**FEATURE**

# International Classification of Traditional Medicine

**Clasificación internacional de la medicina tradicional**

**William Morris, PhD, DAOM; Stacy Gomes, EdD; Marilyn Allen, MS**

“We cannot ignore the potential of traditional medicine.”
—Sylvie Lucas (2009)

The International Classification of Diseases (ICD) provides alphanumeric codes that have a long-standing place in the annals of contemporary medicine for epidemiology, health management, and clinical diagnoses from patient encounters to death certificates. This system is maintained by the World Health Organization (WHO). Traditional medicine (TM) has historical usage patterns established by treating people through the centuries but has never before been included in the ICD code set. The inclusion of traditional Asian medicine in the International Family of Classifications is a new venture and scheduled to be included in the ICD-11 revision of the codes. This may enable the comparison of diagnostic, clinical outcome, and epidemiological information across medical systems.

WHO recently completed a survey among member nations and discovered that 82% of the world’s population uses some form of TM. Given the charge of WHO, which is to count mortality and morbidity, it is important that the millions of people worldwide who use some form of TM be counted. Beyond accounting for mortality and morbidity, ICD-11 becomes important for equitable health policy development “because indigenous peoples are essentially invisible in the data collection of many international agencies and in most national censuses, the disparities in their health situation as compared to other groups continue to be obscured.”

WHO promotes the use of the ICD codes that were initially developed by 3M’s Health Information Systems division. Contrarily, Current Procedural Terminology (CPT) codes are published by and owned by the American Medical Association (AMA). ICD codes classify inpatient and outpatient diseases; CPT codes, established in 1966, are used to identify the services and procedures provided by medical doctors for the treatment of disease and are used almost exclusively in the United States. These codes generate a considerable income every year for the AMA, which makes money every time a CPT code is used in billing an insurance company for a medical procedure or service.

**ICD, ICTM, CPT**

The purpose of the International Classification of Traditional Medicine-China, Japan, Korea (ICTM-CJK) is to allow reporting on the various practices of traditional medicine in a useful manner to improve clinical care and resource allocation. The scope of the ICTM covers disease names, disease patterns, symptoms, signs, indications for treatment, and interventions within the selected traditional medical (TM) systems. The ICTM can be used as an independent, stand-alone classification and could also be included as an additional chapter within the ICD, in part or as a whole. This will enable unification of the conventional and traditional medicine classifications for diagnosis and interventions. The project will establish links with the WHO Family of International Classifications (WHO-FIC) network to enable the membership of ICTM as a derived classification of the WHO family.

WHO owns all rights and processes related to ICD and its other core classifications. It therefore has the responsibility to ensure conceptual consistency in all the changes that are introduced. Historically, ICD has been revised approximately every 10 years. There was an exception recently with 20 years elapsing between the last 2 (ICD-9 and ICD-10) revisions. ICD-10 was completed in 1990, and WHO requested that it should be revised as necessary. Subsequent revisions were to be organized and coordinated by the WHO secretariat in order to provide support for the eventual transition from ICD-10 to ICD-11. Below are the revision goals, the organizational structure, and the plan.

Currently, the United States uses ICD-9 codes, and most of the rest of the world uses ICD-10 codes. Given the expense of conversion and the complexities of the ICD-10 code set, it is reasonable to speculate that the United States might skip the ICD-10 code set altogether and opt for an informatics-based ICD-11 code set.

Aside from the significant transformation in code development and use via the informatics process, the ICD-11 will introduce traditional medical codes. China, Korea, and Japan carried the responsibility for collaboration and development of both Western medicine and a TM coding system for conditions that could be treated by acupuncture. This will offer a foundation for comparison across healthcare systems of epidemiology, health management, and clinical diagnoses.

In 2005, a coalition led by the American Association of Oriental Medicine that included the American Chiropractic Association, the American Academy of Medical Acupuncture, and the Acupuncture and Oriental Medicine Alliance updated the CPT codes for acupuncture that include the following codes:

- 97810: Acupuncture, 1 or more needles, without electrical stimulation, initial 15 minutes of person-
TRADITIONAL MEDICINE INFORMATICS

A BRIEF HISTORY OF THE WORLD HEALTH ORGANIZATION’S TRADITIONAL MEDICINE EFFORTS

In 1972, WHO established a Department of Traditional Medicine (DTM). The United Nations divides the world into 7 regions. Each region has a regional office: for example, the Western Pacific Regional office is located in Manila, Philippines, and the African Regional office is in Brazzaville, Congo. The goal of the DTM departments in these 2 regions is to encourage the use of TM worldwide.6

