ESPN Thematic Report on Inequalities in Access to Healthcare

Czech Republic

2018

Ivan Malý
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Directorate-General for Employment, Social Affairs and Inclusion
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European Social Policy Network (ESPN)

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The European Social Policy Network (ESPN) was established in July 2014 on the initiative of the European Commission to provide high-quality and timely independent information, advice, analysis and expertise on social policy issues in the European Union and neighbouring countries.

The ESPN brings together into a single network the work that used to be carried out by the European Network of Independent Experts on Social Inclusion, the Network for the Analytical Support on the Socio-Economic Impact of Social Protection Reforms (ASISP) and the MISSOC (Mutual Information Systems on Social Protection) secretariat.

The ESPN is managed by the Luxembourg Institute of Socio-Economic Research (LISER) and APPLICA, together with the European Social Observatory (OSE).

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Summary / Highlights

From the very beginning of healthcare transformation in the early 1990s, there has been a clear focus on maintaining broad and generous access to medical care for Czech citizens. The Constitution guarantees free access to healthcare on the basis of statutory public health insurance. Coverage is virtually universal, and the range of the benefits available to insured individuals is extensive. In principle, insured individuals are entitled to any medical care intended to maintain or improve their health status; in practice, there are certain limitations (e.g. cosmetic surgery, dental prostheses, etc. are excluded).

The Eurostat data on self-reported unmet need for medical treatment show the Czech Republic in quite a good light: the 95.7% level of 'no unmet needs to declare' in the total population aged 16 and over is equal to the EU average for 2016. However, the availability of care is currently being challenged. The lack of healthcare staff in specific areas and the relatively high average age of healthcare professionals are factors that are starting to hinder the functioning of the healthcare system. There are shortages of certain specialists and staff in general in rural areas.

The availability of health services was partly enhanced in 2012, when the government introduced explicit guidelines on their accessibility in terms of time and place. However, long waiting times remain an issue, not only because of the lack of personnel, but also because of regional disparities in the availability of expensive medical equipment.

Out-of-pocket (OOP) payments represented nearly 14% of total expenditure in 2015. Measured as a percentage of final household expenditure, this places the Czech Republic in the group of EU countries with the lowest level of OOP spending (OECD, 2016)). Affordability of care is good. However, the burden of OOP payments can be significant for some population groups, such as elderly people. The government's policy reflects that fact and several policy measures have been introduced to protect the most vulnerable groups.

Generally speaking, inequalities in access to healthcare are not usually considered to be among the most challenging issues facing the current Czech system. The system ensures a relatively high level of financial protection and affordability. In our opinion, the main weaknesses relate to lack of transparency: the system does not promote transparent waiting lists, and there is a general culture of informal, mutually beneficial relations overall in the country. There are some serious challenges, such as a lack of healthcare staff in certain areas and the relatively high average age of healthcare professionals. There is one vulnerable population group for whom affordability and availability of care can be problematic – the elderly, and especially those in the lower income deciles and/or who are chronically ill. A study conducted by the European Union Agency for Fundamental Rights (FRA, 2013) also mentions Roma and immigrants in this respect. This may well be true; however, there are insufficient data to assess the extent of such inequalities or discrimination.

1 Description of the functioning of the country's healthcare system for access

After a remarkably rapid transformation between 1990 and 1993, the Czech healthcare system completely changed from the 'Semashko' model[1] to the continental model based on statutory public health insurance. The more or less liberal features of the system were combined with a keen attempt to maintain broad and generous access to medical care for Czech citizens. During the very first period of transformation there were transparency, economisation[2], democratisation, humanisation[3] and a higher standard of healthcare officially declared as the main values.

The general principle governing access to healthcare is defined in the Charter of Fundamental Rights and Freedoms (Decree no. 2/1993 Coll.). Article 31 declares that 'Everyone has the right to health protection. Citizens are entitled to free healthcare and medical supplies on the basis of public insurance under the conditions laid down by law.'[4]

Statutory public health insurance was introduced in 1993; since then, its main principles – such as universal coverage and a universal package of benefits provided in kind – have remained the same. The benefit package is specified in §§ 13-16 of Act no. 48/1997 Coll. (Public Health Insurance). In principle, insured individuals are entitled to any medical care that aims to maintain or improve their health status, including dental care, mental healthcare, disease prevention and health promotion, rehabilitation care, medical transportation, etc. A list of services that are excluded or that are only covered with certain limitations is explicitly set out in Annex 1 to the law. Cosmetic surgery and dental prostheses, in particular, are not covered. Nursing care at home is a typical example of a service that requires a referral from a general practitioner before it is covered.

Entitlement to health insurance coverage is quite broad in the Czech Republic, and is based on permanent residence. Individuals who are not permanent residents, however, are also covered if they work for employers based in the Czech Republic. The law also covers persons seeking international protection (asylum seekers, refugees). The system is compulsory – no one is allowed to opt out.

