CHRIS Study

Interview – Other diseases

Version 1.1 24th April 2024

Authors: LB, MG

1. Introduction

This module stores information related to other chronic diseases, permanent injuries, and surgeries of the participants, that was collected at the interview.

Participants book a morning appointment at the CHRIS study center, ranging from 7.45 to 8.45 a.m. Each study participant is assigned a workflow at the reception. If there are ten study participants (maximum capacity), there are ten different workflows, marked with the letters from "A" to "K". The current workflow is as follows: A-B-C-D-E-F-G-H-I-K. All the workflows can be found in the documentation of CHRIS Baseline/General information/Administrative data, in the file named "Workflows at baseline assessment". The interview occurs always after the spiralography and the blood drawing, for most as the last session, after the ECG assessment and the self-administered questionnaire (workflows B, C, E, F, H, I, L). For the remainder, the interview occurs after breakfast and just before the self-administered questionnaire (workflows A and G) or in between the blood drawing and the anthropometry (workflow D).

The questionnaire was developed by researchers of the IfB, with the aim of assessing any other permanent injury, chronic disease, and surgical intervention that was not explicitly mentioned anywhere else in the interview.

The interview full text and its corresponding answer lists are available at CHRIS Baseline/Interview.

2. History version changes

Version 1 of this interview module was in use between August 24th,2011 and November 2nd, 2012, whereas Version 2 of this module was in use since November 5th, 2012.

Version 1 to Version 2

variables added: x0ot15, x0ot15a, x0ot15c, x0ot16, x0ot16a, x0ot16c, x0ot17, x0ot17a, x0ot17c, x0ot18, x0ot18a, x0ot18c, x0ot19, x0ot19a, x0ot19c, x0ot20, x0ot20a, x0ot20c, x0ot21, x0ot21a, x0ot21c, x0ot22a, x0ot22a, x0ot22c, x0ot23, x0ot23a, x0ot23c, x0ot24a, x0ot24c

question rephrased: x0ot11 (de, it), x0ot12 (de, it), x0ot13 (de, it), x0ot14 (de, it)

The cleaning process did not add any additional variables.

3. Data cleaning

- 1. The main CHRIS dataset was loaded.
- 2. The variable on the presence of the first permanent injury, x0ot01, had it observations transformed into:
 - a) "Unexpected missing" (-89) if they were missing,
 - b) "Don't know" (-88) if the answer option "I do not know" was chosen.
- 3. The variables on the age at the first permanent injury occurrence and on the presence of a second permanent injury, x0ot01c and x0ot02, had their observations transformed into:

- a) "Missing by design" (-99) if they were missing and no first permanent injury was reported (x0ot01="No" or "Missing by design" or "Don't know"),
- b) "Unexpected missing" (-89) if they were still missing.
- 4. The variable on the presence of the second permanent injury, x0ot02, had it observations transformed into "Don't know" (-88) if the answer option "I do not know" was chosen.
- 5. The variables on the age at the second permanent injury occurrence and on the presence of a third permanent injury, x0ot02c and x0ot03, had their observations transformed into:
 - a) "Missing by design" (-99) if they were missing and no second permanent injury was reported (x0ot02="No" or "Missing by design" or "Don't know"),
 - b) "Unexpected missing" (-89) if they were still missing.
- 6. The same procedure described at points 4 and 5 was applied to the missing observations of the variables on the third and fourth permanent injury, x0ot03c, x0ot04, and x0ot04c.
- 7. If the second reported permanent injury was the same of the first reported permanent injury and occurred at the same age, the variable on the presence of the second permanent injury x0ot02 was set to "No", the age at the second permanent injury x0ot02c was set to "Missing by design", and the injury description x0ot02a replaced by empty text.
- 8. If the variable on the presence of the second permanent injury, x0ot02, was "Unexpected missing" but the second permanent injury description was available in x0ot02a, then x0ot02 was set into "Yes".
- 9. If the variable on the presence of the third permanent injury, x0ot03, was "Unexpected missing" but the third permanent injury description was available in x0ot03a, then x0ot03 was set into "Yes". Instead, if the variable on the presence of the third permanent injury, x0ot03, was "Unexpected missing" and the third permanent injury description x0ot03a was empty, then x0ot03 was set into "No".
- 10. The variables related to the fifth, sixth, seventh, eighth, ninth, tenth additional diseases were set to "Not in use" (-98) if they were missing and the questionnaire version x0otver was the first.
- 11. The variable on the presence of the first additional disease, not yet mentioned in the rest of the questionnaire, x0ot11, had it observations transformed into:
 - a) "Unexpected missing" (-89) if they were missing,
 - b) "Don't know" (-88) if the answer option "I do not know" was chosen.
- 12. The variables on the age at diagnosis of the first additional disease and on the presence of a second additional disease, x0ot11c and x0ot12, had their observations transformed into:
 - a) "Missing by design" (-99) if they were missing and no first additional disease was reported (x0ot11="No" or "Missing by design" or "Don't know"),
 - b) "Unexpected missing" (-89) if they were still missing.
- 13. If the second reported additional disease was the same of the first reported additional disease and occurred at the same age, the variable on the presence of the second additional disease x0ot12 was set to "No", the age at the second additional disease x0ot12c was set to "Missing by design", and the disease description x0ot12a replaced by empty text. The same was done for any pair of diseases reported twice in x0ot13, x0ot14, x0ot15, x0ot16, x0ot17, x0ot18, x0ot19, or x0ot20, with the same age at diagnosis.
- 14. The variable on the presence of the second additional disease, x0ot12, had it observations transformed into "Don't know" (-88) if the answer option "I do not know" was chosen.

