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Challenges of customer oriented health care service models – Perspectives from the renewal of a primary health care and integrated care system

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A transition towards a customer-orientated health care service system requires a broader socio-technical and paradigmatic change. The current service system includes established practices which make the paradigmatic changes appear difficult to health care professionals and customers. By using multi-level perspective, social innovation and a chronic care model, we have examined these factors and analysed the challenges from the perspective of two case studies: an integrated care system and the primary health care. As a result, new services, a shared vision, linked development activities, changes in the mindsets and empowering customers to manage their health and participate in developing activities are necessary.

Keywords: Health care, innovations, service innovation, social innovation, systemic change, multi-level perspective

1. Introduction

Chronic diseases are increasing and the ageing of population accelerates this phenomenon. The ageing population means that a larger proportion of people has chronic diseases and at the same time medical scientific knowledge is growing quickly leading to more diagnostic procedures and treatments. At the moment, chronic diseases account for most most of health care expenditure. In Europe an estimated 86% of the deaths and 77% of illnesses are caused by chronic diseases (WHO 2014). As a result, major challenges emerge in the health care service system, threatening individual welfare as well as society's development and growth. Because of chronic diseases, health care has changed from individual consultation to multiprofessional teamwork with many health care providers (Ouwens et al. 2005). It is also critical to emphasise the role of self care, when dealing with chronic diseases. The WHO's definition of health minimises the role of people's capacity to cope with chronic diseases, as it defines health as a state of complete physical, mental and social well-being, and not merely the absence of diseases or infirmity. There have been suggestions (Huber et al. 2011, Godlee 2011) of changing the definition of health towards the ability to adapt and self-manage when it comes to social, physical and emotional challenges.

Customer-oriented thinking and ways to coordinate services have been suggested as a solution. The aims of integrated care programmes are usually to reduce fragmentation and improve continuity and coordination of care by placing customers in a central position. (Ouwens et al. 2005) However, the discussion on customer-oriented health is not new and the problem has been in identifying effective ways to develop new relationships between health professionals and customers within integrative services delivery systems. Service innovations are needed in order to improve or create new health products and ways of interacting. The individuals and institutions need to move in the same direction and customers need to be empowered to have the knowledge and skills to deal with their illnesses and also with new changes in the health system.

These requirements also reflect a paradigmatic shift in the public sector. This is an important factor, since in most countries the state and local authorities are more or less the organizers and funders of healthcare. The role of the professions has traditionally been very strong in healthcare: interaction has been based on knowledge asymmetry highlighting the position of doctors (and to some extent nurses) over customers (Alvesson, 2004; Löwendahl et al., 2001). The paradigm that understood the public sector in terms of top-down policy activities, was dominant until the so-called 'New Public Management (NPM)', which introduced market mechanisms into the public context: business-type management, lean processes, performance focus, and contracting-out (Hartley, 2005; Hess and Adams, 2007; Windrum and García-Goñi, 2008). One of the most important ideas has been treating the patients as customers who have the right to require a high quality of service (Langergaard, 2011). The limits of NPM, however, have become apparent along with the development towards increasingly complex issues, multiple actors and need for open dialogue (Sørensen, 2002). NPM is still the dominant public paradigm, but there is a new paradigm emerging: so-called 'network governance', which highlights relationships and partnerships, and co-production as the service model (Newman and Clarke, 2009). For the professional practice in public services, it means additional challenges because efficient in-house processes are no longer sufficient, and the crucial issue is the empowerment of citizens and stronger customer orientation.

A change towards a customer-oriented service system is not straightforward. Conversely, the challenges require large-scale socio-technical changes based on the simultaneous development of organisations, technologies, services and multiple network relationships (Gallouj, 1994, 2002; Windrum and García Goñi, 2008; Harrison et al., 2010; Rubalcaba et al., 2011). New innovations are needed so as to ensure the quality of health services and the effective use of resources. Furthermore, understanding of the whole socio-technical system, including the dynamic and interplay between parts of the system as well as the social support and social engagement are essential in aiming at the system level solutions (Geels, 2002, 2004). New visions and models of health care are needed outside the current system. Koivuniemi and Simonen (2011) have also argued that perspectives from different fields could provide a break through, because the perspectives are not locked into present system and therefore new ideas can occur.

This paper examines the development and introduction of customer-oriented service models in the Finnish health care services. It studies how the transition can be carried out from production-oriented to customer-oriented care models. The analysis is carried out from two different perspectives: from an integrated care system point of view and from a municipal primary care organization. The development of customer-

oriented service models in Finnish municipalities can be seen as a niche level innovation. At the same time, it requires system level change.

