

Integrating retinal images to the electronic health records and training photographers in the retinal practice

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Purpose: An important issue in today's retinal practice is image archiving and digital data transferring from diagnostic devices to the existing electronic database. Thus, the retinal specialist will be able to access all information from his computer in the consultation room. The image integration into the electronic health record will improve the efficiency in our retina practice.

Methods: The retinal images will be taken by photographers, uploaded and then transmitted to the retinal specialist in an electronic format using specific software. The electronic health record will be connected to the imaging systems (fundus camera, computer perimeter, OCT and others). Thus, multiple images and modalities will be integrated into a single patient record. The comparison of images from the same eye at different time points will allow the evaluation of treatment response, which is especially useful in the treatment of AMD and macular edema.

Results: With this system the practice can benefit from faster and easier access to all images and image analysis tools, which will help the staff work more efficiently. Currently in Bulgaria there are few if any trained retinal photographers. Training such specialist will take significant time, efforts and costs. Performing the retinal images by photographers will save time for both the retinal specialists and the patients. The digital workflow will allow retina consultants to see more patients each day and quickly access all of a patient's images from a single view.