EFMI and SIGNI workshop

Strategic model for nursing terminology

The workshop was set up as a panel of experts who each gave a report of activities in their own country. The time left for discussion was limited although many of the audience continued with the panel into the coffee break.

The session was jointly organised by Virginia Saba for the Special Interest Group on Nursing informatics (SIGNI) and Irma Iversen for the nursing group of the European Federation of Medical Informatics (EFMI). The first part was jointly chaired by NSG member and EFMI Secretary Angela Jeune, and by Virginia Saba.

4th Framework proposals

Elly Pluyter-Wenting gave an overview of the last six months work for the 4th Framework in the European Union. At the AIM meeting in Lisbon in December 1994 to discuss 'Health in the new communication age' as the final conference in the AIM 1991-94 programme's telenursing activities (3rd Framework) two proposals were discussed. One involved BAZIS and its project ‘NURSE’, which had the aim of making visible to decision makers the benefits of the application of computer systems in nursing. The second was a continuation of the first AIM project on 'Telenursing. It was decided to merge both projects for strength.

The countries which had expressed an interest were: Iceland, UK, Sweden, Finland, Denmark, The Netherlands, Belgium, Portugal, Switzerland, Greece and Italy. Their representatives had met in Leiden to discuss the possibilities and through four workshops had prepared ten work packages.

- WP1. Telematics in nursing practice (hospital and primary care).
- WP2. Euro-nursing health database server (nursing minimum data sets).
- WP3. Client information tools (for managers and above, up to politicians).
- WP4. Ibrminology server and data entry.
- WP5. Multi-media in nursing practice and for presentations.
- WP8. Data security and confidentiality.

Elly then described the Telematies team, with BAZIS as the responsible partner: Medigard for Italy (CSA), HELIOS for Greece (ICL), EDDA for Iceland (GAGNAL),
MD KERTEMUS for Finland (MD), SONHO for Portugal (IGIF) and VISION for The Netherlands (BAZIS). The Danish Institute for Health and Nursing would take the lead for WP2. For WP9 the responsible partner was UCA and involved participation with CEN TC251.

The proposals had to be with AIM in Brussels by 10th March 1995, they were also available as a book. However Elly warned that there were 240 proposals competing for money, with 40 in the first shortlist. Since March there had been a cut in finances of 10 million ecu. It was likely that the nursing proposal would have to be trimmed to fit the money available.

**Classification in the USA**

Virginia Saba then gave an overview of activities in the USA on classification. A single code for every data entry was desired. There had been a growth in the number of systems and of the number of experts. The American Nurses Association (ANA) had agreed broad standards of care, endorsed the nursing process and last revised this in 1991. They wished to see standards built into practice and education. IMIA members were collaborating for a common goal. The Nursing Minimum Data Set from Werley had been endorsed by ANA 1. It covered nursing diagnosis, intervention, outcome and the intensity of nursing care. Four nursing vocabularies had been endorsed: NANDA, Omaha, Saba and Iowa University's NIC 2,3,4, 5.

Nursing Informatics had been made a clinical discipline with the first examinations being held this autumn.

A Unified Nursing Language System, similar to the concept of a Unified Medical Language System, would provide a metathesaurus which could be used for mapping terms to find a common language to represent the essential elements of nursing practice. The work would include the concepts in vocabularies and thesauri, the relationships among nursing terms and mapping from user's terms to vocabularies. It was hoped to devise a search facility using a CD-ROM to hold synonyms, antonyms and definitions.

Dr Saba said the International Council of Nurses was working on an International Classification of Nursing Practice. There were also lots of other organisations involved in data standards, nursing was just a part of the movement. For example in the USA there was the High Performance Computing Community, which had a health section for which a national information infrastructure was being devised.

There were also a number of nursing networks available such as the AJN network, ANA*NET, E.T.NET, the NLN electronic accreditation and FITNET. The World Wide Web was also likely to become a source of national databases.