According to recent estimates (Bednárová, 2014), there are between 70,000 and 100,000 people who are not eligible for public insurance coverage and who have limited access to the full range of services in the country. This constitutes less than 1% of the population and consists of non-EU nationals who do not fulfil the above-mentioned criteria (mostly students, spouses and children of employed persons, those who have lost their jobs, etc.). They must purchase private health insurance if they wish to obtain visas for their stay. Some experts (Hnilicová et al., 2010) warn of the unpleasant consequences of such an arrangement, including a higher risk of bad debts for health service providers.[5]

The system is funded primarily through mandatory, wage-based statutory health insurance contributions administered by the health insurance funds (66% of total

[1] Nikolai Semashko was Commissar of Health of the Russian Soviet Federative Socialist Republic (RSFSR) from 1918 to 1930. Under his leadership, a new socialist healthcare model was established in the Soviet Union. The model was highly centralised, integrated and hierarchically organised. It was based on a government monopoly, and state-funded healthcare was provided to all citizens free of charge. All health personnel were state employees.

[2] In a sense of introducing economically rational decision making and increasing the motivation of providers.

[3] Including an introduction of the right to choose a provider.

[4] Particularly Act. no. 48/1997 Coll.

[5] According to the foreign departments of some Prague university hospitals, it is inpatient medical care for children born prematurely and for children with congenital malformations that remains most frequently unpaid. Such cases are literally uninsurable by commercial insurers (Hnilicová et al., 2010).

expenditure in 2015). Other significant sources of funding include general taxation (18%) and out-of-pocket (OOP) payments (14%) (ČSU/CZSU, 2017a).

Insurance contributions are paid by employers, employees and self-employed persons. The state covers the premiums for roughly 60% of those insured. So called "state-insured" persons include pensioners, children until they finish their education, registered unemployed persons, women on maternity leave, disabled persons, parents caring for small children, prisoners, etc. (for more detail, see Ministry of Finance, 2017a).

The contribution rate for economically active payers is universally determined by law (13.5%, i.e. 9.0% paid by the employer and 4.5% by the employee). The self-employed pay the same total percentage (13.5%), but the base is only 50% of their profits. There are significant disparities between the average contributions of employees and self-employed persons. The contribution rate for state-insured persons is determined by the government and serves, in effect, as a tool to regulate the volume of funding in the public health insurance scheme. Since 1992, the revenue generated from contributions paid for state-insured persons has ranged from 20% to 27% of total revenue in the public health insurance scheme.[6] The government currently pays 969 Czech koruna (CZK) (EUR 37.90) for each state-insured person. This contribution is far below the lowest level paid by "non-state-insured". (The level is represented by "insured persons without earnings" that are supposed to pay CZK 1,647/EUR 64.40 per month, representing 13.5% of the minimum wage). The cabinet has redesigned the way in which the contribution rate for state-insured persons is set until 2020. It has ensured an increase in the total amount of contributions of CZK 3.5 billion/EUR 134 million annually. The main purpose of this measure is to allow for wage growth in 2018 and to increase the attractiveness of healthcare professions. In 2017, stabilisation of human resources was a major concern and the issue most frequently communicated by the ministry and the cabinet, which faced intense pressure from trade unions and other stakeholders.

Out-of-pocket payments consist mainly of direct payments for over-the-counter pharmaceuticals and some dental procedures; co-payments for medical supplies and prescription pharmaceuticals whose actual price exceeds the reference price in a particular pharmaceutical group; and user fees (flat rate of CZK 90/EUR 3.50) for emergency care. OOP payments as a percentage of final household expenditure in the Czech Republic remain among the lowest in the OECD countries (Alexa et al., 2015). Affordability of care is fairly high. However, the burden of OOP payments can be significant for some population groups, such as the elderly. The government's policy reflects that fact and it has introduced several measures to protect the most vulnerable groups. These include a change in the cap on the total amount of drug co-payment expenditure for the elderly and children – the ceiling was recently lowered significantly (see Table 1).[7]

Table 1. Changes in drug co-payment caps

Category	Caps till 12/2017 CZK/EUR	Current caps CZK/EUR
Elderly 65-70	2,500/97	1,000/39
Elderly 70+	2,500/97	500/19
Children under 18	2,500/97	1,000/39

Source: authors' information.

