PHARE 2003
STANDARD SUMMARY PROJECT FICHE

1. Basic Information

1.1 **CRIS Number:** 2003/005-551.04.08

1.2 **Title:** "Improvement of Accountability and Transparency in the Allocation and Use of Healthcare Resources through the Implementation of an Informatics Monitoring System for Hospital Morbidity and a Hospital Case Based Financing System"

1.3 **Sector:** Health

1.4 **Location:** ROMANIA

2. Objectives

2.1 Overall Objective(s):

The overall objective is to increase efficiency of public funds use, to reduce waste and opportunity for corruption in hospitals through the implementation at a national scale[1] of a case based financing mechanism.

2.2 Project purpose:

The goal of the project is to implement a system for fair, transparent allocation of resources within hospitals and identify where there are opportunities to shift to alternative services that are more cost-efficient. The case based financing system provides the tools to help hospitals live within their means and ensure value for money spent. Key steps include:

- To develop at national level a unique information system for reporting and monitoring of hospital activity, based on patient level data
- To develop a hospital financing mechanism, based on hospital activity, expressed in terms of type of patients (cases) treated
- To adopt internationally recognized methods of patient classification (coding system), in accordance with EU and WHO recommendations
- To develop interventions to reduce unnecessary hospitalizations, reduce excessive hospital length of stay and improve quality of care

2.3 Accession Partnership (AP) and NPAA priority

The reference from Accession Partnership is: "Strengthen the capacity to manage health sector reform in a comprehensive manner by improving strategic planning for human and financial resources so as to make efficient use of public funds while ensuring equal access to health care. Improve accountability and transparency in the allocation and use of healthcare resources."

2.4 Contribution to National Development Plan

Not applicable.

2.5 Cross Border Impact

Not applicable.

[1] A list of all Romanian hospitals at the end of 2001 (483 hospitals) was presented to the Commission. Based on the hospital rationalization plan (see also Conditionality and sequencing), the actual number will differ at the moment of project implementation. Within the project fiche, the estimated needs are calculated for a number of 450 hospitals.

3. Description

3.1 Background and justification:

The Romanian hospitals get almost 70% of the public health care expenditures, but the actual mechanism for hospital financing (based on hospitalization days per type of department) still creates incentives for waste, inefficiency and corruption. Recently, under the 2002-2003 World Bank project, the Ministry of Health and Family developed a National Strategy for Hospitals Rationalization with the aim to reduce the excess capacity and to rationalize the hospital services. In the meantime, through the Governmental Decision no. 826/2002 it was approved the "National Strategy Regarding the Reform in the Hospital Units", that aim to improve quality of services and the efficiency in using the funds available. It is now the good moment for changing the financing mechanism with a different, market based payment mechanism for hospitals: case based financing (using Diagnostic Related Groups – DRGs).

This is in accordance with the "Strategy for the Implementation of the Case-based Financing in Romanian Hospitals" which was adopted through the Common Order of the Minister of Health and Family and President of the National Health Insurance House no. 102/34/2002 and is the basis for the action plan for 2003 in this area[2]. The case based financing means that the hospitals get funds according to the type of patients treated and not based on hospital structure (staff, equipment etc.), process (number of hospitalization days) or other determinants. This type of financing system provides a transparent and equitable allocation of funds to the hospitals, encourages the efficient use of resources at the hospital level, and works towards improving the quality of the services provided for the patients.

Critical prerequisites of a case based financing mechanism are: a standardized method for coding the patient clinical morbidity (diagnosis and procedures), a data reporting system for hospitals based on patient level data (use of a Minimum Basic Data Set (MBDS)– the hospital reports the same clinical data for each discharged patient in the same format) and a classification system of each patient into a discreet group of diagnosis (Diagnostic Related Groups - DRG).

All the mechanisms and activities included in this proposal, for national implementation, have been tested and are in practice in the 23 hospitals participating at the National Case Based Financing Project. The National Case Based Hospitals Financing Project, funded by the United States Agency for International Development (USAID) was developed in May 2000 – September 2002. Over the course of the pilot project there has been strong political support and involvement from the very top levels. Officials and staff from the Ministry of Health and Family (MoHF), the National Health Insurance House (NHIH), the College of Physicians from Romania (CoP is a non-governmental organization) and the Ministry of Public Finances (MPF) have been active partners in the project from its inception phase[3].

A decision has been made by key health officials to continue to implement the DRG case based system in all appropriate Romanian hospitals. The national scale implementation and set-up of this mechanism is a process developed in "phases" that requires several years of action (up to 8-10 years). This implementation process during several years represents also the experience of other EU and EU candidates countries that are using the case based (DRG) system for hospital financing or/and hospitals performance evaluation (like Portugal, Italy, France, Austria, Belgium, Ireland, Hungary, etc.), or are introducing the DRG system (Germany, that will end the implementation process in 2007, Netherlands, Czech Republic, Bulgaria, Estonia, etc.).

