Short report

Use of patient-reported outcome measures in everyday clinical practice in ophthalmology: results of a European multicountry survey

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ABSTRACT

Patient-reported outcome measures (PROMs) reflect patients' abilities, difficulties and perceptions, but their use in ophthalmic care in Europe is unclear. We conducted a cross-sectional electronic survey among ophthalmologists in the UK, Germany and Switzerland to assess PROM use in routine care, their perceived value and implementation barriers. Only 31% of 112 respondents reported using PROMs, mostly in cataract care, with no differences across countries or clinical settings. Strikingly, perceived usefulness did not predict adoption. Reported barriers included staff and patient burden and uncertainty about instrument choice. To promote routine use of PROMs in ophthalmology, system-level integration and support are needed.

INTRODUCTION

Structural and functional assessments do not fully capture how patients with an eye condition feel or function during everyday life.[1] This measurement gap has led to increased interest in patient-reported outcome measures (PROMs), that is, questionnaires that focus on patient-relevant aspects of their condition.[2–4] However, while PROMs are well established in clinical trial settings, their adoption into routine ophthalmic practice remains limited.[5]

Thus, we investigated the prevalence of, and barriers to, PROMs use in routine ophthalmic care across three European countries with distinct healthcare systems: the UK, Germany and Switzerland.

METHODS

A cross-sectional survey was electronically distributed to ophthalmologists in the UK, Germany and Switzerland via the mailing lists of their respective national professional organisations. The survey was active from January to August 2025, with invitations sent two times to maximise participation.

The electronic survey consisted of 2–8 questions (contingent on the user's responses) and included structured questions on PROM adoption, purpose of collection, barriers to implementation and enablers for wider use (see online supplemental material 1 for full set of questions).

Descriptive statistics summarised survey responses. PROM use across countries and clinical settings was examined using Fisher's exact test based on pairwise comparisons. Logistic regression models were used to explore associations between PROM use and clinical setting (private practice, public hospital or university hospital), as well as pooled settings (hospital-based vs private). The Wilcoxon rank-sum test was used to investigate relationships between perceived usefulness and PROM adoption. Statistical analyses were performed using R V.4.3.1 (R Foundation for Statistical Computing, Vienna, Austria).

Ethical approval was not required for this study in accordance with national and institutional requirements (City, St. George's, University of London #2324–2500; University Hospital Bonn #2025–60-BO; University Hospital Basel Req-2025–00067). All participants provided informed consent. The study adhered to the principles of the Declaration of Helsinki.

RESULTS

A total of 112 clinicians completed the survey (table 1; N_{UK}=77, $N_{Germany}$=22, $N_{Switzerland}$=13). 35 participants (31.2%) reported using PROMs at least sometimes ('users'), while 76 (67.9%) reported rarely or never using them ('non-users'). PROM use did not differ significantly between countries (Germany 40.9%, UK 28.9% and Switzerland 30.8%; p≥0.307).

Across all countries, PROM use did not significantly differ by clinical setting (ie, university hospitals vs public hospitals vs private practices; P=0.266). PROMs were administered as frequently electronically (37.1%) as on paper (37.1%). PROMs used were typically disease specific (74.3%) and were most often applied to cataract patients (62.9%) (see figure 1). Commonly reported purposes for PROM use included assessing successful surgical outcomes (77.1%), benchmarking/registry submissions (37.1%) and clinical research (37.1%). Shared decision-making (25.7%) and treatment monitoring (22.9%) were less frequently cited (see online supplemental material 2).

Both users and non-users typically regarded PROMs as 'useful' (mean±SD: 2.6±0.9 vs 2.5±0.7 on a four-point Likert scale, where scores≥2 indicate a positive usefulness evaluation). Perceived usefulness did not significantly differ between users and non-users (p=0.351).

Among non-users, staff burden (61.8%), patient burden (28.9%) and uncertainty about which

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Table 1 Sample characteristics and PROM use across all three countries

	Overall
Survey participants (n (%))	
Users	35 (31.5%)
Non-users	76 (68.5%)
Discontinued users	0 (0%)
Perceived/expected PROMs utility (mean score±SD)	
Users	2.6±0.9
Non-users	2.5±0.7
PROM users characteristics (n (% of users))	
Administration	
Digitally	13 (37.1%)
Paper based	13 (37.1%)
Both	9 (25.7%)
Types of PROMs used (n (% of users))*	
Disease-specific PROMs	26 (74.3%)
General measures of VrQoL	17 (48.6%)
Measures of general health	7 (20.0%)
I do not know	1 (2.9%)
Others	3 (8.6%)

AMD, age-related macular degeneration; DRP, diabetic retinopathy ; PROMs, patient-reported outcome measures; VrQoL, vision-related quality of life.

PROMs to use (25.0%) were the main barriers to PROM use. Likely potential enablers cited by non-users included the evidence of effectiveness (n=55), support in implementation (n=49) and patient demand (n=31).

DISCUSSION

Our study reviewed the current use of PROMs in the UK, Germany and Switzerland. Although clinicians typically perceive PROMs as useful, the majority (69%) did not routinely use them. The primary barrier identified was staff burden, which highlights the need to better integrate PROMs into the existing clinical pathways and electronic health records. Importantly, the perceived or expected usefulness of PROMs did not predict adoption, which indicates that implementation challenges, rather than perceived utility, primarily limit their use.