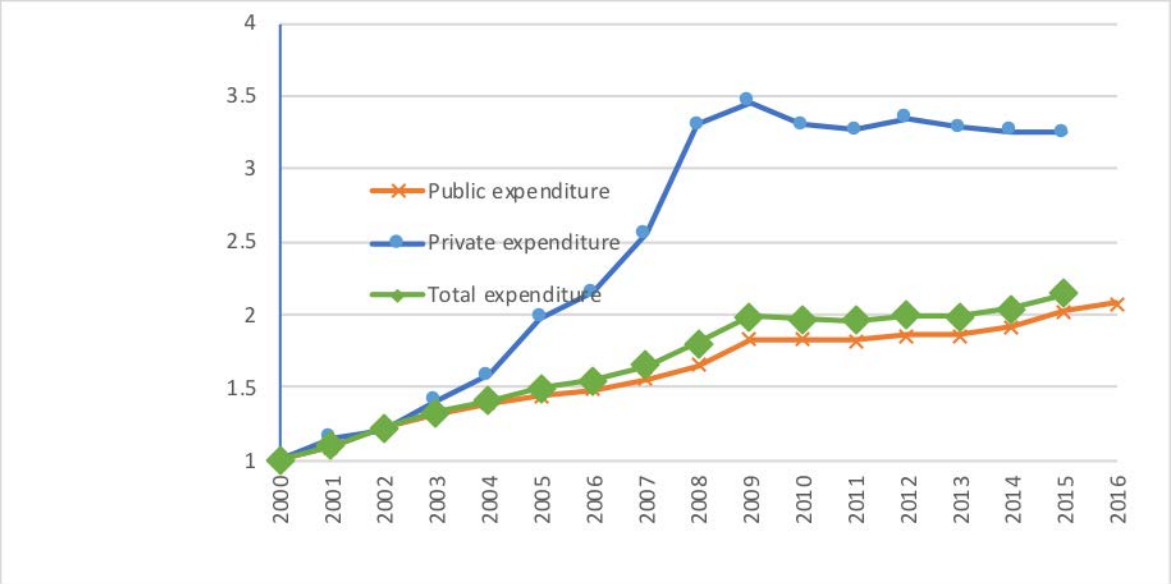
There is almost no evidence on informal payments in the Czech health system. As Alexa et al. (2015) note, according to Transparency International's Global Corruption Barometer 2013, 15% of the population make informal payments in the health system. The findings from our research conducted in 2000 confirmed that only a very limited number of cases can be detected by surveying individual patients or households. Most informal payments are meant as a token of gratitude, rather than as classic bribery.

[6] In 2017, it represented CZK 65 billion/EUR 2.5 billion in total.

[7] The cap for working-age adults has remained the same – CZK 5,000/EUR 194.

Figure 1 illustrates that in recent years the system has been relatively cost-wise. Total expenditure – i.e. from the public health insurance system, the state budget, regional budgets, private expenditure, and other marginal sources – reached approx. CZK 358 billion/EUR 14 billion in 2015 (ČSU/CZSU, 2017b). Compared to the previous year, this represented an increase of 1.2%. Total expenditure on health was 7.2% of GDP in 2015 (the EU-28 average was 9.9% in 2015). The greater part of health services funding comes from public health insurance and public budgets. Expenditure from public insurance amounted to CZK 274 billion/EUR 10.1 billion in 2016, compared to CZK 252 billion/EUR 9.3 billion in 2015 (ÚZIS/IHIS, 2017a). Even though total expenditure is below the EU average, the cost-effectiveness of the system is often questioned (for specific reasons, see mainly the European Commission's country-specific recommendations in recent years). The government has adopted a number of measures, which are at various stages of implementation. The greatest upcoming challenges (ageing of the population, an increase in demand driven by technological development) have yet to be addressed in a systematic and complex way. Alexa et al. (2015) warn that funding could become a serious threat to access to health services. To maintain the current standard of healthcare, additional financial resources will have to be mobilised. If they are not, access could effectively be reduced because of increased waiting times or limited availability of modern treatment options.

Figure 1. Growth in healthcare expenditure (year 2000 = 1)



Source: authors, data from (ÚZIS/IHIS, 2017a and ČSU/CZSU, 2017a).

Seven health insurance funds administer the public health insurance scheme. They are quasi-public self-governing bodies that act as payers and purchasers of healthcare (Alexa et al., 2015). Of these, the biggest is the General Health Insurance Agency of the Czech Republic (VZP). This is due to historical reasons, as the VZP had a monopoly position at the outset of the reform. It currently insures 57% of the population. All health insurance agencies are open to any applicant for insurance. All of them are non-profit, and their activities are governed by the same (or very similar) rules (Holub and Němec, 2014). The health insurance agencies collect contributions from their policyholders. These contributions are fully redistributed among the health insurance agencies according to the age and gender structure of the portfolios of policyholders, in order to reflect the expected costs of treatment. In accordance with the Convergence Programme of the Czech Republic (Ministry of Finance, 2017b), a modification of the health insurance premiums redistribution system was recently approved. From 1 January 2018, Pharmacy-based Cost Groups (PCGs) were added to the redistribution formula, in order to better reflect expected costs of treatment. The health insurance agencies are supposed to sign contracts with selected healthcare providers, according to their health plans, to ensure

complex and accessible medical care for their clients. Healthcare prices are largely uniformly determined by the Ministry of Health, although the ministry's resolution on price levels is formally preceded by negotiations between health insurers and the representatives of healthcare providers (Holub and Němec, 2014).

The Czech Republic emerges relatively well from the Eurostat statistics on self-reported unmet need for medical treatment. The level of 95.7% of 'no unmet needs to declare' in the total population aged 16 and over is equal to the EU average in 2016. We provide more detailed information on self-reported unmet care needs in Part 2.

The availability of health services was partly enhanced in 2012 (Government Regulation no. 307/2012 Coll.), when the government introduced explicit guidelines on the accessibility of health services in terms of time and place. However, long waiting times remain an issue, not only because of the lack of personnel, but also because of regional disparities in the availability of expensive medical equipment.