The purpose of our paper is to identify the challenges of implementing an integrated care model and thus to understand the challenges of socio-technical change in Finnish health care service system. The following research questions are guiding our work:

- What kind of challenges occurs when tackling socio-technical change?
- What are the key factors required to tackle the socio-technical change and implement customer-oriented service models in health care?

At first we describe our theoretical frame work which is based on social innovation, multi-level perspective and chronic care model. Then we present our case studies and continue to the research results. In the conclusion, we discuss the challenges faced in the two cases when developing customer-oriented services, and end with the conclusions of our research.

2. Theoretical background

The current social, economic, and environmental challenges are too big to be met via individual product and service innovations created in individual organizations. A crucial question is how to combine various innovations effectively and how to disseminate them on the basis of continuous interaction between multiple actor-groups. In other words, examining and developing innovations at the systemic level has come to the fore. In order to analyse the complex system level transformation, it is necessary to understand the whole socio-technical system and the process of the social support and social engagement (Gallouj, 1994, 2002; Geels 2002, 2004; Windrum and García Goñi, 2008; Harrison et al., 2010; Rubalcaba et al., 2011.)

Three theoretical frameworks form our starting point in understanding the broad system level transformation in the health care sector and in analysing both complex interaction in development and implementation and new innovative customer oriented services. The first framework is a multi-level perspective to change. It helps in describing the wide development environment of new solutions and the dynamics in developing and disseminating them. The second perspective, social innovation, forms the meso level: here we focus on the bottom-up and top-down activities that function as an engine for the change. Finally, we examine customer-oriented service models in health care; the chronic care model (CCM) and integrated care models based on it as a manifestation of renewal and change activities in health care.

2.1. A multi-level perspective to understand complex systems

We have applied the multi-level perspective (MLP, see e.g. Geels 2002; Elzen et al. 2008) as the overarching theoretical framework explaining the dynamics of transformation in social and health care system. The multi-level perspective facilitates the analysis of the emergence of a new system as an outcome of interaction of different actors and structures and thus provides understanding of the dynamics of systemic change and system innovation. One of the key features of the MLP is its focus on

long-term thinking. Another is its explicit focus on the interconnectedness of technological and social systems, including governance models and institutions.

According to the MLP, a crucial element in a systemic change is the interplay between processes in different system parts in different phases of the development and dissemination of new innovative solutions. It stresses that technological systems change through interplay between landscape, regime and niche level processes. Socio-technical landscape refers to relatively stable, slowly changing factors such as cultural and normative values, long-term economic developments and societal trends. The socio-technical regime refers to established practices in the existing socio-technical system, including the institutions, infrastructure, regulation as well as organisational and social networks to structure and organise a particular societal function such as health care. The set of rules (e.g. agreements, directives, moral codes) are carried by different actors (such as users, policymakers, scientists, and public authorities) and practices and action models based on these rules, and interaction between actors. Niches refer to initiatives and activities in special application areas or bounded geographical areas.

Regimes tend to generate incremental innovations, while radically new innovations are generated in niches which are protected from 'normal' market selection. Radically new innovations need protection because their cost efficiencies, technical performance and usability often need improving. Niches provide locations for experiments and learning processes, and space to build the social networks, which support innovation. (Geels 2004, Geels & Kemp, 2007; Kivisaari et al., 2013.) In practice, well planned and long-term management is rare. Governments are deeply embedded within socio-technical system, and therefore they face difficulties in bringing about radical changes. For this reason, policies tend to aim towards incremental or conservative innovations. (Lovell 2007) Geels (2004, 37) explain that radical innovations break from the niche-level when the external circumstances are right, that is, when on-going processes at the levels of regime, landscape and timing create a window of opportunity. Particular attention is paid to the involvement of 'forerunners', i.e. representatives of innovative solutions that challenge the current unsustainable sociotechnical systems.

A multi-level perspective sees that transition only occurs through development at all three levels. Practitioners who participate in transition experiments operate in a multi-level environment. The multi-level environment requires them to act strategically by connecting problems and solutions at different levels. From the practitioners' point of view, the possibilities for guiding transition are limited, because it depends on actors, developments and events at other levels as well. The distinction between the three levels is useful for understanding socio-technical change and can be seen as a tool (rather than viewing them as real entities). (Raven et al. 2010).

