WHO Barcelona Office for Health Systems Strengthening
Division of Health Systems and Public Health

UHC Partnership in Georgia

Roadmap for DRG implementation in Georgia

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Contents

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Background

The WHO-EU-Luxembourg UHC Partnership (UHCP) enables the WHO Regional Office for Europe to scale up its support to Georgia over the next 2-3 years as the Government of Georgia seeks to move towards universal health coverage (UHC): ensuring all people can use the quality health services they need without experiencing financial hardship. WHO's support focuses mainly on developing the capacity of the purchasing agency (the Social Services Agency, SSA), with a view to enhancing efficiency in the organization and delivery of publicly financed health services.

The first phase of the UHCP in Georgia lasts from July to December 2017, during which WHO will work with the Ministry of Labour, Health and Social Affairs (MOLHSA) to develop a longer-term action plan that builds on the experience and outcomes of the activities implemented during first six months. In this first phase, the focus is on five areas of activity:

1 Preparing an action plan for strategic purchasing
2 Support to strengthen strategic purchasing by using SSA invoicing data
3 Support to increase the SSA's capacity for strategic purchasing
4 Developing best practice patient pathways for selected priority clinical areas
5 Operationalising the primary care strategy 2016-2030

This report concerns activity 2.

Georgia has expressed its readiness to move towards a DRG-based payment system[1]. The report therefore focuses on practical approach of how to move towards DRG implementation by providing recommendations and roadmap for that.

[1] See also mission report of Mission on strategic purchasing, 7-11 of August 2017 and analytical report "Using the Social Security Agency's invoicing data for strategic purchasing, with a focus on DRGs", November 2017.

Objective of the report

The objective of the report is to provide the roadmap for DRG implementation for Georgia, which will guide the country through the DRG implementation process until the DRG system is operational and ready to be used as hospital payment system. It also briefly discusses the risk assessment and resource requirements related issues and linkage between DRGs and strategic purchasing.

DRG Implementation Plan

The DRG Implementation Plan consists of ten core areas, as summarised in Table 1. Under every area, one or more actions are described with responsible institutions and persons and due date. The due dates of some actions may change since they depend on the response from Nordic Casemix Centre (NCC) and on what time the Georgian version of NordDRG grouper (definition tables and grouper software) will be produced. In the paragraphs below, every area is discussed in more detail.

Table 1. The core areas of DRG implementation plan

1.	Adoption of DRG system
2.	Development of DRG implementation and transition strategy
3.	Preparedness of IT systems
4.	Improvement of data quality
5.	Adoption of regulation needed for implementation of DRG system
6.	DRG tariff setting methodology
7.	Reimbursement policy
8.	Monitoring and reporting system
9.	Capacity building for all stakeholders
10.	Communication

1 Adoption of DRG system

1.1 Decide which DRG grouper to implement: The MOLHSA has been taken a decision that Georgia is going to implement NordDRG system. The main reason for this is that Georgia has been using the classification for surgical procedures (NCSP[2]) for several years and this classification is one of the two basic classifications used in NordDRG. If an alternative DRG system had been selected, the international classifications for diseases (ICD) might also have needed revision. Fortunately, the ICD-10 version Georgia is using is compatible with

[2] NCSP – NOMESCO Classification of Surgical Procedures. NOMESCO - Nordic Medico-Statistical Committee)

NordDRG system and only minor changes are needed. The implementation of any other DRG system would require the introduction of new classifications for procedures and/or diagnosis which is a time and resource intensive process.

1.2 Contact the DRG organization: The next step in the adaption process is to get in contact with the NCC – organization delivering the NordDRG system – and start negotiations regarding terms and conditions of using NordDRG in Georgia. Inception letter by the MOLHSA has been sent to the NCC in mid-December 2017.

1.3 Contact the grouper software organization: Once the agreement with NCC is concluded, there is need to contact with organization delivering the grouper software. The grouper software has to be authorized by NCC. Without this certificate the software may not be marketed as NordDRG compliant.

2 Development of DRG implementation and transition strategy

2.1 Define the phases of transition: The transition strategy has been discussed within DRG Working Group and it was decided that the transition period will be divided into four phases:

- 1st phase (duration 3 months) focuses to assure the SSA preparedness
- 2nd phase (duration 3-6 months) aims to test IT solutions from the provider perspective (2 big providers are selected for that purpose)
- 3rd phase (duration 3 months) is for the phase out of the IT solutions to all providers
- 4th phase (duration 6-12 months) during what the DRGs are used for "shadow funding" to conduct preparations and simulations for actual DRG based reimbursement by end of 2019.

According to the implementation plan, the phases of transition with concrete activities and time frames need to be developed.

2.2 Create the DRG core team: Moreover, the DRG core team with clear TORs within the SSA and the MOLHSA need to be created.