The introduction of this new hospital financing mechanism has provided data to identify where efficiency can be increased. Then incentives or penalties can be developed to ensure that health care services are provided in the most appropriate and cost efficient settings. An important feature is that the nature of the system is very transparent, making the corrupt use of funds far more difficult. It becomes very clear where funds are going, what services they cover, and how the funds are used. On the whole this makes a tremendous contribution to increased accountability in the use of public funds and decision making based on actual health needs of the population.

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[2] All regulations in place regarding hospital case based financing in Romania from 2000 to April 2003 are listed in Annex 4.

[3] A short summary regarding the National Case Based Hospitals Financing Pilot Project (covering project objectives, indicators of success and main recommendations) is presented in Annex 5.

These transparency issues become more important and compelling each day. During the first six months of 2002, the debt (cost overruns) in Romanian hospitals reached nearly 200 million Euro. It is critical that there be a tool to increase transparency and contain costs, while maintaining or improving quality of care. This will enable the health system to live within its means without further decreasing the quality of health-care services. In the absence of this control, sustainable vertical programs for HIV/AIDS, maternal/child care, occupational and environmental health, etc. are at risk because of compromises made to the health budget to cover hospital expenses.

3.2 Linked activities:

Previous Phare projects in this area were:

1. RO 9712 Phare program: **"Health Care Financing Reform" 1997**, in value of 4 Meuro. The program provided assistance for the Ministry of Health in the implementation of a new health insurance system and the improvement of structures and management of the health sector. The program was also aimed at increasing the decentralization of the current health system organization and at strengthening its efficiency and effectiveness. The program had 3 components aimed to support different aspects of the reform of the health sector in Romania, such as:

Institutional Reform (1 MEURO) focusing on decentralization and reorganization of the system. It also aimed at assisting in the new definition of the roles and responsibilities of the different institutions involved in the health care system (Ministry of Health, National and District Health Insurance Houses, College of Physicians etc)
Reform of Health Sector Financing (1.5 MEURO) which was oriented towards: (1) the institutional strengthening of the newly created health insurance houses and (2) the elaboration of the necessary legal framework for the optimal functioning of the health insurance system

Approximation of Legislation in the Pharmaceutical Sector (1.5 MEURO) focusing on: (1) regulations regarding the drug market, (2) improvement of the quality assurance system for pharmaceuticals, (3) ensuring sufficient blood supply of good quality.

2. **RO 9914 Consensus III - Institutional Strengthening of Health Insurance Houses** program aimed to support the development of institutional capacity of National Health Insurance House and District Health Insurance Houses

This project will be linked with the 2002 Phare projects: "Strengthening Information Management, Control and Prevention in the Fields of HIV/AIDS and Non-communicable Diseases to Comply with the European Community Requirements and Standards" that aims to support the health sector reform in the priority public health fields identified in the National HIV/AIDS Strategy and the National Program for Prevention and Control of Non-communicable Diseases.

Other projects developed in the past or being implemented by the Romanian authorities or other donors in this area are:

- Ministry of Health's National Program for standardization within the health care sector that supports the introduction of ICD 10 (International Classification of Diseases) coding for diagnosis;
- MoHF, NHIH, College of Physicians, Ministry of Finance and USAID/DHHS supported project "National Case Based Financing for Hospitals" developed and implemented in 23 Romanian hospitals;
- IHSM, NCHS (National Center for Health Statistics), Cluj University Hospital and USAID/DHHS supported project "Cost Containment and Quality Improvement in a Hospital Setting Through a Methodology of Aggregating Costs and Clinical Data Within Groups of Diagnosis" that tested at local level the tools needed for a case based financing system in Romania;
- World Bank projects that supported the modeling of the current health financing system, stimulating its revenue generating performance under present policies and analyzing potential infrastructure capacity of existing health financing system.

3.3 Results:

A. A system standardized at international level for morbidity reports in all Romanian hospitals in place (covering the diagnosis and procedures).
B. A system for hospital morbidity data, based on a MBDS collection and reporting approach in all Romanian hospitals in place.
C. Transparent hospital resources allocations done mainly through a case based financing mechanism system in place.

D. The average length of stay and patient admissions level reduced.

3.4 Activities:

A. The following activities will be carried out in order to have an international level standardized system for morbidity reports in all Romanian hospitals:

1. Updating of the legal framework to make compulsory the new coding and reporting rules for all hospitals;
2. Development of a new catalog for medical procedures;
3. Continuous updating of ICD 10 classification for diagnosis and medical procedures;
4. Training of the people responsible of the coding system at central level;
5. Training of health professionals form hospitals, District Public Health Directorates (DPHD) and District Health Insurance Houses (DHIH) in using the new coding system for diagnosis and medical procedures;
6. Development of a continuous process of communication with hospitals regarding the coding of diagnosis and medical procedures;
7. Development of a standard methodology for continuous monitoring of the coding process in hospitals;
8. Development of an education program for people performing morbidity coding at hospital level;
9. Dissemination of the results.

