

```
/*Exercise 1-Read NAMCS data & create a SAS dataset called namcspat */
```

```
filename nam06 'c:\acsb_data\namcs06'; /*data file*/
```

```
filename nam06inp 'c:\acsb_data\nam06inp.txt'; /*must have*/
```

```
filename nam06for 'c:\acsb_data\nam06for.txt'; /*variable labels*/
```

```
filename nam06lab 'c:\acsb_data\nam06lab.txt'; /*create var labels &  
assign formats*/
```

```
%inc nam06for;
```

```
data namcsvis;
```

```
infile nam06 missover lrecl=999;
```

```
%inc nam06inp;
```

```
%inc nam06lab;
```

```
patwt2=patwt/1000;
```

```
keep specr ager patwt vr vrpwt patwt2 physwt cstratm cpsum pastvis;
```

```
run;
```

```
proc freq data=namcsvis;
```

```
tables specr;
```

```
weight patwt2;
```

```
title 'Weighted 2006 NAMCS Visits: Physician specialty distribution';
```

```
run;
```

```
/*Exercise 2-Create NAMCS physician file and estimate number of  
physicians*/
```

```
data namcsphys;
```

```
set namcsvis;
```

```
if physwt>0;
```

```
proc freq data=namcsphys;
```

```
tables specr;
```

```
weight physwt;
```

```
title 'Weighted 2006 NAMCS physicians: Physician specialty  
distribution';
```

```
run;
```

```
/*Exercise 3-Compute standard error for physician estimates using  
SURVEYFREQ*/
```

```
proc surveyfreq data=namcsphys;
```

```
tables specr;
```

```
strata cstratm;
```

```
cluster cpsum;
```

```
weight physwt;
```

```
title 'SURVEYFREQ standard error estimates of 2006 NAMCS physicians by  
physician specialty';
```

```
run;
```

```
/*Exercise 4-Read 2006 ED PUF & create a SAS dataset called edwait1 */
```

```
filename ed06 'c:\acsb_data\ed2006'; /*data file*/
```

```

filename ed06inp 'c:\acsb_data\ed06inp.txt'; /*must have*/
filename ed06for 'c:\acsb_data\ed06for.txt'; /*variable labels*/
filename ed06lab 'c:\acsb_data\ed06lab.txt'; /*create var labels &
assign formats*/

%inc ed06for;

data edwait1;
infile ed06 missover lrecl=999;
%inc ed06inp;
%inc ed06lab;
if waittime = 9999 then waittime = . ;
/*Recodes missing values on continuous variable to . */
run;

proc summary data=edwait1 nway;
class hospcode; id edwt msa cstratm cpsum;
var waittime;

OUTPUT OUT=edwait2 MEAN=avgwaittime;
/*Sends output to new SAS dataset and
renames waittime to reflect conversion to average*/

PROC PRINT DATA=edwait2 (obs=10); RUN;

/*Exercise 5-Compute average wait time across EDs*/
PROC UNIVARIATE DATA=edwait2 plot;
CLASS msa;
VAR avgwaittime; WEIGHT edwt;
TITLE 'Distribution of average ED wait times by MSA status';
run;

/*Exercise 6-2006 NAMCS public use data
Create a patient weight and recode number of past visits*/

data namcspat;
set namcsvis;

if pastvis=8 then vr=1;
else if pastvis=1 then vr=1;
else if pastvis=2 then vr=.4;
else if pastvis=3 then vr=.2;
else if pastvis=4 then vr=.125;
pastvsdist=pastvis;
if pastvis=8 then pastvsdist=1;

patwt2=patwt/1000;
vrpatwt=patwt2*vr;
keep pastvis ager patwt vr vrpatwt patwt2 pastvsdist;
run;
proc format;
value ager
1='Under 15 years'
2='15-24 years'
3='25-44 years'
4='45-64 years'

```

```
5='65-74 years'
```

```
6='75+ years';
```

```
run;
```

```
proc freq data=namcspat;
```

```
where pastvsdist=4;
```

```
tables ager;
```

```
weight patwt2;
```

```
format ager ager.;
```

```
title 'Number of Visits: Age distribution among patients with 7+ visits  
during past 12 months';
```

```
run;
```

```
/*Exercise 7-visit vs. patient estimates*/
```

```
proc freq data=namcspat;
```

```
where pastvsdist=4;
```

```
tables ager;
```

```
weight vrpwt;
```

```
format ager ager.;
```

```
title 'Number of Patients: Age distribution among patients with 7+  
visits during past 12 months';
```

```
run;
```