3 Preparedness of IT systems

3.1 Analyse adaptation of the DRG grouper to the SSA's IT system: Preparedness of IT systems in DRG implementation is crucial. To assure that, there are planned two actions to be carried out. Firstly, analysis of adaptation of the DRG grouper to the SSA's IT system. This is expected to be conducted after the technical information about the grouper software has been received from grouper software provider (see core area I). In parallel, it is important to describe

the new claims management business process if DRG will be implemented[3]. During the analysis, the pros and cons of alternative solutions have to be considered in order to develop most optimal claims management business process and related IT solution for accommodation of the grouper software.
The main questions to consider are as follows:

- Location of the DRG grouper(s) software (SSA, providers)
- Claims management business process with DRGs
- Necessary changes in the SSA's IT system
- Necessary changes in the providers' IT systems.

3.2 Adapt the SSA IT system to accommodate the grouper software: This can be done only after the necessary changes in the SSA's IT system have been made and the grouper is ready for accommodation.

4 Improvement of data quality

Regardless of the DRG system implementation, the data quality remains one of the issues which have to be dealt with consistently. The SSA database is used for many purposes related to the strategic purchasing as financial transactions, statistics, analyses, provider performance monitoring and other purposes. Therefore, it is of high importance to assure the best possible quality of it.

The actions in this area are related to update and revision of the ICD-10 and the NCSP but also to revision and improvement of coding guidelines to harmonize the use of primary classifications.

4.1 Revise and update ICD-10 and NCSP: For producing NordDRG definition tables for Georgia, nationally used ICD-10 and NCSP needed to deliver to the NCC. Before that, both classifications should be critically evaluated and updated. This activity is recommended to carry out as soon as possible to be able to use the updated primary classification for producing the first grouper version for Georgia.

In longer run, the regular updating process of ICD-10 and NCSP should be developed so that the primary classifications will be revised and delivered to the NCC at least once a year in order to take the changes into account in annually produced DRG groupers by the NCC.

4.2 Revise and improve the coding guidelines for ICD-10 and NCSP: In order to ensure proper coding of diagnosis and clinical activities, there is need (in addition to improvement of the coding guidelines) to provide training and continuous technical support on how to improve coding of diagnoses and activities according to the agreed standards.

[3] Business process may differ during the transition period (DRG is applied as shadow funding instrument) and after transition (DRG is applied as actual payment instrument).

4.3 Develop the external clinical coding audits: Based on international experience, the use of primary classifications may change once the casemix system is in place. Both, coding the secondary diagnosis may improve but also the coding of procedures may become more precise. At the same time, one has to take into account the opportunity that new financial instruments may change health care providers' incentives and may lead to possible gaming with the system.

Therefore, the clinical coding audits should become an essential part of the DRG system to support the improvement of data quality and detect potential gaming.

4.4 Revise and improve the SSA claims management process: Once the clinical coding audits have been in place and tested, there might be the need to revise and improve the SSA's claim management process. It means to integrate coding audits into the claims management process by releasing some of the SSA's medical experts time from their current duties to focus on targeted coding audits of claims and related medical documentation in these cases where the data quality is doubtable and potentially with poor quality.

5 Adaption of regulation needed for implementation of DRG system

Introduction of new payment method may create the need of amendments in legislation and other regulations. This needs to be solved before the DRG implementation. Thus, the actions under this area are to:

5.1 Analyze the legal framework, identify the needed changes in legislation, and

5.2 Prepare the legal documents needed for implementing the DRG system[4].

6 DRG tariff setting methodology

Under this area, four different actions are planned.

6.1 Develop cost weights and base rate estimation methodology: The most crucial is to develop the cost weights and base rate estimation methodology. This can be done in two stages, starting with cost weights for 2018-2019 when DRGs are not yet used for actual reimbursement by borrowing or developing the weighs based on Georgian data. In second stage, the methodology should be adapted to develop cost weights and base rare for the actual reimbursement (starting from 2020).

6.2 Analyze the vertical programs in the light of DRG implementation: In addition, current vertical programs have to be analyzed in the light of DRG implementation to assure alignment between different programs and/or need for better integration between vertical programs and UHC program.

[4] Need for changes in the legal acts may differ during the transition period (DRG is applied as shadow funding instrument) and after transition (DRG is applied as actual payment instrument).

6.3 Conduct simulations for alternative DRG cost weights and base rate scenarios: During the development phase, the simulations for alternative DRG cost weights and base rate scenarios will be conducted to find the most reasonable solution for Georgia.

6.4 Calculate the cost weights, base rate and DRG tariffs: Once the preparation work has been done, the calculation of the cost weights, base rate and DRG tariffs can be carried out.

