

## New Healthcare Policy Challenges

(Diagnosis-Related Group's Negative Effects)

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In November 2022 new way of reimbursing medical services within the framework of the Universal Healthcare Program, the so-called Diagnosis Related Groups (DRG), was instituted. This reimbursement method entails dividing medical cases into groups and determining the care price for these groups. Therefore, starting in November, the cost of medical care was predetermined for 510 groups within the budget program. This payment method from the universal healthcare program implies a rejection of the individual approach and is based on the unification of diagnoses. In particular, the expectation is that medical institutions use similar resources to treat patients with clinically similar inpatient cases (diagnosis). Pricing is determined based on retrospective analysis. Specifically, the medical service price is determined by multiplying the inflation-indexed price per inpatient unit by the weight of the same class. Based on this principle, by 2022, the base rate for a single medical case was defined at 1 959.9 GEL.

For example, the budgetary program will reimburse 17 857.0 GEL for the heart valve surgery of a person beneficiary the Universal Healthcare because the value weight of this group is 9.1112 ( $17\ 857.0 = 1\ 959.9 \times 9.112$ ). The amount of compensation for the femur fracture treatment will be 1 313.7 GEL because the value weight for such a diagnosis is 0.6703 ( $1\ 313.7 = 1\ 959.9 \times 0.6703$ ). However, a co-payment component should be considered for certain groups of people benefiting from Universal Healthcare. For illustration, suppose a person who is a beneficiary of the healthcare program, but has a 10.0% co-payment, breaks her femur in case of receiving treatment services from a medical institution. In that case, she will pay 131.4 GEL, and the state budget will pay the remaining 1 182.3 GEL.

This method of financing care was first developed at Yale University and was integrated into the US healthcare system in the 1980s (Fetter et al., 1976). In the following years, a similar method was developed in European countries (Schreyögg et al., 2006; Quentin et al., 2013; Tan et al., 2014). Therefore, there is empirical literature that studies the results of implementing DRG, where the main line of inquiry is the effect of DRG on the quality of medical service.

In Georgia, discussions about implementing the DRG method started before the Pandemic, when the government had to deal with rising healthcare costs and deficit problems in the healthcare program (Rakviashvili & Shamugia, 2019). On the one hand, the rising cost of the Universal Healthcare

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Program is due to opportunistic behaviour, which is more expressed in the hospital sector. Namely, Universal Healthcare is associated with longer hospitalisation periods (Rakviashvili & Shamugia, 2019). Therefore, implementing a new method of financing was a response to the rising costs of the budgetary healthcare program.

However, this is not the first attempt at cost reduction since, in 2017, some groups of people were excluded from the Universal Healthcare Program, and a differentiated approach was taken for them. Namely, the copayment system was implemented. This, however, could not reduce the tendency of rising costs, and the deficit still needs to be eliminated. Moreover, these efforts reduced the increasing tendency of rising costs only for the year, but the same problem resurfaced with new intensity in the following years (see [Graph 2](#) and [Graph 3](#)). Therefore, at the end of 2019, a price was determined for various medical services, known to the public as the “520th decree”.

Apart from the budget programs, rising costs can be observed in the total expenditures of the healthcare program (Rakviashvili & Shamugia, 2019). This is not a uniquely Georgian phenomenon nor endemic to developing nations. Rising healthcare costs can be observed globally (see [Graph 1](#)), and the instability of Universal Healthcare programs is a challenge for almost every developed nation (OECD, 2021) because the growth of their real economy lags behind rising healthcare costs (see [Graph 4](#) and [Graph 5](#)). Therefore, the healthcare system creates high fiscal risks. It should also be noted that in developing nations, healthcare costs are rising faster compared to the developed world (WHO, 2018). Without taking the recent Pandemic into account, the rise in healthcare costs can be explained by implementing modern technologies for treatment. This increases the cost of service (Chernew et al., 1998; Chernew & Newhouse, 2011; Chandra & Skinner, 2012); increasing life expectancy because elderly persons require more medical care (Gerdtham, 1993; Breyer et al., 2010; de Meijer et al., 2013); economic development because due to increasing income, individuals want to spend more on healthcare (Newhouse, 1977; Wildavsky, 1979; Hall & Jones, 2007).

