

Visual Demands Audit

Identifying appropriate candidates for miotic pharmacotherapy requires more than an absence of contraindications. Because the functional benefit of these agents is inherently tied to the patient's visual tasks and the lighting conditions under which they are performed, a structured assessment of individual visual demands is essential. We propose the use of a *Visual Demands Audit (VDA)*: a brief, systematic collection of patient-reported information designed to characterize the nature, frequency, and context of a patient's near and intermediate visual requirements. Administered as part of the examination intake process, the VDA serves a dual purpose; it identifies patients most likely to derive meaningful functional benefit from miotic therapy, and establishes a personalized baseline against which treatment outcomes can be subsequently measured.

Four domains are of particular clinical relevance:

Occupational Visual Requirements. Occupational vision warrants careful characterization, as patients engaged in sustained near or intermediate tasks represent a population with consistent, predictable visual needs that miotic therapy is well-positioned to address. This includes prolonged computer use, document review, and fine precision work. Patients whose primary occupational tasks are distance-dominant (e.g., a commercial truck driver) might derive a more limited benefit, although this is very much a situation-dependent matter.

Hobbies and Recreational Activities. Hobbies and recreational activities often present visual demands that differ substantially from occupational requirements, and these may represent the primary focus of the patient's dissatisfaction with their visual function and/or current form of correction. A patient who is functionally adequate at the office but frustrated at the dinner table, on the golf course, or at the shooting range represents a substantially different prescribing opportunity. Discussing these recreational demands is sometimes more clinically relevant than occupational needs.

Digital Device Usage Patterns. Digital device usage patterns are increasingly relevant given the proliferation of near and intermediate visual tasks associated with smartphone and tablet use. Relevant considerations include the number of devices used, typical viewing distances, and daily duration of use. High-frequency device users with consistent near and intermediate demands represent a growing presbyopic subpopulation for whom miotic therapy may offer particularly meaningful functional benefit.

Ambient Lighting Conditions. Ambient lighting conditions deserve explicit inquiry. Because miotic agents function inherently through pupillary constriction, their relative benefit is most pronounced under photopic conditions and may be more attenuated in mesopic or scotopic environments. Patients who spend a significant amount of their time in low-light settings (e.g., an optometrist) should be counseled about this limitation, and this should also be a strong consideration in the final prescribing decision and any expectation-setting conversations.

A comprehensive patient intake form is presented for consideration in **Figure #1**.

Figure #1: Visual Demands Audit Patient Intake Form

Visual Demands Audit (VDA)

Patient Intake Form | Please complete prior to your examination

Patient Name _____ Date of Birth _____ Today's Date _____

This brief questionnaire helps your doctor understand how you use your vision throughout the day. There are no right or wrong answers. Please select all responses that apply.

Section 1: Occupational Visual Requirements

1. What best describes your current occupational status?
 Employed full-time Employed part-time Self-employed Retired Not currently employed

2. Which of the following best describes your primary work tasks? (Select all that apply)
 Computer or screen work Reading or reviewing documents Fine or precision work (e.g., assembly, needlework)
 Distance-dominant tasks (e.g., driving, operating machinery) Mixed near and distance tasks Not applicable / retired

3. How many hours per day do you typically spend on near or intermediate tasks at work?
 Less than 1 hour 1 to 3 hours 3 to 6 hours More than 6 hours Not applicable

Section 2: Hobbies and Recreational Activities

4. Which of the following hobbies or recreational activities do you participate in regularly? (Select all that apply)
 Reading (books, magazines, newspapers) Cooking or baking Crafts, sewing, or needlework
 Golf, tennis, or other outdoor sports Shooting sports or hunting Fishing Gardening or yard work
 Card games or board games Other: _____

5. Where does your near vision difficulty bother you most? (Select all that apply)
 At work During hobbies or recreational activities In social settings (e.g., reading a menu at a restaurant)
 At home (e.g., reading, cooking) Equally in all settings

Section 3: Digital Device Usage

6. Which digital devices do you use on a daily basis? (Select all that apply)
 Smartphone Tablet (e.g., iPad) Laptop computer Desktop computer E-reader (e.g., Kindle) Smartwatch

7. How many total hours per day do you spend on digital devices outside of work?
 Less than 1 hour 1 to 3 hours 3 to 5 hours More than 5 hours

8. Do you experience difficulty reading text on your smartphone or tablet?
 Never Occasionally Frequently Always

Section 4: Lighting Conditions

9. How would you describe your typical daytime environment?
 Primarily indoors with bright lighting Primarily indoors with dim or variable lighting Primarily outdoors
 A mix of indoor and outdoor environments

10. Do you regularly spend time in low-light environments? (Select all that apply)
 Restaurants or dining settings Theaters, concert venues, or arenas Dimly lit work environments Nighttime driving
 None of the above

VDA = Visual Demands Audit. This form is intended to supplement standard clinical evaluation, including refraction, ocular health assessment, and review of contraindications to miotic pharmacotherapy. It is not a standalone diagnostic instrument.

Where does most of your week fall?

Place an X on the scale

Near / Intermediate visual tasks

Distance visual tasks