

**MEETING OF WHO COLLABORATING CENTRES
FOR THE FAMILY OF INTERNATIONAL CLASSIFICATIONS**

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Update on ICHI Beta-version field tests

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ICHI Field Testing Summary

The International Classifications of Health Interventions (ICHI) was tabled for beta field testing in order to qualify as member of the WHO Family of International Classifications. The methodology is summarized and the conditions for implementation outlined. The current status of the field testing is described, incl. initial observations on the output from the Beta field tests. Conclusions include suggestions for next steps and draft work plan.

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Rationale and mandate

A succinct classification of health interventions has been derived from the comprehensive classification of procedures and interventions by NCCH in Australia, which was a portion of the Australian modification of ICD 10, or ICD-10-AM.

The resulting ACHI-I was circulated to selected countries for alpha-testing, leading to adjustments to the original version to become ICHI, which is intended and designed to meet the needs of countries which may not need a full classification of interventions, or may not be in a position to implement one, due to limited resources.

It is generally admitted that countries having already adopted a full-scale classification might not consider changing it for a shorter version like ICHI. In order to validate the existence of ICHI as a tool for classifying interventions at international level, it is necessary to assess

- (1) its ability to sustain the comparability of data collected with it with those collected using larger classifications;
- (2) its adequacy to document public health situations at field level in a meaningful manner, and in a manner that is commensurate with the human and other resources available at country level without precluding possible future developments; and
- (3) the guarantee that the terminology used in disparate original systems is fully compatible with that used by the proposed international instrument.

This has been recognised at the annual meeting of the heads of WHO collaborating centres in Reykjavik in October 2004:

"To ensure compatibility with existing classifications, field trials of ICHI need to be undertaken. One aspect of this will be a mapping by countries with their own full classifications to ICHI. Following these trials and informed by their results, a number of decisions by WHO-FIC will need to be made concerning the publication, updating and maintenance of ICHI."

Preliminary considerations

The questionnaire was tailored after the ICF beta-version field test questionnaire. It covers the designation, its needs and use cases, its specificity, its main characteristics, its dimensions, its structure, its coding scheme, its relation to other systems and its practical utility. A copy is available as Annex 3 on page 9

Two target groups were identified for the initial opinion survey: (1) **individual experts** from around the world volunteering to review ICHI, and (2) official channels experts, designated by health authorities in the Member States, either in their own capacity or on behalf of an institution.

Individual experts

Work has started with the constituency of group one. Between 18 April 2005 and 25 September 2005, WHO was notified some 220 registrations. Registered parties received a time-limited privilege for read-only access to the source materials, made available through NCCH, Australia in a proprietary format. Upon receipt of the registration notification, WHO sent an individual email message to each registered participant, indicating the WHO site where the e-questionnaire is available online, and offering to send printed copies on request. No such request was received.

A database was set up in April 2005 on one of the WHO servers to collect the inputs from the participants.

Official channels

Work has been delayed on the second group of experts. According to WHO's rules of procedure, communication with health authorities must occur in the official languages of the Organization. In our case, this applies to the classification itself and to the questionnaire. Furthermore, Regional Offices would object to a release to only one language community, which would create undesirable differences. Internal resources were not available to cover such costs. Government authorities in France have managed to released funds for the translation of ICHI into French, which can be expected shortly. Various Latin-American countries have cooperated to produce a Spanish version, to be released soon. It will therefore be possible to start surveying most countries in Africa and Latin-America. Solutions for other official languages are also being explored.

Initial results

The distribution of registered users is as follows:

As of 25 September 2005, only 10 responses have been received. Three were submitted with many questions unanswered. Seven were received in full.

The title should continue to be referred to as *International Classification of Health Interventions* (BQ-2.1: 7/8), *ICHI* for short (BQ2.2: 8/8). *Health intervention* can be used as an umbrella term (BQ-2.3: 7/9), but 1/9 would prefer to call it ICHI-Medicine, and see it supplemented with other modules: ICHI-Nursing, ICHI-Primary Care, ICHI-Public Health.

The need for ICHI is rated between very significant (7/8) and moderate (BQ-3.1: 1/8) in general (BQ-3.1). In **statistical applications** (BQ-3.1.1) it is rated as very significant (8/10) or moderately needed (2/10), for **management** (BQ-3.1.2) as very important (6/8) or moderately so (2/8). For **research**, including health systems research (BQ-3.1.3), it is considered very important (8/8), but for **clinical care** BQ-3.1.4), the perception varies from very significant (6/8), to moderate need (1/8) and mild need (1/8). In the area of **social policy** (BQ-3.1.5), the need is considered very important (8/8).

