

TOP 10 OPTOMETRY SMARTPHONE APPS



Download these apps to improve your practice and your patients' experience.

BY JOSHUA DAVIDSON, OD, FAAO, FSLS

ccording to a 2017 study by Asurion, a global tech company, Americans check their phone on average once every 12 minutes, swiping and tapping away approximately 80 times each day. In fact, one in 10 people checks his or her phone at least once every 4 minutes.

It's undeniable, the effect that these modern miracles have had on both the personal and professional realms of our everyday lives. Today, an incredible variety of eye care apps have been created to provide practitioners and patients alike with a wealth of information on demand. The sheer number of apps designed and marketed to eye care practitioners can be overwhelming. Here, I offer a closer

look at 10 of my favorite apps that I use regularly in clinical practice.



EYE HANDBOOK (CLOUD NINE DEVELOPMENT)

This is my gold standard and the one most

frequently used on my phone, and I encourage each member of my staff to use it. Eye Handbook is an incredibly comprehensive diagnostic and treatment reference. It includes a wide variety of handheld testing capabilities from color vision to a fluorescein light to pediatric fixation targets. In addition, this app contains 12 calculators for purposes ranging from diopter-to-radius conversions, to amplitude of accommodation, to vertex conversions, not to mention

videos, forum features, and ICD-10 billing and coding assistance.



EYEDOCK (HEALTH INNOVATION **TECHNOLOGIES)**

Although a membership is needed to use this app, most ODs will find it worth the money. It contains a regularly updated database of contact lenses and topical ophthalmic medications (with dosage recommendations, FDA pregnancy category, generic availability, etc.), as well as calculators related to contact lens fitting. Think of it as an electronic Tyler's Quarterly that fits in your pocket.



PARKS THREE STEP (TODD ZARWELL)

Although an app should never be fully trusted

to make clinical decisions, this is a great resource to double-check your hypothesis. The Parks Three Step app, like the test it is named for, is used to isolate the paretic muscle acquired in vertical diplopia. The user simply enters his or her observations for each of the three tests, and the app will suggest which extraocular muscle is underacting.



OPTRANSLATE (DMITRIY RICHTER)

At a surprising cost of \$9.99, this app provides

written translations for a full optometric

exam, complete with pronunciation guides in 12 languages. It also includes written diagnoses of common conditions, case history help, binocular vision explanations, and a whole section for contact lens examinations. An excellent resource for those who practice in areas with a large migrant population and those who don't have the time, energy, or desire to fully commit to learning a new language.



EPOCRATES (EPOCRATES)

Rated the No. 1 medical app 10 years in a row in

Decision Resource Group's "Taking the Pulse" survey, this app contains a wealth of drug information—not only for ocular pharmacology—regarding prescribing and safety labeling, adult and pediatric dosing, adverse reactions, contraindications, black box warnings, pregnancy and lactation considerations, and more. Epocrates also has a drug interaction checker, pill identifier (organized by shape, color, imprint code, etc.), 600-plus dosing calculators, and 6,600-plus formularies. Whenever I open this app, it always seems to have the answer I desire.



GOODRX PRO (GOODRX)

According to the app developer, more than 130.000 doctors, nurse

practitioners, physician assistants, hospitals, and clinics use GoodRx to help their patients find the cheapest medication and thereby improve compliance. The app provides current pricing for both local and mail order pharmacies, and it contains copay cards from some manufacturers. The app was designed to be used by anyone who writes prescriptions or by staff members who help patients with adherence and affordability issues. In my dry eye clinic, I use this app daily to figure out what kind of medication (typically an antiinflammatory) is preferred by a patient's insurance carrier. Often the answer isn't provided, but it points me down the correct road.



OCTAVIA (THE NEW **ENGLAND COLLEGE OF** OPTOMETRY)

OCTaVIA (Optical

Coherence Tomography Visual Atlas) provides eye care professionals with normative OCT reference material. as well as corresponding OCT images for multiple retinal disease conditions. This OCT reference app provides correlation of OCT findings with fundus photography images, brief disease-specific descriptions of OCT images, and high-yield key considerations and useful links to aid in the differential diagnosis of multiple retinal disorders. I love having this in my back pocket to double-check my interpretations of those not-quitetextbook images that we see daily from our OCT. It adds an extra layer of comfort for these often complex images and diagnoses.



ICD10 CONSULT (EVAN SCHOENBERG)

ICD10 Consult puts the most searchable,

complete, up-to-date ICD-10-CM resource at your fingertips. With flexible search features that allow easy handling of laterality, encounter, and staging codes, the app does a lot of the heavy lifting of coding. Features include tens of thousands of medical acronyms and synonyms, transparently cross-referenced to let you search using the terms you are used to (eg, CSME for clinically significant macular edema), ICD-9 to ICD-10 conversion, whether a certain code is valid for reimbursement or more specificity is needed, and a favorites list for easy access to your most common codes, with groups to organize them.



9 GAZE (SEE VISION)

This is an easy-to-use app for documentation of eye motility and

strabismus. The app takes photos of patients in the nine cardinal gazes while offering on-screen guidance

for eye positioning. It then creates a composite image from all of the individual images, which can then be easily emailed or imported into the patient's electronic health record.



EYETUBE (FYRA DIGITAL)

Eyetube, a Bryn Mawr Communications

entity, is home to an extensive archive of narrated videos from the world's leading surgeons across all ophthalmic specialties. Important breaking news in the eye care field and video coverage of major ophthalmology meetings are also housed here. This app is a wonderful resource for me to keep up-to-date with all of the new procedures that our practice's surgeons are currently researching or performing.

Today's practitioners need to understand the importance of embracing new technologies to improve our patient's outcomes and enhance our own clinical acumen. Smartphone apps can play an important role in this. They can be extremely useful tools in our arsenal and help us to provide the highest quality of eye care.

Most of the apps highlighted in this article are free, so there is no real barrier for any optometrist to try them. Simply download the app, play around in the program, and see if it can make your life easier. These apps can add a new dimension to your clinical practice, help with office efficiency, and place an unheard of quantity of information and eye care resources in the palm of your hand. ■

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