



GRIIS

QUESTO – An Ontology of Questionnaires

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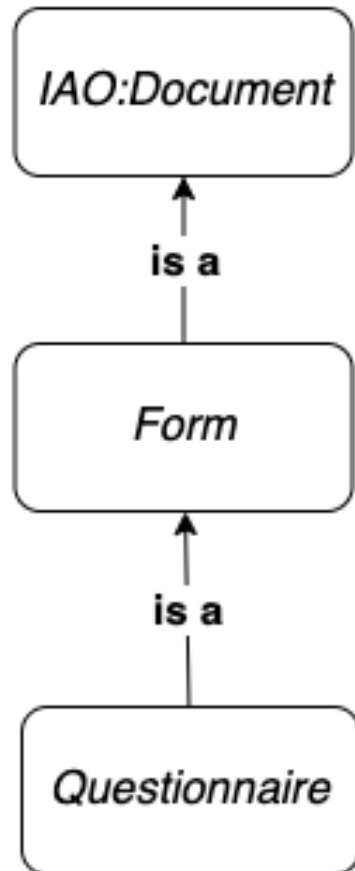
Plan

- Motivations
- Description of QUESTO
- Discussion & Conclusion

Motivation

- Context of a Learning Health System in Quebec (PARS3)
- Clinical questionnaires are an important source of data
- Questionnaire structure, not what it's about

Questionnaire: definition



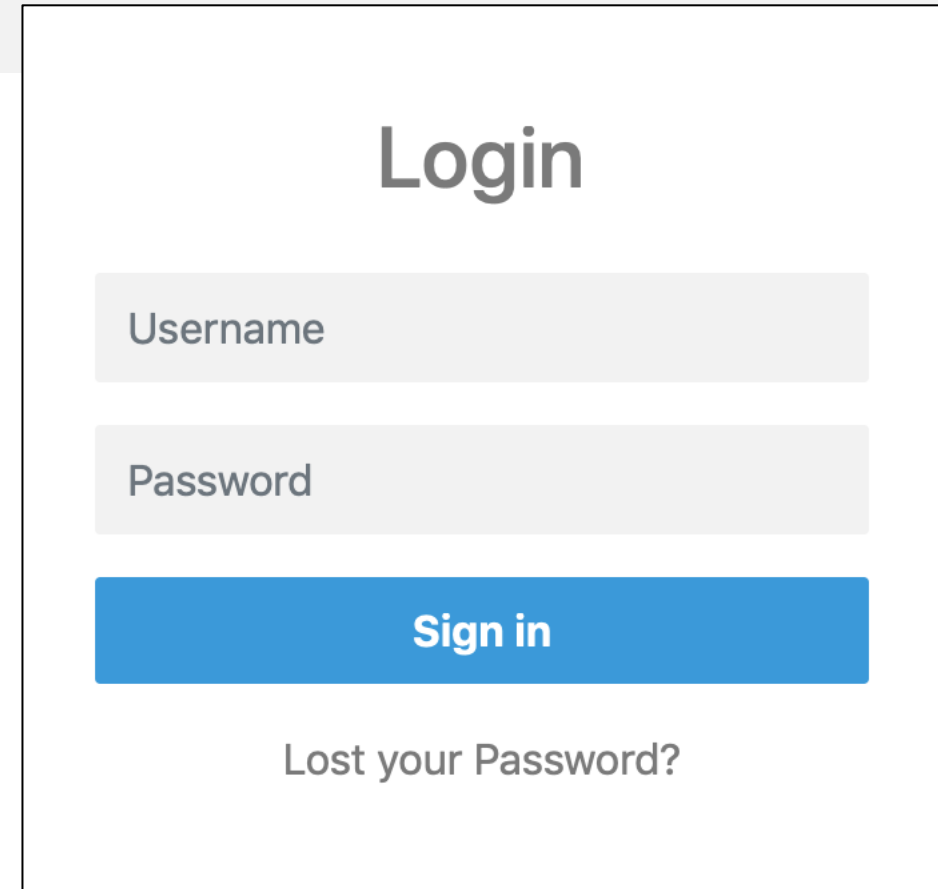
Login

Lost your Password?

