DEX16: Adherence/compliance - what is adherence rate for given drug?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Define adherence as sum of days supply divided by length of treatment period.  **Input:**   |  |  |  |  | | --- | --- | --- | --- | | **Parameter** | **Example** | **Mandatory** | **Notes** | | drug\_concept\_id | 996416 | Yes | Finasteride |   **Sample query run:** The following is a sample run of the query. The input parameters are highlighted in **blue**  SELECT concept\_name,  count(\*) AS number\_of\_eras ,  avg( treatment\_length ) AS average\_treatment\_length\_count ,  avg(adherence) avgerage\_adherence\_count  FROM  ( SELECT person\_id, concept\_name, drug\_era\_start\_date , sum( days\_supply ), treatment\_length ,  sum( days\_supply ) / treatment\_length AS adherence , min( has\_null\_days\_supply ) AS null\_day\_supply  FROM /\* drug era and individual drug encounters making up the era \*/  ( SELECT person\_id, ingredient\_concept\_id , drug\_era\_start\_date, drug\_era\_end\_date ,  drug\_era\_end\_date - drug\_era\_start\_date AS treatment\_length , drug\_exposure\_start\_date , days\_supply ,  DECODE( NVL( days\_supply, 0 ), 0, 0, 1 ) has\_null\_days\_supply  FROM /\*drug era of people taking finasteride \*/  ( SELECT person\_id, drug\_concept\_id as ingredient\_concept\_id , drug\_era\_start\_date, drug\_era\_end\_date  FROM drug\_era  --WHERE drug\_concept\_id = **996416** /\* Finasteride \*/  )  JOIN /\* drug exposures making up the era \*/  ( SELECT person\_id, days\_supply, drug\_exposure\_start\_date  FROM drug\_exposure  JOIN concept\_ancestor ON descendant\_concept\_id = drug\_concept\_id  JOIN concept ON concept\_id = ancestor\_concept\_id  WHERE LOWER(concept\_class\_id) = 'ingredient'  AND sysdate BETWEEN valid\_start\_date AND valid\_end\_date  AND ancestor\_concept\_id = 996416  /\*Finasteride\*/ ) USING( person\_id )  WHERE drug\_exposure\_start\_date BETWEEN drug\_era\_start\_date AND drug\_era\_end\_date )  JOIN concept ON concept\_id = ingredient\_concept\_id  GROUP BY person\_id, concept\_name, drug\_era\_start\_date, treatment\_length )  WHERE treatment\_length > 100 and null\_day\_supply > 0  GROUP BY concept\_name;  **Output:** Output field list:   |  |  | | --- | --- | | **Field** | **Description** | | concept\_name | An unambiguous, meaningful and descriptive name for the concept. | | drug\_concept\_id | A foreign key that refers to a standard concept identifier in the vocabulary for the drug concept. | | concept\_class | The category or class of the concept along both the hierarchical tree as well as different domains within a vocabulary. Examples are “Clinical Drug”, “Ingredient”, “Clinical Finding” etc. | | treatment\_length |  | | person\_id | A foreign key to the concept code in the concept table for the higher-level concept that forms the ancestor in the relationship. | | drug\_era\_start\_date | The start date for the drug era constructed from the individual instances of drug exposures. It is the start date of the very first chronologically recorded instance of utilization of a drug. | | drug\_exposure\_start\_date | The start date for the current instance of drug utilization. Valid entries include a start date of a prescription, the date a prescription was filled, or the date on which a drug administration procedure was recorded. | | days\_supply | The number of days of supply of the medication as recorded in the original prescription or dispensing record. | | drug\_era\_end\_date | The end date for the drug era constructed from the individual instance of drug exposures. It is the end date of the final continuously recorded instance of utilization of a drug. | | ingredient\_concept\_id |  | | ancestor\_concept\_id | A foreign key to the concept code in the concept table for the higher-level concept that forms the ancestor in the relationship. |   Sample output record:   |  |  | | --- | --- | | **Field** | **Description** | | concept\_name |  | | drug\_concept\_id |  | | concept\_class |  | | treatment\_length |  | | person\_id |  | | drug\_era\_start\_date |  | | drug\_exposure\_start\_date |  | | days\_supply |  | | drug\_era\_end\_date |  | | ingredient\_concept\_id |  | | ancestor\_concept\_id |  | |