

Project description sheet issued by a federal administration

Practical information

Name of the public institution who has issued the project: FPS of Health, Food Chain Safety and Environment

Name of the project: measuring the Workload of nursing staff

Timing of the scientific tasks to be accomplished: 24 months

Deliverables and valorisation activities by the scientific team (not foreseen in the project description below):

- *International seminar (beginning of the project, state of the art concerning the data/work to perform) ;*
- *report* exposing the way the data concerned by the project could make international/European comparisons or harmonisation possible by the public authority;
- *Valorisation activity by the end of the project:* the team will make a proposal in this respect in its submission form.
- Deliverables from the research contract with federal Science Policy Office: *project description* (max. 25 lines in French, Dutch, English and German for the Web site of the Science Policy Office), *summary of the project* in max. 10 pages in F/D/EN/G for the web site of the Federal Science Policy Office, *a document in max. 40 lines* destined to the AGORA Newsletter at the end of the project in F/D/EN, *interims reports* (max. 2 pages, issued every 6 months destined to the financing of the project), *reports for the users' committee* (see below) ;

All these activities are to be financed within the allocated budget.

Working of the project:

The public authority steers and manages the project and collaborates closely with the team and the federal Science Policy Office (which form the technical committee of the project). The project is followed up by a users' committee who comes together at least three times in the course of the project (at the beginning, in the middle and at the end). Its role is to give a positive input to the team and the public authority in the management of the project. It is composed by representatives of other public administrations and by other researchers. The scientific team is in charge of preparing the documents for this committee, the public institution is responsible of the agenda and the minutes of the meetings.

Date of the information session with a delegate of the public institution (inscription at least a week in advance by e-mail – naji@belspo.be . without mark of interest, the meeting will be cancelled): **9 April, 10 AM**, Federal Science Policy Office.

The project

1. Name of the Public institution

FPS of Health, Food Chain Safety and Environment

2. Name of the project

Measuring the Workload of nursing staff

3. Acronym

WELAME

4. Description of the project and situation within the framework of the institution

This study aims at developing a staff matrix for all distinguishing letters except for C, D and G, on the basis of the Nursing Minimum Data Set - Minimum Hospital Data Set (NMDS-MHDS). This tool should allow to (re)organise the nursing and care providing staff within the hospital in an objective way, based on the NMDS-MHDS.

Hospitals collect essential policy data for the authorities by registering the NMDS-MHDS.

It is important that policy information can be used in different ways. The NMDS-MHDS should not only allow the federal authorities to play a directing role through hospital funding but should also allow the hospitals to apply these data as a driving force for a better organisation.

The preparatory activities aiming at the introduction of the minimum hospital data are currently being finalised. It was quite early in the development of the NMDS-MHDS that the hospitals were actively involved by the public service. This consultation showed that the field workers emphatically opt for the new nursing data that should allow to allocate staff in the most accurate way. The public service fully supports this view. Moreover, this fits in with the pilot project on the immediate replacement of and compliance with timetables in which 26 hospitals participate in order to improve the organisation of care.

As the NMDS-MHDS allows hospitals to allocate personnel in a more optimal way, it also guarantees an increased involvement of the hospitals. This is in its turn beneficial to the objectivity and the reliability of the data collected, which can strengthen the trust in advanced funding.

5. Tasks to be accomplished

a. by the research team:

- developing a trend analysis of the personnel data and the care data that have been registered by the hospitals during the last 20 years within the framework of the nursing minimum data
- developing a staff matrix for the distinguishing letters H*, I, NIC, E, M and Sp on the basis of the NMDS-MHDS
- developing a methodology, technical aspects and modules of calculations in cooperation with the FPS of Health, Food Chain Safety and Environment
- working temporarily within the FPS of Health, Food Chain Safety and Environment in order to achieve full integration
- guaranteeing the anonymity of the data provided

b. By the public institution:

- making the NMDS available for the research team
- placing the NMDS-MHDS coding manual to be used by the Belgian hospitals when implementing the tool at the disposal of the research team
- carrying out time measurements in the hospitals within the timing to be proposed by the team
- organising 1 consultation meeting with the research team per month during the course of the project
- publishing the relevant results
- organising the meetings of the steering committee during the course of the project

6. Final product to be delivered:

a. By the research team:

