

Characteristics of Hospitalized Pediatric Patients with a Malnutrition Diagnosis at Riley Hospital for Children

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Background: A diagnosis of malnutrition in hospitalized patients has been shown to negatively affect clinical outcomes by impairing immune responses (a subsequently increasing infection and complication rates), increasing the average length of stay in the hospital, and increasing mortality. In the past, there have been efforts to study the characteristics and prevalence of pediatric populations diagnosed with malnutrition in a hospital setting, but until 2014, no universal standards were used for malnutrition diagnosis and documentation. In 2014, The Academy of Nutrition and Dietetics and the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) introduced a recommendation for standardization of identification and documentation of pediatric malnutrition. These recommendations guided a series of malnutrition awareness initiatives at Riley Hospital for Children (Riley) with a focus on increasing malnutrition documentation efficiency and integrity. Subsequently, the number of malnutrition diagnoses at Riley has increased from 2016 when the initiative started through 2021.

Objective: The purpose of this study is to identify characteristics of patient populations diagnosed with malnutrition that may benefit from early intervention.

Methods: Individuals with a diagnosis of malnutrition at Riley Hospital for Children (excluding Obstetric patients) from the years 2019-2021 were included in this study. Patient level data was used to study average length of stay (LOS), 30-day readmission percentage, admitting service, primary diagnosis, and demographics of this population.

Results: Preliminary data analysis suggests there is a decreasing trend in readmission within 30 days for patients diagnosed with malnutrition. A similar trend is seen in the entire population of patients treated at Riley Hospital for Children in the same period. Of note, the entire patient population of Riley has seen a decreasing average length of stay while the patient population with a malnutrition diagnosis have seen an increasing average LOS. These observations have not been evaluated for significance at this time.