2.2. Social innovation as an engine for a renewal

System level innovations are interlinked with social innovations. In the literature on social innovation, the concept 'social' includes two different aspects that are both essential when innovations are pursued at the system level. The first aspect refers to the complex economic and social problems form the starting point of innovation endeavours (Harrison et al., 2010). Social innovations are sought for a wide range of issues in different realms of society: community infrastructures, housing, workplace

design, education etc. (Moulaert et al. 2005). The solutions include the simultaneous development of technologies, services, organisations and networks. Regarding the goals, social and systems innovations have much in common. Both tackle prominent societal challenges, among which ageing of the population is primary.

In this paper, we concentrate on the second aspect of 'social': the participatory processes which are necessary for the emergence of innovations in a multi-actor environment. Also in the novelties created, new ways of interacting is an important ingredient. Social innovations may emerge at the grassroots level among users and employees; be produced by private, public and third sector organizations; or be initiated by policy and regulatory bodies. In all cases, it is essential to integrate bottom-up and top-down processes (Rubalcaba et al., 2012).

Bottom-up grassroots activities constitute an 'engine of social innovations' and are linked to user-driven and employee-driven approaches in innovation (cf. Sundbo and Toivonen, 2011). The creation and implementation of social innovations highlights empowerment: citizens are not passive recipients, but active co-developers (Harrison et al., 2010). When social innovation is studied in terms of empowerment and participation it shares similar qualities with Strategic Niche Management (SNM). SNM is a perspective developed as a part of the transition management approach (Schot & Geels 2008), and it focuses mainly on studying the development and diffusion of innovations as a dynamic learning process between multiple actors.

On the other hand, top-down activities are also necessary for the materialisation and dissemination of social innovations. They are needed both at the organisational and community levels and at the level of policies and regulations. Community decision makers and company managers have to support, recognise and organise bottom-up processes in order to make ideas implementable and scalable (Høyrup, 2010). Policy actors have to enhance society's innovation capacity by revitalising innovation institutions and by fostering the innovation activities of public, private and third sector organisations (Rubalcaba et al., 2012).

2.3. Integrated care programmes as an answer to challenges in health care sector

Within the health care sector, the current pressure for changes is reflected in the renewal for chronic care. The integrated care programmes have highlighted the need for customer support and education, combined with structured clinical follow-up and case management; a multidisciplinary patient care team; multidisciplinary clinical pathways and feedback, reminders, and education for professionals (Ouwens et al., 2005). These programmes are carried out in various countries and are based on the chronic care model (CCM) developed to improve the management of chronic illnesses through six cornerstones: utilizing community resources, developing health organizations, investing in self-management support, redesigning service delivery, employing decision support for professionals and utilizing clinical information systems. Segmenting the chronic customers according to the intensity of care needs is a part of the model. A three-group division, the so-called Kaiser Permanente Triangle - is typical and consists of customers with multiple diseases, customers with high risks, and customers with a self-manageable disease (Bodenheimer et al., 2002). The elements of CCM in integrated care programmes are summarized in Table 1.

Table 1. Central elements of CCM (Bodenheimer et al., 2002 and Ouwens et al., 2005)

Central elements of CCM	Contents of the element in CCM and in the integrated care programmes			
Renewal of health care organization	Ensuring that the health organization is committed to take care of patients with lifestyle and chronic illnesses and structured its activities accordingly.			
Identification of customer subgroups	Making a division between customerss with multiple illnesses, patients with high risks and patients with self-manageable long-term illnesses.			
Self-management support and patient education	Helping patients to acquire skills to manage their own illnesses.			
Follow-ups	Monitoring the customer on a regular base, e.g. by utilizing phone calls.			
Case management	Allocating care to a small team who takes responsibility for the guidance of the customer in the care processes.			
Multi-disciplinary care team	A care team composed of different professions who collaborate in the care of defined customer or customer group.			
Multi-disciplinary clinical pathway	Structured multi-disciplinary care plans for professionals with detailed steps in the care of customers.			
Professional education	Education provided to professionals about the appropriate care for patients.			
Supportive information systems	Registry's for patient information and treatment plans.			
Community resources	Creating linkages with community-based resources to support care.			

CCM, together with the integrated care programmes based on it, differs greatly from the models of acute care and the expert -led health systems that have earlier been dominant in the health care sector; they are customer-centred (not sickness-centred), their focus is on planned, proactive care (not only on the acute, reactive care) and they provide support to the customer (not only diagnostic information). Treating customers as experts in their own health and empowering them to become partners in care is eventually expected to ease economic constrains in the health care sector (Coulter, 1999). An important insight in the circumstances of an ageing population is that the quality of life can be high even when a person has a chronic disease. Health does not only mean the absence of disease, but it includes the capability to cope and function with everyday physical, emotional and social challenges (Huber et al., 2011). The above-described views have sparked the need to examine how the health systems could be rebalanced from addressing the treatment of acute illness to promoting health, and how the citizens themselves could be engaged in the latter task.

