

The Child and Newborn

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E-version of this journal available at website.



ISSN 0975-0894

RNI Registration No.:RNI/68911/97

Vol.22, No.3, July - September 2018

CONTENTS

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Editorial

Jaydeep Choudhury 2

President's Pen

Arun Kr Manglik 3

Now You are a Digital Doctor - Medical Apps for Doctors

Manoj V Ambwani 4

A New Emember In Family – Can You Guess It?

Yatin Mehta 7

Dropbox vs. Google Drive

Yatin Mehta 11

What is Ransomware?

Manoj V Ambwani 15

Which Mobile to Choose for 2019

Pritesh Nagar 19

How to un-Google your Android

Yatin Mehta 21

Mastering your Favourite App - Whatsapp

Manoj V Ambwani 24

Data Logger Thermometers for Vaccine Temperature Monitoring

Bhavesh Shah 28

Point of Care Testing in OPD Practice – My Experiences

Gaurav Gupta 32

How to Break your Phone Addiction

Manoj V Ambwani 34

Netflix – Are you Totally Addicted?

Manoj V Ambwani 37

Online Shopping – Mistakes we Make

Manoj V Ambwani 39

Four Rules of Composition for Landscape Photography

Manoj V Ambwani 41

IAP Drug Formulary

Jeeson Unni 43



Caught in the Net

To any parent Google is the greatest doctor. Not only it can answer all the queries of the parents but also it can suggest the best diagnosis, help with the right investigations and prescribe the best medicines. Google is infallible, virtuous and supreme. But we know that Google is nothing but a search engine and master in deciphering the key words that leads to loads of downloads from unspecified sources. Sadly one must have the expertise to find the needle from loads of hay to get the right information which unfortunately most of the parents do not have. Thus they gulp all the trash and think that they have got the magic wand.

At this point of time I find it most appropriate to quote D H Lawrence. It is so relevant even in this era we are surviving. "Ours is essentially a tragic age, so we refuse to take it tragically. The cataclysm has happened, we are among the ruins, we start to build up new little habitats, to have new little hopes. It is rather hard work: there is now no smooth road into the future: but we go round, or scramble over the obstacles. We've got to live, no matter how many skies have fallen."

Then how to face the parents who encounter us with Googled knowledge? Experience tells us it is better not to confront them. Rather listen to them or at least pretend to listening to them and then tell that as per the textbooks which are taught in all the medical colleges all over the world following is the recommendation, and exert your opinion. Declare that we are bound to stick to the textbook science. Finding fault with Google might sound ridiculous to the Googled parents. Because they think that some invisible supernatural force has given the sermon which has been uploaded in Google.

On the other hand internet has also emerged as an indispensable tool for us. The issue is how to use it in the right way? The ultimate Evidence Based Medicine literature tool is still elusive. Ideally it should be easy-to-use, comprehensive resource at an affordable price that would provide point-of-need, evidence-based information for clinical decision making. Till such an engine is developed, it is important to know the currently available resource for finding high-quality information. For practical purpose each of us must familiarize ourselves with three or four sites and utilize them for basic information and only if what we are looking for is not available on these sites do we check cross references or go to specialty sites.

Some of our senior academicians ponder that we are heavily dependent on this wonder tool and we wonder how they could exist without browsing the net for a single day. Perhaps we can derive some meaning to the word PC. Some people were comfortable in 'pre-computer' era and we are the digitalized doctors who dwell in the 'post-computer' era.

We are fortunate and privileged to belong to this era of digitalized information which makes the path of knowledge and learning user-friendly and a helpline for all of us. Let us use it judiciously.

PS. There is always some space left in a learner's hard disk.

Dr Jaydeep Choudhury
Editor in Chief

Arun Kr Manglik

President, West Bengal Academy of Pediatrics

Technology has made phenomenal advances over the last quarter of a century. Just over two decades ago pagers had made their mark and were a revolution in communication and accessibility. Doctors hailed them as a boon particularly those who were into critical care. In a couple of years came mobile phones, initially rather big ones and mostly not pocket sized. Out was the pager in no time and with charges for mobile usage plummeting downwards spirally had led to the no of SIM cards in a community out stripping the population in numbers.

Today, when one spends maybe Rs 50,000 or even more for a new mobile phone, how often the proud owner does know that he or she will be using only less than 5-10% of the facilities in built in the advanced hand set. Our craze for the most updated versions makes us drain our pockets a lot. If one is more judicious and selective, and is able to utilise most of the modalities available obviously you are the King.

The same holds true for computers and their accessories. About twenty years ago they used to be bulky ones operating on now primitive operating systems eg, MS DOS. Now most operating systems have become immensely user friendly thus allowing even six year olds to use them even more efficiently than their parents.

This issue of The Child and Newborn has been selectively chosen to discuss the intricacies of computers, internet and how to best utilise them in our work, none of being hugely computer savvy.

Wish all a very Healthy and Happy 2019.

Now You are a Digital Doctor – Medical Apps for Doctors

Manoj V Ambwani

Chairperson CMIC-IAP 2017-18, Consultant Pediatrician, Vadodara

Mobile medical apps have become a prominent part of many doctors' practices. From viewing x-ray results to tracking symptoms and vital statistics, these apps help doctors to diagnose, monitor and treat many common diseases.

There are WhatsApp groups discussing and helping each other in making diagnosis as well as helping in the treatment part too. World has become a smaller place and through mobiles we are really very well connected.

Apple's App Store now features an entire collection dedicated to "Apps for healthcare professionals", and also offers a library of apps that have been reviewed by medical experts to ensure they are clinically safe.

The prevalence of smartphones and tablets has enabled doctors to take advantage of increasingly flexible access to medical information. Health libraries commonly report that loads of printed material are declining, while subscriptions to electronic books and journals are increasing.

However, the recent growth of biomedical information has left many clinicians suffering from information overload, unable to sort the wheat from the chaff as the knowledge base continues to expand. Doctors need quick and easy access to quality information resources to be able to make informed decisions regarding patient care.

In order to tackle this problem, a number of organizations have started to subscribe to online evidence-based reference products at a cost of several thousand rupees per year. These synthesize information from a variety of sources, bringing together standard textbook information with

summaries of the findings of the latest research.

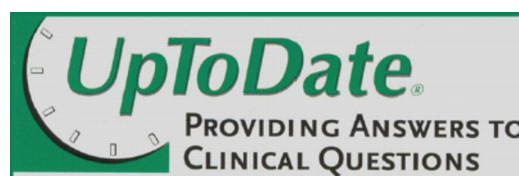
Evidence-based products provide an appraisal of the weight of the evidence, before giving recommendations about which treatment options might be considered in particular cases. Over the last few years, several mobile apps have been developed that offer quick access to evidencebased medical research from mobile devices. The advantage of these apps is they allow the doctor or physician to look up information at the patient's bedside.

Why do we need mobile apps for smart practice?

1. Easier to access accurate, up-to-date drug and clinical information
2. Accurate and updated pediatric dosages per kg, which matters in practice.
3. Calculation of how much fluids needed and what could be the right dose and drip concentrations.
4. Extensive clinical content available in your device for the answers you need at the point of care, without leaving your patient's side.

Up To Date App

One such app – UpToDate, published by Wolters



Kluwer – offers evidence-based opinion and treatment recommendations on over 10,000 conditions. The information that goes into the app is peer-reviewed and collated by over 5,000 doctors and clinicians.

This is a paid App and for an individual the subscription rates are \$.495 = Rs 32,000 per annum.

