

PATIENT-REPORTED IMPACT OF DIABETIC RETINOPATHY ON QUALITY OF LIFE AND DAILY ACTIVITIES: A CROSS-SECTIONAL SURVEY

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BACKGROUND AND OBJECTIVES

- Diabetic retinopathy (DR) is a common complication of diabetes mellitus, with an estimated prevalence of 26% amongst individuals living with diabetes in the United States (US).¹
- DR and the associated complications are the leading cause of preventable visual impairment among working-age adults,² leading to vision loss and blindness if untreated.¹
- Despite the availability of effective screening and treatment options, patients face key barriers in accessing care, such as delayed diagnosis,^{3,4} fears related to vision loss or required treatments, and poor education.⁵
- There is a critical need to better understand how these and other barriers impede accessible DR care from the patient perspective,^{6,7} but evidence on the holistic burden of DR is limited.
- This cross-sectional observational study aimed to:
 - Quantify patient-reported barriers to accessing and adhering to DR care in the US.
 - Assess the impact of DR on quality of life (QoL), daily functioning, and emotional well-being.
 - Identify patient-prioritized gaps in education, support services, and care delivery strategies across the DR treatment journey.

METHODS

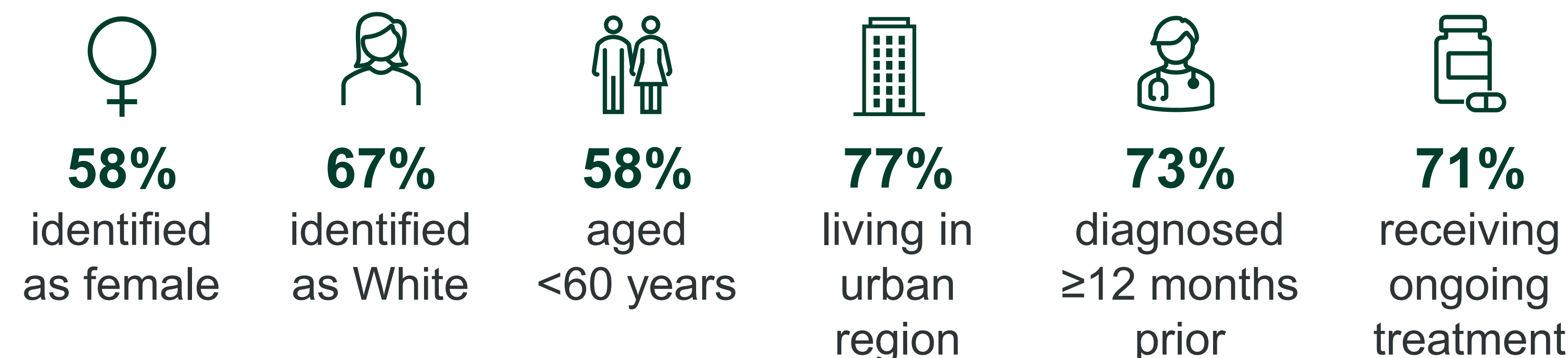
- A purposive sampling strategy was used to ensure adequate representation of adult patients.
- Eligible US patients (≥18 years old) with a clinical DR diagnosis who were comfortable answering questions related to their DR diagnosis and treatment experience completed a validated electronic survey.
- The electronic survey collected demographic information and relevant disease history, as well as patient perceptions of the following five themes of interest:
 - Accessibility of care.
 - Patient journey to treatment initiation.
 - Impact of DR on quality of life and activities of daily living.
 - Emotional burden of DR and impact on mental health.
 - Treatment adherence and identified unmet needs.
- Results were analyzed descriptively, with questions assessing patient perspectives on mental health and QoL pre- and post-diagnosis compared using the Wilcoxon Signed Rank test.

RESULTS

Patient Characteristics

- A total of 111 eligible patients with DR recruited from the third-party recruiter (n = 100) and a retinal clinic (n = 11) completed the survey. Of these, 10 were excluded due to data quality issues (e.g., straight-lining and speeding), yielding a final study population of 101 patients that is generally representative of the broader US DR population (**Figure 1**).

