

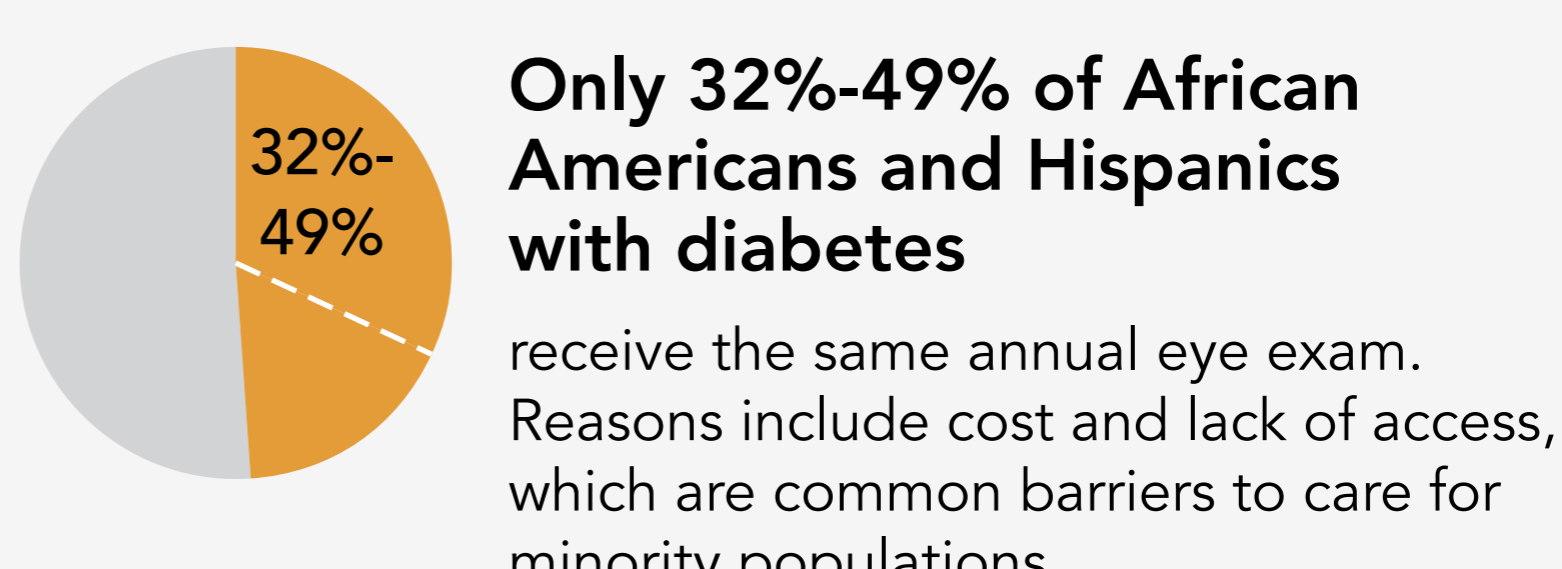
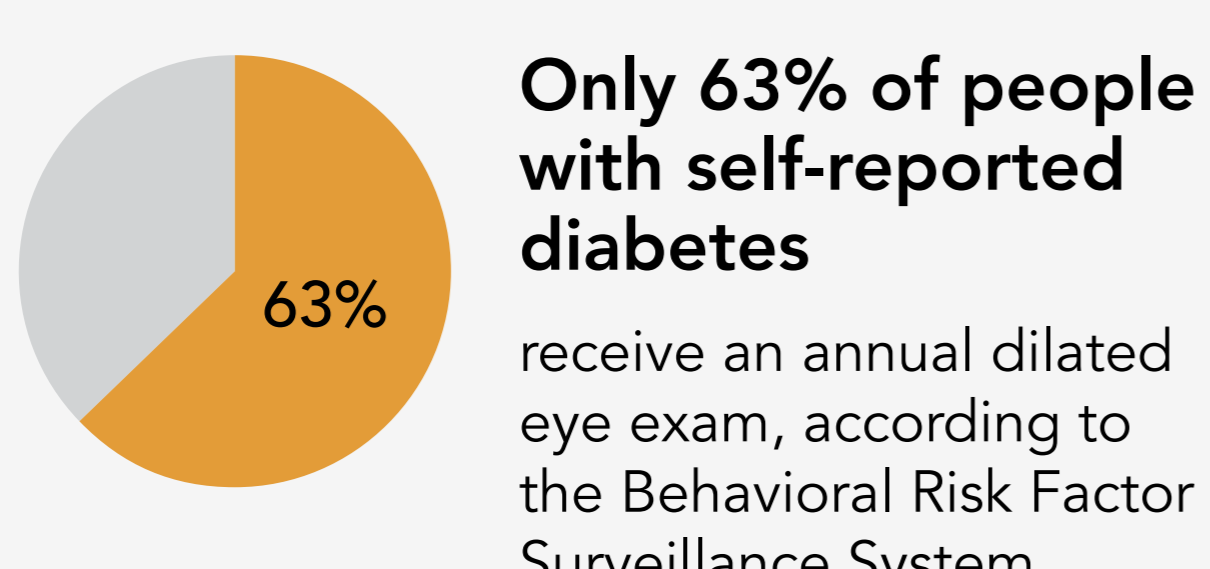
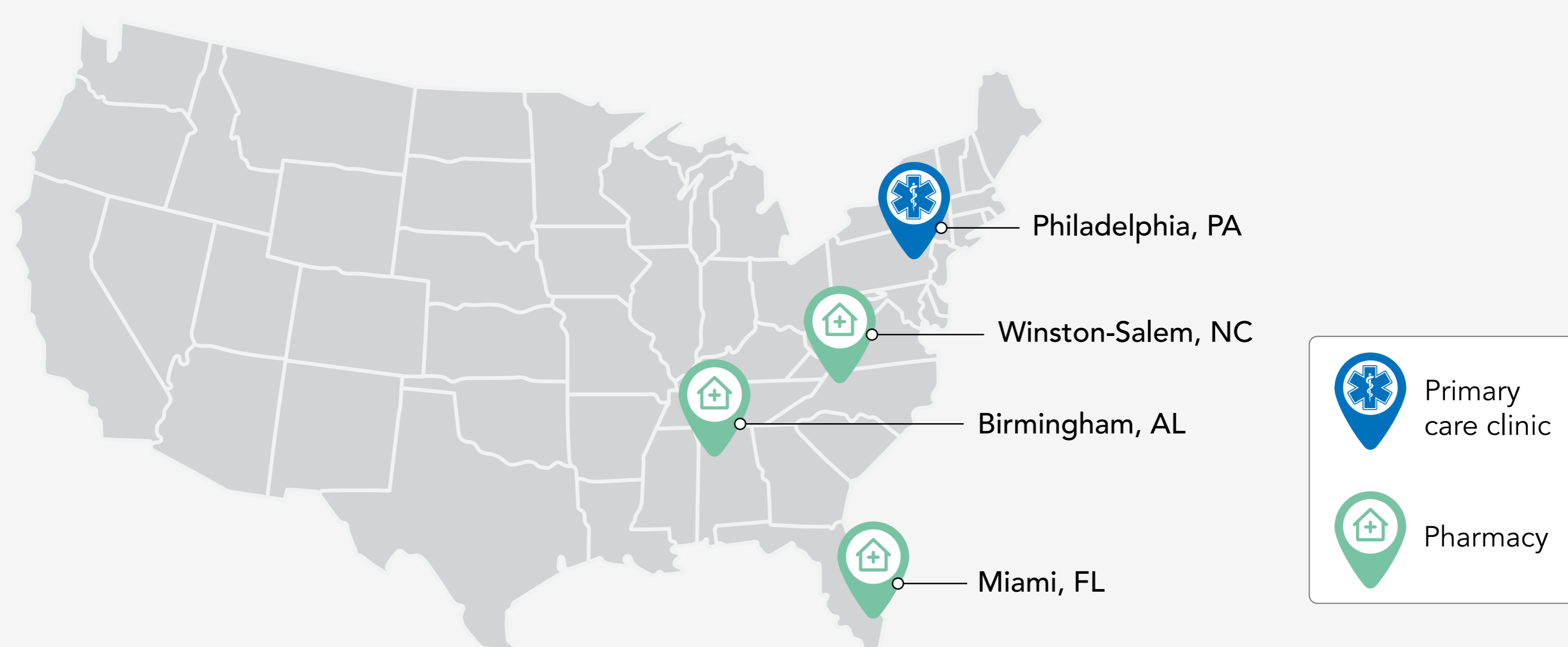
Diabetes Eye Screening in Urban Settings Serving Minority Populations

Owsley C, McGwin G, Lee DJ, et al. Diabetes Eye Screening in Urban Settings Serving Minority Populations. *JAMA Ophthalmol.* 2015;133:174-174. doi:10.1001/jamaophthalmol.2014.4652

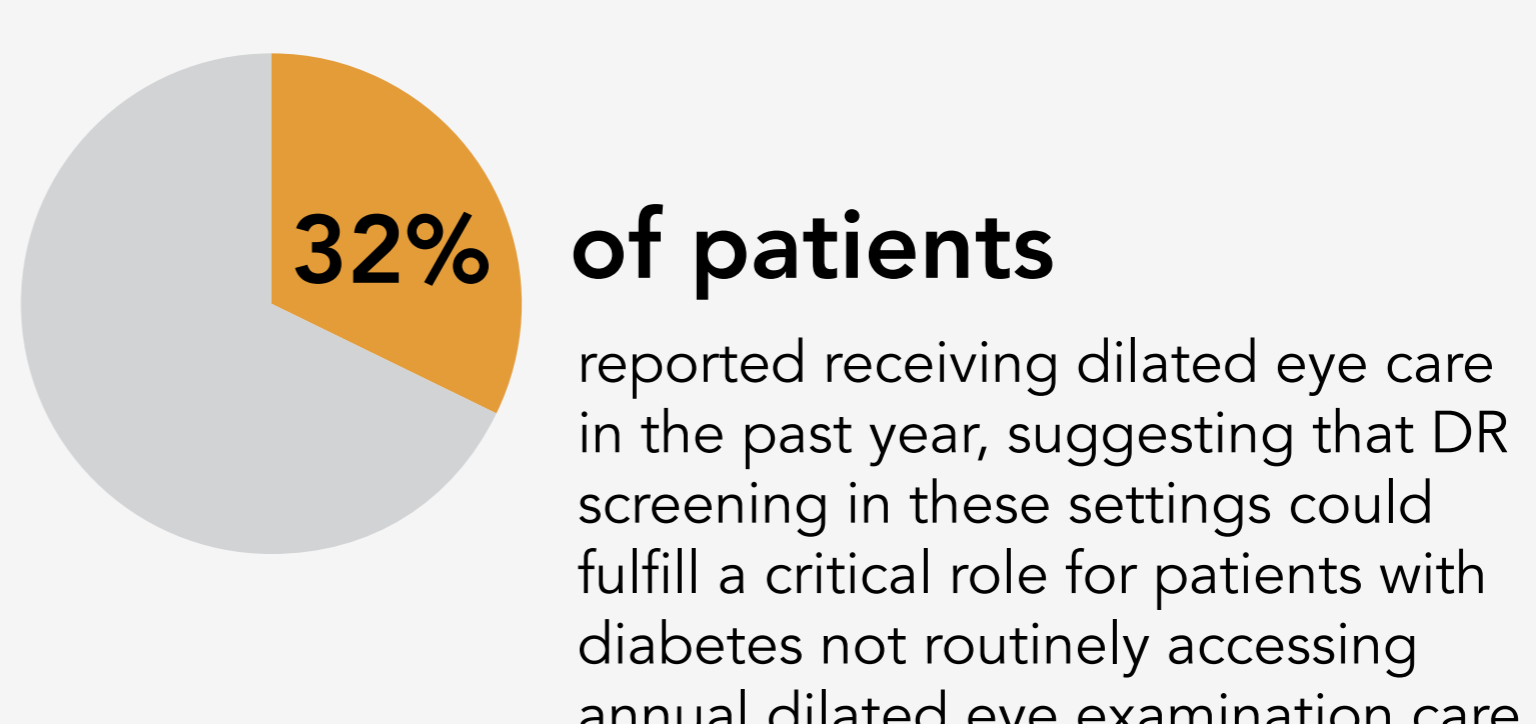
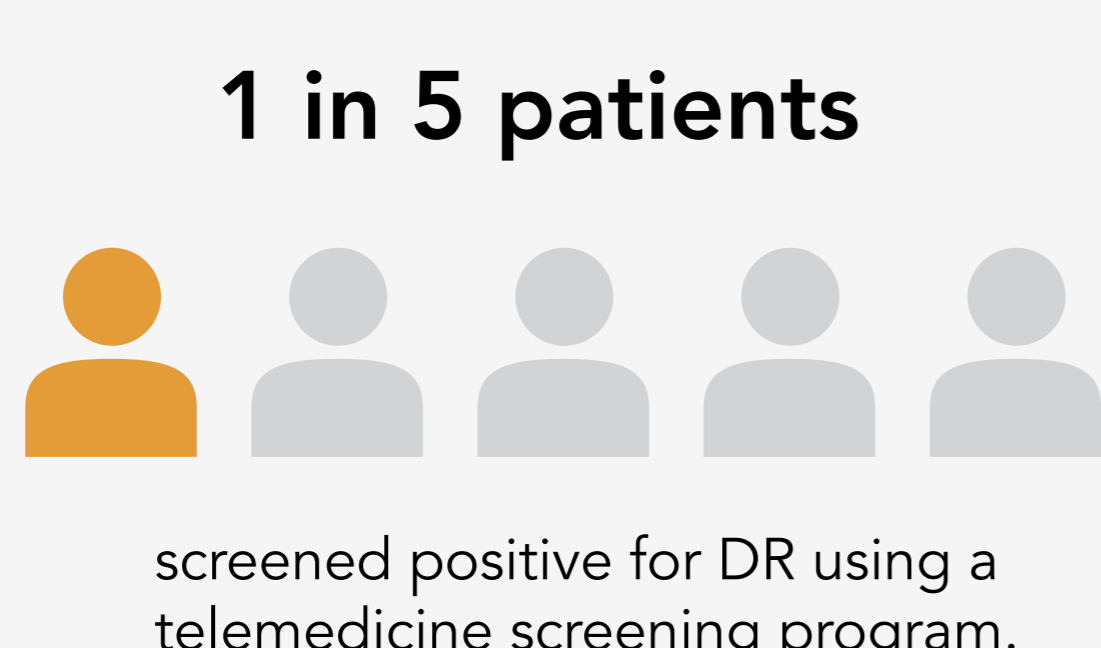
The American Academy of Ophthalmology, American Optometric Association, and American Diabetes Association recommend routine, annual dilated eye examination for persons with diabetes. This examination should be instituted for type 1 diabetes 5 years after diagnosis and, for type 2 diabetes, at the time of diagnosis and annually thereafter. The percentage of Americans with diabetes receiving dilated eye care annually is low. Data analyses of the Behavioral Risk Factor Surveillance System revealed a dilated examination annual rate of 63.3% in persons with self-reported diabetes. Among ethnic/racial minority populations with diabetes, the annual eye examination rate is even lower: approximately 32% to 49% among African Americans and Hispanics. Common barriers to care for minority populations are lack of accessibility (scarcity of eye care professionals in communities and transportation challenges) and cost. There is growing evidence that diabetic retinopathy (DR) screening programs, combined with telemedicine, are cost-effective interventions. In the present study, we sought to examine the feasibility and effectiveness of noninvasive DR screening using a nonmydriatic camera combined with a telemedicine reading center.

Patients with diabetes were screened in four cities in the United States.

The four screening sites provided services to largely uninsured and/or minority populations.



