

# Fairness in Prioritization Processes

*Norway's perception of fairness and effectiveness in the healthcare  
system regarding prioritization of the workforce*

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# Abstract

Healthcare systems face big challenges nowadays regarding the efficient allocation of resources leading to tough decisions policy makers have to go through. Health is not only about being free from diseases anymore; rather, the WHO gives a much broader definition. Hence, high demands require a change of thinking. A lot of focus is put on cost-effectiveness analysis. Hereby, prioritization processes are widespread tools to get the most out of the limited money and human capital available.

Since 1985 with the first Lønning Commission, Norway introduced criteria that give indication about how to best distribute resources in healthcare. Whereby these focus mainly on the cost-effectiveness aspect, claims about including fairness got consolidated.

Although Norway has one of the highest spending on healthcare within the OECD countries, this does not imply a perfect system. Concerns about high sickness absence rates, which mainly stem from long hospital waiting lists, have been emphasized throughout recent years. Policies have tried to lower these numbers, however, have not been as effective as initially thought. With the Faster Return to Work Scheme, which was introduced in 2007, Norway tries to tackle this problem from a human capital approach that allocates additional healthcare workers to participating hospitals. They hence exclusively treat people on sick leave so that a faster return to the workplace can be ensured. Studies found that this scheme certainly lowers waiting times for surgical treatments; however, the results are not as straightforward as expected. Therefore, this paper ascertains whether the fairness aspect is included within this scheme. What the perception of the population towards prioritization of the workforce is has to be identified.

The results of the study show that contrary to the hypothesis Norwegian society sees a prioritization of those who otherwise are in jeopardy to be excluded from work as fair. The main part of the sample focuses a lot on the effectiveness and best possible allocation of resources within the healthcare system, whereby the benefit for the whole society is rather important than the individual. Prioritizing employees on a hospital waiting list is regarded as an appropriate tool to aim a better distribution of resources.

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Verena Weissenbacher

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# Abbreviations and Acronyms

%	Per cent
CIW	Centre for Inclusive Workplaces
DALY	Disability Adjusted Life Years
EU	European Union
FRW	Faster Return to Work
GDP	Gross Domestic Product
GP	General Practitioner
IA	Inkluderende Arbeitsliv
NIS	National Insurance Scheme
NSD	Norwegian Social Science Data Services
OECD	Organisation for Economic Co-operation and Development
QALY	Quality Adjusted Life Years
WHO	World Health Organisation

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# 1 Introduction

## 1.1 Background

Limited resources constitute one of the biggest challenges for healthcare. Due to very complex systems, healthcare is confronted with different interests, varied values and legal rights. All healthcare systems are facing problems concerning the just and efficient allocation of these scarce resources. The money spent for healthcare has increased all over the world within the past years. High drug prices steaming from new drug developments, innovative technology and the rising possibility to treat new diseases drive up prices for staying or getting healthy (Mørland, Ringard and Røttingen, 2010). Additionally, the definition of “good health” has changed over the past decades. The WHO states “health is a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity”. This definition gives explanation about health being seen much broader nowadays than it has ever been. Focusing on all these aspects creates health as an everyday concept, not only including sick people (WHO, 2016). Managing these high demands raises the need for taking tough decisions. How to use limited resources in healthcare has become a widespread recognized topic. The need to be not only more focused on the cost-effectiveness aspect, rather priority setting in general, arises.

Equal access to treatment is to be ensured as well as a maximisation of benefit reached. In the Norwegian “National Health and Care Plan” this objective is described as “the maximum good years of life for all”, which should be changed to “the maximum good years of life for all, fairly distributed.” Criteria to distribute healthcare resources in Norway were first introduced in 1985 with the Lønning I Commission. 5 levels of priority setting were initiated, concerning the severity of the diseases as well as the efficacy of the certain treatments. Since this policy allowed many different interpretations to be done, this first Commission was rewritten in 1997. Lønning II included the criteria of cost- effectiveness, whereby maximisation of health is aimed at being attained. The best health outcome for each Norwegian Krone spent gets measured for example with the indicator Quality Adjusted Life Years (QALY). Equality of outcome is another important factor of this policy. Putting emphasis on those who are the least healthy, Lønning II focuses on reducing inequalities within the system (Wisløff, 2015). A Norwegian council for quality improvement and quality setting in healthcare was established in 2007, a third committee, that released a report called



“Open and fair- priority service in the health service”, in 2013. Hereby, a new framework consisting 4 criteria forms a new system of priority setting. (Førde et al., 2016).

Although it seems like there has been a lot done when it comes to priority setting, Norway is an outlier concerning waiting times in healthcare. With more than 6 days for a GP visit, 4 weeks for a specialist appointment in half of the cases and 4 months waiting time for elective surgery for more than 20% of the population, Norway is compared to other countries lacking far behind (Oecd-ilibrary.org, 2011).

Although, or rather said, because Norway is after Iceland and Sweden the country with the highest workforce participation rate (about 70%), its number of working days lost due to sickness computes to an average that is twice as high as the OECD mean. Regarding disability benefit recipient rates in Norway, it provides with a generous and easily accessible system that amounts to one of the highest sickness pay rates (OECD, 2005). Several reforms have tried to lower these numbers, including the “Inclusive Workplace Agreement” in 2001. Its goal was amongst others to reduce absence due to sickness. Nevertheless, total sick leave in 2009 summed up to 7.7%, which does not deviate significantly from the numbers before the agreement was introduced (Ministry of Labour and Social Affairs, 2010). Those numbers indicate that there is still need for action in the Norwegian System. Studies show that one reason for the long sickness absences is the long hospital waiting lists. The “Faster Return to Work Scheme” tries to tackle this problem from another, more human capital oriented, approach. Introduced in 2007, the FRW scheme aims at reducing the duration of sickness absence due to a new treatment capacity that is exclusively directed to people on sick leave. Long waiting times at hospitals, resulting in unnecessary long periods of not being able to work, can therefore be lowered. Research proves findings that the Faster Return to Work Scheme significantly reduced the sickness absence period. While there is an inconsiderable result for non-surgical treatment, surgical treatment patients may reckon with a 14 days shorter sick leave (Aakvik, Kjerstad and Holmås, 2015).

## **1.2 Problem definition**

Regarding the objectives of the latest health reforms in the Norwegian healthcare system it is evidenced that several policies try to focus on a better distribution of the limited resources. Although in recent reforms social values were implemented, it appears as if the cost-effectiveness aspect is still foregrounded when setting priorities. 6

Taking the Faster Return to Work Scheme as an example, duration of sickness absence is aimed at being reduced due to a faster access to hospital treatment and consequently lower waiting times. As studies show, this is certainly a tool that focuses on the cost- effectiveness criteria regarding prioritization in healthcare. However, the question arises, whether the Faster Return to Work Scheme also includes the equality aspect. Whereas it needs to be ascertained why employed people get prioritized over pensioners, housewives, children or unemployed. One may argue that this policy contributes to enhance overall welfare. Though, in assessing the success of this principle, not only the cost aspect is to be regarded. Rather, it additionally needs to be analysed based on social values.

The research question hence is:

*How do people in Norway value fairness and effectiveness in the healthcare system regarding prioritization of the workforce?*

### **1.3 Aims and Objectives of the Study**

This research project seeks to find out what the perception of Norway's population towards prioritization in the healthcare system is. Whether in their opinion resources are used efficiently is to be examined. As well, to what extent the fairness aspect is included in decision-making and priority setting is aimed at being found out.

By using the FRW scheme as an example special focus is put on prioritization of the workforce. Since studies depict that this system is not as straightforward concerning welfare (Aakvik, Kjerstad and Holmås, 2015), it is therefore crucial to also focus on the aspect of social values and fairness. By distributing limited resources in healthcare, there needs to be a shift in the objective; rather than setting the target on "more good years for all", it is supposed to achieve "more good years for all, fairly distributed" (Wisløff, 2015). If this is initiated by the Norwegian healthcare system and to what extent the population claims this is to be examined.

This study hypothesises that there is a clear lack of fairness in prioritization when it comes to society's opinion. Unlike physicians, who focus more on the efficacy aspect, the population will consider equality as their first priority. Therefore, regarding the trade-off between efficiency and fairness, efficiency gains would have to increase so that the unfair aspects can be disregarded and consequently a full acceptance reached. Concerning the Faster Return to Work Scheme it is assumed that people are repellent towards this approach. Being put behind

in waiting lists in favour of another person will be regarded as unfair unless it is someone being part of the family. However, from the viewpoint of the working population, people place themselves first in line rather than someone else.

## 2 State in Norway

### 2.1 Waiting Times

Supply and demand imbalances cause waiting times and consequently queues in the healthcare system. Excess demand entails a shortage in supply, whereas temporarily excess supply cannot be stored and used for future purposes. Differences in the length of waiting times in varied hospitals emerge due to indication or clinical threshold of the time a treatment is executed (Borowitz et al., 2013).

Waiting times are regarded as a poor attribute of healthcare services. Individuals have to wait longer for treatments that possibly relieve them from pain and discomfort. The improvement of the health status is less worth if the patient gets treated later. Further, in case a health status of an individual worsens while waiting for a treatment, the expected outcome declines. Additionally, it indicates that not enough resources are available or they are not allocated correctly, responsively. However, this rationing mechanism is widely used, especially because it is for example seen as fairer compared to co-payments since it does not exclude patients who cannot afford the treatment (Engesæter, Espehaug and Monstad, 2013). Also, waiting times can be caused intentionally in some cases, since many specialist or GP appointments get cancelled because the indication is gone after a while. The patient is well again without any intervention, what leads to a natural selection of patients.

In Norway, the situation is not different to other countries. Waiting lists get longer. Statistics from 2010 show that the average waiting time for outpatient services is about 50 days unless it is a psychiatric issue. Some patient groups around the Oslo area have to wait 10 days longer compared to former years. Even individuals on a high priority list do not get treated much faster than others. Planned surgeries imply a waiting time of average 37 days (Newsinenglish.no, 2010). For specialist consultations a waiting time of four weeks or more has to be awaited in 50% of the cases. Reducing waiting times has been a main point on the target list in Norway. Thus many policies implement incentives to lower these periods. From 2001 onwards, for instance, people have been allowed to choose a hospital for elective surgery. One of the latest actions regarding waiting times has been the attempt to lower the number of patients treated in hospitals by widening treatment offers in primary or intermediate care facilities. Furthermore, a waiting time guarantee is in place within Norway. This implies, that in case a patient has to wait longer for a treatment than the appropriate waiting time suggests, the person is authorized to travel to another country or region in

Norway to get the treatment, whereby accrued travel costs get reimbursed (Lindahl et al., 2013). In Norway, vertical waiting time prioritization, on the contrary to blanket waiting time target setting (all patients have equal priority, regardless of condition and treatment), is in place. This implies that there are guidelines existing of how patients are supposed to be prioritized (Askildsen et al., 2013).

## **2.2 Priority Setting**

“Priority setting in healthcare involves a process of choice among alternative healthcare programmes and services that can be offered, and among the patients or groups of patients who are to receive care. If undertaken in a systematic and explicit way, it is a process that ranks the alternatives in accordance with normative and technical rules” (Tragakes and Vienonen, 1998).

Societies all around the world are faced with challenges concerning decision making in healthcare. Limited resources need to be distributed in a complex system involving institutions, physicians, patients, researchers and others. New technologies get developed, drugs bought on the market and prices for treatments increase, hence healthcare expenditure has been ascending over the last few years. Norway is no exception. Priority setting is therefore a necessary tool that needs to entail the effectiveness of healthcare spending. How to best use the constrained resources healthcare systems encounter has been causing debates recently (Mørland, Ringard and Røttingen, 2010). Which reforms Norway has taken so far concerning the allocation of resources is explained in the following section.