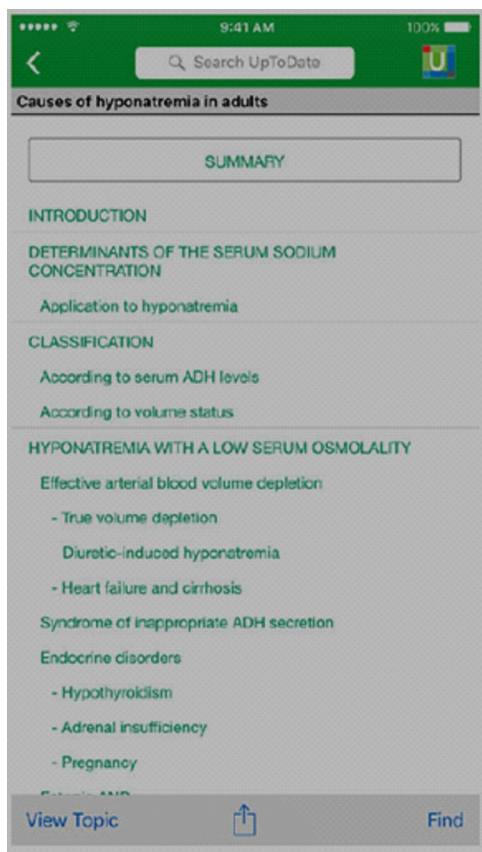
Correspondance : Manoj V Ambwani, Chairperson CMIC-IAP 2017-18, Consultant Pediatrician, Vadodara.
Email : manojambwani@gmail.com.

A little steep for us but there are quite a few who do subscribe it.

The advantage is you have it on all platforms – Desktop, iPad and Mobile. Mobile Complete of UpToDate App is one which has the whole data base downloaded and hence you do not need active internet to access the App. Except few features you have the whole information at the bedside of a patient.

“Physicians have many questions that arise while they’re seeing patients, and the data suggests that if you can answer all of those questions, you can actually impact patient care and change decisions that physicians are making,” said Dr. Denise Basow, vice president and general manager of UpToDate at Wolters Kluwer.

Medscape App



This is a free App and has been one of the most downloaded App of the medical profession.

Powered by WebMD, Medscape offers physicians, medical students, consumers, and other health care professionals a wealth of easy-to-access medical information wrapped up in a beautiful interface. And



the best part is that you don't have to pay a rupee for it, nor put up with any ads.

Pros :

Ideal companion for medical doctors and students – Medscape offers valuable information in the form of a comprehensive, reliable reference database featuring 4,400+ conditions, all essential drugs and hospital procedures, and tools like drug interaction checker and risk calculators, as well as through the latest medical news presented in a distraction-free window.

Educational component – The app incorporates accredited CME/CE courses, which we have found stimulating, especially since you can earn credits by answering medical questionnaires. That you can save news articles and drug & clinical reference articles and review them later also helps.

Cons :

Somewhat lengthy setup – Apart from having to register an account and provide information such as your name, email, and location, you must also



download a few large packages of data before you can enjoy all of the app's features. The advantage of downloading the content to your device is that you can use the app offline.

Epocrates App

When I used to own a Palm top I have used the free



version of Epocrates App.

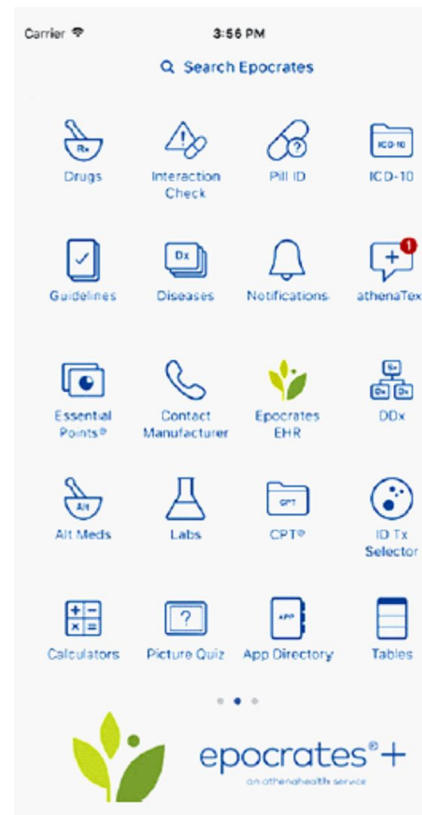
When you think of medical apps, one of the first that comes to mind is Epocrates. A popular drug reference app going back the age of the PalmPilot, its now one of many drug reference apps that clinicians can choose from. Here, we'll look at the latest version of Epocrates to see how it stacks up.

Clinicians create a free account on Epocrates that allows for updates of clinical information and medical news. Required information includes first and last names, email, password, and country where the user is currently living. Zip code, profession, and specialties may also be included which helps to tailor medical news included in the app.

The best thing I liked in Epocrates was if a patient brings you a pill without a wrapper – you take a pic or in App focus with your phone's camera – it will give the name and strength of the pill. I tried for Alprax 0.5 mg and it could diagnose for sure. May not work for non-branded ones though.

I will now just name a few for you all to explore

1. Skyscape
2. MedCalc
3. Read by QxMD
4. Medical terminology



5. Figure 1 – medical images

6. CareZone

The list can go on and on. There are many Apps for respective branches. You can just google Top 5 Apps for Dermatologist or Gynecologist or Pediatricians etc.

I hope you are a Digital doctor now. We doctors are students all our life and with the help of these newer devices we need not sit with those heavy books and journals – we have our mobile devices to help us.

A New Emember In Family – Can You Guess It?

Yatin Mehta

Immediate Past Chairperson, CMIC - IAP

In our house, we have a new family member, Alexa! When we ask anything to Alexa, and if she is in the hearing range and knows the answer, she replies it very methodically and with exact information. Not only this but she can say us a joke or play the music or song of our liking. The conversations are like this: Alexa, what is the time now? Alexa, what is the temperature today at Vadodara? Alexa, can you play a song "Gerua" from Dilwale? Alexa, what is India's cricket score?

You might have guessed it now, we have now with us Echo Dot from Amazon. It has changed the life differently. It's worth a try.



What is Echo Dot?

• Echo Dot (2nd Generation) is a hands-free, voice-controlled device that uses Alexa Voice service to play music, control smart home devices, make calls, send and receive messages, provide information, read the news, set music and alarms, read audiobooks from Audible, control Amazon Video on Fire TV, check your calendar, weather and sports

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scores, manage to-do and shopping lists, and more

- Connects to speakers or headphones through Bluetooth or 3.5 mm stereo cable to play music from Amazon Music, Saavn, Spotify, Pandora, iHeartRadio, and TuneIn. Play music simultaneously across Echo devices and speakers connected via cable with multi-room music.
- Call or message almost anyone hands-free with your Echo device. Also, instantly connect to other Echo devices in your home using just your voice.
- With seven microphones, beam-forming technology, and noise cancellation, Echo Dot hears you from any direction-even in noisy environments or while playing music
- Controls lights, fans, TVs, switches, thermostats, garage doors, sprinklers, locks, and more with compatible connected devices from WeMo, Philips Hue, Sony, Samsung SmartThings, Nest, and others
- Includes a built-in speaker so it can work on its own as a smart alarm clock in the bedroom, an assistant in the kitchen, or anywhere you might want a voice-controlled computer; Amazon Echo is not required to use Echo Dot
- Alexa is always getting smarter and adding new features and skills. Just ask Alexa to order food from Zomato, request a ride from Ola, book a carpenter from Urbanclap, and more.

How does it work?

