

RE: 6 month technical progress report (Bell – 2014 P01)

Aim	Description	Status
1	Estimate the proportion of persons who reside* <60 miles to a regional rehabilitative care facility;	In progress
2	Estimate the proportion of persons who reside* >60 miles to a regional rehabilitative care facility;	In progress
3	Estimate the proportion of persons who reside* >120 miles to a regional rehabilitative care facility;	In progress
4	Estimate the rate ratio of service utilization among persons who reside* <60 miles to care;	In progress
5	Estimate the rate ratio of service utilization among persons who reside* >60 miles to care;	In progress
6	Estimate the rate ratio of service utilization among persons who reside* >120 miles to care;	In progress
7	Estimate the concordance between areas classified as having poor access and low service utilization;	In progress

* This word has been changed to 'travelled' for purposes of the study due to the structure of the data released by the RFAO

Summary

On Friday, May 29, 2015 I received feedback from the South Carolina Revenue and Fiscal Affairs Office (RFAO) that the project has been approved and data will be released. RFAO approval required substantial time (on the part of PEBA) to complete the internal data request and analysis. In particular, PEBA requested that all state health insurance + Medicaid claimant records be combined into a single database per their release specifications at geographic scales below 'region'. As the primary purpose of this study was to map the geographic distances between patients and providers and its relationship to frequency of service use we agreed to this revision. On June 1, 2015 I received the data documentation and download instructions from the Medicaid and PEBA data stewards within the RFAO. Data for this project has now been uploaded to the USC Nursing secure server and can be prepared for analysis.

Summary of data file released by RFAO

A total of 306 patient records were released for this project. These records represent SCI claims from individuals whose primary provider was either Medicaid and PEBA between the 2008 – 2012 calendar period. Released with this data were all inpatient and outpatient claims data for each person over a two year period. The output file contains the following variables: encrypted ID, age at time of injury, sex, region (Upstate, Midlands, Pee Dee, Low Country), and number of months covered under Medicare/PEBA.

The 306 records from the patient eligibility will be linked with a corresponding claims file that contains the following information: provider specialty, encrypted billing provider code for grouping claims, place of service, procedure codes, discharge status, an out of state provider flag, and the geographic distance between the patient's residence and place of service.

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In total, 34,785 inpatient and outpatient claims records for the period 2008 – 2012 have been released. These claims will be coded and classified according to inpatient and outpatient visitations and by ICD diagnosis codes 803.0 – 806.9 and 952.0 – 952.9. The primary diagnosis codes were not released by RFAO in the original data release and I have submitted a claim to have the dataset resent (June 15, 2015). Once returned, records specific to general physician and rehabilitation services visits will be evaluated to determine whether geographic distance to services is a statistically significant indicator of frequency of services obtained. We will stratify our analysis by SCI injury grade using the ICD diagnosis codes.

Timeline for data analysis

It is anticipated that this project will be completed on schedule on/before December 2015. My goal is to have the data analysis component of this work completed by the end of September, with manuscript submission to follow. I also plan to submit a revised request to the RFAO in the fall to release Vocational Rehabilitation records for this file for a separate analysis. I plan to submit the results from this work to the American Public Health Association annual meeting in 2016 and corresponding NIH or DoE funding cycles in 2016.