amount of waiting person needs to be prepared to do during the process and unstructured knowledge transfers during transitions from care units to other or between care paths.</p> <p>As a result a structured approach based on the theoretical framework to manage waiting, contacts and transitions is proposed. Also a general model for increasing customer orientation is presented. A possible concept for digital services is proposed as the current trend and on-going projects in the health care sector are aiming to create customer value also by digital services.</p>	
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1 Introduction

The health care sector is in the middle of a re-organization process, not only in Finland but all over the western world. Despite the financial model behind the health care the challenges are pretty much the same all over: hospitals need to be able to perform more efficiently: savings in cost and delivering better health outcomes from client perspective. This study uses HUS (The Hospital District of Helsinki and Uusimaa) as a case example of a possible way to meet the new requirements caused by the financial situation and the legislative decisions.

HUS has decided to answer the challenge by setting up a process organization and center of excellences (CoE) in order to gain the benefits from lean organization, volume and processes (Board decision 2.9.2013). To achieve the desired outcomes, horizontal integration between centers of excellences and changes in management practices are likely to be needed. This can be reached only with common core processes that are flexible and scalable enough to meet the various client requirements and by customer centric approach in all organization levels.

The current status of implementing CoEs is that the Heart and Lung Center has operated since 1.1.2013 and the Cancer Center operations has begun 1.1.2014. The plan is to have ten more CoEs starting their operations at the beginning of year 2015 (Board decision 21.10.2013). The HUCH evaluation report 2012 (p. 31) states that before implementing new CoEs thorough evaluation of the Heart and Lung Center operations needs to be performed in order to find out if the supposed benefits (productivity and improvement in care quality) are gained via the change.

1.1 Case organization general context

The HUS Process organization implementation is an extensive undertaking for several reasons and not least because of the organization size and structure. Figure 1 describes the current HUS operational organization. The Cancer Center is located under the hospital district ("sairaanhoitoalueet") as an independent clinic like the Heart and Lung Center (Sydän- ja keuhkokeskus). The actual services for the customer perspective are produced in the clinics under the hospital districts and by centralized services like HUSLAB

and HUS Imaging. All other parts of the organization should support and enable the service production in the clinics.

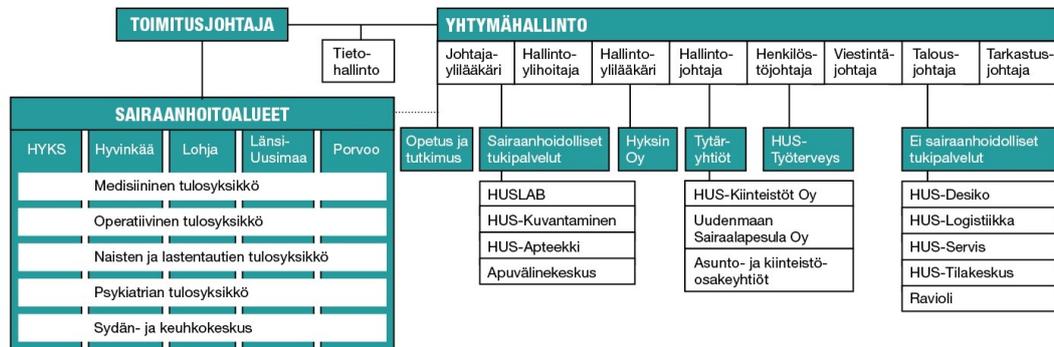


Figure 1. HUS Operational Organization structure 2013 (HUS organisaatio).

Organization structure itself is not a determinant factor what comes to successful and effective delivery of health care services. More important is how the daily operations are bound together and how the information flow helps to serve the customers. Current information structure is mainly built on the framework inherited from 1960's, when the first IT solutions were created. As a result of continuous re-building and fixing there are in total of 32 separate information pads and 219 integration faces. This complex information structure causes the situation where the most reliable data of the treatment time stamps needs to be retrieved directly from the base. Due to the several different patient information systems updating treatment lead time report can take up to six weeks. (Paajanen 28.1.2014).

Even if daily operations in the clinics happen with efficiency and proficiency the current situation is that there are no common clinical processes and sometimes not even a common interpretation of the used terminology. The lack of common processes and terminology are often explained by the special characters of the certain special care area and the fact that customers usually have multiple clinical processes on-going at the same time. Though in several processes there can be similar phases with similar content, common information cannot be produced from this (Paajanen 2014: Ydinprosessin mittaamisen kehittäminen).

Due to the large scale of the whole project this thesis is limited to the areas supporting each other (Paajanen 28.1.2014). Figure 2 describes the different project areas and their

relationships. In the scope of this thesis is the core processes from customer oriented point of view.

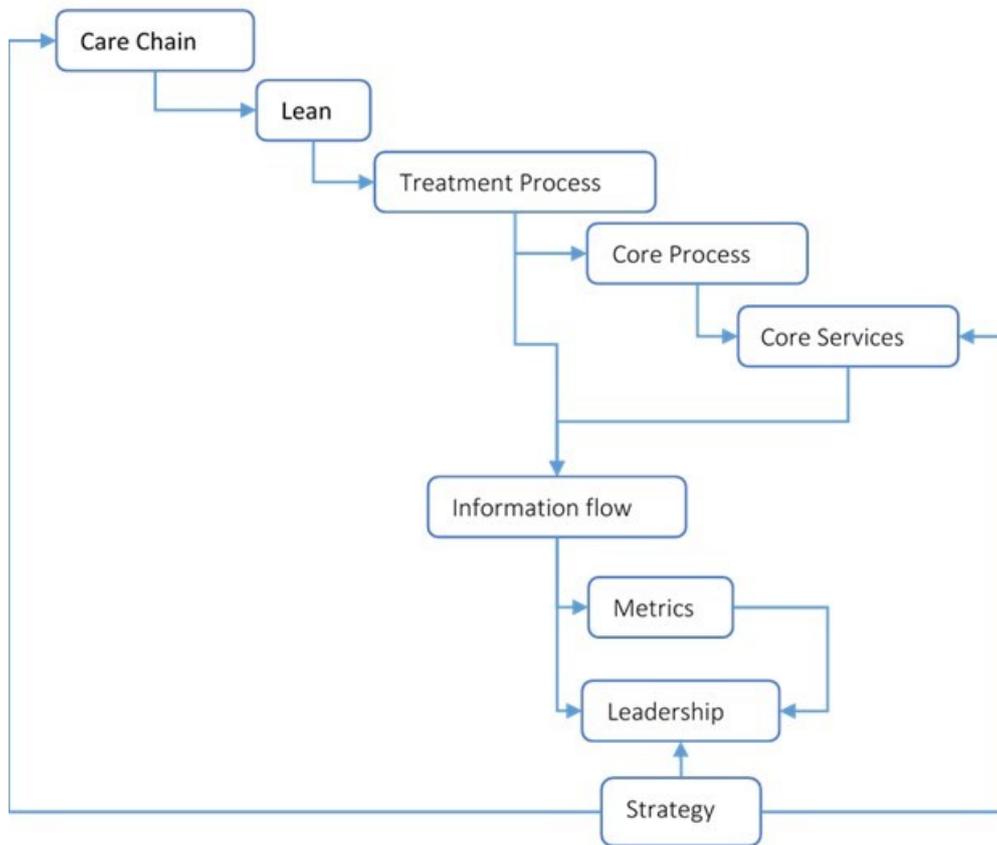


Figure 2. HUS Process Organization implementation structure (Paajanen 28.1.2014)

The HUS strategy for 2012 – 2016 (p. 3) states the following vision of HUS (translated):

HUS is internationally high-grade hospital organization creating new information where the patient care and research is high-quality, delivered on right time, safe and customer centric. HUS service production is competitive, its hospitals and units are desired employers.

When defining the core processes the other project organization implementation areas need to be kept in mind with the vision statement. From this the key for the process definition is the customer centricity. As of now the process definition work has been done from the internal operations perspective and the customer view has not been considered (Paajanen 2014: Ydinprosessin mittaamisen kehittäminen). The second phase of process development is to think working processes from customer perspective and take that as the main guideline for the definition.

1.2 Objective of the thesis

This thesis aims to find the possible integration points from the current care processes for the Cancer Center in a way that the defined cancer-core process will meet the set requirements regarding customer centricity and scalability. Processes under investigation are breast cancer process and neuro-oncological process.

After the documentation of the core process based on current care processes the aim is to recognize the main process pain points from customer perspective and seek a scalable solution for solving those. The proposal should be applicable outside Cancer Center as well so it cannot be disease or process specific but it should be on conceptual framework level that can be applied and modified for different needs.

2 Research approach

2.1 Research process

The research approach for this thesis is following action research approach though this is not pure action research. According to Coghlan and Brannick (2014, 9) action research cycle contains the definition of context and purpose, constructing, planning action, taking action and evaluating action. This thesis applies the steps in the context of this study and the research process for this study is shown in Figure 3.

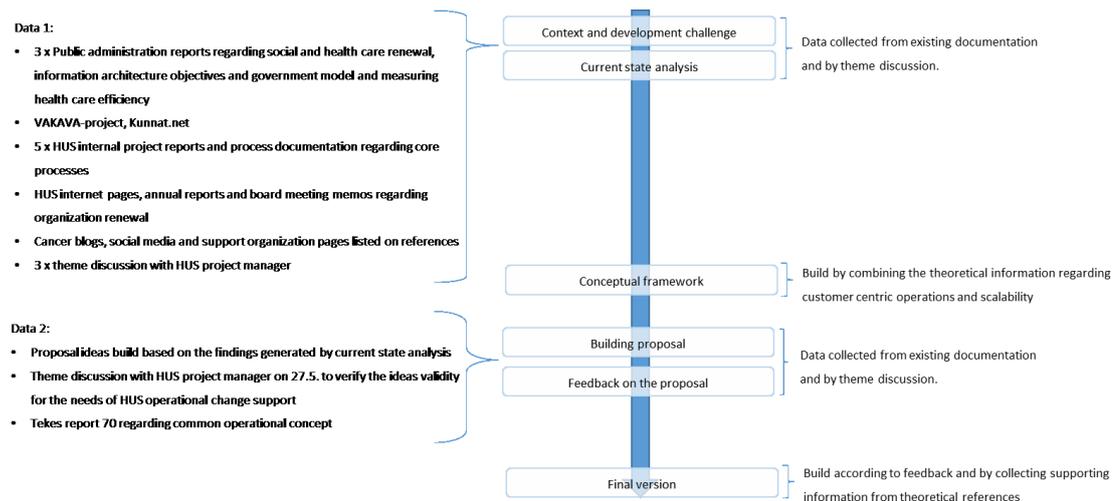


Figure 3. Thesis research process.

Context development and challenge of the thesis was given by the operational environment changes in healthcare and social area and patients more active role planned by the Finnish Government (Asiakkaan ja potilaan oikeudet, Potilaille ja läheisille). The organizational and operational changes, Centers of Excellences, HUS is implementing in order to meet changing environment requirements is providing the more limited context and development challenge for this thesis. Current state analysis is following the context and development challenge. In this phase the current processes are evaluated and a generic core process created in order to form an overall view about current state from customer perspective.

The conceptual framework of the thesis is built by studying existing literature and articles on customer centricity, scalability and operational efficiency. The current organizational structure and on-going development projects are taken into account when forming the theoretical background. Based on the current state analysis and theoretical background the proposal of actions for increasing customer centricity in cancer center operations are build. Since the customer needs can be different in different areas the actions of increasing customer centricity is generalized into conceptual level of working guideline that can be applied at operational level by anyone interested of increasing customer centricity.

2.2 Data collection and data analysis methods

The required information for the research is gathered by theme discussions, e-mail communication and studying the existing documentation from public databases and provided

by HUS. The main emphasis is on analyzing the existing documentation. Theme discussions with HUS representative are used for acquiring the internal view to the organization and for documentation analysis.

The data analysis method is a combination of content analysis and grounded analysis. Content analysis is used to find data from existing material that supports the idea and grounded analysis is used for discussion analysis (Easterby-Smith, Thorpe, Jackson 2012: 163). Yet it is to be remembered that theme discussions are built on existing knowledge and documentation constructed by content analysis.

Used HUS data is confidential project documentation and presentations describing the related strategic projects in progress and public data available in HUS internet pages like council decisions, cancer clinic pages and HUS personnel magazine (Husaari). The total amount of HUS specific confidential data was approximately 170 printed pages. Used customer stories about health care and especially from cancer were acquired from cancer.fi, open Facebook groups (Syöpäpotilaan päiväkirja, Cancer – Positive thoughts and stories), blogs (My Breast Cancer Blog, Boobs on Ice, The Merits of the case) and livestrong.org pages that has almost 200 interviews both men and women who survived the cancer and caregivers who has followed their partner's, child's or sibling struggling with the decease. This data was used to form both intellectual and emotional understanding about cancer patient's situation and only some parts are used in the text but it has effect on how processes are evaluated from customer perspective. From Finnish perspective already at some level analyzed data was provided by Koivuniemi's and Simonen's book "Kohti asiakkuutta" (2011).

3 Current state analysis

Current processes in Figure 4 describe the cancer treatment processes for neuro-oncological cancer and for breast cancer. Processes show the usual timeframes for each process phase and the responsible ward and staff members for implementing the process phase. These process views are based on the operative reality of the treatment personnel and can be used as a basis for core process definition. In these processes there is no other role reserved for the customer than going through the process.

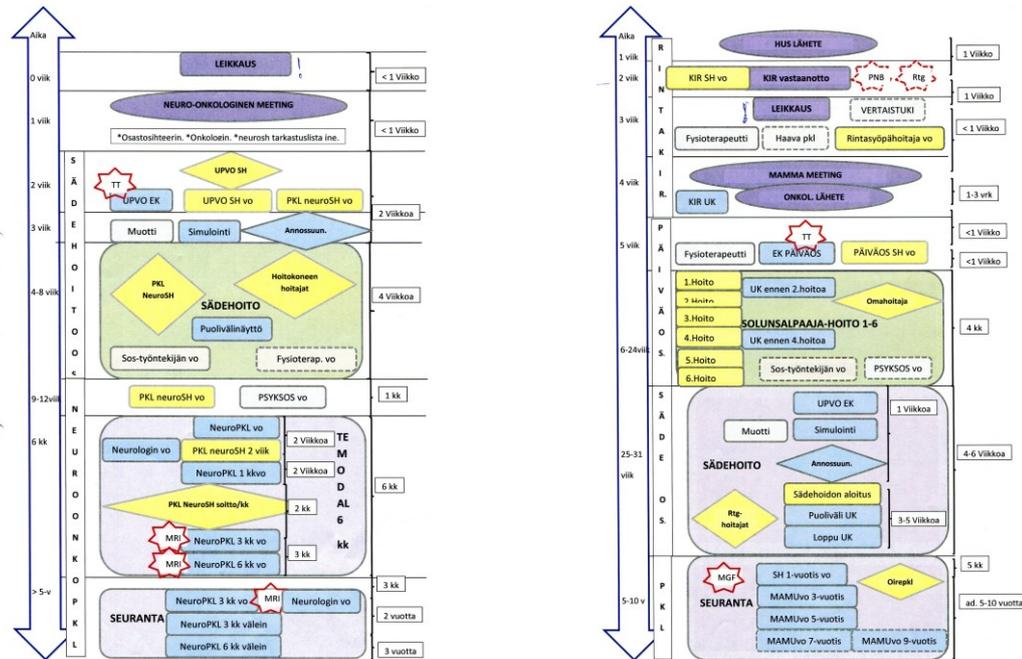


Figure 4. Neuro-oncological process at the left hand side and breast cancer process at the right hand side (Saarto 2014).

In the processes each action is a customer experience interface. This doesn't necessarily need to change the actual operative process that is determined by the cancer type, severity and available treatment resources. What it might change is the way that service is provided for the customers during the whole course of illness.

In cancer cases the customer cancer process experience begins from the first doubt of cancer that might be initiated by the customer, primary health care or occupational health care. End of the process after the years of follow-up phase is however more vague from customer perspective. Even after the follow-up phase in the cases where the treatment has been successful customers are likely to view the possibility of cancer in a different way than before the illness so from customer perspective the cancer process might continue the rest of the life.

3.1 Core process for the cancer center

Core process is supposed to describe in a simplistic way the core functions of the treatment. The treatment methods and actual treatment times depends on customer, illness type and severity. From clinical perspective it is important to keep in mind that customer

centric way of performing treatment processes is not actually changing the treatment itself. Only the way that the customer is experiencing the treatment can be affected.

Figure 5 describes the core process for cancer center customers. Process is initiated by the referral to cancer care. Referral can be sent to Oncology Department by primary care, private clinic or other hospital department noticing a need or possible need for cancer care. Invitation to customer for meeting a physician is sent.

At the physician appointment customer is examined, needed tests and scans are taken to verify the cancer diagnosis and to determine the best possible treatment procedure. There are mainly three types of cancer treatments: surgery, drug therapies and radiation therapy. Based on the cancer type and severity the customer can go through one type of treatment or different combinations of treatments. Since all treatments have their specialized ward and staff the customer information flow between the ward and treating personnel needs to be ensured. After the treatment begins the follow-up period that takes years. During the whole treatment cycle there are psychologists, physiotherapist and support groups available for comprehensive rehabilitation. At any point if cancer is severe and it is not responding to treatments or there are other reasons why customer cannot be treated with traditional methods there is a possibility to start palliative care. Palliative care is available during the whole cycle of treatments as its function is to ease the pain caused by cancer and cancer treatments.

During the whole treatment customer commitment for the care is needed. In practice this means that customer acknowledges his/her situation and communicates openly with nurses, doctors and other care professionals involved during the process. On the other hand care professionals need to be able to create the environment that enables open and honest communication between the customer and staff. Committing the treatment means also commitment to the treatment plan: treating yourself according to the instructions agreed together with the treating doctors, nurses and therapists.

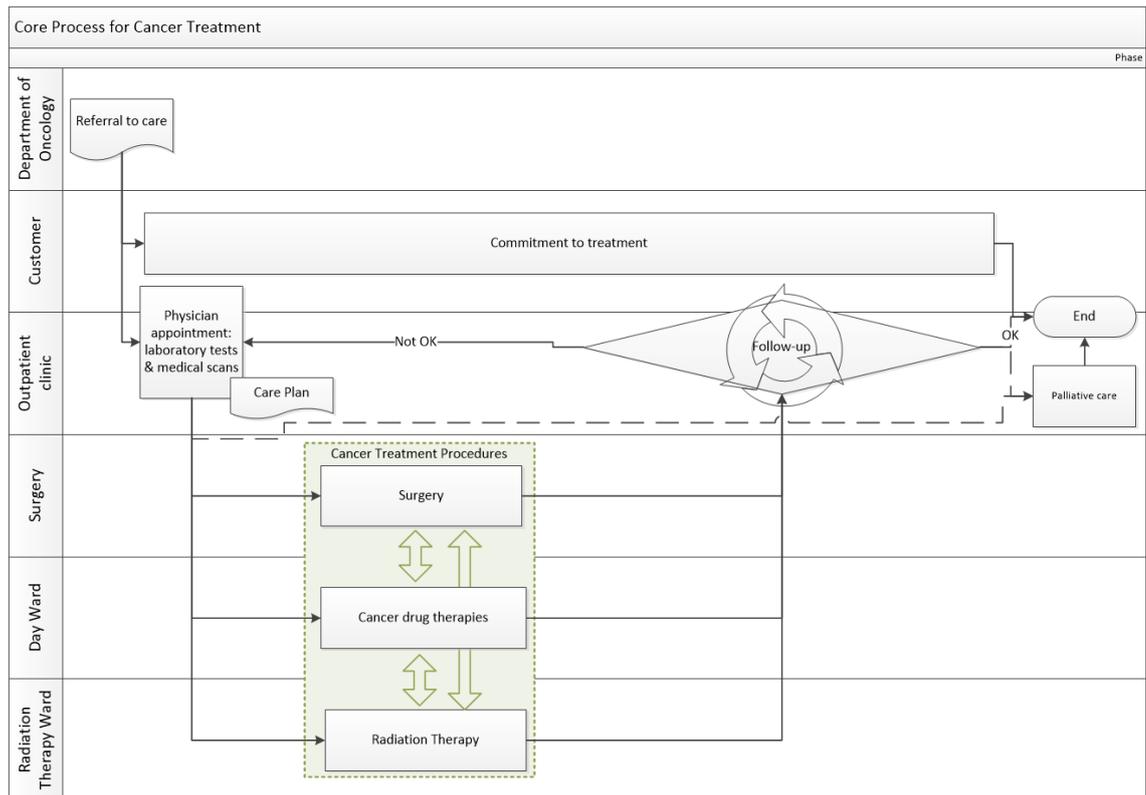


Figure 5. Core process for Cancer Treatment.