Questionnaire: definition

Form =_{def.} “A document that contains a set of questions. It may also contain allowed answers to some of those questions, and specifications about how to record and store the answers.”

Questionnaire =_{def.} “A form that is intended to be answered by a human respondent.”



The image shows a login form with the following elements:

- Login** (Title)
-
-
- Sign in** (Button)
- [Lost your Password?](#) (Link)

Questionnaire: components

Q. 1: Do you have a family physician?

Yes

Does not know

No

Does not answer

Instructions

- Reporting
 - Check the appropriate box.
- Storing
 - Enter the following values:

Yes.....01

No.....02

Does not know.....08

Does not answer.....09

Questionnaire: components

Questioning and reporting and storing specification =_{def.} “A directive information entity that provides specifications about how to:

- 1) ask a question to a respondent;
- 2) report this answer;
- 3) store this answer.”

Q. 1: Do you have a family physician?

Yes

Does not know

No

Does not answer

Instructions

- Reporting
 - Check the appropriate box.
- Storing
 - Enter the following values:

Yes.....01

No.....02

Does not know.....08

Does not answer.....09

Questionnaire: components

Extended question representation=_{def.} “A directive information entity that specifies a question to be asked to a respondent with possible answers and/or answer format constraints.”

Answering-reporting-storing (ARS) item group specification=_{def.} “A directive information entity that specifies some constraints pertaining to an answer item and possibly its associated answer reporting and storing item specification.”

Q. 1: Do you have a family physician?

Yes Does not know

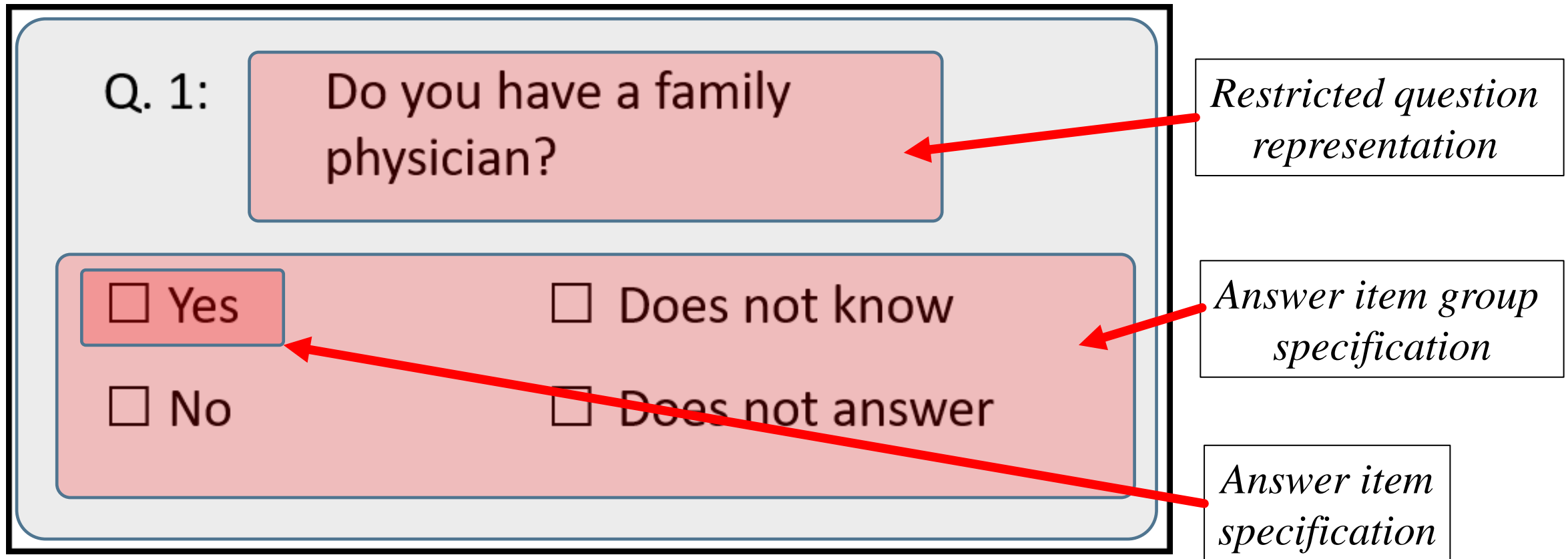
No Does not answer

Instructions

- Reporting
 - Check the appropriate box.
- Storing
 - Enter the following values:

