Constructing Consumers in Healthcare: A Comparative Study of National Public Portals in Scandinavia and the UK

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Abstract

The patients of today are more often than previously said to act as consumers towards healthcare. However, the definition of the concept of consumer is often unclear and not based on theory. The present paper applies a theoretical framework that emphasizes the role of technological devices for the construction of calculating consumers as outlined by Michel Callon. The focus is on to what extent technological devices on national public healthcare portals in the UK and in three Scandinavian countries equip patients to act as consumers towards healthcare. It is concluded that Norway’s technological devices to some extent and the UK and Danish devices to a greater extent equip patients to act as consumers. Sweden’s technological repertoire when it comes to public national healthcare portals is to date much more limited. The Danish and UK devices showing quality indicators stand out as cutting edge facilities. The UK device Choose and Book offering connections between selected hospitals and a device for booking appointments is a further example. The applied theoretical perspective enhances the understanding of fundamental design issues related to the role of technology for the individual in forming his or her relationship towards healthcare.

Keywords: Healthcare, Consumer, Patient, Portals.
1 BACKGROUND

During more than 10 years patients have been using information technology (IT) in general and the Internet in particular to find information about healthcare, illnesses, treatments as well as to exchange support and experiences (Joseffson 2005, Tovey 2006). In this paper the concept of consumer rather than the obedient patient of old times is taken as the basis for discussion. The concept of patient is here defined from the point of view of the medical rationality associated with the role of being a patient in need of care. In contrast to this the role of consumer is here defined by incorporating aspects of the ideal of the “calculating consumer” emanating from economics (Edwards & Elwyn 2001). In line with this thinking, to behave as a consumer in the choice of a doctor or hospital, the individual must be able to obtain an overview of alternatives and to compare and rank these alternatives (Greener 2003). Discriminating consumers are at the heart of pan-European discourses on health reform in late modernity (Coulter & Magree 2003). Many countries have introduced varying frameworks for patient choice in public healthcare (Vrangbæk et al., 2006) something authors characterize as transforming patients to consumers (Newman & Kuhlman 2007) without a thorough definition of this concept. However, there are few theoretically informed examinations of to what extent IT in any particular environment has the potential to support or equip patients viewed as consumers. Greener (2003) investigated to what extent patients in healthcare are capable of acting as consumers when choosing doctors. The theoretical framework in his study came from Callon (1998) and similar focusing on preconditions for calculating consumers. In his study Greener concluded that the patients were not capable to act as consumers since healthcare is full of complexities of which the most important is lack of information from the side of patients making them dependent on trust in doctors. In a similar vein, Scott (2001) discussed healthcare in view of the necessary conditions for patients acting as fully informed consumers. He asserted that in healthcare nearly all of the assumptions of the economists’ model of consumers in markets do not apply. One of the most important discrepancies is that professionals have much more information about relevant circumstances (illnesses, treatments etc) than patients at the same time as the patients have the most developed view of their personal preferences when it comes to health. It should be noted that Greener (2003) and Scott (2001) leave out IT in their discussion of the conditions in healthcare when it comes to patients’ capacity to act as consumers. This indicated need for information and support to compare available options that is an integrative aspect of acting as a consumer is dependent on a significant degree of transparency towards healthcare (Blomgren 2007) from the side of the individual that might be enhanced by technological devices. One prominent form of devices is available on healthcare portals by which an individual gets an overview of rights and available services as well as support to further evaluate the available options.

With this as a background, the focus of study is on to what extent technological devices on national public healthcare portals equip patients to act as calculating consumers (Callon & Muniesa 2005) towards public healthcare. The situation at stake is the choice of hospital for treatment. The investigated national healthcare portals are situated in the UK and three Scandinavian countries (Norway, Denmark and Sweden). These portals can be characterized as a window towards national public healthcare as well as a translation of frameworks for choice in healthcare into concrete technological devices.