### **2.2.1 Lønning I & II**

With debates about prioritization already in the 1980s, Norway is the first developed country using guidelines regarding this topic (The National Council for Priority Setting in Health Care, 2015). In this Nordic country discussions about how to prioritize started even though the level of resources was rising (Calltorp, 1999). Hereby the main issue was put on maximising health benefit for the society as well as equality. In 1985 the first Lønning Commission in Norway set criteria for a distribution of these restrained resources. Hereby, 5 levels of priority setting - severity of a disease, equality of treatment opportunities, waiting time, health economic aspects, and the patient’s responsibility for his or her condition- were regarded as important. Due to the possible high degree of interpretation and a therefore lack of clarity within these criteria, a new Lønning Commission, Lønning II, was introduced in

1997. Hereby, severity of the disease, benefit, and cost-effectiveness were the described criteria, which provided a basis for future regulations, laws, and committees (Førde et al., 2016). Reducing health inequalities, especially related with the equality of outcome, and emphasis on the least healthy were the predominant criteria. The best allocation of resources is aimed, whereby the most effectiveness outcome for each Norwegian kroner used is supposed to be reached. Quality Adjusted Life Years (QALYs) are hereby taken into account. Where the threshold (how much is the society willing to pay for one more life year) between costs and effectiveness lies is yet unclear when applying these criteria in practise. Implemented in Norwegian Laws and Regulations, the Lønning Commission gives as well guidelines for areas regarding health technology assessment or drug reimbursement. The three criteria discussed in the Lønning II Commission, severity, benefit and cost-effectiveness, have not yet been operationalized as expected. The fact, that these terms are widely open for interpretation, makes it hard to set definitions. Consequently, health loss, health gain, resource use, and opportunity costs are concepts that are suggested to replace those in the Lønning II Commission. Hence, the conception of “more good years of life for all” should be augmented to “more good years of life for all, fairly distributed” (Wisløff, 2015).

## **2.3 Inclusive Workplace Agreement**

“ To improve the working environment, enhance presence at work, prevent and reduce sick leave and prevent exclusion and withdrawal from working life.” This is stated in a cooperation agreement on a more inclusive working life (Norwegian Labour and Welfare Service, 2014). While society’s health status increased over the years before the 21st century (Statens folkehelseinstitutt, 1999), the populations’ perceived health status declined according to statistics (Statistics Norway, 1998). Although the reasons therefore are yet unclear, emphasis has been put on hindering persons with health or social problems to get absent from work (Amundsen, Olsen and Svendal, 2009). There needs to be a shift away from passive to active programmes that try to involve employers into the processes, increase interventions and promote incentives to work (OECD, 2005). One of those concepts was the More Inclusive Workplace Agreement in Norway, which is a tri-partite agreement launched in 2001 and signed for 4 years. Increasing employers’ responsibilities as well as a change in the roles of the three participating parties, state, employers, and employees, were aimed at being introduced. The main goals of the IA were (1) to reduce the working days lost due to

sickness by at least 20%, (2) the number of disabled people in the workforce is to be increased, and (3) the retirement age should rise. Companies voluntarily sign this agreement if they want to be part. They then work closely together with the newly established Centre for Inclusive Workplaces (CIW). Easier access to financial support systems and public administrations are one advantage of joining (Amundsen, Olsen and Svendal, 2009). Associated companies also benefit from a longer self-certified sickness period of 8 days instead of only three for their employees (OECD, 2005). One and a half years after introducing the Inclusive Workplace Agreement 54.3% of Norway's employees were affiliated. Whereby this might sound successful, the main goal of reducing sickness absence by at least 20% was far from being reached; rather is it supposed that other reasons were crucial for the slight decline (Amundsen, Olsen and Svendal, 2009). Since the first goal of the agreement, to reach a significant reduction in sickness absence, is open for a lot of interpretations, it has been hard to measure. The indicator of the sickness absence has not been clearly defined yet. However, the main factor to be measured should be the outflow of work. It was assumed at the time that changes in the sickness payment were of higher significance regarding the decrease in sickness absence (OECD, 2005). Although not very successful, the Inclusive Workplace Agreement was renewed and is still in place. Concerning the sickness absence rate, improvements are recorded; yet, the 20% goal has still not been reached (Eurofound.europa.eu, 2015).

## **2.4 Recent Reform – Open and Fair**

Although the Lønning commissions were widely applied for many years, debates about priority setting were still predominant. Especially in very difficult situations no consensus could be found, due to unspecified definitions regarding these criteria. Consequently, a third committee for priority setting, the Norwegian Committee on Priority Setting in the Health Care Sector, with 14 members of varied backgrounds was established in 2013. They worked on a report, which was released in November 2014 under the name: "Open and fair- priority setting in the health service". Four principles formed a new framework that is supposed to define a new system of priority setting. Clear criteria, transparency and participation of all stakeholders, the use of effective instruments and the pursuing of the greatest number of healthy life years for all, fairly distributed, form the basis of the new report. Whereby the latter of the four named principles contains three crucial criterions, namely the (1) health-benefit criterion, the (2) resource and the (3) health-loss criterion. The first one focuses

mainly on healthy life years, whereby QALY is the measurement. Resources are assessed with opportunity costs. That means that through one alternative health benefits are forgone somewhere else. With cost-effectiveness the first two criteria can be represented. The health-loss criterion tries to approach prioritization from the fairness aspect by advancing those who are worse off. As worse off are those one defined whose health loss is greater resulting on their condition. Introducing this criterion, the focus is put more on the distribution of healthcare resources taking into account the individual, instead of just focusing generally on the total benefit.

To use the three criteria in an appropriate relation weights get assigned to them based on the health loss of the individual. Due to a simple rule various decision-makers can easily understand it. Decisions can be made if the criteria are used to rank different alternatives or if predetermined cost-effectiveness thresholds exist. Calculated according to opportunity costs these thresholds have been introduced informally in Norway, however, not yet examined by the Parliament.

Another important issue that the Committee tackled in the new report is about transparency and legitimacy, whereby also the backside of openness got discussed. Reimbursees often get discounts from manufacturers if they don't make prices they pay publicly. In this case transparency could be a disadvantage.

User participation is further emphasised in "Open and Fair". Hereby, quality of care, autonomy and fairness were redefined. More voice got attributed to patients and their relatives regarding prioritization processes in healthcare.

A nationwide survey about the report brought many positive feedback, however, the health loss criterion gave reason to diverse opinions. Hence, many think it's too complex and should as well not include past health states. Consequently, more emphasis has been put on severity than on health loss, since this includes more prospective health issues.

Norway's general approach to priority setting as it is included in laws and regulations can be a recommendation for other countries. Unlike many other countries Norway has a Committee that sets guidelines for prioritization processes in healthcare that do not only include the cost-effectiveness criteria, rather focuses on the fairness aspect.



## 3 Faster Return to Work Scheme

### 3.1 Sickness Absence

The labour market in Norway draws on a good system and a therefore high participation rate throughout the age groups. In 2005, the percentage of people working summed up to 75%, which is much higher than the OECD mean (65%). Additionally, Norway's labour market discerns an increase of participation within the elderly age group, which is contrary to most other European countries. Female participation rates further exceed the OECD level (OECD, 2007). The unemployment rate in Norway is steadily low and computed to 4.6% in 2015 (Statistisk Sentralbyrå, 2016). However, due to the short duration of working weeks the absolute annual labour accounts to one of the lowest labour utilisation among OECD countries. About 25% lower is the actual time worked per week than the average of the OECD countries (OECD, 2007). This is due to a high number of part time workers, which is approximately 20% and consequently up to 4% more than in other countries (NHO, 2013). The potential growth of working times got lowered by annually 0.5% over the last years. These short weekly labour hours might stem from a higher living standard and therefore more time spent on leisure activities than on hours of work. A relatively high marginal income tax rate computing up to 49% also plays a role concerning working hours. Since new challenges are about to occur, for example age-related changes, the need arises to increase efficiency and working hours (OECD, 2007).

Nevertheless, Norway's shortage of weekly working hours mainly emerges from the high number of working days lost due to sickness and non- holiday leaves, respectively. In 2004 the working population in Norway lost 2.1 weeks of working time regarding to sickness absence. Only Sweden accounted to a higher amount, however, the hours worked per year are much higher there (OECD, 2007). It is argued that such a high rate of employment, as it is the case in Norway entails high sick leave. Yet, this cannot be the only explanation since comparable countries with almost the same number of working participants have a much lower sickness absence rate. The total sick leave summed up to 7.7% in the third quarter of 2009, which did not change significantly although certain policies aiming at reducing the high sickness absence rate were implemented after 2001 (Ministry of Labour and Social Affairs, 2010). According to the OECD an increasing 3% of working hours could be reached supposing the sickness absence was lowered to the EU average, even more in case larger reforms were implemented.

Norway spent 4.1% of the GDP on sickness absence and disability benefits. This is a lot compared to the EU average. No other European country uses up as much money for vocational training and rehabilitation, especially to avoid people getting into long-term sickness absence (OECD, 2007).

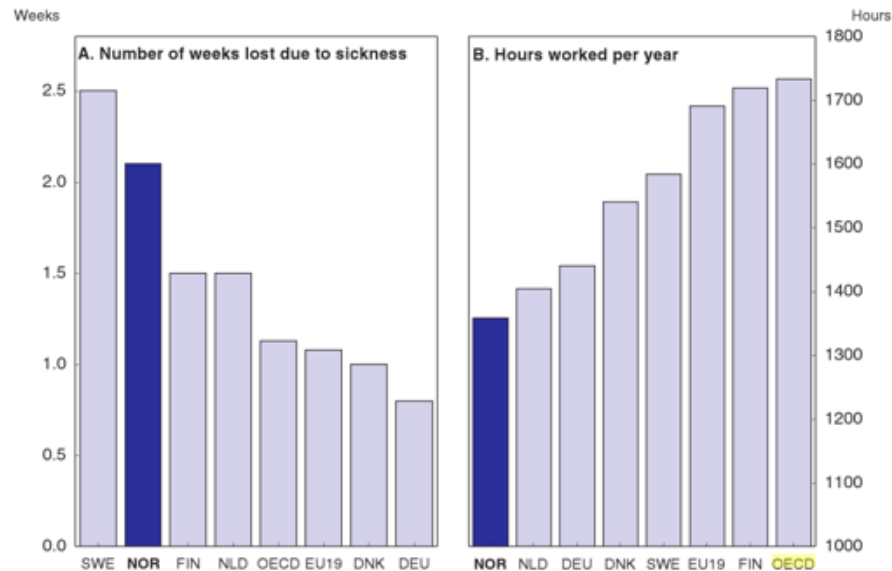


Figure 1: Hours worked and working weeks lost due to sick leave (OECD, 2007, pp. 94)

The public National Insurance Scheme (NIS) is responsible for the sickness benefit system in Norway. Hence, they state three different points of which at least one needs to be applicable to workers in order to be deputized to receive the benefit: (1) They are occupied with the same employer for at least 14 days, (2) their annual income must exceed half of the basic income, (3) injury or disability is the reason why they are not able to work. Usually a physician, mainly a GP, is obligated to assess whether a sickness prevails or not. A self-report can be made for not longer than three days, not more often than four times a year. Employees on sickness absence get 100% of their pensionable payment rate up to 52 weeks, whereby the employer compensates the first 16 days, consequently the NIS accounts for the rest (Aakvik, Holmås and Kjerstad, 2012).

In the literature three institutional factors explain why the number of working days lost due to sickness is as high. Sickness benefit rates are, as mentioned before, with 100% very generous. Both cash benefits but also physical benefits, such as rehabilitation allowance, lead to a very convenient system. Furthermore on the employer side, they are facing very low expenses for their sick employees, since the NIS pays after the first 16 days. Another reason may be that the GPs who are responsible for the assessment of the sickness do not get evaluated for their assessment. Although it appears that patients play a big role in the

diagnosis process, it is still the GP who is competent to review the state of a patient. Hence, social insurance institutions should put more weight on evaluating these reports (Aakvik, Holmås and Kamrul Islam, 2010).

## **3.2 Policy**

As mentioned above, waiting times are very often used to ration health services. Especially in countries with healthcare services financed by taxes prioritization is a common tool. It goes without saying that spare resources are added where waiting times are the longest or where they are needed the most. This is the case if time is a crucial factor. However, recent approaches tackle this issue from a more human capital aspect. Consequently, resources should be allocated based on where the opportunity or indirect cost of waiting is the highest. Hence, the Faster Return to Work Scheme, built on the human capital approach, tries to lead to a better cost-benefit ratio. Due to resources exclusively aimed at employed people will prevent prolonged waiting times and therefore reduce productivity losses regarding sickness absence. To assign resources to people on sick leave rather than to children, unemployed or retired, might be regarded as controversial however takes the indirect cost aspect into account (Aakvik, Kjerstad and Holmås, 2015).