7 Reimbursement policy

7.1 Develop the DRG reimbursement policy: For implementation of the DRG system, some adjustments of reimbursement policy need to be considered regarding which payment methods to use for purchasing certain cases and clinical areas. E.g., how to pay for a very short/low-cost and long/high-cost inpatient cases. The adjustments in reimbursement policy also concern the cases of certain clinical areas like psychiatric care, rehabilitation, referred cases, ICU, but also cases including high cost drugs and devices.

7.2 Conduct simulations for DRG reimbursement policy scenarios: Simulations for the different DRG reimbursement policy scenarios need to be conducted before making the final decision.

8 Monitoring and reporting system

8.1 Group the data, analyze and provide feedback about grouping results to providers: During the transition period it is important to group the data with DRG grouper, analyze the results and provide feedback about the grouping results to the providers. It is planned to conduct in two stages, starting with testing the system, and then providing the feedback to the hospitals participating in two first phase of transition. After that, the reporting system can be rolled out nationwide. In addition, monitoring and reporting system during transition period includes the feedback about the "shadow funding". It simulates the situation if DRGs would have been used compared to the actual payment.

8.2 Develop performance indicators and principles for regular monitoring of providers and reporting by using DRGs: In longer run, there is a plan to develop the performance indicators and principles for regular monitoring of providers and reporting by using DRG system data to detect clinical variations, to monitor service utilization and to compare the hospitals, departments within the hospitals, certain clinical areas e.t.c. over the period of time.

9 Capacity building for all stakeholders

All stakeholders dealing to any extent with DRG system need to strengthen their capacity in that field. Nonetheless, the SSA and the MOLSHA are the key organizations whose capacity needs to be strengthened to support the implementation of the DRG system and the maintenance of it.

9.1 Asses gaps in capacity and develop a training plan for capacity building among different stakeholders: As first step, the gaps in the capacity need to be assessed according to

the core areas in the DRG implementations plan. Based on that the training plan for capacity building activities can be developed.

9.2 Improve competence in DRG systems for all stakeholder organizations by offering training and educational opportunities according to need: Furthermore, the capacity building opportunities via offering regular trainings and information have to be provided to other stakeholders (mainly hospitals) having relationship with DRG implementation and further maintenance.

10 Communication

Proactive communication is crucial during the DRG implementation process to keep the process transparent and engaging for the key stakeholders. For this:

10.1 Develop a DRG implementation communication plan, and

10.2 Implement the communication plan: DRG implementation communication plan has to be followed during the whole DRG transition period.

DRGs in the context of strategic purchasing

How DRG fits into broader purchasing framework is one of the key issue. There is no need to have a DRG just for DRG but the need is to replace current case grouping system by more transparent and manageable one. It works out only when DRG system is wisely integrated to the general purchasing process, which includes e.g. benefit package design, clinical guidelines and protocols, tariff setting principles, selective purchasing, contracting, volume control instruments.

This topic will be included to the UHCP 2018 action plan to address the linkage between DRG and broader strategic purchasing framework in Georgia.

Risk assessment

To assure DRG implementation and deliver the actions set out above will be a highly complex undertaking and will be subject to many controlled and uncontrolled variables.

The main risks are related to:

1) limited human resources in the SSA and the MOLHSA;
2) insufficient financial resources of the SSA and the MOLSHA to assure implementation of DRG system.

In addition, the smooth implementation of DRG system will require that all stakeholders are regularly updated on the reform objectives and progress made to ensure that expectations are managed appropriately.

If needed, the actions and due dates need to be revised according to the real progress of DRG implementation.

High-level leadership

The main burden in implementing DRG system in Georgia is on shoulders of the MOLSHA and the SSA. Both organizations have committed personnel with clinical, economic and IT background which is a good mix of competence. In addition, they have capacity and experiences to use DRG like system as their current case based payment system applies the combinations of diagnosis and procedures. Nevertheless, current capacity is limited to secure smooth implementation and operation of the DRG system and needs development.

Therefore, the key success factor in DRG implementation is the high-level leadership in the MOLHSA and in the SSA which would enable to find additional human and financial resources and/or re-allocate existing ones to the priority area. Only high-level leadership throughout the whole implementation process assures staff commitment to the complex and long-term process such as implementation of DRG. Also, high-level leadership is needed to keep the focus on the key areas that are critical in moving forward with DRG implementation and to make timely managerial decisions if necessary. In a low-resource setting as Georgia is, it is important to seek for cost-effective and pragmatic solutions to meet the deadlines in the DRG implementation plan as well as to assure DRG system's sustainability after the transition period.