HUS has chosen customer treatment lead-times as a key-metric regarding the process efficiency, customer experience and value provided for the customer (Paaajanen 2014). Other side of following up waiting time metrics closely is that legislation defines the timeframe when customer needs to get the treatment (Finlex 1326:6, 50 § - 53 §). This metric is demonstrating only one aspect of customer value: how fast customer is getting the service. Planned measurement points for the lead time are following:

1. Customer sign-up
2. 1st treatment
3. 2nd treatment
4. Treatment resolution

From customer perspective there are multiple other factors as well than a lead time that define the customer experience. An assessment report by National Institute of Health and Welfare (1/2012, p.4) lists seven areas that have effect on customer experience:

- Waiting times
- Communication, interaction and information

- Customer impression of the personnel proficiency
- The effects of illness
- Urgency classifications
- Surroundings
- Presence of the next of kin and close friends.

Needham (2012: 259) claims that waiting times, which are often raised as the most important factor of the customer experience, are not significant after all. When waiting happens in the beginning of the experience, if customer is distracted during waiting or if customer is able to track the progress of the service they are waiting for, the actual length of waiting is not important. More important is how healthcare personnel manages the waiting customers. Do they just let them wait or is there communication happening like “Doctor is 40 minutes late from his schedule. You can have a cup of tea at cafeteria and we can call you when the doctor is ready for you.”

3.2 Identifying potential of customer centricity and scalability

Identifying the potential points for increasing customer centricity in scalable manner requires defining the cancer care core process (Figure 4) in further detail. Sections from 3.2.1 to 3.2.6 describe the high-level procedures in each of the phases defined in the core process. The number of detail in this level is sufficient for understanding the customer contact and transition points effecting the customer experience.

3.2.1 Physician appointment

The first meeting after getting a cancer diagnosis and referral to cancer clinic is a physician meeting where cancer diagnosis is verified and needed tests and medical scans are taken. Customers are invited to the meeting based on the referral and lead times for getting into treatment are followed monthly (Nopeasti osaavaan hoitoon). Getting time for the treatment depends on the urgency of the case. The maximum waiting time is four weeks in non-urgent cases according to Ministry of Social Affairs and Health guidelines (Yhtenäiset kiirettömän hoidon perusteet 2010). According to HUS Cancer clinic pages in urgent cases it is possible to get the treatment process started even at the same day when referral is received (Nopeasti osaavaan hoitoon).

During the first meeting the relationship is established between the customer and several different professionals depending the cancer type and needed additional tests that are necessary to take. Figure 6 presents the different functions that can be included during the first physician appointment at the Cancer Center (Tarkat tutkimukset johtavat tarkkaan diagnoosiin).

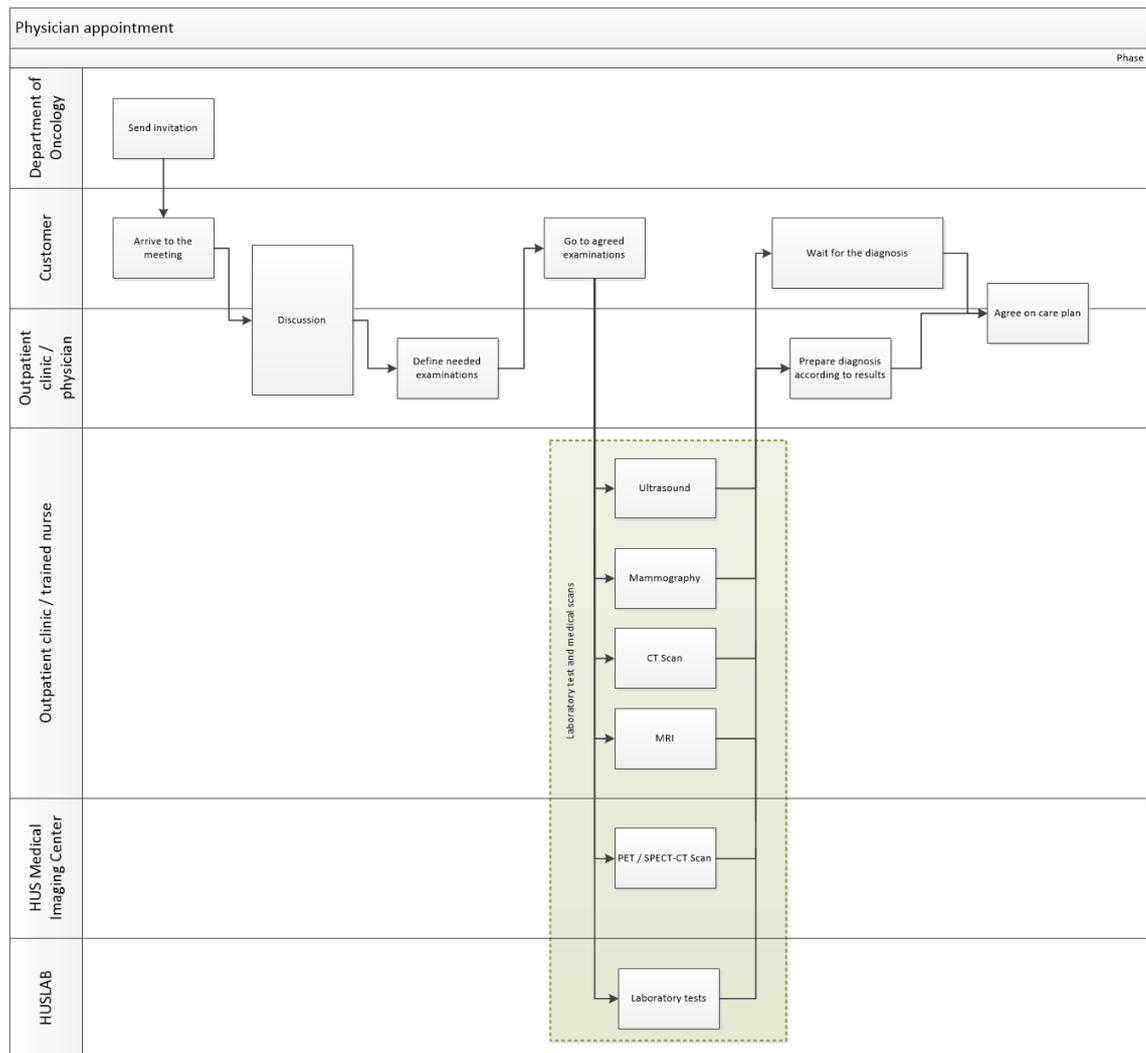


Figure 6. Functions included into the first physician appointment in the Cancer Centre.

3.2.2 Surgery

When surgery is included in the care plan customer will receive time for surgery and preceding meeting for defining customer preferences and possible additional tests if

needed. Customer will meet the operating surgeon, trained nurse and anaesthetist at the time who will explain the surgical procedures. Once surgery is done discharge process follows and physiotherapist is included into the team. After couple of weeks there will be a follow-up meeting with the customer to evaluate the sufficiency of the surgery. Information about the surgery and customer status is given to department of oncology and responsible team there. Also recommendations for the further treatment is given. Figure 7 describes the surgery process and parties involved in the different phases of process (Leikkaus).

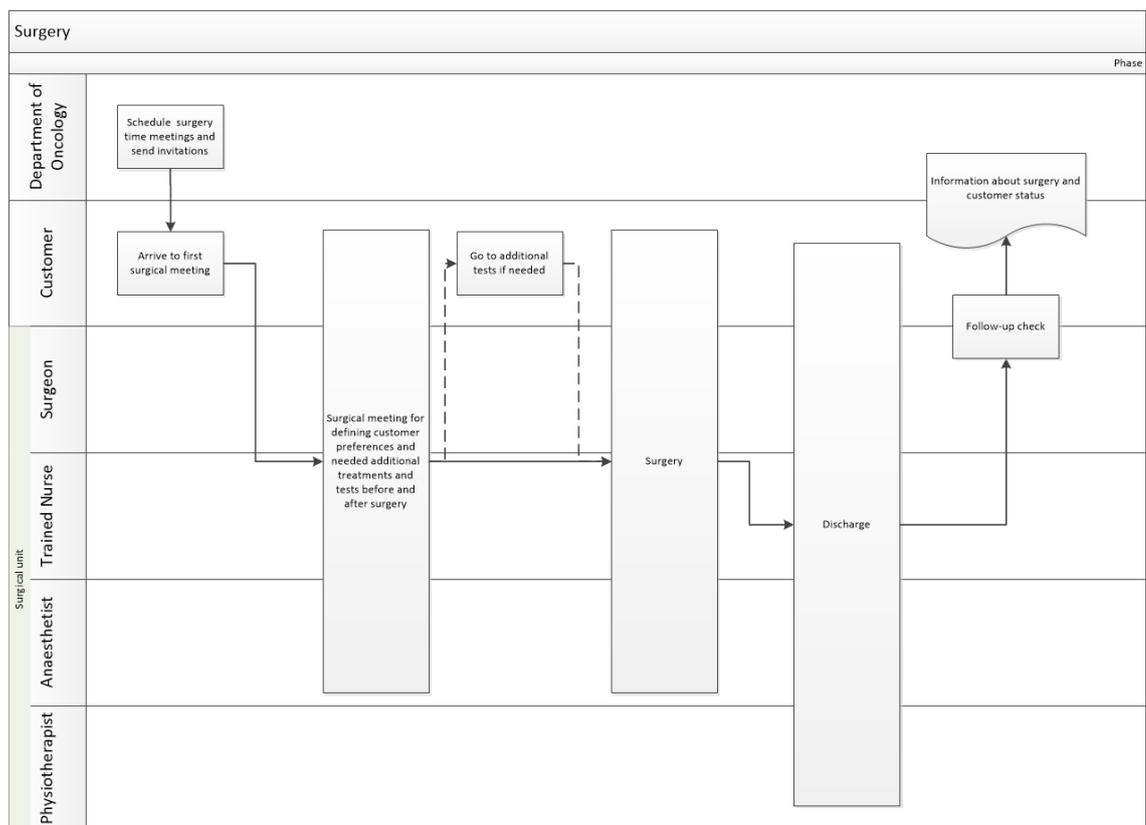


Figure 7. Functions and roles involved in surgery process.

3.2.3 Cancer drug therapies

There are multiple different types of cancer drug therapies currently available. Likely the most known one is the form of chemotherapy that is usually given in outpatient clinic as

intravenous drip. In addition drug therapies can be given as tablets and injections depending the cancer and the drug type. Drug therapy can be also a combination of mentioned methods including drugs to ease pain and nausea. (Chemotherapy)

Figure 8 describes the different phases of cancer drug therapy. The customer is invited to the first meeting where the care plan regarding the drug therapies is gone through and different effects of the therapy is discussed. Lab test and imaging scans are taken before the drug therapy begin if needed. Depending the therapy type the customer takes drugs independently or is assisted by the healthcare professionals. Intravenous drip is usually given at Oncology department outpatient clinic, tablets are taken independently according to guidelines and injections can be trained to be done independently or a near relative/friend can be trained to give injections. Alternatively injections can be given as well at the customer's own health center. (Lääkehoidot, Solunsalpaajahoito, Rintasyövän hormonaalinen hoito)

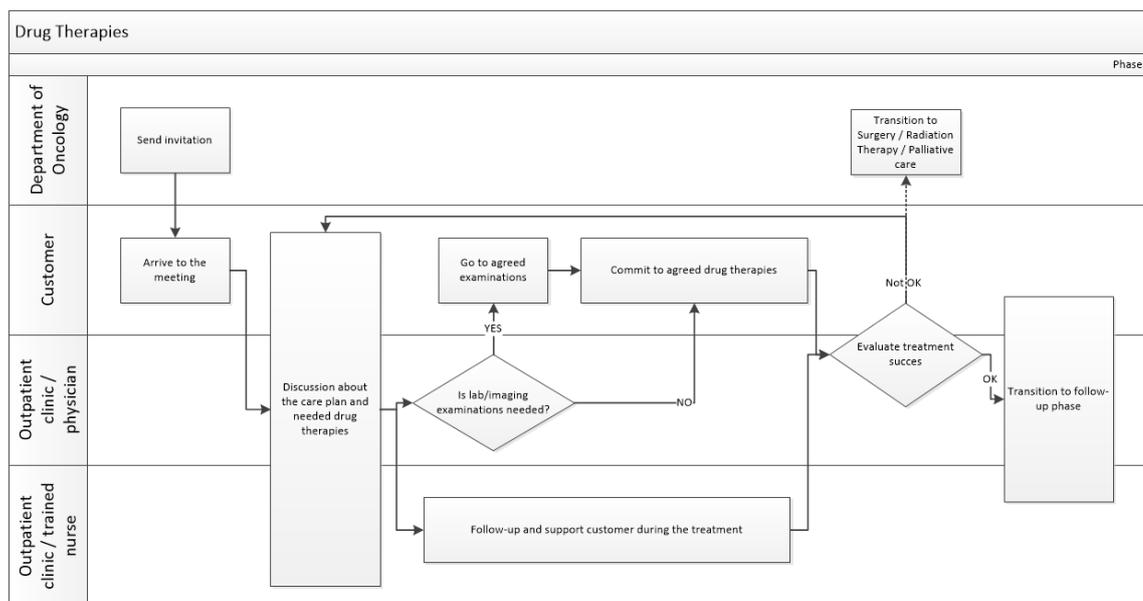


Figure 8. Procedure for drug therapies.

3.2.4 Radiation therapy

The treating doctor will write a referral to radiation therapy when that is included in the care plan. The trained nurse at the radiation therapy clinic will go referrals through daily,

schedule the times and send invitations to the customer. During the first meeting the physician will estimate the customer's eligibility for the radiation therapy and the actual need for it. Customer has possibility to meet also the trained nurse and the radiographer who will explain the radiation therapy procedure in detail and give additional information about the therapy. (Rintasyöpäpotilaan hoito sädehoito-osastolla)

The actual treatment begins with a careful planning including fixation and imaging with TT-scan and dose planning. Once treatment details are cleared with planning the actual treatment is done and new time for treatment scheduled when needed. Once the radiation therapy treatment cycle is finished summary about the treatments is sent to the treating oncologist who will communicate final results with the customer and follow-up phase begins. Figure 9 describes the different phases in the radiation therapy procedure. (Rintasyöpäpotilaan hoito sädehoito-osastolla)

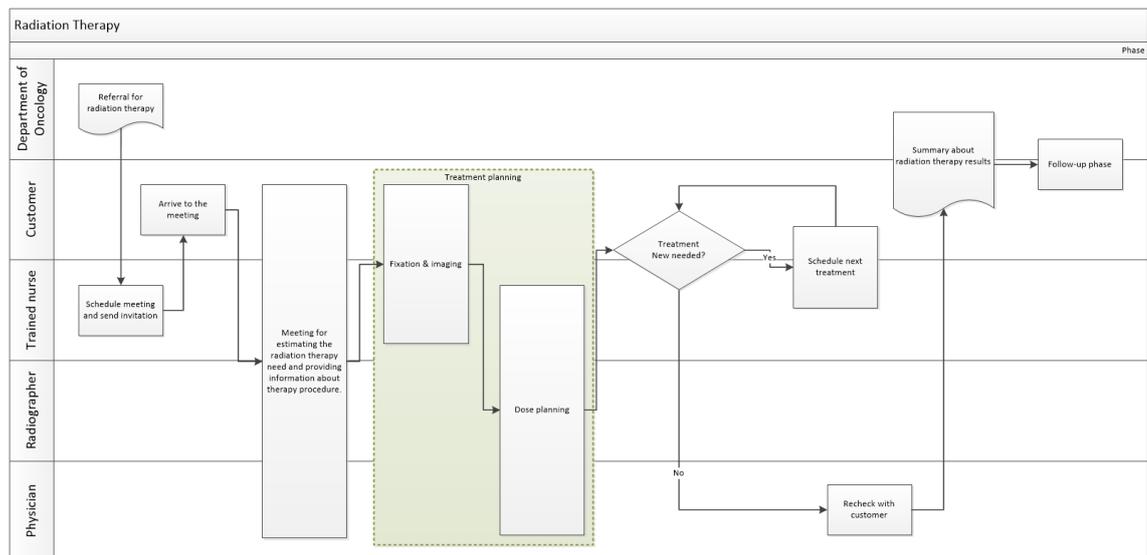


Figure 9. Radiation therapy procedure.

3.2.5 Follow-up

After the cancer treatment procedures are completed the follow-up phase begins. Follow-up recommendation vary depending the cancer type. The basis of follow-up is customers own feelings, regular laboratory tests, imaging and physician appointments (Syövän hoidon jälkeinen seuranta).

Figure 10 describes the follow-up procedure. After all needed cancer treatments are completed the time for initial follow-up meeting is scheduled and invitation sent. At the follow-up meeting the individual follow-up plan is created and schedules agreed with the customer. The main responsibility of implementing follow-up according to plan is customer's. Customer is responsible for arriving to agreed lab test, scans and physician meetings and informing any new or disturbing symptoms during the follow-up by contacting the dedicated nurse. The nurse is responsible for supporting and guiding the customer throughout the whole follow-up phase when needed. (Rintasyöpäpotilaan seurantaohjelma, Seuranta)

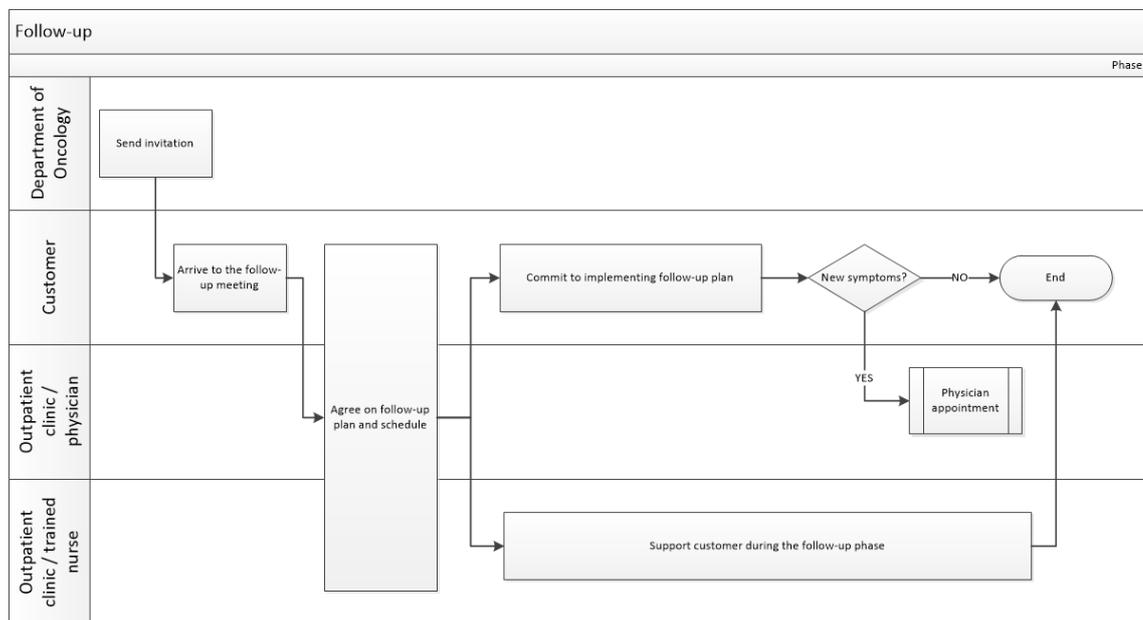


Figure 10. Follow-up procedure.

