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Title: step2\_readmit\_labels

Description: Compute whether is a 30 d, 90 d readmit and whether is followed by a readmit at 30 d, 90 d.

Version Control: https://dsghe.lacare.org/nblume/Readmissions/tree/master/Code/Data\_Acquisition\_and\_Understanding/Cloudera%20DSW/Iteration2/

Data Source: nathalie.prjrea\_step1\_inpatient\_cases

Output: NATHALIE.PRJREA\_STEP2\_READMIT\_LABELS

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IS A 30 d, 90 d READMIT? For each case, is it preceded by an admission within 30 days or not? Label 'I' if no, and 'R' if yes.

Create a copy of the input table called tmp. Join input table to copy with offset 1. Save values for latest admit per row, plus save small set of data concerning earliest admit if exists.

To solve row shearing from join, add a dummy row to tmp with rownumber is 0, dis\_dt/adm\_dt 100 years in past, and other vals null.

\*/

drop table if exists nathalie.tmp

;

create table nathalie.tmp as

select \* from nathalie.prjrea\_step1\_inpatient\_cases

;

insert into NATHALIE.tmp (adm\_dt, dis\_dt, rownumber)

values('1900-01-01', '1900-01-01', 0)

;

drop table if exists NATHALIE.njb\_labeled\_as\_readmits

;

create table NATHALIE.tmp\_base

as

SELECT

\*

, case

when days\_since\_prior\_discharge <= 30 then 1

else 0

end as is\_a\_30d\_readmit

, case

when days\_since\_prior\_discharge <= 90 then 1

else 0

end as is\_a\_90d\_readmit

FROM

(-- A is earlier than B; 1st row for A is nulls/ancient dates

SELECT

B.\*

, CASE

WHEN A.cin\_no = B.cin\_no AND DATEDIFF(B.adm\_dt, A.dis\_dt) >= 0 THEN DATEDIFF(B.adm\_dt, A.dis\_dt)

ELSE NULL

END AS days\_since\_prior\_discharge

, case

when A.cin\_no = B.cin\_no AND DATEDIFF(B.adm\_dt, A.dis\_dt) >= 0 then A.case\_id

else null

end as prior\_stay\_case\_id

FROM NATHALIE.tmp AS A LEFT JOIN nathalie.prjrea\_step1\_inpatient\_cases AS B ON A.rownumber = B.rownumber - 1

) AS S

;

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PRECEDES A READMIT BY 30 d, 90 d? For each case, is it followed by a readmission within 30 days or not

\*/

drop table if exists NATHALIE.tmp2;

create table NATHALIE.tmp2 as

select \* from NATHALIE.tmp\_base;

insert into NATHALIE.tmp2 (adm\_dt, dis\_dt, rownumber)

values('1900-01-01', '1900-01-01', 0);

--main computation

drop table if exists NATHALIE.PRJREA\_STEP2\_READMIT\_LABELS

;

create table NATHALIE.PRJREA\_STEP2\_READMIT\_LABELS as

SELECT

\*

, case

when days\_until\_next\_discharge <= 30 then 1

else 0

end as is\_followed\_by\_a\_30d\_readmit

, case

when days\_until\_next\_discharge <= 90 then 1

else 0

end as is\_followed\_by\_a\_90d\_readmit

FROM

(-- A is earlier than B

SELECT

A.\*

, CASE

WHEN A.cin\_no = B.cin\_no AND DATEDIFF(B.adm\_dt, A.dis\_dt) >= 0 THEN DATEDIFF(B.adm\_dt, A.dis\_dt)

ELSE NULL

END AS days\_until\_next\_discharge

, case

when A.cin\_no = B.cin\_no then B.case\_id

else null

end as subsequent\_stay\_case\_id

FROM NATHALIE.tmp2 AS A LEFT JOIN NATHALIE.tmp\_base AS B ON A.rownumber = B.rownumber - 1

) AS S

;

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Clean up

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drop table if exists tmp;

drop table if exists tmp2;

drop table if exists tmp\_base;