Other possible uses are mentioned, including clinical pathways, EHRs. The list of use cases should be further developed. Education and treatment are also mentioned.

Six respondents (6/8) agree that ICHI provides a meaningful way of classifying interventions (BQ-4.1). While no one strongly agrees, 2/6 respondents strongly disagree, claiming it is too medical and not sufficiently developed in the field of nursing.

Seven respondents (7/7) consider a short list preferable to a longer list (BQ-4.2), and whereas nobody found it too detailed, 2/7 found the level of detail just right, but 5/7 said ICHI offers not enough details (BQ-4.2). With regard to coverage (BQ-4.4), nobody strongly agrees that their specialty area is adequately covered, 3/10 agree it covers it well (urology, rehabilitation, hospital management), 3/10 disagree (radiation, oncology, health statistics), 1/10 strongly disagrees (mental health nursing). Three (3/10) do not agree or disagree but indicate that health informatics and clinical care are not covered.

Additional comments raise the issue of the relationship between this classification (i.e. ICHI) and the underlying terminologies, as it cannot be both a clinical terminology and a classification at the same time. Others suggest to unfold MRI, CT-scan, megavoltage radiation treatment, radiation field setting. One respondent says they use ICD-9 in Spanish, which is more detailed than ICHI.

On the intrinsic characteristics of ICHI (BQ-5): according to a majority of respondents (5/7) criteria listed under BQ-5.1 to BQ-5.10 are mostly largely met. Two (2/7) see them even as fully met with regard to acceptability to professionals, with few considering they are poorly met or not at all (1/10 each). The language issue is cited as the principal problem at this stage.

In response to question BQ-6, 4/5 respondents consider ICHI is appropriate for use at international level, and 1/5 at national level in resource-limited settings only, but then language is a problem. 5/10 have not responded at all to this question. One respondent commented that a more detailed classification would be needed with a short list being used for reporting purposes only.

As to overall structure (BQ-7), the breakdown is clear for interventions (7/7), the procedure types are clearly identifiable, the top-down topology is appropriate (7/7), labels are understandable (7/7). Five (5/7) consider that finer description as used in patient records for interventions will be amenable to ICHI categories, but 2/5 disagreed. Seven (7/7) feel a detailed description of the summary categories would be useful, and 5/7 said they would like to have explicit definitions, and 2/7 that they would like an extensional list of interventions covered by the category. Four (4/7) would prefer embedded definitions, 3/7 would prefer to have a separate glossary. If an extensional list were to be produced, it should preferably be embedded (5/7) rather than developed as an index (2/7).

The coding scheme (BQ-8) is clear to 5/6 respondents, but from an operational point of view, 6/7 find it advisable to have a structured coding scheme mirroring the anatomical site, intervention type etc.

The correspondence with existing national classifications (BQ-9.1) is fine (5/6). Two thirds (4/6) of the respondents are absolutely sure that the categories in their national classifications and those in ICHI have exactly the same meaning (BQ-9.2), but one third has a different opinion.

ICHI is considered (4/5) suitable for other uses (BQ-9.3), and can be used in several information systems (7/7), except that nursing interventions are not sufficiently covered.

With regard to ICHI's practical utility (BQ-10), it is considered to be particularly good for the health insurance sector, and with regard to compatibility with ICD and ICF, is perceived as adequately compatible, but the linkages should be more explicit.

Conclusion

It is premature to draw conclusions based on such a small number of respondents. The list of registered evaluators of ICHI is growing everyday, in excess now of 220. They are distributed in some 60 countries. Follow up messages are being sent to encourage participation. A more detailed analysis will be conducted once a more significant number of responses has been received.

The forthcoming existence of the French and Spanish version may also help in mobilizing participants. The circulation to national institutions through WHO channels may also provide feedback from a different constituency. Results in the two groups will be compared.

Annex 1: Invitation to participate in the trials

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From: Lewalle, Pierre H.L. [mailto:lewallep@who.int]

Sent: Friday, May 13, 2005 5:08 AM

Subject: Evaluation of ICHI, International Classification of Health Interventions

Dear Colleague,

You have expressed interest in the International Classification of Health Interventions (ICHI) developed by the Australian National Centre for Classifications in Health for the network of WHO Collaborating Centres for the Family of International Classifications. We have received notice from our Australian colleagues that you have been formally registered as ICHI evaluator.