Due to the high numbers of people on sick leave in Norway the Faster Return to Work Scheme got implemented in 2007. Its aim is to reduce these numbers based on an increasing hospital capacity, exclusively for people on sick leave. Since waiting times for hospital treatment lead to unnecessary long periods of being unable to work, this policy is supposed to reduce the total length and incidence of sickness absence. A Committee formed by representatives from the central government, labour unions and employer organizations proposed this new concept. Within the first three years period the sum spent for the FRW amounted to 1.5 billion nok (Aakvik, Holmås and Kjerstad, 2012). As studies show, 40% of the people on sick leave are in need of hospital treatment. Average waiting time is approximately 70 days. This leads to the assumption that if there is a decrease in days waiting for treatment people can go back to work faster (Aakvik, Holmås and Kjerstad, 2015). If this works does not necessarily have to be true. Physicians are the ones who make diagnoses. They have to be able to give the right ones in order to make the system work. Furthermore, after a diagnosis exists, appropriate treatment needs to be available. Nevertheless, most people on sick leave in Norway suffer from kinds of musculoskeletal diseases. It is evidenced that within these cases treatment does not have the expected effect.

GPs in Norway have the gatekeeper function, what means that any referral to inpatient or outpatient care must be by a GP, excluding emergency cases. If employees are absent from work because of sickness they also have to get certified by a GP to prove they are not able to work. Further, the GP sends the patients to the appropriate facilities and as well helps the patient to obtain specialist care. It is also the physician's task to refer their patients to hospitals offering the FRW scheme or adequate treatment. The FRW scheme is established in hospitals that sent a submission to the relevant regional health authorities. Within the first three years after the FRW scheme was introduced, around 60 FRW facilities were approved. Decisions were made based on assessing demand and supply. The potential number of patients and on the other side practicality of the FRW regarding stuff, costs etc. had to be reasonable to be in favour of the FRW scheme (Aakvik, Holmås and Kjerstad, 2012).

### **3.3 Cost Effectiveness Criteria**

Studies were conducted about the effectiveness of the Faster Return to Work Scheme. What could be found out is that people on sick leave in the FRW system have waiting times 12 to 15 days shorter than those on the regular lists. However, this does not necessarily lead as well to a reduction in working days lost due to sickness. Rather the total decrease sums up to about 8 days. Whilst the FRW scheme reduces waiting times for both, surgical and non-surgical patients, length of sick leave only gets affected significantly with surgical patients. Hereby, 15-23 days can be saved. Consequently, it can be assumed that hospital treatment does have more effect for surgical treatments than for non-surgical ones. For non-surgical treatments it occurs that time is what heals the disease, not the treatment itself. Especially musculoskeletal diseases belong to these cases.

The results show that the FRW scheme has better outcomes with surgical treatments. Patients are usually receiving well-organized procedures and the effects of a surgery are mainly clear. Rehabilitation afterwards can quickly facilitate the curing process. Therefore, if more resources are allocated to surgical capacity a shorter waiting time can be reached and hence a reduced sickness absence from work. Although this does not apply for non-surgical treatments, the reduction of waiting times can constitute a benefit in itself. Since patients' health on a waiting list is usually poorer than after the treatment they thus suffer a utility loss. Even though a 100% sickness pay rate does not cause a direct money loss, a worse health status leads to disadvantages in their lives (Aakvik, Holmås and Kjerstad, 2012).

All the hospitals affiliated with the FRW scheme used the additional capacity within different areas, whereby patients on sick leave were prioritized in one hospital, another patient with same symptoms was put on the regular list in a different hospital.

In 2008, 1.4% of all hospital admissions were FRW cases. About 46 000 of these 48 000 FRW admissions were outpatient treatments, whereby non-surgical patients form the majority.

Regarding the benefits, changes in the production loss due to the sick leave are the main issues affecting welfare, on the cost side the additional financial resources that are put into the hospital is the driving factor. By using the increasing number of working days multiplied with daily gross wages, an estimation of benefit gains in a monetary value can be made. 144.9 million Nok were spent in 2008 for the FRW scheme. 61.1 million Nok of benefit could be made in the same year due to a reduction in working days lost. Consequently, this leads to a cost-benefit ratio of approximately 2.4.

The FRW is therefore not as straightforward as was expected. It is suggested in the literature, to prioritize within the prioritization, what means to put more emphasis on the patients who are in need of surgical treatment, rather than on those who need others. The cost-benefit ratio could hence be increased (Aakvik, Kjerstad and Holmås, 2015).

## 4 Social Values

### 4.1 Equity, Equality, Justice and Fairness

A main issue in healthcare is that resources are scarce. Not everyone is able to get all efficient treatments and interventions one might need. Therefore, health systems all around the world have been concerned with questions about the efficient allocation of those restrained goods. Whereby the efficiency aspect has always been emphasised, justice comes more and more into light. Fairer methods of resource allocation need to be developed in order to ensure a proper approach to these challenges (Lie and Sabik, 2008). As a form of rationing, prioritization has yet been implemented in several countries as a solution to a growing scepticism of traditional methods. Whilst rationing is often seen as negative, since it is associated with a forced choice, prioritization is rather positive by having a privilege of choice, hence use resources more efficiently in a way that society profits best. Consequently, although often used for the same meaning, priority setting leads necessarily to rationing; on the contrary rationing does not achieve prioritizing. Nevertheless, both have the same outcome, namely the allocation of competing scarce healthcare resources. By doing so, it is inevitable to override several claims and as well treat one group of people more harshly or favourable than others, respectively (Tragakes and Vienonen, 1998).

Prioritization aims at achieving “a maximization of health, reduction of inequities in health, and final protection against the costs of ill health”. However, in recent years, mainly the first of those three goals has been pursued. Cost-effectiveness analyses focus on the whole amount of health gain, whereby the aspect of how those are distributed is left out. Therefore equity analyses are to be implemented (Baltussen et al., 2014). Equity related policies depict an important issue in nowadays prioritization objectives. Equal access to healthcare for equal health is a crucial concern. Furthermore, inequalities in healthcare are often regarded as unfair or unjust. Health policy makers as well as health economists often use those terms indistinctly. However, to get a better understanding of the principle of equity of health those have to be distinct and further explained. According to Margaret Whitehead it is considered necessary to focus on the cause of an inequality: “The term ‘inequity’ has a moral and ethical dimension. It refers to differences which are unnecessary and avoidable, but in addition are considered as unfair and unjust. So, in order to describe a certain situation as inequitable the cause has to be examined and judged to be unfair in the context of what is going on in the rest of society” (Whitehead, 1992).

When talking about equality the equal distribution of the entity that has to be or which society wants to be distributed is looked at. Since these shares are often hard to measure, what people are striving for is the aim for equal opportunities. Hence, equality is usually expressed as the equal access to healthcare for equal need. Thereby, inequalities are acceptable, as long as they comply with the differences in preferences in society. Moreover, variations in need should not be disregarded when distributing healthcare, according to Aristotle's principle of justice, that: "equals should be treated equally and unequals unequally" (Olsen, 2011). This can be also expressed in horizontal and vertical equity, whereby the former means equal treatment for equal cases and the latter unequal treatment for unequals (Baltussen et al., 2014).

Consequently, it can be said that if inequalities stem from different preferences or choices it does not count as inequitable. Responsibility at an individual level and avoidability at societal level depict a suggestion from the WHO Commission on Social Determinants of Health that not all of the health inequalities are unjust or unfair, rather unfortunate in certain cases. Only if inequalities could be avoided but are not, this leads to them being inequitable. Hence, unavoidable inequalities are considered as being equitable inequalities.

Fairness in healthcare has a very positive character. Something is seen as fair, if it is intuitively right, acceptable or just. Fairness in healthcare is reached when resources are allocated appropriately. With his two principles, the liberty and difference principle, Rawls 1958 set a fundamental idea of justice as fairness. This will be regarded later in this paper.

Whilst fairness stems more from individual judging, perception and daily life, justice regarded as being more professional. Stated in philosophies, laws and politics, it is more objective than fairness.

To sum these four terms up, it can be said that equity implies equality, whereby fairness reduces inequalities and theories of justice are applied in the analysis of equity (Olsen, 2011).

## **4.2 Rawls' Theory of Justice**

John Rawls (1921-2002), an American philosopher devoted himself to questions concerning justice. One of his three books, *A Theory of Justice* (1971), had and still has great impact to society. This book addresses the justice of social institutions as well as social or political actions and policies. Thereby Rawls states that all social institutions and laws are built on justice. Giving more shares to another person cannot make up taking freedom from one person. "It does not allow that the sacrifices imposed on a few are outweighed by the larger

sum of advantages enjoyed by others.” Injustices can only be tolerated if they hinder greater injustice (Rawls, 1971).

In “A Theory of Justice” Rawls superiors the concept of utilitarianism. Utilitarianism aims at maximizing utility for the society, regardless of how those goods get distributed amongst people. Hereby, Rawls argues that the justice aspect is left out. One person making sacrifices for another persons gain is not morally acceptable.

By saying that beliefs are probably inconsistent, Rawls refers to the reflective equilibrium. This is reached if all thoughts and arguments, which we consider as attractive from its principles, are morally consistent.

Regarding Rawls’ moral theory, special principles reveal facts and statements so that people know what to do. A problem arises in case there are different values. Hence, a prioritization of these is necessary, whereby the highest priority is valued highest when setting principles.

By revising Locke, Kant’s and Rousseau’s principles, Rawls conditions the social contract idea anew with his “justice as fairness” principle. According to him the society is a well-ordered one, based on three principles: (a) society is regulated by a public conception of fairness, (b) members understand this conception, and (c) to hold a and b is common knowledge. Two kinds of inequalities are recognized. The deep ones, ones that cannot be chosen (one is born into) and the others, which people can be made accountable for based on their decisions. Rawls focuses on the basis structures of a society, whereby justice must apply in the first instance (Arneson, 2008). Rawls bases his concepts on the “Original Position”. Hereby he assumes that people decide about the Social Contract without knowing what their future will look like. They imagine themselves in a position without having any information about in which society or as what person they will be in the future. Hence, they design their life by being behind a so-called “Veil of Ignorance”. “No one knows his place in society, his class position or social status; nor does he know his fortune in the distribution of natural assets and abilities, his intelligence and strength, and the like.” Only by doing so, people can make fair decisions, in which liberties and goods will be distributed equally. Rawls calls these goods needed for a good life Primary Social Goods. Rights, liberties, powers, opportunities, income, wealth and self-respect belong thereto. Those goods are to be distributed equally unless an unequal distribution benefits everyone (Hammering Shield, 2013). Therefore Rawls draws on a form of egalitarianism, whereby the maximin criterion is feasible as long as the worst-off in society benefits (Olsen, 2011).

John Rawls structures his ideas in two principles of justice as fairness. The first principle assures each person in a society to have equal access to basic liberty. The second principle



gives information about how to arrange social and economic inequalities, whereby it is split into two parts. The first part approaches social structures that must require the ideas of fair equality of opportunity. Instead, the second part says that those distributions need to benefit the least-advantaged member in society, also called the “Difference Principle” (Richardson, 2016).

Rawls ideas are not connected to healthcare since he assumes that everyone in a society is healthy. However, Norman Daniels, an American philosopher, addressed the justice aspect of health in his book *Just Health Care*, written in 1985. Based on Rawls ideas, he elaborates on what justice requires for health. Three questions build the main structure of his Daniels’ book: (1) What is the special moral importance of health? (2) When are health inequalities unjust? (3) How can we meet health needs fairly when we can’t meet them all? (Rid, 2008).

According to him, health is especially morally important for societies, due to the statement that health leads in further consequence to a range of opportunities open for one. Hereby, Daniels clearly distinguishes health from wellbeing or treatment and enhancement, respectively. Thus, promotion of health is an obligation; on the contrary, the same does not apply for wellbeing. The second question is answered by saying that an inequality in health is an inequity only if the socially controllable factors of health are distributed unjust (Holm, S., 2009). Third, Rawls theory is too indeterminate as to give sufficient answers to the entire population. Therefore, limit-setting decisions need to be aligned with fair processes that ensure legitimacy (Rid, 2008).

