Chapter 4

Promoting equity in health and health care in Denmark

Whilst health equity is a stated priority of the Danish health care system and the current Danish government, until recently there have been few policies or interventions designed to safeguard equity, or to address inequity. There are indications that health inequalities in Denmark are rising, and although gaps in data make it difficult to get a full picture across all areas, evidence suggests that there are disparities in health status, access to health care and health outcomes.

This chapter examines Denmark's need to build upon the principle of equity that is a cornerstone of the Health Act, and work across all levels of government to put in place appropriate policies that promote equity across the health care system. The chapter suggests that policies that prevent structural inequalities should accompany existing initiatives targeting health risks, and that close examination should be given to possible barriers to equitable access to services. Efforts to promote equity in health and health care will be most successful with a comprehensive data infrastructure, and recommendations about strengthening areas of data weakness are made.

Changes and improvements in policies around quality of care, the primary care system, and the hospital system all have the potential to impact upon equity, and the analysis and recommendations made in this chapter are closely tied to those of the three preceding chapters.

4.1. Introduction

Equity in health is a key priority of the Danish health system, and this chapter offers an analysis of the current levels of health equity in Denmark, and of policies, initiatives and elements of the health system design that contribute to or mitigate against inequity, as well as a number of recommendations for how Denmark can ensure that currently levels of equity are maintained and built upon further.

The chapter begins by examining the Danish context, and acknowledging that Denmark's longstanding commitment to equity – as a building principle of the health care system – has largely led to good and equitable health care for the whole Danish population. However, it is also apparent that there are some clear inequities in health status and health outcome across the Danish population, which Denmark has perhaps not historically done enough to directly address, and which are in some cases rising. The current Danish government, and the Danish Minister for Health, have stressed that health equity is a priority. In order to address health inequities Denmark would benefit greatly from a better data infrastructure in order to monitor these inequities, and this recommendation is detailed in Section 4.3 of this chapter.

Although some analysis is limited by a lack of data, evidence suggests that there are inequities in Denmark around health risk factors and access to services. Sections 4.4 and 4.5 address these two areas, recommending that Denmark looks to introduce a more comprehensive set of preventative health policies, and also that ensuring equitable access to services be an explicit policy goal, especially in the context of the current reforms to the Danish hospital system. There is a need for policies that focus on structural inequalities around health, in addition to Denmark's historical focus on health risk behaviour. Denmark's municipalities could also include policies to address inequity as part of their responsibility for prevention and health promotion. Strongly related to the challenge of ensuring equitable access to services, Section 6 addresses the possible financial barriers that exist in the Danish health care system. Despite having a very small number of services for which there are co-payments, very limited exemptions to co-payments on these services appears to represent a barrier to care, and Section 4.6 recommends that co-payment exemptions are re-examined and made the subject of greater policy consideration in Denmark.

4.2. Equity is a building principle of the Danish health care system but there is evidence of growing inequalities in health

The principle of equity is at the centre of the Danish health system

The Danish health system is founded on a principle of equal and universal access to care for all citizens. In Denmark, the aim of easy and equal access to health care is enshrined in the Danish Health Act, and is a central part of the government health care platform (Danish Government, 2011). The principle of equity underpins the health care model across the Nordic countries, and indeed reflects the wider societal view that social security and protection should be provided to all citizens (Vallgårda and Lehto, 2009).

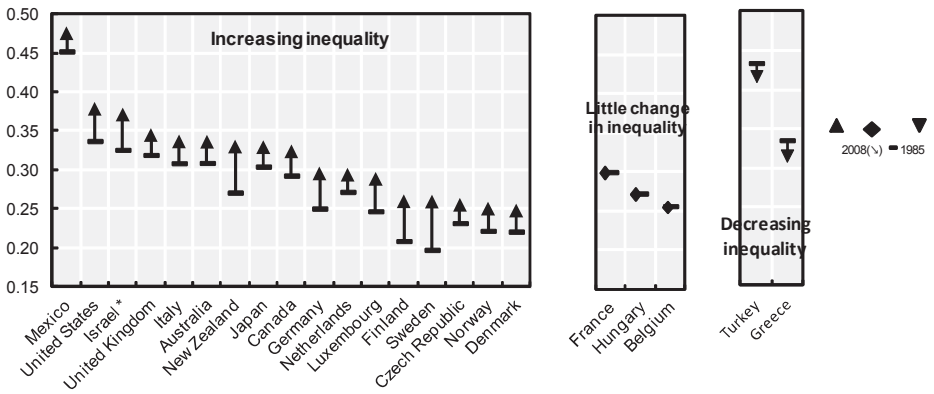
Denmark's commitment to equity in health care is underscored by universal health coverage, financed by general taxation, with co-payments limited to pharmaceuticals and some specialist services, notably dentistry and physiotherapy. Health financing in Denmark is a mix of proportional taxes at national and local level. State-transfers to regions, which make up the majority of Danish health care financing, include a large needs-based allocation, drawn from social and demographic indicators as well as some health indicators (Gundgaard, 2006; Olejaz et al., 2012). This is regarded as being a fair resource allocation system that takes into good account variation in need across localities. While there are differences in the fiscal capacity of individual regions, as is inherent in decentralised system of governance, the way resources are allocated reflect indicators of need (see also Chapter 1). Patients appear to enjoy good access to care and to be satisfied with the health system.

However, available evidence suggests increasing inequalities in health outcomes, despite income inequalities that remain very low relative to all other OECD countries

Economic inequality in Denmark is amongst the lowest in the OECD. Even though income inequality, as measured by the Gini coefficient, has been rising in recent years, it is low even compared to other Nordic countries (see Figure 4.1), as inequality in Sweden and Finland has increased faster. Child poverty and household poverty rates in Denmark are consistently amongst the lowest in the OECD (*OECD Family Database 2011*).

Figure 4.1. Inequality increased in most Nordic and Oceanic countries, including Denmark

Gini coefficients of income inequality, mid-1980s and late 2000s



Note: For data years see Table 4.1. "Little change" in inequality refers to changes of less than 2 percentage points.

*. Information on data for Israel: *http://dx.doi.org/10.1787/888932315602.*

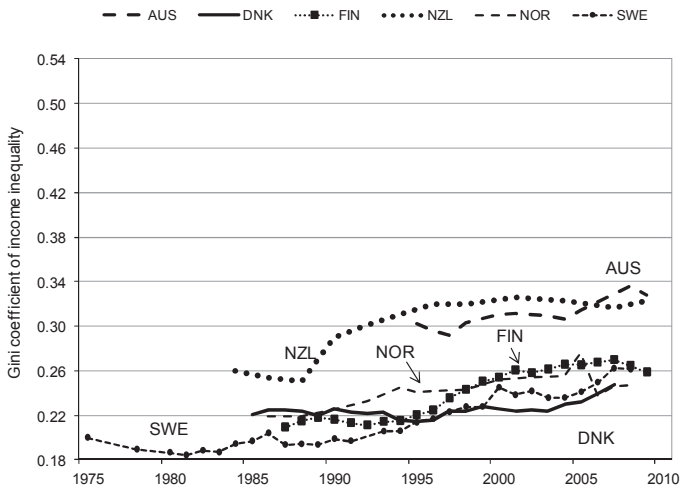
Source: OECD (2011), *Divided We Stand: Why Inequality Keeps Rising*, OECD Publishing, doi: *10.1787/9789264119536-en.*

However, despite Denmark's low rate of income inequality, high level of coverage of social policies, and a universal health care system, there is evidence of increasing socioeconomic inequalities in health outcomes, including in mortality. This difficulty of converting apparently good socioeconomic equality into equalities in health has previously been termed "The Scandinavian Welfare Paradox of Health" (Diderichsen et al., 2012), as this pattern seems to be repeated to varying extents across the Scandinavian countries.

For example, there is evidence that socioeconomic inequalities in mortality have widened between 1980 and 1995 (Mackenbach et al., 2003). As in many other OECD countries, the relationship between annual income and life expectancy, and between education and life expectancy suggest that higher incomes, and a higher level of education, are both predictors of a higher life expectancy and of remaining years of life spent in good health in Denmark (Figure 4.3 and Table 4.1).

Figure 4.2. Increased Gini coefficients of income inequality in Nordic and Oceanic OECD countries, 1975-2008

Gini coefficients of income inequality in 27 OECD countries, 1975-2008

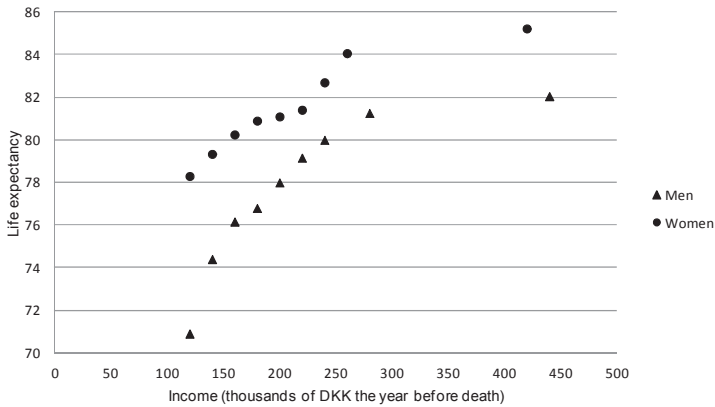


Note: National sources have been used to complement the standardised OECD data for Australia, Chile, Finland, Norway, New Zealand and Sweden. Their methodology is as close as possible to OECD definitions. Break in series between 2000 and 2004 for Austria, Belgium, Ireland, Portugal and Spain.

Source: OECD (2011), *Divided We Stand: Why Inequality Keeps Rising*, OECD Publishing, doi: *10.1787/9789264119536-en.*

Figure 4.3. Higher incomes is a predictor of a higher life expectancy, Denmark

Relation between annual income (in thousands DKK) and life expectancy 2008/09



Note: Income is calculated the year prior to death for all age-specific mortality rates.

Source: Adapted from Diderichsen, F. et al. (2012), "Health Inequality – Determinants and Policies", *Scandanavian Journal of Public Health, Vol.* 40, Suppl. 8, pp. 12-105, November.