B. The following activities will be carried out in order to have in all Romanian hospitals a data collection and reporting system for morbidity data based on a patient level data (Minimum Basic Data Set – MBDS, for each discharged patient):

1. Updating the MBDS requirements;
2. Training of personnel from local level in data collection, reporting and analysis;
3. Development of software applications for use at hospital and central level;
4. Updating the assessment of the IT equipment needs;
5. Provision of IT support for the MBDS implementation in hospitals;
6. Development of a continuous process of communication with hospitals regarding the collection and reporting of MBDS;
7. Development of a process for continuous monitoring the data accuracy;
8. Improvement of the knowledge and skills of the people responsible of data collection, reporting and analysis at central level;
9. Strengthening the capacity of the agency that collects the MBDS and perform reports and analysis for decision makers;
10. Development of a strategy regarding the integration of hospital morbidity data with patient cost accounting data;
11. Development of a strategy regarding the integration of hospital morbidity data, both with patient data from other levels of the health care system and with other national statistics;
12. Updating of the legal framework for the use of a MBDS (legislation regarding the use of data by the MoHF, NHIH and other institutions for hospital morbidity monitoring);
13. Elaboration of of studies, reports and analysis (regarding hospital morbidity and performance) as the basis for health policies at local or central level;
14. Dissemination of the results.

C. The following activities will be carried out in order to have a transparent hospital resource allocations, done mainly through a case based financing mechanism:

1. Definition and assistance for implementation of hospital structures based on the type of services provided;
2. Establishment of the financing mechanism for hospitals, according to the services provided;
3. Development of a system for classification of patients, based on diagnosis, medical procedures and resources consumption;
4. Development of a local list with prices for cases based on Romanian pattern of medical practice;
5. Development of cost accounting mechanism at department and case level, as the basis for the financing mechanisms of hospital services;
6. Training of personnel from local level in cost accounting and hospital financing;

7. Improvement of the knowledge and skills for the people responsible at central level with cost accounting, development of classification system, hospital financing etc.;
8. Development of a continuous process of communication with hospitals regarding the cost accounting process;
9. Support for development of a quality monitoring agency that will evaluate the quality of services provided and the practice variations;
10. Development of a strategy regarding the integration of hospital financing with the rest of heath care providers financing;
11. Dissemination of the results.

D. The following activities will be carried out in order to reduce the average length of stay and patient admissions levels:

1. Development of criteria for hospital admissions for the most frequent cases admitted in acute hospitals;
2. Establishment of more severe limitations on length of stay;
3. Development of an action plan for improvement of alternative care (primary, ambulatory, preventive) services and redeployment of staff and resources to these services;
4. Dissemination of the results.

3.5 Lessons learned:

The development of this project is based on the recommendations and lessons learned from projects implemented in Romania, financed through Phare, World Bank, USAID and other donors' funds. Conclusions based on experiences in Hungary, the Czech Republic, Australia, and western European countries have also been integrated into the planning for this implementation. The main lessons learned incorporated into project design are:

- From the outset, it is important to define the desired results (e.g., reduced length of stay for certain diagnoses, or a shift to outpatient services for specific conditions) so that incentives and penalties applied to the financing system will achieve those results.
- It is critical to have strong political will and support to implement this new financing mechanism, because physicians who are accustomed to professional independence will not be happy to have controls on their actions, and hospital directors who are happy with the lack of transparency will resist the necessary disclosure of hospital financing and expenditures.
- The usage of international standards for coding of diagnosis and procedures is compulsory for international comparisons of Romanian hospitals activity.
- The coding process is easier if the patient data collection application is designed to help this process (using of the coding lists – dictionaries - and of the coding search engine based on key words).
- The usage of a patient level data collection and reporting system (MBDS) is the basis for the monitoring of hospital morbidity and activity
- The use of a standardized reporting for hospital structure facilitate the evaluation and comparison of hospital results.
- The duplication of reporting for MoHF and NHIH must be eliminated to decrease effort at hospital level and increase the accuracy of the data collected.
- A high number of personnel from all the institutions involved must be a part of the implementation as key stakeholders (the pilot had team members from the MoHF, NHIH, the Ministry of Public Finances, the Romanian College of Physicians, the Institute of Health Management and the National Center for Health Statistics).
- The implementation in all Romanian hospitals of a case based financing mechanism requires trained personnel at all levels of health care system.
- The development of a MBDS approach for data collection and reporting requires an extensive effort of continuous communication with hospitals.
- There should be a provision of an unique patient data collection application at hospital level, which is easy and simple to run on usual computers
- The hospitals should be allowed to use different informatics applications for collection of MBDS, but the reporting of data should be done on a standard national format.
- The accuracy of data collected is essential for performing reliable morbidity analysis for health policies or for an effective case based hospital financing.

- The financing of hospitals based on type of cases (DRG) should be used only for acute care and the hospital financing policies should be convergent with the organization and financing of the entire health care system.
- The data plays an increased role the in terms of promoting and managing the quality of services. The previous projects clearly pointed out that the tools and techniques of quality management should become a part of every hospital's management plan and the quality mechanisms used to monitor and improve the quality of services must be understood not only at top hospital management level, but also at the level of each health professional.