3. Case context and methodology

In the empirical part of our paper we focus on two separate cases in order to study the application of customer-oriented service models in Finland. It has been recognised that health care organisations in Finland struggle with the increased customer pressure and reduced resources of health care professionals, and can no longer ensure health impact in the present system. Challenges faced in health are similar to the ones in other Western countries due to the ageing of the population, rising expenditure and growing inequality in the access to services (OECD, 2005). In addition, it has been claimed that in Finland the problems also relate to the small size of the service providers, current service structure and inefficient management system (Kivisaari et al., 2013)

At the moment, there is an on-going preparation for social and health care reform which will be running from 1 January 2017. The key objective in this reform is to promote health and wellbeing and also to ensure equal access to social and health care services in all parts of the country. One objective is also to promote integration between social and health care services and create a seamless package from primary and specialised services. (Social welfare and health care reform)

Our paper is based on two case studies that focus on different levels of operations and management, but the core questions are the same: how to create and promote the use of customer-oriented service models in a complex socio-technical environment. In the health care sector, the adoption of CCM represents a paradigmatic shift towards customer-oriented service systems, and in our analysis we will examine the central elements of the model from two perspectives: from an integrated care system's point of view and from a municipal primary care organizations. The development of customer-oriented service models in Finnish municipalities can be seen as a niche level innovation. So far, consensus for a customer-oriented health care system has not been accomplished in Finland (Virtanen et.al 2011) Our paper identifies the challenges faced by the two case studies and highlights the barriers to why consensus in Finland hasn't been accomplished yet.

3.1. Developing the customer oriented service model for citizens with cardiovascular diseases

The first case study focuses on developing new customer oriented service models for citizens with cardiovascular diseases. The aim is changing the care of people with cardiovascular diseases by implementing a new customer-oriented integrated service model at a local level. The integrated service model is used in regional and university hospitals as well as in primary care. The goal is to create a generic solution, but at first the emphasis is on cardiovascular diseases and implementing a new integrated service model in use at a local level. A service model is developed in collaboration with multiple regional and national partners including a university hospital, a regional hospital, local health centres, 3-sector organisation, research partners and municipalities.

The new customer-oriented service model aims at supporting the operation of health care and medical treatment, controlling the network of service providers as well as encouraging customers to self care. The development of a new service model is fo-

cusses on three specific issues. The first is that the customers should be seen as the expert in their own health and treatment. The second is that the customers should be an equal partner with the health care professionals, and the third is that the care process should be customer-centred. An additional aim in the process is to develop tools that enable customers to participate more actively in their own care. One tool created tool is an online navigator, which integrates to personal health record. Online navigator supports self care and, moreover, gives the health care professionals information about the quality and effectiveness of treatment and gives them the opportunity to manage operations. Development has thus focused on both technological and social service innovations.

An idea behind this development is to empower people to take care of their health and treatment for their illness by giving individual and well-timed support and thus improving health outcomes in a sustainable and cost-effective way. However, the change towards these goals is not easy, because the ideology behind the development is fundamentally different from the mindset of the current service system. The new service model brings changes to professional and customer relationships as it empowers customers to become an active part of their treatment. This also requires new models of operation from the customers. Although the need for new service models is identified by professionals and customers, the change is so paradigmatic, it appears to be ambiguous and difficult to grasp. At the same time the customers need to be empowered by the help of a supporting network and national definitions of policies are needed in order to support the change. A shared vision is essential.

Methodology

Our data collection was conducted between 2011 and 2013 via interviews and workshops. At first, we interviewed ten national and regional welfare and health care experts (see Leväsluoto and Kivisaari, 2012). The interviews were carried out between the autumn of 2011 and the beginning of 2012, and the aim was to map the experts' outlook on customer-oriented service models and their adoption into practice.

After the interviews, empirical work continued in workshops with a large network of stakeholders by using participatory foresight, embedding and stakeholder analysis (see Kivisaari, Kohl, Leväsluoto, 2014). One central aim in the workshops was to create a platform where different perspectives were viewed and discussed in order to promote trust, understanding and a shared vision. As the interviews unfolded that shared understanding is essential to change, the study was based on empirical experiment, which aimed at promoting the creation of a shared understanding of what the change entails and how it can be carried out. We focused on studying how transition from a production-oriented to a customer-oriented chronic care model can be carried out.

