Internationalizing NPCR's Abstract Plus: NAACCR Standards Spread South

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Background

- Hospital cancer registry software in low-income Latin American countries needed

- Most software not available in languages other than English

- CDC and International Union Against Cancer **(**UICC) partnered to develop Abstract Plus in Spanish, adapting specifics of Latin American culture

- NAACCR record layout customized, including additional length needed for address information and SSN replaced with a longer field, PID

- Abstract Plus is a free abstracting tool developed by CDC for cancer registries, used to summarize the medical record into an electronic report of cancer diagnosis and treatment which complies with an elaborate body of standards for cancer registry data set by NAACCR

Objectives

- Use current software with additional language translations

- Promote NAACCR standard data items and codes with locale customizing

- CDC provide software upgrades and support; UICC provide user support

- Compatible with IARC's (International Agency for Research on Cancer) population-based software CanReg4, or others

Methods

- Translation and customizing of lookup codes
- Locale Setting in MS Windows for date format, character set and other language variables
- Multi-Language Add-In for Visual Basic[1]
  - Scans the source code and controls for all string text
  - Allows selection of needed strings for function replacement in any translated language
  - Uses resource file for string replacement which provides increased capacity and performance
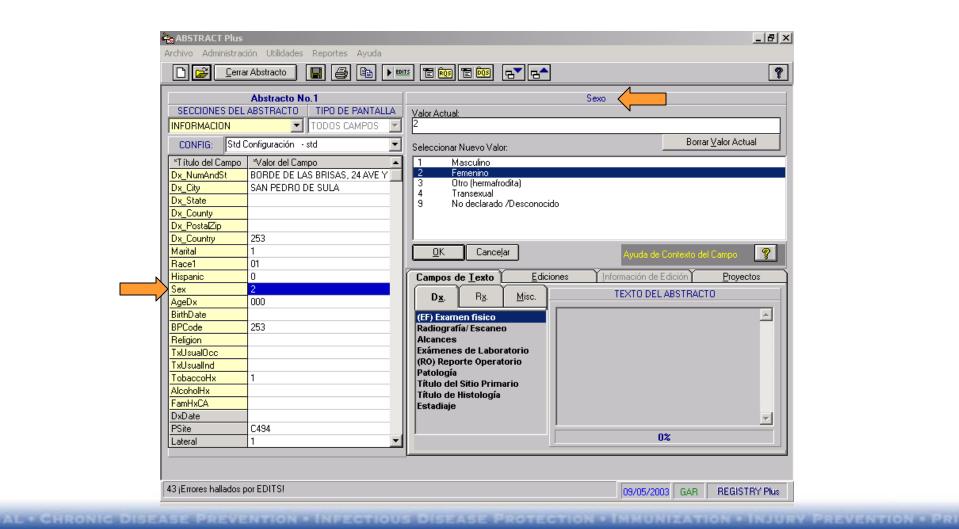
[1]©Copyright Phil Jollans, 2002; http://www.jollans.com

Methods (cont'd)

- World Resource String Editor Add-In for Visual Basic[1]
  - Alternative to the standard Visual Basic Resource Editor
  - Exports resource file into MS Excel for language translation
  - Allows import of translated files into a resource file
- Export added to allow selection of fields needed, to support use in CanReg4 or other software.
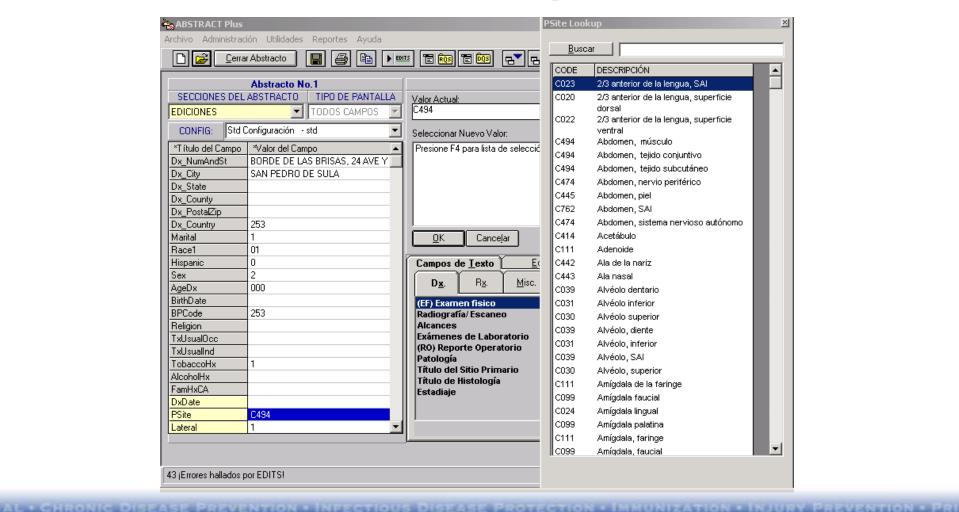
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Abstract Plus in Spanish:

Abstract Plus - translated lookup code:

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CHILD HEALTH • GLOBAL PARTNERSHIPS • MINORITY OUTREACH • MONITORING HEALTH • COMMUNITY PARTNERSHIPS
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HEALTH EDUCATION • EPIDEMIOLOGY • WORKPLACE HEALTH • IMMUNIZATION • WORKPLACE SAFETY • TRAINING • C
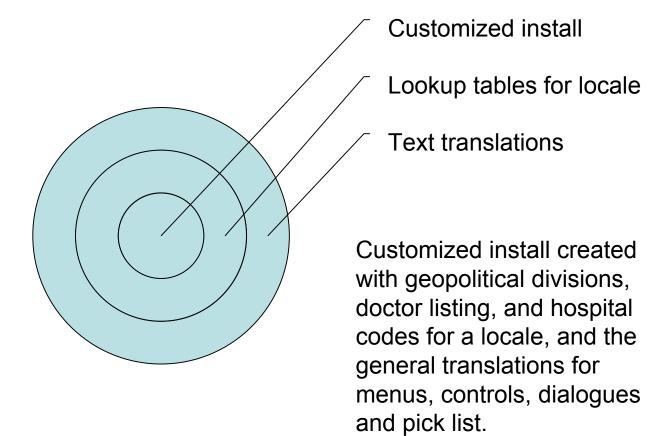TH • PREVENTION RESEARCH • PRIVATE SECTOR PARTNERSHIPS • PUBLIC HEALTH WORKFORCE • WOMEN'S HEALTH

Translations

- UICC contracted the language translations from a school in Miami and a Spanish speaking CTR
- Online help, not translated
- Online users guide targeted for translation
- Other online manuals translation available in print
- EDITS messages not translated

Abstract Plus install for a country

Customized install

Lookup tables for locale

Text translations

Customized install created with geopolitical divisions, doctor listing, and hospital codes for a locale, and the general translations for menus, controls, dialogues and pick list.

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Training and customized installs

- CDC has hosted net-conference training in Spanish by UICC for registrars throughout Latin America, including Argentina, Chile, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Paraguay, Peru, and Venezuela

- Customized software distributed so far to, Argentina, Ecuador, El Salvador, Guatemala, and Honduras

Results

- Software previewed at the GRELL (Group for Epidemiology and Cancer Registries in Countries of Latin Languages) conference in Havana, Cuba (2003) and introduced at the GRELL conference in Lisbon, Portugal (2005)

- Pilot-tested and customized for individual countries geopolitical divisions, etc.

- Net-conference training in Spanish provided for registrars throughout Latin America

- UICC website for user support in Spanish and software download access

Conclusion

- Abstract Plus in Spanish, will facilitate standardized collection of cancer data in Latin America, customized for their local needs

- With the text translations, this software can be easily converted to other languages using the resource string functions; Canadian French version started

- Allows exports for IARC CanReg4 or other software

- Offers the same software version and support that are available in English

- Promotes the use of NAACCR standards internationally

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Additional Information

For more information about Abstract Plus in Spanish, visit
http://www.uicc.org/index.php?id=1024

For more information about NPCR's Registry Plus —
Software Programs for Cancer Registries, visit
http://www.cdc.gov/cancer/registryplus/index.htm

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