4. Institutional Framework

The implementing authority for this project will be the Ministry of Health and Family, whose Project Implementation Unit will be responsible for the administrative management of the program.
The National Institute for Research and Development in Health, National Center for Health Statistics, National Health Insurance House, College of Physicians, Ministry of Public Finance and representatives of the Romanian hospitals will be involved in the implementation of the project with the following division of responsibilities:

- Ministry of Health and Family will develop the necessary legislation to support the development of an informatics system for hospitals based on patient level data and the introduction of a case based hospital-financing mechanism. Meantime the Ministry of Health and Family will coordinate this program with other programs or health reform measures that target the same objective of increasing transparency in resources allocation and hospital efficiency;
- The National Institute for Research and Development in Health (NIRDH) is the main institution designated by the Ministry of Health and Family to manage the implementation of the case-based hospital financing system in Romania. NIRDH will be responsible with updating the MBDS, performing hospital data collection and provision of reports and analyses from these data. The Institute will provide also the validated and classified patients of each hospital toward the NHIH in order for NHIH to perform case based financing and will participate in the process of developing local tariffs for type of cases;
- National Center for Health Statistics will be responsible with implementation at hospital level of the standardized coding for diagnosis and procedures and the continuous monitoring of this process;
- The National Health Insurance House will implement the case based financing mechanism as one of the main tools to reduce waste, inefficiency and corruption within the hospital health care sector and will participate in the process of developing local tariffs for type of cases;
- The College of Physicians will support the development of criteria for hospital admissions and will participate in the development of practice guidelines and elaboration of pattern of care for clinical pathways for improved quality of health care services;
- Ministry of Public Finance will support the process of developing local cost accounting mechanism and will integrate case based financing mechanism with other financial measures that reduce waste and inefficiency at hospital level.

At the beginning of the inception phase of the project, a Steering Committee will be set up in order to supervise the implementation of the project with the involvement of the representatives of the above-mentioned stakeholders (MoHF, NIRDH, NCHS, NHIH, CoP, MPF and hospitals' representatives).

5. Detailed Budget (in MEuro)

	Phare	**Support**				
	Investment Support	Institution Building	**Total Phare (=I+IB)**	**National Co-financing (joint)**	**IFI**	**TOTAL**
Contract 1 Technical assistance inclusive training		1,6				1,6
Contract 2 Equipment inclusive maintenance contracts	1,4			0,5		1,9
Total	1,4	1,6	3	0,5		3,5

6. Implementation Arrangements

6.1 Implementing Agency

Central Finance and Contracts Unit, Ministry of Public Finance (CFCU), Magheru Avenue, no 6-8, 5th floor, Bucharest 1, Romania, Phones: +40-21-211 99 79, +40-21-211 99 84, +40-21- 210 62 20, Fax: +40-21-210 64 56, +40-21- 210 83 48.
The financial management of the Program will be under the responsibility of the CFCU. The nominated Program Authorizing Officer (PAO), who is a Secretary of State from the Ministry of Finance, and the Deputy PAO, who is the General Director of the CFCU, are responsible for contracting, reporting and accounting. The responsibilities of the CFCU also cover finalization of contract dossiers for approval, of Technical Assistance contracts, and maintenance of financial records for audit purposes.

Implementing Authority: Ministry of Health and Family, PIU PHARE, str. Cristian Popisteanu no.1-3, Bucharest 1, Romania; Phone: +40-21-307 26 20;
Fax: +40-21-312 14 33.

6.2 Twinning

Not applicable

6.3 Non-standard aspects

No non-standard aspects are envisaged, the PRAG will be strictly followed.

6.4 Contracts

Contract 1: Technical Assistance including training:
1,6 MEuro

Contract 2: Investment in Equipment:
1,9 MEuro

7. Implementation Schedule

7.1 Start of tendering/call for proposals

January 2004

7.2 Start of project activity

June 2004

7.3 Project completion

November 2006

8. Equal opportunity

Not applicable

9. Environment

Not applicable.

10. Rates of return

Not applicable.

11. Investment criteria

11.1 Catalytic effect

Without Phare assistance, the project would have been delayed up to 5 years.

11.2. Co-financing

The project is co-financed (joint co-financing) with 0.5 MEuro, which will provide 26% of the total investments cost of the project.

11.3 Additionality

No other financing sources from the private sector or from IFIs were available for financing this project.

11.4 Project readiness and size

The implementation of the project can start according to the implementation chart (Annex 2) and the project complies with the 2 MEuro minimum Phare allocation requirement.

11.5 Sustainability

According to the legislation in place (see Annex 4 "Main regulations regarding hospital case based financing efforts in Romania") the Romanian Government is committed to the implementation of this system, which will lead to increased transparency and better resource allocation in the health sector. Any future costs at the hospital or central level necessary to continue supporting the project will be insignificant compared to its benefits. The expected savings due to the increased efficiency and better quality of services delivered at the hospital level (i.e., reduction in hospitalisation days, average length of stay, and a shift from acute care setting to more cost efficient settings) will cover future expenses to guarantee the sustainability of this project.