Table 4.1. Inequality in 30-year olds' remaining life expectancy and the percentage of the remaining life that can be expected to be in good health, 2004/05

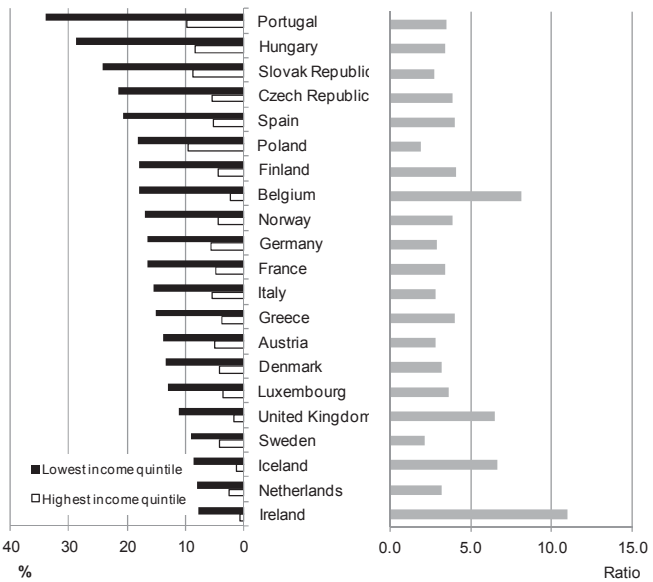
Educational level:	Males			Females		
	Long	Medium	Short	Long	Medium	Short
Remaining life expectancy (years)	49.3	47.1	44.4	52.7	51.5	49.5
Years in good health (%)	83%	80%	67%	82%	75%	61%

Source: Adapted from Diderichsen, F. et al. (2012), "Health Inequality – Determinants and Policies", *Scandanavian Journal of Public Health, Vol.* 40, Suppl. 8, pp. 12-105, November.

As well as an observable relationship between mortality, income and level of education, there are inequalities in self-reported health along education and income gradients. Although a relatively small disparity compared to some other EU countries, there is nonetheless a lower percentage of people from the highest income quartile reporting "very bad" health as compared to the lowest quintile, with the ratio being lower than in Iceland and Norway, but higher than in Sweden (see Figure 4.4).

Figure 4.4. Lower percentage of people from the highest income quartile report "very bad" health, Denmark

Inequalities in persons reporting their health as "very bad", by income quintile and rate ratio, selected EU countries, 2006

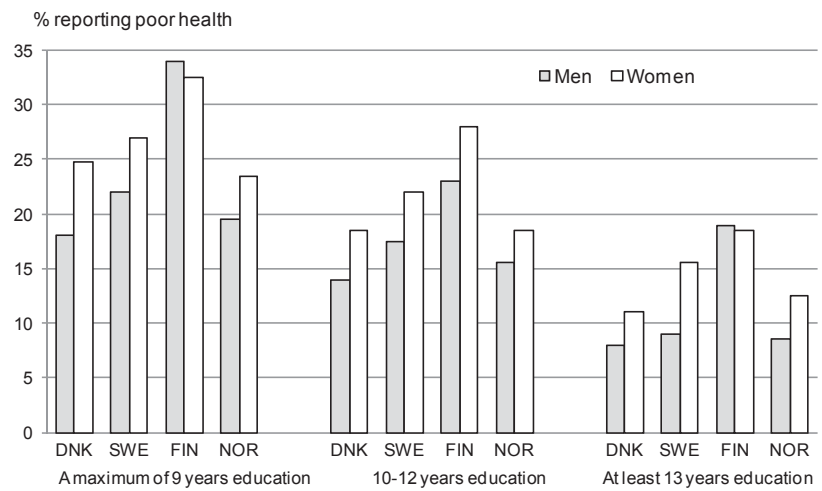


Source: de Looper, M. and G. Lafortune (2009), "Measuring Disparities in Health Status and in Access and Use of Health Care in OECD Countries", *OECD Health Working Papers*, No. 43, OECD Publishing, doi: *10.1787/225748084267*.

More significant is the gradient between people reporting poor health across different educational levels; there is a significant decline in the percentage of people reporting poor health as years of education increase. Whilst the overall share of people reporting poor health is smaller than in other Nordic countries, the gradient by educational level is no less pronounced (see Figure 4.5). Women also report poorer health across all levels of education. Furthermore, people with lower levels of education (no training or short training) are more likely to have a long-term illness (46.9% of respondents with no training, compared to 25.7% of respondents with 12 or more years education) or be very bothered by pain or discomfort (48% with no education and 37% with short training, compared with 24.7% of respondents with 12 or more years education) that people with 12 or more years of education. People with no training or short training were more likely to have taken long-term sick leave[1] (6.5% and 4.9%, respectively) than people with medium-term higher education (4.8%) and people with long-term higher education 2.5% (Sundhedsstyrelsen Danmark and Statens institut for Folkesundhed, 2010).

Figure 4.5. Share of people reporting poor health is higher the lowest the educational level

Percentage of people reporting poor health, by education and gender, Nordic countries, 2000-09



Source: de Looper, M. and G. Lafortune (2009), "Measuring Disparities in Health Status and in Access and Use of Health Care in OECD Countries", *OECD Health Working Papers*, No. 43, OECD Publishing, doi: *10.1787/225748084267*.

Finally, whilst immigrants from Denmark's close neighbours (Sweden, Norway) have a higher mortality, non-western immigrants have lower mortality than that of the local population (Diderichsen et al., 2012). Asylum seekers are not covered by regional health care, and therefore have fewer entitlements, and undocumented immigrants are only entitled to acute treatment (Olejaz et al., 2012). Despite these lower mortality rates for non-western immigrants, obstacles to care for asylums seekers and undocumented immigrants may merit further investigation.

In comparison to other Nordic countries with similar commitments to health equity, Denmark's policy commitments to equity are late in arriving, although there are several valuable initiatives underway

There are some clear indicators of inequity in health outcomes in Denmark. However, health inequalities have not historically been comprehensively measured, and only in recent years policy has attention to equity in health has increased. Despite similar commitments to equity in health, policy focus on equity came later in Denmark than in neighbouring Nordic countries. Strong equity agendas have been in place in Finland since the late 1960s and in Sweden since the early 1980s (Vallgårda and Lehto, 2009). Conversely, despite widening socioeconomic inequalities in mortality between the early 1980s and the early 1990s (Mackenback et al., 2003), health inequalities in Denmark were not addressed on a national political level until 1998.

In recent years policy attention to equity in health in Denmark has increased, for example through the public health programmes *Folkesundhedsprogram 1999-2008* (Public Health Programme 1999-2008), and *Sund hele livet* (Healthy throughout Life) from 2002 (Diderichsen et al., 2012).

The *Folkesundhedsprogram 1999-2008* (Public Health Programme 1999-2008) had two core goals, which were to i) to increase longevity with higher quality of life and ii) to reduce social inequality in health (Diderichsen, 2012). This policy included a series of targets for the reduction of inequality in health, including a considerable reduction of inequality in health as indicated by both morbidity and mortality, initiatives addressing basic differences in health behaviour – including smoking and alcohol consumption – and living conditions for the most disadvantaged groups, and that it should be made possible to monitor morbidity and mortality in various social groups during the period of the programme (*Folkesundhedsprogram 1999-2008*; Diderichsen, 2008). There were no quantitative targets in this programme.

The *Folkesundhedsprogram 1999-2008* was replaced in 2002 with *Sund hele livet* (Healthy throughout Life), following the election of a new government, which retained health equity as a key priority, focusing on increasing life expectancy, number of health years lived, and minimising social inequality in health (Diderichsen, 2008 ; Diderichsen et al., 2012). Again, this plan focused on the "most vulnerable" social groups, for example, children of alcoholics, drug addicts and mentally ill parents, without focusing on the social gradient in health or detailing any interventions or policies to minimise inequalities in health (Diderichsen, 2008). The behaviour of these vulnerable groups was the focus of discussion of health inequalities in this strategy – looking at risk behaviour, and seven disease categories –, rather than addressing structural inequalities that may contribute to inequity in health (Vallgårda, 2008).

Addressing inequalities in health has is a priority of the current government (Danish Government, 2011). Some recent changes to the health care system have been explicitly focused on improving equity; for example, in 2011 co-payments on interpretation services for health care were abolished (although there are still some charges for interpretation into minority languages depending on patient residency status), along with co-payments for fertility treatment, and annual co-payment reimbursement thresholds were adjusted. In addition, until a few years ago there were few systematic mechanisms for patients' to have their voices heard, Danish Patients (an umbrella organisation grouping 16 patient associations and representing some 850 000 members) is now a regular member of all major health committees set up by the Ministry of Health. Patients are also part of many regional forums regarding hospital treatment and planning.

The Danish regions published in 2010 an overview of regional initiatives to address inequities and adjust health care services to the specific needs of different population groups, and there have been a number of regional seminars addressing inequalities in health. A government platform ("Equality in Health") to address inequalities has been established, involving stakeholders from the regions, the central government three municipalities and some GPs, although policy interventions remain in their early stages. Ongoing initiatives include national clinical guidelines to reduce variation in quality of treatment and outcomes across regions. However, to date there is hardly any evaluation of such initiatives.

The Ministry of Health recently published a report on *Inequalities in Health* (2013), which underline the importance that the Ministry of Health is giving to promoting health equity. The report addressed the causes of inequalities in health and in life expectancy, including diet, smoking, physical activity and obesity, as well as self-rated health, stress, and used of services including preventative services, general practitioners services,

specialist services and dentistry services. The current Danish government plans to formulate national goals for health, including health promotion and prevention for children, young people and adults with the aim of reducing inequalities in health.

