

# Optimizing Medical Software for Value-Based Care: Transforming Data Input for Outcome Measurement in Age-Related Macular Degeneration

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## INTRODUCTION

The efficient tracking and analysis of clinical outcomes are **critical for optimizing patient care in ophthalmic clinics**, especially for conditions like age-related macular degeneration (AMD). **This study examines** the impact of transforming data input methods for key ophthalmic indicators in medical software to enhance outcome measurement and reporting.

## METHODOLOGY

The project aimed to optimize **ophthalmic software by modifying data input procedures for visual acuity and central retinal thickness**. These indicators were no longer recorded as free text but entered as numerical values. **This change enabled detailed patient-level reporting**. Additionally, discussions were held on implementing a module for tracking patients with AMD and DME, allowing historical analysis of these indicators.

## RESULTS

The implementation of the new data input methods **significantly improved the ability** to generate detailed and dynamic patient reports. By entering visual acuity and retinal thickness as numerical values, the software **could follow up and reflect changes over time for individual patients**. This shift enabled the creation of comprehensive historical records, illustrating the progression of these health indicators. The introduction of the new module for AMD and DME patients further enhanced the system's capability **to provide** valuable insights into treatment efficacy and patient outcomes.



## CONCLUSION

**Modifying the data input methods in ophthalmic software** to use numerical values for key health indicators markedly improves the quality of outcome measurement and reporting. **This change not only streamlines data entry processes but also enhances the ability to track and analyze patient progress over time**. The adoption of a specialized module demonstrates the potential for such software optimizations to support better clinical decision-making and patient care.

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