CHRIS Study

Interview – Chronic diseases

Version 1.1

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1. Introduction

This module stores information related to chronic diseases, that were collected at the interview, such as liver disease, ulcer, inflammatory bowel disease, and sight problems.

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 interview full text and its corresponding answer lists are available at CHRIS Baseline/Interview. This module is based on the FRAGEN ZUR GESUNDHEIT module of the follow-up F4 questionnaire of the KORA Study (*Kooperative Gesundheitsforschung in der Region Augsburg*).

2. History version changes

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

Between the different versions, the following changes have occurred:

Version 1 to Version 2:

variables dropped: x0cd01c, x0cd01d, x0cd02, x0cd02b, x0cd02c, x0cd02d, x0cd03, x0cd03b, x0cd03c, x0cd03d, x0cd04, x0cd04b, x0cd04c, x0cd04d, x0cd05, x0cd05b, x0cd05c, x0cd05d, x0cd06c, x0cd06d, x0cd07, x0cd07b, x0cd07c, x0cd07d, x0cd08, x0cd08b, x0cd08c, x0cd08d, x0cd09, x0cd09b, x0cd09c, x0cd09d, x0cd10c, x0cd10d, x0cd11, x0cd11b, x0cd11c, x0cd11d, x0cd12, x0cd12b, x0cd12c, x0cd12d, x0cd13, x0cd13b, x0cd13c, x0cd13d, x0cd14c

variables added: x0cd01e, x0cd01f

question order changed: x0cd14d before x0cd14b

questions rephrased: x0cd01 (it), x0cd06 (de, it), x0cd10 (de, it), x0cd14 (de)

other: Vasculitis part (x0cd14, x0cd14a, x0cd14b) was moved from the kidney diseases module (link to kidney module)

3. Data cleaning

1. The main CHRIS dataset was loaded.

2. The variables storing the notes on additional chronic diseases, x0cdn1, x0cdn2, x0cdn3, and x0cdnote were translated and categorized when possible.
3. For those dichotomous variables in common between the two versions, x0cd01, x0cd06, and x0cd10, their observations were transformed into:
    a) "Unexpected missing" (-89) if they were missing,
    b) "Don't know" (-88) if the third answer option "I do not know" was chosen.
4. The variables on age at diagnosis, occurrence in the last 12 months, and treatment of a liver disease, x0cd01b, x0cd01c, x0cd01d, had their missing observations transformed into:
    a) "Missing by design" (-99) if the participant did not report suffering from a liver disease in x0cd01, i.e. when the latter was "Missing by design", "Don't know" or "No",
    b) "Not in use" (-98) if the version was the second (only for x0cd01c and x0cd01d),
    c) "Unexpected missing" (-89) otherwise.
5. The variable on the name of the participant's liver disease, x0cd01e, had its missing observations transformed into:
    a) "Missing by design" (-99) if the participant did not report suffering from a liver disease in x0cd01, i.e. when the latter was "Missing by design", "Don't know" or "No",
    b) "Not in use" (-98) if the version was the first,
    c) "Unexpected missing" (-89) otherwise.
    d) If some additional text was provided in x0cd01f it was corrected from "Unexpected missing" to "Other".

    The variable on the additional liver diseases, x0cd01f, was translated and categorized when possible. When multiple diseases were reported, they were written separated by a comma. There are multiple cases where the hepatitis type was not clear. Furthermore, if the text in x0cd01f reported cirrhosis and x0cd01e was missing, the latter was corrected into "Cirrhosis".

6. The variables on age at diagnosis, occurrence in the last 12 months, and treatment of gout, x0cd06b, x0cd06c, x0cd06d, had their missing observations transformed into:
    a) "Missing by design" (-99) if the participant did not report suffering from gout in x0cd06, i.e. when the latter was "Missing by design", "Don't know" or "No",
    b) "Not in use" (-98) if the version was the second (only for x0cd01c and x0cd01d),
    c) "Unexpected missing" (-89) otherwise.
7. The variables on age at diagnosis, occurrence in the last 12 months, and treatment of osteoporosis, x0cd10b, x0cd10c, x0cd10d, had their missing observations transformed into:
    a) "Missing by design" (-99) if the participant did not report suffering from osteoporosis in x0cd10, i.e. when the latter was "Missing by design", "Don't know" or "No",
    b) "Not in use" (-98) if the version was the second (only for x0cd01c and x0cd01d),
    c) "Unexpected missing" (-89) otherwise.
8. All the variables specific to the first version on other liver dis, x0cd02, x0cd03, x0cd04, x0cd05, x0cd07, x0cd08, x0cd09, x0cd11, x0cd12, and x0cd13, had their missing observations transformed into:
    a) "Not in use" (-98) if the version was the second,
    b) "Unexpected missing" (-89) otherwise.
9. The subquestions of x0cd02, x0cd03, x0cd04, x0cd05, x0cd07, x0cd08, x0cd09, x0cd11, x0cd12, and x0cd13, had their missing observations transformed into:

a) "Missing by design" if the main variable inquiring the disease presence was "No", "Don't know" or "Missing by design",
c) "Not in use" if the version was the second,
b) "Unexpected missing" (-89) otherwise.

10. All variables on the year at diagnosis were dropped in favor of the age at diagnosis variables.
11. The variable on vasculitis, x0cd14, on the first version of the kidney module (x0kiver) and then in the chronic diseases module, had its missing observations transformed into:
    a) "Missing by design" if at the first version of the kidney module and the general kidney diseases question was "No", "Missing by design" or "Don't know",
    b) "Unexpected missing" otherwise.
12. The variables on age at diagnosis of vasculitis and its treatment, x0cd14b and x0cd14c, had their missing observations transformed into:
    a) "Not in use" if x0kiver was the second (only for x0cd14c),
    b) "Missing by design" if the participant reported no vasculitis in x0cd14 or did not know to have it,
    c) "Unexpected missing" otherwise.
13. The variable on specific vasculitis types, x0cd14d, was translated and categorized.
14. The baseline dataset was saved.

4. Advices for the analysis

The content of the nurse's notes, referring to liver diseases, gout, osteoporosis, and vasculitis can include reporting of diseases not explicitly mentioned as chronic diseases in the questions of this module.

Some diseases such as gastritis, duodenal ulcer, inflammatory bowel disease, gall bladder inflammation, inflammatory joint disease, and backbone degeneration, were assessed only in the first version of the questionnaire and then reported in the module on "other diseases", x0ot* (CHRIS Baseline/Interview/Other diseases).

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.

5. References

Löwel H, Döring A, Schneider A, Heier M, Thorand B, Meisinger C. The MONICA Augsburg surveys - basis for prospective cohort studies. Gesundheitswesen. 2005;67(Sonderheft 1):S13–S18. DOI: 10.1055/s-2005-858234

Holle R, Happich M, Löwel H, Wichmann H-E. KORA-A Research Platform for Population Based Health Research. Gesundheitswesen. 2005;67(Sonderheft 1):S19–S25. DOI: 10.1055/s-2005-858235