Workshop supported by EFMI working groups NLU, NURSIE and MCRO MBDS

From an ontology framework standard to terminologies

Jean Marie RODRIGUES\textsuperscript{a,b,c,1}, Ann CASEY\textsuperscript{d}, Richard MADDEN\textsuperscript{e}, Cédric BOUSQUET\textsuperscript{a,b}, Sukil KIM\textsuperscript{f}

\textsuperscript{a}University of Saint Etienne, CHU, Department of public health and medical informatics, Saint Etienne, France
\textsuperscript{b}INSERM UMR 872 Eq 20, Paris, France
\textsuperscript{c}WHO collaborating center for International Classifications in French Language, Paris, France
\textsuperscript{d}Royal College of Nursing of United Kingdom, London, England
\textsuperscript{e}University of Sydney WHO-FIC network, Australia
\textsuperscript{f}The Catholic University of Korea, Seoul, Korea

Abstract. The workshop is aimed to make the European medical informatics community aware of the most recent international standardization efforts in biomedical terminology and their translation/applications to the existing and under development reference terminologies. It will start with the presentation of 2 CEN/ISO standards in their final phase of approval and will go on with the translation/applications to the WHO-FIC (World Health Organisation -Family of International Classification) ICHI (International Classification of Health Intervention) and to the extra European National Korean reference terminologies. The workshop will emphasize on one hand the field of surgical procedures and on the other hand the nursing terminologies. What is expected is to support a seamless knowledge sharing between the standardization world, the reference terminologies world and the European medical informatics community.

Keywords. Standard, Terminology, Ontology, Surgical Procedures, Nursing

1. Background

The standards and the biomedical terminologies have appeared since a long time as two different worlds. In biomedical terminologies several broad pre-coordinated or compositional systems have been proposed to users targeting different goals for example UMLS (Unified Medical Language System) [1], LOINC [2] for clinical laboratories, DICOM SDM [3] for imaging or SNOMED CT [4]. At the same time most of developed countries have continued to maintain, update and modify their own coding sys-

\textsuperscript{1} JM Rodrigues, CHU de St Etienne, SSPIM, Chemin de la Marandière, 42 270 Saint Priest en Jarez, France, rodrigues@univ-st-etienne.fr.
tems for procedures and their national adaptations of ICD. Significant efforts have been made in Nursing (ICNP)[5] as well.

Standardisation in health informatics started in the US with the HL7 user group. The European Standard Body CEN TC 251 WG2 (Comité Européen de Normalisation Technical Committee 251 Working Group 2) and later the International Organisation for Standardization (ISO) TC 215 WG3 elaborated and developed a standard approach for biomedical terminology named Categorial Structure [6]. This workshop is aimed to facilitate the sharing of knowledge between these different worlds towards a more complete semantic interoperability. It has a primarily educational purpose with learning objectives. It is namely aimed to the 3 EFMI working groups NLU, NURSIE and MCRO MBDS.

2. Goal of the workshop and learning objectives

The main objective is to make the European medical informatics community aware of the most recent international standardization efforts in biomedical terminology and their translation/applications to the existing and under development reference terminologies.

The specific educational goals of the workshop are from 3 categories:
1. Sharing knowledge on 2 ISO standards in their final phase of approval on surgical procedures [7] and on nursing [8].
2. Sharing knowledge on use of these standards in the Development of International and national terminologies and classifications of surgical procedures [9] and of nursing [5].
3. To extend the world community participating actively to the harmonization process between standards, terminologies and classifications.

3. Format

The workshop will be structured in 3 main parts:
1. The presentation by 2 Standards experts of the 2 prENISO 1828 (JMR) on surgical procedures and 18104 on Nursing (AC).
2. The presentation by a WHO FIC expert of the state of development of ICHI (RM) including nursing actions and by a Korean expert (SK) of the national Korean classifications of health interventions with a collaborative web based and bilingual tool.
3. Discussion with the participants and the 3 EFMI working groups to clarify and criticize the method applied in order to facilitate further cooperation between the different approaches.

4. Speakers

PrENISO 1828: Jean Marie RODRIGUES

University of Saint Etienne, CHU, Department of public health and medical informatics, Saint Etienne, France
ISO/CDIS 18104: Ann CASEY
Royal College of Nursing of United Kingdom, London, England

ICHI: Richard MADDEN
University of Sydney WHO-FIC network, Australia

KCHI: Sukil KIM
The Catholic University of Korea, Seoul, Korea

Each presenter will start with a slide presentation summarizing the state of the art regarding a specific aspect of the workshop topic. An EFMI working group attendant will be in charge of summarizing each presentation and another one to summarise the part 3 discussion.

5. Expected achievements and outcomes

1. To increase the level of knowledge of the participants (educational focus)
2. To create a report on a new approach to translate standards works in the real world concepts with critical success factors, failures and pitfalls and recommendations.

Statement of participation: The speakers commit themselves to participate to the workshop.

References

[3] DICOM see http://www.xray.hmc.psu.edu/dicom/dicom_home.html