The network of healthcare facilities is fairly dense and is more or less stable, despite certain local shortcomings. According to the OECD (2016), there were 3.7 practising doctors per 1,000 population in 2014, which is fairly close to the EU average (3.5 per 1,000 population). The growing average age of physicians is of some concern.[8] A lack of specialists in certain fields (e.g. dentists and paediatricians) and a general staff shortage in rural areas are already apparent. On the other hand, the total number of full-time equivalent physicians increased slightly in 2015/2016. Aside from Prague (677 physicians per 100,000 population), regional capacity varies from 286 to 435 physicians per 100,000 population; the country average is 393 physicians per 100,000 inhabitants (Bartůňková et al., 2015).

The shortage of nurses in acute inpatient care is even more disturbing. The total number of full-time equivalent nurses decreased by more than 1,500 between 2010 and 2016 (Bartůňková and Dušek, 2016). This has even led to the loss of some acute beds. The reasons for this development include low pay, unpleasant and stressful working conditions, and an attractive supply of jobs abroad (Germany, Austria).

The network of inpatient care providers in 2016 consisted of 189 hospitals, 126 specialised medical facilities (including convalescent homes and hospices) and 88 spa facilities. There were 48,511 hospital beds (ÚZIS/IHIS, 2017a). According to the World Health Organization's Health for All database,[9] there were 425 acute beds per 100,000 inhabitants in 2014 – slightly above the EU average (394). Recent figures from the Institute of Health Information and Statistics (ÚZIS/IHIS, 2017b) suggest substantial regional disparities, with the number of beds varying from 594 to 925; the national average is 737 beds per 100,000 inhabitants.

The vast majority of healthcare providers work under contract to the public healthcare system. The non-contracted, fully private regime is quite rare and is limited to specific metropolitan areas (mostly Prague and Brno). With no data available, it is impossible to estimate its market share; however, its overall impact is negligible. Non-contracted providers are (relatively) more common in attractive (and lucrative) specialisations such as dentistry or rehabilitation care.

2 Analysis of the challenges in inequalities in access to healthcare in the country and the way they are tackled

(In)equality in health status as an **outcome** can serve as a useful indicator of inequality in access to healthcare.

[8] The EU Semester (European Commission, 2018) notes: 'The lack of healthcare staff in certain areas and the relatively high average age of healthcare professionals are starting to hinder the functioning of the healthcare system.' More than 30% of general practitioners and 40% of paediatricians are at least 60 years old.

[9] https://gateway.euro.who.int/en/datasets/european-health-for-all-database/

In 2015, life expectancy at birth for women (81.6 years) and life expectancy at 65 (for both women and men) were worse than the EU average (ECHI, 2018). Inequality in self-perceived general health (as good/very good and bad/very bad) varies considerably between income groups and is substantially worse than the EU average.

Life expectancy differs slightly across the regions of the Czech Republic. While life expectancy at birth for males was 78.02 years in Prague in 2016, it was only 73.98 years in Ústecký Region (ČSU/CZSU, 2017c). Alexa et al. (2015: 146) suggest that: 'these disparities are, to a great extent, likely to be attributable to environmental factors as the regions with a relatively low life expectancy (such as Moravskoslezsky or Ustecky) have a history of heavy industry, intensive mining and poor environmental quality. Occupational hazards may also be a cause of the differences. Geographical discrepancies in life expectancy are more pronounced for men than for women, with heavy industry and mining jobs traditionally being male occupations.'

Individual socio-economic position appears to be a reason for inequalities in all-cause mortality among the Czech population. Vandenheede et al. (2014) found that age-standardised mortality rates in the lowest socio-economic groups were the worst and were above the average for the whole sample. The differences between groups were more pronounced for men than for women in the Czech sample. Another study (FRA, 2013) pointed to a 10-year gap in life expectancy between men with high and low educational attainment, compared to less than 3 years for women. The results indicate that there is scope for health policy interventions to improve the health outcomes for the socio-economically worse-off sections of the Czech population (Alexa et al., 2015).

There is little information available in the Czech Republic on mortality or causes of death based on ethnicity or other socio-economic indicators other than age and education (FRA, 2013). However, research conducted in 2001 suggests that the mortality rates among Roma people, especially children, are significantly higher than in the total population (Koupilová et al., 2001).

By contrast, there is a rich set of indicators of **availability** of services in terms of resources, capacities, geographical distribution, utilisation and self-reported unmet need.

