

## Complete transcript of Choice Apps That Will Help Make Your Practice Run More Smoothly

[00:00:03] The healthcare dynamic is rapidly changing. Understanding the basic fundamentals related to the Business of Medicine empowers practitioners to advance their skills in, and knowledge of, the business aspects of medicine. SMA's Business of Medicine Simplified program explores the essentials of everything from reimbursement and compensation models, insurance and risk management, to practice employment and business finance.

[00:00:31] Choice Apps That Will Help Make Your Practice Run More Smoothly. In a recent report from the FDA, according to industry estimates by 2018, 50 percent of the more than 3.4 billion smartphone and tablet users will have downloaded mobile health applications. Join us for "Choice Apps That Will Help Make Your Practice Run More Smoothly." Doctors Andy Mohan and Reza Sadeghian will discuss the various aspects of healthcare applications and benefits to your patients and practice.

[00:01:01] We have seen a significant increase in the growth of mobile application in medical practice. And I'm saying that because 15 years ago or more when I had more those Palm Pilots, I remember there was a Windows-based operating system on one of my phones made by Siemens that I had Stedman's, Stedman's Dictionary on my, on my phone and when I started medical school, especially when it comes to anatomy, it was very helpful rather than going through the book to use it as a resource. Now we're talking about 2018, 15-16 years later, from from the time that those preliminary applications were made for Palm Pilot or BlackBerry at a time. And now we're talking about a major, major shift in technology and development of all these new applications that a clinician can use in their practice. So just to give you a little bit of statistics to see how much different it has become from those, from those report, you will see a data analyze the application across the two major operating program system that we have.

[00:02:43] One is Apple made, that we also call it iOS, that made by Apple, and the other one is a Google Play Android. And so we have over 325,000 mobile has application that was available in 2017. So you can see the significant increase in number from early 2000 to now that we have over 325,000 applications. And it's interesting because Android now is the leading mobile health platform. And they provide us some more data between these two platforms.

[00:03:20] Some of us carry Android-based operating phone and some some folks, they have Apple. So it's really important to kind of know the application that you're looking for if the developers have made that for its platform. Most of the time that they try to build an app for both platform, but over the past year or so we have seen that there are more applications in health care that are being developed for Android operating system. For instance, since last year we have over 78,000 new health application that added to major app stores, and we had about 50 percent increase from prior year a number of application that was added to Google Play, a store which is your Android, and the number was about 158,000 new applications. And also, we had about 20 percent increase in the number of applications that added to iOS for your Apple phone.

[00:04:27] So, for the purpose of our target, you can see that it's almost impossible to go over these number of applications, but what I'm hoping to accomplish for our audience here is that by understanding and knowing what kind of applications are available to their specialties, they can leverage those and make their workflow easier. So we don't have a whole lot of application that run on other platform like in, like, like Windows phone or Amazon app store or BlackBerry. Now Blackberry's even the BlackBerry phones run by Android. So basically the major two player here is Apple and Android. Now the other issues to consider is whether these apps are free or paid. And there are plenty of free applications, some of which we're going to get into that, that clinician can leverage and use it as as as part of their extra assistance on their smartphone as to accomplish their daily task, and also to make their work a lot easier. The other things keep in mind is whether these apps are being developed by third-party vendors or institution based, based. And what, what what it means is if you're a pediatrician like me, or if you are an internal medicine or family physicians, you are institutions also have applications that you should receive through the newsletter or in mail or as part of your membership that, surprising, a lot of people are not aware of.

[00:06:16] And I give an example, for instance, that as a pediatrician, one of the most famous thing that we, we, we know is the Harriet Lane book that people use or used to use and also "Red Book" which we use for infectious disease. And so as part of our membership, you can also get the Red Book on your app, on your phone so you don't have to carry that book or if you're not in your office that you have the books on your shelf, you can have access to. And this is a great resource for for me as a pediatrician. Or other example as a Harriet Lane that most of the time through and throughout the training, they suggest to read that, and so you have the book on your phone; this is to the publisher so you have to purchase it. But the beauty of it is that as the contents get updated, you also get those updates on your phone. So think about the old fashion that we would go and buy a book after book after book if you want to have a new and latest and greatest version of it.