3.2.6 Palliative care

According to World Health Organization web pages palliative care is a treatment method that is aiming to improve customer's quality of life through the prevention and relief of suffering both physical and mental in cases of life-threatening illness (WHO Definition of Palliative Care). The key aspects of palliative care is that it usually begins as the actual cancer treatment begins and when the illness proceeds the need of palliative care is increasing in the cases where the actual cancer treatments are not producing results (Palliatiivinen hoito ja saattohoito).

Figure 11 describes the palliative care process. It begins with the referral to palliative care and by scheduling the initial meeting time for the customer, physician and nurse who both are specialized in palliative care. During the meeting the palliative care plan is agreed. Customer implements the palliative care plan with the support from trained nurse. Depending the customer situation the care plan can include collaboration with hospital priest, social care, physiotherapist, psychologist or other professionals that is needed for improving customer's situation. The key decision point of palliative care during the cancer treatments is the customer's condition and physical treatment results. At the point where it is evident that customer's life is at the end the palliative care is completed by the primary health care units or hospices according to customer's wishes. (Palliativinen hoito ja saattohoito).

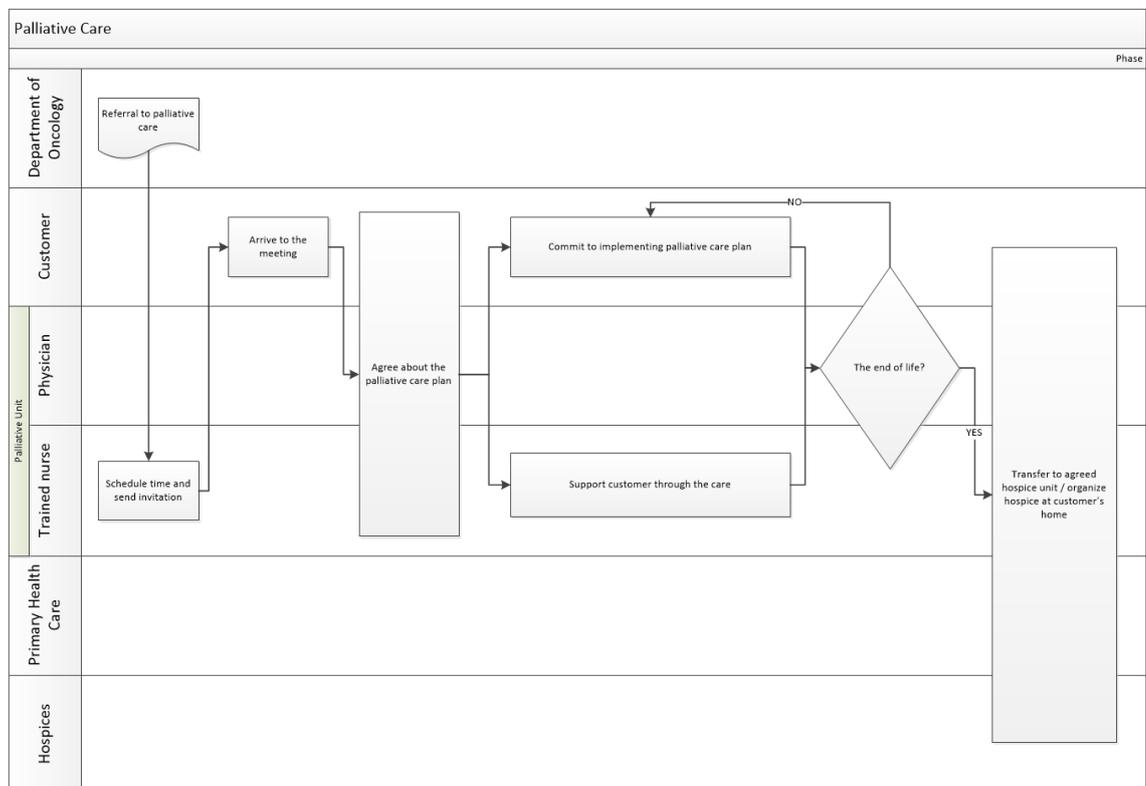


Figure 11. Palliative care process

3.3 Summary of current state analysis

In overall the processes at Cancer Center seem to be in good shape. There are clear phases in the treatment, dedicated nurses to support customers and a lot of information

provided to support customer during the process. In addition customers are usually able to establish a good relationship with their responsible physicians and nurses. One could even say that cancer treatment could be a good example of health care where processes are working well.

However there are two sides in each case. As the cancer care operations are working fine at the HUS Cancer Center it might be tricky to get in the process early enough mainly due to the fact that cancer can be very treacherous and symptoms that it can cause might be very vague. So it might just take too much time before the cancer is diagnosed and customer sent to cancer center. But when in the customer will get responsible physician and nurse, treatment from multiprofessional teams with good level of knowledge.

The several different treatment phases and multiprofessional teams are needed yet they are setting challenges to information management and unified way of managing customers when they are waiting or transferred. Table 1 summarizes the key findings from current processes positive and negative sides from customer oriented perspective.

Table 1. Key findings of current state positive and negative sides from customer oriented perspective

Pros (+)	Cons (-)
<ul style="list-style-type: none"> - Multiprofessional teams - Clear phases of care - Once customer is in the system treatment “goes like a train” - Referral based system provides good possibilities for care transparency and progress. - Good level of professional knowledge - Responsible nurse for the cancer care path 	<ul style="list-style-type: none"> - Number of contacts to be managed - Practices can vary depending the treating person - There is very little possibilities for customer to effect “the course of the train”. - Referral after referral, “go from A to B via C and then back to A, visit B if needed” - Information sharing when waiting or transferring - Responsible nurse and physician can be reached via phone only during office hours.

4 Best practices of customer orientation

The conceptual framework of this study is built on views about customer value co-creation that is usually used in other types of businesses creating product and services for the customers. On top-of the value co-creation there are the operational processes and views about efficiency and scalability.

The framework aims to a model that could be applied in current health care structure taking the restrictions into account. These restrictions are mainly the hierarchy and bureaucracy of the organization, lack of clearly defined horizontal contact points across the customer care paths and the massive size of the organization including distributed functions.

4.1 Customer centricity in health care

Customer centricity in health care is patient centricity and understanding what is important for the patient during the whole course of treatments. The patient is the ultimate customer of health care and therefore this thesis discusses customers instead of patients. In a simplistic model the only customer expectation could be getting as healthy as possible as quickly as possible with minimal effort. This is a rough assumption about customer expectations where just might be some grain of truth when looking at the studies regarding customer experience.

Needham (2012: 259) states in his essay about customer experience:

“Patient experience is about managing both the emotional and physical roller coaster a patient experiences while undergoing a healthcare procedure and about maximizing the patient's social, mental, and physical health and wellness. To achieve this level of management, I propose a framework built around three Ps: personalize medicine, partner with patients, and empower employees.”

Needham's view about improving the customer experience summarizes the overall idea of the customer centric thinking. Better customer experience can be achieved by customer centricity but to be successful in customer centric approach organization needs to understand the customers. This means segmenting the customers and organizing the services and the processes around the segments (Galbraith 2005: 7).

4.2 Co-creation of value

Understanding the customers is the core of customer centric service delivery. In customer centric operations customer is participating into service value creation (Payne, Storbacka, Frow 2008: 83). In healthcare this statement is more than true since seldom treatment is successful without customer participation. The basis of customer knowledge can be created by investigating customer processes and values.

Payne, Storbacka and Frow (2008: 86) present in their article a conceptual framework for value co-creation. In health care value is co-created by customer commitment into treatment, learning and communication. From healthcare professionals point of view value co-creation means willingness to leave the expert role (Gittel & Douglas 2012: 720) and learn from the customer who is the expert of his/her own body, mind and symptoms. This framework is presented in Figure 12 and shows the interfaces between customer and supplier processes.

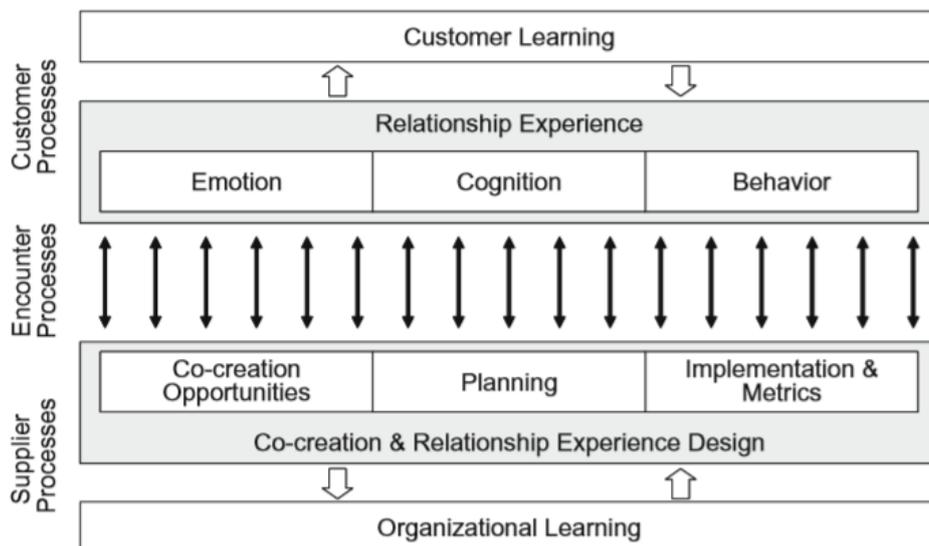


Figure 12. Conceptual framework for value co-creation (Payne, Storbacka & Frow 2008: 83).

The value co-creation framework summarizes the key aspects of customer centric service delivery. The whole framework is based on processes and understanding those. In

order to improve the customer experience the supplier processes and the encounter processes need to be supporting the customer processes. Koivuniemi and Simonen (2011: 77 - 87) reflect in their book customer oriented approach via customer's ability to manage his/her everyday life. To improve customer's healthcare service experience the customer's everyday processes and values need to be understood by the health care organization and the personnel should implement this understanding into treatment practices.

The basis of customer orientation is understanding the customer process end-to-end and how service process can be matched with that. For Cancer Center core process this means taking the each process step and reflecting that from the customer perspective. Encounter methods should support both the customer and organization processes.

Figure 13 describes as an example what the customer process, encounters and service provider processes for the first step, meeting the physician, in the cancer center core process could be.

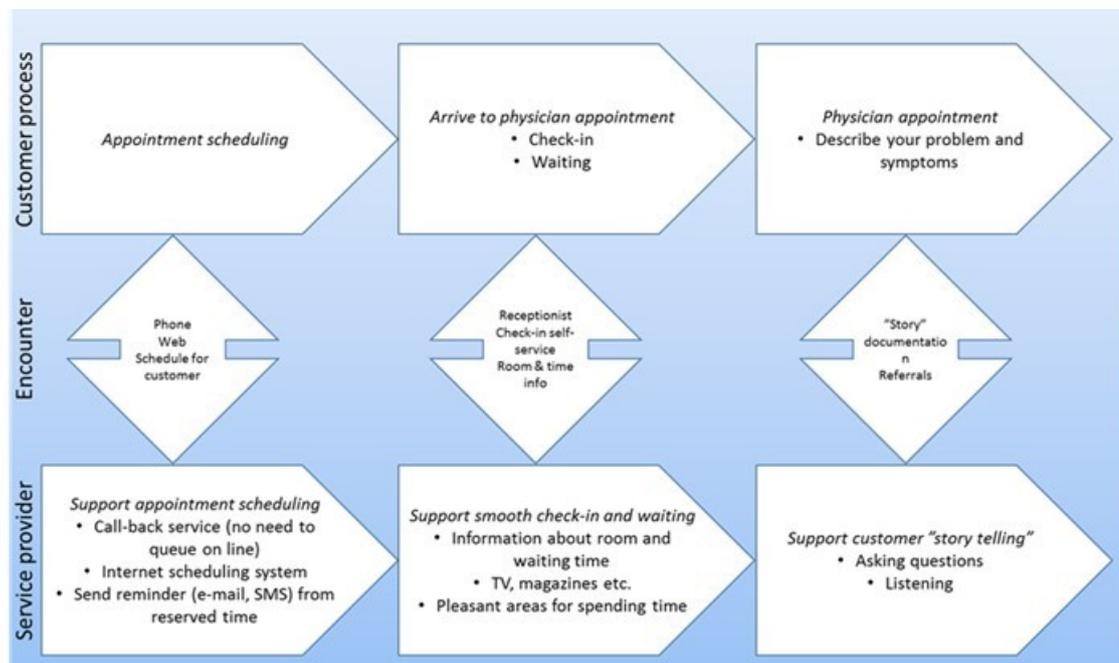


Figure 13. Customer encounter process for physician appointment, a one possible example.

McCull-Kennedy, Vargo, Dagger, Sweeney and van Kasteren (2012) have taken in their value co-creation framework the different co-creation activities and styles into account as well. Their framework has been done specifically the health care area in focus and

the variety of the customer base. Their research findings were eight different co-creation activities that customers do when creating value for health care services and four different co-creation styles depending the customer type and personality. Table 2 summarizes different activities and examples of behavior related to the co-creation activity found by McColl-Kenedy et al (2012).

Table 2. Customer value co-creation activities and examples of behavior (McColl-Kenedy et al. 2012: 9)

<i>Activity</i>	<i>Examples</i>
Co-operating	<ul style="list-style-type: none"> - Accepting information from the service provider - Compliance with basics
Collating information	<ul style="list-style-type: none"> - Sorting and assorting information, managing basic every day activities
Combining complementary therapies	<ul style="list-style-type: none"> - Use of supplementary medicine (e.g., Chinese medicine), exercise, diet, yoga, meditation
Co-learning	<ul style="list-style-type: none"> - Actively seeking and sharing information from other sources
Changing ways of doing things	<ul style="list-style-type: none"> - Managing long-term adaptive changes such as changes in financial position - Involvement in activities deliberately targeted to take an individual's mind off the situation e.g. holiday/overseas trip, hobbies
Connecting	<ul style="list-style-type: none"> - Build and maintain relationships
Co-production	<ul style="list-style-type: none"> - Assisting with redesigning treatment programs and reconfiguring composition of medical team
Cerebral Activities engaged in by the self that ultimately contribute to the co-creation of value	<ul style="list-style-type: none"> - Actively hoping, talking to oneself, and having a positive attitude (- Emotional labor - Reframing and sense-making—accepting one's actual situation

Figure 14 summarizes the different styles for value co-creation found by McColl-Kenedy et al (2012). Each of the styles combines the value co-creation activities in a way that suits best the customer's personality and lifestyle. X-axis has the level of activities and Y-axis the level of interactions. At the top-right quadrant customers are most active ones and the low-left quadrant customers are likely to "go with the flow".

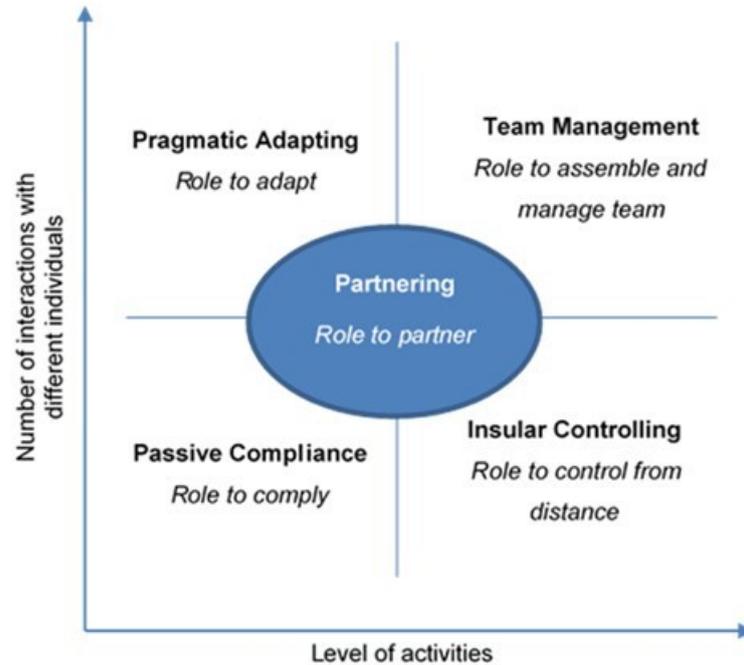


Figure 14. Customer value co-creation practice styles (McColl-Kennedy et al. 2012:14)

4.3 Process scalability

Scalability is often associated with the system ability to handle growing amount of work without compromising the performance. Several internet sources, for example Wikipedia, WhatIs.com and Dictionary.com, define the scalability as mentioned. From process perspective scalability could mean for example process stability, sustainability and flexibility for other similar type of services.

Service processes are mainly performed by humans and human interaction is essential part of the service and customer service experience. In order to achieve process scalability in complex, hierarchical environment where there are multiple actors Gittel and Douglas (2012: 727 – 728) propose the model of relational bureaucracy. The model of relational bureaucracy aims to combine the advantages of bureaucratic organization – sustainable and scalable processes – and the relational organization where there are no silos or hierarchy breaking the horizontal process and information flow.

The bureaucratic organization is usually a siloed organization where processes and information flows well inside a silo (Gittel & Douglas 2012: 712). A typical characteristic of bureaucratic organization is equalization, meaning all customers are served without regard for the individual person. The relational organizations operational efficiency is based on reciprocal relationships according to Gittel and Douglas (2012: 712). By combining the relational organization approach to bureaucratic structure Gittel and Douglas claim to form an organization with scalable and sustainable processes, yet able to serve customers with individual touch. The key is to create environment, and communication structure that enables role based communication and processes across the silos.

Lean methodologies can be used to support relational bureaucracy approach and to bring agility into hierarchical organization and scalability into processes. One of the aspects in lean is to cut waste, actions in the process not adding value for the customer (Wennecke 2008: 28). Considering the customer centric approach and the fact that customer and customer processes should be in the center of the operations applying lean methodologies, the customer service teams should be built based on the customer end-to-end process, across the possible silos.

4.4 Balancing customer centricity

Customer centricity has been proved to add value for the customers but on the other hand there is little evidence on its positive effects on the service quality and cost savings in public organizations (Walker, Brewer, Boyne & Avellaneda 2011: 707). Homburg, Müller and Klarmann (2011: 66) studied the effect of customer centricity into performance and found out that too much customer orientation has a negative effect on performance (Figure 15).

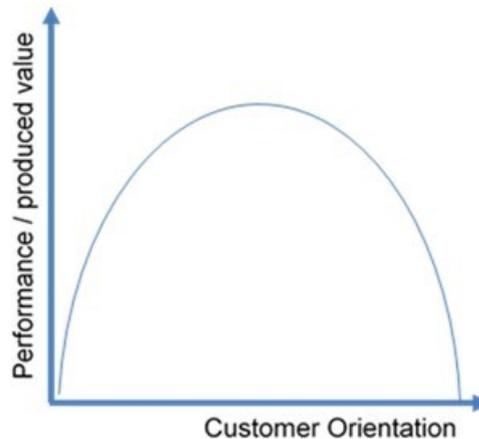


Figure 15. The customer orientation effect on performance and produced value (Homburg, Müller & Klarmann 2011: 66).