Previous studies of public national healthcare portals have featured among other things in what ways they provide adequate and trustful information about illnesses and treatments (Glenton et al. 2005). There are studies of the NHS Direct Online portal in UK focusing on user evaluations of the general usefulness of its information (Nicolas et al. 2002) as well as user evaluations of its online advice service (Eminovic et al. 2004). There are studies of national healthcare portals from the point of view of a digital information consumer (Nicholas et al. 2002) without an elaborated definition of that concept. In contrast, public national healthcare portals have not been evaluated from a theoretically informed view of to what extent the provided devices equip patients to act as consumers.
Thus, the theoretical framework applied in this paper emphasizes the role of technological devices for the construction of calculating consumers (Callon 1998, Callon & Muniesa 2005). In this paper there will be a theoretically informed analysis of the technological devices that are available through the portals in the four countries. In sum, two issues are treated in the paper: (1) To what extent does the devices provided by the portals equip patients to act as calculating consumer? (2) What are the “cutting edge” technologies available in line with this ideal?

2 CONSTRUCTING CONSUMERS IN HEALTHCARE

What can be said about the role of technological devices in their capacity to equip patients to act like calculating consumers in their choice of hospitals? Callon and Muniesa explain the general background to their perspective on consumers as follows: “Whereas economics maintains the idea of a reality of ‘pure’ calculation, the other social sciences try, by contrast, to show that real practices are infinitely more complex and leave little room for calculative practices per se” (Callon & Muniesa 2005, p. 1230). As a contrast, these authors ask the general question of what are the sources of our economic calculativeness or, put otherwise, of an individual becoming equipped to act as a consumer? Callon (1998) and Callon & Muniesa argue that material devices (a pair of scales, the shelves in a supermarket) but also more abstract devices like those provided through functionalities in portals are decisive to support the individual to act as a calculating consumer. These devices are such that they create a meeting between the consumer and the products or services (Callon 1998). Also, the devices are decisive as a help in making distinctions and choosing between services (Callon & Muniesa 2005).

Further, they outline a general model of calculation that consists of a number of calculative activities: Objectives have to be detached or isolated from their context and grouped in the same frame, perhaps in a trading screen. Secondly, once they have been sorted out they are associated with one another and subjected to manipulations, still in a very material sense. Thirdly, a result has to be extracted and a new entity has to be produced (a sum, an ordered list, an evaluation) (Callon & Muniesa 2005). This proposed model includes a wide definition of calculation that includes both quantification and qualitative judgements. An important issue according to this perspective is what technological devices actually do in order to support these activities that are pursued by calculating consumers.

In the present article the concept of consumer and associated activities and devices as outlined in the general model of calculation are applied to healthcare; something that normally are thought about as a deeply personal issue or related to medical science. It is fair to say that we are not accustomed to talk about healthcare issues using this terminology that more often are used concerning exchange of goods and services in commercial markets. Not less important, these concepts are flavoured with the inherently ideological rational choice theory (RCT) (Archer & Tritter 2000). RCT has been questioned from many viewpoints such as for example its presupposition of stable preferences and that choice rather is a social rather than an individual decision etc. It has indeed been assigned to “underpin the neoliberal reforms of the public sector in much of the Western industrialized world” (Archer & Tritter 2000, p. 1).

However, it has to be remembered that Callon & Muniesa (2005) make up very broad model of agency in connection with exchange of goods and services. In this manner they are not making up a firm theoretical model but something that, in line with Beckford’s characterisation of Rational Choice Theory (RTC), can improve our “understanding of decision-making that preserves the rich and complex texture of social life” (Beckford 2000). In fact, catching this sociological dimension of decision-making in various circumstances is a prominent rationality for studies in this tradition (Callon & Muniesa 2005) including the empirical account of national healthcare portals in the present study. Also, in line with Beckford we argue that the concepts of calculation sensitize social scientists to the importance of the competition for advantage that functions in spheres of life normally considered to lie in the realm of non-instrumental values (Beckford 2000). In other words, there are processes of decision and evaluation of individual benefit also in situations of choice in healthcare.
The thorough analysis of factual technological arrangements to support consumers’ choice of hospital makes them public and an issue for debate. Thus, this procedure is not a way of applying an inherently political concept of calculation thereby hiding its political quality, but rather a way of making the organized arrangements a target for political discussion.

