## Medical outcomes post transition of clinical care from a paediatric cystic fibrosis care model to an adult cystic fibrosis care model – an Irish perspective

Thornton KP<sup>1</sup>, Ronan NJ<sup>2,3</sup>, Shortt C<sup>2</sup>, McCarthy M<sup>2</sup>, Fleming C<sup>2</sup>, Daly M<sup>2</sup>, Hickey C<sup>2</sup>, Howlett C<sup>2</sup>, Flanagan ET<sup>2,3</sup>, Eustace JA<sup>3</sup>, Murphy DM<sup>1,2</sup>, Plant BJ<sup>1,2</sup>

<sup>1</sup>Medical School, University College Cork, Cork

<sup>2</sup>Cork Adult CF Centre, Cystic Fibrosis Centre, Respiratory Department, Cork University Hospital, University College Cork, Cork.

<sup>3</sup>HRB Clinical Research Facility, University College Cork, Cork.

As life-expectancy increases in CF it is paralleled by an increasing number of patients transitioning from a paediatric care-model to an adult care-model. In chronic illnesses' including CF the transition process is often complicated by concerns about the potential implications. Traditionally studies have evaluated subjective aspects of transition including patient satisfaction. There are limited objective studies in this area. Our study investigated the change in clinical status in the year pre & post transition.

Data was collected retrospectively for the year pre-transition and the first year post-transition for the last 28 patients who transitioned from our paediatric to adult program. FEV<sub>1</sub>, FVC, BMI, number of pulmonary exacerbations were recorded.

There was no significant difference in the mean decline in FEV<sub>1</sub> (p=0.66) or FVC (p = 0.248) in the year pre-transition compared to the year post. There was a significant decrease in the total number of exacerbations (PO & IV antibiotics) in the year post- transition (p = 0.015). There was no significant change in the number of exacerbations requiring IV antibiotics (p = 0.568). A significant increase in use of home IV antibiotics was noted after transition (p = 0.006) with a parallel non-significant reduction in number of inpatient days (mean -2.35 days, p = 0.211). There was no significant change in BMI after transition (p = 0.66).

In a cohort of patients with CF transition is not associated with a clinical decline; however, it is associated with a change in antibiotic practice - with a reduction in oral antibiotic usage and a change in location of IV antibiotic delivery.