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**Title**

*Mobile Technology-Supported Shared Decision-Making and Goal Setting for Management of Depression in Primary Care*

**Priority 1 (Research Category)**

Behavioral, psychosocial, and mental illness

**Presenters**

Christina Hester, PhD, MPH, Lambros Chrones, Ashley Kucera, Elisabeth Callen, PhD, Elise Robertson, MA, Tarin Clay, BA, Michael Martin, MD, MBA, Andrea Nederveld, MD, MPH, Angie Lanigan, MPA, RD, Melissa Filippi, PhD, MPH, James King

**Abstract**

Context: Mobile-based apps have potential to assist primary care clinicians and patients in the shared decision-making (SDM) process for the management of major depressive disorder (MDD). Primary Care Path is a program that includes a patient-facing mobile app and an accompanying care team-facing web interface for supporting depression management in primary care.

Objective: Evaluate use of Primary Care Path for MDD management in primary care clinical settings and its impact on SDM, treatment, symptoms, and goal setting and attainment.

Study Design and Analysis: Practices were randomized to program use (intervention) or usual care (control).

Setting: Four primary care clinical practices in the US.

Population Studied: Patient participants were aged  $\geq 18$ , being treated for MDD, and smartphone users. Clinical care team participants were engaged from all study sites.

Intervention/Instrument: Intervention was 18-week use of Primary Care Path program. Patient participants completed online surveys at baseline, 6, 12, and 18 weeks. A subset of care team member participants and intervention patient participants completed interviews at study end.

Outcome Measures: SDM-9, treatment changes, PHQ-9, and goal setting and attainment.

Results: 76 patients (34 intervention; 42 control) were enrolled; majority were female (79%; 76%), White (91%; 95%), non-Hispanic/Latino/a (85%; 100%), and employed (77%; 81%). No significant differences were observed in SDM-9 between intervention and control; however, in interviews, care team and patient participants reported using the program data to assist in the SDM process. More

intervention participants initiated antidepressant medication by weeks 12 ( $P=0.030$ ) and 18 ( $P=0.040$ ) and switched medications by weeks 6 ( $P=0.009$ ) and 12 ( $P=0.040$ ) versus control. Both groups demonstrated significant improvement in PHQ-9 scores over the study ( $P<0.001$ ), with no difference in change by group. At week 18, intervention patient participants felt more successful than control participants in achieving their personalized treatment goals ( $P=0.048$ ).

Conclusions: Use of this program in the primary care setting may enhance MDD management, leading to earlier medication optimization and helping patients achieve treatment goals that matter most to them. The results of this study will inform development and uptake of technology-based depression management in primary care to improve patient-centered approaches to care.