[00:07:30] And now you have it on your phone. Now, what are the benefits of these on your phone? So, as I said, you know, we have, or the way I can think of it is that we have four different application types and so depends on what application type you're using these applications can have benefits for you.

[00:07:56] We are, you know grateful that we have advanced technologies and with our telecommunication services and we have a fast 4G and now they're talking about 5G that is coming out. And so you have constant access to some of these resources that you need to be online through some of these app to be, to have access to, but some of these applications you have the entire contents on your phone.

[00:08:24] So if you're in the part of the hospital that you doing you don't have good receptions or the Wi-Fi is not strong enough or you are outside the country, you know on a missionary trip or Doctors without Borders, or anything that you can really use some of those references to educate or educate others, or you know use for your treatments, and you have no access to the computer or you don't have access, so you didn't bring all those textbooks along with you, then your little smartphone has those applications that basically you carry around as your reference. And I found this very beneficial. Most of the time that I'm on my phone, I want to, I want to

educate the staff or medical student or residents or family and I don't have access to the computer and sometimes it makes it easier for them to visualize, especially the family. I just pull up that part of the anatomy on my phone with the apps and you know, I can go over the child illness and it just makes it easier for them to understand. So there are so many benefits that having those application on your phone can play a role.

[00:9:51] Now as part of that, as far as the application type, I kind of divided four categories. So one is a medical reference and I kind of alluded to that and I just put a few example of some of the most common one. And as I said in the beginning, we have over 325,000 applications, so we just want to highlight some of the application that I use in my practice or some of my colleague use in their practice. So hopefully this will, this will guide you to kind of further look into this and see what applications out there that would help you with your clinical workflow.

[00:10:30] So, for instance, Epocrates UpToDate, Medscape, and Red Book. I already talk about the Red Book, the infectious disease textbook for pediatric so I, I use UpToDate and Medscape very much. And so, what I like about these is that you know Epocrates is also an application I used to use. This is pharmacology formulary app and then UpToDate, as you know, I'm sure you have heard about it. This is a great resource to look into illnesses, treatment, and they have a clinician version that you have to subscribe on an annual basis or your institution can have, can give you an access if they have an institution account. And also they have a patient side which the information would be a lot easier for patient to look into as part of the family education. I also use Medscape for my medication which I found it very helpful and also they have Medscape news on the app. So as you browse and you see interest in articles that comes to my phone that I can share the link with, you know, with colleagues or posted on LinkedIn or on other plat, platform and I found it very helpful to have that.

[00:11:53] The second type of applications are social and communication app, and this is also a very interesting category.

The, one of the apps, that, one of the apps that I really like is Doximity, and I, in particular, I use their dialer. So what is the app by itself? So this is basically, basically a social network. So if you Google your own name and if you had signed up for Doximity, you should see your name. So they have, they claim they have about 70 percent of the physician database. So basically this is a HIPAA secure and protected platform to communicate with other doctors across the, you know, their network. You can send fax through your phone, you can follow news, and you know, training, your specialty, sometimes they post the job, you compare salaries, and it's a free app and a lot of physician use that to communicate with other physicians.

[00:13:00] The other app is, like, Figure 1 and Figure 1 is also very interesting; is available on both platform on iOS and Android and this is a great app if you want to look back on some of the rare conditions or if you're seeking to see and learn about those rare condition or any textbook cases, and, one of the feature about the app is that, that the publisher says that they guarantee patient privacy by automatically face-blocking and removal of identifying information. Again, this is also a free app.

[00:13:41] The other type of apps that are popular, at least I use, is a medical journal app and I just put two of them. There are plenty of these apps available once you click on one, one of these

app, or one you go on your phone on your Apple Store or Google Store, the machine learning that is built into the search engine will suggest various, would suggest you with other apps that are there are similar in function. So and this is, this, this applies to both App store and Android store.