4.3. Measures of health inequities should be strengthened in Denmark

Denmark has the potential to measure inequalities in health through its solid data infrastructure, but this is not used as yet for regular measurement and reporting

Denmark has an excellent data infrastructure and the potential to profile inequalities in health. The Danish civic registration system makes it possible to link age, ethnicity and socioeconomic variables with health status information. Every four years, the five regions and the Danish National Institute for Public Health conduct a national survey – the Danish National Health Profile (last published in 2010), which provides a picture of health status, quality of life and health behaviours. The data enable benchmarking across regions and municipalities and has the potential to be used for analysing inequities in health. Similarly, the data from National Health Interview Surveys carried out by the Danish National Institute for Public health could be used for measuring health inequalities.

However, measurement of health inequities is not as yet carried out systematically. For example, while a report on health inequalities across Denmark was published in 2012 (Diderichsen et al., 2012), there is no regular report (i.e., a disparity report) focusing on inequalities in health. Periodic surveys do not allow for regular monitoring of variation in health utilisation and disease prevalence. There are no disaggregated quality indicators by population groups, especially with regard to community-based care. Given that period surveys show evidence of inequity across socioeconomic variables, and academic literature and the recent Diderichsen et al. (2012) report on health inequalities support such evidence, a better data infrastructure would leave Danish authorities better equipped to assure their declared commitment to health equity. Information available in national disease registries could be used for supporting monitoring of clinical information disaggregated by socioeconomic groups. The rich data infrastructure could be used for regular reporting on health utilisation and quality in hospital care disaggregated by socioeconomic groups. Critically, it will be important to ensure that information on inequalities in health is then effectively used to tackle inequalities at local and regional level.

In addition, data on health outcomes, such as mortality and morbidity, and behaviour, for example smoking and obesity, in Denmark is available broken down across age, sex, income and educational level, but exploration of dimensions of equity are broadly limited to income and educational level. There is far less granular exploration of equity across gender, for example looking at men's health status and provision of care, including preventative care and screening, for men's health. Data and discussion on equity for people with disabilities is also lacking, as is data on health status and outcomes across age groups. Some health inequities are apparent in Denmark, notably by socioeconomic group, but an overly narrow consideration of the question of equity may mean that other inequities are being overlooked.

Ongoing surveys and data collection are key information resources that Danish municipalities could take advantage of, and build upon

The administrative health care reform of 2007 created larger regions and municipalities, and changed the attribution of tasks and responsibilities, as is discussed in Chapter 1. One of the objectives of the 2007 structural reform was to create incentives for the municipalities to place more emphasis on prevention, health promotion and rehabilitation outside of hospitals (Olejaz et al., 2012); municipalities are responsible for preventative work aimed at the citizens in general, and for some parts also for initiatives aimed at patients. As such, municipalities are a key partner in preventing inequalities in health, and municipalities are responsible for initiatives that focus on the structural causes of inequalities. Given these allocations of responsibility, and given that there are some quite significant variations in health between municipalities – for example differences in life expectancy (Diderichsen et al., 2012) – the Danish municipalities will be centrally involved in efforts to address inequities in health.

There are a number of data resources that could be marshalled by municipalities in order to address problems around equity, both in ensuring that the equity amongst the population of a given region does not fall behind that of the rest of the nation, and in addressing areas of particular inequity that become apparent. Specifically, the Danish CPR registry, which makes it possible to connect place of residence, age, ethnicity and socioeconomic status, and other indicators to all other health data, is a particular strength of the Danish health system. Additionally, information gathered in the Danish National Health Profile 2010 (Den Nationale Sundhedsprofil 2010) can be used as a tool by municipalities in designing structural interventions around particular areas of need. To take an example, Diderichsen and his colleagues note that "there is a significant variation in life expectancy between the poorest and richest municipalities and areas of town" (Diderichsen et al.,

2012, p. 88); this, they stress, is because of the way in which labour markets and house prices distribute the population according to income, employment and health. Diderichsen et al. (2012) suggest that there is a particular risk to children and young people, and also to elderly populations who risk suffering disproportionately from poverty and isolation if local support networks are weak. As part of giving a full picture of health inequalities in Denmark strengthening of data gathered from municipalities, or making good use of data already gathered, should be a priority, and available data should inform policies implemented by municipalities.

Diseases that are contributing to Danish inequality in burden of disease are increasingly treated in primary care, for which the data infrastructure is weak

Work underway to improve the infrastructure for monitoring equality in health care should continue. Most efforts should go to addressing data gaps in primary care, for example data collection on variation in chronic diseases in general practice should be strengthened. Diseases that are contributing most to Danish inequality in burden of disease, such as diabetes and depression, are increasingly being treated in primary care settings (see Chapter 2 and Table 4.2). Given this, data collection in primary care is an appropriate way to monitor equitable health outcomes, and inform initiatives to address existing inequities.

Table 4.2. The ten diseases contributing most to the Danish inequality in burden of disease

The difference in disease burden between the two halves of the population with shortest and longest educations respectively is measured in DALY per 1 000

	Disease burden inequality DALY per 1 000	Disease burden in the total population (with total population ranking)
COPD	11.5	16.4 (2)
Heart disease	10.9	17.5 (1)
Alzheimer's disease	5.9	9 (5)
Lung cancer	3.5	9.5 (4)
Depression	3.3	7 (7)
Alcohol dependency	2.6	4 (12)
Hearing loss	2.4	7.3 (6)
Diabetes	2.2	5.3 (9)
Liver cirrhosis	1.7	3.5 (14)
Stroke	1.6	10.1 (3)
All diagnoses	54.5	192.8

Source: Adapted from Diderichsen, F. et al. (2012), "Health Inequality – Determinants and Policies", *Scandanavian Journal of Public Health, Vol.* 40, Suppl. 8, pp. 12-105, November.

Data on health equity across age groups is scarce, despite the health needs of Denmark's ageing population

There is little available data on access to health care or health outcomes, adjusted for need, for Denmark's elderly population. Excellent care for the elderly is a priority in Denmark, and data monitoring of health outcomes and health care provision for population groups by age would contribute to securing this priority. Linkage of population data by age with care delivery in primary care could be beneficial to monitoring equity for elderly populations and people with multiple chronic conditions in particular. For example, Denmark has a relatively poor record at vaccinating older people against influenza, which is a primary care function (OECD, 2011a; see Chapter 2).

Measures of quality of care could be used to monitor equity

There are some indications of inequitable quality of care in Denmark which could be investigated further. There is, for example, evidence that women with acute coronary syndrome are less invasively examined and subsequently less treated than men (Hvelplund et al., 2010). In addition, one study showed that elderly patients had higher mortality following an ischemic stroke compared to younger patients, and amongst the older patients receipt of secondary prophylaxis after hospital discharge, and continued drug use, were comparatively lower (Palnum et al., 2010). There could be closer examination of care quality for specific procedures, for example open heart surgery, and also for specific disciplines which are known to be vulnerable to inequities in quality and coverage, for example old age psychiatry.

Given these indications of inequalities in quality of care across a range of population groups, the equity dimension should made a greater priority in health care quality improvement initiatives, and data monitoring. Denmark's unique patient identifiers could be used most fruitfully to further understanding of care quality across population groups.

4.4. Existing initiatives to tackle risk factors may be insufficient to address observable health inequities

There is some evidence for decline in risky health behaviour, with falls in alcohol consumption and smoking. Indeed, Denmark is the only Nordic country for which alcohol consumption decreased between 1980 and 2010 (OECD, 2012b). Diderichsen et al. suggest that smoking, and inequity in smoking across educational level has decreased since 2005, whilst obesity and inactive leisure time has increased. Alcohol consumption is higher

amongst adults in higher income groups, but "binge" drinking (drinking heavily but more infrequently, excessive drinking on one occasion) is more common amongst lower income groups, and Denmark is the only Nordic country in which alcohol consumption has fallen. Compared to other European countries there are low levels of inequity in smoking rates and obesity across education level in Denmark (Mackenbach et al., 2008). Furthermore, a recently published report on social inequalities (Juel and Koch, 2013) suggests that 60-70% of the inequalities in life expectancy in Denmark are caused by smoking and alcohol consumption.

Table 4.3. Some inequalities in health behaviour in Denmark rose between 1987 and 2010, notably obesity and inactive leisure time

	1994	2000	2005	2010
Daily smoking	17.8	27.6	30.7	27.7
Population prevalence (%)	39	34	29.6	20.9
Alcohol > 14/21 units per week	-5.6	-5.7	-3.6	-1.5
Population prevalence (%)	10.7	11.7	14.3	10.6
Obesity	8.6	10.3	14.6	16.9
Population prevalence (%)	7.6	9.5	11.4	13.4
Inactive leisure time	16.4	17.6	18	18.7
Population prevalence (%)	15.5	16.3	12.9	15.9
Unhealthy diet	-	-	-	22.2
Population prevalence (%)				20.9

Source: Adapted from Diderichsen, F. et al. (2012), "Health Inequality – Determinants and Policies", *Scandanavian Journal of Public Health, Vol.* 40, Suppl. 8, pp. 12-105, November.

In addressing inequalities in health, Vallgårda and Lehto (2009) suggest that when compared to Finland, Norway and Sweden, Denmark's efforts in the late 1990s and 2000s focused very much on individual responsibility and individually chosen behaviour, rather than pursuing targeted policy interventions. The *Folkesundhedsprogram 1999-2008* and *Sund hele livet* programmes do, indeed, focus on health behaviours such as smoking, alcohol consumption and obesity, and health education, promotion and voluntary initiatives that stress individual responsibility (Diderichsen, 2008). The Danish government, unlike other Nordic governments, has been explicitly liberal in imposing legislation or economic policy measures in relation to tobacco and alcohol. Furthermore, a belief in individual freedom and responsibility shared across the political spectrum in Denmark likely influences emphasis on individual responsibility for health behaviour for all but the most vulnerable groups, rather than a focus on the social gradient in

health care as seen in other Nordic countries, for example Sweden and Norway (Diderichsen, 2008).