3 CONTEXT AND METHOD

The context of study is the institutional, but even more so, the technological outlay of public healthcare in Norway, Denmark, Sweden and the UK. In all of these countries different types of choice arrangements are part of the institutional framework in healthcare. This means that the individual patient has the right to obtain healthcare from other providers than the hospital in his or her vicinity as well as to affect this choice (Newman & Kuhlman 2007, Vrangbæk, et al. 2006). Further, in most cases the patients need a referral from their General Practitioner (GP) or another doctor.

Due to the explorative nature of the investigated issues the chosen research approach is comparative case study method (Yin 1994). The main attention is given to the analysis of the portals and their technological devices in each country from the point of view of the degree of which the patient is equipped as a consumer (Callon 1998, Callon & Muniesa 2005). Only public national portals are included in the study representing a fair view of how significant actors support patients in healthcare in these countries. The portals are owned and implemented by national public agencies and associations in the four countries as for example the Norwegian Ministry of Health in Norway, the Association of County Councils, the Department of Interior, and the Department of Health etc in Denmark, the Association of County Councils in Sweden and the Department of Health in the UK.

The locus of attention is on the content and design of the four countries’ national public portals in healthcare and their devices in case such portals exist. This means that in the Norwegian case the portal Free Hospital Choice (Fritt sykehusvalg) www.sykehusvalg.no introduced in 2003 as a prominent part in choice reform in healthcare, is included as a whole. In Denmark there is a national portal Health (Sundhed) www.sundhed.dk in healthcare that was introduced in 2003. Links to other national public agencies’ facilities that are related to choice in healthcare are included in the analysis: a portal describing waiting times in healthcare for different treatments (www.venteinfo.dk), a portal describing available public and private hospitals included in the choice reform (www.sygehusvalg.dk), and an extended facility for the evaluation of quality in care (www.sundhedskvalitet.dk). In Sweden there is no national public portal in healthcare. However, there is one portal offering an overview of waiting times for different treatments; Waiting times (Väntetider i vården) (www.vantetider.se). Because Sweden has a less extensive public technological repertoire at a national level of healthcare, a brief investigation of current development activities with the intention to launch a national healthcare portal in 2009 is included (Vården på webben). All in all, in 2007 five project leaders and designers were interviewed in this respect with the intention to capture prominent design intentions associated with the coming Swedish portal. In UK there has been a national portal for healthcare since 1999 when the NHS Direct Online was launched. At present it is denominated as NHS Choices and it is accessed through www.nhs.uk. Also it is linked to further facilities supporting booking of appointments denominated as Choose and Book.

In this study the general model of calculation as outlined by Callon and Muniesa (2005) is translated into the pragmatic prerequisites for calculating consumers: (1) Isolating alternatives. The provision of technological devices describing the rules or frameworks for choice of hospital as well as the hospitals available for treatment. (2) Examining alternatives. The provision of technological devices for further investigating available choices for example when it comes to waiting times for different areas of illnesses and treatments as well as quality indicators. (3) Ranking alternatives. The provision of devices for comparing selected alternatives joining different qualities and creating some kind of ranked lists as ground for choice. Against the backdrop of this translation of the model into tangible forms of information and devices this author pursues a straightforward walkthrough of the portals in the four countries. Taken together this account of available facilities is used as the basis for discussing
to what extent the provided devices equip the patient to behave like a calculating consumer as well as what can be considered as the cutting edge devices in the four countries.

4 NORWAY

As for the issue of isolating alternatives the main page of the portal Free Hospital Choice contains the statement that “In Norway patients have the right to freely choose the preferred hospital for treatment”. Also, there is a link to documents describing the right to choose a hospital for treatment, as well as the types of hospitals that are eligible for choice immediately or after a waiting time guarantee has been activated etc. The general search for hospitals for choice can be carried out indirectly by a device on the main page denominated as Waiting times (Ventetider) by which a user can access a comprehensive list of 17 areas of illnesses and treatments. When clicking on an instance in the list the user reaches a further list of treatments. Alternatively, one can access the waiting times data through an alphabetical list of treatments or click on a picture of the human body and continue from there.