Many prioritization systems draw on Daniels’ approach of “accountability for reasonableness”. This theory is based on two presuppositions, namely that first the WHO view about health is too broad and second that if fairness is to be included in healthcare, a “normal” level of human performance is required. Hence, Daniels claims “accountability for reasonableness makes limit-setting decisions in healthcare not only legitimate, but also fair.” Several conditions are supposed to be met when making decisions in order to ensure accountability. Those are publicity condition, relevance condition, revision and appeals condition and regulative condition. Daniels states: “In any healthcare system, then, some choices will have to be made by a fair, publicly accountable, decision-making process. Just what constitutes a fair decision-making procedure for resolving moral disputes about healthcare entitlements is itself a matter of controversy. (..) Our rights are not violated, however, if the choices that are made through fair decision-making procedures turn out to be ones that do not happen to meet our personal needs, but instead meets needs of others that are

judged more important.” It can therefore be concluded, that inequalities or treating to people in a different way only becomes an inequity or treating two people in an unfair way if the negative discrimination cannot be justified. Thus, Daniels emphasizes the need for a “normal” functioning instead of an equal one. With normal he means the performance of an average citizen to avoid contradiction of the human diversity. To say it with other words, this natural distribution is corrected rather than eliminated.

The approach of accountability for reasonableness can be concluded as being a very important tool to address the limits in healthcare. An “equal opportunity function” described in his book gives evidence about limit-setting decisions, which are not only legitimate but also fair. Nevertheless, to best achieve fair decision-making, this method has to further be speculated (Nunes and Rego, 2013).

### **4.3 Trade off between efficiency and fairness**

Difficult decisions are often to be made within the healthcare system. Decision-makers have to deal with a lot of information that has to be evaluated. Economic efficiency is hereby the main goal to be reached, whereby a maximisation of outcomes is aimed. To do so, cost-effectiveness analyses are performed in healthcare systems to get to these results. Alternatives are measured against each other on the basis of for instance costs per life year saved, costs per year of life saved and many others. As mentioned earlier, these are mainly based on the utilitarian scheme, which tries to maximise health benefit for the whole society. However, people are often faced with difficulties to distinguish between statistical and actual lives, since some decisions lie outside the rational scope. As an example a study shows that more people would be in favour of a screening test for the whole population than for just a small part, even though the latter one would be more efficient and consequently saves more lives. The difficulty to place a value on the outcomes of healthcare programmes to compare them with each other requires putting monetary values on them. If taking the Faster Return to Work Scheme into account, a human capital approach is used to do so. This causes disparities within these decisions, since more value is put on time of economically productive people than on unemployed ones (Derse et al., 2002). By trying to implement ethical and justice issues into these cost-effectiveness analyses difficulties arise. Ethical questions never have one possible solution; rather their complexity makes several answers appropriate. Different people have different points of views, attitudes and standards. Such ethical issues in cost-effectiveness analyses can be as follows:

A very crucial issue is, how health states and disability should be evaluated. Variables such as life expectancy clearly limit the outcomes of health interventions. Improvements or quality of life are hereby left out. Hence, multi-attribute measures, that assign values to benefits, got introduced. QALY's or DALY's measure the quality and quantity improvement of one's life. How much weight to put on different diseases or conditions gives reason to discuss. Since frankly every QALY has the same value regardless of age, one may argue that an additional life year of an 85-year old is not the same as one of a 25-year old. As an alternative therefore, DALY's assign different values to life-years gained, depending on the age. Social roles of people in various stages of their lives justify this. QALY's get measured by taking the average life expectancy into account. Thereby it is controversial which life expectancy should be taken, since it differs from country to country. Also, this implies that the same treatment of a life-threatening disease on a child and an elderly person would automatically bring more QALY's to the child.

Another question arises, namely what costs and benefits to include in the cost-effectiveness analysis. Obviously, direct costs for a treatment get included. This counts as well for healthcare professional cost or medical equipment and supply. However, whether to include indirect costs or not is not that easily to be answered. Hence, if costs, such as travel costs or working days lost, are calculated in these analyses depends strongly on the point of view and can therefore lead to ethical issues when it comes to priority setting.

Regarding priority setting one also has to deal with the question what priority should be given to the worst off or sickest. Rawls addressed this topic in his theories, as mentioned earlier in this paper. According to him, inequalities in prioritizing are only appropriate if they benefit those who are worst off. The argument on that account is, that the sickest people have the greatest possible improvement of their health related quality of life and therefore the highest benefit. By prioritizing those who are worst off, it makes sure to avoid an increase of the already existing unjustified disadvantage or inequality those people are confronted with. Whether this is fair or not is seen as contradictory.

Cost-effectiveness analyses usually do not take into account of who gets what benefits. Rather, their focus is on maximizing the benefit without regarding the distribution of health or disease. The choice if small benefits should be given to a large group in society or large benefits should advance few people often falls in favour for small benefits to many. Hereby, consensus is hardly ever reached.

To conclude these matters, cost-effectiveness analyses often trigger conflict between fair chances and best outcomes. Due to economic scarcity, fair chances often have to suffer due to

the fact that the highest benefit should be reached for the least amount of money (Acharya et al., 2003).

## 5 Data and Methods

This paper draws data from a Norwegian Citizen Panel, called “Norsk medborgerpanel”, which is a platform for online-based surveys of Norwegian citizens about their attitudes and changing views of different topics regarding society and politics. Its purpose is simply to find out society’s perception about important topics (Norske Spørrelundersøkelser, 2014). Participants, selected randomly from the Norwegian Population Registry, are encouraged to take part in these panels. The survey ran for the first time in 2013 and is conducted about two times a year. The survey is owned and controlled by the University of Bergen. Data is stored and disseminated by the Norwegian Social Science Data Services (NSD). This national, cross-sectional survey of individuals above the age of 18 collects data to enable analysis about diverse issues. Besides giving indication about socio-economic information, the survey ascertains citizens’ opinions, attitudes and arguments about politics, climate, relations between ethnic groups, immigration, media, security services and health. This study is online accessible for everyone.

The data is collected via an online-based questionnaire. Members are recruited by addressing them with emails, which was carried out in several phases. In the first phase, panel members were sent an email to, containing an invitation to take part in the survey. Hereby, a description of the survey was included together with a confidentiality agreement, contact details of the responsible persons, the link to the survey and the time for completing the survey, which was estimated to be 20 minutes. To encourage people to complete the survey, a travel voucher was given out to those who submitted the full questionnaire. The email invitation was sent out the 10<sup>th</sup> of March 2014, followed by reminders the 13<sup>th</sup>, 17<sup>th</sup> and 20<sup>th</sup> of March to those who have not completed the survey by then.

The first round was addressed to 25 000 people randomly drawn from the Norwegian Population Register. Thereby, everyone born in Norway, both current and former residents are registered. Responsible for this administration is the tax authority, partly outsourced to Evry. The list received from Evry consisted of information about surname, first name, age, sex and address of the participants. The present paper draws information from the second round of the survey. The gross sample composed of 4863 persons, the net sample 3372, what results in a response rate of 69%. To compensate for observed bias two weights have been calculated, which correlate to the ratio of the panel population to the overall population.

The dataset is appropriate for this study purposes since the research question is widely addressed. It was chosen on account of the large number and variety of citizen asked. More

than 25 000 people were selected, whereby it was assured also in the second round of the survey to get a proper diversification of different population groups. Hence, the sex distribution was about 50/50. Further, all age groups above 18 were covered. The age ranged until the age group 75+, whereby there is no indication about how old the eldest participants are. However, the number of people in each age group varies in a way it can depict the current distribution of population.

The sample got divided into 6 regions in Norway – Oslo, Østlandet, Sørlandet, Vestlandet, Trøndelag and Nord-Norge, whereby the percentages of the distributions are 28%, 25%, 5%, 27%, 8% and 7%, respectively. All 19 counties in Norway are displayed with regarding numbers of participants.

Due to the certain selection of people and their weighting according to depict Norway's population, this dataset was used to answer the research question. Since mainly perceptions of the people about different topics were asked, the dataset gives good indication about the hypothesis of this paper. Hence, although in the second round of the panel only 3372 people submitted the questionnaire, this can be seen as a sufficient representation of the whole population. Different people with distinct backgrounds are assumed to have distinct conceptions about issues. Consequently, all relevant perceptions are covered in the “medborgerpanel”. Therefore conclusions for the purpose of this study can be drawn from this survey.

As a secondary data, the dataset furthered the process of this paper a lot, since it covers the main part of the research question. For the researcher, it would have otherwise been difficult to get access to this important information. Due to the fact that this survey covered many topics and as well a large part of the population it depicts an appropriate solution to analyse the given subject.

To find results about the research question *“How do people in Norway value fairness and effectiveness in the healthcare system regarding prioritization of the workforce?”* only variables regarding health and background were used out of the dataset. The others are irrelevant for this aim. 6 variables describe the background of the sample. They are exclusively categorical variables. Hence, people were asked about their own perceived health status. 5 answers were possible, ranging from “excellent” to “bad”, whereby the value 1 was “excellent” and 5 “bad”. The variable age was divided into 7 categories, 18-25, 26-35, 36-45, 46-55, 56-65, 66-75, and 75+. Consequently, those two variables depict additionally ordinal data. “Sex”, “Region”, “County”, and “Education” are solely categorical, whereby the

educational status got reduced from 15 possible answers in round one of this survey to three possible ones in the second phase.

In total, 47 questions about health relating issues were asked. Those can be grouped into different topics, namely:

- Factors that influence the trust in the nearest hospital
- Perception of effectiveness of healthcare
- Experience with healthcare
- Experience with waiting times
- Resource use
- Prioritization
- Prevention
- Access to treatment
- Costs and form of treatment
- Own opinion in decision-making processes

All of these variables are categorical, where most of them is ordinal data. The questions have 6 to 11 answers, mainly ranging from “agree strongly” to “agree not at all”. Each question also included the possibility to choose “no answer”. These values were transformed into missing values, so that they could be excluded from the analysis. Each topic contained several similar questions, each of which was in most of the cases not asked to everyone of the sample. Rather, small groups of a bit more than 300 people were chosen for these sub questions. For example:

- Approximately 258 300 people in the Norwegian healthcare system are in health queues. How effective do you think the Norwegian healthcare system is regarding turnaround times?
- Approximately 258 300 people in the Norwegian healthcare system are waiting for treatment. How effective do you think is the Norwegian healthcare system regarding turnaround times?

Some questions only vary in single words, which is a tool of survey methodology. Thus, it can be depicted whether people get biased through the different wording in the question (Pew Research Center, 2015). The way in which the sample got confronted with these topics was for reason to get an at most honest, uninfluenced and undesignedly answer. The groups of people selected for each question were picked randomly by randomized variables. Due to the several levels of answer possibilities directions in which people’s perceptions go could be

found out. A simple yes or no would have made it impossible to give honest reactions to the questions or statements.

The analysis of the data was conducted using the statistical package StataSE v.14 (StataCorp, College Station, TX).

The analysis focused on the variables drawn from the survey deemed to be relevant to the research question to find out directions of perceptions, compare different questions and present them graphically. Hereby the dataset got analysed based on participants' demographics initially, including their age distribution, sex, education, health status, and place of living. Further, other variables were examined. Based on peoples' answers, a general perception of the population about several issues could be implied. In this stage, an answer to some parts of the hypothesis and research question was already given.

In the second stage of the analysis correlations between variables were investigated. Therefore, independent and dependent variables had to be identified. This analytical part contains finding out impacts of independent variables on dependent ones. This finds whether changing the independent variable has an effect on the dependent one. To answer the research question variables were manipulated in a way to be able to control them accordingly.

To conduct all this analysis the dataset had to be prepared in the first place. Variables that were not relevant for these purposes were dropped. Therefore, a better overview could be enabled. The next step was to rename the variables in order to facilitate working with them. The names chosen are also used for the representation of the results in this paper. Further, due to the fact that for each question only a small part of the total sample was asked, these with value 98 indicated: variables had to be transformed into missing values. Since the other answer possibilities were described with ranges from 1 to 9, they would have changed the results a lot. Graphical depiction was as well not very meaningful. The same was done with those answers where people did not want to express their opinions and therefore marked "no answer". By transforming these answer options with value 97 into missing values they do not account for analysis. In a next step, regression analysis was conducted to find significant correlations between variables. Therefore, more answers to the research question could be found.



## 6 Results

The survey in the present round was sent to 4863 people, whereby the response rate sums up to 69%, which depicts a number of 3372 persons. The panel was answered by an equal part of women as men. The distribution of men and women is 50.03 and 49.97, respectively. In total numbers 1 687 men and 1 685 women completed the survey. Regarding the age distribution of the participants all age groups are covered. Though, every age group contains a different number. However, the sample of each age group can be compared with the current population pyramid and be therefore representative for the whole Norwegian society.

