

Introduction:

This document ties together the four component files that make up the GRASP example demonstrating a SAS-based macro that automatically calculates and tabulates the bivariate associations between continuous or categorical covariates and a dichotomous outcome. This example provides de-identified and sanitized data consisting of outcomes and 6 covariates from 50 pseudo subjects and serves for demonstrational purposes only.

Keyword Categories:

Clinical: delirium, ICU, admission characteristics, Confusion Assessment Method (CAM)
Statistical: logistic regression, bivariate
Software: SAS 9.1

Clinical Reference Article:

Pisani MA, Murphy TE, Van Ness PH, Araujo KLB, Inouye SK. Admission characteristics associated with delirium in older patients in a medical intensive care unit. *Archives of Internal Medicine*. 2007; 167(15); 1629-1634.

Component Files:

a.	PDF file explaining entire example:	MacroBivSummaryMurphy.pdf (this file)
b.	Sample input data structure:	MacroBivDataSanMurphy.txt
c.	SAS program:	MacroBivProgramMurphy.txt
d.	Output from SAS program:	MacroBivOutputMurphy.pdf

Optimal Use:

1. Read this Summary file completely	Component a listed above
2. Set up an input SAS dataset with the demonstrated structure	Component b listed above
3. Run the SAS program in concert with structured data.	Components c listed above
4. Check the output to make sure the procedure was executed correctly	Component d listed above

Prerequisites:

One only needs the ability to run SAS programs, any recent version will be sufficient.

Potential Applications:

The contents here may be useful when analysts are looking at a number of explanatory variables with potential associations with a given outcome. In this case the outcome is dichotomous and therefore the macro employs proc logistic and proc genmod. It can easily be modified for different types of models.

Feedback:

Any feedback on how to make this example more useful is welcome.

Log into the main GRASP page, i.e.

<http://grasp.med.yale.edu>

and choose the "forum" link in the upper menu on the right to enter feedback on any GRASP submission.

Please refer to the specific file names when commenting so we can appropriately steer your suggestions.