## Supplementary Data for Ceusters, Hsu, Smith, ICBO 2014

**Table 1**: 16 sample lines from the data dictionary portion of the template for data expansion of the variables ('Var') 'id', 'sex' and 'q3' used in the original dataset.

| L  | Var | DT | REF                       | Min   | Max   | Val |
|----|-----|----|---------------------------|-------|-------|-----|
| 1  |     | IM | patient_study_record      |       |       |     |
| 2  | Id  | LV | patient_identifier        |       |       |     |
| 3  | Id  | IM | Patient                   |       |       |     |
| 4  | Sex | CV | Gender                    |       |       |     |
| 5  | Sex | CV | Male                      |       |       | 0   |
| 6  | sex | CV | Female                    |       |       | 1   |
| 7  | sex | UA | Sex                       | BLANK | BLANK |     |
| 8  | q3  | CV | no_pain_in_ lower_face    |       |       | 0   |
| 9  | q3  | CV | pain_in_ lower_face       |       |       | 1   |
| 10 | q3  | IM | in_the_past_month         |       |       |     |
| 11 | q3  | IM | lower_face                |       |       |     |
| 12 | q3  | IM | time_of_q3_concretization |       |       |     |
| 13 | q3  | RP | an_8_gcps_1               | 0     | 0     | 0   |
| 14 | q3  | UP | an_8_gcps_1               | 1     | 10    | 0   |
| 15 | q3  | UA | an_8_gcps_1               | BLANK | BLANK | 1   |
| 16 | q3  | JA | an_8_gcps_1               | BLANK | BLANK | 0   |

**Legend**: 'L' = template Line Number, 'Var' = Variable, 'DT' = Data Type (with possible values being 'LV' = Literal Value, 'CV' = Coded Value, 'UA' = Unjustified Absence, 'IM' = IMplicit reference, 'RP' = Redundant Presence (RP), 'UA' = Unjustified Absence, 'JA' = Justified Absence), 'REF' = Reference, 'Min' = lowest possible value for variable, 'Max' = highest possible value for variable, 'Val' = possible value for variable.

**Table 2**: Ontology portion of the template for data expansion for the 16 sample lines of Table 1.

| L  | IUI(L)  | IUI(P)  | P-Type                  | P-Rel             | P-Targ | Trel | Time  |
|----|---------|---------|-------------------------|-------------------|--------|------|-------|
| 1  |         | #psrec- | DATASET-RECORD          |                   |        | At   | T     |
| 2  | #pidL-  | #pid-   | DENOTATOR               | Denotes           | #pat-  | At   | T     |
| 3  | #patL-  | #pat-   | PATIENT                 |                   |        | At   | T     |
| 4  | #patgL- | #patg-  | GENDER                  | inheres-in        | #pat-  | At   | T     |
| 5  |         | #patg-  | MALE-GENDER             | inheres-in        | #pat-  | At   | T     |
| 6  |         | #patg-  | FEMALE-GENDER           | inheres-in        | #pat-  | At   | t     |
| 7  |         | #patgL- | UNDERSPECIFIED-ICE      |                   |        | At   | t     |
| 8  | #q3L0-  | #pat-   |                         | lacks-participant | PAIN   | At   | #tq3- |
| 9  | #q3L1-  | #pq3-   | PAIN                    | Participant       | #pat-  | At   | #tq3- |
| 10 |         | #tq3-   | MONTH-PERIOD            |                   |        |      |       |
| 11 |         | #patlf- | LOWER-FACE              | part-of           | #pat-  | At   | t     |
| 12 |         | #cq3-   | TIME-PERIOD             | After             | #tq3-  |      |       |
| 13 | #q3L-   | #q3L-   |                         | corresponds-with  | #q3L0- | At   | t     |
| 14 | #q3L-   | #q3L-   | DISINFORMATION          |                   |        | At   | t     |
| 15 | #q3L-   | #q3L-   | UNDERSPECIFIED-ICE      |                   |        | At   | t     |
| 16 | #q3L-   | #q3L-   | JUSTIFIED-BLANK-<br>ICE |                   |        | At   | t     |

**Legend:** 'L' = Line Number, 'IUI(L)' = prefix for the IUI proxy for the information content entity of the data item concretized in the dataset denoting the entity about which one or two RTT-templates are formulated by means of the last six elements of the line, IUI(P) = prefix for the IUI proxy for the entity about which one or two RTT-templates are formulated by means of the last six elements of the line, P-Type = ontological type of the entities denoted by instantiated IUI(P)s, P-Rel = relation between the entity denoted by an instantiated IUI(P) and the entity denoted by an instantiated P-Targ, 'Trel' = temporal relation, 'Time' = temporal period during which P-rel holds. Only entries relevant to the discussion in this paper are shown.