"Alexa" is Amazon's cloud-connected, voice-activated virtual assistant. She's Siri in a speaker. You wake her up by saying her name, "Echo." The array of microphones inside of the Echo Dot is always listening, and when they hear the wake word,

they'll record whatever you say next and send it off through the cloud to Amazon's servers. Those servers will figure out what you're asking for, then tell Alexa how to respond. All of this happens in about a second.

You can ask Alexa to do all sorts of things. For starters, she can stream music from Amazon Prime Music, Pandora, or Spotify. She can play podcasts from iHeartRadio or TuneIn. She can set kitchen timers. She can look up facts. She can wake you up in the morning. She can tell your kids painfully bad jokes. She can read off the day's headlines from whatever news sources you like (including, TOI). All you have to do is ask.

On top of that, Alexa keeps getting smarter thanks to an increasingly robust market of third-party voice apps called "skills." There are over 3,000 of them at this point, and each one teaches Alexa a new trick. The Uber and Lyft skills let you tell Alexa to call you a ride. The Capital One skill lets you tell Alexa to make a credit card payment. The Domino's skill lets you tell Alexa to order a pizza. A skill called The Wayne Investigation lets you talk your way through an interactive mystery set in Gotham City. You can browse through them all in the Alexa app, then pick which ones you want to enable. You can also just ask Alexa to turn one on by saying something like, "Alexa, enable the Jeopardy skill." And, as of now, none of them cost anything.

Small, but mighty

The new Echo Dot is a little shorter than the original because there's no longer a ring around the top that you turn to control the volume. Instead, you turn things up and down using two new volume buttons on the top of the device. It's also a bit lighter, with a glossy plastic casing instead of the matte black body of generation one. And, of course, it's available in white also. Other than that, this is the same Dot as before: same plug-and-play simplicity, same voice-activated smarts.

Like every other Echo product, the Dot is really just an access point for the Amazon Alexa cloud platform. That means that you're getting the exact same Alexa features as you would with the full-size Amazon Echo or the battery-powered Amazon Tap. The Dot just has a less powerful speaker.

There's an ace up the Dot's sleeve, though, and that's the fact that you can connect it with existing speakers and audio setups over Bluetooth or via line-in cable. Do so, and you'll essentially make an Echo out of whatever speakers you like. The Echo and Tap can't do that -- with both, it's the built-in speakers or it's nothing.

That makes Dot the most flexible of the three, and the most intriguing, too. After all, music is a big part of the Alexa experience, and most music lovers already have an audio setup they're happy with. The Dot lets them give that audio setup a brand-new brain.



How to setup your Echo Dot:

Setting up of Echo dot is not very difficult. As in any new electronic device, you have to go through the installation process. Worry not, here is the exact method to set it up.

You can place Echo Dot in a variety of locations, including your kitchen counter, your living room, your bedroom nightstand, your study room or library or anywhere you want a voice-controlled computer.

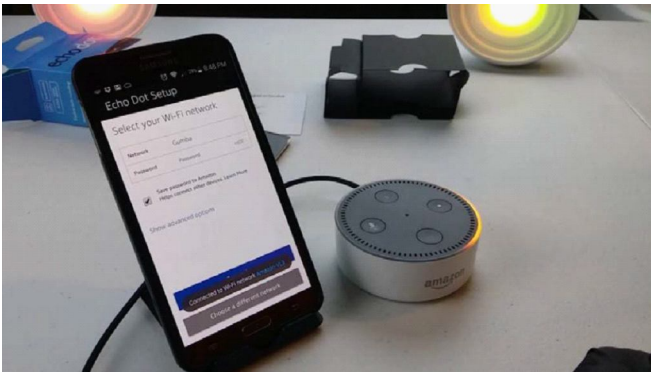
Before you begin using your Echo Dot and the Alexa Voice Service, connect it to a Wi-Fi network, and then register it to your Amazon account from the Alexa app. To do this, follow the steps below:

Step: 1 - Download the Alexa app and sign in.

With the free Alexa app, you can set up your device, manage your alarms, music, shopping lists, and more. The Alexa app is available on phones and tablets with:

- (i) Fire OS 3.0 or higher
- (ii) Android 4.4 or higher
- (iii) iOS 8.0 or higher

To download the Alexa app, go to the app store on



your mobile device and search for "Alexa app." Then select and download the app.

You can also go to <https://alexa.amazon.com> from Safari, Chrome, Firefox, Microsoft Edge, or Internet Explorer (10 or higher) on your Wi-Fi enabled computer.

Step: 2 - Turn on Echo Dot.

Place your Echo Dot in a central location (at least eight inches (20 centimetres) from any walls and windows). Then, plug the included power adapter into Echo Dot and then into a power outlet. The light ring on Echo Dot turns blue, and then orange. When the light turns orange, Alexa greets you.

Note: Other USB power adapters, like phone chargers, may not provide enough power to Echo Dot.

Step: 3 - Connect Echo Dot to a Wi-Fi network.

In the Alexa app, follow the instructions to connect Echo Dot to a Wi-Fi network.

How to connect your Echo Device to Wi-Fi:

Your Echo device requires an active Wi-Fi connection to answer questions, process your commands, and stream media.

Before you begin:

- Plug your Echo device into a power outlet.
- Open the Alexa app.

Echo devices connect to dual-band Wi-Fi (2.4 GHz / 5 GHz) networks that use the 802.11a / b / g / n standard. Echo devices can't connect to ad-hoc (or peer-to-peer) networks.

To connect Echo devices with a screen to Wi-Fi:

1. Say, "Go to settings," or swipe down from the top of the screen and select Settings.
2. Select Wi-Fi.

3. To connect to a network, select the network and follow the prompts on the screen.

If you don't see your network listed, you can add a network or find advanced Wi-Fi options by scrolling down to the bottom of the page.

To connect other Echo devices to Wi-Fi:

1. In the Alexa app, open the Menu, and then select Settings.
2. Select your device and then select Update Wi-Fi. If you're adding a new device to your account, select Set up a new device instead.
3. On your Echo device, press and hold the Action button until the light ring changes to orange. Your mobile device connects to your Echo and a list of available Wi-Fi networks appears in the app.
4. Select your Wi-Fi network and enter the network password (if needed). If you don't see your Wi-Fi network, scroll down and select Add a Network (for hidden networks) or Rescan.

Note: The Alexa app may ask you to manually connect your device to your Echo device through your Wi-Fi settings.

- (i) MAC address: If you need to add an Alexa device to your router's list of approved devices, you need to provide your Alexa device's MAC address. To find your MAC address information, open the Alexa app menu, and go to Settings. Select your device, then scroll down to see the MAC address section.
- (ii) Optional - Save your Wi-Fi password to Amazon: Any Wi-Fi passwords saved during setup automatically appear when you connect a new Alexa device to the same Wi-Fi network. The password is also remembered if you switch between saved Wi-Fi networks.
- (iii) Optional - Connect to a public network: Enter the required information to connect to a public network. The information could be a pre-shared password, room number, or just a button to accept conditions for using the network. This information cannot be saved to Amazon. Contact the network owner for more information.

5. Select Connect. Once connected, a confirmation message appears in the app. You're now ready to use Alexa.

Step: 4 - Talk to Alexa.

You can now use your Echo device. To get started, say the "wake word" and then speak naturally to Alexa. Your Echo device is set to respond to the wake word "Alexa" by default, but you can change it at any time. To change the wake word by voice, you can

say, "Change the wake word." You can also make this change in the Alexa app, by going to Settings, selecting your Echo device, and then selecting Wake word.

Step: 5 - Optional: Connect Echo Dot to an External Speaker

While Echo Dot has a speaker, you can connect it to external speakers with the included audio cable or through Bluetooth.