- a report with tables and charts of evolutions, divisions and percentiles with regard to the nursing units, patient-days, FTE / observations per distinguishing letter, the rating ridit per distinguishing letter, performance per staff category per distinguishing letter, stays per distinguishing letter, patients classified by age per distinguishing letter, a projection of the nursing units on the NMDS chart, NMDS items
- an analysis report on the NMDS-MHDS including the technical aspects, the data changes made and an explanation of the calculations and formulas
- an analysis report, a detailed technical manual and a users manual for the IT tool in a version that can immediately be applied by an IT specialist
- detailed definitions of the NMDS-MHDS items
- calculated and/or measured times per NMDS-MHDS item (new weighing items) and the method used

b. For the public institution

The matrix will be developed in such a way that the FPS of Health, Food Chain Safety and Environment can put it at the disposal of the hospitals, policy makers and researchers.

7. Valorisation of the end product

a. For the public institution: integration of the end product into its own way of working

The FPS of Health, Food Chain Safety and Environment has an important mission to support the hospital management in pursuing their policy.

Moreover, the public service can also use the matrix to examine what the most appropriate staff standards are.

In addition, this matrix provides policymakers at different levels with information to direct their policy.

b. for the 'public': access conditions and modalities for scientific users and for the general public

1. Hospitals

The matrix allows hospitals to daily allocate the pool of nurses to the different nursing units in an objective way.

2. Professional nursing organisations

The matrix will provide the professional nursing organisations with information that contributes to a continued professionalisation of the profession. It will help to map out the work force of the different hospitals and to interpret these data.

3. Researchers

The matrix allows the researchers to further examine the data on the work force of the different nursing units. It makes it possible to make analyses in time and at different aggregation levels.

8. Timing, planning and allocated budget

a. timing of the activities:

1 September 2008 - 31 August 2010.

b. planning of the activities:

1. For the research team

- A study of literature (October 2008, 1 month)

The study of literature should include a preparatory investigation of both similar international studies and the most recent international articles in this field of study.

- Validation with the sector (November 2008 – February 2009, 4 months)

The validation with the sector consists on the one hand of the composition of a broad expert group for two Delphi rounds and on the other hand of recruiting a response group that can voluntarily react through an especially designed website.

In the first Delphi round, the expert group defines what sub-activities can be distinguished in each NMDS-MHDS item. The result will be tested against the observations made by the response group.

In the second Delphi round, the expert group defines which NMDS-MHDS items should be measured per distinguishing letter and what nuances should be measured in each NMDS-MHDS item. The result will be tested against the observations made by the response group.

- Pilot measurements (March 2009 – June 2009, 4 months)

The pilot measurements are carried out in nursing units of a limited but representative and stratified sample of hospitals. The research team carries out time measurements amongst other things in order to determine the number of measurements required per item.

- Extensive measurements (July 2009 – April 2010, 10 months)

The extensive measurements are carried out in nursing units of a broader representative and stratified sample of hospitals. Once all data are assembled, each NMDS-MHDS item and each distinguishing letter can be weighed. This makes it possible to determine the total care weight of each nursing unit, to which the personnel quota can be linked.

- Development of a personnel allocation matrix (May 2010 – June 2010, 2 months)

- Reporting (July 2010 – September 2010, 3 months)

The results as well as the procedure shall be described in detail and will be presented in a clear and convenient way.

2. For the public institution

- putting the NMDS-MHDS coding manual to be used by the Belgian hospitals at the disposal of the research team
- organising 1 consultation meeting with the research team per month during the course of the project
- publishing the relevant results
- organising the meetings of the accompanying committee during the course of the project

9. Special conditions

a. Suggestions for the composition of the support committee:

The steering committee should consist of experts from hospitals, professional associations, the Belgian Health Care Knowledge Centre and the Belgian Federal Science Policy Office and of scientists from the 3 regions who can provide added value for the research.

b. Clause of confidentiality and intellectual property:

A confidentiality clause should be agreed upon by the FPS of Health, Food Chain Safety and Environment and the scientific team with a view to protecting the anonymity of the data.

c. Presence of the research team in the institution

In order to achieve a full integration in the daily activities, the presence of the research team in the FPS of Health, Food Chain Safety and Environment is expedient during a given period of time before final delivery.