November 2007 US National Health and Wellness Surveys on at least one ARV component drug participated in this study. For the multivariate analysis, responders needed to be on an ARV regimen that contained at least two nucleoside reverse transcriptase inhibitors and at least one protease inhibitor or non-nucleoside reverse transcriptase inhibitor. Respondents were classified as adherent if they either never missed or skipped an antiretroviral dose or did so less than once per week, and complete adherence if they never missed or skipped a dose, otherwise they were considered non-adherent. Resource use was defined by ER visits and hospitalizations. Chi-square tests were used for comparisons of percents and t-tests for comparisons of means. Logistic regression models were run controlling for possible confounders, with complete adherence the dependent variable of interest. RESULTS: A total of 798 women were included (71.6% male, 26.4% female; average age = 43 years). The mean duration of HIV/AIDS diagnosis was 10.3 years; median number of ARV pills taken daily was 4.0, and median number of non-ARV medications was 2.0. Significantly higher percent hospitalizations (37% vs. 13%; p < 0.001) and ER visits (47% vs. 23%; p < 0.0001) respectively were reported by the non-adherent group. The result indicates non-adherence was associated with increased hospitalizations and ER visits.

CONCLUSIONS: Increased pill burden resulted in lower adherence to antiretroviral therapy and may lead to a negative impact on health care resource use.