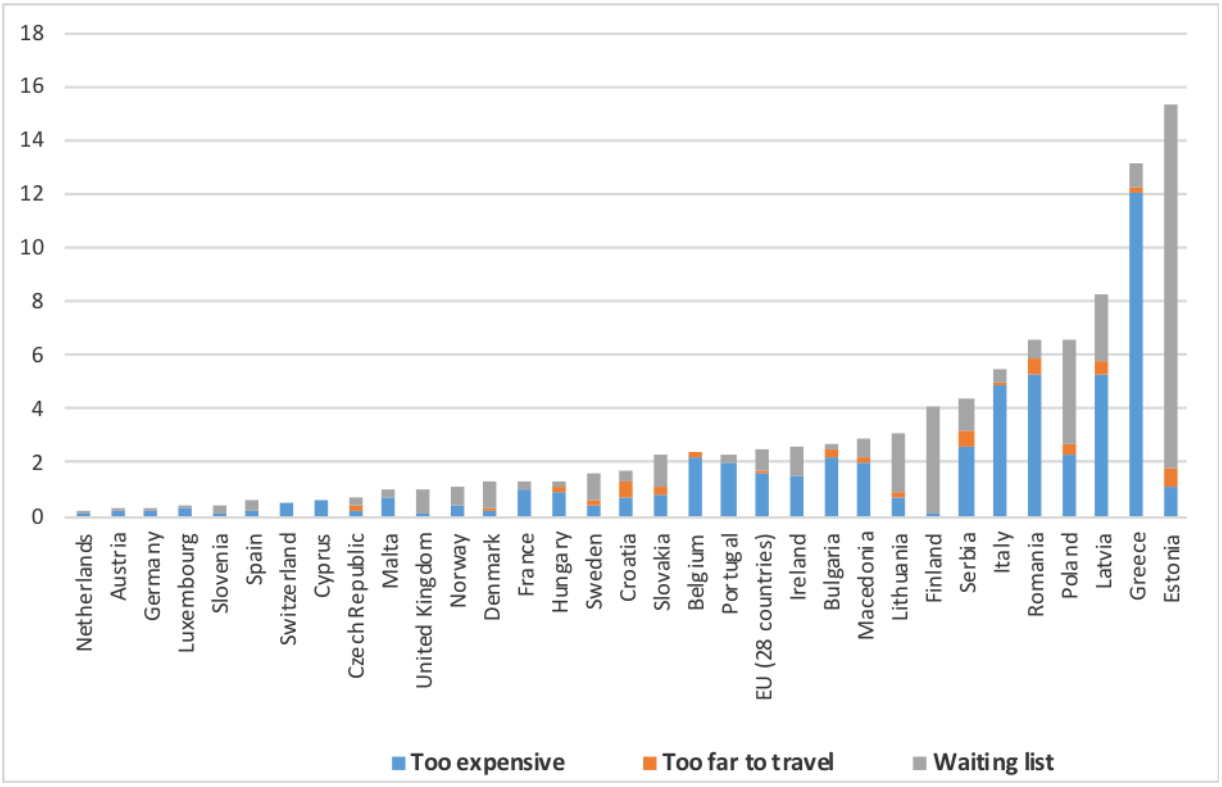
Using data on unmet need for medical treatment (based on EU-SILC, 2016) we can see that the Czech Republic emerges in quite a good light, ranking generally above the EU-28 average (except for the reason 'Too far to travel'; see Table 2). Looking more closely at the three most relevant reasons for unmet care needs – 1. Could not afford it (too expensive); 2. Waiting list; 3. Too far to travel – we can see that the country ranks ninth out of 32 countries (see Figure 2).

Table 2. Self-reported unmet need for medical treatment by detailed reason, percentage of population aged 16 and over

Country	Total	Too expensive	Too far to travel	Waiting list
Czech Republic	0.7	0.2	0.2	0.3
EU (28 countries)	2.5	1.6	0.1	0.8

Source: EU-SILC, 2016.

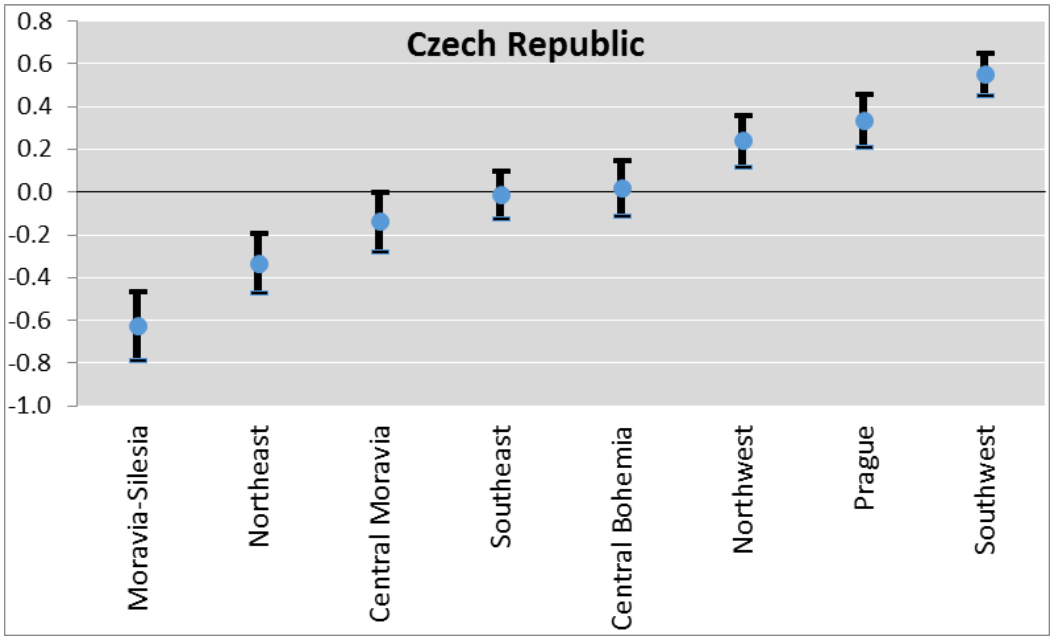
Figure 2. Unmet medical need, by main reasons, per cent



Source: EU-SILC, 2016.