There is strong commitment to address inequities starting from prevention in Denmark. However little is known to date about whether local initiatives to address risk factors in health and measures to change behavioural incentives such as through "sin taxes" have yielded any effect on populations most at risk. In 2007 a Prevention Commission was established to launch a national plan of preventative measures, of which the 2012 "fat tax" (see below) was a part. Higher taxes on cigarettes, unhealthy food, and alcohol were implemented nationally, following the 2011 government-commissioned report on determinants of health inequalities (Diderichsen et al., 2012; Commonwealth Fund, 2012). In recent years other OECD countries have also introduced fiscal measures designed to address population health; fiscal measures appear to have the most success and reducing alcohol consumption, whilst as already discussed the situation is trickier when addressing obesity (Sassi et al., forthcoming 2013; see Box 4.1).

The Danish Health and Medicine Authority published a number of "prevention packages" in 2012, which include recommendations for the use and organisation of preventive action in the municipalities. The packages include recommendations concerning the underlying determinants and risk factors – for example tobacco, inappropriate use of alcohol, physical inactivity and mental health – that focus inter alia on inequity in health. The recommendations in these packages is only consultative, but the packages have been well received by the municipalities and the government has funded a new health prevention center, which will provide the municipalities with advice and guidance on implementing the prevention packages. Municipalities and regions have established ad hoc projects to address risk factors in low socioeconomic groups. The focus of the majority programmes on prevention is to some extent appropriate given the disease categories that contribute to inequity in mortality (see above), and given that smoking and obesity show socioeconomic gradients similar to those in mortality and morbidity (Mackenbach, 2006; Diderichsen et al., 2012). Targets or indicators for measurement would track the success of these programmes in improving population health, and improving equity in population health. Closer examination and evaluation of polices targeting risk factors would be appropriate.

In 2012 Denmark's tax on foods containing more than 2.3% saturated fat was repealed following widespread criticism, inflated food prices, and threats to Danish producers, for example cheese producers. Furthermore the administrative cost of implementing the tax was deemed to be unacceptably high. A plan to introduce a levy on sugar has also now been cancelled. Whilst fiscal measures to address health risks, such as alcohol consumption and obesity are very cost effective, Denmark's experience with this tax

echos some of the findings of the OECD's 2010 report on measures to tackle obesity. This publication suggests that tax increases tend to be controversial, and whilst cost-effective and effective in reducing consumption of targeted goods, risk having a regressive effect, weighing most heavily on the less well off (OECD, 2010). However, the health benefits of such "sin taxes" were also found to benefit people in low socioeconomic groups more, especially if coupled with targeted subsidies on healthy food such as fruit and vegetables, as this OECD report recommends.

Evidence regarding the efficacy of different interventions to reduce health risks suggests that combining several interventions to tackle unhealthy diet and physical inactivity – such as physician counselling, a mass media campaign, food taxes and subsidies, nutritional labelling and marketing restrictions – is an efficient way of improving population health. OECD research on measures to address obesity suggests that many interventions have a more significant impact upon lower income groups, and that all interventions had a favourable, although small, effect upon equity as measured by the Gini coefficient, with physician/dietician counselling having had the most significant positive impact on health equity (Sassi et al., 2009). In Denmark, a whole package of measures needs to be put in place to address health risks. There are a wide range of initiatives in place in OECD countries (see Box 4.1).

Box 4.1. Preventative measures to address health risks across the OECD: alcohol and obesity

- Fiscal measures to reduce alcohol consumption are in place virtually everywhere in the OECD, and evidence shows that increases in taxation reduce alcohol consumption, particularly for moderate drinkers, women, and young consumers. Fiscal measures appear to have the most success and reducing alcohol consumption, whilst as already discussed the situation is trickier when addressing obesity (Sassi et al., forthcoming 2013; OECD, 2010).
- Information, education and community actions have been shown to have some success in increasing awareness of alcohol consumption, although the impact on behavior is more limited.
- Health sector interventions, for example interventions in primary care and psychosocial treatments for alcohol dependence may significantly reduce alcohol-related morbidity.
- Targeted measures directed towards particular population groups we more effective in addressing obesity, and were not less cost-effectiveness than cross-population measures.
- Counselling in primary care to tackle obesity was found, across a study of six OECD countries, to lead to a gain of up to half million life years free of disability, although is more expensive than many other interventions (see also Machenbach et al., 2008).

Box 4.1. Preventative measures to address health risks across the OECD: alcohol and obesity *(cont.)*

- Several OECD countries introduced taxes on unhealthy foods and beverages in 2011 as part of their efforts to counter obesity:
  - Denmark introduced a tax on foods containing more than 2.3% saturated fats (meat, cheese, butter, edible oils, margarine, spreads, snacks, etc.) which has now been repealed.
  - Also in 2011, Hungary introduced a tax on selected manufactured foods with high sugar, salt or caffeine content and carbonated drink. The tax does not concern basic food stuffs and only affects products that have healthier alternatives. The Hungarian government is reportedly expecting to raise in excess of EUR 70 million per year from the tax.
  - In 2011 Finland also introduced a tax on confectionery products, while biscuits, buns and pastries remained exempt. The tax, originally intended to be set at almost EUR 1 per kilogram of product, was subsequently dropped to EUR 0.75 per kilogram. At the same time, the existing excise tax on soft drinks was raised from 4.5 cents to 7.5 cents per litre.
  - In France, a tax on soft drinks came into force in January 2012. The tax affects both drinks with added sugars and drinks with artificial sweeteners. It is set at EUR 7.16 per hectolitre (i.e., EUR 0.072 per litre or approximately EUR 0.024 for a 33 cl can) for both categories. It is payable by manufacturers established in France and importers. The tax is expected to generate revenues in the region of EUR 280 million per year.
  - Taxation of unhealthy foods or beverages is being discussed in a number of other countries. Ireland and the United Kingdom are among the countries actively considering a levy on unhealthy food and/or drinks. Debates are taking place in the United States.

Source: OECD (2010), *Obesity and the Economics of Prevention: Fit not Fat,* OECD Publishing, doi: *10.1787/9789264084865-en*; OECD (2012), "Obesity Update 2012"; Sassi F. et al. (forthcoming 2013), "Harmful Alcohol Use: Trends and Prevention Policies", *OECD Health Working Papers*, Paris, OECD.

There is a role for municipalities in implementing initiatives that prevent inequality and promote health equity

It is quite widely accepted that early intervention – intervention in early childhood, childhood and adolescence – is a key way of promoting good health outcomes across the lifecourse. Indeed, Diderichsen et al. show that there is some evidence of social disparities in disease occurrence and wellbeing in Denmark even in early childhood (Diderichsen et al., 2012, pp. 28-30). The recently published Ministry of Health report Inequalities in Health (Ulighed i sundhed, 2013) stressed that inequalities in health start at

childhood, and that fewer children of parents with low levels of education or training come to child health checks and complete vaccination programmes. The report also shows that newborns whose parents have little or no education are more likely to be readmitted to hospital following discharge than the babies of parents with more education. In the 2009 report *Doing Better for Children* the OECD stated that "Countries should invest more resources during the period from conception until entry into compulsory schooling when outcomes are more malleable and foundations for future success are laid. If interventions are well designed, concentrating on early childhood can enhance both social efficiency and social equity" (OECD, 2009, p. 179). Municipalities are well-placed to lead such initiatives, likely with support and co-ordination from regions. Initiatives might include preventative child health examinations in primary care, child health examinations in schools and educational programmes in schools and other day care facilities, targeting pre- school and early school years age groups. Some such initiatives have already been implemented – for example preventative child health examinations by general practitioners (Juhl et al., 2005; Michelsen et al., 2007) – and could be built upon (see Diderichsen, 2012, pp. 28-30). Multidisciplinary health centres in municipalities could be another key contact point, for example for pre-natal and ante-natal care.

Multidisciplinary health centres, and disease-specific management programmes that regions and municipalities are expected to jointly develop, offer opportunities for disease-specific interventions to promote equity in the Danish population's health. Equity ought to be a priority in the organisation of both services, and well implemented prevention programmes can be seen as a way of promoting good health outcomes for the whole population. Disease-specific management programmes for cardiovascular disease, diabetes, COPD and musculoskeletal disorders, which have been established, might usefully include explicit attempts to promote equity, especially given that COPD, heart disease and diabetes all contribute quite significantly towards the difference in disease burdens across the population according to educational level, for example (see Table 4.2).

4.5. Addressing inequitable utilisation and access to health care should be a priority

Open access and no co-payments contribute to pro-poor inequities in primary care utilisation but there are small pro-rich inequities in utilisation of specialist services

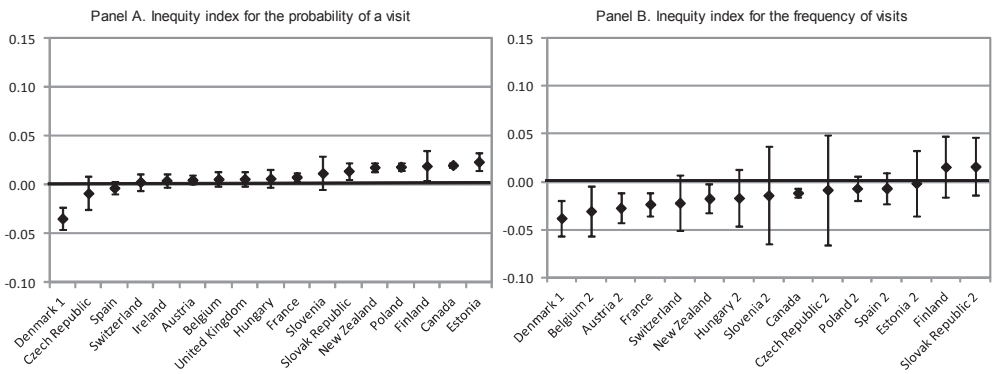
Access to care in Denmark is enhanced by the fact that there are no co-payments for most services, and whilst there is GP gatekeeping for specialist care, there is open access to GPs and primary care. This system design is

reflected in the pro-poor differentials in the use of GP services observable in Denmark, unlike in many other OECD countries.