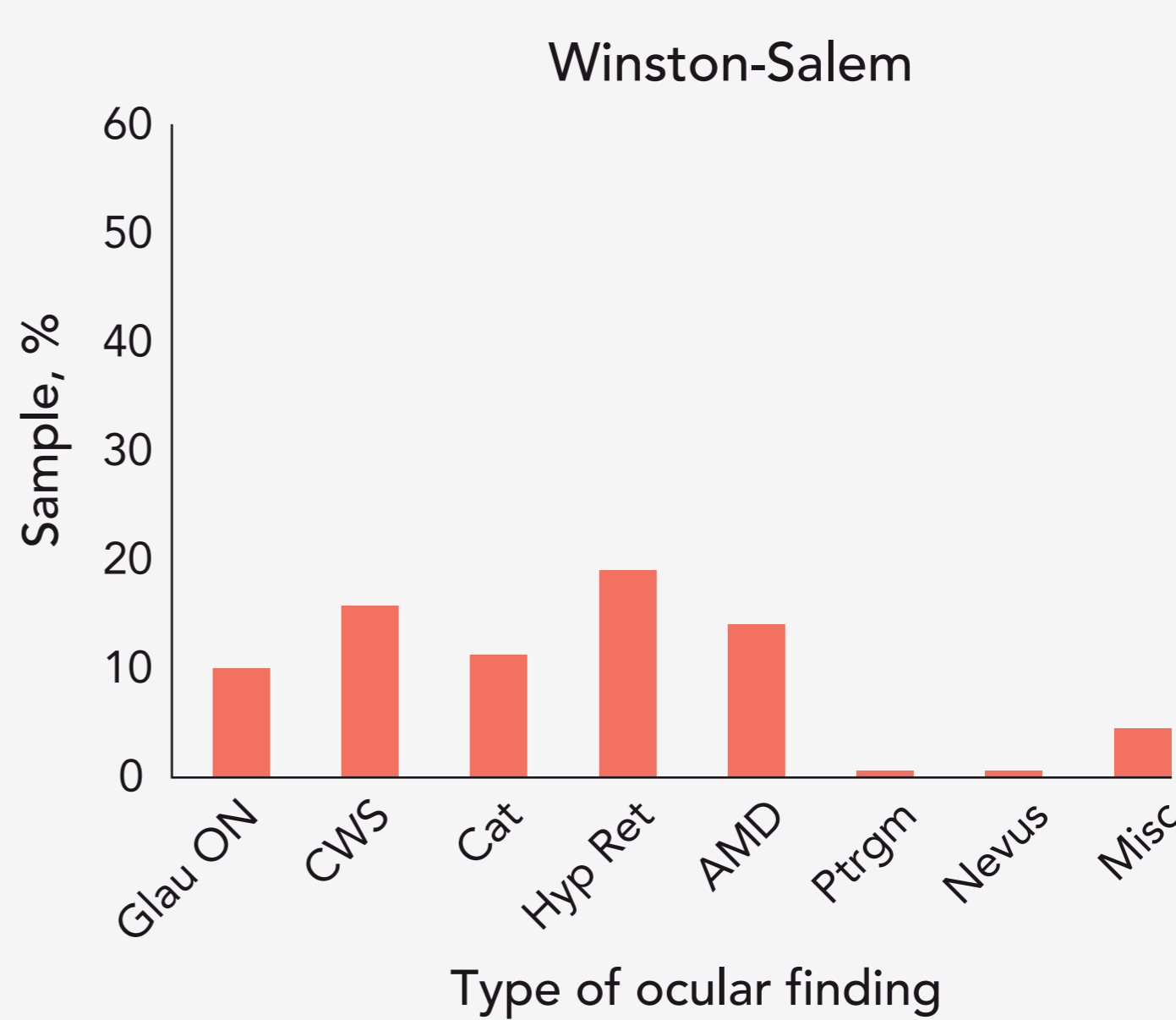
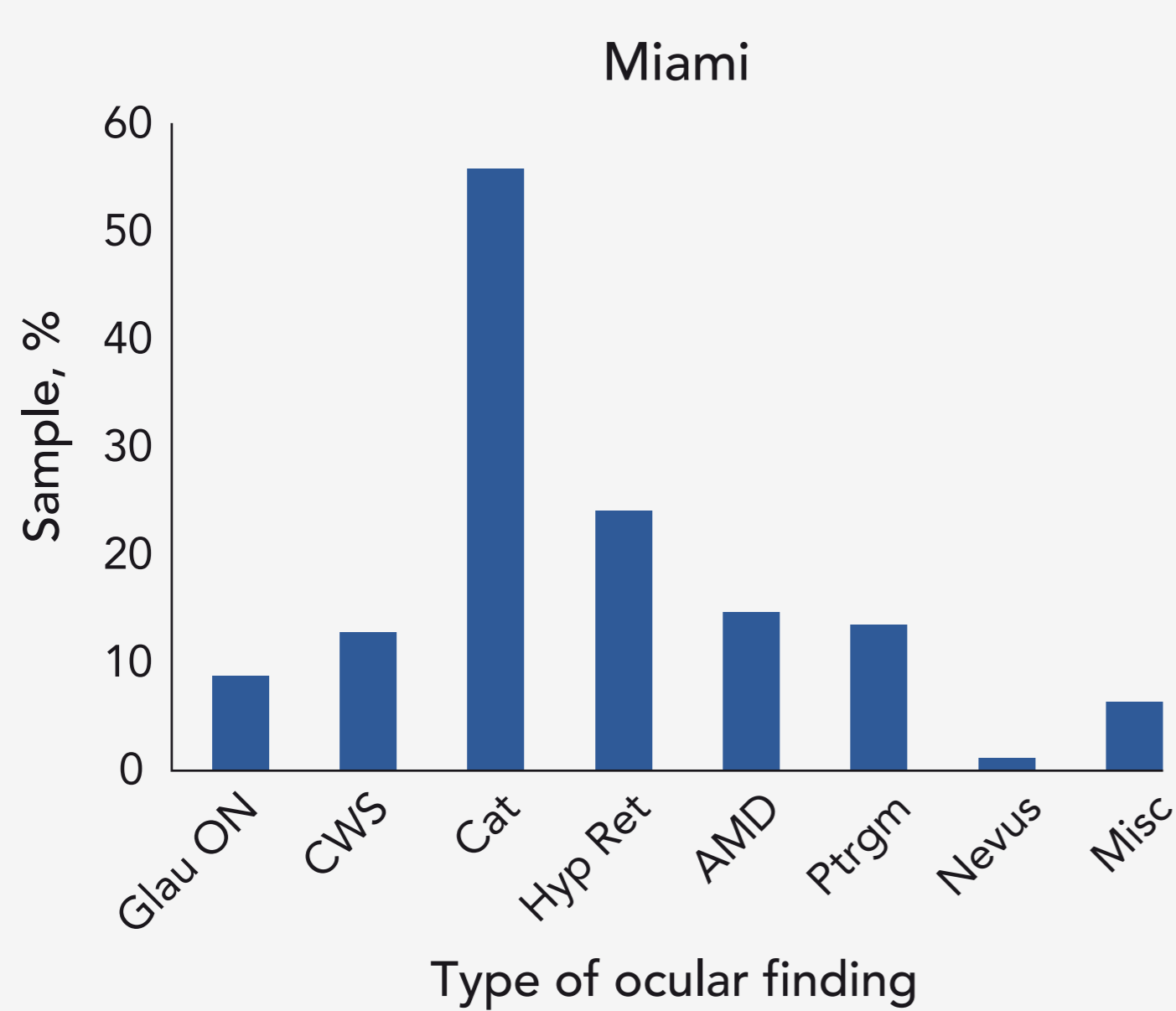
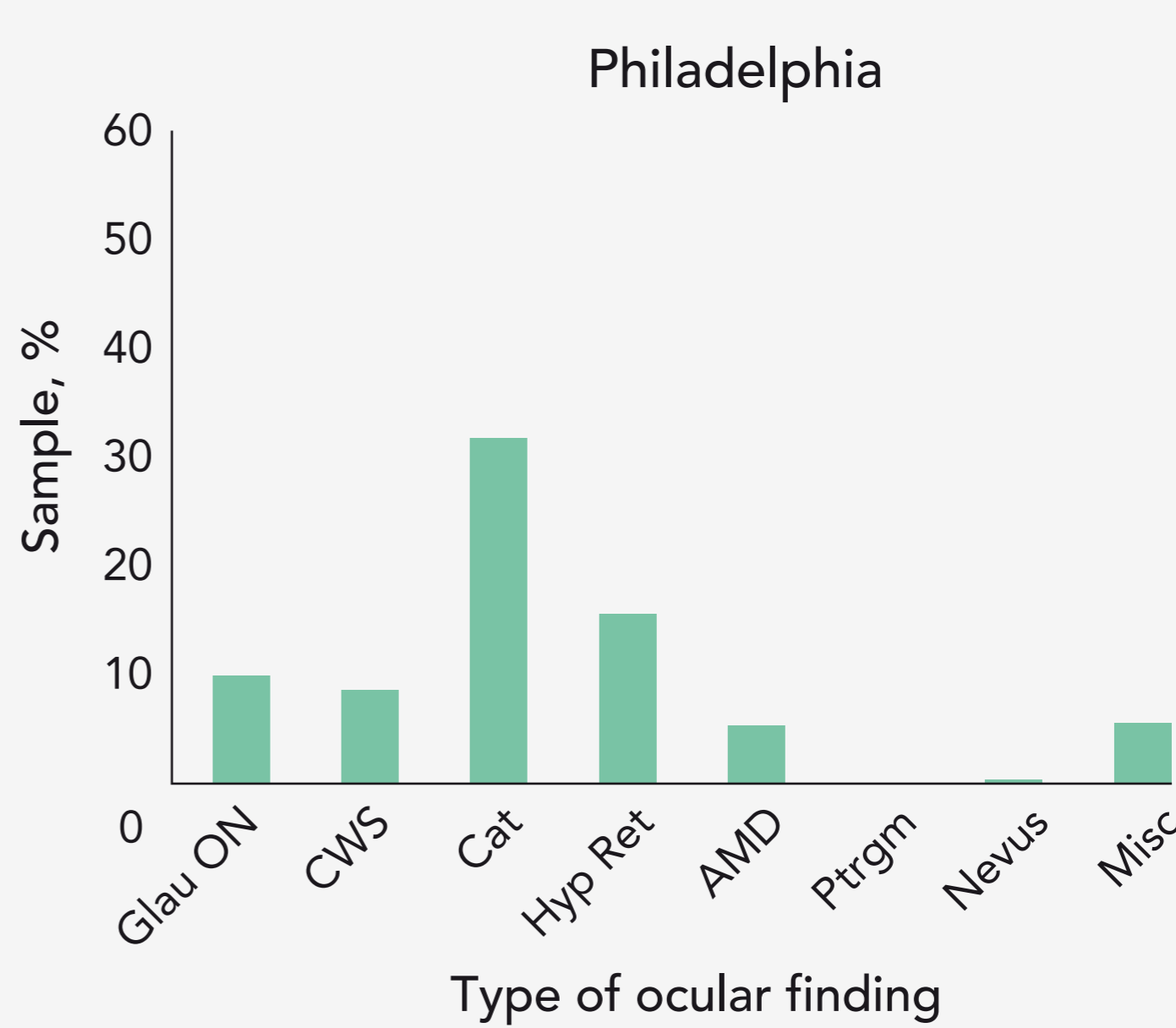
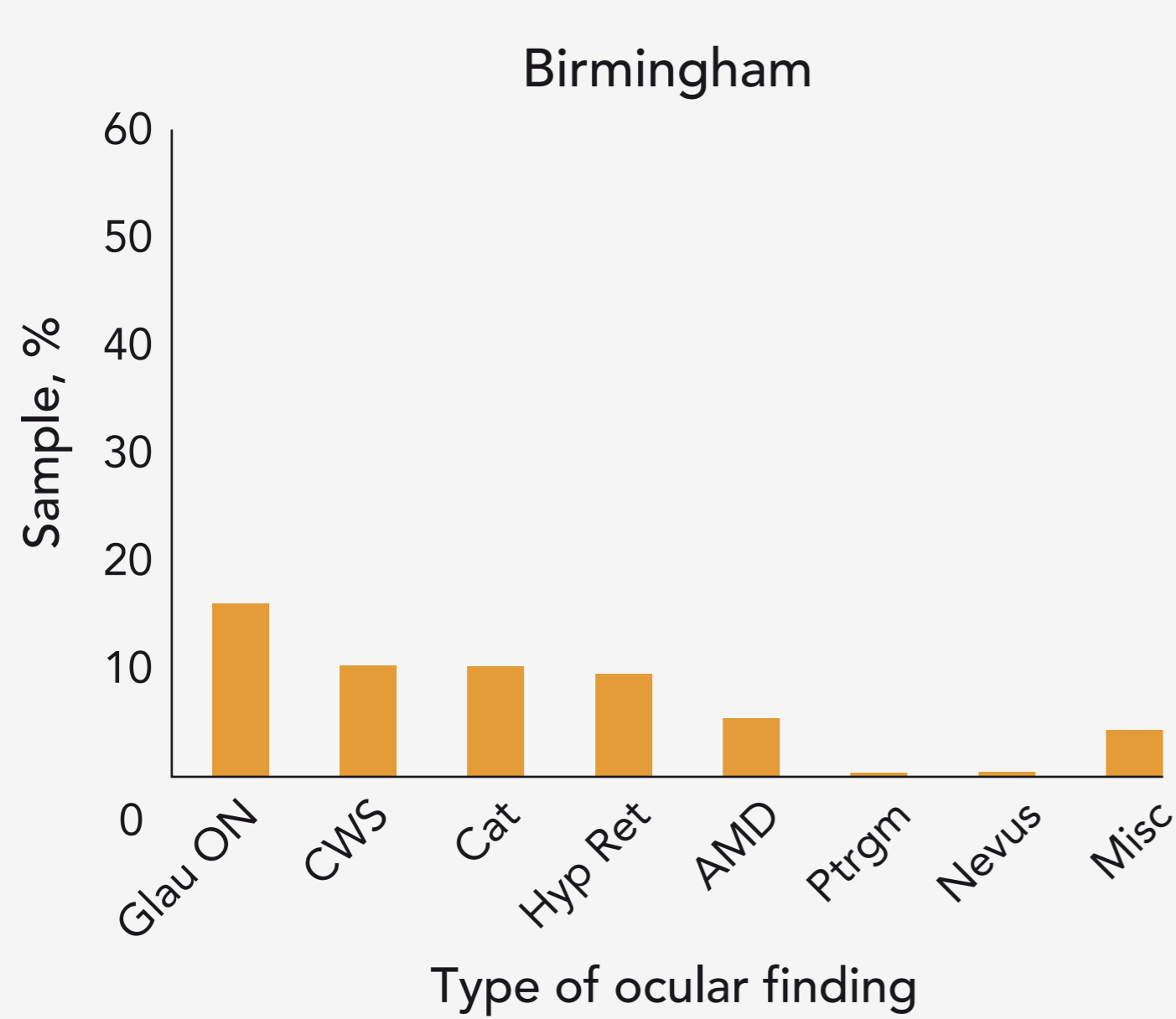
A DR screening program combined with telemedicine was effective in finding DR and other ocular findings.



Almost half of the participants had other ocular findings as result of DR screening, with the most common being cataract.

This is an important collateral benefit of DR screening programs since many ocular findings are potentially sight-threatening conditions that are amenable to vision-preserving treatments.

Types of Other Ocular Findings in Either Eye



Percentage of the sample having other ocular findings in either eye stratified by site. AMD indicates age-related macular degeneration; Cat, cataract; CWS, cotton-wool spots; Glau ON, glaucomatous/optic nerve findings; Hyp Ret, hypertensive retinopathy; Misc, miscellaneous; and Pterygium, pterygium.

Conclusions

In a DR telemedicine screening program in urban clinic and pharmacy settings in the US serving predominantly ethnic/racial minority populations, one in five patients with diabetes screened positive for DR. Most had background DR, suggesting a high potential for intervention in DR's earliest phases when management can prevent vision loss. Other ocular conditions were detected in almost 50% of the patients screened, a potentially underappreciated feature of DR screening programs for preventing vision loss.