The age groups are divided into intervals, starting at the age of 18. The first group, ranging from 18 to 25, has 337 participants, which depicts about 10% of the sample. Deputizing the second age group, 26 to 35, are 463 people. Further, 36 to 45 year olds were representative 594 times. 21% makes up the age group of 46 to 54 with 704 persons. The biggest representing age group is the one from 56 to 65 with 737 people. 456 times was the sample completed by someone aged 66 to 75. The smallest age group was covered by the 75 and above ones with only 81 submitted questionnaires.

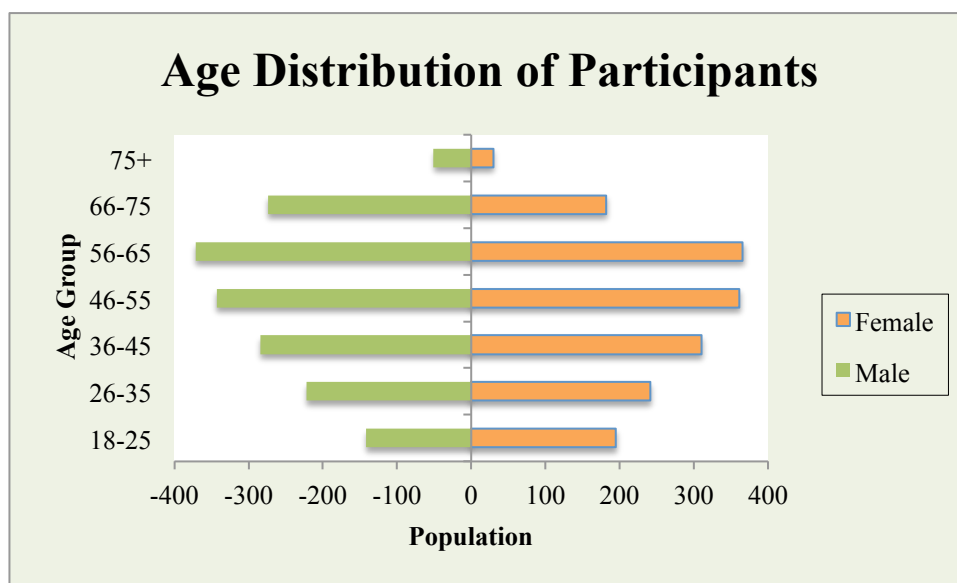


Figure 2: Age Distribution of Participants

As mentioned before, the educational background of people who took part in the survey got combined in the second round. Whereby 15 different answers, containing varied types of schools and universities, were possible in the first phase of the questionnaire, the considered variable in the for this paper relevant round consists of only three options to answer. Either

“no education/basic education”, “secondary school” or “high school/university” were the combined educational backgrounds. 10%, 33% and 57% was the respective part of the people who checked each of the answer possibilities.

The sample is divided into 6 regions – Oslo/Akershus, Østlandet, Sørlandet, Vestlandet, Trøndelag and Nord-Norge. The highest number of participants with about 25% each come from Oslo/Akershus, Østlandet and Vestlandet, the other three regions are represented with 5, 8 and 7%, respectively. The actual relative numbers of these regions are similar to the ones in this study, which makes it therefore representative for the whole Norwegian population.

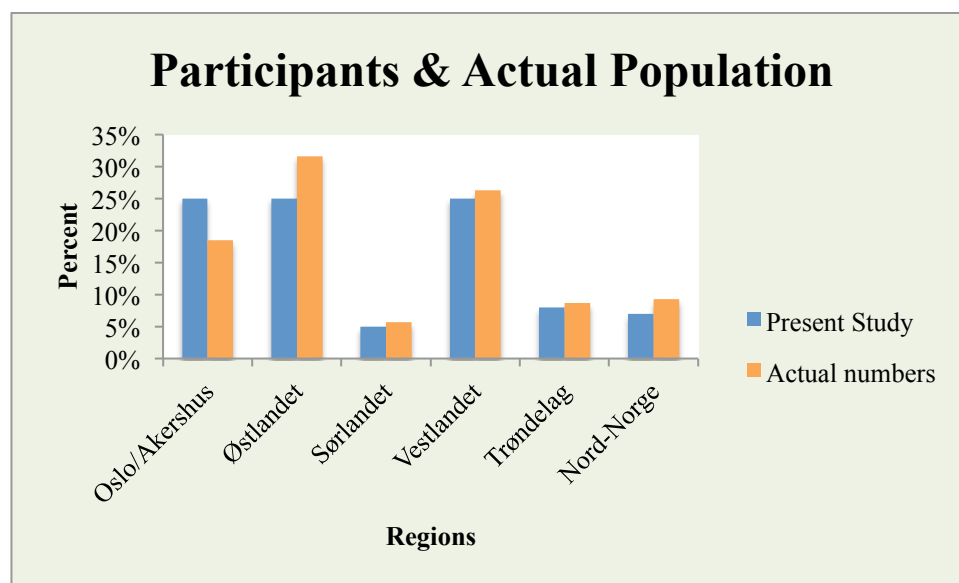


Figure 3: Participants & Actual Population (Wikipedia, 2015)

The sample was asked to roughly assess the own health status. Everyone got this question at the end of the questionnaire, whereby 5 possible answers were at choice, namely “excellent”, “very good”, “good”, “not so good” and “bad”.

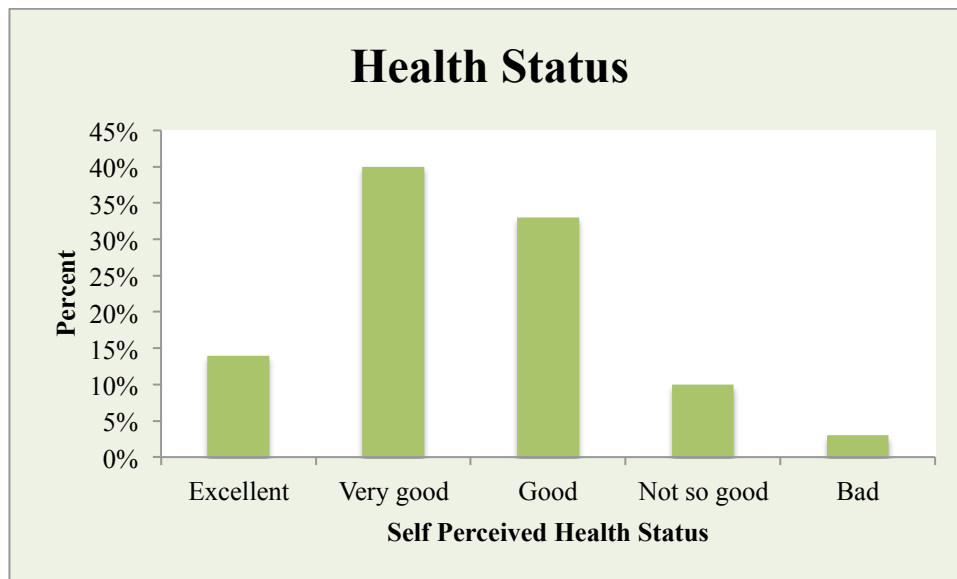


Figure 4: Health Status

Here, one can see that the biggest part of the people taking part in the survey perceive their own health status as very good with about 40%. Still 33% assessed it with good health. Though, only 14% ticked the box saying excellent. 10% and 3% reckon their health status is not so good or bad. This can be interpreted as a very good result, since 87% of the representative population thinks their health is in a good condition. The distribution of scores indicates that the general population is in good or very good health.

When examining the relationship between health status and age, a significant, although weak, association is observed. The sample comprised of 3 301 observations. The health status is dependent, albeit weakly, on the age with a coefficient of 0.12 within a 95% confidence interval between 0.10 and 0.14. Hence, for each level of increase in age group, the average self-reported health status decreases by 0.12 points on a scale ranging from 1 (best) to 5 (worst). Since the values go from 1 to 5, whereby 1 is the best health status and 5 the worst it can be concluded that the older people get the worse their perceived health status. Whereas the mean of 18 to 25 year olds lies at 2.24, it is 2.97 for the ones who are older than 75.

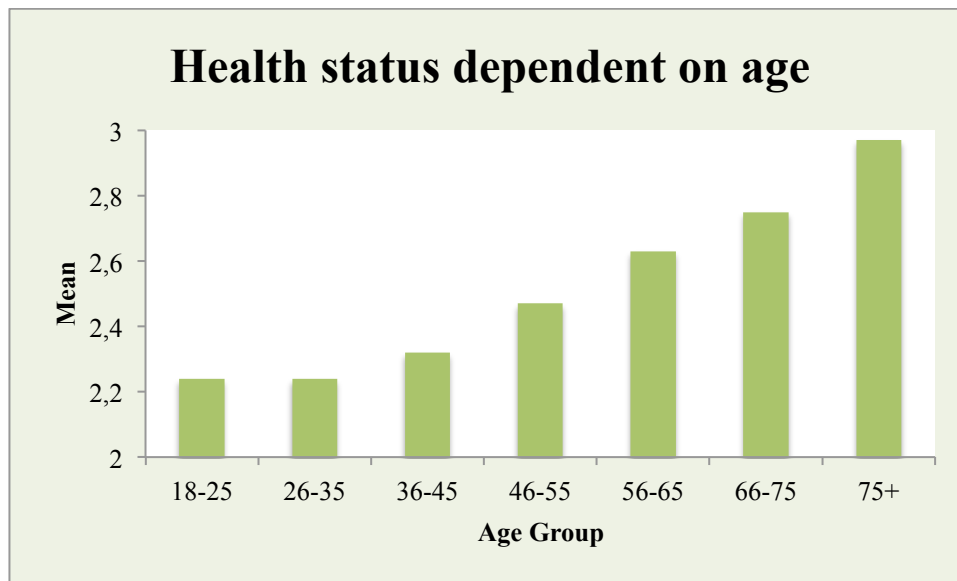


Figure 5: Health status dependent on age

A regression analysis gives further indication about the relationship between the health status and the longest waiting time people had to experience; thus, the health status dependent on the waiting time. However, the coefficients for most of the values are not statistically significant at the 0.05 level. Therefore, the result is not statistically in the association between waiting time and self reported health status.

The survey wanted to evaluate how often the sample received treatment during the last 12 months. Possible answers were “never”, “once”, “2 to 5 times”, and “more than 5 times”. Most of the people, namely about 38%, went to a doctor, hospital or specialist 2 to 5 times. 29% had a visit 1 time, 20% were not in need of any professional help during the last year. Approximately 13% got treatment more than 5 times. Hereby, it has to be noticed that women had a doctor visit more often than men. Women had on average a 0.27 score point higher on this variable.

Three questions in the survey were specifically addressed to the sample’s opinion about effectiveness in the system. The questions were widely similar, however, little differences can be observed.

The first question pointed out that there are 258 300 people in a treatment queue. How effective people think the system is was to be evaluated. 5 possible answers ranged from “very effective” over “effective” to “slightly effective”, “a little effective” and “not effective at all”. 246 people answered this question, whereby the percentages are 1, 13, 35, 43, and 8,

respectively. Hence, the largest part of the sample perceives the healthcare system only as slightly or a little effective. This accumulates to 78% of the asked persons.

The second question had a similar questioning by again stating the fact that there are 258 300 people, hereby, waiting for treatment. The possible answers were the same as in the case before. Since the posing of the question was so similar to the first question, the results obviously differ only slightly. In per cent, 2, 9, 33, 45, and 10 were the respective outcomes. Also here, a strong trend towards slightly and little effective can be found out according to people's perception.

The third question hereby left out the fact about people waiting for treatment and rather just asked how effective one thinks the healthcare system is. Answers ranged again from "very effective" to "not effective at all", whereby the outcomes in per cent were as follows: 1, 19, 42, 32, and 6, respectively.

