Accredited Continuing Education Program Information

# Using electronic health records (EHR) data: Data readiness and FAIR principles

## Course Organizers

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## Course Description

The learning health system requires researchers to interpret high-dimensional heterogeneous medical data while also making efficient and accurate decisions regarding diagnosis and treatment. Widespread adoption of electronic health records (EHRs) has resulted in the collection of massive amounts of clinical data, however, EHR data has not yet achieved data readiness (data that are high quality, available, interoperable, and have clearly defined provenance).

Attend this course if you are interested in the secondary use of electronic health record (EHR) data for research. Instructors will present a framework for FAIR Data Principles (Findable, Accessible, Interoperable, and Reusable), and participants will gain valuable insights regarding data standards and common data models, including the Observational Medical Outcomes Partnership (OMOP) CDM and the importance in research use of health care data.

## Physician Accreditation Statement

The Association for Research in Vision and Ophthalmology (ARVO) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

## Physician Credit Designation

ARVO designates this live activity for 3.75 *AMA PRA Category 1 Credits™.* Physicians should claim only the credit commensurate with the extent of their participation in the activity.

International Attendees: The American Medical Association (AMA) has determined that physicians not licensed in the U.S. who participate in CME activities are eligible for *AMA PRA Category 1 Credits™.*

## Statement of Need

Widespread adoption of EHRs has resulted in the collection of massive amounts of clinical data. In ophthalmology in particular, the volume of data captured in EHR systems has been growing rapidly. Yet effective secondary use of this EHR data in AI research for improving patient care and facilitating clinical decision-making has remained challenging due to the complexity and heterogeneity of these data. EHR data has not yet achieved data readiness—data that are high quality, available, interoperable, and have clearly defined provenance, nor is it easily shared according to FAIR principles: findable, accessible, interoperable, and reproducible.

## Target Audience

This course is aimed at those that are interested in the secondary use of electronic health record (EHR) data for research and towards researchers who want to use EHR data for Artificial Intelligence (AI) research or other observational models. It will explore EHR data readiness for reuse as well as ways to improve EHR data readiness. It will also inform researchers about how they can comply with FAIR data sharing requirements for their EHR. The focus will be on AI research in ophthalmology, but concepts apply across medical specialties as well as for other studies using observational data in the EHR.

## Educational Objectives

After participating in this CME activity, participants should be able to:

* Assess challenges and opportunities in using EHR data
* Cite methods for evaluating data readiness
* Describe how FAIR principles apply to EHR data

## European Union of Medical Specialists (UEMS) CME/CPD Requirements

European physicians can convert CME credit from the course to meet European Union of Medical Specialists (UEMS) CME/CPD requirements.

The American Medical Association has an agreement of mutual recognition of CME credits with the UEMS, the accreditation body for European countries. Physicians interested in converting *AMA PRA Category 1 Credit™* to UEMS-European Accreditation Council for Continuing Medical Education CME credits (ECMECs) should contact the UEMS at mutualrecognition@uems.eu.

## CME Credits and Certificates Fee

Learners who register for “CME Credits and Certificates” as part of their Annual Meeting registration are eligible to claim *AMA PRA Category 1 Credit™* for participating in this course. This fee is paid once and covers credit claiming for an Education Course and the Annual Meeting.

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| **CME credits and certificate fee** | **By March 15** | **After March 15** |
| ARVO MIT/Nonmember-in-Training | $ 79 | $ 79 |
| ARVO Member/Exhibitor (paid full-meeting access badge)  | $ 99 | $ 119 |
| Nonmember/Exhibitor (complimentary full meeting access badge only) | $ 99 | $ 119 |

## Instructions to receive credit and/or certificates

Learners interested in claiming *AMA PRA Category 1 Credits™* or obtain a Certificate of Participation for participating in the course must pay the CME credits and Certificates fee as part of their Annual Meeting Registration. Payment is collected during the Annual Meeting registration process by adding “CME credits and Certificates” as a session. Attendees who do not register for CME before the conclusion of the meeting will not be able to claim and request credit. Learners registered as guests are not eligible to receive CME credit.

Credits and certificates are awarded within our ARVOLearn platform. CME registrants will receive an email with instructions prior to the start of the course or within two business days of your purchase (whichever is later). All requests for credit must be submitted no later than 11:59pm U.S. Eastern Time on Friday, Aug. 30, 2023.

## Certificate of Participation

ARVO is accredited to offer *AMA PRA Category 1 Credits™* to physicians. All other participants in the course may receive a Certificate of Participation that documents the number of CME hours attended\* by following the same instructions listed above and paying the CME credits and certificates fee.

\*Some accrediting agencies may award equivalent Continuing Education (CE) credit when presented with a Certificate of Participation from an activity that offered *AMA PRA Category 1 Credit™.* Check with your accrediting agency for information.

## Certificate of Attendance

Certificates of attendance are available free to all attendees. These certificates state that one has attended the course; but does not offer credit tracking. They will be available for pick-up onsite at the meeting registration desk and ARVO Central in the exhibit hall.

## Contact Us

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Participants have an implied responsibility to use the newly acquired information to enhance patient outcomes and their own professional development. The information presented in this course is not meant to serve as a guideline for patient management. Any procedures, medications, or other courses of diagnosis or treatment discussed in this activity should not be used by clinicians without evaluation of patient conditions and possible contraindications on dangers in use, review of any applicable manufacturer’s product information, and comparison with recommendations of other authorities.

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**Disclosures for all individuals involved in planning and managing this accredited CE activity are listed here with their relevant disclosure information. Disclosure information for presenters and course moderators will be provided within a disclosure slide(s), prior to the start of the course and their respective presentations.**

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*The following course organizers and activity managers reported no relevant financial relationships.*Kerry Goetz, MS, (course organizer), Michelle Hribar, PhD, MS, (course organizer), Cathy Conley (Activity Manager),

*The following clinical content reviewers reported no relevant financial relationships.*Lindsay Scott, PT, DPT, ATC

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| **Full name** | **Role** | **Disclosure**  |
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| Azza El-Remessy, PhD, PharmD, BC-ADM | PDEC | Nour Therapeutics, LLC: (O) |
| William Foster, MD, PhD, FRCSC | PDEC | Altasciences (C); Lynthera (C); US Patent 9,050,171-Small diameter fragmatome for minimally traumatic retained lens fragments removal (P) |
| Edmund Tsui, MD | PDEC | Kowa Company Ltd (C, F); Cylite Pty Ltd (F); EyePoint Pharmaceuticals (C) |
| Thomas Ach, MD, FEBO | CME | Apellis Pharmaceutical: (R); Roche: (R); Novartis: (R, F); Bayer: (R); Heidelberg Engineering: (R); MacRegen Inc.: (I) |
| Ron Adelman, MD, MPH, MBA | CME | Tesseract: (C); Johnson & Johnson/Jenssen: (C) |
| Natasha Kolomeyer, MD | CME | AbbVie/Allergan: (F, C); Guardion Health Services Inc.: (F); Equinox: (F); Nicox: (F); Olleyes: (F); Santen: (F); Glaukos: (F); Diopsys: (F); Aerie: (F); |
| Louis Pasquale, MD | CME | Eyenovia: (C); Twenty Twenty: (C); Skye Biosciences: (C) |
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