The main implications in Homburg's, Müller's and Klarmann's study was that people who are too customer oriented serve few customers in numbers and more than 50 % percent of their interaction is off-topic. Another finding was that broad service portfolio in heterogeneous markets and the same customer interaction approach leads to misallocation of resources. This finding supports the segmentation approach presented in chapter **Virhe. Viitteen lähdettä ei löytynyt..** Different customer interaction models are needed depending on customer and service type.

Deciding the correct level of customer centricity is a strategic choice. Galbraith (2005: 25) has divided the customer centric solution strategy into two main dimensions: the scale and scope and the degree of service integration. The scale and scope refers to the number of services combined to a solution delivered for a customer (Galbraith 2005: 28). In healthcare this could be translated into a care path that describes from customer perspective the different stages and services in the treatment and how they are linked across the service providers. The integration level between the services needed to deliver the complete solution to a customer can vary from a loose assortment of services to highly integrated services (Galbraith 2005: 29). In healthcare side care path and customer type defined by segmentation could be used to determine the needed level of services integration. Figure 16 illustrates Galbraith's view on the customer centricity level and corresponding organization structure supporting the needed level of horizontal integration.

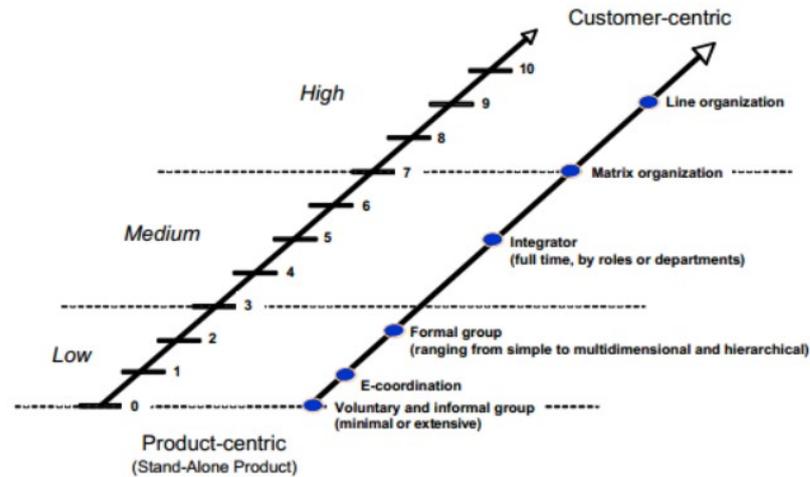


Figure 16. Matching strategy location to horizontal coordination requirements (Galbraith 2005: 41).

Finding the correct balance between customer orientation and organization performance is important both for the customers and organizational stakeholders like municipalities and government. Customer centricity is not itself increasing organization performance but it generally has positive effect on customer satisfaction (Walker et al. 2011: 715). Increasing performance levels need to happen therefore by keeping the customer in mind and tuning the processes, performance metrics and organizational structure to support customer satisfaction.

Based on the customer values, ability to manage everyday life and coping with the illness customers can be divided into segments. Segmenting approach depends as well from the organization strategy and targets. Segmentation should provide the classification of customer base in a way that it benefits the customer centric approach and supports organization's operational targets.

Customer segments should be used as a baseline when designing service offering. Segmentation is a tool for recognizing different customer patterns for service development, not a guideline how service should be offered for the customer based on customer's segment. Koivuniemi and Simonen (2011: 102) proposes five high-level customer segments in healthcare as presented in Figure 17.

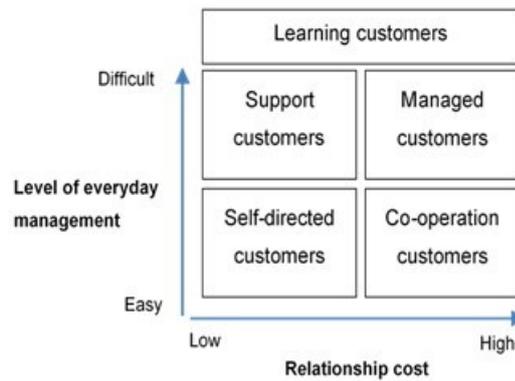


Figure 17. Customer segments for healthcare sector (Koivuniemi & Simonen 2011: 102).

Koivuniemi's and Simonen's (2011: 101) view of segmentation is based on the level of customer's capability to manage everyday life with the illness and the relationship cost. The higher the relationship cost is the more there is appointments needed and organizations involved in the treatment. The more difficult it is for the customer to manage the everyday life and treat the illness independently the more support has to be provided.

The main categories in Koivuniemi's and Simonen's (2011: 101 – 104) approach are support customers, managed customers, self-directed customers and co-operation customers. On top of the main categories there are the learning customers, the type of customers with a condition or treatment producing new information for the organization that can be used to benefit other customers. Koivuniemi's and Simonen's view has clear analogy with the value co-creation styles and activities developed by McColl-Kennedy et al. (Table 2 and Figure 14).

Lately it has been argued that segmentation in service business is not enough as the relationship between service provider and customer should offer more insight about the customer needs (Bailey, Baines, Wilson & Clark 2009: 229). Healthcare is a heavyweight service business where interaction between service provider and customer is strong. Based on the study Bailey, Baines, Wilson and Clark present seven propositions that can be applied in the public healthcare business as well (2009:242 -246):

1. Multiple sources of customer insight needs to be used to supplement segmentation for meeting the strategic and operational goals.

In the healthcare the customer with cancer, or other complex illness, uses a wide net of services providers: doctors, nurses, physiotherapists, psychologists. In addition there are various interactions with administrative personnel when scheduling treatment appointments and dealing with Kela (The Social Insurance Institution of Finland). All these interactions with different service providers are a source for increasing and developing individual customer insight. Currently the challenge is the lack of common CRM base that would ease the information sharing between the parties. Still it is possible to organize information sharing efficiently by defining the contact points and the form of communication between the different stakeholders. Koivuniemi and Simonen state in their book that the best customer experience happens when personnel is able to communicate what has happened, what will happen next and why (2011: 43). In practice this would require the understanding of the customer's whole end-to-end treatment process and recognizing the process transaction points for the communication. Communication needs to happen between the process stakeholders relevant for the treatment phase.

2. Segmentation should be used when deciding on customer selection and offering that needs to apply for a group of people.

Even healthcare services are highly individualized based on customer's situation. There are still need for different type of bulk services. One example of this could be the use of mass communication, e.g. cancer screening invitations. The communication channel (phone, letter, e-mail, SMS, social media etc.) should be selected based on the customer segment and communication purpose. Other use of segments could be providing general services to support customer's everyday life and coping with illness. A good example of this is mielenterveystalo.fi providing information and support for customers having mental issues.

3. When interaction happens on personal level aspects of the offering that can be tailored for the customer specific needs will be best informed by one-to-one analytics rather than using segments.

Segments are defining the overall approach and offering but the actual interaction between the customer and healthcare service provider will guide to meet better the customer needs. In practice this means that when beginning to know the customer it should be possible to customize the service for meeting customer needs better or coaching him/her to use bulk services in more efficient way.

4. Real time customer-interactions provide the most effective information for service production and targeting whereas segmentation needs to be refreshed time by time.

Segmentation needs to be updated when the organization strategy or operational targets change or when there is a need to re-define the view where customer base is observed. In healthcare this could mean for example shifting from ability to manage everyday life (Koivuniemi & Simonen 2011: 101) to customer's behavior. Based on the person's lifestyle people could be divided into segments, like Deloitte did in its study about the U.S. healthcare market (2012). Information generated by the actual customer interactions evolve as the customer relationship evolves, therefore the individual customer data is the most accurate if properly handled and recorded.

5. When transactional history data is available it should be used with existing customers. Segmentation is a good starting point for communication with new customers.

For the healthcare services this approach is natural as the business is highly individualized and different customer information systems already contain individual customer data even this data is not available for all health care service providers. In a case where there is no history data available, the service dialogue can begin from segments when at the same time the collection of individual data should begin for the future use.

6. Success of services can be measured based on individualised customer insight.

This proposition could be translated into healthcare side to be an assumption that the better the customer is known as a whole, in addition to the condition under treatment, the better changes there is to provide effective care. What the actual success measures for effective care are, depends from the organization strategic goals.

7. Segments can be dynamically optimized when customer data is combined with segmentation.

Dynamic optimization of segments should happen in healthcare not only when individual customer data increases but as well when there is new treatments and information affecting the operations available. Healthcare business is a long term business as customer relationships are lifetime long so the change happens as well through the ageing of the customers.

4.5 Summarizing conceptual framework

The conceptual framework presented in this thesis aims to add customer centricity into operations without compromising operational efficiency and scalability – both horizontal and vertical – and taking into account the current organization structure and the ways of working.

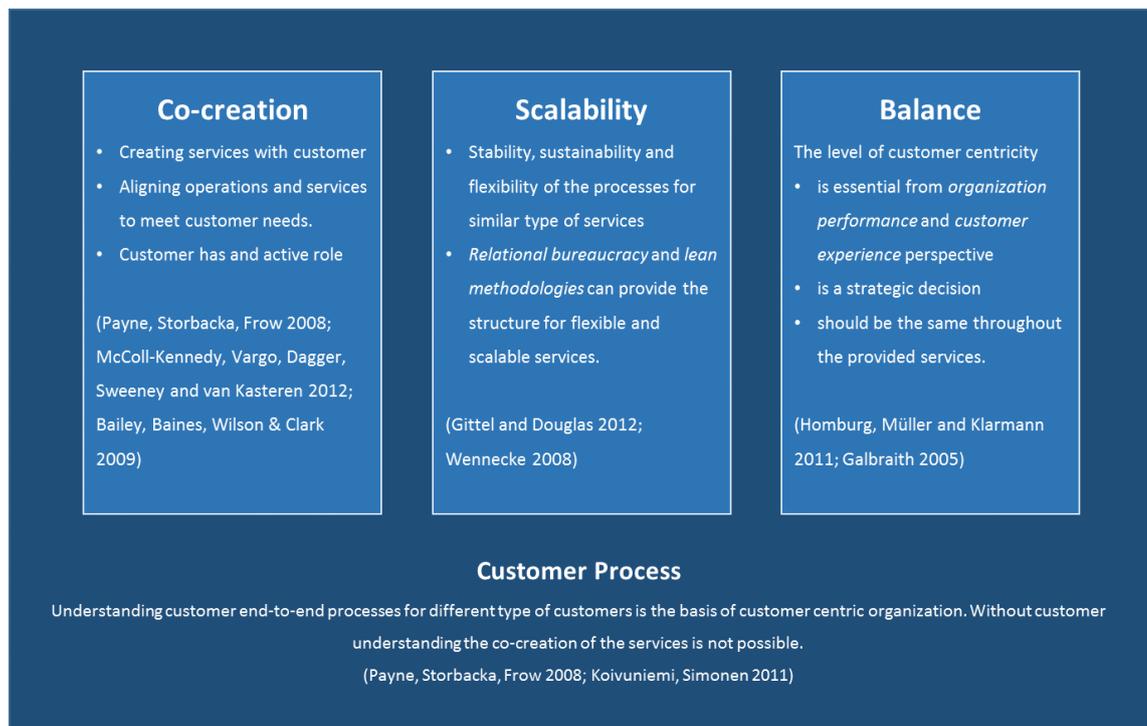


Figure 18. Conceptual framework for increasing customer centricity.

The basis of the framework in Figure 18 is formed by the customer process. Without understanding the customer process it is not possible to develop customer centricity of current services or new services to meet the customer requirements. Customer process needs to be taken into account in each phase of core process. Knowing the customer processes and the customer base will enable the organization to categorize its customers to segments and plan the service selection to meet the customer needs in the best possible ways.

The second level of framework is formed by co-creation, scalability and balance. With co-creation it is possible to plan operations and services that support the customer process and customer needs. The value for the customer, in this case better health and

improved quality of life, is produced by the operations and services. Every operation should be done for the benefit of a customer. Operations need to be seamless across different organization silos as the customer need for the care is indifferent to organizational and hierarchical structures. The co-creation can help building customer centric operations and services.

Scalability of the operations, services and processes will bring the flexibility that benefits both personnel and customers. When defining the services and process for the customer needs it should be scalable in a sense that it can be applied other service areas as well. This will save the effort of maintaining multiple forms of processes and services to meet the same need. From customer perspective it will bring security regarding the service levels as there is no unnecessary variations for example in appointment scheduling or receiving information. Lean methodologies and relational bureaucracy can be used for creating uniform and scalable processes for the services.

Due to the size of the organization it is not reasonable to assume that the organization could be flat and operating merely on networks. Structure, provided by hierarchy and bureaucracy, is needed to ensure the operational efficiency and transparency. With relational bureaucracy it is possible to build scalable care networks based on roles that fosters to one another attentiveness to the situation.

Lean methodology in its simplest format is to avoid waste during the process and improve efficiency and quality through that. Six Sigma is a concept that emphasizes customer satisfaction and financial performance aiming to reduce process variances which is essential in order to have scalable services and processes. Lean Six Sigma is a customer oriented way of combining quality, performance and cost reduction that has been applied in hospitals (Cheng & Chang 2012: 431, Wennecke 2008: 28, Wijma & al. 2009: 222). All in all the lean is about using common sense for simplifying current practices and a mind-set for continuous improvement.

The correct balance of operational efficiency and customer centricity might be the most challenging aspect of the framework. Based on the experiences available in the cancer.fi pages and what Simonen (Koivuniemi & Simonen 2011: 13 – 16, 46, 49 – 50) tells about his experiences as a customer with a cancer it becomes quite clear that the level of customer centricity – or to be accurate customer centric way of working – varies a lot during the treatment depending on the treating quarter. Uniform way of taking care of the

customer through the whole chain would contribute both into positive customer experience and the operational efficiency in similar way that scalability. The balance of operations and customer centricity is related to performance metrics. The key is in defining the correct metrics that support both the selected level of customer centricity and the needed level of operational efficiency. In the end selecting the customer centricity level is a strategic choice that has effect on organization structure, management and leadership needs.

5 Building the proposal for increasing customer centricity

Building proposal for increasing customer centricity takes the findings from current state analysis and reflects those in the light of created conceptual framework. Each of the main pain points are walked through separately and ideas derived from the conceptual framework are presented in a way that they could be examples from a practice. As a result the steps for increasing customer centricity are summarized into a general process or guideline for improving customer orientation in daily practices.

5.1 Customer centric view to defined core processes

Defining the current core processes for cancer center has revealed the wide contact area that customer needs to be able to manage during the whole care path. The described processes concentrate only to the essential of the clinical care and the aspect of social and psychological care is excluded from the process description though the services are available and needed during the clinical care. This means that the contact network for customer to be managed is even wider than the core processes describe.

Another finding was the actual amount of waiting that the customer needs to be prepared for during the process from the initial cancer suspicion at the occupational or primary healthcare until the end of the process. This waiting includes the waiting of getting appointments for different professionals, waiting at the clinic for agreed appointments, tests and scans, waiting at home for the test results. Almost every phase in the defined process and in the care path includes waiting at some format.

The third finding was the challenge of customer transition between the different phases and silos. Information flow is a crucial part of the transition and from customer perspective this means that customer is explained what is happening next and why. Also it is ensured that the receiving quarter knows and understands the customer situation.

Based on these observations there are three actions that the cancer center could take in order to increase customer centricity: wait time management, support for customer contact point management and transition management.

5.2 Wait time management

Wait time management is mainly customer expectations management and knowledge sharing about customer's process status. It should address the cases where customer is waiting for the invitation or test results outside hospital or other care unit and the cases where customer is waiting for an appointment with a specialist at hospital or at other care unit premises. The fact is that waiting cannot be eliminated from the process simply because of availability of physical resources or clinical reasons but it can be managed in a way that it is as pleasant for the customer as it can be.

The following sections from 5.2.1 to 5.2.3 consider the wait time management from the aspects of the theoretical framework and how that could be applied in the practice.

5.2.1 Co-creation of value

Co-creation of value is understanding the customer processes, co-creation activities and styles and especially how to encounter those in customer oriented manner, like explained in the chapter 4.2 and Figure 13 and Figure 14 in pages 20 and 22 and Table 2 in page 21.

The customer waiting cases could be roughly divided in three. First case could be waiting at physician, nurse or other healthcare or social professional office to get in for a scheduled appointment. Second case could be waiting for the test results and the third case could be waiting for the invitation for a specialist appointment. Another aspect of under-

standing the customer waiting is understanding where the waiting is physically happening. It could be either at the physical waiting room at the hospital or outside hospital. Customers might also need to wait on line when calling by phone from various reason, for example receiving information about their situation in the process. Figure 19 summarizes the different aspects of a waiting customer.



Figure 19. Examples of different aspects of a waiting customer.

When planning the customer encounters considering the key questions and emotions customer is facing while waiting should be done. Based on the customer experience stories in the cancer.fi pages (Potilaat kertovat, Läheiset kertovat) and what research has found out anxiety and concern regarding care availability is the dominant feeling during the waiting along the treatment journey (Pineault 2007: 847; Paul, Carey, Anderson, Mackenzie, Sanson-Fisher, Courtney, Clinton-McCHarg 2012: 326). The key questions during the wait time to be answered could be for example “what is my status, how much more I need to wait?”.

The different encounter methods for the waiting can be planned based on customer aspects of waiting and the key questions. The table below walks through the possible waiting customer scenarios and planned encounters to ease the customer waiting time experience.

Table 3. Scenarios and encounters for waiting customers.

<i>Waiting at home</i>	
	Encounters
Invitation	<ul style="list-style-type: none"> - Possibility to have information about referral handling status via phone or internet - Receiving invitation by phone call - Written confirmation about scheduled time received by SMS/e-mail/letter. - Possibility schedule and manage needed times independently via internet or by phone
Test results	<ul style="list-style-type: none"> - View test results status in the process via internet <ul style="list-style-type: none"> o Where are my results in the queue? o What is my results handling status? - Possibility to inquire status via phone
<i>Waiting at hospital</i>	
	Encounters
Appointment Test results	<ul style="list-style-type: none"> - Customer is noticed when arriving - Comfortable waiting area (e.g. some relaxing pictures on the walls, TV, magazines etc.) - Customer is informed about the expected waiting time when arriving - Customer is updated about the status if expected waiting time is exceeded - Queuing status is visible (e.g. numbers on the wall) face to face communication, personnel is paying attention to the waiting customers.
<i>Waiting on line</i>	
	Encounters
Various reasons: new symptoms appeared, need for re-scheduling, status inquires etc.	<ul style="list-style-type: none"> - Call-back service - Estimation about expected waiting time.

The main idea of easing customer's waiting is providing information about the current status related to customer's issue and making the waiting as pleasant as possible. The fact is that all waiting cannot be eliminated or minimized so the methods for managing customer expectations during the waiting time should be in place. The three views on wait time management based on Table 3 are communication and enabling customer to

acquire information when s/he wishes to do so and finally paying attention on the physical atmosphere at the waiting areas.

5.2.2 Scalability

The proposed model of wait time management is scalable in a sense that it is indifferent to customer's clinical status and condition. The basic idea of wait time management could be applied in all sections of healthcare.

From operative perspective the wait time management and encounter methods and roles taking responsibility of the customer in each case needs to be planned. The bureaucracy providing the structure for the operations is already existing and adding the relational aspect into it will support taking the responsibility of customer's wait time experience. With lean practices that are already being implemented at some parts of HUS, for example HUS Imaging, it is possible to cut the overall waiting times across the processes (Dinesh 2013; Dydyk, Franco & Lebsak 2007: 516).

