The 2017 New Technology & EHR Survey provides descriptive statistics on the use of technology and EHR systems by optometrists in 2017. The intent of the survey is to gather key information about the clinical use of technology, practice management use of technology, meaningful use of electronic health record systems (EHR), and blue light technology by practicing optometrists in 2017. Equipment usage and usage of a complete EHR system utilized by optometrists is compared to utilization reported in previous surveys conducted between 2003 and 2016. Meaningful use of EHR is compared to data reported on the 2010 EHR Survey and the 2011-2016 New Technology & EHR Surveys. For questions about this or other surveys conducted by the AOA, please contact the Research & Information Center at ric@aoa.org.

COMPLETE ELECTRONIC HEALTH RECORD SYSTEMS UTILIZED IN PRIMARY

Seventy-two percent of responding optometrists have adopted a complete EHR in their primary practice, a 4.3% increase from 2016. AOA-member optometrists are significantly more likely to use a complete EHR in their practice (75%) as compared to non-members (65%). In terms of employment situation, more non-solo-owners (85%) and non-owners (84%) report EHR use than solo owners (61%).

72% use a complete EHR system

- 85% Non-Solo Owners
- 84% Non-Owners
- 61% Solo Owners
- 75% AOA ODs
- 65% Non-AOA ODs

RESPONDENT DEMOGRAPHICS

Seventy-eight percent of respondents were practicing in major metropolitan areas, 12% were practicing in micropolitan areas (population more than 10,000 but less than 50,000) and 10% were practicing in rural areas. The majority (30%) of respondents were located in the South, 27% in the Midwest, 25% in the West and 18% in the Northeast. Seventy-four percent of respondents were male; 26% were female.

Eighty-one percent of respondents were in private practice, 11% were in corporate, and eight percent were either with a non-OD healthcare provider or other practice type. Of those in private practice, Ninety-one were owners. Forty-two percent of those in corporate practice were non-owners.

Optometrists who have been in practice for more than 31 years accounted for 61% of respondents. Fifteen percent have been in practice for 21 to 30 years, 13% have been in practice for 11 to 20 years, and 11% have been in practice for less than ten years. The average age of respondents was 56 years and the average number of years in practice was 31 years.
Of the respondents who report using a complete EHR system, 24% report using OfficeMate, followed by RevolutionEHR (17%) and CompuLink (13%). Eighty-three percent of responding EHR users report initially implementing their EHR system in their primary practice in 2014 or earlier. Eighty-four percent of respondents are using the same EHR system originally purchased for implementation. Of optometrists who have the same system that was initially implemented, 85% report overall satisfaction with their system. Twenty-three percent report replacing their initial EHR system; of these, 50% report overall satisfaction with their new EHR.

Current EHR users were also asked to report on the benefits of their implemented systems. Sixty-seven percent of responding optometrists selected “access patient chart remotely”, “identified needed tests” (52%) and “increased productivity” (34%) as benefits they personally experience with EHR use.

Electronic prescriptions were provided by 55% of optometrists in 2017. EHR users remain significantly more likely than non-EHR users to electronically prescribe medications and report electronically prescribing 61% of total medication prescriptions in the last year. Although the majority of optometrists (66%) continue to provide handwritten medication prescriptions, the percentage of total medication prescriptions handwritten by optometrists has decreased to 29%. Non-EHR users report electronically prescribing ten percent of total prescriptions provided to patients in 2017.

![Figure 1: Percentage of Total Medication Prescriptions Provided to Patients by System Used in Practice, 2017](image-url)
A majority of responding optometrists (91%) report current use of an automated perimeter in their primary practice. At least half of responding optometrists also currently utilize an auto refactor/autokeratometer (89%), fundus photography (81%), pachymeters (71%), optical coherence tomography (OCT) (61%), anterior segment imaging (53%) and corneal topography unit or Orbscan (50%). GDx (5%) and vascular imaging to test for blockage/flow (3%) remain the least utilized equipment.

In addition to indicating which listed equipment the optometry practice plans to acquire, respondents were asked to list any additional equipment they plan to purchase or lease in 2017. The most frequently reported equipment planned for purchase or lease in 2017 are lipiflow (16%), slit lamps (6%) and autolensometer (3%).

The majority of optometrists (47%) plan to spend less than $10,000 on clinical equipment in 2017. Forty-one percent plan to spend between $10,000 and $49,999; 12% plan to spend more than $50,000.

Clinical equipment purchases have also shown some impact on practice profitability. Seventy-one percent of optometrists feel that their clinical equipment purchases have increased profitability over the past three years; among EHR users, this number is even higher at 77%.

Optometrists were asked about how they are addressing the concerns regarding the effect of blue light technology on the visual system. Seventy-six percent of responding optometrists indicated that they discuss the impact of blue light technologies with their patients. Over fifty percent of optometrists reported concerns about the impact of blue light on existing eye conditions (71%), computer vision syndrome (70%) and sleep disruption (52%).
MEANINGFUL USE IN 2017

The 2017 New Technology and EHR Survey collected data from EHR respondents on their intent to achieve meaningful use (MU) in 2017. Responding optometrists were presented with a list of the 2017 CMS Meaningful Use objectives and measures. They were then asked to indicate whether they would attest for use of the measure or report an alternate exclusion. Of these, 96% report attesting to use of their EHR system to meet Objective 1 (“Protect Patient Health Information”), followed by 88% reporting attesting to Objective 2: Measure 1 (“Clinical Decision Support: Interventions”). Objective 10 (“Public Health Reporting) Measures 2 (“Syndromic Surveillance Reporting”) and 1 (“Immunization Registry Reporting”) are the highest reported exclusions among responding optometrists at 82% and 79%, respectively.

Meaningful Use Objectives & Measures Reporting:
Attestation and Exclusions

96% Attest to Objective 1
“Protect Patient Health Information”

88% Attest to Objective 2: Measure 1
“Clinical Decision Support: Interventions”

82% Report an Exclusion for Objective 10 | Measure 2
“Public Health Reporting: Syndromic Surveillance Reporting”

79% Report an Exclusion for Objective 10 | Measure 1
“Public Health Reporting: Immunization Registry Reporting”

41%
Engage with the AOA MORE Registry for submission of clinical quality measures and MIPS in 2017