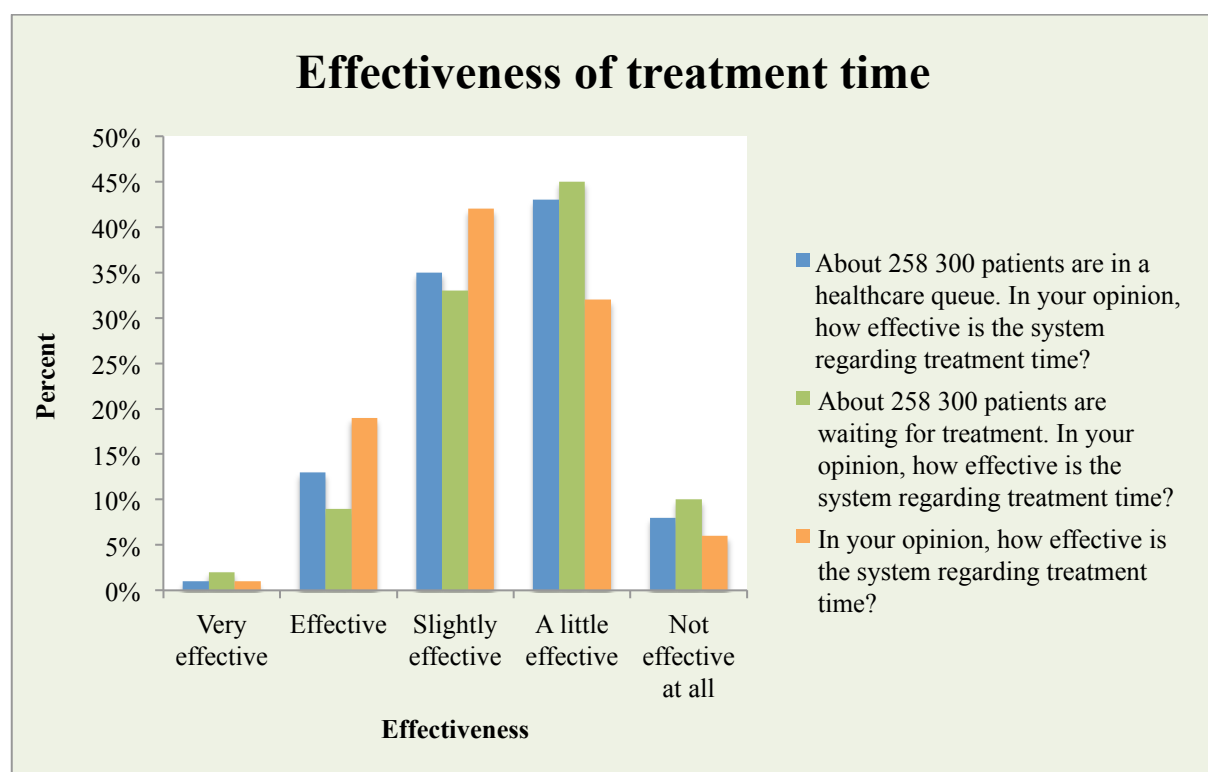


Figure 6: Effectiveness of treatment time

The results in this question differ to the other two in a sense that the values go down. This can be best expressed by the means of the three questions. 3.4 and 3.5 in the first two questions, compared to 3.2 in the third gives indication about people who answered the third question perceive the healthcare system a bit more effective than the others. This might be a

consequence of the left out fact in the third question about the number of people waiting for treatment, which gives reason to bias peoples' views. By combining the three questions, a result for the common perception towards effectiveness in the healthcare system is given.

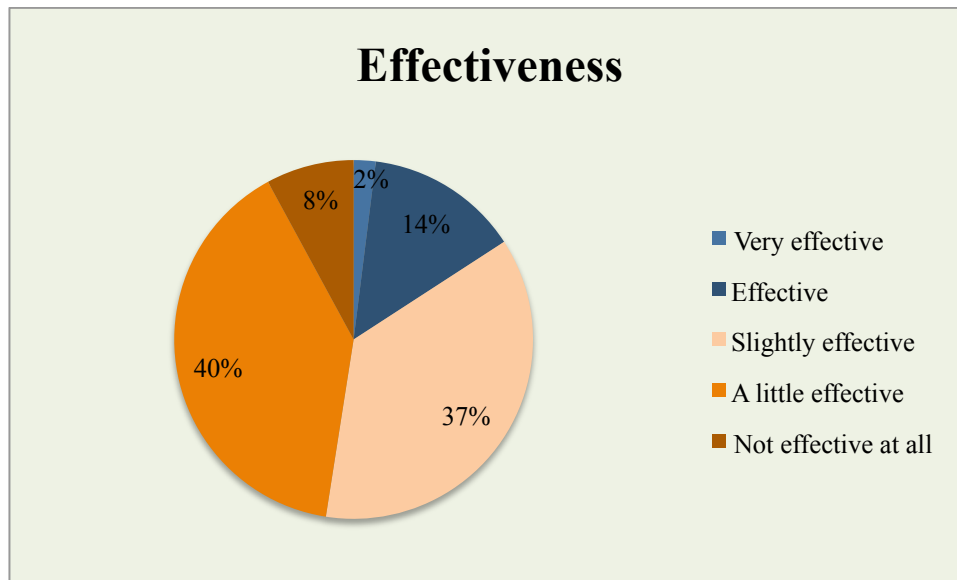


Figure 7: Effectiveness

Hereby, 40% of the people perceive the healthcare system as little effective and 37% as slightly effective. 8% do even think it is not effective at all. Only 16% checked the boxes that indicate a very effective or effective system. Significantly more than half of the people asked perceive the healthcare system in Norway as not very efficient. Since it represents the population's perception, this result is to be interpreted in different ways.

In the following graph one can see the distribution of the longest waiting times people were confronted with. There was no time frame given, so answers are given about the longest waiting time people remember. 630 people answered this question. Thereby, 1 to 5 months is the main time the sample stated. However, also 20% of the people asked said they didn't have to wait at all for their past treatments. The average waiting time hence lies between 1-3 weeks and 1-2 months. This question gives no indication about what kind of treatments people had to wait for.

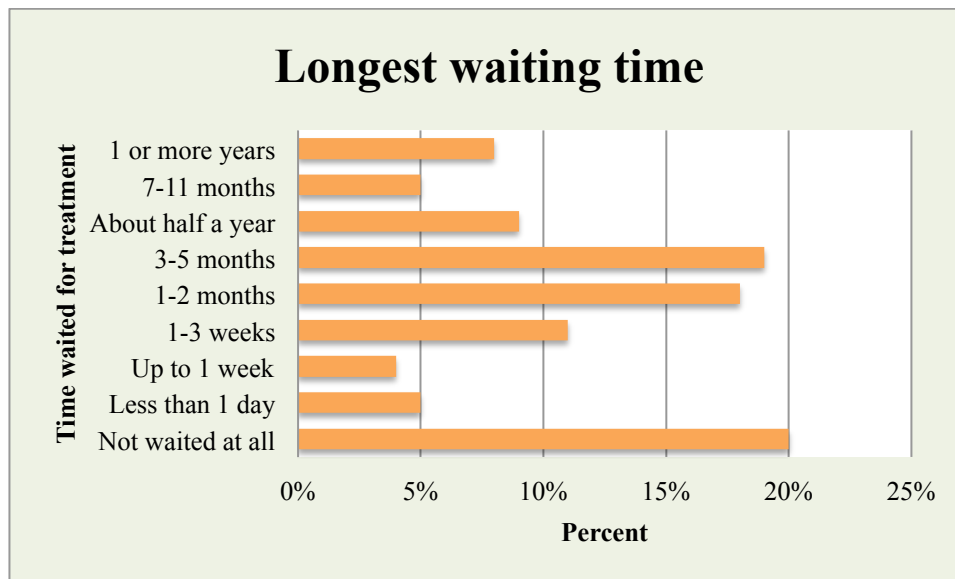


Figure 8: Longest waiting time

If regarding the question whether resources spent on health in Norway are sufficient to ensure all necessary treatments, investigations and preventive measures, about half of the people who took part in the survey agreed, while the other half disagreed. A little part answered with neither agreement nor disagreement.

“If health services should offer all health measures that are useful, will this therefore lead to a loss of resources in other sectors such as education, police or transport.” About 35% agree on this statement, whereas 49% disagree. This means approximately half of the sample thinks that more resources spent on healthcare does not necessarily lead to a lack of those in other fields.

The question whether it makes sense to take costs into account when choosing treatments to give patients, who would otherwise not be treated, the chance to get an intervention, makes sense for about 60% of the people asked in the survey. Only 23% disagree on that assertion.

1622 people, whereby it concerns the same persons for each of the questions, answered each of those three questions.

In the present dataset 6 variables are about prioritization, whereby questions were asked so that a comparison between them gives good indication about people’s preferences.

The first three of these addressed variables want to find out whether people agree that those patients with the worst disease get prioritized over someone else in a waiting list for a knee surgery, which helps everyone the same. Whereby in the first variable someone else is a random other person who has to wait longer; in the second one a close person; and in the

third one it is the person answering the question him/herself. Possible answers in these examples are “strongly agree”, “agree”, “somehow agree”, “neither agree nor disagree”, “somehow disagree”, “disagree”, and “strongly disagree”. Regarding all three variables more than 80% agree on the statements.

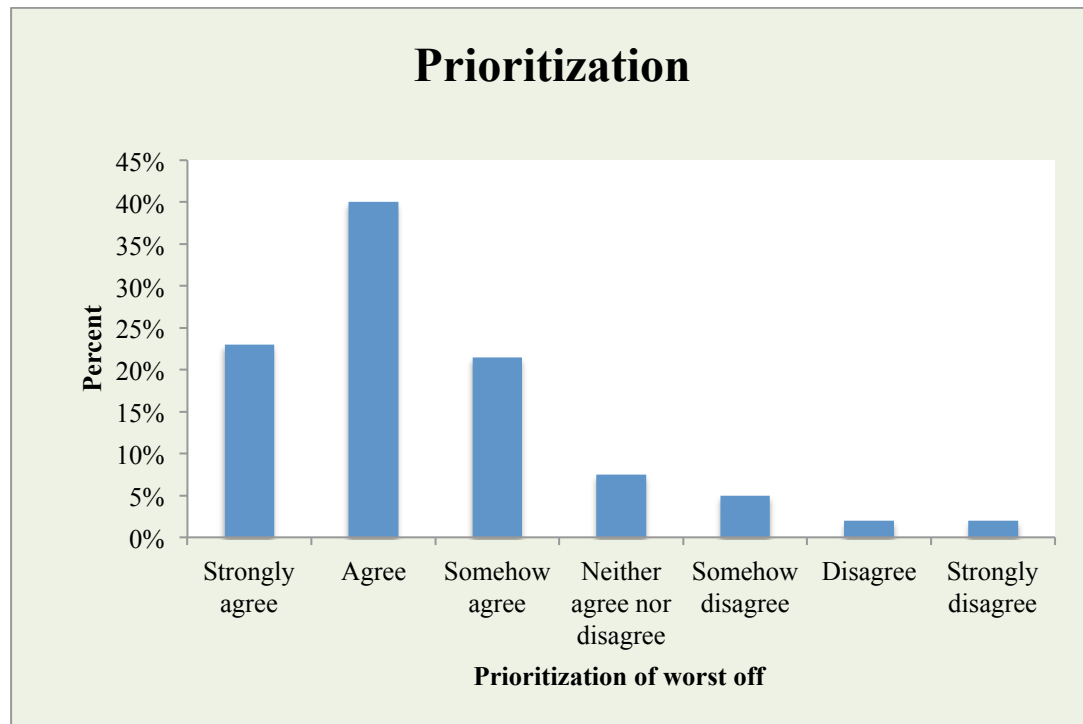


Figure 9: Prioritization

Incidental, people consider it as fair that those in a worse condition as someone else, even if it is they themselves, get prioritized in a waiting list. What is significant hereby is that for the first variable (a random person has to wait longer) women do agree more on the prioritization of the worst off than men. The coefficient is 0.56.

The second question in this regard asks whether people agree or disagree that patients with the most benefit of knee surgery should be prioritized in the healthcare queue. Everyone is in the same condition before the surgery. Benefit hence relates to the most quality of life, most quality adjusted life years or suchlike, which are gained after the surgery. In the first variable a random other person has to wait longer therefore, in the second one a close person and in the third one they themselves. 52%, 58%, and 62%, respectively, agree in these examples. These numbers lead to the interpretation that people do agree more to prioritization of the ones with the highest benefit if they themselves have to wait longer, than if someone else has



to wait more for a certain treatment. This gives indication about people putting others first. They give others more relative importance than themselves.

In general though, the agreement is not as high as in the variables before, what leads to the assumption that people value the health state before a treatment more than the benefits achieved after a surgery.

When it comes to allocation of resources, the question was asked whether the government should spend more resources on disease prevention than it currently does. Again, 7 answers were possible to check, ranging from “strongly agree” to “strongly disagree”. Out of 815 people asked about 60% agree to some degree with this statement. Only about 22% disagree.