When successfully implemented, PROMs can provide insights into the quality of life that traditional biomedical measures do not fully reflect.[2] At the same time, PROMs have associated costs and barriers, as supported by our findings. Clinicians often view PROMs as lengthy, burdensome or difficult to integrate into high-volume ophthalmic workflows[3]: solutions could include shorter PROMs or computer-adaptive testing methods, and tools supported by artificial intelligence or large language models to streamline administration and interpretation.[6] Interestingly, PROMs are more widely used clinically in some other medical domains, such as oncology or surgery, although the degree of integration varies by specialty.[7 8] Orthopaedic surgery, in particular, stands out as the field with the most comprehensive and systematic use of PROMs, supported by national registries and outcome benchmarking.[7] With adoption rates in orthopaedics exceeding 45% and reaching even 90% in some integrated systems, ophthalmology remains notably behind this and several other surgical fields, both in routine care and in clinical trials.[3 4 9 10] Recent analyses have shown that PROMs are included in only a minority of ophthalmology clinical trials, and their use as primary outcomes is uncommon.[4] Furthermore, PROM instruments in ophthalmology show considerable heterogeneity, with limited standardisation and infrequent reporting of minimal important differences,[5] indicating less maturity of PROM implementation compared with other fields. This lack may partly reflect the reliance on objective functional measures, such as visual acuity, which may have reduced the perceived need for PROMs within ophthalmology.[11]

Our findings align with prior reports demonstrating that PROM use in ophthalmology remains skewed towards outcome measurement and registry-driven benchmarking, with limited adoption for direct patient-centred care.[4] Likewise, the fact that PROMs were reported to be used most frequently in cataract patients is consistent with the literature,[10] as were the concerns expressed by non-users regarding staff burden, cost and lack of implementation support.[3 11] The lack of association between perceived usefulness and use suggests that increasing awareness or offering education alone is insufficient; systemic

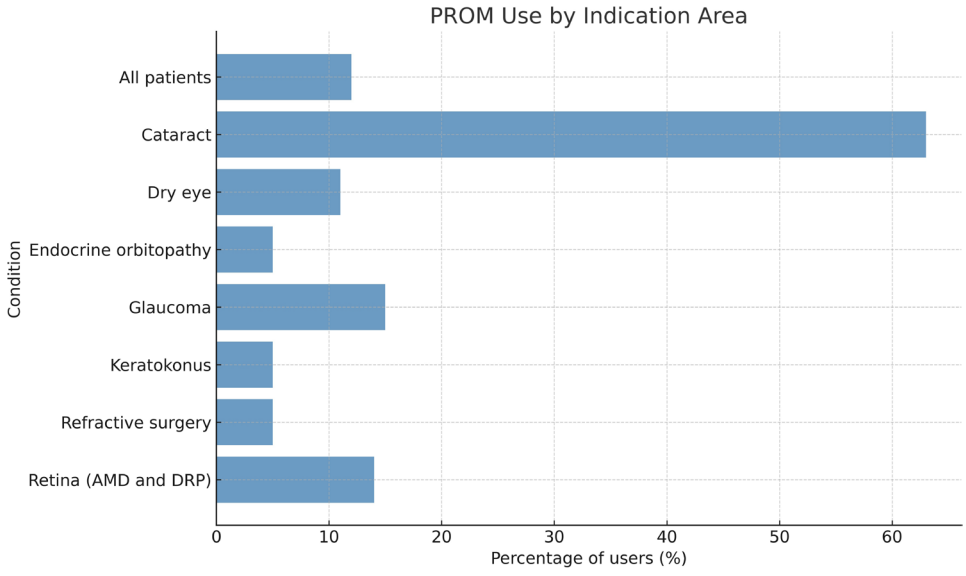

Figure 1 Frequencies of reported PROM utilisation in different indication areas among PROM users. PROM, patient-reported outcome measure.

and institutional support, along with the evidence of benefit, may be more effective to promote PROM adoption. Integrating PROMs into the existing electronic medical record systems may reduce administrative workload and promote broader use. Similarly, emerging approaches, such as manufacturer-hosted platforms, demonstrate how embedding PROMs into the existing digital tools could streamline data capture and encourage their routine incorporation into clinical workflows. At the health system level, the integration of PROMs into reimbursement mechanisms could substantially enhance their adoption in ophthalmology; however, empirical pilot initiatives remain scarce.

Limitations of the present study include the voluntary nature of participation, which likely resulted in self-selection bias. Ophthalmologists with an existing interest in PROMs or prior experience using them may have been more inclined to respond, potentially overestimating the true prevalence of PROM use. Furthermore, the sample size was modest and disproportionately represented the UK, limiting generalisability and statistical power. Future research should include longitudinal studies, cross-specialty comparisons and evaluation of institutional support, financial incentives and patient demand to enhance PROM integration in routine ophthalmology.

CONCLUSIONS

- Ophthalmologists generally perceive PROMs as beneficial, yet uptake in routine care remains limited (32%).
- Perceived usefulness of PROMs does not predict PROM use; instead, obstacles, such as staffing and infrastructure, appear to limit usage.
- PROMs are mainly applied for treatment-outcome measurement (77% of users) and benchmarking (37% of users) rather than for patient-centred purposes like shared decision-making (26% of users).
- Addressing system-level barriers is critical to enable the broader integration of PROMs into ophthalmic practice.

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