The Impact of a Checklist on Quality Patient Care and the Reduction of Clinic Visit Times in Pediatric Patients with Neurofibromatosis Type I (NF1)

PURPOSE
The purpose of this scholarly project was to standardized practices in the NF clinic by establishing clinical guidelines, increasing the productivity of the new patients’ appointment times with an evidence-based checklist (CL). It is crucial to optimize the patients’ experience by evaluating the complete organ systems of those affected with NF1 and potentially decreasing clinic wait times. A new patient checklist can be beneficial to achieve these goals.

BACKGROUND
The project was implemented at a large ambulatory pediatric Neurofibromatosis Clinic in the academic center in the Texas Medical Center, Houston, Texas.

METHODOLOGY
The Plan-Do-Study-Act (PDSA) method of quality improvement was used for this project. The author conducted a literature review to explore the benefits of a checklist in NF1. A CL was designed using evidence for the needs of the NF1 patient. This evidence-based CL was created with common clinical symptoms of patients with NF1 currently limited in the literature. A baseline 3-month time study confirmed the number of minutes spent for all new pediatric patient appointments for NF1. The new patient CL was implemented at each initial visit. The Advanced Practice Provider (APP) collected time data and completed the new patient CL.

RESULTS
A baseline time study was collected for five new NF1 patient visits with an average of 96 minutes to complete. A time study was completed for all six CLs completed during the project period, with an average of 101.3 minutes for the visits. There was not an improvement in clinic times. There were multiple variables identified. They were related to the COVID-19 pandemic, staffing changes, and data highlighting clinical variability as a time-critical issue when examining new patients with NF1.

IMPLICATIONS
CLs allowed providers to document individualized patient information to readily identify each patient’s specific disease burden, diagnostic workup needed for further evaluation, and ongoing needed management. It will also serve as a personalized, educational tool for families and patients with NF1.