Exercise 7: Advanced Data Management – part 1

Exercise 7 and Exercise 8 cover the materials in Chapter 8 of the module notes.

Launch Stata, open a new do-file and save as *Stata_Exercise7.do*. Add appropriate comments at the beginning of the do-file. Add commands to change the current working directory to the Exercise 7&8. Remember to keep saving the do-file as you go along.

7.1 Loops and Strings

Open *fup_meds.dta*.

- Change the contents of each of *fup_med1-10* to lower case.
- Create a binary variable called *bb* that takes the value 1 if the patient is on a beta blocker and 0 otherwise i.e. 1 if beta blocker is found in any of the *fumed* fields.
- Similarly create a binary variable called *ace* to indicate whether patients is on an Ace inhibitor (*ace*).
- How many patients were on beta-blockers and ace-inhibitors.
- Save as *fup_meds1.dta*.

Open *bl_meds.dta*.

- The following are a list of lipid lowering drugs [caduet, crestor, juvisync, lescol, lipitor, livalo, mevacor, pravachol, simcor, vytorin, zocor, statin, niacin, ezetimibe]. The list is found in the do-file *lipid_drugs.do*.
- Create a binary variable called *liplow* that takes the value 1 if the patient is on any of these drugs and 0 otherwise. To do this create a local macro containing the names of the lipid lowering drugs and then use two foreach loops to loop through each drug name and each variable in turn.
- Save as *bl_meds1.dta*.

7.2 Elapsed Dates

Open *bl_combined2.dta*.

- List *birthdt, indx_day, indx_mon, indx_year, cons_dt* and *randdt* in the first 5 rows. Make sure you understand the format of each variable.
- Translate each of these into an elapsed date and apply a date format
- Check the conversion has worked. Then drop the original date variables.
- Generate a new variable *age_rand* which is equal to the patient's age in years at the date they were randomized. Check this against the variable *age*. Are there any discrepancies?
- Look at the variable *hfhospdt*. In what format has this date been recorded? What issues are there with the dates? How might you translate this variable into an elapsed date?
- Save as *bl_combined3.dta*.