Further, a device showing waiting times can be used for examining available alternatives. Apart from searching based on illnesses and treatments, this database is searchable limiting search to one or several of the five hospital regions in Norway. In the list with waiting times that has been generated by selecting treatments a user can for each individual hospital also find quality indicator data (see below) and information about the type of institution (public or private). A second section accessed through the main page of the portal is denominated as Attention to quality (Pekepinn på kvalitet). It is stated that the significant factor is the experiences of patients, whereas the indicators do not necessarily say much about the result of the medical treatment as such. Further, there are descriptions of the different quality indicators. In the device for accessing the quality indicators a user might select one of four regions in Norway and thereafter continue by selecting an individual hospital for which the quality indicators themselves appear as follows: (1) The number of planned operations that subsequently are postponed. (2) Indicators expressing different views of care from the perspective of policlinic and in-house patients respectively: Standard of premises, Communication, Organisation, Information, getting around in the hospital, Experiences from received care as a whole. (3) The number of patients that have to reside in corridors as opposed to ordinary patient rooms at the hospital. For each one of these, there are statistics expressing the mean value for all hospitals in Norway. A link to what is denominated as devices for health personnel leads to a list containing some further indicators; among those are statistics about Caesarean sections and the outbreak of hospital disease. In a similar vein, on the main page there is a device for health personnel, in which one can view quality information for one selected indicator for all hospitals in a region.

As for ranking alternatives, the devices means that it is possible to manually compare different hospitals as regards waiting times after a certain illness or treatment has been selected. Especially if one chooses to delimit search geographically to one region the provided device offers an overview of a reasonable number of hospitals making comparisons possible. This is also in line with the experience that patients prefer hospitals situated in their region. At the same time, the connection between a list of selected hospitals’ waiting times and their associated quality information is limited in scope since this information has to be accessed individually for each hospital in the list. An exception to this is the device directed towards health personnel that provides a long alphabetical list of indicators for all hospitals in a region.

5 DENMARK

In Denmark a portal Healthcare (Sundhed) www.sundhed.dk was launched in the year of 2003. On its main page, it is said that: "Sundhed.dk is your main entrance to healthcare in Denmark. Here you get information that is useful for patients and health personnel”. The portal contains several sections: Health, Treatments, Medicine, What about the law?, Facts and figures, The organisation of healthcare,
and News. There are also links to all the regions in Denmark and their hospitals etc. Among these, the section “What about the law?” is relevant to the issue of isolating alternatives for choice. One of its subsections is denominated as Free choice of hospitals. Here the frameworks for choice are summed up, but there are also links to documents containing the actual framework regulating choice.

Not less important, on the Danish portal there is also a link to a portal Free Hospital Choice (Sygehusvalg.dk) implemented by the Association of County Councils. On the first page of this portal it says that:

“Patients that do not receive care by a public hospital after two months of waiting has now the option to seek care at private clinics in Denmark as well as hospitals abroad. […] To use the right of free choice of hospital there is a precondition that the chosen hospital has an agreement with the county councils and hospitals about the relevant treatment”.

At this level there is a link denominated as Patients. When clicking on this link one finds general information about patient rights. There are also links to a database with waiting times and a leaflet about the free choice of hospitals etc. There is an option to search among all hospitals included in the free choice of hospitals after a two-month period of waiting has been surpassed. In this database there are options to search in an alphabetical list containing all hospitals, to search within selected geographical boundaries or to select one of 18 areas of treatments. For each one of these alternatives there is a selection of relevant treatments to choose from. Further, as a contrast to the Norwegian portal focusing on the choice of hospitals, the Danish portal Health (Sundhed) increasingly contains more personalized facilities as for example offering access to a personal file on medication and limited version of electronic patient record.

One way of examining available alternative hospitals is through a device showing waiting times “Waiting times” (Ventetider). When using this facility there is the option to select one of 21 areas of treatments or illnesses, as well as associated sub areas. Then the relevant hospitals for the selected treatment appear as well as the waiting time. It is possible to include private hospitals in search. There is also the option to delimit search geographically to different regions in Denmark.

