ELECTRONIC MEDICAL RECORDS SYSTEMS — COA MEMBERS DISCUSS

California Optometry asked a few COA members who had recently installed an Electronic Medical Records (EMR) system into their practice to talk about their experience.

Dr. Loren Azevedo (left) works with a staff member inputting data into their EMR system.

Special Report

Dr. Loren Azevedo
Humboldt-Del Norte Optometric Society
A to Z Eyecare converted to EMR in 2003 using MaximEyes from First Insight. We have found that it is critical to have a talented local computer technician. We recommend interviewing and hiring the best of the technical talent in your area. It is important to have enough work stations.

It is always tempting to cut costs, but you get what you pay for just like you do with quality eye care. Before choosing a software company, look at their track record, the quality of their staff and CEO. Ethics and integrity are essential. The support at First Insight has been fantastic and the entire staff is accessible, from the president to the customer service representatives. We have found it to be a great long-term partnership.

EMR is an opportunity to change charting and revolutionize efficiency since there are many customizations available. We recommend a full conversion by carefully transferring important info from each paper chart and then tagging and storing it away for seven years. Then you can enjoy the benefits of accessing the complete chart any time from any location in the office. You will be able to update the chart quickly through quick copying and making changes.

Yes, it is a huge task. However, the benefits are exponential. In our case, in the fall of 2006 we decreased from five doctors down to two doctors, yet we continued to grow! The fully integrated EMR was the key to efficiency and our success.

Dr. Edward Revelli, Associate Dean of Clinical Affairs at UC Berkeley School of Optometry
Alameda Contra Costa Counties Optometric Society
Our first Compulink EMR (Jan 1996) included exam summary information, diagnostic codes, and prescription releases along with practice management features such as scheduling, recall, patient ledger, and material orders. This solution proved successful for more than 10 years. Having a solid practice management system already in place, we decided to move to Paperless EMR in 2007, incorporating exam screens to record what was previously done on paper.

Our Paperless EMR goals were to provide a standard recording methodology for all doctors and students, an easy-to-read medical record, and a consistent place to find patient exam data. We decided against using the "standard" Compulink screens and customized the EMR to match our exam flow. Although screen creation requires technical expertise and time to develop, we felt customization was necessary to address all of our clinical needs. We moved away from having too many fields on too many screens, modifying ours to hold standard exam information for the typical patient encounter. Additional specialty screens were developed to accommodate more specific data and could be added to our standard exam record as needed.

Preparing the doctors, staff and students was another key to our success. Training materials were created, and hands-on practice sessions were held for all groups several weeks in advance of implementation.

There were many technology and process bumps along the way. One major question was how to make data from the former paper record available. We chose to scan the records as the patients returned to our clinic, as opposed to scanning all existing files at once. Although it may take years to completely eliminate the paper exam record, it was a more favorable solution than attempting to scan over 180,000 files at once.

On looking back, we realized moving to Paperless EMR was one of the most expensive clinic upgrades that did not directly result in an immediate return for our patient experience, revenue or teaching. The long term benefits, however, are many. We now have one digital record, available on any computer in our clinic. Doctors can find patient data from visit to visit in the same-known screen location, all in a very readable format. Staff members can look up exam assessments and plans, diagnostic codes and prescription releases to serve patients more efficiently. Files are no longer being chased around the clinic, where it was last seen on someone else's desk. Overall, we are very happy to have worked through the development and deployment challenges, and now have a solid system meeting our goals.

Dr. David Rosenblum
Rio Hondo Optometric Society

Our office made the transition to electronic medical records (EMR) two years ago. The decision process was many months in the making as we were closely evaluating the top four leading optometric software providers. Interestingly, each system seems to have its strengths and weaknesses, while no one system gives you everything. Ultimately, however, we chose to work with Officemate/ Examwriter.

Staff training was the initial step. The most difficult adaptation process staff and doctors must both endure is chartless patient flow. Charts and records are the blood flow of the office. We like to hold and carry charts — we jot things down in charts, we put charts in trays, stack them on the doctor's desk, and place them in the "to be billed," or "to be filed" areas. What about the "to be called" charts and "over 90 days" charts...how can we possibly practice without them?

Initial setup of EMR's takes some time. Customizing exam templates allows the office to create a format most conducive to its style. Our system utilizes drop-down selections for almost all data recording. This works well for my father, practicing over 45 years, who doesn't like to type — he simply points and clicks. The front desk sets up the chart by entering all patient information and scanning the old records. The doctor can access these scans by simply clicking on a box at the bottom of the screen. Some practices bring in data entry personnel or employ outside sources for data entry. We did try this initially, but found too many mistakes and lack of concern. We made the decision to scan as we go. This has certainly taken a longer time, but no extra help need be hired and mistakes are rare.

After weeks of trying different ways to coordinate patient flow, we decided the easiest and "greenest" method was to print a single sheet of paper for each patient to flow with them throughout the office. This paper is either their insurance information (VSP form, MES plan, etc.) or a basic information sheet. This allows office staff to pass a patient to one-another by physically handing over a sheet of paper with the patient's name on it. This sheet is also placed on the door outside the exam room while waiting for the doctor. The doctor needs to know who's in the chair before he enters the room. This sheet serves that purpose.

The pre-tester enters old Rx, reason for visit, complaints, history (both systemic and ocular) auto-refraction, tonometry, PD, color screening, etc. The patient is then seated in the examining room where we present him/her with a video from Eyemaginations. This computer generated 3-D video plays on the same flat screen utilized by the doctor for charting. Our video educates the patients on UV protection, dry eyes and computer vision syndrome.

My father and myself both found using EMRs awkward at first, taking a little extra time to locate the correct box to click, but, like anything, practice makes the task much easier and quicker. The doctor need only point and click his/her way through the exam, click on procedures performed, then finalize the chart by closing it. We can draw pictures, access old photos, show retinal photos to the patient, and play brief 3-D animations on any ocular condition. Patients experience the "wow" factor and appreciate technology.

After examination, the patient is walked out to the optical showroom and his/her "sheet" is passed to an optician who opens the particular chart at one of many computer work stations in the optical. Everything the optician needs is in the computer: Rx's, alternate Rx's, contact lens Rx's, PD's, and vision plan information.

All in all, the transition to electronic medical records was neither quick nor easy, but overwhelmingly positive. The adjustment takes months and the changeover process can take years as patients' charts are regularly scanned. The result is fantastic. No more filing. No more storage of records. No more lost charts. Clear legible documentation and no more misfiling. All patient information is instantly accessible.

If I can give any advice at all to those EMR rookies it is to backup, backup, and backup your data again. It's probably wise to do a data loss drill to test your backup. I did the drill, and failed. My IT guy wasn't allowed to leave until he fixed the backup and passed the data loss drill. Lose your data, and the repercussions could be devastating. We could never go back to paper charts; they just don't make sense anymore.