

Query Presented at HAR Report Writers' Group, 12/1/2017

For questions, email Deborah Scott, Quality Manager at EOE.
Saved in HAR community folder: example_get_last_CDS.rdl

This query retrieves the last assessment in a date range, (which is specified through parameters). The query also returns answers to 5 dementia-related questions in the last assessment. (The CTE is shown in blue and the main query is shown in green. Boldfacing is used to highlight different clauses and aspects of the query.)

```
WITH CDS AS (  
SELECT  
HAR_ASSESSMENTS.CONSUMER_UUID  
,HAR_ASSESSMENTS.SESSION_UUID  
,HAR_ASSESSMENTS.SESSION_DATE  
,HAR_ASSESSMENTS.UPDATE_DATETIME  
,HAR_RESPONSES.QUESTION_ID  
,HAR_RESPONSES.RESPONSE_DATA  
,HAR_ASSESSMENTS.AGENCY  
,HAR_ASSESSMENTS.ASSESSFORM_NAME  
,DENSE_RANK() OVER(PARTITION BY HAR_ASSESSMENTS.CONSUMER_UUID  
ORDER BY HAR_ASSESSMENTS.SESSION_DATE DESC, HAR_ASSESSMENTS.UPDATE_DATETIME  
DESC,  
HAR_ASSESSMENTS.SESSION_UUID DESC) AS RANK  
FROM HAR_ASSESSMENTS INNER JOIN HAR_RESPONSES  
ON HAR_ASSESSMENTS.SESSION_UUID = HAR_RESPONSES.SESSION_UUID  
WHERE  
HAR_ASSESSMENTS.ASSESSFORM_NAME LIKE N'%cde%'  
AND HAR_ASSESSMENTS.ASSESSFORM_NAME NOT LIKE N'%Unofficial%'  
AND HAR_ASSESSMENTS.ASSESSFORM_NAME NOT LIKE N'%NF%'  
AND HAR_RESPONSES.QUESTION_ID IN (N'1146', N'5342', N'7641', N'1209', N'1210')  
AND HAR_ASSESSMENTS.SESSION_DATE >= @SESSION_DATE_GT_EQT  
AND HAR_ASSESSMENTS.SESSION_DATE <= @SESSION_DATE_LT_EQT  
GROUP BY  
HAR_ASSESSMENTS.CONSUMER_UUID  
,HAR_ASSESSMENTS.SESSION_UUID  
,HAR_ASSESSMENTS.SESSION_DATE  
,HAR_ASSESSMENTS.UPDATE_DATETIME
```

Comment [E1]: The code, starting with "WITH CDS AS (" is a common table expression (CTE). I named the CTE "CDS." This CTE enables the query to get the CDS data. (Another CTE could be added to include enrollment data.)

Comment [E2]: These lines rank the assessments by the consumer. If a consumer has two or more assessments with the same SESSION_DATE, the following formula then ranks by UPDATE_DATETIME. In instances when two or more assessments have the same SESSION_DATE, as well as the same UPDATE_DATETIME, the formula arbitrarily ranks by the SESSION_UUID, so that a consumer does not have two assessments with the same rank.

Comment [E3]: GT = greater than; LT = less than; EQT = equals to

```
,HAR_RESPONSES.QUESTION_ID
,HAR_RESPONSES.RESPONSE_DATA
,HAR_ASSESSMENTS.AGENCY
,HAR_ASSESSMENTS.ASSESSFORM_NAME
)
```

SELECT

```
HAR_CONSUMERS.CONSUMER_AGENCY_DES
--,HAR_CONSUMERS.PRIMARY_CARE_MANAGER
,HAR_CONSUMERS.CLIENT_ID
--,CDS.AGENCY
,CDS.SESSION_DATE
,CDS.UPDATE_DATETIME
,CDS.RANK
,MAX(CASE CDS.QUESTION_ID WHEN 1146 THEN CDS.RESPONSE_DATA ELSE 0 END)
AS SHORT_TERM_MEMORY
,MAX(CASE CDS.QUESTION_ID WHEN 5342 THEN CDS.RESPONSE_DATA ELSE 0 END)
AS PROCEDURAL_MEMORY
,MAX(CASE CDS.QUESTION_ID WHEN 7641 THEN CDS.RESPONSE_DATA ELSE 0 END)
AS MINI_COG
,MAX(CASE CDS.QUESTION_ID WHEN 1209 THEN CDS.RESPONSE_DATA ELSE 0 END)
AS ALZHEIMERS
,MAX(CASE CDS.QUESTION_ID WHEN 1210 THEN CDS.RESPONSE_DATA ELSE 0 END)
AS DEMENTIA
,CDS.ASSESSFORM_NAME
```

FROM

```
HAR_CONSUMERS INNER JOIN CDS
ON HAR_CONSUMERS.CONSUMER_UUID = CDS.CONSUMER_UUID
```

--WHERE

```
--CDS.RANK = 1
```

GROUP BY

```
HAR_CONSUMERS.CONSUMER_AGENCY_DES
--,HAR_CONSUMERS.PRIMARY_CARE_MANAGER
,HAR_CONSUMERS.CLIENT_ID
--,CDS.AGENCY
,CDS.SESSION_DATE
,CDS.UPDATE_DATETIME
,CDS.ASSESSFORM_NAME
,CDS.RANK
```

Comment [E4]: This begins the main query, or outer query, where the CTE is joined with the CONSUMERS table.

Comment [E5]: This is commented out so that the output shows how the ranking formula works. The output shows the various CDS assessments that a consumer may have in a particular date range. A "1" in the RANK column is the most recent assessment in a date range, a "2" is the next most recent assessment, and so forth.

ORDER BY

HAR_CONSUMERS.CONSUMER_AGENCY_DES
,HAR_CONSUMERS.CLIENT_ID
,CDS.RANK