Further, the “Treatment” section also gives access to a device: “Quality in Healthcare” (Sundhedskvalitet) introduced in November 2006. A document says that “This portal is the first version of an attempt to give a complete picture of quality and service through the Internet”. The intention with this is further described as a means to support the choice of hospital. It is also said that by looking at statistics about different aspects you can get information about the quality of both public and private hospitals. The user is advised to make a choice of quality indicators from those that are available: (1) Standard of premises: Number of beds per room, and Toilets. 2) Sanitary conditions: Hands, Infections after operation, Kitchen, Sanitary services in general. (3) Rights: Contact person, Waiting time guarantee, and Extended choice of hospital. (4) Patients’ safety from the point of view of patients: Mistakes in medication, Injuries in operation. (5) Patient satisfaction from the point of view of patients: General, Inclusion in care, Safety when leaving the hospital.

There are also quality indicators for the different types of treatments or areas of illness. As an example, for cataract operations there are quality indicators for: (1) Activities: Number of patients, Medium number of days for in-house treatments. (2) Expected waiting time: For medical examination, treatment, ambulant treatment. (3) Complications. For Heart failure, there are quality indicators, as for example: (1) Means of medical examination: EKG, X-ray. (3) Treatment: Physical exercise, Teaching, Beta-blocker. (4) Mortality. In contrast to this, for some types of treatments there are no indicators saying something about the medical examinations or result of treatment, but only the expected waiting time for treatment. Further, there are 21 areas of treatments to choose from, followed by associated treatments for each alternative. When it comes to the choice of indicators further instructions are given through short film sequences. Search can also be limited on geographical grounds region and maximum distance. When using these facilities the device shows the quality indicators for the hospitals that an individual has chosen for a selected treatment.
In line with the Norwegian experiences, the provided devices render possible manual ranking or comparisons of different hospitals as regards waiting times after a certain area of illness or treatment has been selected. However, when it comes to the capacity compare to make quality data the Danish devices directed towards patients offer options to limit search according to geography, indicators and different areas of illnesses or treatments. Since all these possibilities can be combined the provided device offers a list of the hospitals chosen with a specific competence and selected quality indicators in association with this. This means that the provided device equip patients to make manual but highly qualified comparisons.

6 SWEDEN

In Sweden there is no national healthcare portal that in a more elaborated way supports the choice of hospital helping out in isolating available alternatives. However, there is a device denominated as Waiting Times in Care (Väntetider i vården) introduced in April 2000 that contains a database with waiting times for different types of treatments. It was created by the Association of County Councils (Landstingsförbundet). This device might be accessed directly or on all of the 21 county councils’ portals. Concerning the issue of choice of hospital, a text expands on the relationship between the waiting time guarantee and the free choice of hospitals explaining that the forms for exercising choice are decided by the individual county council. The right to information about available options are described as follows: “Normally it is the responsibility of the patient to find an alternative provider of care”. This formulation can be contrasted with the recommendation about choice in healthcare that since 2003 has been adopted by all county councils in Sweden: “It is an important task for the county councils to continuously inform their inhabitants about the options for choice in healthcare. Such information must be directed towards the population as a whole as well as towards those that are seeking care” (Landstingsförbundet 2000, p. 2).

As for examining available alternatives, Waiting Times in Care contains waiting times for specialised and primary care. In the database there is the possibility to search for a certain hospital, area of illness or treatment and region. 26 areas of treatments are available for choice, six types of specialised medical examinations, and circa 40 treatments. For each treatment the relevant hospitals, waiting time in weeks, information about free capacity and contact information in case such capacity are presented. The information about free or excess capacity is explained as the potential of each clinic to receive patients coming from other county councils than their own. Search can be limited to data about first visit, medical examination and treatment.

When it comes to quality information in Sweden there is no comparative online facility as the ones in Norway and Denmark. However, in 2006 and 2007 reports were published with a variety of quality indicators for all hospitals in a county council with some exemplifications from individual hospitals (SKL & Socialstyrelsen 2007). Further, since 1999 there is a portal Health advice online (Sjukvårdsrådgivningen) www.sjukvardsradgivningen.se owned by the county councils in Sweden. Its focus is on illnesses, injuries, anatomy, health, drugs and treatments. There is information about the waiting time guarantee but no information at all about the rights of choice of hospitals in healthcare. In 2006 the Association of County Councils in Sweden initiated a project with the aim to build up a national portal for healthcare: Healthcare on the Web (Vården på webben). The portal Health advice online and its development organisation forms the basis for this work but since 2007 all the 21 county councils have joined the actual work in the project.