We are very grateful for your interest in this important piece of work, and I have pleasure inviting you herewith to participate formally in the evaluation of this pre-final or beta version. Your feedback on ICHI will assist WHO and its Collaborating Centres in determining the most useful scope and format of the proposed ICHI, and in tailoring it to the needs of the largest possible constituency of users around the world.

The evaluation process requires you to answer a few questions, after you have studied the content of ICHI. The questionnaire is submitted to the evaluators preferably in electronic form (e-questionnaire). It shouldn't take you more than 15 minutes to fill it in and submit it. Your opinion will be automatically recorded in our database and analyzed in due course. If you experience difficulty accessing or using the e-questionnaire, kindly let us know. We shall be happy to send you additional explanations, or to provide a document in pdf format, which you can print and return to us by postal mail.

The e-questionnaire is available at the following address:
<http://www3.who.int/ichi/ichibq>.

I thank you very much in advance for your important contribution to the advancement of the project.

With kind regards,

Annex 2: Executive Summary of the Reykjavik meeting

5. International Classification of Health Interventions (ICHI)

The meeting was presented with the electronic and printed copies of the ICHI beta-version, developed under the auspices of the network by the Australian centre (NCCH) on the basis of the Australian classification (ICD-10-AM). The proposed classification was intended for use as a simpler classification in countries that did not have any classification schemes for interventions.

WHO-CAT agreed to arrange for extended field tests of ICHI. Arrangements have been made to prepare supporting questionnaires. They will be fielded as soon as feedback has been received from the centres.

Several issues that need to be addressed were raised during the meeting. The value of the ICHI contribution has been highly appreciated, but any final version to be proposed to WHO governing bodies for possible adoption should ensure that all Member States have an equal chance to produce high quality data in using the proposed classification as other Member States that use a more comprehensive classification.

It was also emphasized that the scope of the classification should go beyond medical/surgical procedures, given the fact that developing countries are devoting important portions of their limited resources to preventive and other public health interventions, which need to be carefully planned and monitored.

In practical terms, it was agreed that countries already using larger interventions classifications would map them to the ICHI to assess their compatibility.

Annexe 3: ICHI Beta-1 Field Trials Questionnaire

ICHI Beta-1 FIELD TRIALS

Respondent institution:

Type of institution:

Ministry of Health.

Health care providers

Health care management.

Health economists.

Research Social security institution

Insurance companies.

Other financing institutions.

Other Specify:

Country:

Responsible officer: .

Email:

Telephone:

Basic Question Response Form

BQ-1. Identification

BQ-1.1. Unique Participant Number will be assigned automatically.

BQ-2. Title

BQ-2.1. Should the final title of ICHI, as a new member of the WHO Family of international Classifications, be '*International Classification of Health Interventions*'?

Yes

No

BQ-2.1.1.

If No, suggest a term to replace it.

BQ-2.2. If the title is ‘International Classification of Health Interventions’, should the acronym be ICHI?

Yes No

BQ-2.2.1. Comments:

BQ-2.3. Should ‘*health interventions*’ be retained as the umbrella term for the medical and other procedures, including nursing procedures, primary care procedures, and other public health interventions?

Yes No

BQ-2.3.1. If No, please clarify whether, in your view, those various procedures should be classified separately. In that case, suggest an alternative title for ICHI.

BQ-3. Need and uses for ICHI

BQ-3.1. How would you rate the overall need for ICHI?

Very significant need moderate need mild need no need

BQ-3.1.1. How would you rate the need of ICHI in the area of **statistical applications** (Epidemiology, data base development, recording tool, health services delivery)?

Very significant need moderate need mild need no need

BQ-3.1.2. How would you rate the need of ICHI in the area of **management** (health information system, management information system, management of health services, managed care)?

Very significant need moderate need mild need no need

BQ-3.1.3. How would you rate the need of ICHI in the area of **research** (health systems research, cost-effectiveness of health interventions, etc.)?

Very significant need moderate need mild need no need

BQ-3.1.4. How would you rate the need of ICHI in the area of **clinical care** (needs assessment, case mix groupings, DRGs, electronic patient records)?

Very significant need moderate need mild need no need

BQ-3.1.5. How would you rate the need of ICHI in the area of social policy eligibility determination and planning, insurance schemes, policy design and implementation)?

Very significant need moderate need mild need no need

BQ-3.2. Are there other areas of use for ICHI?

BQ-4. Specificity of ICHI

BQ-4.1. Do you agree that the ICHI Beta-1 overall provides a meaningful way to classify “*health interventions*”?

