// First make sure you have the latest version of gllamm
net install http://www.gllamm.org/gllamm, replace

// Next load my version of the Framingham data
use "C:\Documents and Settings\carroll.ADSTAT\Desktop\framingham_2008.dta", clear

// Describe the data
describe

// Summarize the data
summarize

// I wish to model firstchd as a function of age, smoke and cholest2
logistic firstchd age smoke cholest2

// I now wish to introduce a error-laden covariate, lsbp2,
// The is the transformation used by Carroll, et al in their book.
// We could naively use the average measurement

logistic firstchd age smoke cholest2 lsbp2

// Using -gllamm- directly to fit a measurement error model involves
// having to double-up the data so that you can pass this model to
// -gllamm- as a mixed-response model, half the data for the measurement
// model, half for the logit.
// A better alternative is to use the -cme- wrapper program for -gllamm-, which does all the data preparation, calls -gllamm-, and then pretties up the results

net install http://www.stata-journal.com/software/sj3-4/st0052, replace

// Now we just call -cme- using the transformed SBP as replicates

cme firstchd age smoke cholest2 (sbp2true: LSBP2 LSBP3), fam(binom) eform

// If you are interested in the gory details, simply add option -commands- to -cme- to see what was done behind the scenes

commands cme firstchd age smoke cholest2 (sbp2true: LSBP2 LSBP3), fam(binom) eform commands