# **TITLE**: Challenges in updating the DRG system

#### Introduction

In Slovenia, we have been using the DRG system since 2004, when we introduced AR-DRG v4.2. Since then, updates to the system have been rare: in 2013 the transition to v6, and in January 2023 we started using AR-DRG v10, ICD-10-AM/ACHI/ACS edition 11. The transition to the new version was very demanding for all stakeholders (public hospitals and private healthcare providers, Public health institute, Health insurance institute of Slovenia) to implement, mainly due to the vast amount of changes, including the impact on hospital revenues. The update of the DRG system is still not complete, as an essential part of the update is still missing - the calculation of Slovenian weights (we still use Australian weights).

### **Methods**

At the beginning of 2023, we started using AR-DRG v10, ICD-10-AM/ACHI/ACS edition 11 for classifications and reimbursement of acute hospital treatment in Slovenia. More than half a year was needed for the translation and expert review, the amount of changes compared to edition 6 was enormous. A large personnel (translators and medical specialists) and financial investment (for the purchase of new AR-DRG version and grouper) was required. New software had to be installed in all hospitals, and coders had to be trained (a workshop was held in November 2022).

In parallel, hospitals established conditions for recording detailed data on costs. Together with them, we prepared a methodology for recording costs (of labour, drugs, materials, balance sheet costs), and the hospitals had to take care of updating their software, changing processes, and additional staff if needed. For this purpose, ZZZS is distributing each year EUR 2 million to pilot hospitals. This data will be used for calculating the new Slovenian weights.

## Results

The new AR-DRG, grouper and coding rules affected hospital revenues. Some DRGs are no longer in use, some DRGs are new, and some treatments are classified differently compared to the previous version. To cover the different (better and worse) evaluation of DRGs in 2023 due to the impact of new AR-DRG, ZZZS planned an additional EUR 16.6 million for all providers in the DRG system (the same amount is planned for 2024. For comparison: the total cost of DRG services in 2023 is approx. 900 million). Nevertheless, due to the dissatisfaction of the hospitals, the Ministry of Health requested a change in the weights in such a way that no DRG should be weighted lower than in the previous version. Throughout the year, we regularly monitored the realization of DRG cases in hospitals and prepared a methodology for the distribution of these additional funds, with which we will mitigate the impact of the new AR-DRG version on hospital revenues as much as possible.

At the same time, throughout 2023, ZZZS collected data on costs from hospitals, which will be used to calculate the new Slovenian weights in 2024. We checked it and in cooperation with hospitals fixed errors. The quality of the data is still not at the level we would like (some hospitals still do not record all the required data).

#### **Discussion**

In 2024, the calculation of Slovenian weights is expected based on the collected data. At the same time, several questions and challenges arise:

- How often should we update the DRG system (implement new versions of AR-DRG and calculate new weights) so that it is sustainable from a financial, personnel and time point of view, and that the inclusion of new procedures, diseases and other changes in medicine is timely?
- In what way can we further improve the data based on which we will calculate Slovenian weights? How to encourage hospitals to make greater use of data also for their own needs?
- How to ensure the acceptance of the new Slovenian weights by all stakeholders and how to ensure the implementation and use of the new weights?