5.2.3 Balancing customer centricity

How much effort is wise to put on wait time management is a strategic decision related to selected level of customer centricity and customer type, defined in chapters 4.4 and **Virhe. Viitteen lähde ei löytynyt..** Whatever the strategic approach is, from customer perspective consistency is important. The same way of handling waiting customers should be applied through the whole treatment journey.

Defining the structured way of facing and communicating with waiting customers and metrics supporting the desired customer experience will not only add to customer satisfaction but will also improve the customer facing skills of treating personnel by giving the framework for different situations. The core of balanced customer experience is understanding the customer expectations and setting them to right level that can be reached and measured.

5.3 Customer contact point management

Customer contact point management is a tool supporting customer with the various contacts that are needed for improving customer's physical and mental situation. Depending the customer's type and medical condition the list of needed contacts can vary a lot. What is important from customer perspective is that there is clear and defined contacts for different cases that the customer is likely to face during the treatment. The contact list is updated during the course of treatment and it combines the contacts relevant for customer's conditions. In practice this means that if customer has breast cancer, heart condition and mental problems at the same time the list of contacts collects these contacts together. For customer it is concrete tool and reminder about where to find help when needed and for treating personnel it is a collaboration tool regarding the one specific customer case. Ensuring the contact list is up-to-date helps to build a more comprehensive picture about the customer's actual situation.

5.3.1 Co-creation of value

From value co-creation perspective the contact point management begins by understanding the customer's situation as whole, not just from the cancer or other specific clinical condition perspective. Including the other aspects of customer's life into treatment journey could even reveal overlaps or synergies in the treatment. Figure 20 summarizes the different aspects of contact point management that could be taken into account during the customer treatment. At the same when customer's contact point network is mapped, it is possible to create better understanding about the customer's overall situation that could have either positive or negative effect on treatment success.

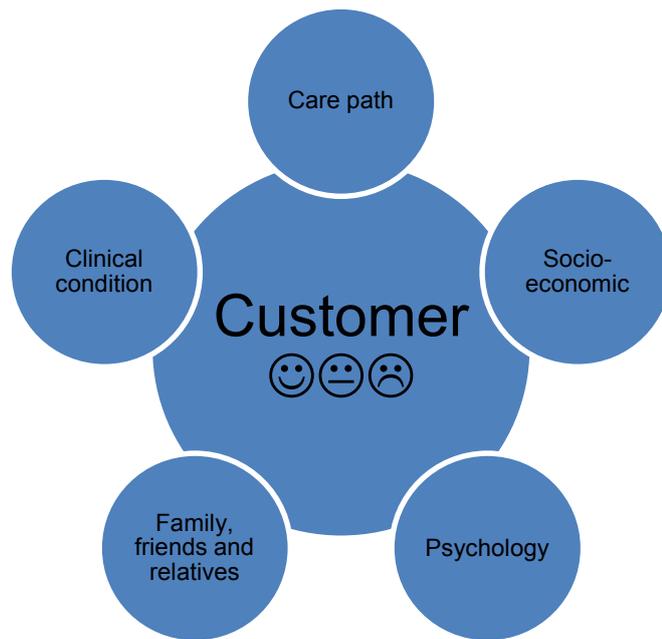


Figure 20. Examples of different aspects of customer's contact network.

Planning encounters for customer contact point management is about considering the customer process and needs from every side of contact point management. Key questions need to be defined for each point of contact network. Depending the customer type and personality it could be that some sides are more important than others or some aren't needed at all. Table 4 summarizes some examples of key questions and possible encounters for contact point management. For some cases a general information and services available via internet is enough, other cases might need more hands-on type guidance in the form of actual contact information list.

Table 4. Examples of key questions and encounters related to customer contact point management.

<i>Care Path</i>	
Key Question	Encounters
Who is taking care of me?	<ul style="list-style-type: none"> - Clarifying roles and responsibilities of clinical professionals that customer is meeting during the different phases of treatment. - Names and contact information availability. - Personalized contact list, printed on paper, e-mailed or available in internet as a service.
<i>Socio-economic</i>	
Key Question	Encounters

How this effects on my economic situation?	<ul style="list-style-type: none"> - Discussion with customer about the situation - Collected information about the cases where KELA supports and how. Information available in internet and printed hand-out. - Contact information of persons dedicated to support customers in need of socio-economic guidance. Information available as internet services and printed hand-out.
What do I need to tell my employee?	
Who takes care of my kids?	
Is KELA supporting me?	
Psychology	
Key question	Encounters
I'm constantly worried.	<ul style="list-style-type: none"> - Discussion with customer - Collected information about organizations and peer-support groups. - Contact information of persons dedicated to support customers in various psychological cases. - Information available as printed hand-out and internet services.
I'm tired and I don't care.	
Who can help me to cope with this all?	
Family, friends and relatives	
Key question	Encounters
How to tell my family about this?	<ul style="list-style-type: none"> - Discussion with customer - Collected information about organizations and peer-support groups. - Information available as printed hand-out and internet services.
How does this effect on people close to me?	
Who can best support me with this?	
Clinical condition	
Key question	Encounters
How does cancer effect on my condition x?	<ul style="list-style-type: none"> - Discussion with customer - Collected information about customer's clinical condition. - Documented and updated information about care professionals working with customer outside cancer center.
I'm already seeing a great physiotherapist, can s/he help me with rehabilitation?	

5.3.2 Scalability

The proposed model of customer contact point management is scalable in a sense that it is applicable in other areas than cancer as well.

From operative perspective mapping the customer contacts is a common task for customer and healthcare professionals. Currently as there is no common CRM base for healthcare sector and even HUS has several different customer bases in its use it is not possible to see customer's contacts at one glance. Therefore effort is needed with customer to clarify customer's contact network in all the areas related to customer's care. It might be possible to fill in some of the contact points related to care path, socio-economic and psychological support but instead of giving these contacts to customer as they are, the point of mapping is understanding if customer is already having relations in the areas and what kind of relations. The benefit of this kind of interaction is the possible of finding synergies in the relations that supports customer's treatment journey.

An example of one possible way of implementing customer contact point management is Orton Hospital's customer oriented care path. They have taken in use a role of case manager (kuntoutuskoordinaattori) who is responsible for communicating regularly with customer to check everything proceeds well with the care. In addition case manager communicates with KELA and insurance companies and can support customer with other issues as well. Figure 21 shows Orton's view of customer oriented care path (Tavoitteena nopea työhön paluu, asiakaslähtöinen hoitoketju).



Figure 21. Orton's view of customer oriented care path includes case manager (kuntoutuskoordinaattori) role.

5.3.3 Balancing customer centricity

Depending the customer type and selected level of customer centricity the level of needed contact point management can vary. For other customers it might be enough that available services are pointed out, others might need more hands-on support with their contacts.

The structured way of mapping customer contacts and supporting customer's to manage those during the treatment can contribute to positive customer experience by reducing customer uncertainty about who is responsible of what and where help for different cases is available. From operational perspective the mapping will increase personnel knowledge about the customer overall status and support communication especially in transitions. The better efficiency of treatment could be achieved by better customer understanding and businesslike communication through customer's contact points.

5.4 Customer transition management

Transition management should aim to smooth customer transition between the different wards and silos. The main points in transition management is information flow between the needed parties and ability to take care of customer in a way that customer avoids the feeling of being tossed around. A vivid examples of the bureaucracy in practice and rolling customers in there is described by Kimmo Simonen (Koivuniemi Simonen 2011: 49 – 50) and Marjo Ainasoja in her Facebook posts on 16 April and 9 May 2014 (Syöpäpotilaan päiväkirja).

Transition management is in close relation to contact point management and understanding the customer's case as whole especially in complex situations where the care is fragmented over several organizations.

5.4.1 Co-creation of value

From co-creation perspective transition management begins by understanding from customer perspective different forms of transition. Transition happens whenever there is referral to another care unit, a new phase in treatment begins or a shift changes when staying at ward.



Figure 22. Examples of different aspects for customer transition management.

Planning the encounters for each transition case begins by considering the customer transition situations and what are the customer key questions for the transition.

Table 5. Examples of key questions and possible encounters for transition cases.

<i>Referral</i>	
Key Question	Encounters
Why I'm getting this referral?	- Discussion with customer why the referral for another treating unit needs to be given.
Where do I need to go with this?	- Explaining what happens and what customer should be prepared for when customer arrives to another treating unit with the referral.
Do they know there my situation and what to do?	- Possibility to view own referrals and documentation related to referrals - Contacting customer when referral is received
<i>New treatment phase</i>	
Key Question	Encounters

What happens now and why?	- Discussion with customer about the new treatment phase and what is to be expected.
What should I be prepared for?	- Providing visibility to treatment process each step by documentation and discussions.
Who are treating and supporting me?	- Defining / clarifying treatment and support network and services.
Shift change	
Key question	Encounters
Who is the next doctor and nurse treating me?	- Providing visibility to shift changes and knowledge what is transferred during the change.
Do they have knowledge about my situation and needs?	- Visiting customers during the change and giving customer possibility to explain his/her point of view. - Constructive approach to negative and even unreasonable customer feedback.
I don't like this nurse, can I change her/him?	
Another clinical path	
Key question	Encounters
I'm having problems with my eyes because of diabetes. What should I do?	- Discussion and data transfers between clinical professionals in different care paths - Discussions with customers before and after transfer and during - Managing customer's contact point network
Do they know about my cancer and how that affects treatment?	

5.4.2 Scalability

Transition management is a scalable service in a sense that it is applicable to all areas of healthcare and other center of excellences as well. From customer perspective the key of transition management is the transparent processes and flow of information between parties involved in the process.

From operative perspective the contact point management and communication methodologies are significant during the transition management. Transition management could be seen as well as a part of care coordination that could be used in overall health care area to manage care fragmentation (Reducing care fragmentation).

5.4.3 Balancing customer centricity

Depending the customer and change type the transition can be managed in several different ways. For some customers more actual face-to-face communication is needed and for others a short notification about the change could be enough. From customer experience perspective it is important that the organization has a systematic approach to transitions.

From operative perspective balancing customer centricity for transitions requires developing metrics and transition tracking system that takes into account the selected level of customer centricity and customer care progress in some levels also outside the primary treating unit (Reducing care fragmentation).

5.5 Summary of the proposal

The general findings based on the current format of operations produced three main considerations for improving customer centricity: wait time management, contact point management and transition management. The examples described in chapters 5.2, 5.3 and 5.4 present a structured approach based on theoretical concept of this study for increasing customer centricity.

The structured approach can be generalized into the framework level for adding customer centricity into daily operations when the organization have their processes defined and they know their customer base. The framework consist of four steps presented in Figure 23.

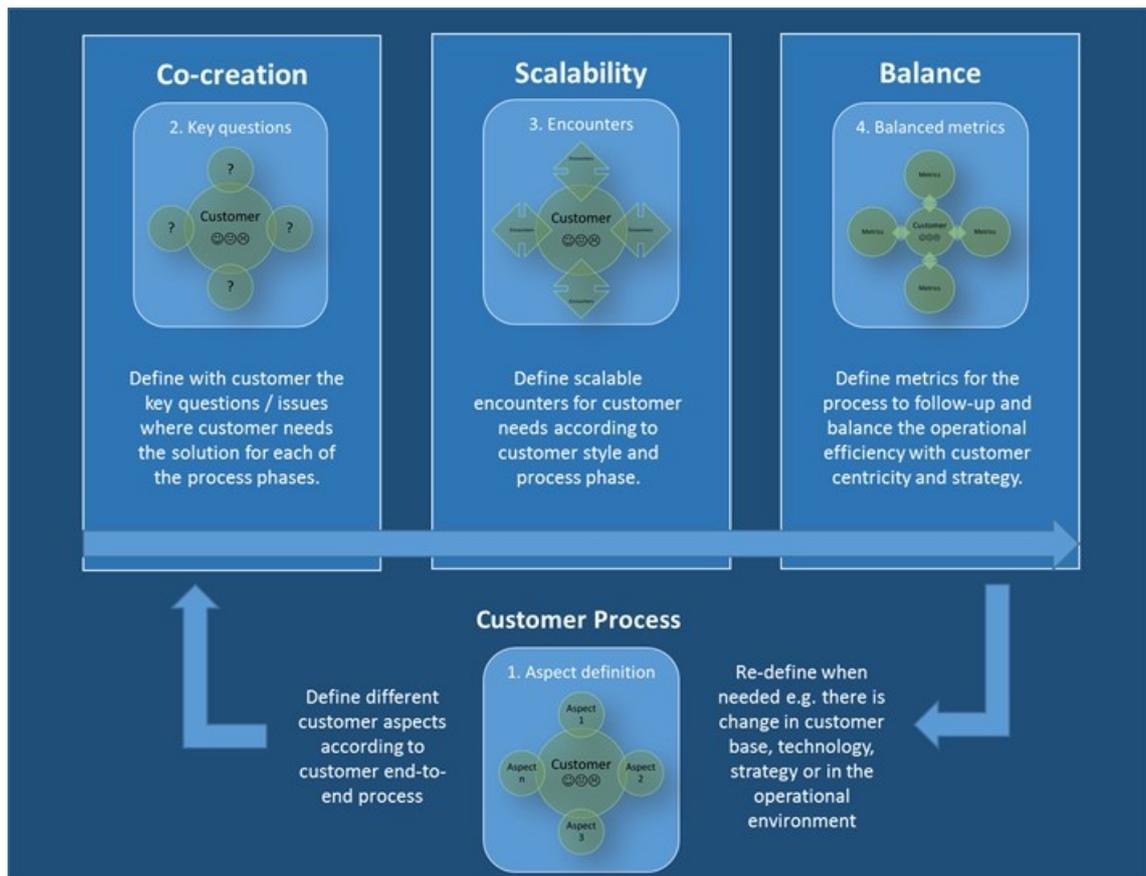


Figure 23. Steps for increasing customer centricity into daily operations.

The first step is aspect definition and that step should create an understanding about the customer overall status, customer point of view and cases that have effect on customer experience in the process or service selected to be improved. The second step is about defining the possible questions and needs that customer is facing in relation to all defined aspects. The third step is planning how to answer different questions and needs. The used encounters can be anything from process or practice change to different type of communications and services either digital or more traditional type of services. The main importance is that those are supporting the customer experience and selected strategy. The final step is defining metrics that provide visibility to customer experience and support maintaining or improving operational efficiency without compromising customer satisfaction. Once implemented in practice the follow-up and re-defining is needed according to operational environment, strategy, technology and customer base changes.

6 Feedback

Discussion with Birgit Paajanen on 27.5.2014 elaborated that in larger scale this is a question of changing process organization into service organization in order to meet the overall requirements of the changing operating environment. As of now, spring and summer 2014, HUS has been mainly working at the conceptual level of their change whereas this study with consultative approach has concentrated mainly on the logical and physical level as shown in Figure 24 based on JHS recommendation 152 (2012: 6).

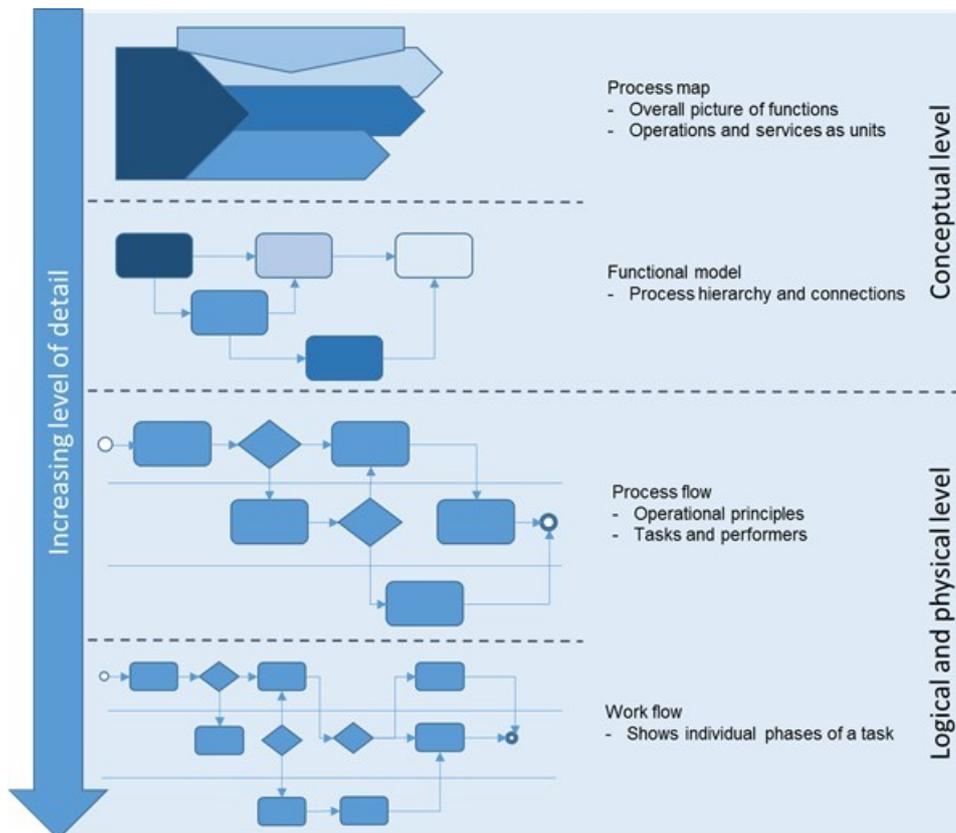


Figure 24. Process documentation levels (JHS 152 2012: 6).

Feedback discussion with HUS project manager Birgit Paajanen on 27.5.2014 the following items were validated:

- Defined core process and its sub-sections
- Findings regarding the possible improvement points
- Structured approach for adding customer orientation into processes

The documented cancer core process and the sub-processes – physician appointment, surgery, and cancer drug therapies, radiation therapy, follow-up and palliative care – was said to describe well their current way of working. The documentation was mainly created based on cancer specific documentation received from HUS and the more generic information available about the treatments in the cancer clinic pages. In the conceptual level for generic core processes there were enough information for documenting the high level process flows and recognizing roles required to implement the process but when considering the possible process improvements that could be achieved for example with lean methodologies the access to wards, customers and staff would be needed and detailed observation of daily work would be required. In high level it is possible to apply these processes as well for other areas than cancer when strictly considering just the functions. Challenge then will continue to be the management of workflow variations in order to ensure similar service and quality for customers.

The findings regarding the improvement points from customer perspective – number of contacts to be managed, varying practices, the lack of self-control, information sharing and availability during waiting and transfers (see Table 1 on page 17) – were recognized during the discussion to be common findings that could be related to other areas than cancer as well. The same type of topics are also widely discussed in the book of Koi-vuniemi and Simonen (2011) and these are as well the topics that mostly raise either positive or negative emotions in cancer blogs, social media and in more traditional media where the discussion often goes around queueing times, service availability, cost and quality of services.

Wait time management, contact point management and transition management generated from findings was said to be a one possible approach to improve customer experience. These are though just suggestions and to implement these practices into daily workflows a more detailed information about the course of work, current environment and reality of the people involved in the process would be needed. It was also mentioned that some of the suggested practices would require a fundamental change in the infrastructure and operative way of doing in order to be able to provide customers suggested information e.g. regarding test result processing stage (e-mail from Paajanen 12.5.2014). The more generic approach derived from the systematic way of approaching issue solving for waiting, contacts and transitions, the framework for adding customer centricity into daily processes (see Figure 23 on page 44), was discussed to be a possible approach that could be applied when designing the services for customers.

As the work in conceptual level has proceeded the actual need for logical and physical definition of customer oriented services and especially the lack of digital services was raised (Paajanen 27.5.2012). Therefore the final version of the proposal takes the suggested waiting time management, contact point and transition management and explores those from the digital service approach. The detail of proposed services is more on conceptual than in logical and physical level.