In most countries, the worse-off tend to visit GPs more frequently that richer population groups, due to their greater health needs (Figure 4.6). However, according to an OECD study (Devaux and de Looper, 2012), once an adjustment for health needs has been made there is no significant difference in the probability of visiting a GP between the worse and the better off. Denmark, meanwhile, displays pro-poor inequalities in visits to GPs; for the same level of need, the worse-off are more likely to contact a GP. Whilst data issues – doctor visits for Denmark were recorded over the past three months rather than across the previous year – could lead to an over-estimate of pro-poor inequalities in Denmark, this finding is consistent with earlier studies (Van Doorslaer and Masseria, 2004). These findings suggest that, firstly, inequity is not a concern for GP-delivered primary care, and secondly, that GPs may be appropriate deliverers of any pro-equity initiatives that target disadvantaged populations.

Figure 4.6. Poor patients have a higher probability of visiting a GP in Denmark, after adjusting for need

Inequity index for GP visits in the past 12 months, adjusted for need, 2009 or latest year



1. Visits in the past three months in Denmark.

2. Counts in the past four weeks in European Health Interview Survey (EHIS) countries (Czech Republic, Estonia, Hungary, Poland, Slovak Republic, Slovenia).

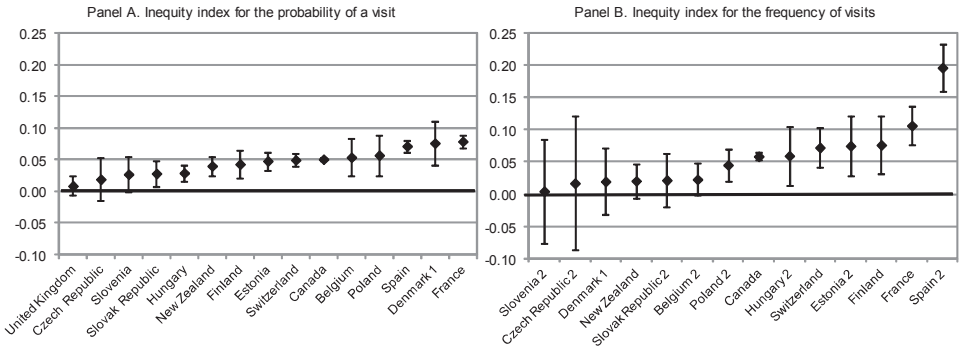
Source: Devaux, M. and M. de Looper (2012), "Income-Related Inequalities in Health Service Utilisation in 19 OECD Countries, 2008-2009", *OECD Health Working Papers*, No. 58, OECD Publishing, doi: *10.1787/5k95xd6stnxt-en.*

Whilst GP utilisation shows pro-poor inequalities, Denmark is more similar to other OECD countries in patterns of utilisation of specialist

services, showing use being skewed with strong pro-rich inequities. Although there are no co-payments for specialist visits in Denmark, and access is for the most part controlled through GP referrals, high-income groups are more likely to visit a specialist, and visit specialists more frequently than low income groups. The degree of this inequality in Denmark is elevated in comparison to other countries (Figure 4.7).

Figure 4.7. Rich patients have a markedly higher probability of visiting a specialist in Denmark, after adjusting for need

Inequity index for specialist visits in the past 12 months, 2009 or latest year



1. Visits in the past three months in Denmark.

2. Counts in the past four weeks in European Health Interview Survey (EHIS) countries (Czech Republic, Estonia, Hungary, Poland, Slovak Republic, Slovenia).

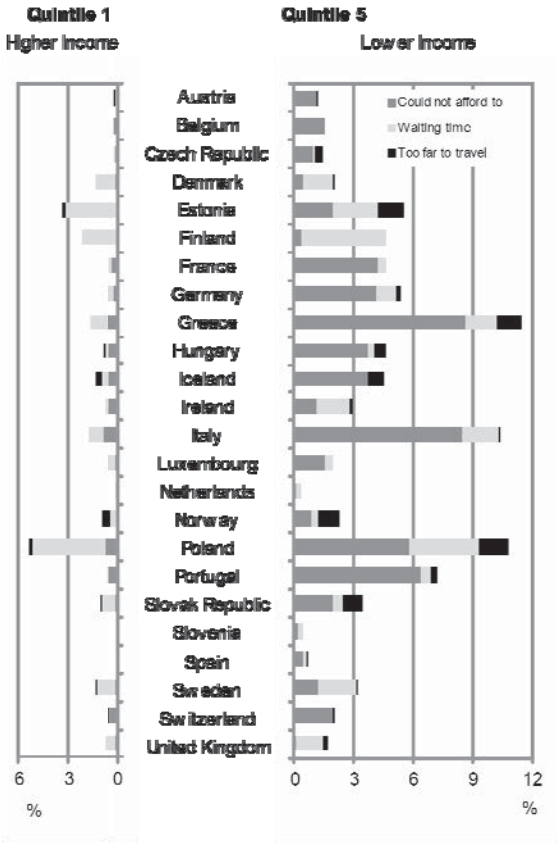
Source: Devaux, M. and M. de Looper (2012), "Income-Related Inequalities in Health Service Utilisation in 19 OECD Countries, 2008-2009", *OECD Health Working Papers*, No. 58, OECD Publishing, doi: *10.1787/5k95xd6stnxt-en.*

Finally, there are some inequalities in the utilisation of preventative services, with the percentage of low income women having had cancer screening in the past two years is only slightly over 10%, the lowest among 15 OECD countries. Data show that people from lower socioeconomic backgrounds are less likely to participate in breast cancer and uterus cancer screening, and are at higher risk of being readmitted to hospitals for preventable conditions (Devaux and de Looper, 2012).

Waiting times seem to be the more important factor behind unmet need

Unmet needs for medical examination are relatively low in Denmark compared to other European countries. Where there exist, they are most likely to be due to waiting times for services rather than cost or geographical distance (see Figure 4.8).

Figure 4.8. Unmet needs for medical examination are most often due to waiting times in Denmark



Source: OECD (2011), *Health at a Glance 2011 – OECD Indicators*, OECD Publishing, doi: *10.1787/health_glance-2011-en.*

Waiting times are an ongoing political challenge for the Danish health care system, especially for elective surgery, and have been monitored in hospitals since 1993 (OECD, 2013). Expected and experienced waiting times are regularly measured for 18 selected diagnoses and treatments, including hernia, prolapsed disk, tonsillitis, cataracts, and a range of other elective surgeries. Waiting times for elective surgery fell during the period 1998-2008, although there was a rise in waiting times from 2008.As part of the policy response to challenges around waiting times, *free choice of hospitals* was introduced in 1993, with extended free choice of hospital introduced in 2002 along with a waiting-time guarantee. The 2002 extended

choice meant that private hospitals were made available to patients if the hospital to which a patient is referred cannot foresee fulfilling the waiting times guarantee. In 2010, 4.8% of patients used extended free choice to select commercial private hospitals, whilst for some specialties the share of patients using extended free choice was as high as 10% (OECD, 2013). This policy appears to have had a positive impact upon depressing waiting times. The 2007 agreement between the government and the Danish regions to eventually development of integrated care pathways for the diagnosis and treatment of 34 defined types of cancer, and later four defined types of heart problems, is also likely contributed to have reducing waiting times for related procedures by improving co-ordination and timely care delivery (Christiansen and Bech, 2013). The objective of these care pathways was to secure fast and well-organised treatment and avoid waiting times, and was supported by organisational and clinical standards and guidelines, clinical working groups, monitored hospital funding, and in some regions pay-for-performance schemes.

An evaluation of the consequences of policies to widen consumer and patient choice of health care providers, which includes the promotion of free-choice of provider amongst hospitals and municipalities for consumers, is underway but no yet available.

Whilst there is equal access for all and patients can seek treatment outside of their home region, patients are generally not reimbursed for additional travelling costs (OECD, 2013), which may mean that waiting times, travel, and cost intersect as barriers to treatment for some individuals. While cost and distance to travel are less important factors than waiting times, they are a more important reason explaining unmet medical needs for medical examination for lower income groups than for higher income groups. It is important to remember, however, that unmet need remains low compared to most other European countries, although there is evidence showing a strong pro-rich inequities in access to specialists in Denmark (Devaux and de Looper, 2012).

Maximum waiting time guarantees for life-threatening diseases are also defined, and regions are expected to find solutions to situations in which waiting times guarantees are not being met, staying within the maximum time guarantee. If regions cannot meet this waiting time, and dialogue and co-operation to provide treatment is primarily between the regions, contacting the National Board of Health is a last resort when no appropriate solution has been found, and the Board will then attempt to find a treatment offer. For alternative treatments the patient's home region pays the costs of transportation and stay for the treatment. The current government, elected in 2011, has proposed a change to the existing treatment guarantee to introduce an initial diagnosis guarantee (with some exceptions), which are due to

come into force in 2013. Some doubts have been raised about the capacity of the system to diagnose patients faster, and also about the monitoring and penalties for regions that do not meet these guarantees (OECD, 2013).

Whilst the increased use of private health care might have been expected to reduce unmet need for medical examination for higher income groups than lower income groups, 2009 data do not show significant differences between unmet need due to waiting time across income groups (see Figure 4.7). However, data on waiting time by income group, or socioeconomic group, is not readily available. Given that waiting times is a major factor behind unmet meet, it would seem important to monitor the impact of waiting time guarantees and free choice of hospital on access to elective surgery by different socioeconomic groups.