11.6 Compliance with state aid provisions

The project respects the state aids provisions.

11.7 Contribution to NDP and/or Structural Funds Development Plan/SPD:

Not applicable.

12. Conditionality and sequencing:

In order to avoid waste of resources, the Government of Romania will take a decision on the rationalization of the hospital network before the tender for the equipment component is launched.

Following this decision concrete figures for investments particularly with regard to the IT equipment will be worked out during the project, after the up-dating of the equipment needs.

Glossary of Acronyms

ALOS	Average Length of Stay
CA	Cost Accounting
CFCU	Central Financing and Contracting Unit
CoP	College of Physicians from Romania
DHHS	U.S. Department of Health and Human Services
DHIH	District Health Insurance House
DPHA	District Public Health Authority
DRG	Diagnostic Related Group
EU	European Union
ICD	International Classification of Diseases
IT	Information Technology
NCHS	National Center for Health Statistics
NIRDH	National Institute for Research and Development in Health, Bucharest
LOS	Length of stay
MBDS	Minimum Basic Data Set
MIS	Management Information System
MoHF	Ministry of Health and Family
MPF	Ministry of Public Finances
NCHS	National Center for Health Statistics
NHIH	National Health Insurance House
NPAA	National Programme for Adoption of the Acquis
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization

Annex 1 : Logframe Matrix for project "Improvement of Accountability and Transparency in the Allocation and Use of Healthcare Resources"

LOGFRAME PLANNING MATRIX FOR Project	Programme name and number	
"Improvement of Accountability and Transparency in the Allocation and Use of Healthcare Resources through the Implementation of an Informatics Monitoring System for Hospital Morbidity and a Hospital Case Based Financing System"	**Contracting period expires** 30 November 2005	Disbursement period expires 30 November 2006
	Total budget : 3.5 Meuro	**Phare budget** : 3 Meuro

Overall objective	**Objectively verifiable indicators**	**Sources of Verification**	
• To increase efficiency of public funds utilization in order to reduce waste and opportunity for corruption in hospitals.	• % of hospital expenditures reduced by 15% in 2007. This reduction is based on several factors: reduction in hospital admissions, reduction of ALOS, overall shift of hospital services towards more cost-effective settings (primary care, ambulatory etc.).	• Annual Reports by the MoHF,NHIH, MPF.	
Project purpose	**Objectively verifiable indicators**	**Sources of Verification**	**Assumptions**
• To implement a system for fair, transparent allocation of resources within hospitals and identify where there are opportunities to shift to alternative services that are more cost-efficient.	. Data on hospital expenditures are published.	Financial report of NHIH, Report of MoHF, reports of the Ministry of Finance Commission Regular Reports	Continued commitment to the governmental strategy concerning the case based financing system.
Results	**Objectively verifiable indicators**	**Sources of Verification**	**Assumptions**
• **A.** A system standardized at international	All hospitals use	Reports of the MoHF	System used as planned by all

level for morbidity reports in all Romanian hospitals in place	internationally standardized system for coding diagnosis and medical procedures	Health Statistics	parties involved
• **B.** A system for hospital morbidity data based on a Minimum Basic Data Set (MBDS) collection and reporting in all Romanian hospitals in place	Morbidity reports of all hospitals based on MBDS.	Reports of the MoHF and NIRDH. Health Statistics	System used as planned by all parties involved
• **C.** Transparent hospital resources allocations achieved mainly through a case based financing mechanism in place	All acute care hospitals are reimbursed by case-based financing mechanism.	Financial reports of NHIH, MPF	Different perceptions of the actors in the Romanian health care financing system can be overcome
• **D.** The average length of stay and patient admissions level reduced	The average length of stay reduced from 8.8 days to 7.5 by the end of 2007. The average of patient admissions reduced from 24.4/100 inhabitants to 20/100 inhabitants by the end of 2007.	Health Statistics	Good coordination among the alternative health care services (primary, ambulatory, preventive)