6.1 Digital healthcare services

The possibilities to apply the digital health landscape to the benefit of the individual customer and society seem endless as of now based on information available at Nuviun (2014) and McKinsey (2013) internet pages. From practical perspective and considering where HUS is going with operational and information structure changes the digital aspect of services is evident.

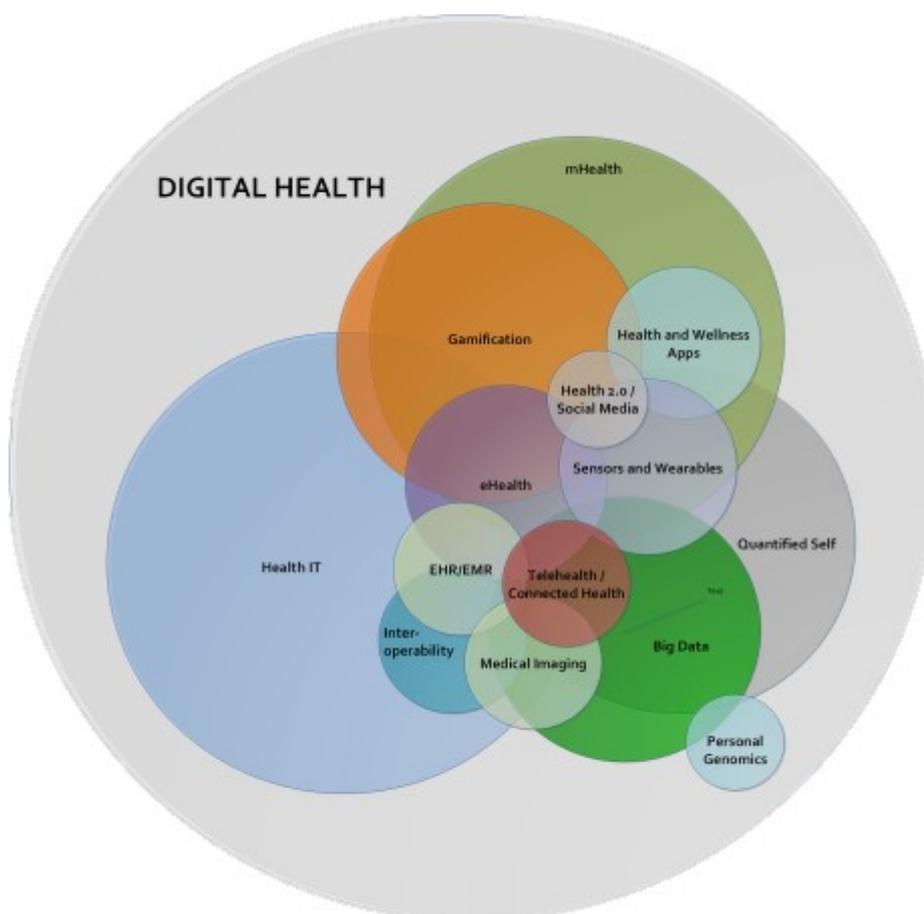


Figure 25. Digital Health Landscape (Nuviun 2014).

Figure 25 shows the wide range of concepts included in digital health and digital health care service production. In general concept is an idea or a logic according to which a specified function is working, evolving and developed (Virkkunen, Ahonen, Schaupp, Lintula 2010: 38). Due to the change in information technology and in medias storing and sharing the information – digitalization – and the way people are using information the one way of developing new services and ways of working leading to new concepts are networks sharing information and learning together according to Virkkunen, Ahonen, Shcaupp and Lintula (2010: 120). When considering the healthcare customer's care paths and customer processes the networks are important from customer experience perspective like discussed in chapters 5.3 Customer contact point management and 5.4 Customer transition management. Digital services could ease the customer networks information sharing and learning through the care paths and across the customer processes.

The final version of the proposal concentrates on possible digital services supporting positive customer experience on the wait time management, contact and transition management. From the landscape perspective these services could apply concepts familiar from health 2.0/social media, EHR/EMR (electronic health record / electronic medical record), telehealth/connected health, medical imaging, mHealth and eHealth. Interoperability of the services is crucial for the success and needs to be supported by health IT.

6.2 Digital service approach for supporting customer care path

“A watched pot never boils” one could say when waiting for something to happen. During the cancer treatments and generally in the healthcare waiting is a necessity and it is not possible to cut all waiting from the processes. In the chapter 5.2.1 the different aspects of waiting customer and possible encounters were analyzed. Similar analysis was done for the customer contact point management and transition management in chapters 5.3 and 5.4. The key encounter for the customer in conceptual level that came up in all cases was an information sharing about process status and communication.

The importance of communication is high what comes to customer experience (Jain, Sethi, Mukherji 2009: 61). While Jain, Sethi and Mukherji has studied the communication in Indian call centers the similar rules of effective communication apply in other service areas as well. It means providing the information customer needs and wants in a suitable manner. Figure 26 summarizes in high level the information areas from the care path where customer could benefit from different type of digital services.

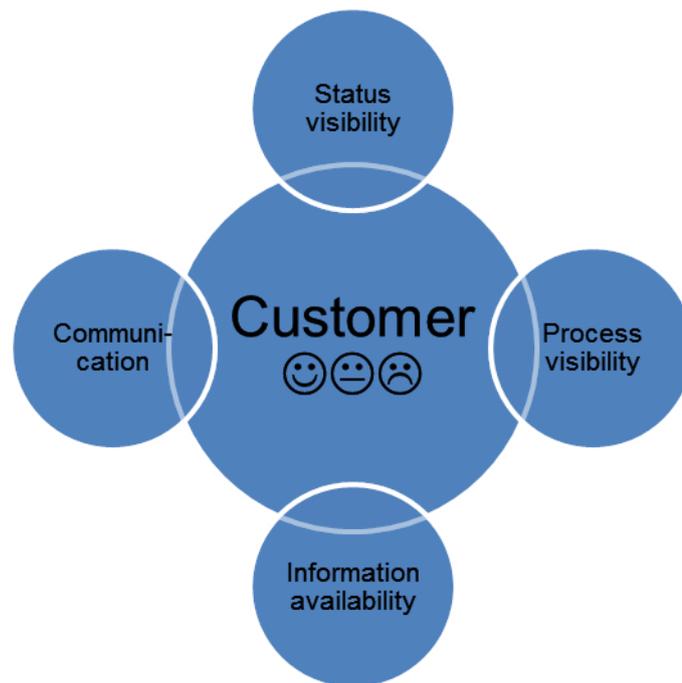


Figure 26. Areas where customer could benefit from different type of digital services during the care path.

Status visibility can be applied to situations where the customer is waiting for the appointment at the hospital or is waiting for the test results. As simple things as queuing and urgency numbers and estimated times for processing test results could be provided as well as information about delays. Sharing information can happen in media independent ways via internet and mobile services. A good examples of mobile services is reminders about the appointments that could be sent in a format that customer can easily add it to his/her calendar when appointment times are scheduled (for example *.ics*).

Cancer center has taken a good step forward regarding the process visibility by publishing breast cancer care path in their pages (Rintasyöpäpotilaan hoitopolku). Path contains very well general information about the breast cancer care. Yet taking a step further to

service approach would be a personalized care path where customer would be shown only the process phases, contacts and schedules relevant to his/her care plan.

6.2.1 Co-creation of value

Co-creation of value is about defining the key questions and possible encounters the customer needs to be answered during the process for each of the aspects that have effect on customer experience. Table 6 summarizes the common aspects from Figure 26 for the defined pain points – waiting, contact points and transitions– that the customer is facing during the care path.

Table 6. Examples of possible key questions and encounters for different information areas of care path.

Status visibility	
	Encounters
Where am I in this queue?	- Queueing numbers visibility
How much I still need to wait?	- Estimated time of waiting
What is my test result processing status?	- Clear “lifecycle” statuses for test results (e.g. in queue, in progress, waiting, ready)
Process visibility	
	Encounters
How is this working?	- Clear process documentation for customer needs
Where am I in this process?	- Personalized process view showing the information relevant for the customer
What is happening next?	
Information availability	
	Encounters
What was it what the physician told me?	- Availability of epicrisis and other notes from the appointments
How are my images looking?	- Availability of medical imaging and other scans and test results
What do I need to know about this topic?	- Availability of valid general information related on customers condition, filtered according to customer needs.
Communication	
	Encounters
I have a question to my physician / nurse, it's not urgent	- Communication with treating personnel via digital services like chats, e-mail, SMS, video.

<p>though. Should I call or e-mail or what?</p>	<ul style="list-style-type: none"> - Communication with support groups and peer group via chats and social media, e-mail, SMS
<p>I would like to know what other's going through this have experienced.</p>	<ul style="list-style-type: none"> - Access and visibility of the information needed to support communication.
<p>Does all the relevant parties have the information they need regarding my condition?</p>	

6.2.2 Scalability

The proposed digital service approach regarding the information sharing and communication is scalable in a sense that it can be applied to other healthcare and social services areas as well. This idea, concept, is not new to the area and there are currently several quarters thinking how to do this in a way that the integrity of the customers is secured, yet needed information is available. Kanta.fi is the first phase visible to customers of implementing this type of concept of information sharing. Yet it is limited to history data and it has no connections to processes and other organizations relevant from customer perspective.

From information sharing and communication perspective the scalability of this type of service could be defined by the flexibility of the platform and data structure:

- How easy it is to use for customers and professionals?
- How easy it is to maintain and develop?
- How easy it is to create integrations between different systems?
- How easy it is to use with different medias (computers, smartphones, tablets)?

A one viewpoint that should be kept in mind in the initiative of this scale is not to forget the customers who for some reason or another are not able to use at all or temporarily digital services. A scalable service system should be able to meet these needs in some level as well.

6.2.3 Balancing customer centricity

In digital services balancing the customer centricity should be done in similar way than for other operational areas. Defining the metrics that are measuring the processes from

customer perspective (e.g. customer feedback) and operational efficiency (e.g. lead times). Metrics should be in balance with the selected strategy and they should support the selected level of customer centricity.

The service approach in the digital services is about serving the customers and fulfilling their needs. In the healthcare area this service should also serve the professionals working with the customers so finding the balance between customer requirements and professional operative requirements is as important as finding the correct level of customer service and defining systematic approach that is applied horizontally across the care path.

6.3 Summary of the final proposal

Based on general aspects summarized in Figure 26 and the key questions and encounters to meet the needs in Table 6 a future digital service experience after the first physician appointment at the cancer center or other specialized care unit could be as described in Figure 27.

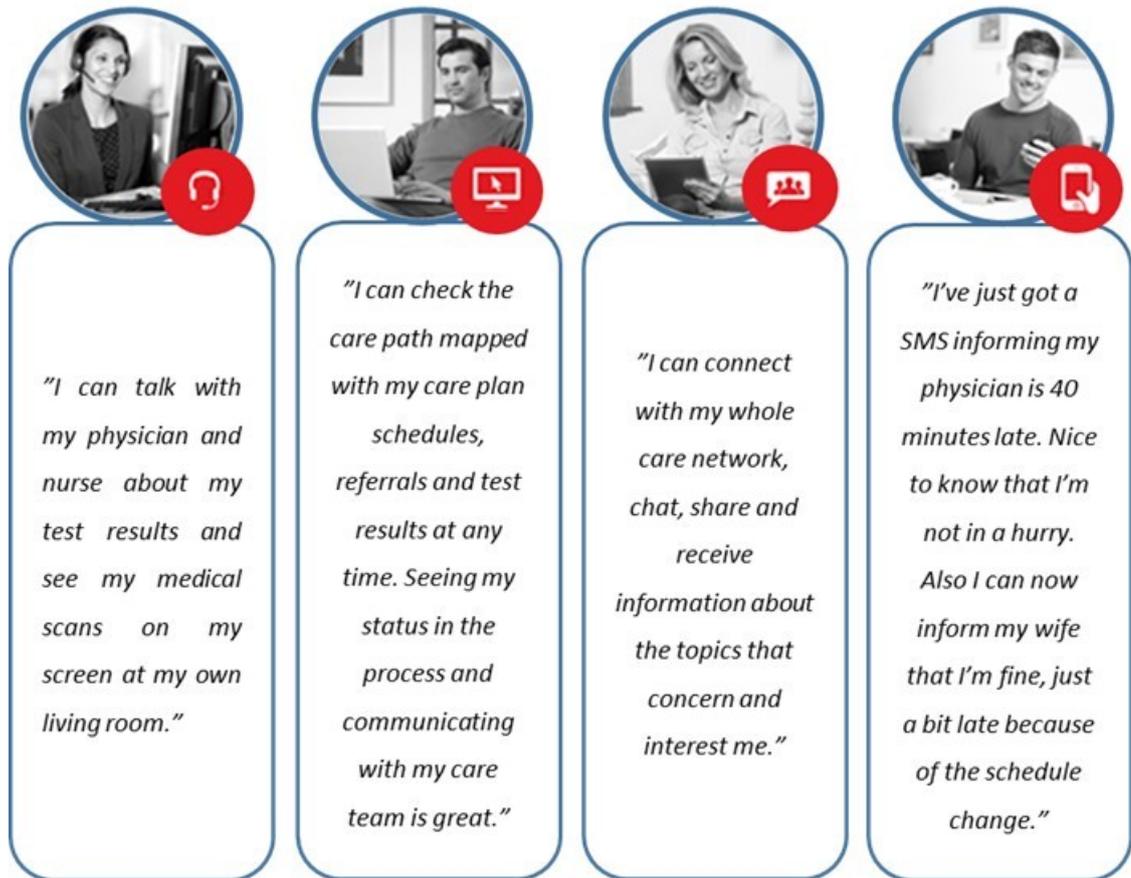


Figure 27. Examples of possible service experience stories in future with digital services.

In some levels all methods presented in Figure 27 are already in use or could be used but their capacity for services is not fully deployed for various reasons (lack of common IT systems, questions regarding data security and privacy). Also above example will require quite a different approach into operative way of working both in IT infrastructure and human mindset level as it is making the process and people in it transparent in a culture that is traditionally managed issues internally (Tucker 2004: 162 - 166). From customer care and experience perspective it would be important that service platform and information shared and generated through that would be available and accessible for all the network members relevant for customer successful care and treatment experience.

As of now (spring – summer 2014) HUS is in the process of defining common CRM base called Apotti (Apotti-hankeen päävaiheet ja aikataulutus). This on-going requirement definition will set the basis for future digital customer services. As the definition is done the

customer point of view should be kept in mind along the operational needs. The possibilities of industrial internet – also called as “internet of things” – could be investigated as well.

When considering the possible digital customer experience story in the light of the framework the proposed idea of customer centric service could be generalized into following key points:

- aligned with customer processes
- aligned with customer styles
- scalable for different ways of usage
- in balance with organization operational efficiency and strategy requirements
- measurable.

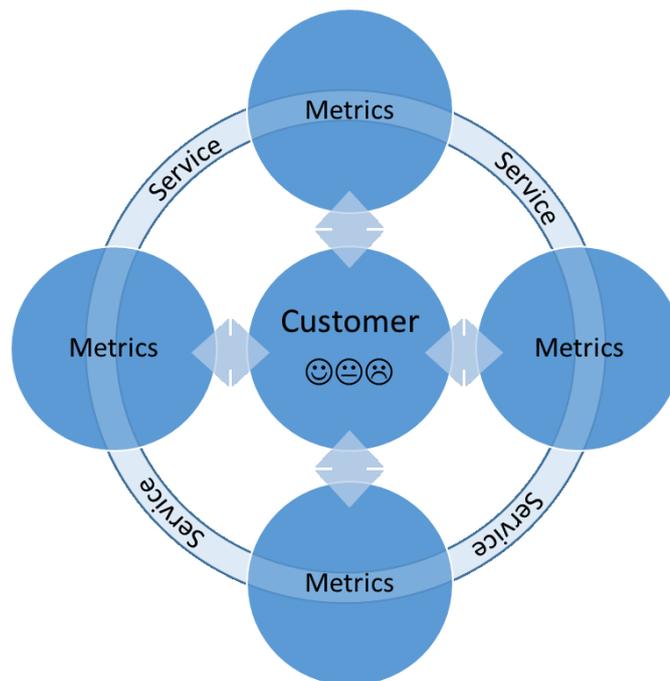


Figure 28. Customer centric services should be fulfilling both the customer and organizational requirements.

In the end the structured approach for increasing customer centricity presented in this work has produced an idea of a possible digital service experience that could be used as a preliminary guideline for system requirements design from customer perspective. The service requirements can be generalized into higher level and added as a fifth and final step into the framework completing it into a process of developing customer centric services.

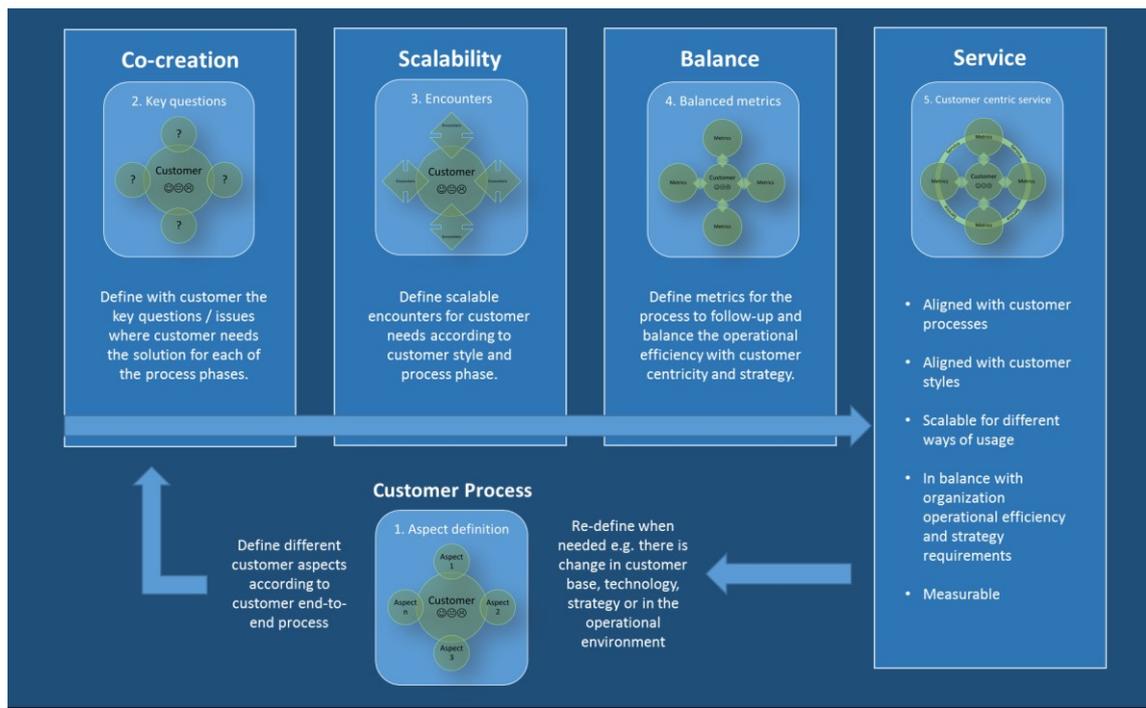


Figure 29. A proposed process of developing customer centric services aligned with the organization operational efficiency and strategy requirements.

7 Conclusions

HUS has taken a major step when decided on the organizational changes, centers of excellences and starting to move from process and operations oriented organization to a customer oriented service organization. Being a customer oriented service organization requires instead of vertical and hierarchical approach horizontal integrations and lateral coordination according to customer care needs. Currently lateral coordination is more or less customer's responsibility.

In order to align with customers an organization will need to know customer segments, customer processes from different segments and its own processes. Without knowing customers and how they operate in different situations and without knowing own processes it is not possible to streamline offering and serve effectively. Cancer clinic and other special units, like HUS Medical Imaging, seem to have very good knowledge about their own processes and operations but what is lacking is the unified method across the

HUS facing and serving customers. As the operations are in one sense very effective they are also very sensitive to changes and financial losses caused by customers not being able to commit to care and care schedules. Therefore better understanding the customer processes will help not only to serve customers better but be as well more flexible regarding the changes caused by customers.

