

## **Implementation of a Caregiver-Focused Educational Intervention to Improve Knowledge and Competency for Managing Adrenal Crisis in Patients with Duchenne Muscular Dystrophy.**

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**Purpose:** The purpose of this quality improvement project was to evaluate the effect of adrenal crisis education for the caregivers and providers of patients with Duchenne Muscular Dystrophy. The project looked at caregiver knowledge, injection training, and provider prescription rates.

**Methods:** This project utilized a pre-post design to compare the knowledge of adrenal crisis management before and after the education using a questionnaire. Injection technique was demonstrated to caregivers, and their injection competency was assessed using a checklist. Lastly, the neurology providers received a presentation on adrenal crisis management. The rate of emergency hydrocortisone prescriptions written by providers was compared pre and post-intervention through a chart review.

**Results:** A total of 11 caregivers agreed to participate. There was a statistically significant median improvement in knowledge scores of 5 points (IQR 4) from pre to post-test ( $p < 0.01$ ). All caregivers required only one iteration to demonstrate injection competency. A total of two neurology providers participated in the training. Provider prescription rates improved from 0% (0 out of 10 patients) to 63.6% (7 out of 11 patients) following the training.

**Conclusions:** This project demonstrated that knowledge and competency improved for caregivers of patients with Duchenne Muscular Dystrophy after one education session. Provider prescription rates also improved with education. Adrenal crisis education in Duchenne Muscular Dystrophy has not previously been reported in the literature and needs to be further studied.