EyeConnect: A Multimethod, Interprofessional CE-Certified Initiative to Improve Diabetic Eye Care Across the Continuum of Care

Abstract

Preventable vision loss from diabetic retinopathy (DR) and diabetic macular edema (DME) remains a persistent challenge driven in part by delays in screening, diagnosis, referral, and treatment—particularly among underserved patient populations. DR is the leading cause of blindness among working-age adults in the United States. Since these challenges span multiple care settings and specialties, improving outcomes requires proactive engagement from all clinicians who manage patients with or at risk for DR/DME. As a result, Paradigm Medical Communications, in collaboration with the American Academy of Physician Associates, the American Association of Nurse Practitioners, the California Academy of Family Physicians, Endocrine Society, and the National Minority Quality Forum's Center for Sustainable Health Care Quality and Equity, developed the interprofessional education, CE-certified initiative Eye Connect: Take Action to Prevent Blindness for Your Patients With Diabetes, aiming to improve multidisciplinary collaboration, early recognition, and evidence-based treatment of DR/DME across diverse clinical audiences.

Methods:

Between August 2022 and May 2023, 3 educational modules were launched and data analysis conducted, each comprising multiple activities designed to address specific gaps experienced throughout the DR/DME care continuum for primary care physicians, endocrinologists, nurse practitioners, physician associates, optometrists, ophthalmologists and ophthalmology residents, retina specialists, and retina fellows. Outcomes were evaluated using qualitative and quantitative matched cohort data analyses, including pre/postassessments of knowledge, competence, and confidence, supplemented by a longitudinal study that included real-world clinical behavior comparisons between learners and matched controls. Educational formats included live residents and fellows programs, live webinars, enduring materials, patient cases, animated infographics, and an immersive group-based online learning platform.

Results:

Collectively, participants reported potentially impacting over 2 million patients annually, with more than 80% managing individuals with or at risk for DR/DME on a weekly basis. Results from matched cohort pre and postactivity assessments demonstrated significant improvements in knowledge (+33.3%), competence (+10.1%), and confidence (+39.0%) across all learning objectives.

Actionable practice changes were reported by over 50% of learners, including enhanced use of guideline-based screening, improved patient education, and increased referral to eye care providers. Notably, strategies to address health disparities were emphasized in Module 3, where 57% of completers reported intentions to identify barriers in underserved populations.

EyeConnect: A Multimethod, Interprofessional CE-Certified Initiative to Improve Diabetic Eye Care Across the Continuum of Care

Clinician behavior metrics and intended practice changes showed substantial planned increases in the use of evidence-based strategies, including screening patients at risk for DR/DME (+34.9%), identifying social determinants of health that can be addressed (+54.3%), and referring patients to eye care providers (+32.9%). Ninety-seven percent of follow-up respondents implemented an action plan and clinical behavior changes included a 50% reduction in time from referral to treatment among learners. Learner satisfaction was high, with over 97% of respondents agreeing the activities enabled improved patient care and real-world data analysis. Comparing learner clinicians with matched controls suggested a positive trend in earlier treatment and higher overall patient volumes.

Conclusion:

This multiformat, CE-certified initiative demonstrated measurable improvements in clinicians' knowledge, competence, and confidence, resulting in planned practice behaviors related to DR/DME care. Findings from both qualitative and quantitative matched cohort learner assessment data and longitudinal real-world data support the effectiveness of multidisciplinary collaboration and tailored education in fostering earlier referral, proactive treatment, and more equitable care—particularly among populations facing systemic barriers.

Acknowledgment:

Paradigm Medical Communications, along with partners, extends our sincere gratitude to the expert faculty, steering committee, and reviewers who guided this initiative. We also thank our collaborators—the American Academy of Physician Associates, the American Association of Nurse Practitioners, the California Academy of Family Physicians, the Endocrine Society, the Center for Sustainable Health Care Quality and Equity of the National Minority Quality Forum, and Gather-ed—for their valued partnership, and Komodo Health for outcomes measurement and analytics support. We further acknowledge our internal cross-functional team members whose expertise and dedication were instrumental in the successful implementation of this initiative.

This initiative was supported by an independent educational grant from Regeneron Pharmaceuticals, Inc.

Click <u>here</u> to access the accompanying poster and additional data results from this CE-certified initiative.