Activities	Means	Assumptions
A1. Updating of the legal framework to make compulsory the new coding and reporting rules for all hospitals;	Acquisition of information through legal national documents, external sources; Meetings and working group sessions.	
A2. Development of a new catalog for medical procedures;	Meetings and working group sessions. Printing and disseminating the catalog of medical procedures.	
A3. Continuous updating of ICD 10 classification for diagnosis and procedures;	Meetings and working group sessions. Printing and disseminating of updates for diagnosis and procedure	
A4. Improving the knowledge of the professional responsible of the coding system at central level;	Training sessions and workshops. Acquisition of first hand information during study tour in EU Member States with similar coding system.. Acquisition of complementary information through documents.	
A5. Training of health professionals from hospitals, District Public Health Directorates and District Health Insurance Houses in using new coding system for diagnosis and procedures;	Training sessions and workshops. Acquisition of complementary information through documents.	Participation only for staff directly involved in using new coding system for diagnosis and procedures;
A6. Development of a continuous process of communication with hospitals regarding the coding of diagnosis and procedures;	Leaflets, News letters, Web site.	
A7. Development of a standard methodology for continuous monitoring of the coding process;	Meetings and working group sessions.	
A8. Development of an education program for people performing morbidity coding at hospital level;	Meetings and working group sessions. Developing and printing a training manual. Distance learning system.	
A9. Dissemination of the results.	Seminars, conferences.	
B1. Updating the MBDS requirements;	Meetings and working group sessions.	
B2. Training of personnel from local level in data collection, reporting and analysis;	Training sessions and workshops.	Participation only for staff directly involved in data collection, reporting and analysis;
B3. Development of software applications for usage at hospital and central level;	Purchasing the software, specialized technical assistance.	
B4. Updating the assessment of the IT equipment needs;	Field visits, assessment of options for utilization of existing facilities	

B5. Provision IT support for the MBDS implementation in hospitals;	Purchasing IT equipment, maintenance contracts for two years for hardware and software.	
B6. Development of a continuous process of communication with hospital regarding the collection and reporting of MBDS;	Meetings and working group sessions. Leaflets, News letters, Web site.	
B7. Development of a process for continuous monitoring the data accuracy;	Meetings and working group sessions. Coding guideline.	
B8. Improvement the knowledge and skills of the people responsible of data collection, reporting and analyses at central level;	Training sessions and workshops. Acquisition of first hand information during study tour in EU Member States with similar coding system.. Acquisition of complementary information through documents.	
B9. Strengthening the capacity of the agency that collects the MBDS;	Supply of office and IT equipment, service maintenance, Internet accesses.	
B10. Development of a strategy regarding the integration of hospital morbidity data with patient cost accounting data;	Meetings and working group sessions.	
B11. Development of a strategy regarding the integration of hospital morbidity data, both with patient data from other levels of health care system and with other national statistics;	Meetings and working group sessions.	
B12. Updating of the legal framework for the use of a MBDS (legislation regarding the use of data by the MoHF, NHIH and other institutions for hospital morbidity monitoring);	Meetings and working group sessions. Acquisition of complementary information through documents.	
B13. Development of reports (regarding hospital morbidity and performance) that will represent the basis for health policies at local or central level;	Meetings and working group sessions.	
B14. Dissemination of the results.	Seminars, conferences.	

C1. Definition and assistance for implementation of hospital structures based on the type of services provided;	Meetings and working group sessions.	
C2. Establishment of the financing mechanism for hospitals according to the services provided;	Meetings and working group sessions.	
C3. Development of a system for classification of patients, based on diagnosis, procedures and resources consumption;	Meetings and working group sessions.	
C4. Development of a local list with prices for cases based on Romanian pattern of medical practice;	Meetings and working group sessions.	
C5. Development of cost accounting mechanism at department and case level, as the basis for the financing mechanisms of hospital services;	Meetings and working group sessions.	
C6. Training of personnel from local level in cost accounting and hospital financing;	Training sessions and workshops.	Participation only for staff directly involved in cost accounting, development of classification system, hospital financing;
C7. Improving the knowledge and skills of the people responsible at central level with cost accounting, development of classification system, hospital financing etc.	Training sessions and workshops. Acquisition of first hand information during study tour in EU Member States with similar coding system.. Acquisition of complementary information through documents.	
C8. Development of a continuous process of communication with hospital regarding the cost accounting;	Leaflets, News letters, Web site.	
C9. Support for development of a quality monitoring agency that will evaluate the quality of services provided and the practice variations;	Supply of office and IT equipment.	
C10. Development of a strategy regarding the integration of hospital financing with the rest of health care providers' financing;	Meetings and working group sessions.	

C11. Dissemination of the results.	Seminars, conferences.	
D1. Development of criteria for hospital admissions for the most frequent pathologies admitted in acute hospitals.	Meetings and working group sessions.	
D2. Establishment of more stringent limitations on length of stay;	Meetings and working group sessions.	
D3. Development of an action plan for improvement of alternative care (primary, ambulatory, preventive services) and redeployment of staff and resources to these services;	Meetings and working group sessions.	
D4. Dissemination of the results.	Seminars Conferences.	
		Preconditions
		The Government of Romania will take a decision on the ratio-nalization of the hospital network before the tender for the equip-ment component is launched.