Dropbox vs. Google Drive

Yatin Mehta

Immediate Past Chairperson, CMIC - IAP

In the battle of the cloud storage, which is better: Google Drive or Dropbox?

Two of the most popular cloud storage solutions are Google Drive and Dropbox, and with good reason. Their feature sets, pricing, and free trial options make them some of the best cloud backup offerings out there. But how can you choose one over the other?

Free storage

Both Dropbox and Google Drive offer free storage space for those who would like to try out their respective services before putting down a few dollars a month for something more expansive and permanent. Google Drive comes as standard, with 15GB of free space, which is far more than Dropbox's initial free storage offering of just 2GB.

Although that does give Google a serious edge in this section, Dropbox offers a number of ways to increase your free storage. Basic (free) accounts can earn an additional 500MB of storage space for each friend or family member referred to the service, up to 16GB. Dropbox also recently introduced the chance to earn a further 1GB for earning the "Mighty Answer" badge for helping out a fellow Dropbox user on the forum.

While the additionally earned free storage space does lead to Dropbox offering more free space than Google Drive, referring hoards of friends isn't a simple task, especially in today's world, where most people who want cloud storage already have it. It's good that Dropbox has that option, but ultimately Google Drive's free storage is simply better.

Winner: Google Drive

Premium storage

If you want to store anything beyond a few gigabytes,

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it doesn't matter which cloud storage solution you opt for: You're going to have to pay for it. Both Google Drive and Dropbox offer premium subscription services which give you much more remote storage to work with. The question is, which one has the better packages available?

Google Drive starts users off with 5GB of storage whereas Dropbox only starts with 2GB of storage. Google offers 25GB for \$2.49 a month, 100GB for \$4.99 a month if users need more storage space. Dropbox rates on the other hand start at \$9.99/month for 50 GB or \$19.99 for 100 GB. Overall Google Drive offers more space for a cheaper price.

For personal users, Dropbox has a very simple pricing structure for its premium storage offerings. The Dropbox "Plus" account offers a terabyte of storage space with most of the same features as the Basic and business accounts. It'll set you back \$100 for the year, or \$10 a month. There's also the option of a "Professional" account, which costs \$20 and offers the same amount of storage space as the Plus account, but with Dropbox's "smart sync" feature and the exclusive "Showcase" feature which can act like a mini portfolio site, and an extended version history.

For teams and business users, Dropbox also offers "Standard" and "Advanced" accounts, which feature additional file recovery time, built-in encryption and a few other expanded features. Where the Standard accounts are limited to 2TB of storage for \$12.50 a month though, the Advanced accounts are essentially unlimited, listed as "as much space as needed." It's much more expensive, though, costing \$20 per user per month when paid annually, or \$25 per month on a rolling basis. The minimum number of users is three.

Plus

\$9.99 / month

\$99.00 / year (save \$20.88)

Get the space you need to bring everything—photos, videos, projects, and more—on to Dropbox.

Select

Professional

\$19.99 / month

\$199.00 / year (save \$40.88)

Store all your files, easily put together polished presentations, and keep tabs on who's seen what.

Try free for 14 days

Or buy Dropbox Professional now

- ✓ 1 TB (1,000 GB) of space
- ✓ Offline folders on mobile
- ✓ Remote device wipe
- ✓ Priority email support

- ✓ **Everything in Plus**
- ✓ Smart Sync: Save hard disk space
- ✓ Showcase: Present and track your work
- ✓ Advanced sharing controls
- ✓ Full text search
- ✓ 120-day version history
- ✓ Priority chat support

In comparison, Google offers a trio of options beyond its free account. The entry-level option is \$2 a month for 100GB, followed by its “most popular,” option for \$10 a month, which comes with a terabyte of space. For the heavy users, there’s also a 10TB account, though that comes with a rolling monthly charge of \$100.

For those who require even more space, it also offers 20TB and 30TB packages, costing \$200 and \$300 a month respectively.

Ultimately, Google Drive and Dropbox both have their advantages when it comes to pricing. If 100GB of space will suffice, Google Drive’s \$2 a month option is the best bet. It also has many more varied options

Pricing Guide

Get started with 15GB for free or upgrade to a premium plan.

100 GB

\$1.99 / month

MOST POPULAR

1 TB

\$9.99 / month

10 TB

\$99.99 / month

Choose your plan

for larger storage capacities. However, Dropbox's Business package offers unlimited storage space for as low as \$75 a month, which is far more and far less, monetarily, than Google Drive's biggest offering.

Result : Draw

File Syncing

Dropbox has the ability to sync files across multiple devices and operating systems, including all major desktop and mobile platforms. As Cloudware breaks down in its comparison, its Linux support and "smart-sync" set Dropbox apart from the competition, as it means only changes are synchronized, not the entire file or folder.

In comparison, Google Drive's syncing supports multiple devices and operating systems, though doesn't support Linux natively. There are some workarounds to make it so, but it's not an officially supported platform for file syncing. While it does let you select specific files to sync, it doesn't support syncing of file changes, often called "block level" synchronization. That means it needs to re-upload or download entire files to sync them.

Winner: Dropbox

File sharing

File sharing is of paramount importance to many cloud storage customers, as it makes it much easier to send large files or folders to groups of people.

Google Drive lets you share files and folders using the mobile app or in the web-browser interface, with direct links, or the option to email access to your trusted share partner. It also offers the option to give view and edit permissions to those you share with, letting you customize the power they have. The only downside is that without passwords or expiry dates on those links, they do present a potential security problem if you don't move your shared files or folders in the future.

Dropbox offers just as much flexibility with where you can designate shared folders and files from, but Professional and business account holders have the ability to set passwords and expiry dates on links, which help protect your data long term. You can also set edit permissions for users. Its Showcase feature is a nice touch too for Professional users, letting

them create portfolio pages with Dropbox media.

Dropbox's share page also makes it easy to see which folders and files you've made accessible to others. Ultimately that, combined with better security protections for user data, make Dropbox the better choice.

Winner: Dropbox

Differences in File Support

When uploading files, you do not have to be concerned file type on the cloud service, but you can only view certain file types that are supported. Google Drive is known for being able to support a large variety of files. There are 30 different file types that Google Drive supports. You can view files such as AutoDesk and even Photoshop files despite not having those programs installed on your computer since you can edit documents without downloading them to your computer. When viewing Microsoft files online they are converted to the Google docs equivalent when editing. On the other hand Dropbox does not support any file type. Instead all files must be downloaded to the computer, so nothing is opened while online. This means that you would have to own the program for the file that was sent.

Winner: Google Drive

Deleted Files and Old Versions

Both Google Drive and Dropbox have their own way to deal with version control, which allows you to go back and retrieve old files that you deleted or older versions of a file. The way Google Drive deals version control it is that it stores up to 100 revisions of a document or 30 days of versions per document, which counts towards your total storage allowance. The trash folder is used to store deleted files and if the trash folder is deleted the files are gone forever. Dropbox keeps unlimited versions of your document for 30 days and it does not count toward the total storage space you are allowed.

Result : Draw

Security and privacy

In a world of post-Snowden revelations and regular hacks of major organizations, making sure your remote data and your privacy is protected is a major consideration for many cloud storage customers.

For its part, Dropbox encrypts your data to a 128-bit

AES standard while files are in motion, and then to a 256-bit AES standard when at rest. It also offers two-factor authentication for decrypting files, to prevent unauthorized users from gaining access to them. Paying customers can also remotely wipe sync files should they lose a relevant device. Version rollback even lets you replace updated files for differing periods of time depending on your package, offering some measure of protection against ransomware.

Google Drive offers comparable security features, though uses 256-bit AES encryption with files in transit and 128-bit AES encryption when at rest. It also supports two-factor authentication.