This means that as it is today, manual ranking or comparisons of waiting times can be pursued by the available devices but no online quality information covering healthcare as a whole is available. However, a prominent goal behind the new national portal is that an individual should have access to information about all kinds of providers of care including those that are not part of the publicly financed healthcare system. A further goal is that the national portals should enhance the possibility to
compare conditions and regulations, waiting times and quality (MD, National project, personal communication, March, 29th, 2007). This ambition has been backed up by the government policies (Socialdepartementet et al. 2007). The actual launch of the national portal is planned to take place in 2009. The design of individual devices was discussed intensively in the autumn of 2007 and the requirement documentation is completed so purchasing process might start in December 2007 (Designer, National project, personal communication, September, 18th, 2007).

7 UK

Since 1999 there has been a national healthcare portal in the UK directed towards patients (NHS Direct online) that at present focuses on health information for patients and their families. However, since June 2007 there is also a complementary portal that is denominated as NHS Choices www.nhs.uk. Its aim is presented as: “[NHS Choices has] been developed to help you make choices about your health, from lifestyle decisions about things like smoking, drinking and exercise, through the practical aspects of finding and using NHS service should you need them.” Further:

“Choose Services helps you and your GP, for the first time, pick the best provider for the treatment or procedure required. Every hospital you will be able to choose to have treatment from in 2008 has a ‘scorecard’ of facts and figures. The government’s ‘Free Choice’ policy includes NHS hospitals, NHS foundation trusts, independent NHS treatment centres and a large number of independent hospitals.”

On its main page a user can access health advice but also data about hospitals isolating alternatives by entering postcode or location. What turns up is lists of hospitals all of which at a gradually longer distance from the user, information about their approximate distance from user and their location is shown on a map. The user can click on this relatively long list of options accessing data about the individual hospital. Another main way of searching for hospitals is that if a user has a special treatment in mind he or she can start selecting by clicking on a male and female body map or select among 13 different general areas as Head & Neck, Chest, and Arms & Hands etc. Thereafter a user selects an area of illnesses as well as a yet another sub area. Then what turns up is a description of this particular illness and associated treatments. In some cases a user is asked to consult his or her GP for further directions on treatments. In other cases a user can continue to get information about nearby hospitals that have the relevant competence. After having entered ones postcode and selected ones GP, five alternative hospitals turn up with their respective quality data etc (see below). There is also the potential to continue by clicking on “More choice”, or in other words, hospitals situated at a longer distance from home (see below). Apart from these devices, the portal contains further information about the framework regulating choice. Initially a document describes a five step process describing the principal process of choice as: Find out what your choices are, get the information that you need, talk it through with someone else, weigh up the pros and cons and book your appointment.

In a general search of hospitals has been pursued without defining a relevant area of illness a user gets long lists of hospitals with limited options for examining alternatives. But if search has been pursued by defining an area of illness a user gets comparative data of five nearby hospitals covering issues like; Overall quality of services, Patient treatments (respect, information, sanitary conditions, accommodation) but also data about the appearance of MRSA blood infections and control. If a user wants more options search can be limited by combining two criteria of those already described plus preferred maximum distance from home. In some cases other indicators including waiting time for treatments and the relative performance compared to best practice of treatments etc (see for example Coronary angioplasty).

As for ranking alternatives, there is a summary list showing all quality data for the closest hospitals. Also, among the hospitals chosen from those situated at a farther distance from home a user can select

1 About NHS Choices [http://www.nhs.uk/aboutnhschoices/Pages/AboutNHSChoices.aspx](http://www.nhs.uk/aboutnhschoices/Pages/AboutNHSChoices.aspx) 16th Oct 2007
up to five for closer comparison. This list is sorted as well as outlaid in a way that makes it is easy to compare all hospitals for the same criteria.