Initiatives addressing inequalities in health service utilisation across geographical areas can be strengthened

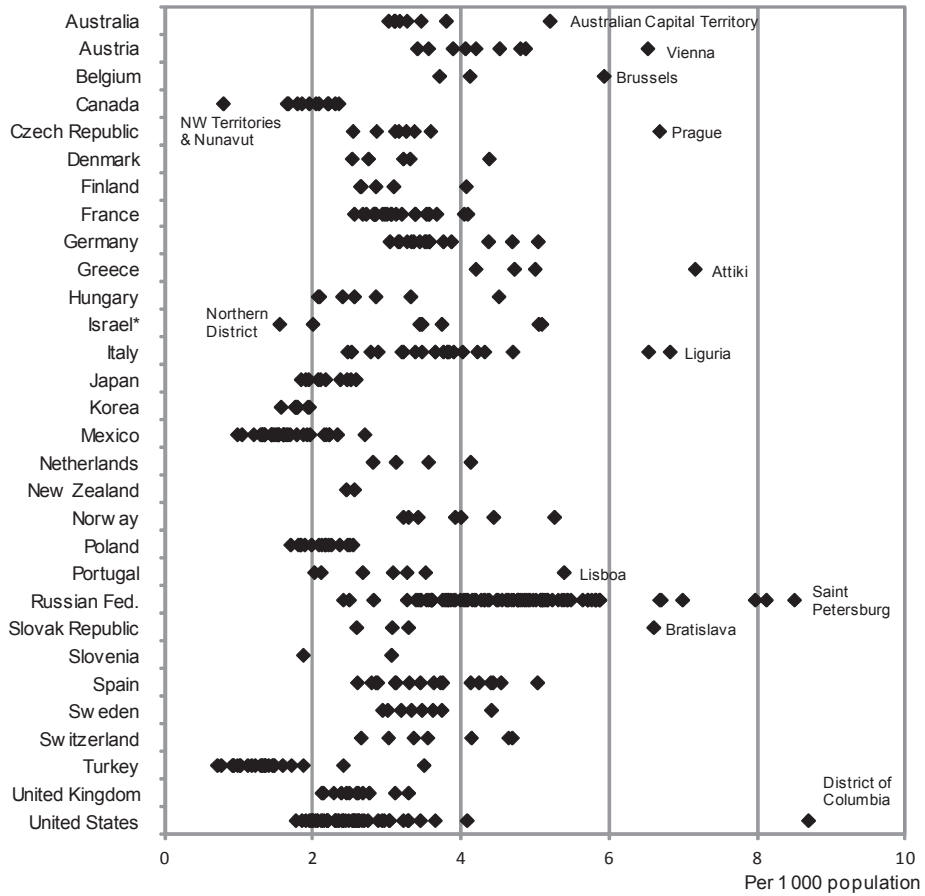
Access to health care services appears to be broadly equitable across regions, although limited reporting by regions and municipalities on inequalities inhibits deeper understanding and analysis. Whilst there is some clustering of physicians around urban centres, including the clustering of physicians specialised in primary care around larger towns, especially in Copenhagen and the northern suburbs of Copenhagen (Danish Regions, 2010), physician services are quite evenly distributed across regions compared to other OECD countries (Figure 4.9). That said it is important for Denmark to maintain policies to incentivise doctors to work in underserved areas. For example, the requirement for young doctors to practice in underserved areas during the first year of their medical practice is a good way to address geographical disparities. It is important to note, however, that in countries were inequalities in the distribution of medical doctors are more pronounced, such measures is unlikely to change incentives for young doctors to set their practice is these areas. Incentives to recruit health professionals from local communities where needs are the highest might have better payoffs on retention in underserved areas in the longer term.

There have also been concerns that the current hospital reforms, and the closure of small hospital departments, might lead to an increase in the concentration of specialist health services around urban centres (Vallgarda and Lehto, 2009). Given the small size of Denmark such clustering is unlikely to pose as big a challenge as in other Nordic countries, for example Sweden and Norway. That said, considering existing inequities in access to specialist services, and in reported reasons for unmet medical examination by low socioeconomic groups, the impact of these reforms on equitable access and service utilisation ought to be monitored. Initiatives to safeguard

against problems with access following the hospital reform have included out-reach teams, eHealth initiatives and telemedicine, and such approaches should continue to be monitored carefully to makes sure that all population health needs are being met.

Figure 4.9. Physician services are quite evenly distributed across regions in Denmark relative to other OECD countries

Physician density, by Territorial Level 2 regions, 2008 or nearest year



* Information on data for Israel: *http://dx.doi.org/10.1787/888932315602.*

Source: OECD (2011), *Health at a Glance 2011 – OECD Indicators*, OECD Publishing, doi: *10.1787/health_glance-2011-en.*

Last, if the government wants to address health inequities, it would be important for equity to be an explicit consideration in *health service planning decisions*, both at local and regional level. For example, the involvement of the Board of Health and Welfare in approvals of plans for highly specialised units in hospitals has been regarded as a way to address variation across localities, but thereafter there has not been close monitoring of variations in medical utilisation across localities. Hospital reforms may have reduced the degree of patients choice over where to receive care in exchange for higher safety deriving from hospitals performing higher volumes of procedures. It would seem important to continue to monitor variation in access to hospital and physician care and measures of unmet across localities.

Municipalities can take a more prominent role in ensuring that the elderly population have equitable access to health care

There is little available data on access to health care or health needs for Denmark's elderly population, as noted earlier in this chapter, but even without better linked data Denmark's municipalities can work to prioritise the health of older people. As noted in Chapter 2, nurses have taken on new roles managing elderly patients, particularly in the context of services provided by the municipalities. A comprehensive outreach service targeted at elderly populations, especially those with identified health needs and vulnerabilities, led by nurses working in the community would be an appropriate initiative at a municipal-level. Such an outreach service, or population-specific targeted campaigns led by municipal health centres, for example around seasonal influenza vaccinations, could be considered. Elderly populations are likely to be particularly vulnerable to changes in access to hospital and physician care with the current hospital reforms, as they are likely to be less able to travel, and have more regular health needs, and hospital visits. Efforts to identify unmet needs of the elderly population should be made, including efforts to consider mental and physical wellbeing of elderly populations, both in the community and in residential care-settings. Good health care in nursing homes and long-term-care settings is a further dimension of equity in health care access that should be considered by municipalities. Once identified, gaps could be addressed either through an effective community nurse outreach scheme, or through appropriate training for care providers in long-term care settings.

Despite high utilisation of GP services, low-income patients still have worse outcomes, suggesting that adherence to clinical practice guidelines could be better

Whilst data issues – doctor visits for Denmark were recorded over the past three months rather than across the previous year – could lead to an over-estimate of pro-poor inequalities in Denmark, this finding is consistent

with earlier studies (Van Doorslaer and Masseria, 2004). However, despite more frequent GP visits, low income patients still have worse health outcomes. Given the high access to GP services, this is likely to be due to lifestyle factors, treatment adherence, delays in diagnosis and referral. Considering that low-income groups are less likely to see a specialist in Denmark (see above), there may be disparities in referrals and treatment from GPs that warrants further examination. Clinical guidelines in primary care could be used as one way of helping to standardise care equality across all patient groups, and further promote equity. Where clinical guidelines do exist, incentives or penalties to improve adherence could improve their efficacy, and the impact that guidelines do and could have on equity of care and outcomes should be considered.

Whilst there appears to be, overall, good access to GP services in Denmark, monitoring of access to GP care and utilisation across population groups would be desirable, to track, for example, the utilisation of primary care by elderly groups relative to need, or by immigrant populations. Given some evidence that health outcomes are poorer amongst low-income groups, despite higher GP service utilisation when adjusted for health needs, wider investigation of equity in primary care delivery could be considered. It would be desirable to ensure both that groups such as the elderly have good access to GP services, but also that they have equally good quality of care in primary care, including diagnosis and referral. Current and future efforts to strengthen the quality of primary care in Denmark (see Chapter 2) should include considerations of possible impact on equity.

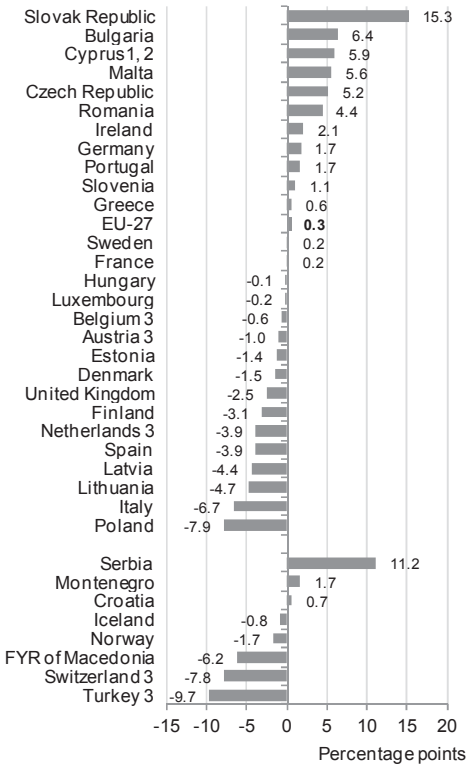
4.6. Steps to reduce the financial burden of low-income people will protect vulnerable groups but should be especially targeted to primary care and prevention

Denmark's universal health coverage, financed by general taxation, aims to alleviate financial burdens for disadvantaged populations. Data showing a pro-poor inequities in GP utilisation suggest that the lack of financial barriers have a positive effect on equity in health utilisation, and the high level of public financing of health care in Denmark generally has the desired effect in promoting equitable access to health care for all. Progressive tax financing for the health system means that the aim of universal equitable financing to the health system is largely guaranteed across all different localities. There are no co-payments for the majority of health services in Denmark, including primary care, specialist and hospital care, and long-term care. In 2011 the government also reduced cost sharing by eliminating user charges on hospital services for fertilisation treatment that had been introduced in 2010. Furthermore, there are no co-payments on prescription drugs for chronically ill patients, and there is a cap on co-payments

exceeding EUR 2 267 within one year. The recent reduction in cost sharing will help low-income groups improve access to care. Furthermore, out-of-pocket spending in Denmark fell between 2000 and 2010, unlike in many other European countries (see Figure 4.10).