One area where Dropbox does show a slight advantage over its competitor, is in privacy. While both protect their user's information in many respects, Dropbox is one of only a few companies awarded a five-star privacy rating by the Electronic Frontier Foundation (EFF). Google itself was given four stars, though it fell behind Dropbox in that it does not stand up to national security letter (NSL) gag orders,

which prevent companies from informing their customers that their data has been requisitioned by

authorities.

Dropbox does stand up to that, giving it a slight edge in this category.

Winner: Dropbox

Final recommendations

Pitting Google Drive versus Dropbox was always going to be a tight race, as both offer some of the best cloud storage features available today. Both services have expansive free and paid for versions, as well as solid consumer protections and file sharing capabilities.

However, your needs are dependent on what you want to use the cloud storage facility for. If you have a few files and folders or are merely giving cloud backup a try, Google Drive would be my first recommendation, as its free offering is vastly superior to Dropbox's. Google Drive is also excellent for those who are plugged-in to Google's ecosystem, but for everyone else, Dropbox offers the superior service.

With faster file syncing, better password control for shared links and the ultimate unlimited storage package if you take out a business account, Dropbox is my pick.



What is Ransomware?

Manoj V Ambwani

Chairperson CMIC-IAP 2017-18, Consultant Pediatrician, Vadodara

Ransomware is a sophisticated piece of malware that blocks the victim's access to his/her files, and the only way to regain access to the files is to pay a ransom.

Wannacry



The WannaCry ransomware attack was a worldwide cyberattack by the WannaCry ransomware cryptoworm, which targeted computers running the Microsoft Windows operating system by encrypting data and demanding ransom payments in the Bitcoin cryptocurrency.

The attack started on Friday, 12 May 2017, and within a day was reported to have infected more than 230,000 computers in over 150 countries. Parts of Britain's National Health Service (NHS), Spain's Telefónica, FedEx and Deutsche Bahn were hit, along with many other countries and companies worldwide.

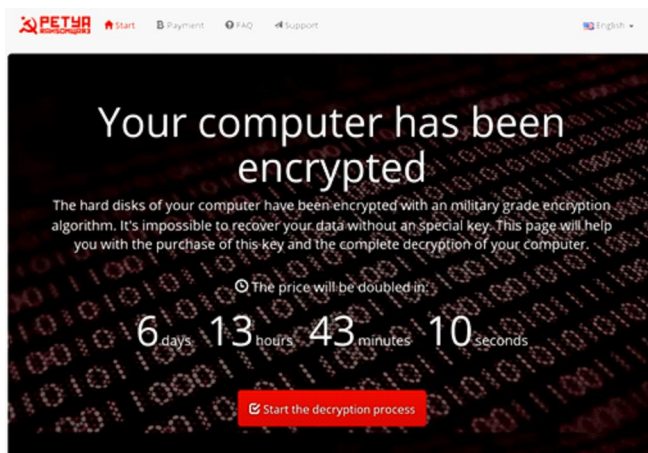
WannaCry spreads across local networks and the Internet to systems that have not been updated with recent security updates, to directly infect any exposed systems. A "critical" patch had been issued by Microsoft on 14 March 2017 to remove the underlying vulnerability for supported systems, nearly

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two months before the attack but many organizations had not yet applied it. Those still running exposed older, unsupported operating systems such as Windows XP and Windows Server 2003, were initially at particular risk but the day after the outbreak Microsoft took the unusual step of releasing updates for these operating systems too. Almost all victims were running Windows 7 or newer.

Much of the attention and comment around the event was occasioned by the fact that the US National Security Agency (NSA) had discovered the vulnerability in the past, but instead of informing Microsoft had built the EternalBlue exploit for their own offensive work. It was only when the existence of this was revealed by The Shadow Brokers that Microsoft became aware of the issue, and could produce a security update.

Shortly after the attack began, a web security researcher who blogs as "MalwareTech" discovered an effective kill switch by registering a domain name he found in the code of the ransomware. This greatly slowed the spread of the infection, but new versions have since been detected that lack the kill switch. Researchers have also found ways to recover data



from infected machines under some circumstances. Within four days of the initial outbreak, security experts were saying that most organizations had applied updates, and that new infections had slowed to a trickle.

There are two types of ransomware in circulation

1. Encryptors, which incorporates advanced encryption algorithms. It's designed to block system files and demand payment to provide the victim with the key that can decrypt the blocked content.

Examples include CryptoLocker, Locky, CryptoWall and more.

2. Lockers, which locks the victim out of the operating system, making it impossible to access the desktop and any apps or files.

The files are not encrypted in this case, but the attackers still ask for a ransom to unlock the infected computer.

Examples include the police-themed ransomware or Winlocker.

Some locker versions infect the Master Boot Record (MBR). The MBR is the section of a PC's hard drive which enables the operating system to boot up. When MBR ransomware strikes, the boot process can't complete as usual and prompts a ransom note to be displayed on the screen.

Examples include Satana and Petya families.

Crypto-ransomware, as encryptors are usually known, are the most widespread ones. The cyber security community agrees that this is the most prominent and worrisome cyber threat of the moment.

Ransomware has some key characteristics that set it apart from other malware:

- It feature sunbreakable encryption, which means that you can't decrypt the files on your own (there are various decryption tools released by cyber security researchers);
- It has the ability to encrypt all kinds of files, from documents to pictures, videos, audio files and other things you may have on your PC;
- It can scramble your file names, so you can't know which data was affected. This is one of

the social engineering tricks used to confuse and coerce victims into paying the ransom;

- It will add a different extension to your files, to sometimes signal a specific type of ransomware strain;
- It will display an image or a message that lets you know your data has been encrypted and that you have to pay a specific sum of money to get it back;
- It requests payment in Bitcoins because this crypto-currency cannot be tracked by cyber security researchers or law enforcements agencies;
- Usually, the ransom payments have a time-limit, to add another level of psychological constraint to this extortion scheme. Going over the deadline typically means that the ransom will increase, but it can also mean that the data will be destroyed and lost forever.
- It uses a complex set of evasion techniques to go undetected by traditional antivirus
- It often recruits the infected PCs into botnets, so cyber criminals can expand their infrastructure and fuel future attacks;
- It can spread to other PCs connected to a local network, creating further damage;
- It frequently features data exfiltration capabilities, which means that it can also extract data from the affected computer (usernames, passwords, email addresses, etc.) and send it to a server controlled by cyber criminals; encrypting files isn't always the endgame.
- It sometimes includes geographical targeting, meaning the ransom note is translated into the victim's language, to increase the chances for the ransom to be paid.

Their feature list keeps growing every day, with each new security alert broadcasted by our team or other malware researchers.

As families and variants multiply, you need to understand that you need at least baseline protection to avoid data loss and other troubles.

Encrypting ransomware is a complex and advanced cyber threat which uses all the tricks available because it makes cyber criminals a huge amount

of money. We're talking millions!

If you're curious how it all started, it's time to go over:

A quick history of ransomware

It may be difficult to imagine, but the first ransomware in history emerged in 1989 (that's 27 years ago). It was called the AIDS.

Trojan, whose modus operandi seems crude nowadays. It spread via floppy disks and involved sending \$189 to a post office box in Panama to pay the ransom.

How times have changed!

The appearance of Bitcoin, and evolution of encryption algorithms helped turn ransomware from a minor threat used in cyber vandalism, to a full-fledged money-making machine. As a result, every cybercriminal wants to be a part of this.

Keep in mind 3 things, so you can get a sense of how big the issue really is:

There are numerous variants of each type (for example, CryptoWall is on its 4th version);

- No one can map all the existing families out there since most attacks go unreported.
- New ransomware is coming out in volumes at an ever-increasing pace.