Strongly agree agree disagree strongly disagree

If you disagree or strongly disagreed, explain why:

BQ-4.2. The ICHI is intended for basic health interventions. Is this sufficient for your purposes or would you prefer to have a longer, more detailed version available, from which data could be aggregated into a smaller list of categories for specific uses

Sentinel list sufficient Full version preferred

BQ-4.3. Is the level of detail of the list appropriate?

Too detailed Just right Not enough detail

BQ-4.4. Do you agree that your field or specialty area is adequately covered in the ICHI Beta version ?

Strongly agree agree disagree strongly disagree



BQ-4.4.1. Identify your specialty area

BQ-4.5. Comments:

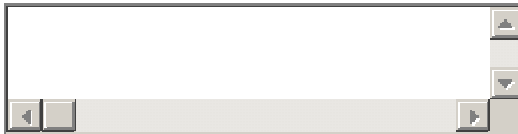
BQ-5. Characteristics of ICHI Beta-1

BQ-5.1. Does the ICHI Beta-1 meet the following criteria ?

Criteria	Fully	Largely	Somewhat	No at all
BQ-5.1.1. <u>Cultural sensitivity</u> : sensitive to cultural variability	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BQ-5.1.2. <u>Applicability across disciplines</u> : applicable in different <u>health</u> disciplines	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BQ-5.1.3. <u>Applicability across sectors</u> : broad enough to serve the multiple <u>purposes</u> required by different sectors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BQ-5.1.4. <u>Simplicity</u> : simple enough to be used by different health professionals in practice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BQ-5.1.5. <u>Meaningful in daily practice</u> : meaningful in practice of <u>different</u> health professionals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BQ-5.1.6. <u>Comprehensiveness</u> : comprehensive enough to be used by different <u>health</u> professionals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BQ-5.1.7. <u>Clarity</u> : a clearly <u>defined</u> conceptual framework	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BQ-5.1.8. <u>Flexibility</u> : a <u>central core</u> to which additions can be made in a flexible manner	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BQ-5.1.9. <u>Acceptability to professionals</u> : acceptable to health professionals working in <u>the</u> classification area around the world	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

BQ-5.1.10. <u>Acceptability to consumers:</u> acceptable to consumers and care givers in the health interventions area				
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BQ-5.1.11. Comments:



BQ-6. Dimensions

(see Draft International Classification of Health Interventions as Annex 1)

The proposed candidate International Classification of Health Interventions is built on the same principles as ICD-10. It consists of a tabular list based on body systems (e.g. Nervous System) or specialties (e.g. Obstetrics). It contains 20 chapters and approximately 2000 procedure codes. It covers all surgical interventions as well as allied health, cognitive, imaging and other therapeutic and diagnostic interventions.

Procedures may be described at a number of levels. In order to simplify the use of the proposed classification, categories are grouped in each chapter according to sites within the relevant body system and then by procedure type which is described consistently throughout the classification:

- Examination
- Application, Insertion, Removal
- Incision
- Destruction
- Excision
- Reduction
- Repair
- Reconstruction
- Revision
- Reoperation
- Other

It is designed as a shorter list of interventions for use in international settings. It is modelled after a full, more detailed classification of health interventions comprising more than 6000 codes, which can be used for refined reporting if there is a need and resources are available. While a full detailed classification provides mechanisms for aggregating

information into higher-level categories, the proposed shorter classification will not permit reverse post-coding disaggregation, due to the insufficient degree of specificity of the aggregated categories.

BQ-6.1. In your opinion, the proposed candidate shorter international classification of health interventions is

appropriate for use

at international level

at national level in general

at national in resource-limited settings only

at sub-national level (e.g. district)

inappropriate as proposed, as a more detailed classification of health interventions, with adequate aggregation mechanisms for summary reporting purposes, would seem preferable for use in your working environment, resources permitting?

BQ-6.1.1. Comments:

BQ-7. Overall structure

The proposed candidate international classification of health interventions is arranged in 20 chapter. The chapters refer to body systems (e.g. Chapter I – Nervous system), specialties (e.g. Chapter XIII - Gynecological), or procedures and techniques (e.g. Chapter XIV – Obstetric procedures , Chapter XX - Imaging.)

BQ-7.1. Is the breakdown appropriate and clear for a classification of interventions?

Yes

No

BQ-7.2. Are the procedure or intervention types for these items clearly identifiable?

Yes

No

BQ-7.3. Sections in each chapter are arranged according to a top-down topology. Is this appropriate for your purposes?