The empirical experiment was divided into three workshops. In the first workshop, we developed a shared vision with our partners of what customer-oriented services would look like in the year 2030. Based on this workshop, we started developing vision paths for the change. In the second workshop, with large participation of stakeholder from different organisations and levels, we aimed at creating a shared understanding of necessary stakeholders who are essential for the change. The second workshop gave more information for the development of the vision paths. Based on the interviews and the two workshops, we identified three vision paths which repre-

sent different levels. The aim of the third workshop was to deepen the understanding on what local stakeholders can do to foster the change.

3.2. Renewal of a local primary health care system

The second study focuses on the renewal of a primary health care system in a middle-sized city of approximately 67 000 inhabitants. The renewal has been going on since 2010 and is linked to a broader national exercise for social welfare and health care. The efforts have been a part of a national development plan for social welfare and health care (KASTE) supporting the development and implementation of the CCM principals altogether in 61 municipalities. The renewal is led by the city's health organization, which is responsible for organizing the primary care services in 8 health centres.

The health organization has been exceptionally active in learning about the newest developments of the CCM model and integrated care programmes and in testing them in practice. The aim is a systemic change in the health service generation, which is why the renewal activities focus on a comprehensive change in the entire operational model. Primary care in the city is under great development pressure due to reduced resources of health care professionals and the constantly growing customer queues that burden the current health care system and hinder the citizen's access to services. It was recognized that the old system of primary care functioned for the care of acute illnesses and did not support the increasing number of customers with chronic and lifestyle illnesses. Without development actions the system would eventually collapse.

Moving away from the traditional professional expert – led health system and creating a system that supports the self-efficacy of customers has been identified as the key to the transformation. The current system of primary care has been dominated by the traditional 'expert professional – passive patient' –approach, and the role of the customers in the care of chronic and lifestyle illnesses has not been actively supported. The care is reactively rather than proactively organized, the self-management of illness is not supported and the care lacks systematics and planning. This is the challenge of the 'unfinished patient', which results in the slowness of care processes and expenses caused by long customer queues (Kivisaari et al., 2009). The problem stems from the lack of process management. To create an empowerment –based system of primary care, the health organization is comprehensively renewing its entire operational model; the delivery of services, management the model and ICT systems. Three goals for the transformation have been set: 1) improving the availability of services to citizens, 2) providing better health impact, and 3) improving productivity by reducing the resources used per customer.

Methodology

Our extensive data, which has already been gathered on the case during 2013 and 2014, consists of primary data based on non-participant observations, action research, interviews, research diaries and documentation. It is supported by secondary data including documentation of the renewal process, reports, and the learning diaries of some personnel representatives. To gain an extensive understanding of the transformation, observation, action-research and interviews have been utilized. The weekly meetings of two management teams responsible for renewal activities of the

case organization were observed during February and June 2013. During the first three months, our research group observed without any participation to gain an overall conception of the on-going transformation process. For the final two months, we then adopted an action research strategy: participating in the teams' conversations and pointing out problems related to the systemic change and solutions development. A detailed memo was created after every meeting. The material gathered from the observations and participations has been further supported by individual face-to-face interviews (15 in total) with all the team members. These interviews were conducted in June and July 2013. The observations and action research carry on until December 2013, and during year 2014 the gathering of the case material has continued in monthly workshops with the management team, which will continue until the end of year 2014. This is seen as necessary in order to gain insight on how the innovative solutions and behaviour has developed throughout the process.

4. Research results

Both cases analysed aimed at developing a new customer-oriented service system where customers are seen as experts, and encouraging them to self-management. The need for systemic change towards customer-oriented services comes from the individual need to manage chronic diseases. In addition, the economic pressure and the need to ensure service quality and health impact motivate the renewal. To create a customer-oriented integrated care system is one step towards a system level customer-oriented service system. National coordination and support is needed so as to promote the change, but the bottom-up innovations are equally important.

The need for paradigmatic change is also acknowledged by health care professionals. However, there are different views on what kind of changes are required towards customer-oriented service models, what the time scale should be, and who the actors are that are needed to promote the change. From the point of view of socio-technical change, it is essential to build a shared understanding of what customer orientation means in the social and health care system. A systemic approach can help people to realise that the comprehensive change requires changes in different practices, processes and levels which happens in parallel processes.

