IDENTIFYING BARRIERS AND MOTIVATORS TO SPIROMETRY IN ADOLESCENTS WITH CYSTIC FIBROSIS

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Key Findings: A needs assessment identified forgetting to share results, concern for hospitalization, and insufficient spirometry device knowledge as barriers to home spirometry for adolescents with CF and their parents. Motivators for at-home spirometry included staying healthy and impacting the child’s future health. This information can be used to generate interventions targeting CF treatment compliance and increasing treatment confidence.

Background

• In March 2020, the WHO declared COVID-19 a pandemic
• The Cystic Fibrosis (CF) Center quickly limited in-person spirometry due to aerosolization risks
• Spirometry monitors CF patient’s lung functionality
• At-home spirometers were given to patients via CF grant funding
• 114 devices distributed to patients 6-18 years old (average 12.5 yrs.)
• 79% (n=90) of patients are device trained
• Adolescent patients with CF exhibit poor treatment adherence to monthly testing
• Current adherence to monthly testing is on average 67.33%

Methods

• Needs assessment to identify barriers and motivators to at-home spirometry in patients with CF ages 12-18 years
• Electronic surveys assessing at-home spirometry was developed utilizing literature review, CF content experts’ discussions, and clinical guidelines
• Surveys were posted to CF social media for adolescents with CF and their parents
• Presented executive report of study findings to key stakeholders at the CF Center

Results

• 4 participants fully completed the survey
• 66% were female parents and age range of children with CF was 12-14 years old
• 75% of participants felt moderately comfortable with the device
• Most common barriers were forgetting to share results (2, 50%), concern for hospitalization (2, 50%), and insufficient device knowledge (3, 75%)
• Most common motivators were staying healthy (4, 100%) and impacting child’s future health (3, 75%)