

## **The use of ICPC in Portugal – status update**

Report for the WONCA International Classification Committee

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### **Summary**

ICPC is the official classification for primary care in Portugal. Almost every family doctor has access to an EHR that uses ICPC to classify reasons for encounter, problems and process. EHRs must use ICPC coding to be authorized for use in primary care. Hospital referrals are also coded with ICPC. However, the number of doctors who actually coded in records was low until recently. The Portuguese Association of General Practitioners and the Portuguese Health Ministry are developing initiatives to train family doctors and hopefully increase coding. A new book updating the translation to ICPC-2ev3.0 has been prepared and will be published soon.

### **Detailed report**

The Portuguese Association of General Practitioners secured from WONCA the rights to the use of ICPC in Portugal. ICPC-2 was translated into Portuguese in 1999 and published as a book. The book edition was widely distributed when it was published and a copy was given to each new member of the Portuguese Association of General Practitioners (usually residents) up to 2008 (it ended because there were no further copies available). It is still available in PDF format.

There are no available statistics on ICPC usage, the following information is anecdotal.

Up to 2006 almost every doctor used paper records. Until then, the use of ICPC was mostly restricted to academia, family doctors involved in training of residents and the residents themselves. From 2006 onward there has been a large move to electronic medical records. In September 2011 almost every family doctor in mainland Portugal and Madeira was using an electronic medical record. There are three main software systems in use in public primary care: one made by a department of the Ministry of Health (used by about 90% of family doctors) and two made by private companies. All of them use ICPC (this is a requirement by the Ministry of Health for NHS primary care services) and allow coding for problems, reasons for encounter and processes and use an episode structure. However, none of the programs requires an ICPC coding to be made in each visit. With few exceptions (coding for diabetes, hypertension or pregnancy as problems when a specific screen within the software is used), all programs require user action for coding reasons for encounter and problems (although both programs made by private companies display code prompts when typing free text). All programs automatically code for certain processes (such as prescribing drugs, ordering exams, nurse referrals), but the accuracy of such coding is low (namely, choosing the right chapter). Anecdotal reports suggest that there may be age related differences in the usage of ICPC, with older doctors coding less than younger ones. Most doctors code only problems. Problems which are related to pay for performance schemes or performance evaluation measures are the most frequently classified. Coding for diseases outside these performance measures is far below expected prevalences. ICPC coding of at least one problem at each visit is a proposed performance measure for 2012.

All primary care to hospital referrals are made by a different computer program. This software requires ICPC coding of the reason for referral. ICPC code titles inside this program do not use the official Portuguese translation, some minor differences are present. Presumably these adaptations were made to help hospital specialists understand the classification better (this is arguable). Patient problems other than the reason for referral are inserted as free text.

Licensing for the usage of ICPC in electronic health records was agreed by each software manufacturer with the Portuguese Association of General Practitioners.

In 2010 the Ministry of Health concluded that better data on morbidity in primary care needed to be collected. This data will probably be used in the future to decide financing of primary care. To support this objective, the Ministry of Health cooperated with the Portuguese Association of General Practitioners in two tasks: updating the Portuguese translation and to choose priority problems which doctors should always code. The Portuguese translation was updated by the ICPC interest group of the Portuguese Association of General Practitioners using ICPC-2e version 3.0. The update included all the changes made since ICPC-2 (1999) and some minor corrections to the translation. This work was concluded in the first trimester of 2011 and a book was prepared by the Ministry of Health and July, however, it has not yet been published in paper or released online. Also, this update has not yet been introduced into electronic health record software. The Ministry of Health defined the following problems for priority coding: D84, D75, K74, K75, K76, K86, K87 (this code was expanded into K87.01 cardiac lesion, K87.02 vascular lesion, K87.03 renal lesion, K87.04 eye lesion, K87.05 brain lesion), K89, K90, L90, L95, R79, R95, R96, R97, X75, X76, P01, P15, P16, P17, P70, P74, P76 (this code was expanded into P76.001 depression, P76.002 postpartum depression, P76.010 reactive depression, P76.016 endogenous depression),<sup>1</sup> T82, T83, T89, T90, T93, and Y85. This initiative has resulted in an increase in coding for primary care visits.

The Portuguese translation is also available online at <http://icpc2.danielpinto.net/> since March 2007 (conflict of interests – I built the website). This website had an average 3,000 page views per month in 2007, which grew to 22,000 page views per month in 2010. In 2010, the average number of unique visitors was 1,400 per month. These numbers show a high number of ICPC users in Portugal. Almost 10% of page views (2,100 per month) originated from Brazil.

Currently training in the use of ICPC is provided as part of the family medicine residency program in the North, South and Azores regions (usually a few hours), but not in the Center or Madeira regions. Training of family doctors has been scarce as there are few (about six) people considered national experts on ICPC and there was no funding. Training sessions have taken place in some conferences organized by the Portuguese Association of General Practitioners, and occasionally experts provided training sessions for health centers or residents in their local area. Currently, the Ministry of Health is implementing a training program for a limited number of family doctors from throughout the country, who will then perform training sessions in their local practices.

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<sup>1</sup> This doesn't seem to comply with ICPC rules on expansion, since it doesn't follow ICD-10.

There is only one published study on the ability of clinicians to properly use ICPC (conflict of interests – I'm one of the authors).<sup>2</sup> A sample of 100 family medicine residents was asked to code three clinical vignettes. The participation rate was 47.0%. Only 56.5% of reasons for encounter, 75.9% of diagnoses, and 48.8% of processes were correctly classified. The review of the manuscript published in the Portuguese Journal of General Practice also showed differences in the interpretation of ICPC between Portuguese "experts" on ICPC (the authors and the reviewers).

### **Portuguese health care context**

Mainland Portugal has a national health service funded by the government. The Azores and Madeira archipelagos each have an autonomous system funded by local governments. Health professionals (including doctors) work for the government and are paid by salary (although since 2006 a mixed system consisting of a basic salary, a capitation and pay for performance has been introduced in primary care). In the NHS, primary care is organized into health centers, which are then divided into functional units (comprised of doctors, nurses and secretaries). Almost all units use electronic health records (exceptions are a few remote locations, which will also be converted to EHRs soon) and all EHRs (there are three options available) use ICPC. However, there are no real incentives for family doctors to code with ICPC, but a very large number do so for coding problems. There is no advantage for the clinician to code for process, since this does not interfere with his/her salary.

In parallel with the public NHS, there is private care, but most of it consists of specialist outpatient care. Private practice of primary care does take place, but is marginal. Doctors in private care are also moving to EHRs (especially since August 2011, when non computer made prescriptions stopped being reimbursed). Here there are many more EHR systems, only some of which allow coding or the use of ICPC.

Barcelona, October 6, 2011.

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<sup>2</sup> Pinto D, Corte-Real S. Codificação com a Classificação Internacional de Cuidados Primários (ICPC) por internos de Medicina Geral e Familiar. Rev Port Clin Geral 2010;26:370-82.  
<http://danielpinto.net/trabalhos/ICPC.pdf>