Yes.....	.01
No.....	.02
Does not know.....	.08
Does not answer.....	.09

Questionnaire: *extended question representation*



Questionnaire: ARS item group specification

Instructions

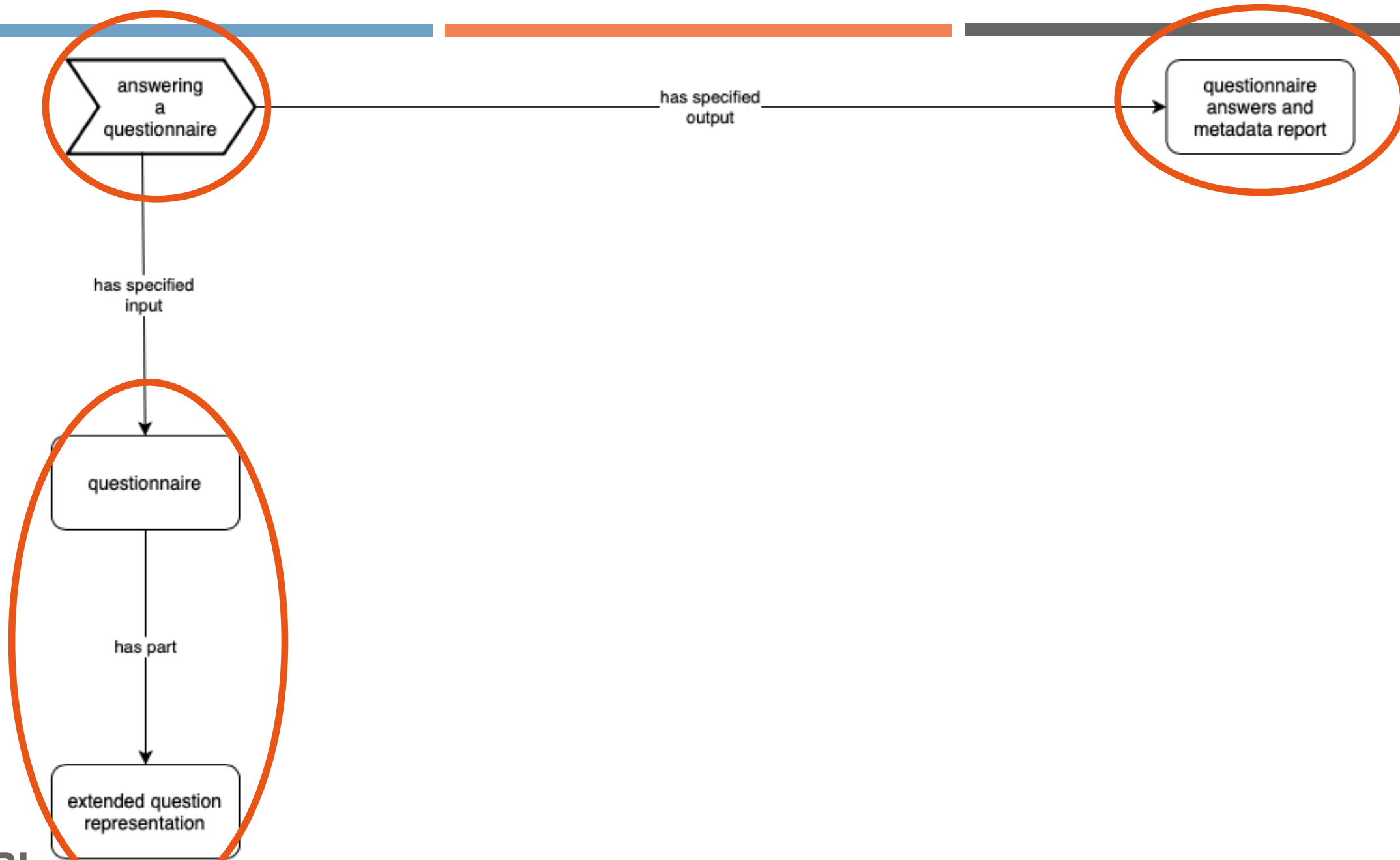
- Reporting
 - Check the appropriate box.
- Storing
 - Enter the following values:

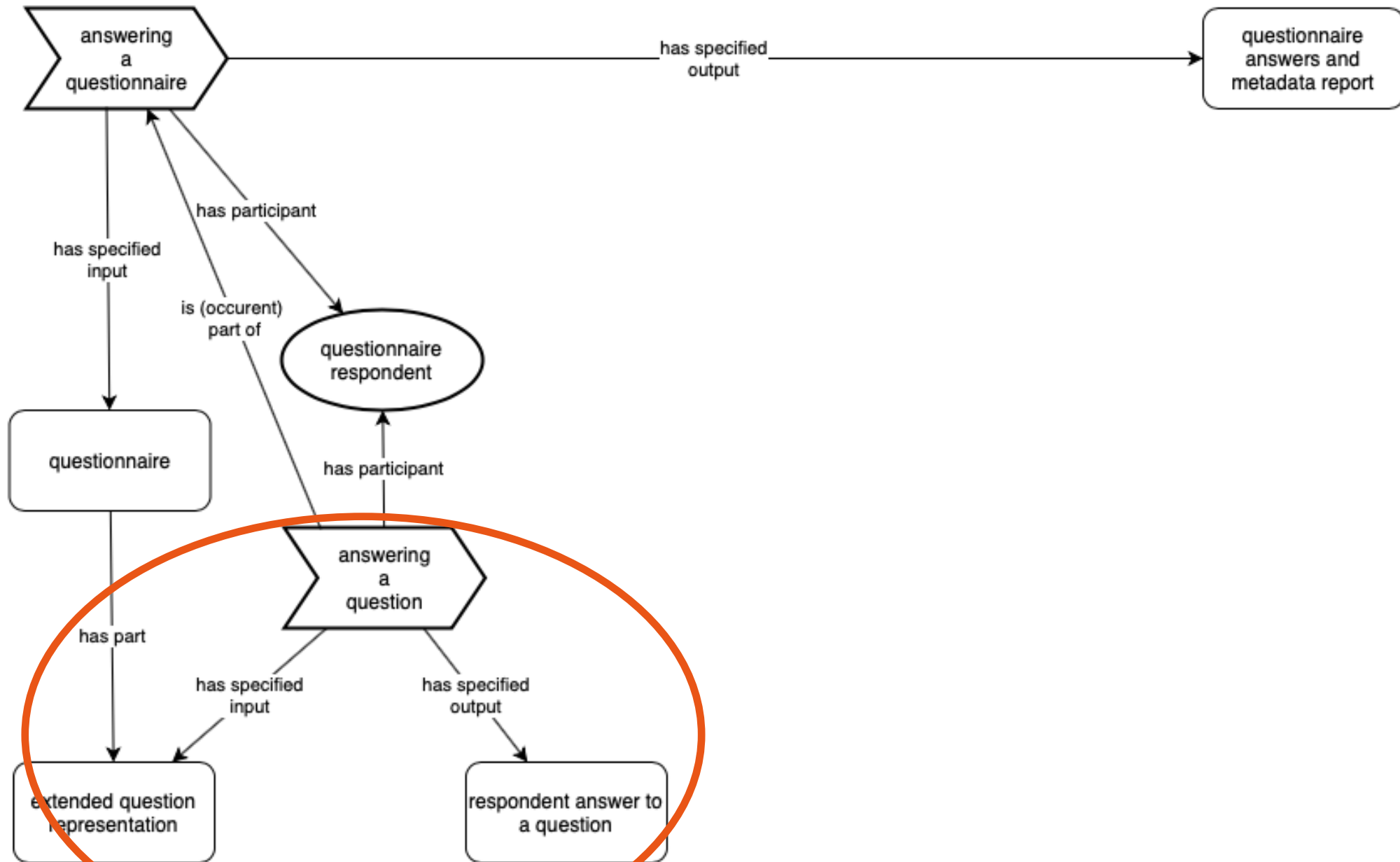
Yes.....	01
No.....	02
Does not know.....	08
Does not answer.....	09