### Diagnosis-Related Groups Effects

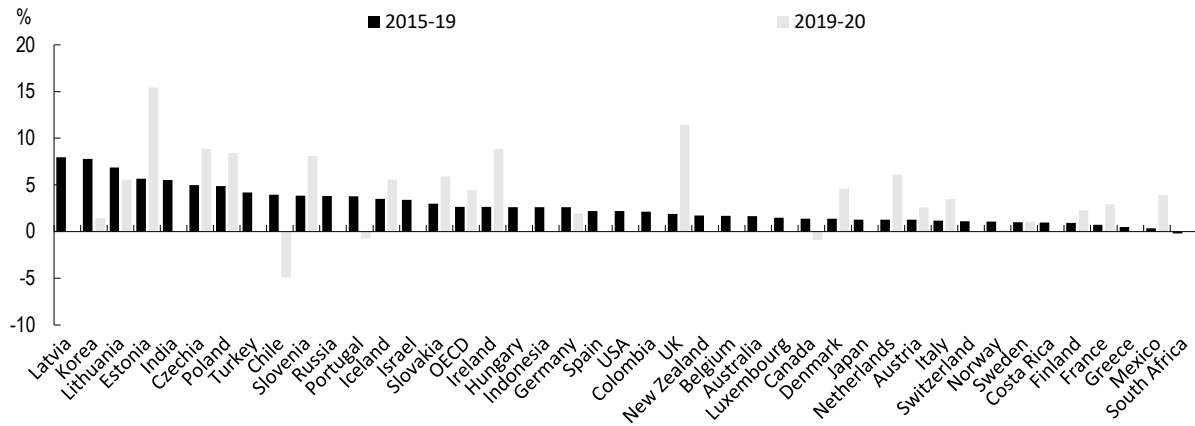
Although the DRG method is widely popular, it cannot ameliorate all the problems faced by the healthcare system. **There appears to be empirical proof that this method can help reduce costs and average hospitalisation duration** (Kahn, 1990; Louis et al., 1999; Kwon, 2003; Tsai et al., 2005; Schreyögg et al., 2006; Baroni et al., 2020). **However, some studies highlight its negative aspects, namely a decreased quality of care.** When the prices are predetermined, clinics try to minimise costs to avoid a reduction in profit margin. This leads to a drop in the intensity and quality of care (Kwon, 2003;

Farrar et al., 2009; Paddock et al., 2007; Cutler, 1995; Hamada et al., 2012). There are also cases of discrimination in various circumstances when providers of medical services prefer to treat patients that are more “profitable” (Monrad Aas, 1995; Ellis, 1998). Because of DRGs, medical providers are incentivised to treat more profitable diseases and overlook other services or reduce their scope. On the other hand, there are problems such as hospitalisation duration and diagnosis manipulation. Clinics sometimes are incentivised to move patients to more expensive groups (Eichenwald, 2003; Dafny, 2005). Also, due to this kind of financing, clinics seem to reduce average hospitalisation duration at the expense of short-term stationeries (Norton et al., 2002; Pongpirul et al., 2011). For instance, In Belgium, this kind of policy led to a 42% increase in one-day hospitalisation (Perelman & Closon, 2007).

Implementation of the DRG method could reduce existing opportunistic behaviour. For instance, within the framework of Universal Healthcare, hospitalisation duration could decrease in the short term; however, more severe problems could arise in the long run because healthcare providers will have new incentives. Considering general experience, healthcare providers in Georgia could also reduce treatment intensity and quality of care due to price fixing. On the other hand, the proper functioning of such a complex system of financing requires regular systemic analysis. Thus, maintaining such a policy requires highly qualified human resources, a lack of which could be observed back in 2019 when price fixing on some medical services was introduced. It should also be noted that if complications associated with Universal Healthcare programs emerge, the healthcare system could be sent into a regulatory spiral. Therefore, introducing a more complex regulatory system would lead to more long-term complications, which could give rise to a demand for even more regulatory mechanisms.

