**Epi5143 Winter 2020 Quiz 5**

Due by Tuesday March 24th, 2019 by 11:59pm. Submit quiz via Github (link will be provided by email)

From the class data:

Determine the proportion of admissions which recorded a diagnosis of diabetes for admissions between January 1st 2003 and December 31st, 2004. Generate a frequency table of frequency of diabetes diagnoses, with the denominator being the total number of admissions between January 1st 2003 and December 31st, 2004 .

This exercise requires sorting, flat-filing, and linking (merging) tables.

Hints:

* From the NhrAbstracts dataset, you will have to create a new dataset which contains only unique admissions (hraEncWID) with admit dates (hraAdmDtm) between January 1st, 2003 and December 31st, 2004: this is your spine dataset.
* From the NhrDiagnosis table you will need to determine if one or more diagnosis codes (hdgcd) for diabetes (ICD9 starting with ‘250’ or ICD10 starting with ‘E11’ or ‘E10’) was present for each encounter in the diagnosis table and create an indicator variable called DM (=0 for no diabetes codes, =1 for one or more diabetes codes).
* You will need to flatten your diabetes diagnoses dataset with respect to encounter ID (hdgHraEncWID).
* You will need to link the spine dataset you generated from NhrAbstracts and the flattened diabetes diagnoses dataset you generated based on the NhrDiagnosis table using the encounter id’s from each database (renaming as required).
* Your final dataset should have the same # of observations (and include all encounter IDs) found in your the spine dataset and have an indicator variable, DM which is 1 if any diabetes code was present, and 0 otherwise.

libname classdat "C:/Documents/EPI5143 Winter 2020/class\_data"; /\*write protecting original dataset\*/

libname ex "C:/Documents/EPI5143 Winter 2020/Epi5143 Work Folder/data";/\*Save modified datasets in separate class directory\*/

**proc** **sort** data=classdat.NhrAbstracts out=abstracts nodupkey;

by hraEncWID;

**run**;

**Data** period; /\*Create spine dataset\*/

set abstracts;

by hraEncWID;

if hraAdmDtm=**.** then delete;

year=year(datepart(hraAdmDtm));

If year > **2004** then delete;

if year < **2003** then delete;

**run**;

**proc** **sort** data = classdat.NhrDiagnosis out=diagnosis;

by hdgHraEncWID;

**run**;

**data** diabetes; /\*create a dataset with a flag for diabetes\*/

set diagnosis;

diabetes=**0**;

if hdgcd in:('250' 'E10' 'E11' ) then

diabetes=**1**; /\*diabetes flag\*/

**run**;

**Proc** **means** data=diabetes noprint;

class hdgHraEncWID;

types hdgHraEncWID;

var diabetes;

Output out=diabetes\_flat max(diabetes)=diabetes n(diabetes)=count;

**run**;

**proc** **sort** data=diabetes\_flat out=one\_diabetes(rename=hdgHraEncWID=hraEncWID);

by hdgHraEncWID;

**run**;

**data** final;

merge period (in=a) one\_diabetes;

by hraEncWID;

If a;

if count=**.** then count=**0**;

if diabetes=**0** then count=**0**;

DM=**0**;

if count>=**1** then DM =**1**;

**run**;

**proc** **freq** data=final;

tables count DM;

**run**;





