Jean Karl Soler, MD, PhD
info@thefamilypractice.com.mt

41 – The International Classification of Primary Care: a Success Story

Jean Karl Soler, MD, PhD
Wonca International
Classification Committee (WICC)
Wonca Informatics Working
Party (WIWP)
Co-authors
Marc Jamoulle 1,2, Peter
Schattner 2
1. Wonca International
Classification Committee (WICC)
2. Wonca Informatics Working
Party (WIWP)
(°) The first WICC working group
consisted of Charles Bridges-
Webb (Australia), Robert
Westbury (Canada), Philip Sive
(Israel), Derek Callagher (New
Zealand), Donald Crombie
(United Kingdom) and Jack
Froom (United States). ICPC was
first developed by Henk
Lamberts, Maurice Wood and
Sue Meads.

The Forty Year Story of ICPC

The WONCA International Classification Committee (WICC) was set up by the WONCA Council in Melbourne in 1972 on the occasion of the Fifth World Conference (1). WONCA recognized the need for classifying and analysing data derived from clinical encounters with patients that was quite unique to family medicine. This would become increasingly important with the advent of electronic health records.

From an initial small group led by Henk Lamberts and Maurice Wood (°), a tool which would become the ICPC was progressively developed and in 1987, the three existing classification systems, the International Classification of Health Problems in Primary Care (ICHPPC-2), ICPC-Process and Reason for Encounter - were merged into a single one; the ICPC. ICPC-2 was published in 1998 by the WONCA International Classification Committee, after several years of revision and cross-mapping with the International Classification of Diseases (ICD) – 10 (2).

ICPC-2 is maintained by WICC and an updated version is edited on the site of the Norwegian Centre for Informatics in Health and Social Care. WICC members meet each year in a different country and communicate through a very active mailing list.

ICPC and its Role in Primary Care

ICPC is a coding and classification system that reflects the distribution and content of the domain of family medicine, and also acts as its ordering principle. It was designed as an epidemiological tool to classify and analyse data about three important elements of the health care encounter: the reasons for encounter (RFE), the diagnosis or problem, and the process of care in family medicine. Novel features are the inclusion of patients' symptoms and complaints which allows the patient's reasons for encounter to enter a system of routine clinical data collection, the structuring of data into episodes of care, and the incorporation of the symptom as a diagnosis (3).

The collation and analysis can occur at the level of an individual patient for clinical care, and at the practice level for recall, clinical audit and activity analysis for health services research. Maps are maintained from other classifications such as ICD-10 so that ICPC may also be used as an organizing principle for data collected in other systems such as the clinical terminology, SNOMED-CT. Linkage of elements permits categorization from the beginning of the encounter with a health problem to its conclusion, as well as a dynamic arrangement of encounters into episodes.

ICPC-2 is available in more than 25 languages. It is compact, and the entire classification can fit onto two A4 pages. It is compatible with problem-oriented clinical records. In Norway, FDs are obliged to label all fee-for-service bills, sick-leave certificates and social security forms with an ICPC-diagnosis in order for them to be accepted by the health authorities. It is also used in referrals, e-Prescriptions and the electronic ordering of laboratory tests (4).

ICPC Use in Family Medicine Research

ICPC has been used extensively for research in family medicine. In Australia, a version of ICPC is used in the BEACH database which contains more than 1,400,000 FD-patient encounter records (5). In the Netherlands and Malta, researchers are able to create reports from TransHis (6), an ICPC-based electronic health record, and the data have been used to develop the first public domain database of the predictive power of symptoms in making a diagnosis, for all relevant primary care diagnoses. ICPC is used by Danes conducting research in rural practice (7), as well as FDs who enter data into the Danish General Practice Research Database (8).

The Future of ICPC

A workshop on ICPC and other classification systems was conducted at the 2010 WONCA Europe conference in Malaga, Spain between WICC and the WONCA Informatics Working Party (WIWP). WIWP is primarily concerned with education in the field of family medicine informatics.

Meanwhile, WICC is developing the third version of ICPC. ICPC-3 has been in development for many years, using data collected with ICPC and other coding systems to allow expansion and modernisation of the classification without losing its core characteristics and values. Further information is available at www.ph3c.org , including the ICPC training module and an extended bibliography.

Take Home Messages

- Structured data in electronic health records are important not only for education but also for research and audit purposes
- Several classification systems are available, including the International Classification of Primary Care (ICPC) produced by WONCA
- Revising ICPC and getting more family physicians skilled in its use remain ongoing challenges

Original Abstract

http://www.woncaeurope.org/content/ws-17-international-classification-primary-care-icpc-and-hows-and-whys-classification

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