As you can see for yourself, things escalated quickly and the trend continues to grow.

Cyber criminals are not just malicious hackers who want public recognition and are driven by their quest for cyber mischief. They're

business-oriented and seek to cash out on their efforts.

Ransomware is here to stay. The current conditions are a perfect storm which makes it the easiest and viable source of money for any malicious hacker out there:

- Ransomware-as-a-service, where malware creators sell its services in exchange for a cut in the profits.
- Anonymous payment methods, such as Bitcoin, that allow cybercriminals to obtain ransom money knowing their identity can't be easily revealed.
- It's impossible to make a completely secure

software program. Each and every program has its weaknesses, and these can be exploited to deliver ransomware, as was the case with WannaCry.

- The number of infections would drastically shrink if all users were vigilant. But most people aren't, and they end up clicking infected links and other malicious sources.

Top targets for ransomware creators and distributors

Cybercriminals soon realized that companies and organizations were far more profitable than users, so they went after the bigger targets: police departments, city councils and even schools and, worse, hospitals!

To give you some perspective, nearly 70% of infected businesses opted to pay the ransom and recover their files. More than half of these businesses had to pay a ransom worth \$10,000 to \$40,000 dollars in order to recover their data.

But for now, let's find out how online criminals target various types of Internet users. This may help you better understand why things happen as they do right now.

Why ransomware creators and distributors target home users ?

- Because they don't have data backups;
- Because they have little or no cyber security education, which means they'll click on almost anything;
- Because the same lack of online safety awareness makes them prone to manipulation by cyber attackers;
- Because they lack even baseline cyber protection;
- Because they don't keep their software up to date (even if specialists always nag them to);
- Because they fail to invest in need-to-have cyber security solutions;
- Because they often rely on luck to keep them safe online (I can't tell you how many times I've heard "it can't happen to me");
- Because most home users still rely exclusively on antivirus to protect them from all threats,

which is frequently ineffective in spotting and stopping ransomware;

- Because of the sheer volume of Internet users that can become potential victims (more infected PCs = more money).

Why ransomware creators and distributors target businesses:

- Because that's where the money is;
- Because attackers know that a successful infection can cause major business disruptions, which will increase their chances of getting paid;
- Because computer systems in companies are often complex and prone to vulnerabilities that can be exploited through technical means;
- Because the human factor is still a huge liability

which can also be exploited, but through social engineering tactics;

- Because ransomware can affect not only computers but also servers and cloud-based file-sharing systems, going deep into a business's core;
- Because cyber criminals know that business would rather not report an infection for fear of legal consequences and brand damage.
- Because small businesses are often unprepared to deal with advanced cyber attacks and have a relaxed BYOD (bring your own device) policy.

It's never too late and I request you all to be wise enough to protect yourself.

Which Mobile to Choose for 2019

Pritesh Nagar

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The world is so connected but the people living in it are so disconnected – all thanks to the evolutionary “mobile phone” technology. That’s the philosophical note to start off this topic but I won’t bore with that. If I were to talk about this topic of selecting a good mobile phone about half a decade ago it would have been a lot easier. There was a clear distinction between the good ones and bad ones and the price vs quality barrier was also very clear. In the last couple of years these lines are blurred. There are great phones available even at budget prices; which was unheard of. So, picking up a clear winner is difficult. Here is my list of favorite phones currently available in the market. They are in no particular order.

1. Samsung Galaxy S9 and S9 Plus (Rs 61900 to Rs 64900)

It’s a fantastic phone especially for shutterbugs with top of the line processor, brilliant quad HD display and 6 GB ram with 64 / 128 GB storage options. The camera is the highlight of the phone and it can rival some DSLRs. The Indian version comes with the exynos processor and not the snapdragon as the international version. The thorn in the otherwise brilliant package is the poor battery life and Samsung’s slow update delivery.

2. Samsung Note 9 (Rs 64900 to Rs 84900)

It’s a S9 plus with a pen. So if you are not too keen on a pen and want a Samsung, stick with a S9 or S9 plus. Its basically the same package in all departments with a slightly larger display. The storage option starts at 128 GB with a 512 GB variant also available. The only notable difference (apart from the brilliantly innovative s pen) is a larger battery

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life. At least you need not find a plug point all the time.

3. Huawei P20 Pro (Rs 64999)

When you have a Leica camera lens with a triple camera at a mind-boggling specs of 40MP/20MP/8MP; there is no reason that this should not be on any best mobile phone list. Even the front camera is an awesome 24MP. The battery is great at 4000 mAh and comes with 64 GB / 128GB option. The only hitch is their proprietary kirin processor. It’s no snapdragon but gets the job done. The camera does all the talking in this phone and it’s the best performing on any mobile phone beating the likes of Samsungs and iPhones. It scores the highest on Dxomark Scores (a rating system for camera quality) for any mobile phone till date. The rest of the package gives it a bit of setback.

4. iPhone Xs and Xs Max (Rs 99999 to Rs 129999)

Its an iPhone – need to say anything more. It’s all about the fluidity of the OS. When you look at the raw specs it can’t beat even budget android phones, but the iOS makes it fantastic to use. The camera is brilliant, but lot of android phones have caught up and some (I am looking at Number 3 here in the list) even manage to beat it. The battery is the Achilles heel of an iPhone; and now the price is akin to last nail in the coffin.

5. OnePlus 6T (Rs 37999 to Rs 41999)

The flagship killer is the tag line and I think it justifies. When One Plus launched its first phone it changed the way we look at top end phones. Until then it was unheard of to get a top specs phone at a mid-range price. From then on till the latest One Plus 6T the tradition has been maintained but the prices have gone up a bit. You still get a fantastic phone for half

the price of a top end Samsung phone or about 33% of an iPhone. The specs / storage / ram, all are best the industry can offer. The camera is almost at par with the top ones and in the last couple of years can compete with the big bosses up there. The battery is also decent and lasts an entire day. The icing on the cake is the near stock android experience, fantastic updates (one of the first phones to be on Android 9), dash charger and in display fingerprint display. It would be my personal pick for a great phone to buy. The perfect value for money.

6. Google Pixel and Pixel XL (Rs 71000 to Rs 92000)

It is kind of the iPhone of Android. Google's own hardware and software. Can get the best of experience. It has the best specs and will be the first phones to receive updates. The battery is a bit of letdown. The 12MP single camera is good but may be a letdown in today's times when the stakes are too high. Google claims that it is best by industry standards, but benchmark scores speak otherwise. The competition is offering better camera specs even at lower price points. Go for it if you are a google fan and want plain vanilla android experience, but there are a lot of better options out there. This one is not worth according to me.

7. Moto G6 Plus (Rs 22690)

For a budget phone it has got decent specs with a 6GB ram and 64GB storage and snapdragon 630.

The Rest of specs are same as any of the mid rangers. The reason it has been included is it has one of the best cameras in the price range. The 12 + 5 MP dual camera clicks some fantastic photos at its price point.

8. Poco F1 (Rs 20999 to Rs 29999)

At this price point you get the specs of a One Plus or a Galaxy 9. Yes, its unbelievable but true. The battery is also great at 4000mAh. The catch is the poor built quality, average camera and display. But for prices this phone ticks a lot of boxes right. It would be my pick if the budget is less than a One Plus.