Analysing the data on unmet medical needs, in order to achieve a better understanding of the regional distribution, Brezzi and Luongo (2016: 18) found that 'being aged 65 or more and having a chronic illness has a differentiated impact on the probability of unmet medical needs across regions within the same country'. They suggest that 'such a result implies that policies to reduce inequality in health call for complementing nationwide policies to increase healthcare access with actions targeted to specific population groups according to the needs and results of specific regions' (ibid.). According to their findings, regional figures for unmet need vary significantly from the average for the Czech Republic (see Figure 3). Regional disparities in resources and capacities (mentioned in Part 1) can partly explain such variations. We agree with Alexa et al. (2015) that 'regional disparities in the accessibility of medical services remain a key challenge for future Czech health policy'.

Figure 3. Regional probability of experiencing unmet medical needs, 2011
Regional values (blue dots) expressed as the difference from the national value (zero-line) and their 95% confidence intervals (bars)



Source: Brezzi and Luongo (2016: 11).

A low level of 'too expensive' as a reason for unmet need could easily suggest a relatively negligible relevance of **affordability** issues. However, our practical experience gives us a different perspective. The public and (latterly) the politicians are very conscious of OOP payments and their implications for health policy proposals. The OOP payment burden increased after the implementation in 2008 of new user fees in the Czech Republic (for details see Alexa et al., 2015). As various exemptions and changes came into force between 2008 and 2014,[10] the overall burden on households declined. Finally, at the beginning of 2015 the government abolished the standard charges for medical appointments and prescriptions. The only fee that remains is an emergency care charge.

As several authors show (Kočiš Krůtilová and Doubková, 2018; Alexa et al., 2015), the burden is not distributed equitably. It is highest for elderly households (households with members aged 65 and over); conversely, households with children (which are often mentioned as a vulnerable group and protected from high health payments) had a much lower burden (Kočiš Krůtilová and Doubková, 2018).

Alexa et al. (2015) provide an interesting analysis of private per capita spending on health (see Table 3). They questioned the validity of the widely held assumption of the regressive nature of OOP payments. Table 3 shows that private per capita household spending as a share of total household expenditure in the Czech Republic in 2013 was highest not among those in the lowest income deciles, but among middle-income households. The exemption from user fees for people on low incomes and the annual ceiling on selected user fees and co-payments for prescription pharmaceuticals may have a mitigating effect in this regard for low-income deciles.

[10] The introduction of small standard fees (EUR 1.50 for a medical appointment and EUR 4 for a day of inpatient hospital care) in 2008 appears to be the largest system change in the past decade – and the most controversial. The fee per stay in hospital was finally abolished by the Constitutional Court's decision in 2013. The Court claimed that the fee represented a real barrier to access to healthcare for certain groups of the population (pensioners) who had difficulty coping with these – albeit moderate – out-of-pocket payments (the average pension is roughly EUR 400 a month in the Czech Republic).

Table 3. Private per capita expenditure on health in EUR and as a share (%) of total household expenditure according to net disposable income per person (deciles), 2013

Decile		2013
	Annual expenditure on health per capita (EUR)	Share of household expenditure on health per person (%)
Lowest 10%	51	1.96
2nd 10%	70	1.95
3rd 10%	107	2.71
4th 10%	128	2.90
5th 10%	131	2.82
6th 10%	138	2.86
7th 10%	127	2.38
8th 10%	142	2.38
9th 10%	152	2.22
Highest 10%	187	1.91
All households	116	2.38

Source: Alexa et al. (2015).

It will be interesting to observe this distribution after the implementation of recent and planned changes. As we noted in Part 1, there has been a substantial reduction in the ceiling for co-payments for medical supplies and prescription pharmaceuticals, and the ministry plans to allow full coverage of certain health aids (ČTK/CPO, 2018). The number of persons eligible for the statutory cap on the co-payments has decreased substantially over the past 10 years (see Table 4).

Table 4. Total number of VZP clients aged 65+ who exceed the statutory cap on co-payments

Year	Limits (CZK)	Persons
2009	2,500	236,491
2014	2,500	140,081
2016	2,500	46,729
2018	1,000/500	n/a

Source: authors; data from VZP Yearbooks 2009, 2014, 2016.

Czech healthcare seems to provide a relatively high level of financial protection and affordability. In our opinion, the main weaknesses relate to lack of transparency. The system does not have transparent waiting lists, and there is a general culture of informal mutually beneficial relations. There are some serious challenges, such as a lack of healthcare staff in certain areas and the relatively high average age of healthcare professionals. There is one vulnerable group of the population in terms of the affordability and availability of care: the elderly, and especially those in lower income deciles and/or those who are chronically ill. Some studies (FRA, 2013) also mention Roma and immigrants. This may be the case; however, there are insufficient data to assess the extent of inequalities or discrimination here.