The second question hereby, whether more money than now should be spent on prevention in case many more lives could be saved, even more people agree. About 69% out of 795 persons think this is reasonable. Only approximately 15% disagree.

Although it is basically the same question, the fact stated in the second question that more lives could be saved seem to make people more aware of the importance of prevention.

People with higher education see the importance of prevention rather than others. This can be ascertained by regressing the education variable with the one that states to use more resources for prevention, whereby the allocation variable is dependent on the educational status. For a one unit increase in education there is a 0.30 decrease in the allocation variable. Since hereby the value 1 depicts the highest agreement and 7 highest disagreement, a decrease in the value can be equated with a stronger agreement for more resources allocated for prevention matters, even if therefore resources for treatments of diseases get lost.

A clear correlation can be seen between two variables, which are concerned with the resources used for healthcare. The first one claims that there are sufficient resources used for healthcare in Norway to fulfil all relevant and necessary treatments. The second one states that more resources spent on healthcare would lead to a lack of these in other sectors. A regression analysis shows that the first variable is significantly dependent on the second one, with a coefficient of 0.40 and a 95% confidence interval between 0.35 and 0.45. Hence, for every unit increase in the independent variable, a 0.40 higher number of the dependent variable is predicted, holding all other variables constant. Hence, persons who figure more resources should be allocated to health do also not see a problem in them being taken away from other fields, such as police or education.

A significant relation can also be depicted between the variable, which says that more resources spent on health will not cause a lack of resources in other parts, and the other variable regarding resource use. This one states that it is reasonable to take costs into account when choosing treatments, so other people, who would otherwise not, are able to get treatment as well. The correlation evinces the dependence of the latter variable on the former. Namely, with every unit increase of the former one, the value of the latter variable raises by 0.39. Thereof, people who disagreed on the first variable have a higher chance to also disagree on the second. If people say more resources allocated on health have no impact on other sectors, they also disagree more on the statement that costs should be taken into account when choosing treatments. Consequently, people do not think costs regarded in order to ensure more necessary treatments is the solution, rather allocating more resources on healthcare.

There is a weak but significant correlation between the variable that states costs should be taken into account when choosing treatments and more money should be spent on prevention of diseases, although this will therefore lack in the treatment of diseases. The result shows that those who agree on the former one do also higher agree on the latter variable. A unit increase in the second variable of this example gives a 0.26 increase in the first one, which shows the dependency of the first on the second variable. The more a person wants to take costs of treatments into account the more this person thinks that spending more resources on prevention is a good thing to do. Both variables focus on the effectiveness aspect. Regarding costs of treatments to get the most benefit for the most people out of the money available will eventually make the system more efficient. Further, by emphasizing prevention of diseases, resources can be saved in the long run.

The access to treatment is evaluated in three different questions, which are quite similar. The first question asks whether patients should get faster access to treatment in case they are in jeopardy to otherwise get excluded from work. The result hereby gives a very clear indication about societies' opinion. Possible answers were "strongly agree", "agree", "slightly agree", "neither agree nor disagree", "slightly disagree", "disagree", and "strongly disagree". About 38% of the sample answered this question with strongly agree, another 40% with agree and 16% with slightly agree, which sums up to approximately 94% agreeing on it. Only 2.5 % disagree. No significant difference in the answers between men and women could be found.

Further, it is seen that people between the age of 36 and 65 do agree the strongest. In the other age groups the emphasis is set on agreement as well, though, not as clear and strong. This statement represents the main part of the research question.

The second question tries to find out what societies' perception is towards a faster access to treatment in case the sick person constitutes a big burden for the relatives. The same possible answers existed as in the first question. Less people namely about 77%, agreed on it. However, compared to about 10% who voted against this statement, this is still the main part of the sample, which accepted a prioritization of people who would otherwise be a strain to their families. Hereby, it is also significant that many more men than women agree on this statement. Whilst 160 men do strongly agree, only 110 women do so. Whereas 18 men do not agree, 38 women are in the same category. Additionally, when comparing the age groups it can be seen that the older people get the more do they agree on this scheme. Whereas the emphasis lies on "slightly agree/ agree" in the age groups from 18 to 65, this moves up to "agree/ strongly agree" in the age groups above 66.

Thirdly, people were asked the same question about their opinion of a faster access to treatment, this time in case one has small children at home to care for. Hereby, 56% agreed against 23% who did not agree. Men do more agree than women.

625 people negated the question whether one has ever not received a treatment on account of lacking resources, which accounts to about 87% of the sample, whereas only 97 affirmed this issue. As mentioned before, a large part of the sample thinks the healthcare system is not very efficient. Though, most of the people have no problems with getting the right and best treatment.

The percentage of people who got late treatment because of limited resources is higher than those who did not get treatment at all. About 31% of the ones asked stated they have had to wait for treatment longer than what would have been best for them on account of missing resources. If this is seen in coherence with the experienced waiting times, it is to be assumed that this leads to the high number of people having to wait more than one month for their treatment.

# 7 Discussion

## 7.1 Study Objective

Limited resources in healthcare make decisions about the appropriate allocation of them inevitable. Decision and policy makers are concerned with finding proper solutions of where to spend what amount of money, human capacity and time. Prioritization and rationing have become widespread issues. The endless urge of society to want more triggers a complex matter that has to be solved somehow. Thereby, equal access to healthcare treatments, as well as a maximization of benefits is supposed to be reached. In Norway, recent reforms have tried to aim these objectives, however, besides their emphasis on the cost-effectiveness criteria, they should target at distributing the resources available in a fair way. Several policies about priority setting have existed for several years already, whereby the Faster Return to Work Scheme is one. Due to a very high number of days absent from work on account of sickness, Norway tries to reduce these numbers with the scheme. Hospital resources exclusively aimed for people on sick leave try to lower the waiting times for employees. Hence, this idea is mainly based on the efficient allocation of resources. People will be able to go back to work faster, what decreases the productivity loss. However, whilst already several studies exist regarding the cost-effectiveness criteria of the Faster Return to Work Scheme, the fairness aspect is broadly left out. Consequently, this paper tries to find out *how people in Norway value fairness and effectiveness in the healthcare system regarding prioritization of the workforce*. Taking the Faster Return to Work scheme as an example, it is to be found out whether the society perceives such prioritization processes as fair or rather unfair. In general, what the perception towards effectiveness in the system is constitutes another part of the study. Based on a survey, which was conducted in 2014, opinions about certain issues could be collected, on which the paper is grounded. The study hypothesises that people value fairness highest and therefore are repellent towards this approach of prioritizing the workforce. Hence, whether this hypothesis is rejected was found out within the result section and will further be elaborated in the following part.

## 7.2 Main findings

Only 13% of the Norwegian population in this sample state their health status as bad or very bad. Hence, the majority perceives their own body in a good, very good or excellent health. Norway is a country with one of the highest total health expenditures within the OECD

countries. After the US and Switzerland Norway spends the most US dollars per capita on health. If regarding the GDP, Norway lies with 8.9% right at the OECD average (OECD, 2013). By looking at the life expectancy, Norway faces after Japan, Iceland, and Switzerland the highest with 81.8 years on average for men and women (OECD, 2013). Also, Norway has with 4.3 doctors per 1000 inhabitants one of the highest physician densities among OECD countries. Only Greece, Austria and Russia do have more (OECD, 2013). What is as well remarkable, Norway has a very high number of available nurses. 16.7 nurses per 1000 inhabitants could be counted in 2013 (OECD, 2013).

These numbers are in line with the outcome of the question asked within the considered study. High health expenditures, a high number of healthcare workers and a good quality of life lead among other factors to a very good perception of ones own health status. People have the opportunity to see a doctor in case of sickness, get proper treatment, have universal coverage, a low level of co-payment, and as well have a good education about preventative measures. All this leads to a healthcare system, which supports society in an appropriate way and therefore ensures good health for everyone.

Overall the healthcare system in Norway is well distinct with a universal coverage and an easy access for everyone. However, there is still a lot of way for improvement. According to the population's perception the healthcare system in Norway is not very effective. A big part of society thinks the resources in health are not used appropriately and do not achieve the best possible outcomes.

This is in line with a study that was recently published by the Norwegian Knowledge Centre for the Health Services in 2013. The overall effectiveness of a healthcare system is hard to measure. Hereby though, the perceived effectiveness reveals a clear lack of effectiveness in the Norwegian system. In Norway, both central and lower level actors decide on where limited resources go to. Needs of the population and level of activities determine the amount. Over the past few years an increase of resource need in several fields was observed. Psychiatric care, drug abuse, or ambulatory care are examples therefore. The National Council for Priority Setting is an important player when it comes to allocative effectiveness. Recent studies about cost-effectiveness comparisons found out that healthcare services in Norway are way less efficient than other sectors like for example kindergarden services (Lindahl et al., 2013).

However, the user perception of effectiveness stays open for discussion. The ability of society to see the big picture might sometimes be missing. The perception of the population regarding effectiveness gives no validity on how the healthcare system actually performs.

The result of this study shows that the population is not satisfied with the effectiveness of healthcare in Norway. Perceptions get formed out of experiences, which means that most of the people who think the system is not efficient enough, have been confronted with bad experiences.

Primary Care Physicians in Norway are characterized by a high performance and are the major players within healthcare. General practitioners function as gatekeepers in the Norwegian healthcare system. The majority of them have a private contract on the municipality level, which is responsible for primary care. 30% per capita of general practitioners' salary comes from the municipalities, while the remainder sums up through patients' co-payments and reimbursements by the Norwegian Labour and Welfare Service. 99% of Norwegian society is registered in a system that gives them the right to choose their GP. 1200 to 1500 patients is the typical number on each GP list (Landmark, Romøren and Torjesen, 2011).

Due to the tax-financed public provision of healthcare services the population pays a lot of money on taxes, whereby it might often be unclear of what the money is used for. In this case, a clear lack of transparency triggers the perceived ineffectiveness. Additionally, long waiting times can depict a reason for dissatisfaction. Especially in hospitals, long waiting lists for admissions are not rare. Already in 1998 waiting lists depicted a major issue in the healthcare system (Hagen, Iversen and Van den Noord, 1998).

In this present study waiting times are examined. Although it is unclear from this study of how these waiting times come into existence, assumptions can be made. This well organized system of primary care gives indication about the result of this paper. People who stated they did not have to wait at all for their treatment are most probably those who were in need of primary care.

However, in the second four- month period of 2010 a study found out that the average waiting time for elective surgery in Norway summed up to 75 days, which is way higher than in several other EU countries (Borowitz et al., 2013). National health authorities in Norway are responsible for the hospital sector, which are in further consequence in charge of specialist care. Since 2002, the 19 counties in Norway are not anymore owners of public hospitals. Rather, 5 and respectively 4 later, Regional Health Enterprises were introduced by

the government. Hence, local and national level split the Norwegian healthcare sector into two separate administrations. Several reforms in each of the levels might have helped to increase the quality within the systems, however, mediating structure is still missing. Within recent years the two sectors emphasized on improving the weakness of their interaction, collaboration and relation. Therefore, a new plan, called the “Coordination Reform”, was introduced in 2009. In line with the WHO’s aims to strengthen integrated care, this reform appeals to restructure parts of the system to lower the demand for hospital services. As a result more patients could be treated in primary healthcare and as well discharges from acute hospitals could be earlier, so that consequently hospital-waiting times would be decreased. This economically oriented approach suggests incentives to make this new reform work. Pre-hospital low threshold wards in primary healthcare are funded as well as co-payments from primary to hospital care, which is limited to 20% of hospital costs for patients in need of treatment, is agreed upon (Landmark, Romøren and Torjesen, 2011).

The timeframe of 75 days of waiting for a surgery can be seen in the graph about waiting times in this study. Hence, it is to be assumed that these stem from waiting lists for elective surgery. With the Coordination Reform in place, waiting times in general could be decreased. It can be argued that the capacity available at the primary healthcare might be enough for carrying some burden of the hospitals to lower their pressure. Like this, a general improvement of effectiveness can be achieved.

The survey from this paper at hand gives indication about whether sufficient resources are spent on healthcare services to ensure all necessary treatments. The perception of the sample says in about half of the observations that this is not the case. Another question asked whether more resources allocated to healthcare would lead to a loss in other sectors. Again, half of the people disagree. Also, the majority answered that costs should be taken into account when choosing treatments. All these perceptions show how important healthcare for the Norwegian population is.