- 15. The variables on the age at the second additional disease and on the presence of a third additional disease, x0ot12c and x0ot13, had their observations transformed into:
 - a) "Missing by design" (-99) if they were missing and no second additional disease was reported (x0ot12="No" or "Missing by design" or "Don't know"),
 - b) "Unexpected missing" (-89) if they were still missing.
- 16. The same procedure described at points 14 and 15 was applied to the missing observations of the variables on the remaining additional diseases, x0ot13c, x0ot14, x0ot14c, x0ot15, x0ot15c, x0ot16, x0ot16c, x0ot17, x0ot17c, x0ot18, x0ot18c, x0ot19, x0ot19c, x0ot20c.
- 17. If the variable on the presence of the second additional disease, x0ot12, was "Unexpected missing" but the second additional disease description was available in x0ot12a, then x0ot12 was set into "Yes". Instead, if the variable on the presence of the second additional disease, x0ot12, was "Unexpected missing" and the second additional disease description x0ot12a was empty, then x0ot12 was set into "No". If no disease was reported as first additional disease in x0ot11, but a second additional disease was reported in x0ot12a, all the variables of the second reported disease were copied into those related to the first disease, those of the third reported disease into the second, and so on.
- 18. If the variable on the presence of the third additional disease, x0ot13, was "Unexpected missing" but the third additional disease description was not available in x0ot13a, then x0ot13 was set into "No".
- 19. The variables related to the additional surgeries, x0ot21-x0ot24, were set to "Not in use" (-98) if they were missing and the questionnaire version x0otver was the first.
- 20. The variable on the first additional surgery, not yet mentioned in the rest of the questionnaire, x0ot21, had it observations transformed into:
 - a) "Unexpected missing" (-89) if they were missing,
 - b) "Don't know" (-88) if the answer option "I do not know" was chosen.
- 21. If any negative age at surgery was reported, their values was set to "Out of range" (-86).
- 22. The variables on the age at the first additional surgery and on the occurrence of a second additional surgery, x0ot21c and x0ot22, had their observations transformed into:
 - a) "Missing by design" (-99) if they were missing and no first additional surgery was reported (x0ot21="No" or "Missing by design" or "Don't know"),
 - b) "Unexpected missing" (-89) if they were still missing.
- 23. The same procedure described at points 20 and 22 was applied to the missing observations of the variables on the remaining additional surgeries, x0ot22, x0ot22c, x0ot23c, x0ot23c, x0ot24.
- 24. If the second reported additional surgery was the same of the first reported additional surgery and occurred at the same age, the variable on the presence of the second additional surgery x0ot22 was set to "No", the age at the second additional surgery x0ot22c was set to "Missing by design", and the surgery description x0ot22a replaced by empty text. The same was done for any pair of surgeries reported twice in x0ot23 or x0ot24 and occurred at the same age.
- 25. If the variable on the occurrence of the second additional surgery, x0ot22, was "Unexpected missing" but the second additional surgery description was available in x0ot22a, then x0ot22 was set into "Yes". Instead, if the variable on the occurrence of the second additional surgery, x0ot22, was "Unexpected missing" and the second additional surgery description x0ot22a was empty, then x0ot22 was set into "No" and the other additional second surgery related variables to "Missing by design". The same was done for the third and fourth additional surgery variables.

- 26. All the year variables, x0ot01b, x0ot02b, x0ot03b, x0ot04b, x0ot11b, x0ot12b, x0ot13b, x0ot14b, x0ot15b, x0ot16b, x0ot17b, x0ot18b, x0ot19b, x0ot20b, x0ot21b, x0ot22b, x0ot23b, x0ot24b, were dropped in favor of the age variables, x0ot01c, x0ot02c, x0ot03c, x0ot04c, x0ot11c, x0ot12c, x0ot13c, x0ot14c, x0ot15c, x0ot16c, x0ot17c, x0ot18c, x0ot19c, x0ot20c, x0ot21c, x0ot22c, x0ot23c, x0ot24c.
- 27. All the description variables of the permanent injuries, additional diseases, and additional surgeries have been translated and categorized when possible. Any identifiable information or circumstance of the injury/diagnosis was not reported in the available version.
- 28. The variables storing the notes on additional information on permanent injuries, additional diseases, and additional surgeries, x0otn1, x0otn2, x0otn3, and x0otnote, were translated and categorized when possible.
- 29. The baseline dataset was saved.

4. Advices for the analysis

The content of the nurse's notes includes information on further permanent injuries, other diseases, or additional surgeries, that did not fit in the available questions or needed a longer explanation.

The current medications can be looked at in the drugs module x0dd, where the participant let their current medication packages be scanned by the nurse at the study center.

All these variables of this module depend on the participant recalling such injuries or diseases, considering them valuable of mention, and being willing to share this information. Nonetheless, this module can be used to complement any other module of the interview, since the participant might have recalled only later of specific diseases that were previously explicitly mentioned. Indeed, for instance, kidney diseases, thyroid diseases, and heart defects are also reported in this module. Furthermore, cancer surgeries are reported among the surgical procedures.

Finally, the analyst should always take into account that the operator in charge of carrying out the interview might have influenced how the participant reported their answers. The analyst should therefore adjust for the operator variable, x0 opintc, when possible.