Yes No

BQ-7.3.1. If No, please explain:

BQ-7.4. Are the labels of each category readily understandable in your work environment?

Yes No

BQ-7.5. Do you think that finer descriptors of health interventions as may be found on patient records will be easily amenable to the proposed summary categories?

Yes No

BQ-7.6. Would you find it useful to have a detailed description of each summary category to guide the selection ?

Yes No

BQ-7.6.1. If yes, would you like to have an explicit definition (intensional definition) or a list of specific interventions (extensional definition) subsumed under the proposed category?

Explicit definition List of particular interventions

BQ-7.6.1.1. For more explicit definitions, would you like to have them within the classification or produced as an annex or a companion glossary?

Embedded definitions As a separate glossary

BQ-7.6.1.2. For more a list of particular interventions, would you like to have them within the classification or produced as index to the classification?

Embedded list As an index

BQ-8. Coding scheme

BQ-8.1. Is the coding scheme adopted for the proposed ICHI clear and sufficient?

Yes

No

BQ-8.2. From an operational point of view, would a different scheme offer added advantages?

Yes

No

BQ-8.2.1. If yes, please comments:

BQ-8.3. Item codes are block numbers from the more detailed classification. From an operational point of view, would you consider advisable to have a structured coding scheme mirroring the anatomical site, intervention type, etc.?

Yes

No

BQ-9. Relations to other systems

BQ-9.1. Do you think that the categories in the proposed international classification of health interventions correspond to categories used in existing national or international classifications of health interventions?

Yes

If so, specify one or more choices:

- 1. Yes, 100%; category names are the same
- 2. Yes, but names are different
- 3. Yes, but codes are different
- 4. Yes but sequencing is different

Please indicate the other classification you compare the proposed ICHI with.

No

Please explain:

BQ-9.2. Are you absolutely sure that categories with the same name in the classifications of health interventions you are comparing the proposed ICHI with actually have exactly the same meaning?

Yes No

How do you know that? Please explain:

BQ-9.3. Do you see different uses of the proposed international classification of health interventions as compared with classifications you know or have heard of at national or subnational level?

Yes No

Please specify:

BQ-9.4. Do you consider that the categories identified to form the proposed international classification of health interventions may be used in several information systems ?

Yes

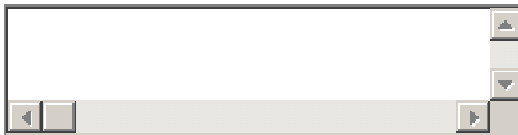
No

BQ-9.5. Are the categories identified to form the proposed international classification of health interventions compatible with all other information systems that you need?

Yes

No

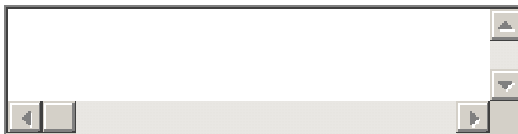
BQ-9.5.1. If not, please comment:



BQ-10. Practical utility

BQ-10.1. In order to stimulate support for the development of an international classification of health interventions, the comparative advantage of practical applications must be clearly demonstrated. Short presentations of successful application cases would provide evidence of the benefits to be derived.

BQ-10.1.1. Please provide a list of success stories in your area of work that, in your opinion, provide compelling evidence of the need to adopt such an international classification. Provide detailed case studies to that effect.



BQ-11. Compatibility with ICD-10 and ICF

ICHI would logically belong to the “family” of classifications developed by the World Health Organization for application to various aspects of health. In this family, health conditions are classified mainly in *ICD-10* which represents an etiological framework. The functioning and disability associated with health conditions are classified in *ICF*. The medical procedures or health interventions applicable to particular health conditions would be classified in *ICHI*.

ICD-10 provides a “diagnosis” and this information is enriched by the additional information given by *ICF* on functioning at body, individual and society levels. The

implications of recognized health conditions in terms of possible courses of action for a variety of actors in the health sector, including ministries of health, health care providers, health systems managers, health management organizations, health financing institutions and other health systems analysts and researchers would best be described by ICHI in a manner that is consistent with the information provided by the other members of the Family.

BQ-11.1. Do you use ICD-10 and/or ICF?

Yes

No

BQ-11.2. In your opinion, how compatible is ICHI for use together with ICD-10 and ICF?

Completely

Adequately

Inadequately

Not at all

BQ-11.3. Do you have any suggestions for making them more compatible?

Please make sure all of the questions has been answered before pressing the submit button.