Digitalization of the services after initial investments can create efficiency into service operations by seamless information flow and structured data. Designing the digital services offering the different customer types and segments need to be taken into account. A thirty year customer is likely to have a different approach to digital services and using the different media for communication and information sharing than a seventy year who has retired from active work life ten years ago. Considering the amount of information that is currently available and scattered all over the internet, treating and supporting organizations a service collecting and filtering data for specific needs and sharing that in a customer preferred way could be appreciated by the healthcare professionals and customers.

More than anything, going beyond IT systems, organizations and operative models good service is about communication and cooperation. Therefore defining clear guidelines on how communication and cooperation in different cases with different stakeholders should be done is essential. Different tools and media can either support or dim the service experience depending how it is used and how digital services are built.

7.1 Managerial implications

Maybe the most important findings in this thesis from managerial point of view for adding customer orientation in practice is understanding the customer process as whole beyond the clinical process in question. By building lateral teams, connections and networks across the horizontal customer process it is possible to create a way of working where customer will get the help he/she needs and a positive service experience.

The center of excellence approach is justified when considering the operational efficiency, economies of scale, education and research. From customer perspective this can mean access to highly skilled professionals and extremely specialized services that will serve the customer with cancer or heart problem or severe infections very well or it

can mean continuation of current siloed situation where the final responsibility of getting the needed services across service providers lies with the customer. In latter case there is not really a change to a current situation from customer perspective.

Based on this what every manager should know about their unit is their customer types and processes that customers are going through. On top of this knowledge it will be possible to build services, teams and horizontal connections to serve the each customer type. Defining common guidelines for communication and facing the customers in different situation, for example when waiting or transition between care paths and units, and living according to agreed rules is an important factor for customer experience.

In many cases the simple solutions, like check lists to support memory in hectic situations, are the best ones to ensure the level of service. Also empowering the professional teams taking the responsibility of the customer processes is needed. This means that every team member though having a clear responsibility only for part of the tasks, takes charge the whole process and sees that customer is navigating fluently through care paths crossing various care units and support organizations.

Moving from process organization to service organization with horizontal integration and coordination is more than anything a change in people's mindsets. Kotter's (1996: 33 - 158) eight-stage process for managing change could be a good framework for implementing any of the coming changes HUS is currently working on:

1. Establish sense of urgency
2. Create guiding coalition
3. Develop a vision and strategy
4. Communicate the change vision
5. Empower employees for broad-based action
6. Generate short term wins
7. Consolidate gains and produce more change
8. Anchoring new approaches in the culture.

In a nutshell Kotter's message is about making people to see and feel the need for the change, find themselves meaningful ways to implement it and start to act on it in a way that the behavior becomes new culture. Management's responsibility is to behave as an example, guide back to correct behavior path when there are signs of old behavior returning and to show the concrete gains produced by the change.

7.2 Next steps

To increase customer orientation in daily processes the next phases for HUS could be defining the horizontal customer processes especially for complex cases. Complex cases can be defined as customers who are having multiple clinical processes on-going simultaneously and who don't necessary have capacity to manage those processes independently. Including customers' voice into this horizontal process definition is a necessity in order to have a process that will support customers positive care experience and coping with their severe conditions in their everyday lives.

Concentrating on horizontal process management and paying attention to communication and information sharing during the process should have positive impact on the customer experience. The practical ways of doing this is the method of customer aspects and encounters defined in this work. A good approach could also be implementing the role of customer case manager who doesn't necessary need to be a clinical person but whose main task is to see that customers are going through the needed processes in all aspects without impediments. What could be done at minimum would be defining structured ways of encountering customers when they are waiting or being transferred. Once the common rules for specified customer situations are defined the change to daily practice needs to be implemented.

In the end making these changes to really happen it is a question of changing people's mindsets along the changes in organization, technology and IT. These changes will need to cross over the whole health care and social field in order to produce results. HUS is in good position for driving the change in its health care district.

7.3 Evaluation

Evaluation of this work is done by outcome versus target and estimating study's reliability and validity. Outcome versus target evaluates on how well the original target of the thesis was fulfilled. Reliability and validity evaluates the actual thesis process and how the data and source material was handled. In overall what needs to be remembered the approach

of this work was a consultative and on applying side of the existing knowledge than for generating new knowledge in a sense that more advanced scientific studies do.

Another key thing to remember is that customer centricity in healthcare is not black and white but more different shades of grey. There are cases where customer needs to be an object in a process without possibility to influence as she/he might not be able to do that physically or mentally. In those cases the best customer oriented approach healthcare professionals can take is to drive and do what is needed for the benefit of the customer.

7.3.1 Outcome versus target

The target of this thesis was to find the possible integration points from the current care processes for the Cancer Center in a way that the defined cancer core process will meet the set requirements regarding customer centricity and scalability. The actual outcomes of this work was

1. Generic cancer core process documented
2. Theoretical framework for combining customer orientation and operational efficiency
3. Structured approach for increasing customer centricity into daily operations
4. Proposal for digital service experience concept and process of developing customer centric service.

All four outcomes were developed according the original requirements of customer centricity and scalability. Also the current structure of operations and need for change in all levels were taken into account when practical solutions were developed.

First the generic core process for cancer treatment was defined based on two different cancer process documentation made for different type of cancers. The core process shows in graphical format the information that is currently available in cancer clinic pages in written format. It doesn't take stand on a cancer type yet it provides enough paths to be applied for different cancer types and customer cases. The generic process description therefore fills the requirement of scalability. The active role for customer was added in order to make the customer active participant of the process instead of being a patient going through the process which is the current approach in many cases. Customer having a role is one of the base requirements of the customer centricity therefore the defined core process fills the set requirement of customer centricity as well.

The theoretical framework of the thesis was created based on the requirements of increasing customer orientation in a scalable manner yet improving and maintaining the operational efficiency. The leading idea behind the framework was to find the methods for utilizing current structures and acknowledging the fact that system is in hierarchical and bureaucratic silos which cannot be pulled down over night. Since the requirement of the customer centricity the customer processes were selected as the base of the theoretical framework. Operations, scalability and balance of the customer centricity can all be tied together on top of the customer processes with simplifying by lean methods and taking responsibility according to relational bureaucracy. The theoretical framework presented in this study is filling the requirements of customer centricity and scalability in a sense that it can be used in other areas of HUS and in overall healthcare and social sector as well.

Structured approach for increasing customer centricity into daily operations is a simple deduction generated from the theoretical framework applied in practice. The approach has the customer process as a starting point and it allows seeing the current resources as means to encounter customers in more cooperative way including the metrics for tracking the progress. This general approach is customer centric and it is scalable in order that it is possibly to apply it in any function where customer orientation needs to be evaluated and improved. It is also simple enough to be applied in all levels of organization and in smaller or larger task entities.

Finally the proposal for digital service approach and process of developing services is summarizing the overall key findings, communication and information sharing, relevant for customer experience into a one digital service concept. A digital service should be combining customer processes into operational processes and supporting customer interactions with health care and social professionals, peer groups and support networks. This idea is customer centric as it is empowering customer to reflect on his/her status and communicate despite the place or time. It is also scalable to any care path.

Yet the possible implementation of this type of service requires major changes in the information structure and investments on solution development, testing and deployment. It will require also the other type of operational changes discussed earlier. To mention few, these are process definitions, structured approach for different situations, clear guidelines and metrics to be followed and a change in the mindset.

7.3.2 Reliability and validity

The reliability and validity, in overall the quality of this study can be questioned by the four quality criteria based on Guba's research presented by Shenton (2004: 64, 73) and the five action research quality terms defined by Coghlan and Brannick (2014: 15). The table below presents Shenton's idea on how a researcher can respond to Guba's quality criteria credibility, transferability, dependability and confirmability. The final column evaluates this study according to the Guba's criteria.

Table 7. Possible ways to address Guba's criteria of trustworthiness (Shenton 2004: 73) and how they are applied in this study.

Criteria	A possible way to address the criteria	In this study
Credibility	Adoption of appropriate, well recognised research methods	The research process and method is presented in this study. The weakness is that there were no several people interviewed or questionnaires sent yet the researcher choice was to study existing documentation on the topic due to the personal motivations.
	Development of early familiarity with culture of participating organisations	Before contacting and starting the process with the target organization the researcher discussed about possible topics and other topics related to target organization with two of the representatives of her own organization and studied HUS internet pages, personnel magazines and public reports about the healthcare status.
	Random sampling of individuals serving as informants	A random sampling was not used. The informant of the study was selected according to the study field and the purpose was that this study process could also contribute into the more conceptual work that the informant was currently working with.
	Triangulation via use of different methods, different types of informants and different sites	Triangulation was not methodically used in this study. There was though interest of widen the data with information available in different type of sources like official public documents, blogs and social media.
	Tactics to help ensure honesty in informants	There were no special tactics used as there were no interviews or questionnaires used. The honesty

		of the blogs is difficult to evaluate therefore the basic assumption when reading those were that the writer is writing a story that has some reality in it considering the serious topic. The idea was that story should at least feel real in a way that it could have happened in real life.
	Iterative questioning in data collection dialogues	When discussing with the organization contact the ideas and general understanding was confirmed by questions and repetition.
	Negative case analysis	Not used in this study.
	Debriefing sessions between researcher and superiors	There were sessions with the organization contact and with the thesis instructor to validate the work progress and that the quality of the work was sufficient.
	Peer scrutiny of project	Not used in this study.
	Use of "reflective commentary"	Not used in this study.
	Description of background, qualifications and experience of the researcher	Researcher background and experience is briefly described in this chapter, point 3 in Coghlan and Brannick's criteria.
	Member checks of data collected and interpretations/theories formed	Formed interpretations and theories were evaluated by the HUS contact to be sufficient.
	Thick description of phenomenon under scrutiny	The phenomenon investigated is not thickly described in this study.
	Examination of previous research to frame findings	Previous research was used to create the conceptual framework that was used to build the final proposal based on findings.
Transferability	Provision of background data to establish context of study and detailed description of phenomenon in question to allow comparisons to be made.	Each data source mentioned in this thesis is documented in the references, appendix has brief notes about the meetings with HUS representative and selected examples of the blogs.
Dependability	Employment of "overlapping methods"	The dependability of this thesis can be evaluated to be weak as it is likely to be difficult to repeat it due to the facts that data in the internet and especially in blogs and social media is changing and the context of the target organization is changing as well as the projects evolve and requirements on higher levels change.
	In-depth methodological description to allow study to be repeated	
Confirmability	Triangulation to reduce effect of investigator bias	There were no methodological triangulation in order to reduce investigator bias yet it was an interest of the researcher to maintain objective approach though the personal experience and motivations
	Admission of researcher's beliefs and assumptions	
	Recognition of shortcomings in study's methods and their potential effects	

	In-depth methodological description to allow integrity of research results to be scrutinised"	had an effect on this study. The integrity of the research results can be questioned as the methodological description is vague and audit trail diagram is not used.
	Use of diagrams to demonstrate "audit trail"	

Coghlan and Brannick (2014: 15 – 16) are presenting five ideas on how to evaluate the quality of action research done in researcher's own organization. These are:

1. How well the action research reflects the cooperation between researcher and the members of the organization?
2. Is action research part of the process of organizational change or improvement and is there a concern for practical outcomes?
3. Is action research inclusive of practical, propositional, presentational and experiential knowing and it is appropriate to apply knowledge on different levels?
4. Is the work significant for the organization?
5. Is there sustainable change coming out of the project?

Evaluating this study according Coghlan and Brannick's ideas the simple answers for their questions are:

1. The cooperation between the researcher and the member of the organization was good in a sense that the appointed contact was interested about the work and was willing to share her knowledge with the researcher. The weakness of the cooperation was that there were just one contact inside the organization that the researcher actively used. The main reason for this was that the researcher own motivation to keep the number of contacts minimal in order to have a one view about the topic that is wide and complex. In future studies a better way would be doing this with a customer and by exploring their horizontal care paths, networks and processes of managing life with severe condition.
2. The researcher concern of practical outcome was strong and the main motivation of the work was that in the end there would be structured and documented way of enhancing daily operations without significant investments. HUS can then freely decide whether to test the suggested approach in practice or not.
3. This study has been built on four main sources of knowledge (1) existing documentation and previous studies, articles, HUS board decisions and project documentation regarding the needed change in the organization and the way of serving customers, (2) previous research on customer orientation, co-creation with customers, processes efficiency and scalability, (3) the target organization contact who has several years of experience on organizational development both in

private and public sector, (4) researcher personal experience on process development and deploying changes for nearly a decade working as an consultant in several different type of organizations and researchers own experience seeing her three close friends and their families going through the cancer process, two of them until the end and one continuing to be afraid during the scheduled routine scans once declared to be “healthy”. In theory this knowledge used to compile this thesis could be furthered in other levels and areas as well.

4. This study process was a part of larger scale organizational change that is ongoing currently at HUS yet it is to be seen if this will add any value to the organization members.
5. The change in the target organization produced by this thesis cannot be evaluated as the main result was the process of increasing customer centricity / developing customer centric services and it has not been applied in practice.

As a summary the main weakness in this study is the lack of observation and interviews of the people currently involved in the process (nurses, physicians, other professionals and cancer clinic customers). Also the researcher’s personal motivation and previous experiences has had effect on this study. However the general findings presented in this study effecting the customer experience in health care area are similar than in several other studies that have investigated the same topic. The presented approach to tackle the findings is yet to be tested in practice so likely, if chosen to be used, the method will evolve according to its’ possible users and target of improvement.

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Selected Customer Stories

A Story about the process from customer perspective (in Finnish)

Jarmo Kovanen pohtii leukemiaan sairastumista

<<http://www.cancer.fi/potilaatjalahaiset/potilaskertomukset/jarmo-kovanen-pohtii-leukemiaan-/>>

Toinen elämä

Rekat jyristävät ohitse ikään kuin mitään ei olisi tapahtunut. Kello on jotain puoli kolme perjantaiyönä. Ikkunasta näkyy moottoritielle. Olen saanut yhden hengen huoneen, tällainen pyritään kuulema antamaan ensikertalaisille. Ikkunoiden välissä nököttää talvipakkasiin kuollut kärpänen. Jokin voima pitää sen kuitenkin vielä lasissa kiinni. Nyt on alkukevät parhaimmillaan, ensimmäiset peipposet virittävät säkeitään minä hetkenä hyvänsä. Se on vuoden tärkeimpiä päiviä. Olen pyytänyt Kirsiä ilmoittamaan heti, kun ensimmäinen laulu raikaa ilmoille.

Jotensakin nuo rekkakuskit järkähtämättömällä menollaan todistavat, että elämä jatkuu. Aivan kuin mitään ei olisi tapahtunut, vaikka yksi ihminen täällä onkin pantu sivuraiteelle. Enkä ole edes yksin. Koko talo on täynnä koskettavia tarinoita. Jonkun tarina ehkä päättyikin tänä yönä. Ettekö te siellä ratin takana tajua, että teitä tarkkaillaan? Eikö teiltä irtoa edes yhtä ajatusta elämästään taisteleville? Täytyyhän teidän nähdä valot sairaalan ikkunoissa. Mutta eihän sitä huomaa. En ole huomannut itsekään, enkä huomaa edelleenkään – en edes neljä vuotta myöhemmin.

Keskiviikon yllätys

Oikeastaan en ole koskaan aiemmin ollut sairaalan asiakkaana. Mitä ihmettä tapahtui? Vielä keskiviikkona olin töissä niin kuin kaikki muutkin. Ruumiillinen ponnistelu tosin oli ottanut voimille jo parisen viikkoa, mutta ainahan sitä joskus väsyttää. Jotain ihme murtelmia ja nivuskipuja ilmestyi silloin tällöin, mutta kuka niitä jaksaa laskea. Olin kuitenkin raahautunut työterveyteen. Lääkäri otatti verinäytteet kaiken varalta, ei keksinyt muuta.

Keskiviikkona lounaalla oli tonnikalalaatikkoa. Valitsen aina kalaa, jos sitä on tarjolla. Töihin kävellessä työterveyslääkäri soittaa. Sanoo vain, että minun pitäisi mennä keskussairaalaan verinäytteisiin heti tai viimeistään huomenna. Ei sanonut sen enempää. Ilmeisesti luotti siihen, että kuulun siihen osaan populaatiota, joka noudattaa ohjeita. Luottamuksenosoitus kai sekin. Niinpä ajattelin mennä työpäivän jälkeen sairaalan kautta kotiin.

Olin melkein varma, että minulla on borrelioosi. En ollut mitään renkaita sen enempää kuin punkkejakaan iholla nähnyt, mutta kerrankos sitä jää tuollaiset huomaamatta. Näytteenottaja kulki salissa vaununsa kanssa ja kyseli sosiaaliturvatunnuksia. Aika luottamuksellisia tietoja, mutta kukapa niistä jaksaisi täällä olla kiinnostunut, jokaisella lienee omat huolensa. Tunnin päästä joku hoitaja haki käytävän päässä olevaan huoneeseen. Kirsi oli juuri saapunut paikalle ja huutanut huolestuneena nimeäni nähdessään minut käytävällä. En vastannut.

Hoitaja pyysi istumaan. Pyysi istumaan. Arvasin jo, että tämän täytyy olla leukemiaa, ei kai sitä muuten istumaan pyydetäisi. Ja vielä sillä äänenpainolla. Mistä se leukemia nyt tulikin mieleen. Kai se olisi se pahin vaihtoehto? Siitähän oli kuullut pelkkiä kauhukertomuksia. Niinpä en saanut mitään kohtausta, vaikka lääkäri hetken kuluttua kertoikin minulla olevan akuutin leukemian. Jotkut leukosyyttiarvot olivat niin korkealla, että minut pitäisi viedä siltä istumalta Kuopioon. Soittikin sinne, mutta sanoivat, ettei siellä yöllä mitään tehdä kuitenkaan.

Lääkäri ei silti päästänyt kotiin. Ohjasi minut päivystysosaston sänkyyn ja sieltä aamutuimaan ambulanssilla Kuopioon. Siellä huomasin, että minulle oli laitettu jätessäkkissä mukaan vieraan miehen vaatteet. No, seuraavan ambulanssin tullessa sekin ongelma saatiin ratkottua. Pääsin siis siihen päätyhuoneeseen, josta on näkymät viitostielle. Sain omahoitajaksi kauniin ja pätevän oloisen naishenkilön. Olipa minulla tuuria.

Me halusimme

Ensimmäinen tehtävä oli saada valkosolujen määrä pienemmäksi. Sitä varten kaulaan työnnettiin katetri, josta veri saatiin sentrifuugierotteluun. Siinä menikin aikaa, kun leukosyyttiarvo huiteli jossain neljässäsadassa. Sitten piti päättää, annanko luvan hoitokokeiluun, jossa kahta erilaista solusalpaajahoitoa verrataan keskenään. Kaipa siitähän joku

lääkäri saa sulkia hattuunsa. Annoin siis luvan. Jälkeenpäin selvisi, että arpa valitsi minulle juuri sen vaihtoehdon, joka ei tehonnut. Kolmen viikon solumyrkkykuuri taisi mennä harakoille, mutta olin sentään hengissä.

Kahden viikon päästä alkoi lähteä tukka. Sain peruukin, jota en kuitenkaan käyttänyt kuin pari kertaa. Ennen kolmen päivän lomalle pääsyä aloin nähdä kaiken kahtena. Pääsin heti silmälääkärille. On se kätevää, kun sairaalasta löytyy apua läheltä - tai ainakin tutkitaan. Ei tällekkään vaivalle mitään hoitoa ollut, se hävisi kuukauden päästä itsekseen. Kaikki muutkin mahdolliset oireet tutkittiin, vaikka se sitten olisi merkinnyt magneettikuvausta tai tietokonetomografiaa. Hammaslääkäri kiskoi kaikki viisaudenhampaat pois siltä varalta, että joskus joutuisin tai pääsisin luuydinsiirtoon.