In the UK there is also a separate portal called Choose and book, offering an overview of options (hospitals etc) that an individual patient have selected during consultation with the GP, as well as potential to book an appointment online in the available hospitals. This portal might also be accessed through NHS Choices. However, dissemination of this technological facility is somewhat limited to 38% of all referrals in April 2007.

8 CONCLUDING DISCUSSION

8.1 Evaluation

In this concluding section we will return to the two research questions: To what extent do the portals equip patients to act as calculating consumers and what are the cutting edge technologies in these experiences? Against the background of our empirical study it can be concluded that Norway in a primitive but concrete way provide devices that contain information about the framework for choice, the available hospitals as well as support for comparisons based on quality information and waiting times. The Danish devices offer all these things and more, since they are part of a national healthcare portal that in fact also offers personalized services in some regions (patient records). Especially the devices showing quality indicators are multifaceted and target patients. This means that Norway’s devices to some extent and the Danish devices to a greater extent support the patient to act as a consumer. However, in both of these cases the devices for ranking and choosing are limited since comparisons must be made more or less manually among an unsorted list of hospitals. Despite the fact that Sweden has a similar framework for choice of hospital its actual translation into technology is much more limited. In Sweden the county councils are comparatively independent, which is illustrated by the fact that their policy to inform inhabitants about the options for choice in healthcare is in form of a recommendation (Landstingsförbundet 2000) and not a law. However, the ambition to launch a portal in 2009 showing all healthcare providers and supporting comparisons (see above) enhances the vision of supporting consumers in healthcare through technology. On the other hand, what will be launched in 2009 is a portal containing information and facilities at the national level, and an inbuilt infrastructure that also includes regional (county councils), local (hospitals etc), and personal (patient or consumer) levels. This means that it is still up to the intention and skill of the individual county council what the individual patient or consumer actually can find and, as a consequence from this, the provided facilities making comparisons possible. Lastly, in a similar manner as the Norwegian ones the UK facilities enhance the concept of choice through their very name; NHS Choices. The regulatory frameworks, the hospitals available for choice, the quality and waiting time information are presented and make up a fair technological infrastructure for calculating consumers. Also, to some extent their devices support ranking or sorting available alternatives.

What about the issue of the “cutting edge” technologies available in line with the concept of the calculating consumer? With this study as a background it can be concluded that in 2003 Norway had what can be characterized as cutting edge devices, whereas as it is today the Danish and UK devices can be characterized as such. What especially stands out is the Danish and UK devices showing quality indicators. Their focus on patients as a contrast to professionals is similar, but in Denmark the technological support for search is somewhat more multifaceted. In terms of the categories of quality indicators denominated as structural-, process- and result-oriented (Rygh & Mörland 2006) the Danish and UK facilities contain instances of all of these. Interestingly, this includes the result of treatments both at a general level (complications, mortality) and the result of a specific treatment. There are also indicators for expressing patients’ personal view of received care. They are in form of indicators covering patients’ safety and satisfaction. Another cutting edge aspect is the UK more holistic approach to portal devices providing the capacity to search for hospitals generally and according to
area of competence, quality indicators, waiting times etc as well as the whole process of choosing hospital including support for ranking and booking. In fact, the UK portal even contains an outlined model of how to think and proceed in the choice of hospital (see above).

The UK device Choose and Book offering connections between selected hospitals and a facility for bookings is, albeit controversial and not much used yet, a last example of cutting edge technologies. Also, the whole framing of the national portal for healthcare through its name enhances the concept of choice. Thus, this examination of technological devices in public national healthcare portals of today offers varying experiences and cutting edge ideas that contribute to research with the intention to evaluate the design of healthcare portals.

8.2 Lessons for design

However, when talking about the construction of patients as consumers in the choice of hospitals there is also the issue of whether they actually are interested in taking part in decisions (Docherty & Docherty 2005). The views among patients might differ. What is important, this author argue, is that through the design of relevant technologies the choice of taking part or not is up to the patient to decide. As it is today in all the four countries studied the regulatory framework permits choice. But doctors have, at least according to Swedish studies (Winblad-Spångberg 2003), functioned as gatekeepers concerning information about choice. It is equally common that doctors have limited knowledge about the rights of choice, or are unwilling to take up time by discussing this issue.