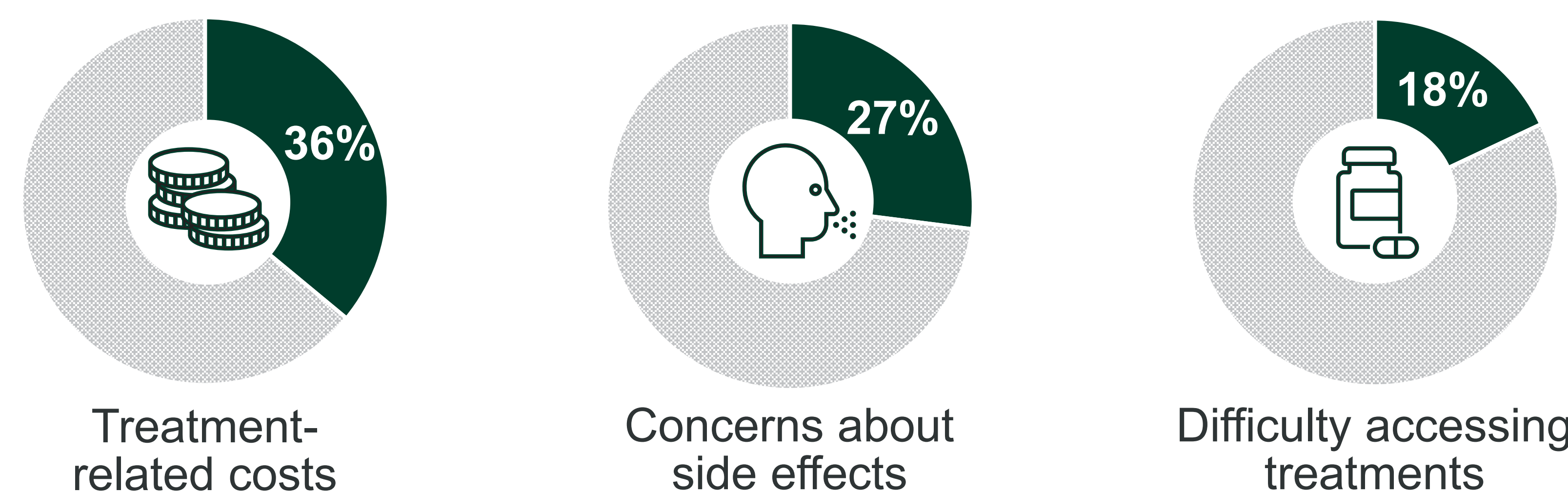
Figure 1: Key Demographics and Disease Characteristics (N = 101)



Barriers to Treatment Adherence

- Most respondents (86%) reported receiving treatment as recommended always or most of the time. Among those who did not, the most common reason was treatment-related costs (**Figure 2**).

Figure 2: Top Patient-reported Barriers to Treatment Adherence (N = 101)



CONCLUSION AND LIMITATIONS

- Overall, patients reported high treatment engagement, but experienced substantial unmet needs related to affordability, education, and psychosocial support, with nearly half of respondents reporting unmet mental health support needs. This study reveals critical areas for improving the delivery of eye care services, highlighting gaps that persist despite ongoing clinical management and the crucial need for accessible DR treatment options.
- These insights have the potential to help care delivery teams better understand the patient perspective when diagnosing, treating, and managing DR. The results shown here are limited by a small sample size, the subjective nature of self-reported data, limited long-term associations due to the cross-sectional design, and the lack of clinical severity stratification.

Unmet Needs in DR Education and Resources

Over half of respondents reported **lacking accessible educational materials at diagnosis**, particularly on **disease progression (56%), DR impact and complications (55%), and treatment options (52%)**.

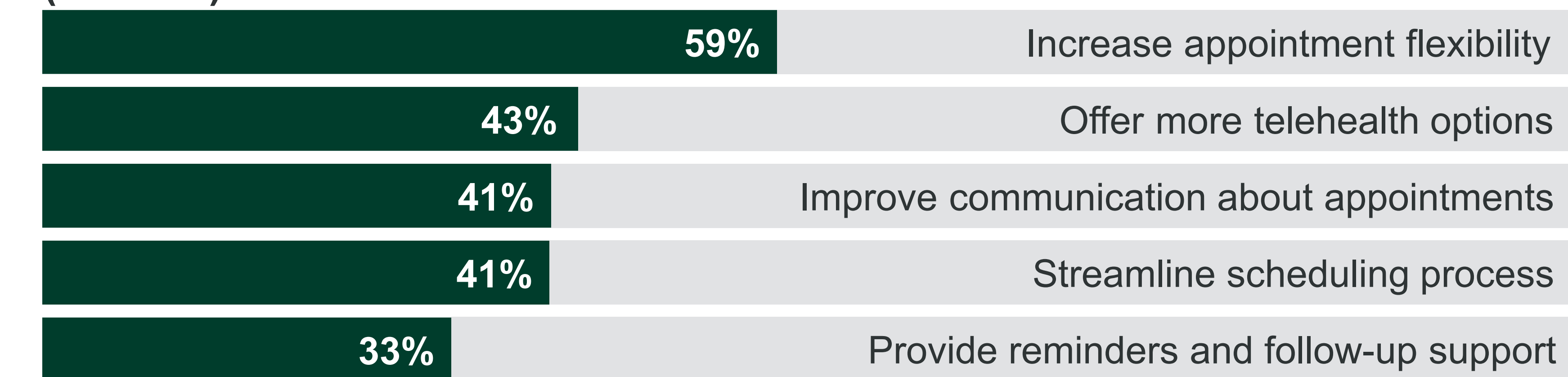
- Patients felt healthcare providers could have better explained the diagnosis in simpler terms (55%) and discussed the emotional impacts and available support (54%).

Unmet Needs in Accessibility of DR Care and Support Services

Crucial gaps identified in DR support services included practical **assistance with insurance coverage (47%)** and **mental health support (46%)**.

- Long appointment wait times (41%) and prohibitive costs (32%) were the main patient-reported barriers to accessing eye care services.
- The top preferred strategies for improved care accessibility included flexible appointments (59%) and telehealth options (43%; **Figure 3**).

Figure 3: Patients' Preferred Strategies for Improved DR Care Accessibility (N = 101)



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