There are a lot of phones that may be left out and the list may not arguably be complete. There are a lot of Chinese phone makers that have flooded the Indian market, but I felt that they are great at a very low budget and are like jacks of all trade and master of none. Most of the above listed phones have some advantage over the competition; and hence made it to my list. In today's times most of the apps will run on almost any phone without a hitch. Only gaming will need the most high-end specs; otherwise those specs can also be ignored. So, it boils down to budget, camera and a decent battery – This is what I feel. Status symbol can be altogether another issue and let's not debate that. Choose wisely and happy shopping.

How to un-Google your Android

Yatin Mehta

Immediate Past Chairperson, CMIC - IAP

Google is at the core of every Android smartphone. An Android device comes bundled with a bunch of Google's cloud services, to get you started. However, in the past few years as Android has evolved our dependence on its services have also increased.

Today, most people use Gmail for their emails, Google Suite for their docs and Spreadsheets, the Play store for their app and among all these services **there are two constants — one being that they're created by Google, and secondly, they are synced with your Gmail account.**

Google is also learning your traits using its Google Play Services, and it shows you content you'd be interested in on the Play Store. This surely sounds like a good thing; however, this also means that the brand is looking into all that you do with your phone or browse for, on your phone, which also sounds creepy.

So, if you want to get rid of Google keeping a track of your device, here's how you can remove Google's omnipresence from your digital life. However, you'll have to keep in mind that the moment you remove these services, you won't be able to use the Play Store to download apps.

1. Sign out

You're probably signed into Google now. You may not remember when you did it or why, but when you're signed in, every action you take is associated with your Google account. You don't have to be signed in to use Google Search, News or Maps.

But when you sign up for a Google account for a service like Gmail or blogger, you're in. Your search history is now being tracked and being used to

market to you more effectively.

Is there any harm to that? That's for you to decide. Google's mantra is "Do No Evil", but you're relying on its definition of "evil". So it's your choice. If you can live without Gmail, Google Reader, Google Alerts, etc., go ahead and sign out. It's that easy. You can also avoid Google completely and use Bing, but you may already be signed in there, too. And of course, you're then deciding to trust Microsoft more than Google.

2. Opt out of Google Ad preferences

Just go to www.google.com/ads/preferences now. Then press the "Opt Out" button. Depending on which browser you're using, you may have to download a "plug-in".

Of course, now the ads you see may be less "interesting", but that may be a good thing.

3. Clear your search history

Could your search history ever be used to harm you? It probably won't ever be used against you in a court of law. But it could be used by a nosy house-guest who wants to prove that you're a chronic self-Gogler (self-Gogler – n. a person who Google's his or her own name). Or maybe your significant other could "accidentally" find out what you were really researching when you couldn't sleep?

If that's the case, you have much bigger privacy problems than Google.

There are definite advantages to retaining your Google history. You could replicate research you've already done, or find a site that seems to have slipped into oblivion. Before you decide one way or another, it's a good idea to look at your History.

Go to <https://www.google.com/history/> now. You may be amazed at how often you've used Google's

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Search, Image Search, Blog Search, etc.

If you're a little dazed and can't decide whether this is a good thing or not, you can "Pause" your Web History now and come back when you're not seeing stars. If you're certain that there's no good use to all this information existing on any database anywhere, you can take action now. Click on "Remove". Then select "Clear entire Web History »".

If you're sure, your history will be gone. In addition, your all tracking will be paused. Now you if you're really serious, you can go ahead and erase your browser's history.

4. Disabling Apps

Google apps come pre-installed on a smartphone, and unlike other apps, you cannot uninstall them like. The only way you can turn a preloaded app off is by disabling them. Go to Settings> Apps and manually look for all the Google Apps and disable it. All apps might get disabled, except one — Google Search.

Rooting your smartphone is another option which will result in the deletion of all the apps. However, this is not only a tricky process but will also void your warranty.

5. Adding Apps

With all Google Apps disabled, you'll need a bunch of alternatives to get work done. But the very first app that you'll need is an app store to get apps from. Since Play Store is already disabled, you'll have to look towards alternatives. Some these stores will also provide access to some popular apps.

9Apps

9Apps is a third party app store that offers many popular apps to choose from. It has apps like WhatsApp, and Hike and a bunch of other apps which are available on the Play Store. 9Apps is your closest alternative to apps available on the Play Store.

Amazon App Store

If you want to get new apps but you're scared of trusting app vendors, and you're looking for quality apps, you can download Amazon's App Store on your device. This App store is the same one as on Amazon's Fire devices. It is home to some of the most popular apps made by some well renowned developers. It's also known for some incredible deals. Often paid apps will be heavily discounted or

offered for free.

F-Droid

F-Droid is an open-source app store for Android devices. The app store is home to numerous apps in the market, however very few in the library are popular. This is because the app store brings in apps from new developers across the globe. The app store also has a material design interface which makes it look aesthetically pleasing. If you're looking to try some new apps and experiment with them, F-Droid is the store you're looking for.

In the case these app stores don't deliver then you can always download the app directly from your browser and install it on your device.

Just search for the name of the app, and end the search with 'apk download' and you're good to go.

If, after downloading an app, the device isn't allowing you to install the app on your phone, then you just need to change the security settings. Go to Settings> Then Security> and under Security enable 'Unknown Sources'. This will allow you to install apps from other sources apart from the Play Store.

Alternative Apps

We've selected a few alternatives that you could use to replace Google's stock apps you've disabled. If you're using a smartphone from OEM's like LG, Samsung and other Chinese smartphone makers, chances are you would already have a bunch of alternatives added to your list. However, if in some case you're a Nexus or a Moto user with near-stock Android experience, here are a bunch of apps that you can consider for your day-to-day use.

Outlook for mobile

Outlook is one of the best email clients to go for, today. It is even better than Gmail for Android. Outlook gets a seamless inbox management with a focused inbox that displays your most important messages first, swipe gestures and smart filters. The app also gets

easy access to calendar and files right from your inbox. Moreover, the app comes with Word, Excel and PowerPoint integrations. It supports service providers like Gmail, Yahoo and of course, Office 365; but it also has added support for IMAP and POP3. Outlook for Android is available on 9Apps.

PowerAMP music player

PowerAMP is by far, one of the best music players to go for, on Android. The player gets a fluid UI with a bunch of interesting features that makes this player stand out of the crowd. The player gets 10 band optimized graphical equalizer for all supported formats, presets, custom presets along with separate powerful Bass and Treble adjustment. The player also supports gapless playback. Moreover, you can customise the user interface with a bunch of themes from the store to make it look cooler. The app is free for a trial of 15 days, post which it is priced at \$4.99, but it surely is worth every penny.

Navigation: OsmAnd

This is one of the best navigation apps in the market right now after Google Maps. It's available on Amazon's App Store, so it isn't very difficult to get your hands on. The app isn't the best looking, but it delivers accurate navigation. Moreover, to get a better user experience, pair the app with AddressToGPS for recognising street addresses more accurately.

Search Engine and Browser: DuckduckGO

This search engine is known to respect the privacy of its users, and doesn't track them. Moreover, the search engine also has a browser for Android, which

you can either download before you go off-Google or simply download the apk file from a website later.

Drawbacks for going off-Google

One of the biggest drawbacks of taking Google out of your Android smartphone is security. Yes, it is understandable that with Google keeping an eye on everything you do is affecting your privacy but when you choose to get apps from third party App developers or are directly loading apk files for apps, the chances of malware entering your phone are higher.

Another drawback is obviously the ecosystem. You've used Android for a while now, and it is really convenient to see all your files and data synced on to one Gmail account, and by simply signing in, you can get the same data on any other device that you switch to. With the elimination of Google services, switching devices will be a task. Additionally, you'll need to manually backup all your files instead of auto-back up on the Google Drive, which can be a pain.