PROJECT TITLE: "Improvement of Accountability and Transparency in the Allocation and Use of Healthcare Resources through the Implementation of an Informatics Monitoring System for Hospital Morbidity and a Hospital Case Based Financing System"

	2004							2005												2006										
Calendar months	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Activities																															
Inception Phase	D	D																													
Updating of the legal framework to make compulsory the new coding, MBDS and reporting rules for all hospitals (A1, B12)			D	D																											
Development of the coding system (A2, A3, A6, A7, A8, A9)			D	D	I	I	I	I	I																						
Development of the hospital morbidity monitoring system based on MBDS (B1, B4, B6,B7, B10, B11, B13, B14)			D	D	D	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Establishment of the case based financing mechanism.(C1, C2, C3, C4, C5, C8, C10, C11)			D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I

Training of involved staff (A4, A5, B2, B8, C6, C7).					D	D	D	C	C	I	I	I	I	I	I	I					I	I	I								
Updating the equipment needs and purchasing of equipment.(B3, B4, B5, B9, C9).			D	D	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I										
Development of an action plan for decreasing the average of length of stay and patient admissions (D1, D2, D3, D4).																							D	D	D	D	D	D	D	D	

D = Design
C = Contracting
I = Implementation

PROJECT TITLE: "Improvement of Accountability and Transparency in the Allocation and Use of Healthcare Resources through the Implementation of an Informatics Monitoring System for Hospital Morbidity and a Hospital Case Based Financing System"

	2004			2005				2006			
	30/06	**30/09**	**31/12**	**31/03**	**30/06**	**30/09**	**31/12**	**31/03**	**30/06**	**30/09**	**30/11**
Contracted	3	3	3	3	3	3	3				
Disbursed	0,158	0,317	0,475	0,633	0,971	1,308	1,645	1,983	2,320	2,658	3

Annex 4

Main regulations regarding hospital case based financing efforts in Romania
(listed in chronological order)[4]

- Ministry of Health and Family (MoHF) Orders no. 935/2000 and 137/2001 regarding the introduction of the first phase of hospital case based hospital financing in 23 pilot hospitals from January 1st 2001 (introduction of a new coding system and patient level data collection). The first order (935/2000) was issued by the former political coalition (that governed in Romania from 1996-2000), and the new political majority kept the same willingness for this hospital financing mechanism, issuing the second order (137/2001) and proving the continuity of the policy decisions in this area*
- Romanian Governmental Decision (RGD) no. 455/2001, regarding the Governing Program – Health Section (of the new elected parties, after general elections in fall 2000). "…The development of a model of objective assignment of the existent funds of the system to the hospitals will be taken into consideration, in accordance with the characteristics of the hospital and with the pathology of the attended patients at each hospital. The proposed financing system will use a method which has been verified and applied in many developed countries - based on the Diagnostic Related Groups (DRG)".
- Romanian Governmental Decision (RGD) no. 1331/2001 regarding the approval of the Framework Contract for hospital care in 2002, that introduced the case based (DRG) financing for the 23 pilot hospitals
- Ministry of Health and Family and National Health Insurance House Common Order no. 630/4234/2001regarding the methodological norms for applying the Framework Contract for hospital care in 2002, that covered the technical aspect required by the beginning of the case based hospital financing
- Ministry of Health and Family and National Health Insurance House Common Order no. 34/102/2002 regarding the approval of the case based implementation strategy in the Romanian hospitals (years 2002 - 2004)*
- Romanian Governmental Decision (RGD) no. 826/2002 regarding the approval of the national strategy for reform in healthcare units with beds, that refer also to "…hospital case based financing and use of indicators developed in DRG pilot project for hospital activity evaluation"
- Ministry of Health and Family Order no. 798/2002 regarding the introduction of a new general medical record in the hospitals and the ICD 10 coding rules for diagnosis
- Romanian Governmental Decision (RGD) 1329/2002 regarding establishment, organization and functioning of the National Institute of Research and Development in Health, Bucharest, that establish NIRDH as the main technical institution to support and participate at case-mix patient classification and hospital payment*
- Ministry of Health and Family and National Health Insurance House Common Order no. 1021/113/2002 regarding the main actions to be done to implement case based hospital financing in 2002-2003*
- Romanian Governmental Decision (RGD) no. 1511/2002 regarding the approval of the Framework Contract for hospital care in 2003, that continues the case based (DRG) financing for the 23 pilot hospitals in year 2003
- Ministry of Health and Family Order no. 29/2003 regarding the introduction of the electronically collection of the Minimum Patient Level Data Set in all the Romanian hospitals, as the first step to national rollout of the case based financing*

[4] The implementation of this patient classification system needs a lot of specific regulations over the years and very good coordination with other aspects of hospital and health care system reform. This is an on-going process and this list has to be up-dated on a regular basis by the project start and during the project implementation.

* These documents are available also in English (upon request)

Summary regarding the National Case Based Hospitals Financing Pilot Project

The Romanian Government selected the case-based financing mechanism as the new way to finance 23 hospitals as a part of the DRG National Roll-Out Project in order to test all the technical and administrative mechanisms of implementing case-based financing as well as to test the political will for country-wide implementation.

PROJECT OBJECTIVES

Many of the objectives that were a part of the DRG National Roll-Out Project are the same objectives that Romanian decision-makers would like to extend throughout the country so that the results can be amplified. These objectives were defined by Romanian decision-makers over in year 2000 at the Prague Summit and have since been expanded to include the following:

Primary Objective:

- Reduce inefficiency and waste in the inpatient hospital service delivery system by allocating the limited inpatient healthcare budget to hospitals for inpatient healthcare services in a fair, equitable, objective and transparent manner.

