Title of Project: Implementation of Electronic Medical Records for 'paperless' ophthalmic practice

Electronic medical records (EMRs) are the digital equivalent of paper records, or charts at a clinician’s office. EMRs typically contain general information such as treatment and medical history about a patient as it is collected by the individual medical practice. We have been developing and constantly improving a computer program (healthcare information system – HIS) for ophthalmological practices. Ophthalmology practice is specific as there is usually a lot of diagnostic and imaging data transfer.

The EMR for ophthalmological practices provides:

- Improved efficiency: EMRs allow for quicker documentation. For example, an electronic refractometry or biometry data can be performed and uploaded to a record in real-time, and a specialist can pull it up and advise within minutes. This leads to improved patient care outcomes as delays are shortened. It acts as an Picture Archiving and Communication System (PACS).
- Standardization: EMRs promote standard record-keeping to include staff and physician notes, assessment findings, and ordering processes. Standardization also allows to perform statistical analysis within the EMR data.
- Improved accessibility: EMRs allow members of the healthcare team to access pertinent parts of the medical record simultaneously. Also, records can effortlessly be retrieved- sometimes between different healthcare organizations.
- Reduction of errors: data transfer to and from diagnostic and treatment devices are performed electronically so there is less probability of input error.
- Improved privacy and security for patients: There is no need for physical manipulation of the records. Paper charts sent to chartrooms or outside a facility is more at risk of a privacy breach. EMRs have safeguards in place to prevent violations. Access to certain parts of the medical record is given only
to the appropriate employees. HIS is in accordance with European General Data Protection Regulation.