A further issue for discussion is to what extent the applied theoretical model (Callon 1998, Callon & Muniesa 2005) is relevant studying the technological support for choosing hospitals. The model as such is rather general and involves both qualitative and quantitative judgements. A pragmatic point is that a good evaluation must build on an evaluative framework. The model as such has previously been used in studies and discussions of the potential of patients acting as consumers (Scott 2001). Further, the applied theoretical model offers an understanding of the role of technology for the often not problemized view of patients performing as consumers. The framework emphasizes the fundamental role of technology equipping individual actors to perform the necessary calculative activities like isolating relevant objects for choice, manipulating and investigating these and finally creating a result in form of some sort of ranked list of available objects (Callon & Muniesa 2005). Put otherwise, we here learn that calculating consumers do not exist as natural phenomena but need devices or tools as a necessary precondition for their activities.

The framework as such also emphasizes the varying translations of technology that contributes to the necessary performative capacities of a consumer. In other words, in this manner we can see that consumers as calculating actors might be a part of varying technical arrangements and that the actual sociological outlay of calculativeness varies. However, it might very well be that individual actors have special needs when it comes to types of information and technological devices, which is an important issue for further research. Thus, it is argued here, this perspective is of relevance for those with the ambition of taking technology seriously (Monteiro & Hanseth 1996) by thoroughly examining and discussing the qualities of technology. More important, it is argued here that the model enhances the understanding of the fundamental design issue concerning the role of technology for the individual in forming his or her relationship towards healthcare. At a general level these portals, like all kinds of technologies implemented by the public sector, is part of the constantly renegotiated formation of the relationship between the citizen and the state. As showed by this article, in healthcare an increasing number of countries launch portals and similar arrangements as a way of showing what healthcare can offer as well as a means of interaction. Therefore they are as such, as well as the different information and devices that they offer, an increasingly important part of today’s governance structure (Anttiroiko 2004).

Last but not least it must be emphasized that the design and introduction of these kinds of calculative devices is a first step whereas the calculating activities that are rendered possible by the provided devices will not automatically came about. However, the portals discussed in this article are public and
at least according to expressed intentions were designed for the individual user in contrast to previous healthcare portals that were designed from the point of view of the healthcare organization. The question, then, is whether the human actors will embrace these possibilities. In terms of Actor Network Theory, which is the theoretical “home” of our applied model, we must ask whether the human actors (patients, consumers) will be enrolled (Callon 1986) to the inscribed behaviours rendered possible by the technological arrangements? Of course, this will depend on several things such as the degree of which the provided facilities are perceived as interesting as well as relevant and are known by the individual. Also there is an option to try to enrol the individual by concrete more or less obligatory routines. An example of this ambition is when the Swedish National Labour Market Board tried to make the use of a portal and certain calculative devices an obligatory routine for unemployed jobseekers (Norén & Ranerup 2005). Therefore, an issue for further studies would be to capture the quantitative use of the discussed facilities. An equally interesting issue for further studies is qualitative detailed accounts of how these facilities are perceived and used. The enterprise of introducing portals that in different ways support individual users in their choice of hospitals can be viewed as attempts to create a competent acting hybrid constituted by the joint activities by the human and technology. In contrast to supporting individuals by healthcare portals, more conscious and coherent attempts to introduce decision support in this way are rare with a few exceptions (Ranerup 2007). Nevertheless attempts like these might become increasingly common when portals more often than previously are viewed as support to the performative capacities of the individual. Thus, a relevant issue would be about the choice of a model for the design of the performative capacities. Corresponding examples can for example be found in educational and careers guidance (pedagogical models) (Law 1999). In healthcare there is no corresponding model for reasoning in choice except for perhaps evidence-based medicine focusing on delimiting productive methods of treatments (Edwards & Elwyn 2001). The growing interest in different quality indicators in healthcare might result in the emergence of a more holistic model of reasoning in choice that, as a second step, can function as a basis for design of technological devices supporting the choice of hospital in healthcare.

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References