Figure 4.10. Out-of-pocket spending in Denmark fell between 2000 and 2010

Change in share of out-of-pocket spending in total health spending, 2000 to 2010 or nearest year



1. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

2. Note by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

3. Data refer to current expenditure.

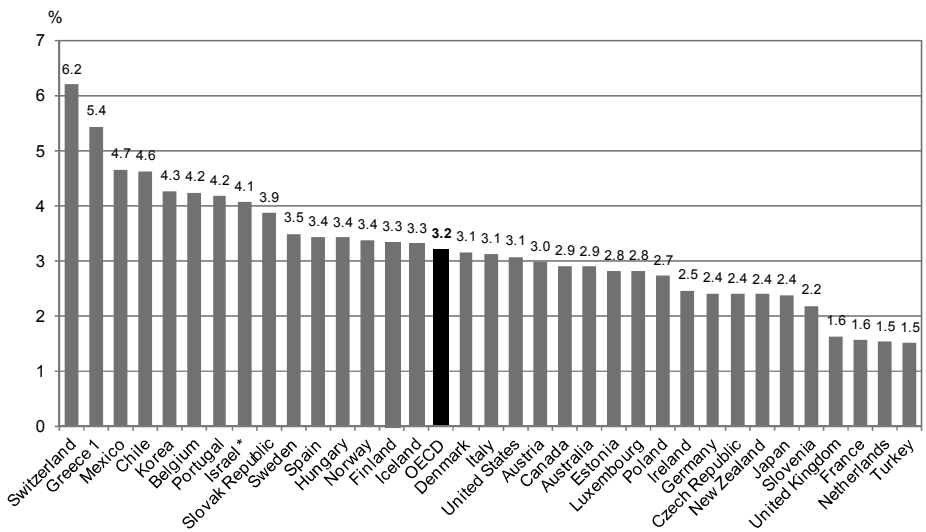
Source: OECD (2012), *Health at a Glance – Europe 2012,* OECD Publishing, doi: *10.1787/9789264183896-en.*

Universal access with no co-payments for most services assures largely equitable health financing, but high co-payments for a small number of services may put a large financial burden on low-income groups

Whist there are no co-payments for the majority of health services in Denmark, there are co-payments on pharmaceuticals and some specialist services, notably dentistry and physiotherapy. Furthermore, despite a low number of services for which out-of-pocket payments are required, out-of-pocket expenditure makes up a surprisingly high share of 3.1% of final household consumption, in Denmark, just below the OECD average of 3.2% (Figure 4.11). Dental care and eye glasses and contact lenses are not covered for adults unless they are subject to special exemptions For an adult not subject to any exemption, there is no coverage for pharmaceuticals up to an annual expenditure of EUR 115, beyond which cost sharing percentage decreased incrementally (50%, 25%, 15%). Relatively high co-payments for pharmaceuticals, dental care, physiotherapy and eye products are likely to impact disproportionately upon low-income groups.

Figure 4.11. Households out-of-pocket expenditure as a share of household consumption is only just below the OECD average in Denmark

Out-of-pocket expenditure as a share of final household consumption, 2009 or nearest year



***** Information on data for Israel: *http://dx.doi.org/10.1787/888932315602.*

1. Private sector total.

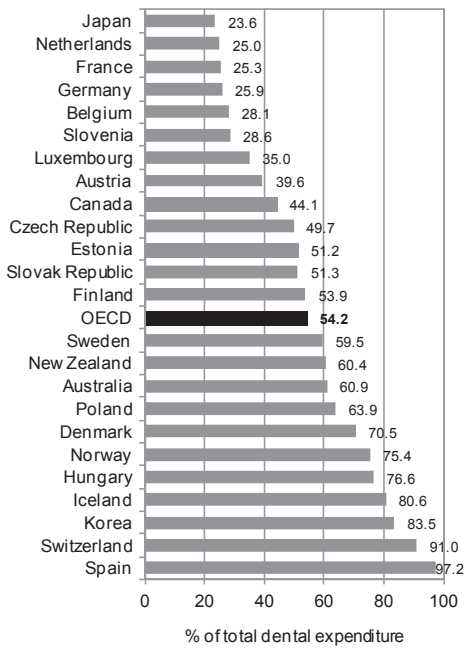
Source: *OECD Health Data 2011,* OECD Publishing, doi: *10.1787/health-data-en*.

High out-of-pocket costs for some services are reflected in patterns of expenditure, and in access to care. Whilst exemptions for out-of-pocket payments exist, they are limited to those with certain medical conditions or disabilities and for children. There are no exemptions for those with incomes under designated thresholds, beneficiaries of social benefits, or seniors, which may present a risk of growing inequities in access to some services.

For example, there is some evidence of inequalities around access to dental care for adults. Unlike access to GP services, for which there is open access with no co-payments and which show pro-poor inequities, unmet need for dental consultation was significantly higher for low-income than for high-income groups in Denmark in 2009 (see Figure 4.12). Whilst the average number of dental consultations per capita, at 0.9 in 2009, was below the OECD average of 1.3 the share of out-of-pocket dental expenditure was quite significantly higher than the OECD average (70.5% compared to 54.2%).

Figure 4.12. Out-of-pocket dental spending in Denmark is quite significantly higher than the OECD average

Out-of-pocket dental expenditure, 2009 or nearest year



Source: OECD (2011), *Health at a Glance 2011 – OECD Indicators*, OECD Publishing, doi: *10.1787/health_glance-2011-en.*

Although inequity in unmet need for a dental examination by income quintile in Denmark is lower than in most other European countries, and than the European average, disparities between income groups are nonetheless more pronounced than the utilisation of other health services, which could suggest the prohibitative effect of the cost of dental treatments for low-income groups in Denmark (Figure 4 13). A new law, Act No. 1380 passed on 23 December 2012, gives young people (aged 18-24) and some recipients of social benefits access to dental care with a more limited co-payment, and should impact positively on access to dental examination.

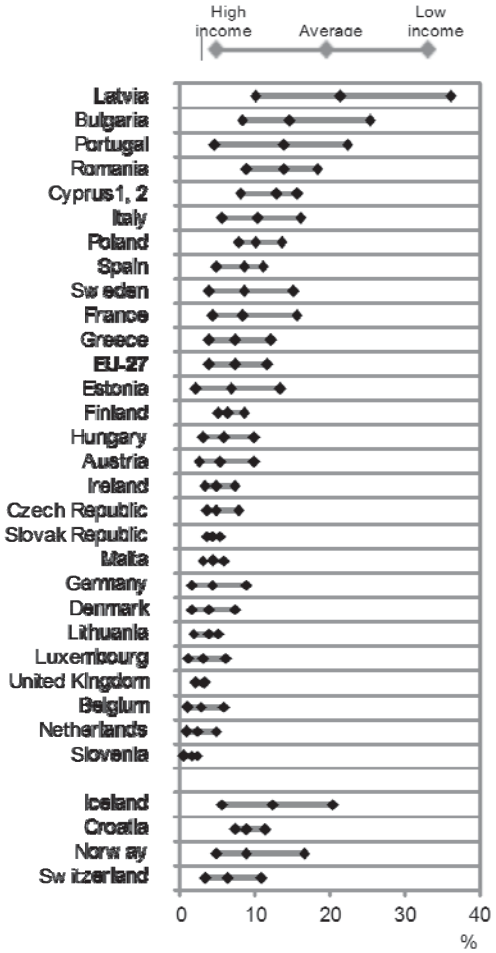
Another possible source of financial barriers concerns the cost for interpreters for immigrants that are not fluent in Danish. A new law regarding the right to interpretation into minority languages that was passed in Denmark and took effect in June 2011 means that refugees and immigrants who have resided in Denmark for more than four years have to pay for any assistance needed from an interpreter themselves (Olejaz et al., 2012). Previously, the limit was set at seven years, after which there was a fee for using interpreters. Given existing inequalities in health between the native Danish population and some immigrant groups, this additional fee may present an obstacle for some patients, although it is unclear how large a population group would be affected by the measure.

Overall, it is important to bear in mind that financial barriers do not seem to be the main barrier to access health care in Denmark, and that cost-sharing still remains low by OECD standards. The recent reduction in cost-sharing will also help low-income groups improve access to care. That said, cost-sharing remains the most repressive form of financing health systems. International evidence shows that cost sharing applied indiscriminately is a blunt instrument for controlling cost, because it reduces both desirable as undesirable health service utilisation. There are three possible issues for Denmark to focus their efforts upon:

- First, there is scope for improving the current system of exceptions which at the moment include people with chronic conditions but excludes low-income people, beneficiaries of social benefits, and elderly people. A starting point would be to review the effectiveness of current exemption policies and monitor health utilisation patters and out-of-pocket expenditure for other vulnerable categorises not currently benefiting from exemptions.

Figure 4.13. Unmet need for dental consultation is higher for poor people in Denmark

Unmet need for a dental examination, by income quintile, 2010



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Source: OECD (2012), *Health at a Glance – Europe 2012,* OECD Publishing, doi: *10.1787/9789264183896-en.*

- Second, given that Denmark public share of health financing is high by OECD standards, there are opportunities to design cost sharing policies intelligently, for example to steer health behaviours towards desired direction (e.g., to encourage compliance with prescribed medical treatment, utilisation of cost-effective drugs or preventative care – or to discourage certain unwanted behaviour (e.g., choice of branded pharmaceutical products when a cheaper bioequivalent is available). There are some good examples of this to be taken from other OECD countries. In France, from 2009, patients who did not follow the agreed medical pathway faced a 40% higher co-payment for treatment. There are several instances where cost sharing is higher for patients when they select branded pharmaceuticals rather than generic bioequivalents, for example in Switzerland.

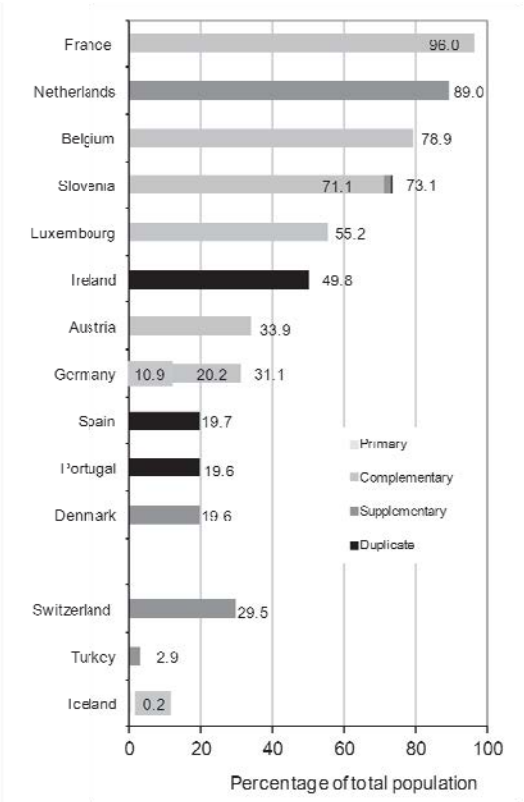
- Third, there is possibly scope for more transparent review of criteria (e.g., cost effectiveness) for inclusion or exclusion of specific services from the public benefit package. There is no clear pattern in the establishment of user charge exemptions, nor is there a policy in place that covers user charges (Olejaz et al., 2012). For example, any OECD countries have cost sharing across a wider range of service, but frequently have exemptions for low income groups or benefit recipients, which Denmark does not have.