**Nursing interventions in Finland**

Anneli Ensio, Chief of Nursing Services for a group of hospitals in Finland, described her work on nursing interventions. She had set out to find out their content, set standards for documentation, define common parts, devise a tool to measure nursing care and to give nurses the opportunity to use computerised nursing care planning. Data collection had begun in 1993 with four wards collecting 2,300 narrative statements over three weeks. She had used Saba's Home Health Care Classification
(HHCC) as she wanted the same tool for home and hospital care. Two researchers had classified the Finnish data, finding some missing fields.

A hospital expert group had been set up to modify the HHCC through workshops, meetings and demonstrations. Version 1.0 was ready at the end of 1994. This was tested in one medical and one surgical ward, by a Medic Data Inc. computerised system. The results would be available soon.

**Standardisation in New Zealand**

Robyn Carr, the SIGNI representative for New Zealand, was working for an Information Systems Department which covered four large hospitals in Auckland. She outlined the pressures for standardisation which included the value of consistent terminology for patient consent to, and understanding of, the proposed treatments, as well as multi-cultural needs. She linked this to a hierarchy of quality: as skills increased the individual went from the initial activity to a repeatable performance, where the task had been mastered; on to a defined task which had been fully understood; to its management where the task was controlled; to optimising it to continually improve.

Standardisation included treatment guidelines and glossaries. Robyn Carr said the Australian National DRGs for output had been agreed. The New Zealand Council of Health Care Standards for accreditation supported training and multiskilling. The development of professional nursing standards was taking into account the work of the International Council of Nurses.

**Nursing data in Switzerland**

Patrick Webber, EFMI representative from Switzerland and an independent consultant reported that the nursing minimum data set from Belgium was being tried at three hospitals: one for children, a public and a private one. The data had been collected, it was being compared for nursing activity and the results would be published. He said the political effort was on using 'PRN' as a tool to try to predict staffing requirements. In August 1995 the nurses would try to introduce nursing data into the national medical data set.

**USA comparative research**

Suzanne Henry, from the University of California, reported on research to compare SNOMED and NANDA for the patient's perceptions of health-related problems. They had used 485 patient encounters. Nursing Interventions Classifications (NIC) had been compared with Current Procedural Terminology (CPT) codes using 22,000 hospital activities, of which 21,000 were nursing interventions: with 100 per cent included in NIC and only 6 per cent in CPT 1, 1. When examining patient problems it would appear that nurse, physician and patient each had their own unique list of terms. The key question was: who is driving the process and so whose terms should be used?

A three year study was starting to collect patient and nurse terms from hospital and home care. These would be compared with SNOMED International, NANDA, HHCC and the Omaha classifications.
Discussion

Irma Iversen took over the chair for the panel discussion.

Q. Why had ANA endorsed four nursing languages?

A. Virginia Saba said they had not felt at the stage to select only one. ANA hoped to encourage research and to look at the unified nursing language, but vendors were pushing for one language.

Elly Pluyter-Wenting said Europe hoped for a world-wide standard.

Evelyn Hovenga from Australia said they were not so active: local language was used. She warned that the perspective was important when selecting a language, the context for its use had to be clear. For example: if it was for measuring nursing work then the terms had to include not only the observable but the cognitive element.

Q. Would natural language have to be replaced by a common nomenclature?

A. The general view was that there was one patient with communication between other professional groups.

Suzanne Henry said the clinical problem was the patient's, there was a shared understanding of what was behind it, so it might be helpful to teach patients the nursing terms as they already use medical ones.

Q. How was standard nursing terminology being used by managers?

A. Virginia Saba said that the nurse should act as advocate for the computerised system. At the University of Cleveland, Edward Holleran had used nursing diagnostic categories for costing patient care and for predicting staffing requirements.

Q. Were cultural differences too great for valid international comparisons?

A. Anneli Ensio said there was a need for local ownership. Once nurses had found the common core concepts the meaning could be the same but the label might differ: we could accept synonyms. Bulechek who was involved in the Nursing Interventions Classifications work at Iowa was more concerned with the issues of translation. A doctoral student, working with linguistics experts, translated nursing terms into Korean. These were sent to nurses with dual language skills for translation from Korean back to English. They were busy analysing the data. Physiological terms appeared prominent, but there were distinct cultural differences around terms for care of the dying.

References