REaL Inpatient Asthma Readmissions

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Background: Asthma admissions are one of the most common pediatric admissions. When children are readmitted with 30 days of their original admission, hospitals are not reimbursed for the readmission. The etiology is likely multifactorial and the lost revenue can be a significant financial burden on the hospital.

Objective: To stratify inpatient asthma admissions and readmissions by Race, Ethnicity, and Language (REaL) to identify healthcare disparities that can be addressed systematically.

Methods: A database of pediatric asthma admissions and readmissions was created through WebFOCUS with ICD-10 codes and over 20 different factors (Race, Ethnicity, Language, age, zip code, insurance type, etc). Data was collected prospectively for 2022 and 2023 and downloaded into an Excel spreadsheet. Data was deidentified, collated and analyzed to examine differences via Race, Ethnicity, and Language (REaL).

Results: There were 5,910 asthma admissions in 2022 and 2023. Patients identified as 42% Hispanic, 41% Black, 2% White, 14% Other, compared to 38%, 32%, 9%, 12%, respectively, for all admissions. In 2022-2023, 15.1% of asthma admissions among those identified as Black were readmitted within 30 days, compared to 18.9% of those that identified as Hispanic. 16.2% of asthma admissions were readmitted within 30 days among patients who identified as English, compared to 16.9% of those whose preferred language was Spanish. However, there were some year to year differences noted.

Conclusions: Patients who identified as Hispanic and Black were more likely to be admitted and readmitted with asthma compared to all admissions. However, there few differences within each group via REaL. These results differ significantly from pilot data and further analysis will be performed to understand these differences.