[00:14:17] So as far as case app, Case app is a major medical journal. This is for physician and researcher and they have very, very strong machine learning algorithm built into it and what it means is that if you look at certain journals and certain article, it starts to understand your pattern of interest and it starts to suggest to you the other articles that are similar to the one that you initially look for. Read by QxMD is similar to Case and this is, this looks like an old-fashioned magazine format so it's pretty cool, especially if you have it on a larger device. I have a Samsung Notes and it's a larger screen. This looks like a magazine format and it allows you to read and download the studies, journals, articles from any sources that they support, including open-access journal, PubMed. And if there are papers that are linked to the institution as long as there is no fee associated with it.

[00:15:30] The last part is my, one of my favorite, and these are the clinical decision support app. And I just put some of the example here. One of the one that I really like is MDCalc, and this one has tons of helpful resources. For instance, you know there are times that you don't deal with certain situation on your daily base but then you run into it and you want to do some evaluation on it and you don't have access to the computer or the reference but you remember that, "OK, you know, for instance, you know, I work, I do inpatient and outpatient and sometimes you get an ankle injury and I want to do the Ottawa Ankle Evaluation." And so in order to make sure that I'm, you know, for instance, not missing anything and I go to the app and put the Ottawa Ankle. Sometimes you are impatient and you want to calculate GFR or creatinine clearance and you have it on the app. You just punch in the number from your labs and you get the number. Bingo. Good to go. So you can adjust your, you know, for instance, medication.

[00:16:49] In my pediatric practice, you know, the Pedia BP, I use it for pediatric blood pressure because in pediatric we have it by age and gender and we have to have all the measures into the, into the calculation. Bili calculation, you know when, when I round in newborn nursery and I want to see the child's, you know, when I see the child's bilirubin level, you know, instead of looking at the graph, if you punch a number and hours of life, it will tell you based on the risk factors where this child is on the graph. If you want to do a quick acid base calculation, and this is actually very good to teach when I'm on the teaching service running by the residents and medical student and see what they think and help them through the app. And it has a really good explanation, and you know what is the primary disorder if there's any compensation. So it's very helpful not only to get to the answer but also is used as educational tools.

[00:18:05] Another thing that I use is STAT Asthma. This is a great app that, it goes over the symptoms of the asthma and particularly for outpatient practice that you can classify your asthma based on the severity of symptoms. And again, it's a really great educational tools. On the adult side, also there are tons of applications. One of the one that my colleague told me that he was using is ASCVD Risk Estimator which is your atherosclerotic cardiovascular disease risk, risk estimator and you know, to calculate your 10-year risk, and they found it also very helpful.

[00:18:49] Now here's a question: we already talked about whether these are paid or free and are they being regulated. So a lot of these applications are, they're being built by third-party vendors. So FDA has some regulation over the apps but it depends on what type of application they are and most of these educational one does not. They don't need to go through the FDA regulations, so it depends on what you're using this application for. I think it's important to kind of keep in mind whether or not I need to make sure that this falls into FDA guidelines so this is an extra step I would take. But for the most part the things that I discussed, you don't have to worry about it if you're within that limit. The other thing is that there are plenty of applications that are available, some of which, as part of, for instance, Milestone, for instance, in pediatric we follow the milestones and when I downloaded some of these apps, they wanted to create an account, which makes sense to create a patient profile based on the date of birth and their visit, what to expect.

[00:20:14] So it is important to keep in mind that these are some third vendor companies and just to make sure that you are not storing patient information on these apps because you don't know on what cloud based its application will be kept, this information will be kept, and so we want to make sure that we're not violating HIPAA.

[00:20:41] Want to learn more about these topics? Make plans to attend estimated Southern Regional Assembly June 27-29 in Birmingham Alabama. Visit [SMA.org/assembly](http://SMA.org/assembly) for more information and to register.