The government has recently introduced (or has plans to adopt) some policy measures to deal with major concerns.

Apart from the reduction in the ceiling on co-payment, we should mention the 'reconstruction' of a special advisory board – the Equipment Commission – with the aims of narrowing the gap in availability of high-cost equipment across regions and reducing inefficiencies. New decision-making procedures will be strictly transparent and will

comply with the principles of Health Technology Assessment (HTA). All documents regarding the commission's proceedings are going to be published.

The ministry has prepared a subsidy programme to support dental care availability in all regions. A call for applications was made in March 2018 to help establish the first psychiatric care centres.

As mentioned above, in recent years there has been a severe shortage of nurses (and midwives) in the sector of acute hospital care. In response, the government has taken two steps: it has changed the qualification requirements for registered nurses and has addressed the problem of the remuneration of inpatient nurses through significant pay rises of 10% a year. These policies seek to stabilise the workforce in Czech hospitals and provide competitive remuneration.

We have already mentioned the issue of ageing. This goes hand in hand with the increasing tendency for younger physicians to move abroad in search of better working conditions. An increase in the number of graduates in general medicine from all Czech medical faculties is currently a hot topic. The Ministry of Education has repeatedly expressed its willingness to provide special subsidies to medical faculties. However, any consensus is still hard to predict. Medical faculties claim that they have long been underfunded and demand guarantees of a long-term solution, which can hardly be expected. They have not confirmed their willingness to accept more students yet. However, proper measures will have to be applied as soon as possible, since it will take at least 6 years for any effect to show up.

3 Discussion of the measurement of inequalities in access to healthcare in the country

Since coverage is not considered to be an issue (except for the 70,000 to 100,000 foreigners from third countries), a great deal of Czech discourse on inequality centres on the actual availability and affordability of services.

Measures concerning regional discrepancies in health (life expectancy, life expectancy in good health, standardised mortality rates, etc.), key capacities (including hi-tech equipment) and available services (including waiting times) can provide a good picture here. Hospitals are supposed to publish their waiting times for planned services (both diagnostic examination and treatment) and indeed they do so. Systematic monitoring and verification of such data would be helpful. We are not aware of any source of this kind.

We can see a possible country-specific limitation in the indicator 'self-reported unmet need for medical treatment'. One of the reasons for postponing and/or forgoing medical treatment may relate to the regulations on sickness benefits: employees do not receive any remuneration for the first 3 days of illness, after which sickness benefits make up roughly 60% of salary. It is likely that some respondents who cannot afford to lose any income choose the answer 'no time', although in fact the true reason is financial and is thus closer to the answer 'too expensive'.

Kočiš Krůtilová and Doubková (2018) used the Household Budget Survey (HBS) as a source of data for exploring households' OOP payments in their very informative study. They claim that the HBS is a 'suitable source of data'. However, they would like some information to be covered in more detail or in a more suitable way, and they claim that many relevant variables related to health status and healthcare consumption are not covered in the survey – the HBS data do not include information on health status or health consumption (Kočiš Krůtilová and Doubková, 2018).

References

Alexa, J., Rečka, L., Votápková, J., van Ginneken, E., Spranger, A. and Wittenbecher, F. 2015. Czech Republic: Health system review. Health Systems in Transition, 2015; 17(1): 1–165. Online. Available at: http://www.euro.who.int/__data/assets/pdf_file/0005/280706/Czech-HiT.pdf?ua=1

Bartůňková, M. and Dušek, L. 2016. Personální kapacity a odměňování v českém zdravotnictví. Nová data z rezortního statistického šetření za rok 2016 [Personal capacities and remuneration in Czech Healthcare in 2016]. Online. Available at: http://www.uzis.cz/zpravy/personalni-kapacity-odmenovani-v-ceskem-zdravotnictvi-nova-data-z-rezortniho-statistickeho-se

Bartůňková, M., Jarkovský, J., Dušek, L. et al. 2015. Personální kapacity a odměňování v českém zdravotnictví r.2015 – celostátní data [Personal capacities and reimbursement in Czech Healthcare 2015]. In ÚZIS/IHIS, NZIS Report no. 1 (06/2016). Online. Available at: http://www.uzis.cz/rychle-informace/personalni-kapacity-v-ceskem-zdravotnictvi-v-r-2016

Bednárová, L. 2014. Na veřejné zdravotní pojištění nedosáhne v ČR až sto tisíc cizinců [Up to 100,000 foreigners are not eligible for public health insurance]. Online. Available at: https://euractiv.cz/section/cr-v-evropske-unii/news/na-verejne-zdravotni-pojisteni-nedosahne-v-cr-az-sto-tisic-cizincu-012339/

