# Supplementary Material 18: Multiple Imputation with Chained Equation (MICE) in lay terms

MICE creates a multitude (in my model there are 10 copies) of imputed (or doppelganger) copies of the dataset, with the missing values replaced using a prediction rule. This prediction rule is usually a regression or multivariable model (or models), which imputes (or impute) missing values from non-missing values in other variables.
An estimation procedure is then performed on each doppelganger dataset, producing estimation results for each one. Pooled estimates are then made by averaging the doppelganger estimates, with standard errors estimated (using Rubin’s rule) from the between–doppelganger variance of the parameter estimates and the mean of the doppelganger parameter covariance estimates.