To analyse the elements and challenges of adopting customer-oriented service models, we utilized the approaches of the multi-level perspective, social innovation, CCM and integrated programmes. In table 2 we have summarized our results based on elements adopted from these approaches.

Table 2. Elements and challenges in applying customer oriented service models

Elements		Renewal of a local health care organization; primary health care	Synthesis of the two cases
Organisa- tional re- newal	Renewal of operation model through an inte- grated care model which has been created in a	operational model: set- ting the management of	The aim is to devel- op customer- oriented service system which

	customer-oriented way	main goal; simultaneous	means changes in
	Identified problems are a lack of indicators to analyse impacts from new service models; management and care divided into silos, identifying the necessary change, how to proceed, who are needed for change	renewal of the organisational structure, management model, financial structure, health services, working methods and tools; creating new service-oriented positions: service managers, service superiors and service coordinators • Understanding the extent of the development and the systemic nature in transforming the organisation is challenging, as these kinds of developmental activities are new to the personnel and include various stakeholders	current operation models Professionals agree on the need of new service models for chronic care New indicators are needed to analyse impacts The scale of the changes needed is confusing to stakeholders and silos between health care organisation complicates development
Customer sub- groups identifica- tion	 Identify different needs of customers and implement customised health treatment plans new online navigator to identify customer needs Implementation of the new online tool to be used in hospitals and health centres requires training and time 	Distinguishing customers with chronic illnesses and multiple diseases from customers requiring acute care. Creating care "channels" for these two sub-groups according to the health situation Segmenting customers is challenging; the health care professionals have a critical role in identifying customers. Constant hurry and old habits influence the guidance of customer flows.	 Identification of different customer- ships and needs Developing new services based on different needs Implementing these new service takes time and recourses
Self- manage- ment sup- port	By identifying different customerships professionals can provide specific information to customers about their chronic disease and selfmanagement and support customers to manage their disease and treatment with individual treatment plans self-care groups and points available	 Investing in services supporting self-management: group services arranged for educating customers about their illnesses and about the prevention of further problems. Attending group services is new to customers, who are used to getting guidance in person from a health professional; traditional views on how health is promoted dominate 	 New services for customers to support self care Customers are not used to using group services Offer different self care options to different customer needs
Follow- ups	 Online navigator where the customers and health care professionals can keep in touch. Also, text messages and reminders are being used Using the online tool is not familiar with custom- 	Empowering customers with target-oriented phone calls by nurses to see how the care is proceeding. Focusing on a coaching approach to support customers in achieving goals.	 Aims at supporting self care by using new methods of follow-ups New services and methods are not familiar to professionals or to cus-

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Support- ive infor- mation system	•	ers or health care professionals. How to motivate people to use this tool on a regular basis? Online navigator programme is a central part of the integrated care model where the customers can see their health and treatment plans, health record, discuss with peer groups	•	Coaching requires new skills of facilitation, negotiation, synthesizing information and utilization of customers' own initiatives from the health care professionals Utilizing eHealth-system for the communication between customers and professionals: allowing customers to see their test results, treatments and health plans, and to transfer the measure-	•	New IT services for customers and professionals Customers can see and create themselves information about their health and thus become
		and professionals and allocate support Unconnected data systems are a challenge	•	ments that they make themselves (e.g. blood pressure). The system is still seen as a one-way communication tool and not a tool for interaction. There are also some challenges to how the system functions		more aware of their health status
Customer manage- ment	•	Customers have their own doctor, own nurse, coordinator, case or care manager depending on their need Lack of resources Information doesn't move between different organisations	•	Assigning of a responsible professional/professional group with whom the customer interacts directly regarding the issues concerning the treatment.	•	Identifying the pro- fessional who is re- sponsible of the care In the first case, the signed professional depends on the identified customer- ship while in the second case the concept is about comprehensive co- ordination of cus- tomers
Multi- discipli- nary care team	•	Integrated care model is planned so that the multidisciplinary work is at the centre especially in those cases where the need for professional support is the greatest Established boundaries and attitudes between health care professional is causing problems Silos between organisation in health care	•	Diminishing professional hierarchy; establishing multi-disciplinary teams to collaborate with the customer; supporting holistic care - not focusing on one disease at a time. Old habits dominate; collaboration still occurs in the form of transferring case to another professional and again to another, rather than basing the care on mutual discussion and interaction around the customers' health issues	•	Multi-disciplinary care is as an overall aim Established bound- aries and attitudes between health care professional and silos between organisation pre- vent multi- disciplinary work
Multi- discipli- nary clini- cal path- way	•	Health plan for all customers with cardiovascular disease Establishing an integrated care model for customers with cardio vas-	•	Creating a systematic health plan in mutual collaboration between the professional and the customer according to goals set by the customer	•	Health plans are created in collaboration between customers and professionals Establishing new