Increasing private health care coverage risks increasing existing inequities

Private health insurance supplements public coverage for services not or only partially reimbursed by the public system (e.g., dental care for adults, pharmaceuticals, physiotherapists). It also offers a means to access the private sector and to obtain faster access to treatment for which there are long waiting times in the public sector.

In 2002, the government sought to encourage PHI through favourable tax advantages for group-based policies in an effort to increase choice and allow faster access to treatment, especially given concerns around long waiting times for elective surgery. There was also interest in complementary health insurance to offset high out-of-pocket costs for some services (Olejaz et al., 2012; OECD, 2013). Following the introduction of the preferential tax benefits for employees health private health insurance doubled between 2003 and 2006, and coverage reached 17% of the employed population in 2006 (OECD, 2008). As of 2010, supplementary or complementary health insurance in Denmark covered nearly one every five persons (Figure 4.14; OECD, 2012b). Preferential tax incentives around private health insurance were abolished in 2012 to improve financing equity (OECD, 2013).

Figure 4.14. One in five Danish has supplementary health insurance



Note: Private health insurance can fulfil several roles. In Denmark, for example, it can be both complementary and supplementary.

Source: OECD (2012), *Health at a Glance – Europe 2012,* OECD Publishing, doi: *10.1787/9789264183896-en.*

This growing role of PHI has raised concern that inequities in prompt access to services would widen, although significant efforts have been made to reduce waiting time for elective surgery. There have been concerns that the growth of voluntary health insurance divides patients, especially when tied to employment, leaving patients with employment better access to health care than unemployed or retired citizens (Olejaz et al., 2012). Other countries have seen inequities emerge linked to differences in coverage between the employed population and other population groups. For example, disparities in access to health care linked to private health insurance coverage have emerged in Finland between people in

employment, and unemployed and retired populations, despite a similar commitment to universal coverage and equity (OECD, 2012c). An evaluation of private health insurance policies across OECD countries has revealed that private health insurance remains more frequently purchased by higher-income population groups and is associated with inequities in access to care and speed of access to care between those with and without private health insurance (Colombo and Tapay, 2004; Thomson and Mossialos, 2010). Private health insurance generally results in differences in access to care and care coverage according to insurance type, although the degree of differential and the extent to which this differential is considered a problem varies from country to country. Because private health insurance is mainly purchased by high-income individuals, subsidies to stimulate private cover tend to be regressive. Countries that grant significant public subsidies to private health insurance, as Australia and the United States, have seen a reduction in government revenue or an increase in public cost (Colombo and Tapay, 2004).

4.7. Conclusions

Compared to most OECD countries, health inequalities in Denmark are low. The commitment that Denmark has made to providing comprehensive, accessible, equitable health care for the whole population has broadly translated into equitable health outcomes for the Danish population. Unmet health consultation needs are low, and although there is some evidence that low income groups use specialist services less frequently, following adjustment for need, and have a higher unmet need for dental care. Out-of-pocket payments are generally low, reducing the burden on low income groups, although high co-payments and few payment exemptions on a small group of services – notably dental care, eye products and pharmaceuticals – are likely to have an inequitable impact on certain population groups. Falls in health risk behaviour such as smoking and alcohol consumption are highly encouraging, but there is still evidence that such behaviour, and rising obesity, is more prevalent amongst lower socioeconomic groups.

At present, available information suggests that health inequities are low in Denmark, but limitations in data collection make it difficult to consistently monitor inequalities. Denmark cannot take for granted that its well-established principle of equal access and a high share of public spending on health that will lead automatically to equity in health utilisation and outcomes. A better data infrastructure would leave Danish authorities better equipped to assure their declared commitment to health equity. Information available in national disease registries could be used for supporting monitoring of clinical information disaggregated by socioeconomic groups. The rich data infrastructure could be used for regular

reporting on health utilisation and quality in hospital care disaggregated by socioeconomic groups. Critically, it will be important to ensure that information on inequalities in health is then effectively used to tackle inequalities at local and regional level. Unique patient identifiers, an incredibly rich source of information for Denmark, could be marshalled so as to better monitor health care equity across population groups. When addressing ways to improve monitoring of equity in Denmark a deliberately wide notion of equity should be considered, moving beyond looking predominantly at socioeconomic gradients, and examining other factors such as age, gender, ethnicity and disabilities. Additionally, given some indications of inequalities in quality of care across a range of population groups, the equity dimension should made a greater priority in health care quality improvement initiatives, and data monitoring.

Given the ongoing and increasing role of primary care in managing chronic diseases such as diabetes and chronic obstructive pulmonary heart disease (see Chapter 2), and the socioeconomic gradient in risk factors such as obesity and smoking and the contribution to inequities in mortality across socioeconomic groups from these diseases, better data gathered from GPs that captures care quality and outcomes across socioeconomic groups could be used to inform interventions that address existing inequities, and prevent growing disparities in health outcomes in Denmark. Monitoring could cover the care spectrum, from collecting data on risk factors such as smoking and obesity, coverage of preventative screening for example breast and cervical screening, screening for depression or diabetes management. As part of giving a full picture of health inequalities in Denmark strengthening of data gathered from municipalities should also be a priority, and existing data should be fully expoited.

Access to specialists services in Denmark shows pro-rich inequity; this could be due to a number different factors, but at present it is not exactly clear which ones are most important. Waiting times are the most important factor behind unmet need for medical examinations, but travel and cost affect disproportionately the poor and could explain part of the pro rich utilisation of specialists services. Other factors may also influence this trend, e.g. poor education, lack of information, inequities in referral patterns from primary care. It may be interesting for Denmark to monitor this trend more closely, for example using surveys, to ascertain the extent to which distance, cost and other factors such as lack of information impact on inequities in access to specialists care. Given the current reorganisation of hospital care, and the closure of smaller local hospitals, a closer examination of equity in utilisation of specialist services would seem timely.

If the government wishes to address health inequities, it would be important for equity to be an explicit consideration in *health service*

planning decisions, both at local and regional level. For example, the involvement of the Board of Health and Welfare in approvals of plans for highly specialised units in hospitals has been regarded as a way to address variation across localities, but thereafter there has not been close monitoring of variations in medical utilisation across localities. Municipalities ought also to be centrally involved, and interventions to address structural inequalities should be part of their responsibility for health risk prevention and health promotion. The role of the municipalities will be especially important, and has the potential to bring the greatest return, around interventions aimed at children and young people, and elderly populations.

An evaluation of the consequences of policies to widen consumer and patient choice of health care providers in responses to concerns around long waiting times in Denmark, which includes the promotion of free-choice of provider amongst hospitals and municipalities for consumers, is underway but not yet available. Such an evaluation could usefully include considerations of the impact of the expansion of patient choice on equity, and whether there are differences in waiting times or taking advantage of patient choice possibilities by population group. In addition, there is an intersection between waiting times, travel and cost that could impact upon health care equity. Whilst there is equal access for all and patients can seek treatment outside of their home region, patients are generally not reimbursed for additional travelling costs (OECD, 2013), which may mean that waiting times, travel, and cost intersect as barriers to treatment for some individuals. Data on waiting time by income group, or socioeconomic group, is not readily available. Given that waiting times is a major factor behind unmet meet, it would seem important to monitor the impact of waiting time guarantees and free choice of hospital on access to elective surgery by different socioeconomic groups.

The factors of cost, distance to travel and waiting time, especially when combined, could be contributing towards observable pro-rich inequities in utilisation of specialist services. The impact of current hospital reform on these factors, especially for lower income groups, should be monitored.

The impact of these reforms on equitable access and service utilisation ought also to be monitored as part of considerations of equitable access to services across regions. At present, access to health care services appears to be broadly equitable across regions, although limited reporting by regions and municipalities on inequalities inhibits deeper understanding and analysis. The increasing centralisation of specialist hospital services could exacerbate small inequalities in the current geographical distribution of physicians across Denmark. Municipalities will need to ensure that elderly patients are not disadvantaged potential problems in access caused by the closure of smaller local hospitals. Health care needs and regional

distribution of physicians could be examined concurrently. Incentives to recruit health professionals from local communities where needs are the highest might have better payoffs on retention in underserved areas in the longer term.

With very few co-payments for services, there are for the most part no financial obstacles to accessing health care in Denmark. Furthermore, out-of-pocket spending has fallen in recent years in Denmark, and the current government has abolished a selection of user charges, for example for fertilisation treatments. However, user charges with limited exemptions may be contributing to observable inequities in unmet need for dental treatment. The impact of user charges for pharmaceuticals, eye products and services such as physiotherapy upon equity could be better examined. There are no exemptions for those with incomes under designated thresholds, beneficiaries of social benefits, or seniors, which may present a risk of growing inequities in access to some services. One starting point would be to review the effectiveness of current exemption policies and monitor health utilisation patters and out-of-pocket expenditure for other vulnerable categorises not currently benefiting from exemptions, and there is possibly scope for more transparent review of criteria (e.g., cost effectiveness) for inclusion or exclusion of specific services from the public benefit package. Further to this, Denmark could use those cost sharing policies that it has intelligently, for example to steer health behaviours towards desired direction (e.g., to encourage compliance with prescribed medical treatment, utilisation of cost-effective drugs or preventative care) or to discourage certain unwanted behaviour (e.g., choice of branded pharmaceutical products when a cheaper bioequivalent is available).

Note

1. More than 25 sick days within the past year.

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