**The Integration of an Embedded Pharmacist into the Atrium Health Cystic Fibrosis Care Teams: A PGY2 pharmacy resident pilot project**

**Authors**: Garfinkle, S. Cowgill, N.

**Practice Site**: Atrium Health – Carolinas Medical Center Ambulatory Care PGY2

**Background and Purpose:**

Cystic Fibrosis (CF) is a progressive, genetic disease that is characterized by the mutation of the cystic fibrosis transmembrane conductance regulator (CFTR) gene. Interdisciplinary care teams collaborate to improve the health and quality of life of patients battling this multifactorial, life-long disease. Patients’ medication needs are complex, and as a result, pharmacists are now recognized by the National CF Foundation as essential members of the CF care team. Prior to July 2021, dedicated embedded pharmacist support in the CF clinics at Atrium Health were non-existent. In response to the CF Foundation’s guidelines, pharmacist integration within the pediatric and adult CF clinics was established through a PGY2 residency program beginning in July 2021. The pharmacist identified that a gap in documentation of CFTR modulator monitoring parameters existed and made multiple interventions to improve this.

**Objectives:**

* To evaluate adherence to CFTR monitoring parameters pre and post pharmacist integration and characterize supportive services provided by the pharmacist.
* To assess the impact of this new service line and justify the ongoing pharmacist integration in the space.

**Methods:**

This was a retrospective, summary review of an investigator-initiated pilot service conducted at Atrium Health’s pediatric and adult CF centers. During the pilot service, the pharmacist saw patients in clinic at follow up visits scheduled with the pulmonologists. The pharmacist was also consulted by CF care team members for pharmacy related assistance. Activities and interventions completed were tracked in real time. CFTR modulator monitoring parameter data pre and post pharmacist integration was collected and reviewed. Interventions made from July 2021 through March 2022 were also reviewed to categorize and prioritize future embedded pharmacist responsibilities.

**Pre-liminary Results:**

While not finalized, 42.5% of patients on a CFTR modulator met the manufacturer’s suggested monitoring parameters pre-pharmacist integration and 71.3% met the parameters post-pharmacist integration. Interventions completed by the pharmacist included 114 comprehensive medication reconciliations, 116 clinical recommendations, 33 patient and provider CF medication education sessions, 27 counseling sessions on adherence, and 78 prescription access assistance. Annual comprehensive medication reconciliation was completed for 82.3% of patients PharmD completed interventions on & 42.5% of total patient population.

**Conclusion:**

CFTR modulators have expanded life expectancy and significantly improve patient’s quality of life but do require particular monitoring to avoid toxicities. Having an embedded pharmacist in CF clinic significantly improved adherence to CFTR modulator monitoring parameters. The pharmacist was also able to make multiple interventions, majority being clinical recommendations and medication therapy reviews. The findings of this review show that there is opportunity for a pharmacist to make a meaningful impact on an interdisciplinary CF care team.