		cular	•	Supporting and coaching		integrated care
	•	Implementation of the integrated care model is sometimes challenging		customers to set long- term goals is new to both professionals and cus- tomers. Traditional transactional views on health care hinder the goal-oriented and holistic care	•	models Setting goals is new when treating chronic diseases
Profes- sional education	•	Professionals have been participating actively in developing and implementing the new integrated care model. Various workshops have been arranged for discussion and development Customers have all the time more information about health issues A barriers is how to motivate the professionals to participate to the workshops Locked-in's in the current system perspective	•	Arrangement of workshops for the professionals about the reorganizing of care and new operation models around specific topics. Encouraging learning dialogue between professionals Challenges in getting the personnel to become motivated and participate in the workshops. Open dialogue and codevelopment still lacking	•	Both customers and professionals need to change their perspective on how to be a customer or an expert. Customers need to become more of an expert on their own care and health care professionals more of a sparring partner Education for professionals on the new services and models Question about how to motivate professionals to participate in workshops and education events
3 sector	•	3 sector are an essential part and the customers are given information about peer groups and rehabilitation and health training courses On some occasions, it is difficult to get customers to participate these courses	•	Collaborating with patient organizations, which can provide information, advocacy, peer support, training, rehabilitation and social events for customers Different interests among groups, active collaboration relationship with the third sector is not yet established	•	Customers are given opportunities and information about 3 sector courses group meetings
Customer voice and empow- erment	•	Perceive customers as experts on their own health, using the knowledge that customers have of their own health Requires changes in customer and professional relationships Change do not happen without a crisis and customers are often forgotten Different attitudes and languages	•	Treating customers as partners in health promotion; empowering them to take their health into their own hands; changing the power distribution in the care process The shift in the professional identity of health care professionals from being a nurturing expert to becoming a coaching partner does not come easy and should be supported	•	Point of view that only a crises can change the attitudes and the course of action To encourage customers to self care and using their expertise on their own health by offering new services The shift in customer- professional relationship is needed
Govern- ance, legislation	•	Shared vision of the fu- ture is missing	•	Creation of collaborative networks with municipal	•	Supporting health should be seen as a

and policy instru- ments	 Investments over sectorial borders New improvements in Finnish health care legislation Point of views of politicians' are narrow and divided into silos Development projects are divided into small projects; continuity is a problem Hybrid actors are needed to promote change in multiple levels 	decision makers; creating partnerships with other Finnish primary health care units Networking with stakeholders is challenging, as it is new to the organisation and there are no established ways of collaborating; true operational collaboration within the municipality has been missing; confusion of who has the overall coordination responsibility of the transformation	as an overall goal which needs actions from different sectors • A shared vision is needed to promote change towards customer-oriented service models • Who are the responsible stakeholders to promote change?
Pilots and experi- ments	 New service models are needed Professionals cannot promote change by themselves, customers need to be involved Diffusion of service innovation is difficult 	 Piloting activities are carried out in implementing new services The feedback-loop from customers and professionals to the development team is missing. Customers are not an active part of the development 	 Project needs to be more coordinated so that they support each other and thus new innovation can spread Customer need to be involved when developing new services

5. Discussion

Both cases analysed aimed at developing new customer-oriented services. Supporting self-care has been promoted by offering services and new tools where customers can see and create for themselves information about their health. This has been done in our first case study by implementing a new online navigator, whereas our second case study has focused more on personal follow-ups by professionals. In the second study, self-care is supported by implementing new services, such as the eHealth system, group services and target oriented contacts from health professionals. In both case studies, the aim was to identify the professionals responsible for the care. In the first case study, the professional is assigned based on identified customership and the needs of the customer. In the second study the idea is to assign a professional responsible for the whole care of the customer. Identifying different needs of customers was one of the key aspects in our first study and it was not emphasized the second study. However, this is most likely because in our first case study the focus was on one disease and its integrated care model, and in our second case study the emphasis was on renewal of the entire primary health care services and investing in holistic care rather than focusing on one disease group. Multi-disciplinary care and clinical pathways are an aim in both our cases. Education of professionals has been offered, and it is seen as an important tool in affecting the attitudes of health care professionals. 3 sector services are also offered to customers as a tool for support self-care.