In 1978, the Alma-Ata Declaration on Primary Health Care called on countries and governments to include the practice of TM within their primary healthcare approaches.7

The WHO Regional Office for the Western Pacific organized a working group for the Standardization of Acupuncture Nomenclature. In 1991, after 10 years of working, a consensus was reached with both the Manila Regional Office and the WHO Scientific Group in Geneva, and the proposed Standard International Acupuncture Nomenclature was published by WHO.8

In 1999, member countries of the United Nations (UN) began a discussion within the General Assembly. Notably, these were the countries that provided socialized medicine to their citizens. The major concerns of high cost of pharmaceuticals and rising costs of diagnostics and surgical interventions began to cause problems given the increased number of people within the socialized healthcare systems. The countries were looking for some other forms of diagnosis and treatment to help defray the costs. These discussions continued for 4 years. In addition to articulating economic and policy concerns relative to TM, the General Assembly recognized that for indigenous peoples, health is equivalent to the “harmonious coexistence of human beings with nature, with themselves, and with others, aimed at integral well-being, in spiritual, individual, and social wholeness and tranquility.”9

In 2003, the UN turned to WHO for a solution. With continued encouragement from experts regarding traditional Chinese medicine as a possible solution, the WHO appointed Choi Seung-hoon, a Korean Oriental medicine doctor, to head the project. He and his family moved to Manila, and the project began to take shape. His charge was to work with the countries of the Pacific Rim: China, Japan, Korea, Mongolia, Australia, and Vietnam. In addition, some smaller countries along with the United States were invited even though they were not in this region.

In 2005, Dr Choi reached out to what is now the American Association of Acupuncture and Oriental Medicine for US representation. Representatives were sent to Korea to participate in the dialogues. Since then, the United States has participated through the auspices of private donors and collective efforts within the acupuncture and Oriental medical field with support from colleges, vendors, and professionals. All other involved countries have official state sponsorship. The United States is the only country that relies on support from within the professional community of practitioners.

THREE PHASES OF THE TRADITIONAL MEDICINE PROJECT

The proposed TM project was to take place in 3 sections and timing stages: (1) standardization of the acupuncture points, (2) standardized term set, and (3) assignment of diagnostic codes.

The first section involved standardization of acupuncture points and their specific locations. The delegations spent several sessions discussing various point locations and the final version, which included an international consensus panel that deliberated on 361 standardized locations. WHO published the results in hard copy and entitled it, WHO Standard Acupuncture Point Locations in the Western Pacific Region. The second section involved the generation of more than 4000 terms with agreed-upon definitions. This process was completed in 2007 and was printed in hard copy by the WHO and titled, WHO International Standard Terminologies on Traditional Medicine in the Western Pacific Region. With these 2 projects completed, the groundwork was laid for research into the various areas of traditional medicine worldwide. Researchers were now able to refer to an agreed-upon set of point locations for acupuncture-related services and an accepted standardized version of terms and definitions for the practices in general.

In a similar timeframe, the large concerns of disease classification for TM were being addressed. Delegations talked about an appropriate title for the work. After much discussion, the title “International Classification of Traditional Medicine” was finalized.

The third section, the continuing work on the International Classification of Traditional Medicine, began in 2009. This phase began the formation of a set of diagnostic codes for TM incorporating the traditional version and language of diagnostic information. China, Japan, and Korea were the 3 main countries involved in the project and have contributed heavily to its continuing progress.

INTERNATIONAL CLASSIFICATION OF DISEASES AS TRADITIONAL MEDICINE INFORMATICS

The WHO-FIC will advance TM as systems of medicine, used by millions around the world, to be recorded in informatics systems. The ontological basis of theory and practice is a necessary feature of the code set development.
For the first time, ICD will reside entirely within a large database for worldwide use. This ICTM classification system will make it possible for the collection of data from around the world. This can then be compared with conventional healthcare information systems. It is therefore critical that TM be included because of the extensive use by such large portions of the population throughout the world. It is important that statistics portray an accurate and complete representation of medical practices in order to inform healthcare policy makers in their efforts to help the citizens of the world.

