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## MON-190 Endo ECHO Improves Patient-Reported Measures of Access to Care, Health Care Quality, Self-Care Behaviors, and Overall Quality of Life for Patients with Complex Diabetes in Medically Underserved Areas of New Mexico

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### Abstract

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**Background** Individuals living with complex diabetes experience limited access to endocrine care due to a nationwide shortage of endocrinologists. Project ECHO (Extension for Community Healthcare Outcomes) is an innovative, scalable model of health care that extends specialty care to medically underserved areas through ongoing telementorship of community primary care providers (PCPs). The purpose of this study was to assess whether participation in the first iteration of the Endocrine ECHO (Endo ECHO) program resulted in changes to patient well-being, health behaviors and quality of care. **Methods** PCPs from 10 federally qualified health centers in NM participated in Endo ECHO, facilitated by a team of specialists at the University of New Mexico Health Sciences Center. Endo ECHO patients were eligible for the study if they were 18 years or older with “complex” diabetes: type 1 diabetes or type 2 diabetes and insulin dependent, and/or with an HbA1c of 9% or higher. Patients took a comprehensive survey during enrollment and again after one year. The Diabetes Comprehensive Care Clinic (DCCC) at UNM was included as a means of benchmarking specialized diabetes care, and a sample of DCCC patients completed surveys during the post-test time frame. We assessed ECHO patients for pre/post change using McNemar’s tests for paired data and then compared intervention group post-test scores to the DCCC patient scores. **Results** Five hundred thirty-three ECHO patients and completed pre and post surveys (62% response rate) and 139 DCCC patients completed surveys during the post survey period. At follow-up, 42% of ECHO patients reported their health status as excellent, very good or good at compared to 30% before program participation ( $p<0.0001$ ), and 43% reported five or more days of physical activity per week, compared to 29% at baseline ( $p<0.0001$ ). Endo ECHO patients reported more frequent provider-initiated tests for A1C (81% to 91%;  $p<0.0001$ ), foot examinations (68% to 87%;  $p<0.0001$ ), and eye exams (63% to 69%;  $p=0.0266$ ), and 84% of patients felt confident in managing their blood sugar levels at follow-up compared to 62% at baseline ( $p<0.0001$ ). Although Endo ECHO patients exhibited statistically significant improvements across all key measures at follow-up, they lagged behind DCCC

patients in some areas, including positive health status (42% Endo ECHO post vs 68% DCCC), daily physical activity (43% ECHO post vs 50% DCCC) and daily blood sugar testing (70% ECHO post vs. 83% DCCC). Conclusions Endo ECHO appears to be effective means of improving the health and quality of life for patients with complex diabetes, although opportunities exist to further improve care as compared to care delivered at a university based specialty clinic. Endo ECHO may be a suitable alternative for patients in medically underserved communities where access to an endocrinology referral center is restricted.