From the results we were able to identify the key requirements and factors that are needed in pursuing a system level transition in the health care sector. The focus in the renewals should be on strengthening service-thinking in health organizations and care processes. Making the change from the traditional reactive and expert-centred approach to care towards empowering customers in care processes requires creating new service solutions that better serve the needs of customers. From the point of view of ensuring economically sustainable and high quality health care, it is essential to recognise customers' own recourse to self care and to offer extra support for those customers who need help from the professionals. To monitor the success of developed solutions and the extent of health impact, new indicators are also required. Identifying key stakeholders and establishing collaboration networks where hybrid actors can act as a link between regime and niche levels are essential during the development of customer oriented service- models. A shared vision among actors is needed to promote change towards customer-oriented service models. For example, strengthening collaboration with the third sector so that they become an active part of the health system is required so that the care of customers is supported by the provision of information, services and support enhancing health promotion more holistically. The silos between health care organisations are seen as a barrier to implementing services where the customer is seen as a subject and not an object of treatment. Supporting health should be as an overall goal needing actions on the part of different sectors which also highlights the need for stronger coordination of renewal activities.

The collaborative network approach should also reach the health professionals implementing new health services and work activities, as the profound change in health care provision requires a stronger multi-disciplinary team work in treating customers. Forums that enable interaction should be developed and provided so as to support the new ways of collaboration. In health care, established routines are not easy to break down. The transition is also greatly dependent on the transformation of the professional identity from being a nurturing expert to becoming a coaching partner. The willingness and attitudes of both the customers and the health professionals are crucial factors in adopting new practices, and are greatly influenced by prevailing attitudes and values. Adopting new forms and practises of care depends on factors linked to human behaviour and interaction; one significant challenge is the cultural mindset change in the customer - doctor/nurse relationship, which requires a reformation of power distribution - both customers and health care professionals need to change their perspective on how to be a customer or an expert. The health professionals have to see the customers as partners in care, and the customers need to take a stronger role in promoting their health (see Ouwens et al. 2005). Professional identity does not change overnight, and investing in support, guidelines and education for health professionals as well as for customers in adopting new ways of collaborating is essential, as adopting new practices also requires new skills of facilitation, negotiation, synthesizing information and utilization of customers' own initiatives. The availability of information and the possibility of preparing for the care is a significant development, as the customers have the possibility to access and utilize their own health information.

Another significant factor arising from both our studies is the need for stronger customer participation in developing and implementing customer-oriented service models. Though the language used is changing towards customer orientation (patients are seen as customers, see also Langergaard, 2011), the reality of utilizing customer

views in the renewal activities is lacking. The culture developing in health organisations should change from seeing customers only as targets to seeing them as resources for innovation. The lack of customer participation in the health care sector can partly be explained by the fact that innovations in public sector usually originate from disconnected impulses from employees interacting with customers at the grassroots and from managers implementing policy requirements (Sørensen et al., 2013). These two approaches are difficult to merge. However, we argue that in order to achieve true customer-orientation in service models in health, the voice of customers need to be heard and utilized.

6. Conclusion

This paper has examined the challenges of implementing an integrated care model and thus understanding the challenges of socio-technical change in the Finnish health care service system. A multi-level perspective, social innovation and a chronic care model were used as a theoretical framework in understanding the broad system level transformation in health care sector and in analysing both complex interaction in development and implementation and new innovative customer oriented services. Our paper was based on two case studies. The case studies represented first a renewal of a hospital district in developing an integrated care model for cardiovascular disease, and second a study based on the renewal of a local health care organisation focusing on primary health care.

Making the change from the traditional reactive and expert-centred approach to care towards empowering customers in care processes requires creating new service solutions that better serve the needs of customers. Collaboration networks and coordination in development activities are needed to be strengthened and identifying and supporting hybrid actors is one solution to this. A shared vision among actors is needed to promote change towards customer-oriented service models and breaking the silos inside health care is essential. All in all, supporting health should be seen as a san overall goal which needs actions from different sectors.

Changing the attitudes of both the customers and the health professionals are crucial factors in adopting new practices as well as changing the cultural mindset in the customer – doctor/nurse relationship. Support, education and guidelines are needed to health care professionals and customers in adopting new ways of collaborating. Another significant factor arising from both our studies is the need for stronger customer participation in developing and implementing customer-oriented service models. In order to achieve true customer-orientation in service models in health, the voice of customers need to be heard and utilized.

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