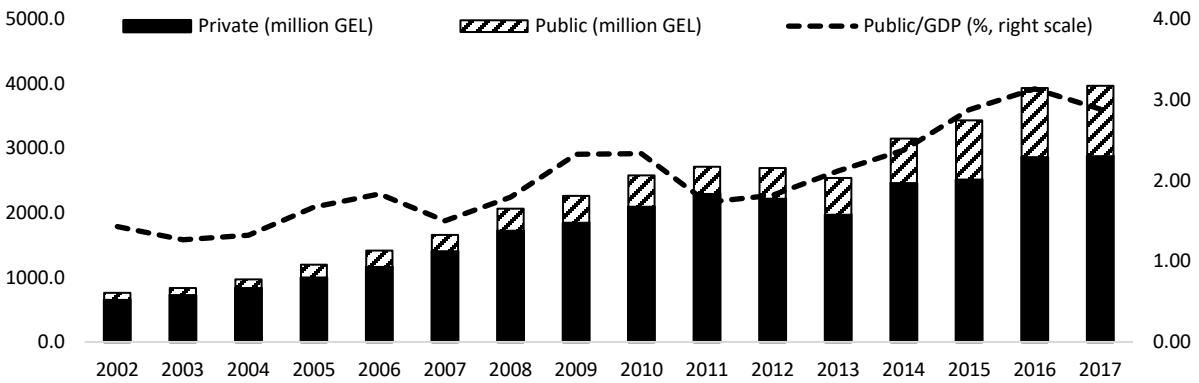
**Graphs:**

**Graph 1: Annual growth in healthcare expenditure per capita (in real terms)**



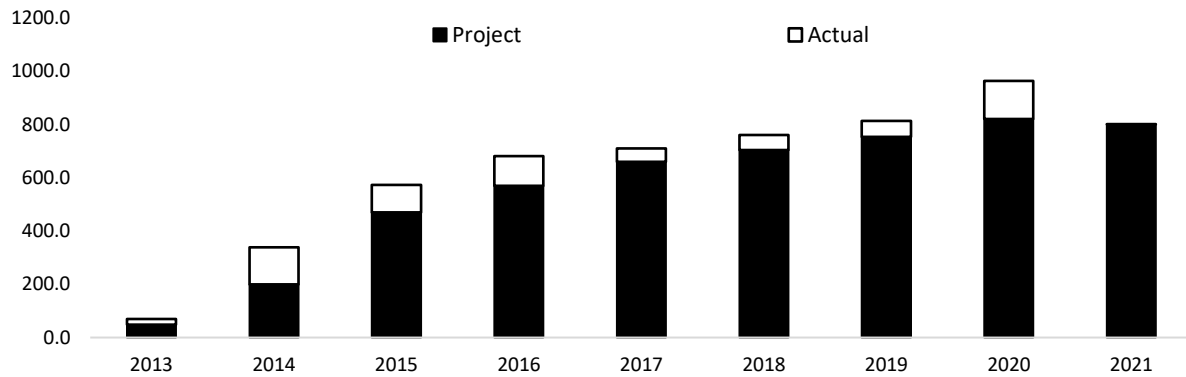
Source: OECD

**Graph 2: Expenditure on Healthcare in Georgia (million GEL)**



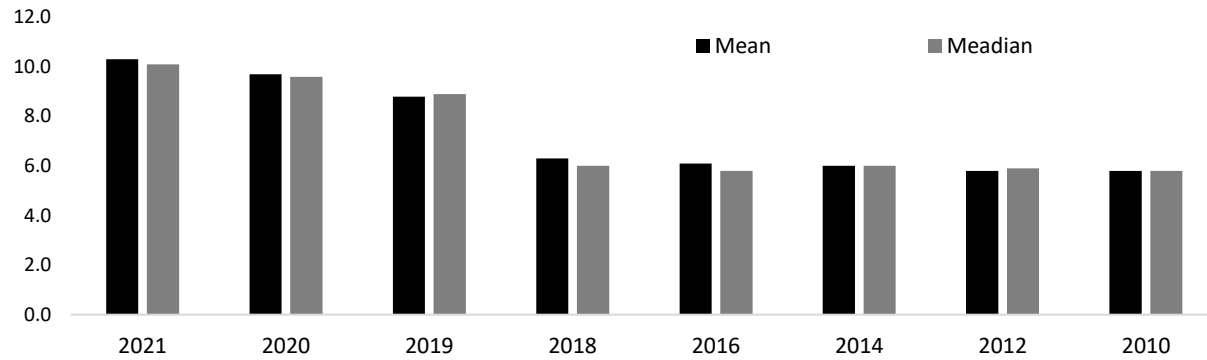
Source: National Health Report of Georgia; National Statistical Office of Georgia; Author's calculations

Graph 3: Expenditures of the Universal Health Care Program in Georgia (million GEL)



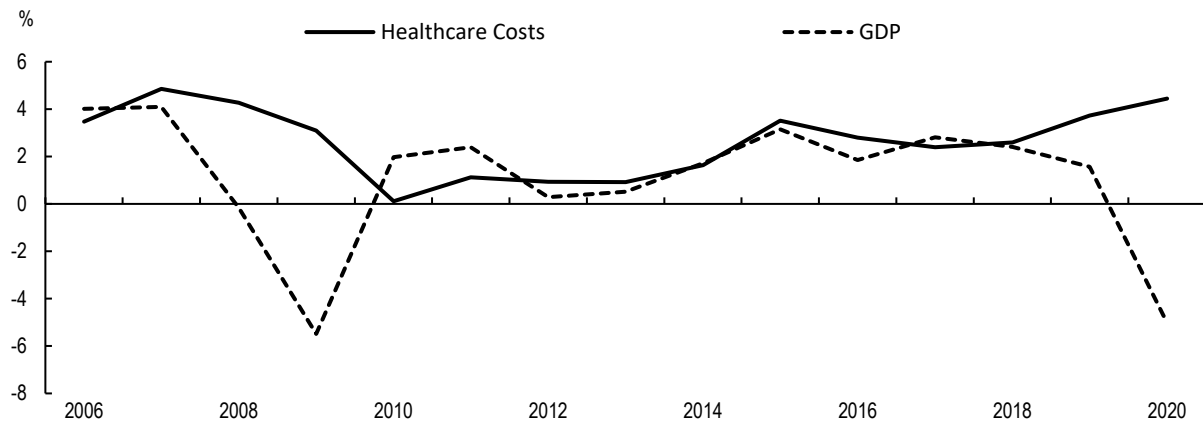
Source: Public finance statistics of the Ministry of Finance of Georgia; Authors' calculations

Graph 4: The ratio of healthcare expenditures from budgetary and compulsory funds of the member countries of the OECD to the GDP (%)



Source: OECD

Graph 5: Annual real growth in per capita health expenditure and GDP, OECD, 2005-2020



Source: OECD

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