

Acute Care Hospitalization and Emergency Department Use without Hospitalization
Measures: Risk Model Worksheet Description

The attached worksheet presents the coefficients, p-values, and marginal effects associated with each risk factor in the final calibrated model for the claims-based *Acute Care Hospitalization and Emergency Department Use without Hospitalization* measures, using home health stays (from Medicare claims data) beginning in the period between January 1, 2013 and December 31, 2013. The same multinomial logit model is used to predict both measures, and incorporates five categories of risk factors, including:

1. Prior care setting
2. Demographic (i.e., age and sex interactions)
3. Health status (i.e., based on hierarchical condition categories)
4. Medicare enrollment status, and
5. Interaction terms

For more information about the risk adjustment model, please refer to the accompanying technical report. Table 1 describes the content presented in each tab of the attached worksheet.

Table 1: Worksheet Directory

Worksheet Tab	Content
PriorCareSettingVariables	Displays coefficients, p-values, and marginal effects associated with prior care setting variables
Demographic	Displays coefficients, p-values, and marginal effects associated with demographic variables
HierarchicalConditionCategories	Displays coefficients, p-values, and marginal effects associated with hierarchical condition categories variables
EnrollmentStatus	Displays coefficients, p-values, and marginal effects associated with enrollment status variables
InteractionTerms	Displays coefficients and p-values associated with interaction term variables ¹

¹ Each input variable has an associated marginal effect value that can be interpreted as the change in the population value of the measure if all patients in the population had the risk factor but had the observed distribution of all other risk factors. For example, the marginal effect for Congestive Heart Failure takes into account the change in the predicted risk of the outcome due to changes caused by the Congestive Heart Failure and Congestive Heart Failure*Chronic Obstructive Pulmonary Disease variables, if the value of Congestive Heart Failure were set to 1 for all patients. Therefore, marginal effects are not included for interaction terms.