Appendix 1

The DRG implementations plan for Georgia, 2017-2019

Core areas	Actions	Responsible institution	Responsible person	Due date	Comments
1.Adoption of DRG system	1.1 Decide which DRG grouper will be implemented	MOLHSA	N.Berdzuli Z.Sopromadze	December, 2017	Decision made to use Nordic DRG grouper
	1.2 Contact the organization delivering the DRG system and start the negotiations	MOLHSA	N.Berdzuli Z.Sopromadze/S. Belkania	December 2017- March 2018	Letter sent to Nordic Casemix Centre in mid-December 2017
	1.3 Contact the organization delivering the grouper software	MOLHSA	Z.Sopromadze/S. Belkania	March 2018	
2. Development of DRG implementation and transition strategy	2.1 Define the phases of transition with concrete activities and time frames	MOLHSA/SSA	Z.Sopromadze/S. Belkania	January-March, 2018	
	2.2 Create the DRG core team with clear TORs within SSA and MOLHSA	MOLHSA/SSA	Z.Sopromadze/S. Belkania	January-March, 2018	
3.Preparedness of IT systems	3.1 Analyse (pros and cons of alternative business processes) adaptation of the DRG grouper to the SSA's IT system	SSA	I.Tabatadze	April-July, 2018	
	3.2.Adapt the SSA IT system to accommodate the grouper software	SSA	I.Tabatadze	April-July, 2018	
4.Improvement of data quality	4.1 Revise and update ICD-10 and NCSP	SSA/NCDC	M.Khomeriki	2018-2019	
	4.2 Revise and improve the coding guidelines for ICD-10 and NCSP	SSA/NCDC	M.Khomeriki/ M.Kereselidze	Jan-Dec, 2018	
	4.3 Develop the external clinical coding audits	SSA/NCDC	M.Khomeriki/M. Kereselidze	Sept-Dec, 2018	
	4.4 Revise and improve the SSA claims management process	SSA	M.Khomeriki/ I.Tabatadze	Jan-April, 2019	After the clinical coding audit system has been tested

5.Adaption of regulation needed for implementation of DRG system	5.1 Analyze the legal framework to identify needed changes in legislation to implement the DRG system	MOLHSA/SSA	Z.Sopromadze/M .Darakhvelidze	May-December, 2018	In parallel with implementation of DRG system. However, approval is needed for DRG piloting to involve providers in the first and second phase of the transition period
	5.2 Prepare the legal documents needed for implementing the DRG system	MOLHSA/SSA	Z.Sopromadze/ M.Darakhvelidze	May-December, 2018	
6. DRG tariff setting methodology	6.1 Develop cost weights and base rate estimation methodology	MOLHSA/SSA	l.Nikoladze	I stage: September-November, 2018 II stage: September-November, 2019	I stage: the cost weights for 2018, (when DRGs are not yet used for actual reimbursement) can be borrowed or developed based on GEO data. II stage - cost weights for actual reimbursement.
	6.2 Analyze the vertical programs in the light of DRG implementation	MOLHSA/SSA	l.Nikoladze	September-November, 2018	
	6.3 Conduct simulations for alternative DRG cost weights and base rate scenarios	MOLHSA/SSA	l.Nikoladze	September-November, 2018	
	6.4 Calculate the cost weights, base rate and DRG tariffs	MOLHSA/SSA	l.Nikoladze	September-November, 2018	
7.Reimbursement policy	7.1 Develop the DRG reimbursement policy • Define exemptions (e.g. psychiatric care, rehab care, referred patients etc) and the payment method for financing them • Define reimbursement rules for expensive drugs and devices, ICU,	MOLHSA/SSA	Z.Sopromadze/M .Darakhvelidze/	September-November, 2018	

	etc, and the payment method for financing them • Define high-low cost/LOS outliers				
	7.2 Conduct simulations for DRG reimbursement policy scenarios	MOLHSA/SSA	Z.Sopromadze/M.Darakhvelidze/ M.Khomeriki	January-May, 2019	
8.Monitoring and reporting system	8.1 Group the data, analyze and provide feedback about grouping results to providers	SSA	M.Khomeriki/ I.Tabatadze	Testing March-May, 2018 Pilot June-December, 2018	
	8.2 Develop performance indicators and principles for regular monitoring of providers and reporting by using DRGs	MOLHSA/NCDC/SSA	M.Darakhvelidze /M.Kereselidze/ M.Khomeriki/	March-May, 2019	
9.Capacity building for all stakeholders	9.1 Asses gaps in capacity and develop a training plan for capacity building among different stakeholders 9.2 Improve competence in DRG systems for all stakeholder organizations by offering training and educational opportunities according to need	SSA/NCDC	M.Khomeriki/ I.Tabatadze/ M.Kereselidze	I stage – January-March, 2018 II stage – September, 2018-April, 2019	Assessing gaps and improving capacity will be carried out according to the core areas and actions of the implementation plan
10.Communication	10.1 Develop a DRG implementation communication plan	SSA	Z.Sopromadze	April-July 2018	
	10.2 Implement the communication plan	SSA	Z.Sopromadze	July -December, 2018, 2019	