Brezzi, M. and Luongo, P. 2016. Regional disparities in access to health care: A multilevel analysis in selected OECD countries, OECD Regional Development Working Papers, 016/04, OECD Publishing, Paris. Online. Available at: http://dx.doi.org/10.1787/5jm0tn1s035c-en

Czech Press Office (ČTK/CPO). 2018. Novela zákona umožní plnou platbu zdravotních pomůcek, říká ministr [An amendment will allow full reimbursement of certain health aids, says the Minister], *Zdravotnický deník*, 28 March. Online. Available at: http://www.zdravotnickydenik.cz/2018/03/novela-zakona-umozni-plnou-platbu-zdravotnich-pomucek-rika-ministr/

Czech Statistical Office (ČSU/CZSU). 2017a. Výsledky zdravotnických účtů ČR – 2010-2015 [Health Accounts Results]. Online. Available at: https://www.czso.cz/csu/czso/vysledky-zdravotnickych-uctu-cr-2016

Czech Statistical Office (ČSU/CZSU). 2017b. Statistická ročenka ČR 2017 [Statistical Yearbook 2017]. Online. Available at: https://www.czso.cz/csu/czso/24-zdravotnictvi-qvn74xj0bo

Czech Statistical Office (ČSU/CZSU). 2017c. Life Tables for the Czech Republic, Cohesion Regions, and Regions 2015-2016. Online. Available at: https://www.czso.cz/csu/czso/life-tables-for-the-czech-republic-cohesion-regions-and-regions-2015-2016

European Commission. 2018. Commission staff working document. Country Report Czech Republic 2018. 2018 European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011. Online. Available at: https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-czech-republic-en.pdf

European Core Health Indicators (ECHI). 2018. Online. Available at: https://ec.europa.eu/health/indicators_data/indicators_en

European Union Agency for Fundamental Rights (FRA). 2013. Inequalities and multiple discrimination in access to and quality of healthcare. Online. Available at: http://fra.europa.eu/en/publication/2013/inequalities-and-multiple-discrimination-access-and-quality-healthcare

Hnilicová, H., Dobiášová, K. and Čižinský, P. 2010. Komerční zdravotní pojištění cizinců v ČR [Commercial medical insurance for foreigners]. Online. Available at: http://aa.ecn.cz/img_upload/224c0704b7b7746e8a07df9a8b20c098/HnilicovaDobiasovaCizincsky_KomercniZdravotniPojisteni.pdf

Holub, M. and Němec, J. 2014. Pensions, health and long-term care, Czech Republic. ASISP Country Document. Online. Available at: http://www.ec.europa.eu/social/BlobServlet?docId=12957&langId=en

Institute of Health Information and Statistics (ÚZIS/IHIS). 2017a. Zdravotnická ročenka České republiky 2016 [Health Statistics Yearbook of the Czech Republic 2016]. Online. Available at: http://www.uzis.cz/katalog/rocenky/zdravotnicka-rocenka-ceske-republiky-1961-az-2013

Institute of Health Information and Statistics (ÚZIS/IHIS). 2017b. Zdravotnictví ČR: Lůžkový fond 2016 [Czech Healthcare: Available beds 2016]. Online. Available at: http://www.uzis.cz/en/system/files/nzis_rep_2017_E03_luzkovy_fond_2016.pdf

Kočiš Krůtilová, V. and Doubková, D. 2018. The out-of-pocket health burden in the Czech Republic – Should we care? *KONTAKT* 1 (2018) 102-111. Elsevier. *Social Science in Health.* Available online at www.scienceirect.com. Cited from http://casopis-zsfju.zsf.jcu.cz/kontakt/administrace/clankyfile/2018040613560 4642050.pdf

Koupilova, I., Epstein, H., Holcik, J., Hajioff, S. and McKee, M. 2001. Health needs of the Roma population in the Czech and Slovak Republics, Social Science and Medicine, 53(9), pp. 1191-1204.

Ministry of Finance (MFCR/MF ČR). 2017a. Otevřená data MF ČR - Platba státu za státní pojištěnce 2017 [Open data MFCR Payment for state-insured persons 2017]. Online. Available at: http://data.mfcr.cz/cs/dataset/platba-statu-za-statni-pojistence/resource/1417f01a-a204-48b7-9352-77a23424c30f

Ministry of Finance (MFCR/MF ČR). 2017b. Convergence Programme of the Czech Republic. Online. Available at: http://www.mfcr.cz/CoPr

OECD. 2016. Health at a Glance: Europe 2016, State of Health in the EU Cycle. Online. Available at: https://www.oecd.org/els/health-systems/Health-at-a-Glance-Europe-2016-CHARTSET.pdf

Vandenheede, H., Vikhireva, O., Pikhart, H. et al. 2014. Socioeconomic inequalities in all-cause mortality in the Czech Republic, Russia, Poland and Lithuania in the 2000s: Findings from the HAPIEE Study. Journal of Epidemiology and Community Health. Online. Available at: http://jech.bmj.com/content/68/4/297.long

Všeobecná zdravotní pojišťovna/General Health Insurance Agency (VZP). Yearbooks 2009, 2014, 2016. Online. Available at: https://www.vzp.cz/o-nas/dokumenty/rocenky