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Who We Are

The Vancouver SAS Users Group (VanSUG) is an informal group of SAS users in the Vancouver area who meet and share their knowledge. There are no fees – we simply meet every spring and fall to have presentations, networking, and fun! Check us out at vansug.ca.

Newsletter Inputs

This newsletter is for and by the local Vancouver SAS community. If you'd like to contribute to a future newsletter, please email us at vansug@gmail.com!

Executive Team

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Vice President:

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Executive Update

Over the last few years, the Vancouver SAS User Group has come a long way. This is due in part to the increased involvement of you, the SAS users. As always, we continue to encourage you to get involved by contributing in any way, whether it be giving us your feedback via the evaluation forms, providing a small article for the newsletter, or presenting at a meeting.

TIPS & TRICKS: Transposing data with and without ID statement in PROC TRANSPOSE

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PROC TRANSPOSE is a commonly used procedure for transposing data. Although optional, when there is a missing record and if the order is important when transposing row data to columns using PROC TRANSPOSE, then the use of ID statement is imperative. Below is a test data which has blood pressure records for 4 visits for two patients. Note that the blood pressure record for patient 101 is missing at the 2nd visit.

	Patientid	Visitnum	Bloodpressure
1	101	1	90
2	101	3	98
3	101	4	100
4	102	1	102
5	102	2	99
6	102	3	110
7	102	4	120

Below is what the transposed data would look like without an ID statement. Note that the 4th visit record is missing for patient 101 in the transposed data.

	Patientid	NAME OF FORMER VARIABLE	Visit 1	Visit2	Visit3	Visit4
1	101	Bloodpressure	90	98	100	
2	102	Bloodpressure	102	99	110	120

On the other hand, below is the result with an ID statement.

```
proc transpose data=test out=test2 prefix=Visit;
  by Patientid;
  id Visitnum;
  var Bloodpressure;
run;
```

	Patientid	NAME OF FORMER VARIABLE	Visit 1	Visit2	Visit3	Visit4
1	101	Bloodpressure	90		98	100
2	102	Bloodpressure	102	99	110	120

However, in cases where both patients have missing blood pressure at the 2nd visit, having an ID statement might not be sufficient if you want to include the 2nd visit in the transposed data. In that case, the DATA step with array statements is a better choice in the sense that it allows for more precise control of the transposition process.

TIPS & TRICKS: Using ODS Trace to obtain output

Jason Chen: jason.jchen@hotmail.com

When abstracting from SAS output, we could copy and paste the results, but there are occasions when we need to customize the output data report. For example, if we want to create a forest plot of odds ratios from logistic regression, then the odds ratios and 95% confidence intervals are needed. ODS TRACE ON could be used with PROC LOGISTIC so that the name of the output result tables could be identified.

```
ods trace on;
proc logistic data=testdata;
  class ais neurologicallevel / param=ref;
  model surgery=ais neurologicallevel / lackfit rsquare;
run;
ods trace off;
```

We would obtain the information of odds ratios in the Log window as follows:

Output Added:

```
-----
Name: OddsRatios
Label: Odds Ratios
Template: Stat.Logistic.OddsRatios
Path: Logistic.OddsRatios
-----
```

After getting the odds ratio table name, we can rerun the model to save the data in a dataset called 'OR'.

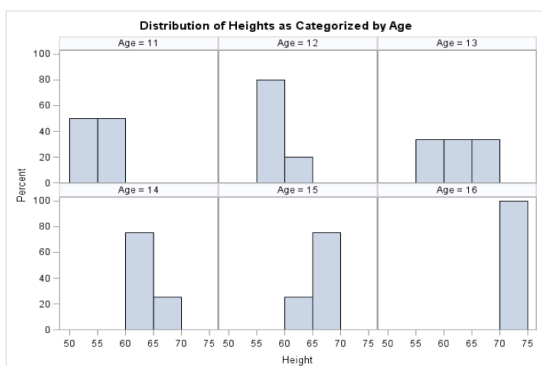
```
ods output OddsRatios=OR;
proc logistic data=testdata;
  class ais neurologicallevel / param=ref;
  model surgery(event='Yes')=ais neurologicallevel / lackfit rsquare;
run;
ods output close;
```

TIPS & TRICKS: PROC SGPANEL example

Eric Cai: Eric.Cai@bccancer.bc.ca

Have you ever wanted to produce a series of plots that are categorized by a character variable? Do you want to display them side by side or in a panel so that they can be easily compared on the same scale? You can accomplish both of these goals using PROC SGPANEL. Here is an example using the built-in data set SASHELP.CLASS. I will plot the distribution of the height as categorized by the 6 ages in a 2-by-3 panel layout.

```
proc sgpanel
  data = sashelp.class;
  panelby age / rows = 2 columns = 3;
  histogram weight;
run;
```



TIPS & TRICKS: Three useful SYSTEM options

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MERGENOBY=ERROR:

Specifies that an error message is issued when a merge occurs without a BY statement. This is a safeguard against random merges when you forget to write a BY statement.

COMPRESS=YES:

Compresses your SAS datasets, saves disk space, cuts down on disk read/write, significantly speeding up how fast your programs will execute with large data sets. For some small tables it will actually increase the size of the dataset, but the gain in time/speed on big tables outweighs by far the loss on those small tables.

NOREPLACE:

Specifies that a permanently stored SAS data set cannot be replaced with another SAS data set of the same name, which prevents the accidental replacement of existing SAS data sets.

Our next user group meeting will be in **May 2016**. Check out the VanSUG website at vansug.ca later for more information!

The archived presentations and newsletters, as well as a link to scheduled SAS training courses held in Vancouver, can all be found on the VanSUG website at vansug.ca!

The **SAS Global Forum 2016** will be held in Las Vegas, NV on April 18-21, 2016. Information can be found at sasglobalforum.com.

The **Western Users of SAS Software (WUSS) Conference 2016** will be held in San Francisco, California on September 7-9, 2016. Information can be found at wuss.org.