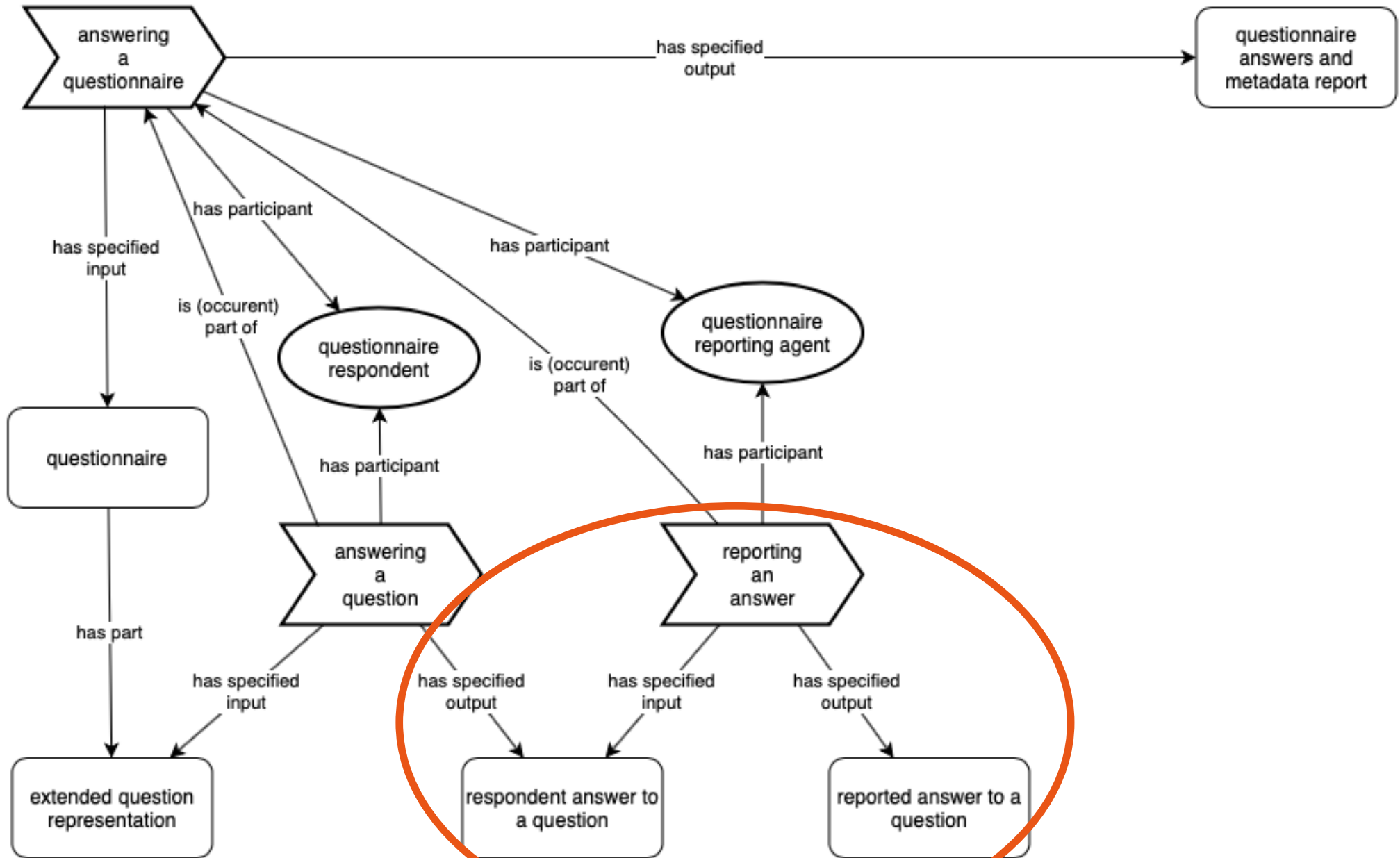
Answer reporting item specification

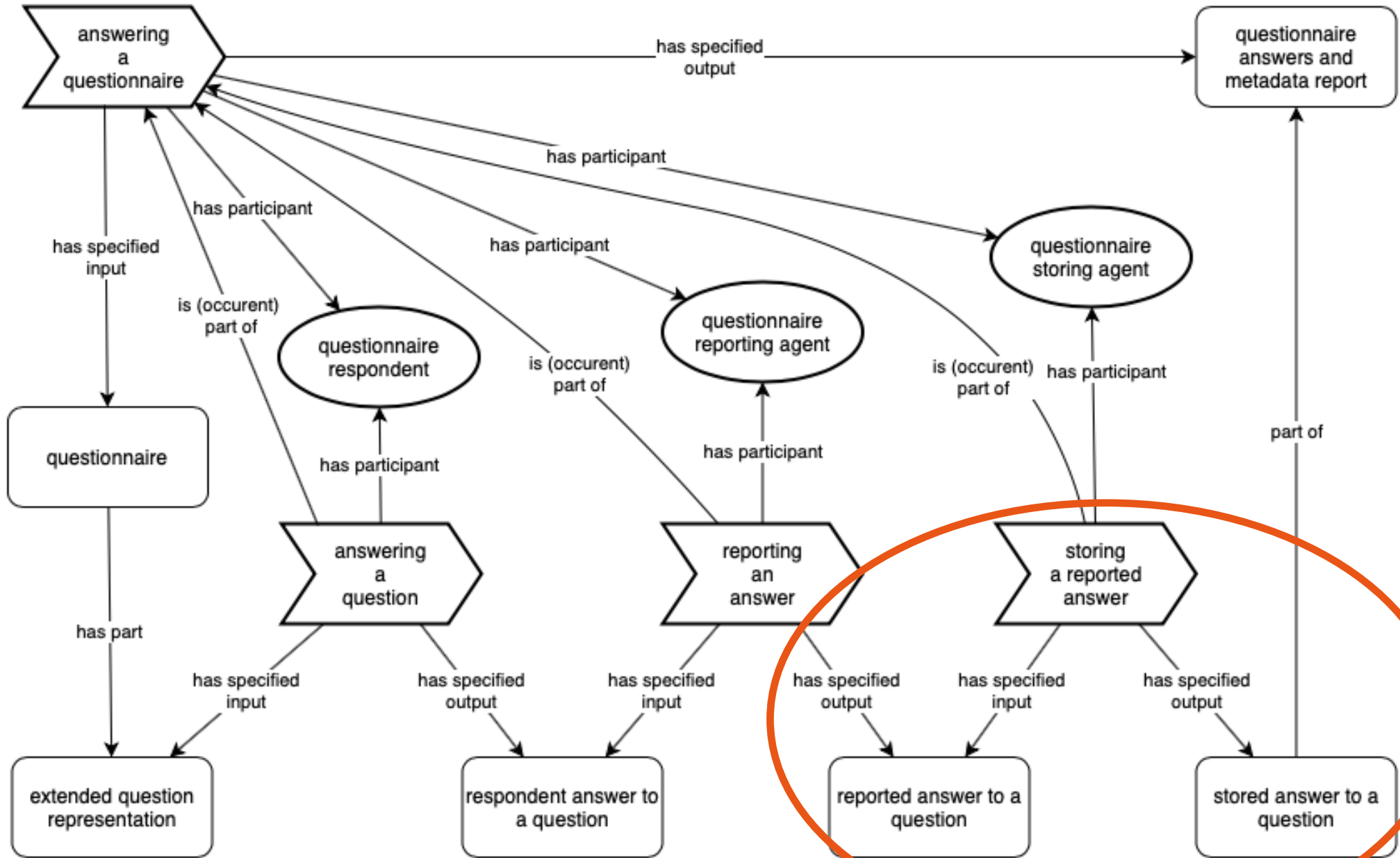
Answer storing item specification

Answer storing item group specification









Discussion and conclusion

- QUESTO can represent the constituent elements and the processes related to a questionnaire
- Clinical context but could be applied to all kind of questionnaire
- Future works on aboutness in order to link QUESTO classes to non-informational entities



Thank you