Additional Objectives:

- Increase transparency of the funds distributed as well as of the types of services provided by the different types of hospitals
- Create a mechanism to evaluate hospital performance, to monitor fraud, abuse, and waste, and begin implementing controls and penalties for such violations
- Provide both a technical mechanism and the necessary incentives to move services from the hospital setting to more appropriate care settings
- Reduce length of stay and unnecessary hospitalizations
- Improve the quality of health care services provided in Romania
- Create central and local infrastructure and expertise

Upon completion of this project in September 2002, Romanian officials took the decision to expand the implementation to all acute care hospitals in Romania over time. The first step of this expansion is to continue the financing for the 23 pilot hospitals by including case-based financing in the 2003 Framework Contract[5], while beginning national ICD-10 coding training and uniform clinical data collection for as many Romanian hospitals as possible (with a minimum target of 100 hospitals).

INDICATORS OF SUCCESS

The conclusions of the DRG National Roll-Out Project in 23 hospitals had as a main conclusion that decision-makers wanted to expand the implementation so that hospital financing reform could be connected with the other health care sectors reform, in order that finally the results of the health care system changes can be seen.

The project team's work can be considered as building capacity and institutional understanding and buy-in, by piloting almost all aspects of implementing the case-based financing system in 23 hospitals before Romanian authorities decided to expand the implementation to more Romanian hospitals.

Indicators of Success from June 2000 – September 30, 2002

- WHO ICD-10 coding system implemented and clinical patient level data collected from all 23 hospitals. Both were precursors to piloting the implementation of a case-based financing system, therefore, these were significant milestones;
- Piloting technical steps required to implement case based financing in 23 hospitals;
- Healthcare stakeholders and institutions provided leadership during the project and claims ownership for the expansion of case-based financing (NHIH, CoP, MoF and the MoHF with the IHSM and NCHS) and local level (16 District Public Health Authorities and 16 District Health Insurance Houses out of a total of 42, 23 hospitals out of a total of 480);

[5] N.B. This was done through the Romanian Governmental Decision (RGD) no. 1511/2002

- Development of a core team of local experts providing technical assistance: 30 persons, from at least 4 departments in the central institutions and about 100 others at the local levels (hospitals, DHIHs, DPHAs);
- Implementing the complete financing mechanisms in 2002 for the selected 23 hospitals, while continuing to refine the technical mechanisms for all hospitals in the future;
- While the number of admissions remain the same, the average length of stay started to decrease for these hospitals (compared with the same hospitals in 2001, or the rest of Romanian hospitals);
- Ownership to be transferred, accepted, and assumed by Romanian authorities to expand the implementation for all Romanian acute care hospitals by the end of 2006;

RECOMMENDATIONS FOR FUTURE SUSTAINABILITY

In order to preserve the existing case-based financing system in 23 hospitals as well as expand the implementation to all Romanian hospitals over time, Romanian institutions and the government needed to take ownership of what started out as a project and grew to implementation.

This decision was taken during the fall of 2002, and it gave rise to two key changes. The first change was that after September 30, 2002 the National DRG Project team would not function as the primary implementer in expanding the case-based financing system to more Romanian hospitals. This team reduced its size and revamped its function to serve as a "transition" team to support Romanian officials and institutions as they move forward to implement the infrastructure necessary to expand case-based financing to all Romanian hospitals over time. This was the second decision, and a critical one for sustainability. There is still a great deal of work to be done and still some uncertainty on what the broader implementation will look like, when it will happen, and how long it will take to see broad health system impact.

However, with these new decisions in hand, the work is continuing both on the part of the transition team and on the part of Romanian government officials as they move forward to obtain the decision to have the Institute of Health Services Management (IHSM) designated as an Institute for Research and Development. If this decision is taken, then this new institute will have a DRG department responsible for collecting clinical patient level data, grouping the data, and providing the analysis and basis for financing to the National Health Insurance House and the Ministry of Health and Family[6]. The transition team will work with this new institute as well as all other Romanian decision-makers to support national implementation.

A first step in this process is to provide a detailed case-based financing requirements implementation plan to the implementing authority or institution regardless of who it ends up being. This plan needs to provide details of what needs to be done, who needs to do it, when it needs to be done, and how it should all come together[7].

And one of the most important next steps is to work to develop the hospital financing reform (mainly through the case based reimbursement) in conjunction with the reform of other aspects of the health care system (decentralization, health care management, ownership, alternative types of care, drugs reimbursement, health units accreditation, etc.) in order to crate the incentives for the system to work more efficient, in a greater transparency and with better quality of services.

[6] N.B. This was done at end of 2002 through the transformation of IHSM in National Institute for Research and Development in Health (NIRDH), see Romanian Governmental Decision 1329/2002.

[7] N.B. The action plan for 2002-2003 was approved by the Ministry of Health and Family and National Health Insurance House with the no. 1021/113/2002.