Luuydinsiirto kuulostaa aika ufolta. Otetaan siis luuydintä vapaaehtoiselta lahjoittajalta, joka voi olla sukulainen, tai sitten ei. Sehän on siis elinsiirto kaikkine siihen kuuluvine riskeineen. Nykyään taitaa olla yleisempää, että luovuttajan verestä erotellaan kantasoluja ja annetaan niitä siirtopotilaalle. Mutta sitä ennen tauti pitäisi saada solumyrkyillä remissioon. Minulla se onnistui vasta sillä toisella yrittämällä toukokuun lopussa. Kahden viikon päästä oltiin sitten Kirsin ja poikien kanssa Meilahdessa siirtopotilaan valmistilaisuudessa. Sen perusteella piti päättää, haluaako siirtoon vai ei. Me halusimme.

Olin sairastunut akuuttiin lymfaattiseen leukemiaan, joka on oikeastaan lastentauti. Sairautta havaitaan joskus myös aikuisilla, näistä ensisijaisesti yli 50 -vuotiailla, sanoo Wikipedia. Olin viettänyt viisikymmenvuotispäiviä Intiassa kolme vuotta aiemmin, olin siis tyypillinen poikkeustapaus. Meitä aikuisia potilaita on vähemmän kuin loton päävoiton saaneita, jotain alle 30 vuodessa. Pitäisi kai olla tyytyväinen, ettei sairastunut mihinkään muotivaivaan. Kaiken lisäksi tautini osoittautui Philadelphia-kromosomiposiitiviseksi. Selkäytimestäkin löytyi blastisoluja. Miten siis kaikki mahdolliset mausteetkin sattuivat samaan keitokseen?

Merkipäiviä

Elokuun neljäs päivä on toinen syntymäpäiväni. Silloin suoneen tiputettiin jonkun hyväsydämisen, tuntemattomaksi jäävän miehen verestä saadut kantasolut. Ne pelastivat minut elämälle, joka kokokehosädetyksien ja solumyrkkyjen jälkeen oli aika ohuissa säikeissä. Viikko meni enemmän tai vähemmän morfiinihumalassa. Kuukauden jälkeen

ajettiin 300 kilometriä taksilla kotiin ja aloitettiin elämän opettelu uudelleen. Hoidot jättivät muistoksi polyneuropatian. Kuinka sattukaan - tämä hermosairaus voisi olla myös borreliosisin aiheuttama...

Polyneuropatia oli kai tärkein syy siihen, että olen työkyvyttömyyseläkkeellä. Se vaikeuttaa liikkumista ja siitä aiheutuvat inkontinenssivaivat rajoittavat elämää kokonaisvaltaisesti. Ohjeeksi lähimmäisille: aina ilmavaivojen äänet eivät ole mielenosoitusta, ne voivat johtua myös siitä, etteivät hermot toimi kunnolla. Kaikkeen ihminen tottuu, mutta vaipponen käyttö alle kuusikymppisenä on melkoinen nöyryytys. Sitä ei edes haluaisi ajatella, mutta se on kuitenkin jatkuvasti läsnä ja aikatauluttaa koko elämän.

Samaan pakettiin kuuluu tietysti kyvyttömyys seksiin. Maailman tärkein asia piti laittaa ainakin osittain naftaliiniin. Ei kai erektio ole se ainoa asia seksissä, mutta on se miehelle tärkeä juttu. Joka toista väittää, ei ymmärrä miesten elämää. Vielä kun ihon kosketusherkyydestä on pudonnut pois eroottinen ulottuvuus, vaikutus on melkoinen. Viimeinen oikea rakasteluni tapahtui kolmannen hoitajakson aikana, sairaalahuoneessa kesäkuun 18 päivä, kun Kirsi oli taas monettako kertaa käymässä vierailulla. Huoneesta jopa löytyi valmis lappu ovenkahvaan ripustettavaksi: ei saa häiritä. Melkein kuin hotellissa!

Läheisten tukea ei kai voi koskaan yliarvostaa tällaisissa elämänvaiheissa. Siksikin suku ja ystävät ovat tärkeitä elämässä. Omat lapset olivat ne tärkeimmät motivaation ylläpitäjät. Kiitos siitä heille. Kiitos myös Kirsille, joka jaksoi ja jaksaa elää mukana kaikissa käänteissä. Sairaus monesti myös pelottaa ystäviä kauemmaksi. Jotkut lähentyvät, toiset loitontuvat. Näinhän se elämä menee. Melkein hymyilytti teho-osatolla maatessa, kun hoitaja vuoronvaihdon yhteydessä valisti seuraajaansa, että tämän herran vointia kyselee sitten ex-vaimo, nykyinen vaimo ja rakastajatar - ikään kuin siinä olisi ollut jotain ihmeellistä!

Me sopeutujat

En ole jaksanut esittää kysymystä miksi. Eihän se ole millään tavalla aiheellinen. Shit happens. Pitää vain sopeutua. Ja siinä taidossahan ihminen on melkoisen nero. Sopeutuminen menee jopa niin pitkälle, että sairaalaosastot alkavat jo tuntua kodilta. Juhannuksena hoitajat grillailivat meille parvekkeella makkaroita ja palanpainikkeeksi tarjottiin sekä viiniä että olutta. Vieläkin Lys- poliklinikka tuntuu turvalliselta paikalta, kun siellä on

säännönmukaisesti vierailtava. Kai tämä johtuu siitä, että kaikki hoitajat ja lääkärit ovat tuottaneet pelkästään positiivisia kokemuksia. Kiitos kuuluu siis myös heille.

En ole myöskään jaksanut lukea mitään leukemiaan liittyvää sen paremmin netistä kuin muualtakaan. Edes omia epikriisejäni en ole tullut tavanneeksi. Kaiken viimeksi olisin kysynyt lääkäriltä paranemistodennäköisyyden suuruutta. Kai siihen olisi jokin prosenttiluku löytynyt, mutta olen päättänyt, että tässä tapauksessa se on sata. Pitäkööt tilastotieteilijät lukunsa, ne eivät merkitse mitään yhden ihmisen elämässä. Syöpäjärjestöjen joillekin kursseille olisi hieman tehnyt mieli, mutta alle kuusikymppinen eläkeläinen tuntuu niissä ympyröissä olevan jonkinlainen kummallisuus, väliinputoaja.

Piikityksiä on tullut saatua varmaan samaan tahtiin suonensisäisiä huumeita käyttävien kanssa. Sairaalassa verenkuvaa tutkittiin joka päivä, joskus parikin kertaa. Tuloksista annettiin dokumentit myös potilaalle. Jossain mapissa ne kai ovat. Joku friikki olisi varmaan tehnyt niistä käppyröitä ja taulukoita. En minä. Kovimmille suonet ehkä joutuivat käänteishyljintään annettujen fotofereesihoitojen aikana, jolloin verta kierrätettiin ultravioletti-valohoidossa. Liian ärhäköille valkosoluille opetettiin tapoja, ettei pidä käydä isäntäeläimen omien kudosten kimppuun. Yllättäen tämä jopa toimii, niin uskomattomalta kuin se tuntuukin.

Jotain uutta

Myös Kela on taudin myötä tullut tutuksi, hyvässä ja pahassa. Kyllähän ne korvaavat kaiken maailman asioita. Koko arsenaalia ei varmaan edes tunne, vaikka on sairaalan sosiaalihoitajankin puheilla käynyt. Melkoinen byrokratia tähän on luotu. Joskus toimivat siellä täysin epäloogisesti. Samoilla papereilla joko saa tukea tai sitten ei saa riippuen henkilöstä, jonka pöydälle hakemus sattuu päätymään. Vaikka 3000 euron kuukausikustannus jostakin lääkkeestä korvataankin käytännössä kokonaan, sairaus maksaa silti maltaita. Suomessa köyhän ei todellakaan kannata menettää terveyttään.

Kaipa jonkinlainen Kela -filosofian tavoite on, ettei sairastuminen saisi aiheuttaa potilaalle taloudellisia menetyksiä. Ei se periaate ainakaan käytännössä toimi. Sairastaminen todella tulee kalliiksi. Väkisin tulee mieleen, olisiko ilmainen hoito halvempi ratkaisu kuin massiivinen todistuslappusten kirjoittelu, hakemusbyrokratia ja valitusrumba. Aina-kin se olisi inhimillisempää. Meillä eletään yhä kulttuurissa, jonka mukaan ihmisiä pitää

hallita. Mahdollisuuksien luominen voisi tuottaa enemmän positiivisuutta yhteiskuntaan. Ehkei se olisi mahdotonta, kun monessa muussa valtiossa ilmainen terveydenhoito toimii, eivätkä maat ole sen enempää konkurssissa kuin Suomikaan.

Kaipa jokaisesta asiasta löytyy ainakin yksi positiivinen piirre - tästäkin? Sellaiseksi voitaneen lukea se, että nyt kaikki vaivani otetaan todesta ja tutkitaan. Ei tarvitse juosta terveyskeskuslääkäriltä toiselle. Elinsiirto tuntuu olevan asia, joka aiheuttaa herätyskellojen kilinää koko terveydenhuollon henkilökunnassa.

Jarmo Kovanen

Stories about Cancer Emotions

Of one kind or another

<http://lisabadams.com/2013/07/14/of-one-kind-or-another/>

July 14th, 2013 § 31 comments

I never learned how to juggle. I never could master the coordination of having control of one thing while letting go of two.

And yet, in my life, I am asked to do this daily. Three children, a husband, a house, the constant ebbs and flows of life and family and the demands those things take. Add stage IV breast cancer to this mix and it's a daunting task at best.

"Too painful to think about" is something others can afford to say or think about those like me.

But I cannot. My body does not let me.

Perhaps having hair, looking healthy, betrays me.

Perhaps people forget what my body is enduring.

Perhaps they forget on a daily basis the struggle it is for me to do what I need to do. On some days the hardest task I have is the mental component of trying to deal with this all.

They do not know that while I drink my coffee in the morning and type an email I am prone to worry. I wonder if pain in my side or my back or my neck is cause for concern. I am mentally comparing the location of the pain to the bright flashes on the latest PET scan. I try to remember my body's details on that scan. I create a split screen in my mind. I contemplate if the spots align, if they don't. I have memorized the words in the radiology report. When I want to torture myself I recite them.

There is no "moving past cancer" anymore or counting down to the end of chemotherapy. There will be no day of claiming victory and yet my victory is defined by each day. Winning is not possible, its re-definition now just seeing how long I can keep running, out-smarting the cancer that's here to stay.

I waved a triumphant flag six years ago. I was done with surgery, treatment. My chances of a recurrence or worse, a metastasis: small, small, small. Single digit. The odds were in my favor. "Look where those odds got me!" I scream inside.

I serve as a terrible, disturbing reminder to those just starting treatment: you can't be sure. You can't get cocky. You can't ever be positive that you are done. Perhaps you live your daily life that way, but it can happen. Even years later, it can happen.

That wily son of a bitch can lay in wait, cells silent, dormant for a while. And then, when you least expect it, spring forth to attack, to ravage, to ruin all you know is true. This is why I bristle when people with my particular kind of cancer say they are "cured."

I hesitate when people ask me how I am.

I know they want to believe I am okay.

Even for today.

They want to believe there will be a happy end to the story.

But there cannot be.

This is not my middle age. I will not be that lucky. While others complain of gray hair or wrinkles or saggy bellies I long for them. I want to earn those badges.

I want to flaunt my age.

But let me flaunt a number that begins with a 5... or 6... or more...

I now know this is why my doctor had that look on his face when he told me the news last October that my cancer had metastasized. This is why, when he gave me the news, he let me cry and swear again and again and again when every word in the English language but "Fuck" left my vocabulary.

This is why a particular doctor I know looks at me with sadness in his eyes when I see him, when he hugs me, when he tells me "you look good."

That doctor looks at me like that because he has the curse of knowledge: he knows how this will go.

He knows. He knows this story, he sees it daily. He knows what's coming. He doesn't want me to see the ending but it will come. All we are doing is pushing the "pause" button as many times as we can. When I hug him I feel it. The regret. The pain. He knows what waits for me. It makes me sad to see him in the hall sometimes, as if that feeling can be transferred between us in a look, a hug, a touch. But that compassion, that pain... well, those are honest moments.

Perhaps I ramble today. Perhaps my weary body and mind make no sense. Perhaps I should hit "delete" and send this down the drain. But this is all part of my story. If I am feeling it, I know somewhere someone else can relate to it too.

Every day is a struggle of one kind or another. I am doing the best that I can.

And oh, how I wish I could forget. How I wish I could forget.

My brain on cancer (confessions of a recent non-reader)

<<http://lisabadams.com/2013/07/05/my-brain-on-cancer-confessions-of-a-recent-non-reader/>>

July 5th, 2013 § 36 comments

Something happened to my brain when I heard the words “Your breast cancer has metastasized.” Suddenly, irreparably, it became a sieve. Surgical menopause without the option of hormone replacement seven years ago started the process. But mental anguish and immediate, lifelong chemotherapy been major contributors to my Swiss cheese mind.

...

My mind jumps all over the place. It simultaneously wants quiet but is restless. It craves nothingness and distraction. It is hard for me to sustain long conversations; I find them exhausting now. This is one reason Twitter has remained such a wonderful social medium for me; it is defined by short chats that can be stopped and started at will.

...

When I was first diagnosed with breast cancer and underwent chemo in 2007 I didn't read either. I hear from so many people that this is how they felt, too. Those who are newly-diagnosed think they will spend their time catching up on books they want to read during chemotherapy or after surgery. It just rarely happens: either your brain is in a fog or you feel rotten. When you feel good, you want to get out and do things with your family and/or friends.

The Battle We Didn't Choose

my wife's fight with breast cancer

<<http://mywifesfightwithbreastcancer.com/our-story/>>

...

I'll never forget the sound of Jennifer's voice coming through the phone, just 5 months later, as she told me she had breast cancer. I was numb immediately. I'm still numb.

Suddenly and without warning we were thrown head first into the world of cancer. We were adapting to changes, often daily, that offered no road map, played by no rules, and had no sympathy.

As our life became more complicated our focus became simple - Survive. Everything that wasn't necessary had to go.

Just after our one year anniversary our oncologist told us Jennifer was cancer free and we attempted to put our life back together. This was a challenge. We felt so different from most everyone else in our life and everything we thought we knew or believed in had been turned upside down.

But we had each other and with every challenge our love grew stronger. The little things that used to upset us no longer carried any weight. Making each other smile, picking each other up when we fell, letting the people in our life know how much we loved them...these things mattered.

In April of 2010 our biggest fear became our reality. A scan revealed that Jen's cancer had metastasized to her liver and bone. Jen started receiving treatment immediately. After a few months we noticed that many people didn't understand how serious Jen's illness had become and we felt our support group fading away. Our life was a maze filled with Dr. appointments, medical procedures, medications, and side-effects. The thought that I might be a widower before I was forty felt like someone was kicking me in my gut. Over and over and over. We didn't expect anyone to have the answers; we just needed our family and friends to be there. Something as simple as sending a text message saying "I love you," or dropping off dinner after we had spent all day in the hospital, these things were incredibly helpful.

Our words were failing as we struggled to make known that we needed help so I turned to the only other form of communication I know - my camera. I began to photograph our day to day life. Our hope was that if our family and friends saw what we were facing every day then maybe they would have a better understanding of the challenges in our life. There were no thoughts of making a book or having exhibitions, these photographs were born and made out of necessity.

A close friend suggested that I post our story on the Internet and with Jen's permission I shared some of our photographs. The response was incredible. We began to receive emails from all over the world. Some of these emails came from women who had breast cancer. They were inspired by Jennifer's grace and courage. One woman shared that, because of Jen, she confronted her fears and scheduled a mammogram. That's when we knew our story could help others.

The most important thing that happened was that our family and friends rallied together to be by our side.

On December 22nd, 2011, at 8:30PM, just 16 days after her 40th birthday and less than five years after our wedding, my sweet Jennifer passed.

The Battle We Didn't Choose - my wife's fight with breast cancer

<http://mywifesfightwithbreastcancer.com/photographs/>









Notes from the theme discussions

Meeting with Birgit Paajanen on 19.12.2013 – Discussion to scope the subject of the thesis.

The overall status and the on-going changes of the health care field and their effects on HUS was discussed. The main topics that came up regarding the generic core processes were

- Process interfaces to metrics
- Process and metrics are indifferent to patient group (process scalability)
- Customer orientation
- Interest groups and stakeholders.

Tentative idea is to create one generic process that will meet the above requirements from the core processes currently defined. In order to do this the defined core processes and requirements needs to be understood in sufficient level of detail.

The following material was provided for creating the base understanding about the health care field and operative information structure (material in Finnish):

- Sosiaali- ja terveydenhuollon erityisvastuualueitasoisen tietohallintoyhteistyön tavoitteet, kohteet ja vastuunjako (luonnos), muistio 3.12.2013
- Julkisen hallinnon kokonaisarkkitehtuuri – Julkisen hallinnon kokonaisarkkitehtuurin hallintamalli, Määrittely, v. 0.95, 4.4.2011 Valtiovarainministeriö.
- VAKAVA-projekti, Kunnat.net <<http://www.kunnat.net/fi/asiantuntijapalvelut/sos-ter/tietojarj-sahkoiset-palv/vakava-projekti/Sivut/default.aspx>> 19.12.2013.

The next meeting was agreed to be on 28.1.2014 and discussion during that meeting will go in more detailed level on currently defined processes.

Meeting with Birgit Paajanen on 28.1.2014 – Discussion about the processes and HUS projects regarding the core processes and information structure in further detail.

The main topics discussed during the meeting

- HUS process organization implementation structure and how different sections are connected to each other.
- HUS information structure complexity caused by the framework inherited from 1960's and resulting to current situation with 32 separate information pads and 219 integration faces.
- Complexity of measurement and difficulties of defining common processes due to the fact that similar terminology has different meanings in different specialty areas.

The following material was provided (material in Finnish):

- Ydinprosessin mittaamisen kehittäminen, projektin etenemisen esitys ohjausryhmälle 20.1.2014
- Ydinprosessin mittaamisen kehittäminen, loppuraportti 31.1.2014 (version provided on 28.1.2014 was not final, yet sufficient for thesis purposes)
- Neuro-onkologinen syöpäprosessi
- Rintasyöpäprosessi
- HYKS syöpäklinikan rintasyöpäpotilaiden läpimenoajat
- Erikoissairaanhoidon episodien laskeminen kansallisessa tilastoinnista. Arviointihankkeen loppuraportti. 25/2010. Terveyden ja hyvinvoinnin laitos.

It was agreed that based on the discussion and provided material the current state analysis is done and generic process for cancer center documented. It was also agreed that the customer centricity is the main perspective of the thesis.

Meeting with Birgit Paajanen on 27.5.2014 – Discussion about the work done until the date and the final version of the proposal.

The main topics discussed during the meeting were

- Defined core process and its sub-sections
- Findings regarding the possible improvement points
- Structured approach for adding customer orientation into processes
- HUS change from process organization to service organization

The overall feedback was that defined processes describe the current situation as it is. The approach for adding customer centricity into processes was found scalable. The need for digital service approach was pointed out.

Following material was provided during the meeting:

- Developing and measuring the health care service processes (tentative plan)
- Toimintakonseptin yhteisen kehittämisen mahdollisuus. Tekes raportti 70
http://www.tekes.fi/Julkaisut/tekes_raportti_70_web.pdf

It was agreed that current findings are observed from the digital service point of view.