

## **A NATION-WIDE PROJECT FOR THE REVISION OF THE BELGIAN NURSING MINIMUM DATASET: FROM CONCEPT TO IMPLEMENTATION**

### **Oral presentation**

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### **Summary**

This paper describes the process of revising the Belgian Nursing Minimum Data Set (B-NMDS). The study started in 2000 and will be implemented in 2006. Four phases are described: 1) conceptualisation, 2) language development, 3) data collection and tool validation and 4) information management.

**Keywords:** Nursing minimum dataset

**Conference theme:** From nursing data collection to information / policy, examples of nursing data sets, and of integration of nursing data into (inter)national health data sets.

### **Background**

The Ministry of Public Health commissioned a research project to the Catholic university of Leuven and the University Hospital of Liège to revise the Belgian Nursing Minimum Dataset (B-NMDS) for six care programmes (Cardiology, oncology, geriatrics, chronic care, paediatrics and intensive care) (1). The study started in 2000 and will end in 2006 with the implementation of the revised B-NMDS.

### **Study objective**

This study aims to revise the B-NMDS that was developed earlier in 1985. The revision should take into account the changes in nursing practice, the international development of nursing languages and classifications, the changes in healthcare management and the need for integration with the hospital discharge dataset.

### **Methodology and procedure**

To change is much more difficult than to start from scratch. For the revision of the B-NMDS a very strict plan is followed based on two main streams: 1) using panels of expert nurses and NMDS-coordinators to build the acceptability of the tool and 2) making use of existing and new empirical nursing data for developing a high-quality valid and reliable tool.

The project is divided in 4 major phases. The first phase (June – October 2002) implied the development of the conceptual framework based on literature review and secondary data-analysis. The NIC-language was selected as framework for the revision of the B-NMDS (2). The second phase focused on the language development (November 2002 – September 2003) with panels of clinical experts (N=75) for six care programs. They indicated hospital financing, nurse staffing allocation and assessment of the appropriateness of hospitalization as priorities of an revised B-NMDS. A draft instrument with 84 variables, using NIC, was developed during this period. This leads to a alpha version of a B-NMDS (3). The third phase (October 2003 – December 2004) focused on the data collection and validation of the new tool. The new NMDS was tested on 158 nursing wards in 66 Belgian hospitals from December 2003 until March 2004. This test generated data for some 100.000 inpatient days. These records are linked with the hospital discharge dataset and other mandatory datasets. The interrater-reliability of the revised NMDS is tested. The criterion-related validity of the revised NMDS is compared with the actual NMDS (4). The discriminative power of the

revised B-NMDS is tested to select the most relevant items for data collection (5). This will result in a beta version of revised NMDS in December 2004.

The fourth phase (January – December 2005) focus on information management. The beta version of the Revised B-NMDS will be piloted in a small number of hospitals for a wide range of departments to evaluate the external validity of the revised dataset. Linking the B-NMDS with the hospital discharge dataset will provide nursing profiles per DRG. Applications for hospital financing and nurse staff allocation will be developed. The B-NMDS will be incorporated in the evaluation of the appropriateness of stay in the hospital. Feedback and audit modules will be build. ICT-support in collecting and analysing the data will be developed. Adaptation in legislation to allow this revised data-collection will be prepared. In January 2006, nation-wide implementation of the dataset is foreseen.

### **Study outcome**

This process will result in a revised B-NMDS that is ready for nationwide implementation in 2005-2006.

### **References**

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