“Cost-effectiveness analysis identifies how resources should be allocated across health interventions so as to maximize health benefits within a given budget, or relative to a threshold level of societal willingness to pay” (Drummond et al., 2005). This approach often only focuses on the absolute size of the health gain, however, neglects the concern about how these resources are allocated amongst the population. Together with equity analysis this might lead to differences in health policies. Therefore, the WHO recently developed a Guidance for Priority Setting in Health Care, which emphasizes the equity criteria

additionally to the cost-effectiveness analysis and gives decision makers further support to make choices (Baltussen et al., 2014).

Cost-effectiveness and equity analysis are important tools to ensure an efficient use of the resources available. In Norway, there has been considerably much done in this regard. Though, the population perceives the system could be improved further with the high amount of money available. Not only should this target a proper allocation respecting financial terms, rather social values need to be included.

Also, the willingness to move resources from one sector in healthcare to another, or to rather say reallocate these definitely exists in Norway. Spend more resources on specialist care or the use of health technology assessments are examples. Hereby, the National Council for Priority Setting contributes to a positive development (Lindahl et al., 2013).

Although Norway is a country with a GDP right at the OECD average (OECD, 2013), society believes there should be more resources spent on health. Due to the fact that the majority thinks these would not be lost in other sectors gives information about a lack of effectiveness within healthcare and other sectors. It might not be about spending more money on healthcare, rather about the right allocation and application of the already existing ones. As mentioned above, priority setting is a widespread tool in Norway concerning the proper allocation of resources. Health maximization is aimed at being reached what influences choices of decision makers.

Social values of society were to be found out in the present survey. What is important for society within prioritization processes was examined in 6 questions. The outcome hereby shows a clear tendency within the Norwegian population. The first result is that people value to give others in a worse condition the priority. This means that if for instance two people are waiting for a knee surgery, the one with a worse knee injury gets access to a surgery first. This applies no matter if therefore a relative of the asked person, a very close person or the person him/herself has to wait longer.

Hereby, association with Rawls' Theory of Justice can be seen. As mentioned earlier in this paper, he draws on the principle of egalitarianism, whereby a maximization of total health is feasible, as long as the worst-off in a society benefits. This statement is very much reflected in the perception of Norwegians. Through a prioritization of the worst-off, total health within a society can increase.

Whether the Norwegian attitude stems from the knowledge about that or rather from a high level of loyalty within the population stays open for interpretation.



The second outcome regarding prioritization processes is that it is fairer to rank people according to their health state before a treatment rather than who benefits most after the surgery. This is true because it is the person him/herself who has to wait longer therefore, a close relative, or someone else.

Hence, it can be said that the overall welfare enhancement is more important to the population than the individual. They strive to prioritize the ones worse off, what further improves their health status and consequently increases overall welfare of society. Since the individual is not as important as the welfare of the society according to the perception of the population in the survey, a policy focusing on the cost-effectiveness criteria encounters probably wide acceptance within this society. To maximize the health of the people in this country rather than focusing on the individual is in the foreground.

The results part shows that almost the whole sample agreed on the statement that people in jeopardy of otherwise losing work should get prioritized in the treatment chain.

Norway's labour market is distinguished with a high employment rate much higher than the OECD mean. However, statistics depict that the long-term unemployment rate has increased over the years (OECD, 2015).

Nevertheless, or rather because of that reason, Norwegian society accepts prioritization processes of the workforce. It can be interpreted according to this result that people perceive it as fair if persons get faster access to treatment in order to get back to work without losing too much time spent in sickness absence. Also, the fact that certain age groups agree slightly stronger than others gives indication about the result. People from 36 to 65 can be assumed to be representative for the workforce, which value a faster return to work higher than young people or retired ones. This gives a clear indication about the mentality in Norway. Work is seen as an essential part of life. With regard to the research question an answer can therefore be stated. The hypothesis saying that people consider it as unfair to prioritize the workforce over others on waiting lists can hence be rejected. The Faster Return to Work Scheme, which allocates exclusive resources to people on sickness absence, finds according to the result of this paper widespread approval. Although this scheme mainly aims at emphasizing the cost-effectiveness of the system by leaving out the fairness aspect, society yet affirms. It can be interpreted so that people in Norway focus a lot on effectiveness. If employees can return to work faster after sickness less human capital is lost as well as costs for the employer or government for sickness absence reduced. Since the Faster Return to Work Scheme allocates

more resources to participation hospitals instead of just reallocating the existent ones this prioritization tool is widely recognized.

The study depicts a clear result, which shows people with higher educational status valuing prevention higher.

Especially for the nowadays more frequent occurring chronic diseases preventative measures are able to lower risk factors a lot (WHO, 2016). However, the awareness of how important preventative methods can be perishes often. “The higher a group is on a social ladder, the better the health, by statistical measures” (Den norske legeforening, 2011). This policy document gives indication about how important preventive matters are. Good living condition is amongst others a crucial factor to ensure a good health status. The daily life in which one is living has a great influence on the health over a lifetime. Besides professional knowledge by doctors, individual awareness about one’s own living conditions is relevant. Vaccination and screening programmes, as well as strategies to reduce tobacco or alcohol consumption for instance can only work in a collaboration of physicians’ knowledge together with the individual acceptance of the importance of preventive measures. People are used to frequent a doctor in case they are sick. However, although it might seem unnatural to spend resources on the prevention of diseases promoting healthy lives, reducing risks and raising awareness are the most cost-effective objectives to lower the burden of several diseases (WHO, 2016).

Similarly is an overall agreement to the statement existent if people in waiting lists depict a burden for their relatives. So, if the affected person is unable to manage daily tasks on his or her own, relatives have to look after them. In this case the majority of the sample agrees again, to prioritize these people over others in the waiting list, whereby men accept this statement stronger than women.

To interpret this, women might not see their relatives as much of a burden as men do. Consequently, either women are not as repellent when it comes to care for their closest, such as family members or friends, or it is usually men who are in charge of caring for their relatives, which leaves women more unconcerned with this topic. Also, the older the people get the stronger they are in favour of this assertion. Thus, since elderly people are probably more concerned with this question, or rather are afraid of being in this situation themselves, they do agree stronger to a faster access to treatment so that no burden for the relatives exists.

Hereby it can be seen once more that the overall welfare is important for Norwegians. Regarding this, they tend to put others who are worse off than them first.

## **7.3 Limitations**

One limitation faced in this study is certainly the degree of representativeness of the sample. Although the first round of this survey composed of 25 000 people, the second and relevant round had 3372 respondents. 3372 observations are not much compared to a 5.62 million (Statista, 2016) population. For future purposes this number is supposed to be increased. However, due to the fact that people were randomly chosen from a population registry and also demographics adapted to represent the whole population it was for example made sure that there are as many women and men deputized, as well as the regions are relatively represented. Though, a potential source of bias might be present, since some important groups, for instance with lower socioeconomic status, are not included.

Further, people were invited to take in the survey via email. This might have caused possible influence on different age groups. Since elderly people are generally less proficient in using computers, a big part of them could probably not be approached appropriately. Other methods to take the attention of different age groups are supposed to be considered. This issue should be taken into account for future reference.

Another issue faced during the analysis lead to a restriction within the statistical tests. Although 47 variables were part of the test, finding out relations between them turned out to be difficult. Since the survey covered other sectors additional to health related issues, to ask every person in the sample every single of the more than 400 questions would exceed the scope of such an inquiry. Therefore, by using randomize variables people were divided into subgroups, which means that many questions were only provided to a subgroup of respondents. Hence, two variables might have been answered by a group of completely different people by what no observations could be found. For future research it will be useful to break down the survey exclusively to the health variables and thus ask every person in the sample every question.

The secondary data used for this study was appropriate for this purpose since the questions from the survey are close to what was to be ascertained. Hence, similarities between the research question and those from the survey had to be found in order to be able to get results. The questions from the survey aimed at asking people about their perceptions in different fields, which could definitely be assigned to the relevant questions in this study.

Perceptions might not always reflect the actual situation. They are built on experiences and emotions rather than research and facts. These attitudes could have been influenced by several factors, which biased the answering of people. Though, this study emphasized to get to know societies' opinions and feelings. Therefore, these attitudes were found out. When reading the results though one should keep in mind that they reflect societies' reaction to several issues, which in further consequence builds their perceptions, rather than facts. Additionally, several regression analyses could not give any significant results. This might stem from an insufficient sample size, which should be increased for future research.

## 8 Recommendations

The results of this paper clearly depict that Norwegian society accepts prioritization processes almost fully and as well supports cost-effectiveness tools widely. Fairness stems from seeing something as intuitively right, acceptable or just. It is therefore based on peoples' perceptions and attitudes. Since the major part of Norwegians do accept this prioritization scheme, it can be declared as fair. Thus, for future policy making in the Norwegian healthcare system it is to suggest that the Faster Return to Work Scheme should be further improved based on the efficiency aspect, however, is widely accepted by the population.

Also, the FRW scheme can be beneficial for people to see the importance of returning to work as fast as possible. Hereby, physicians are under the influence of legal reason when it comes to sick leave certificate negotiations. GPs act as decision makers by either issue the certificate or not, whereby the subjective health complaints of patients are mostly hard to diagnose. In these cases GPs act as entrepreneurs deemed to make business, which makes it difficult to reject patients and therefore lose their trust. Hence, GPs are not supposed to be decision makers in this regard. Rather, specific strategies are supposed to be learned and applied by them to secure avoidance of patients using the system. It is the task of physicians to enlighten people about the importance of returning to work as fast as possible by pointing out the positive effects thereof, warning against long-term sickness absence and showing them alternative options to sick leave (Maeland et al., 2015).

By combining cost-effectiveness analysis with decisions that are also based on human values an appropriate allocation of resources can be ensured. However, since the Norwegian mentality focuses a lot on how to get the most out of the scarce resources available, basing decisions primarily on the efficiency aspect is a widespread accepted approach. According to this study, the individual is not in the foreground, instead emphasising the population on improving the system for the whole society. This gives indication about the further processing of future policies, which should mainly be based on increasing the benefits for a big part of the population rather than for certain people.

Apparently, people in Norway are not satisfied with the use of resources. For future reference it is important to develop policies that benefit society most with the resources available. Further it is crucial to include people in such decision-making processes. By finding out their views and opinions a lot can be done. This study is an example therefore. Also, informing the population about decisions and hence improve transparency will most certainly contribute to a better understanding and therefore a wider acceptance of the system.

## 9 Conclusion

Prioritization processes have been mainly focusing on the cost-effectiveness aspect within recent years. Studies depict the Faster Return to Work Scheme, which is based on a human capital oriented approach to lower the number of working days lost due to sickness, definitely contributes to a more efficient system since it is shown that people waiting for surgical treatment are able to go back to their job on average 14 days sooner.

Based on a survey in 2014 the perceptions of Norway's society about topics concerning healthcare could be found out. According to the population's opinion there is a clear lack of effectiveness within the system. Concerning the effectiveness of treatment times about 80% of the people think it is not effective. Looking at the longest waiting times those asked were confronted with, it can be seen that these are way too long in many cases, whereby this concerns assumable elective surgical treatments. Hence, allocating more resources to sectors so that waiting times can be reduced seems like a good approach in improving the system. Hereby, the Faster Return to Work Scheme is one of these strategies. By further ascertaining peoples' perceptions about prioritization processes, it was clearly depicted in the results of this paper that the Norwegian society, regardless of age, sex or background, focuses a lot on the efficiency aspect in healthcare. Healthcare in general has a very high value for them, whereby the benefit for the whole society is in the foreground. Prioritizing those who are worst off is seen as a fair approach in improving the country's healthcare. People were also asked about their opinions towards a prioritization of the workforce. The result depicts a clear agreement on this tool. Obviously, work has a high importance within this country, which makes people affirmative regarding such prioritization processes. Hence, the Faster Return to Work Scheme in Norway is widely accepted. Within a mentality that focuses a lot on the effectiveness aspect and as well highly values work like Norway does, an approach to prioritize people in a healthcare queue who are otherwise absent from work for a long period is certainly seen as fair as long as the effectiveness within the country gets improved.

To conclude this, the study shows that concerns about fairness regarding the Faster Return to Work Scheme are unnecessary. Norwegian society clearly understands the concept of cost-effectiveness analysis and acts accordingly when it comes to prioritization processes. Hence, the hypothesis of this paper, which suggested that there is a clear lack of fairness within this system and thus not accepted by society, is to be rejected.

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