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Title: Improving identification and treatment of children & adolescents with cystic fibrosis related diabetes (CFRD)

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Body: Introduction: Our CF center performed a quality improvement project to improve identification and treatment of CFRD. Our primary goal was to screen at least 80% of patients ≥8 years of age with oral glucose tolerance testing (OGTT) in 2011. Our secondary goal was to improve the mean HbA1c of CFRD patients. Methods: With CF family and staff involvement, we identified barriers in our existing screening process and after multiple PDSA (Plan, Do, Study, Act) cycles implemented new processes: Screening 1) Changed lab protocol for patients receiving OGTT to improve screening efficacy 2) Scheduled annual labs at the first clinic visit of the year 3) Improved mesosystem relationships via weekly huddles between pulmonary and endocrine teams 4) Developed protocol for follow-up of identified patients with CFRD Protocol Design to Improve HbA1c 1) Plan endocrine consult and transition to endocrine clinic using principles of clinical microsystems 2) Implement system to contact families who failed clinic appointment 3) Provide additional education of staff and families Results: Screening of outpatients with OGTT improved from 2010 (66%) to 2011 (99%). The mean HbA1c in patients with CFRD in 2010 was 7.0 (n=4). Their levels improved to 6.6 in 2011, and the mean for all patients including newly identified patients with CFRD in 2011 was 6.0 (n=17). Conclusion: The development of an outpatient screening process successfully identified patients with CFRD. We successfully screened 99% of our patients with OGTTs, and reduced the mean HbA1c in CFRD patients.