CONFLICT OF INTEREST STATEMENT
Margaret Blacketer, Erica Voss, and Patrick Ryan are full time employees of Janssen Research and Development, a unit of Johnson and Johnson. The work on this study was part of their employment. They also held pension rights from the company and own stock and stock options.

BACKGROUND
The Observational Medical Outcomes Partnership (OMOP) Common Data Model (CDM) has been shown to be effective and standardize observational health databases but has not been as commonly applied to survey and registry databases as it has for electronic health records and administrative claims.

We chose to focus on the 2005-2006 Mental Health Screener because each participant aged 18 years and older was an eligible respondent, allowing for a robust set of questions (question DPQ020 will be highlighted throughout as an example of how both a question and response are translated into the CDM).

We designed an ETL process for survey questionnaires in columnar format (each question is a field, each response is a record) into the entity, attribute, value (EAV) structure of the OBSERVATION table within CDM (each record has two fields, one for question, one for response); we applied this ETL process to all questionnaires to assess if the process was suitable to accommodate all types of questions posed in the survey.

We determined the questions and responses from the source and used Usagi to evaluate with a defined threshold of 0.6 and then examined what percent of questions were included to map to a standard vascularized table. Table 1 shows how the Mental Health Depression Screener question was successfully mapped to Logical Observability Identifiers Names and Codes (LOINC) concepts.

METHODS
We will evaluate the feasibility of survey extract, transform, load (ETL) through examination of our ETL for the NHANES database, which is a national open source database comprised largely of data in the form of question/response pairs.

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Table 1: NHANES Mental Health Depression Screener Question Mapped to LOINC Concepts using Usagi

<table>
<thead>
<tr>
<th>Source Code</th>
<th>Source Description*</th>
<th>Target Concept (Id)</th>
<th>Concept Name</th>
<th>Value AS Concept</th>
<th>Value as String</th>
<th>OBSERVATION_SOURCE_VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPQ010</td>
<td>Feeling tired or interest in doing things?</td>
<td>4960924</td>
<td></td>
<td>4960924</td>
<td>Feeling tired or interest in doing things?</td>
<td>1049204</td>
</tr>
<tr>
<td>DPQ020</td>
<td>Feeling down, depressed or hopeless?</td>
<td>40757792</td>
<td></td>
<td>40757792</td>
<td>Feeling down, depressed or hopeless?</td>
<td>0.5</td>
</tr>
</tbody>
</table>

REFERENCES