The ICD is a significant instrument serving WHO’s mission. ICD was adopted and has been maintained since the inception of WHO in 1948. Initially developed for coding mortality, the continuous evolution makes ICD useful for coding morbidity, as well as recording specific diseases, injuries, signs, symptoms, complaints, social circumstances, reasons for presentation, and external causes of both injury and disease. ICD provides a basis for national and international collection, classification, processing, and presentation of disease-related data. The data are kept up to date and consistent with features for comparison and contrast under analysis.

ICD informs public health bodies, clinicians, and researchers alike in the evolving environment of increasingly complex health systems, ensuring the provision of language- and system-independent definitions that are applied for

- national and international health statistics (mortality and morbidity);
- epidemiology, surveillance, and monitoring;
- individual patient records and electronic health records;
- reimbursement and health system financing;
- reference for treatment guidelines, scientific literature and research; and
- quality assessment at the level of individual cases up to assessment of health system outcomes and monitoring.

INTERNATIONAL CLASSIFICATION OF DISEASES PROCESS

WHO, in consultation with a large group of stakeholders in the areas of TM, including complementary and alternative medicine and health information systems, has developed a collaborative project plan to produce an international standard terminology and classification system for traditional medicine. The rationale for this proposal is as follows:

- TM is a significant part of healthcare that is commonly used around the world;
- current health information systems about TM are not adequate: “Traditional medicine does not count, unless we count traditional medicine”;
- local TM knowledge exists, but there is a lack of international harmonization;
- international standardization of TM information is essential;
- unification of traditional medicine and conventional information will improve efficiency; and
- digitalization of health information provides an opportunity for TM.

WHO is coordinating various streams of work to develop standardized TM terminology and the classification system. This standardization will allow for regular data collection and comparisons with conventional health information systems.

This project aims to harness the potential from 2 key drivers: (1) to create an international standard TM terminology and classification that is based on modern information sciences providing a representation format to identify each TM entity with its defining characteristics and (2) to enable tools for compiling health statistics and information related to TM practices serving both analogue and digital health information systems, including electronic health records, accounting, insurance, billing, and reimbursement systems.

The creation of an ICTM will include disease terms submitted from various TM systems. ICTM has different modules, eg, (1) East Asian/Chinese–based traditional medicine, (2) Ayurveda, (3) homeopathy, and (4) other TM systems with independent diagnostic conditions included in a similar fashion. The translational policies for the East Asian/Chinese medical group were targeted toward the end user. This decision was made so that policy makers for WHO were able to understand the language patterns of acupuncture and Oriental medicine. They are physicians with backgrounds in contemporary scientific practice. The ideals of translation focused on the language of origin were abandoned for the purpose of expediency. The project currently resides at the informatics databases of Stanford University under the guidance of professor Mark Musen, MD. Marilyn Allen and the Consortium of Oriental Medicine and Research and Education have agreed to oversee the project for the United States. Subject matter experts were recruited to read and comment on the alpha version of ICTM codes, content, diseases, patterns, and diagnosis using the International Collaborative Authoring Tool system.

The decision-making rules for what is included in the content model are based on evidence, not necessarily consensus. The hierarchy of the content model was logically built on developing diagnoses from different resources with common roots. There will also be an extra chapter written about traditional medicine. The review of the alpha version of the ICTM-11 began in 2011. The working language is English, and the translation is not word-for-word but rather based on concepts.

SUMMARY

The ramifications of the ICD project are far-reaching and complex. At the minimum, there is recognition of TM models. More importantly, given the rate of TM use
worldwide, there is a large knowledge gap about the patterns of TM use, which this project would address in part. The development of acupuncture and Oriental medicine disease classification codes has implications for education, research, insurance reimbursement, medical integration, individual practitioners, international recognition, and professional identity.

The single common denominator across the disciplines and between sovereign nations is the cost of medical care. Whether nationalized or privatized, there is a direct impact upon gross national product and the health of a nation. Furthering the prospect of medical integration and convergence of worldviews will be substantively enhanced through cost-of-care studies. The ICD-11 and the ICTM will enhance the prospects of such research.

Deeper research implications exist. As the data become more available to public health and epidemiological workers, we will begin to have a more accurate picture of medical uses by the public. The implications are not limited to knowledge about what might be best practices given an accurate assessment of the terrain. Such information may have a rather large impact upon local, national, and global health economics and, correspondingly, policy development.

This process has been a journey of globalizing harmonization. Bringing countries together to work for the health of the world’s citizens has been both challenging and rewarding. The United States was invited to be involved in this process because of the acceptance and emerging future of the rapidly increasing use of traditional Asian medicine. The United States is potentially one of the largest end users of this medicine.

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