

Online Supplement: Major opportunities and considerations for core outcome set (COS) development for ophthalmology

Types of Opportunities/Considerations	Opportunities/Considerations
Major opportunities that COS development presents	<ul style="list-style-type: none"> • Engagement of all stakeholders (patients, ophthalmologists, optometrists, researchers, funders, regulators, industry partners, journal editors, guideline developers) to participate in COS development • Opportunities for collaboration, exchange of ideas, and co-learning • Streamline the design of pivotal RCTs to bring new products to market • Opportunities for funders to participate in COS development, thereby influencing what outcomes are measured in the research they fund
Methodologic considerations	<ul style="list-style-type: none"> • Consider the five elements of each outcome: domain, specific measurement, specific metric, method of aggregation, and time-points • Consider what each outcome intends to measure: improvement in health, disease progression, or avoidance of disease progression
Practical considerations	<ul style="list-style-type: none"> • Disease severity and disease subtypes • Preferred measurement instruments and technologies could change over time • Feasibility of measuring each outcome in busy clinics • COSs should include patient-important outcomes
Disease-specific considerations AMD	<ul style="list-style-type: none"> • Urgent need for COS for geographic AMD
Refractive error in children	<ul style="list-style-type: none"> • Quality differs among PRO instruments for refractive error, specifically in terms of rigor of design and analysis. • Age of the patient can add challenges to assessing outcomes.
Dry eye	<ul style="list-style-type: none"> • Only a limited correlation between symptoms and clinical signs • COS developers will need to consider whether separate COSs are needed for each underlying disease or for groups of diseases