At the end of it all, you need to ask yourself, whether you really need that amount of privacy to un-Google your smartphone. And if you really do, these methods would surely come in handy.

Mastering your Favourite App – Whatsapp

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Disclaimer : I, in no way, am encouraging the use of your mobile excessively. Use your mobile judiciously.



WhatsApp : The most used and sought after app. I am going to highlight few things. You may already know some and must be already using them. But I want you to be master of the app you all use day in and day out. Here we go...

WhatsApp has been taken over by Facebook and hence will get lots of new features.

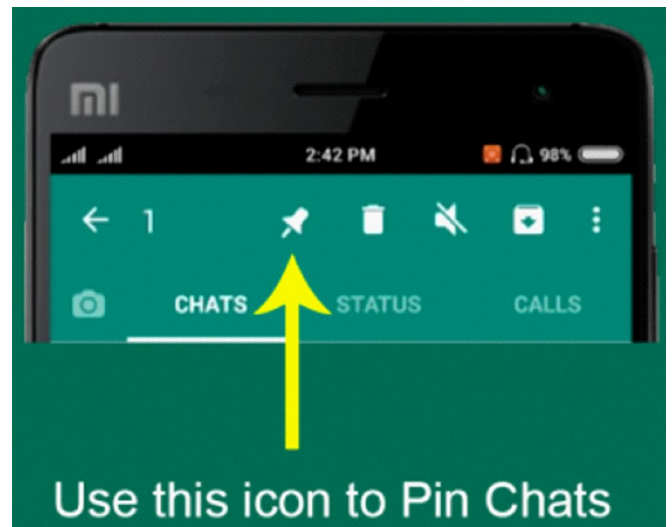
- a. *Forwards are restricted to 5 people only* – it prevents spread of fake news. But 5-5-5-5 you can keep sending , only it is little more taxing. I hope it really helps control the spread of wrong messages.
- b. *Backup to Google Drive*– Whatsapp now allows backup to Google drive but the end to end encryption would no longer be strictly applicable. Google drive has promised that this will not cut into the capacity of 15 GB offered by the Google Drive. So 15 GB + Whatever the Whatsapp Backup.

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Privacy ???? I doubt after the use of mobile – Can anything be secure and private

- c. *Pinning 3 of your most important people*– There are times when you want your most important chats on the top of your conversation list. Scrolling down through scores of messages to find that chat can be tedious. Not anymore. In a recent update, WhatsApp added this function. To pin a contact to the top of the list, you have to long press on the chat from that person and then press the ‘pin icon’ that appears right next to delete, mute and archive icons on the top of the page. As of now, only three contacts can be pinned to place them on top of the conversation list.

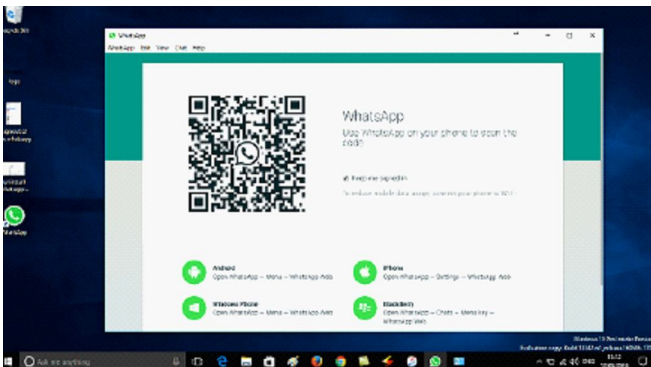
In iOS the chat needs to be slid right , to see the pin option. Here too you can pin the three most important contacts or chats.



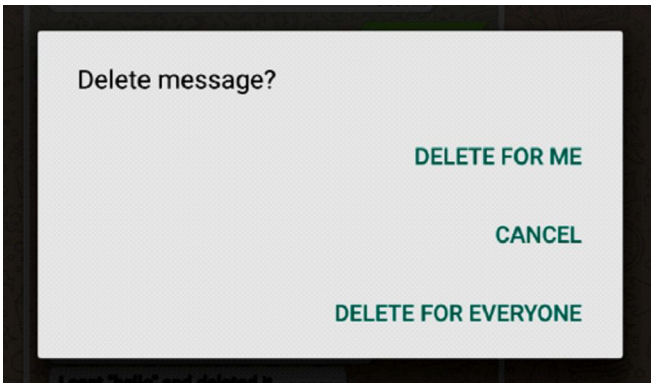
- d. Using two Whatsapp on same android phone – twin app. Mirroring. Two sims – two accounts. Personal and Business. Cloning the App.



e. Whatsapp on mobile phone as well as Desktop/ Laptop



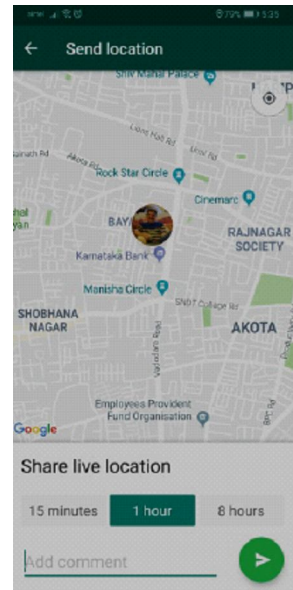
f. Delete your sent message in 7 minutes. For me or For everyone



- g. *Restricted group messages* – only admins can put the messages. This is useful when groups like GIAPCON 2018 are made.
- h. *Whatsapp video calling* – can add more people for group video calling
- i. *You can send messages without typing*– Google Assistant and Siri. They can also read out the messages to you
- j. Read whatsapp messages without informing the sender – read in Airplane mode. Then close the



- app completely and then go online. Voila!!!
- k. Share your live location for 15 minutes, 1 hour or 8 hours.

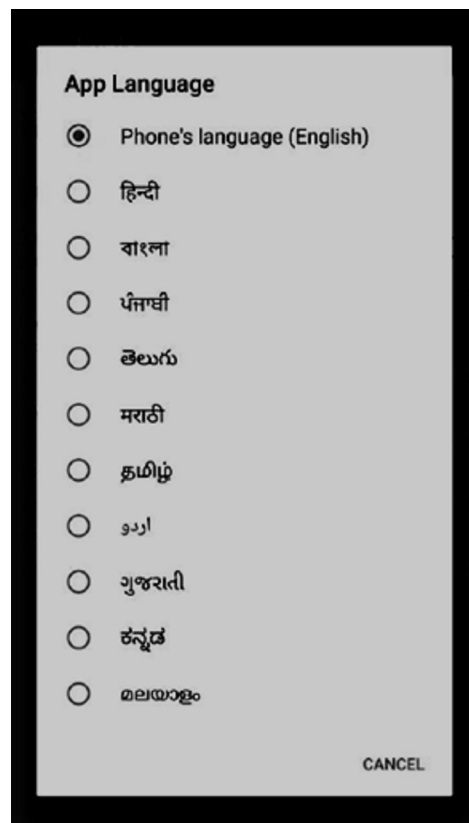


- l. *Create GIFs* – from your video on your smartphone – only 6 seconds is allowed. Open the WhatsApp chat of the contact whom you want to send the GIF to. Click on the attach icon > Select Gallery > Go to videos. Select the video you wish to create in a GIF form. As soon as you do this, it'll open up in the video editing section of WhatsApp. Here, you have to adjust the length of the video to 6 seconds or less, as longer GIFS are not supported by WhatsApp. Once the video length is less than 6 seconds, the option of converting it to a GIF will appear as a slider on top right. Now all you need to do is take the slider towards GIF, and you're set.
- m. *Editing images in Whatsapp* – adding text or emoticons.
When we say that you can edit images on

WhatsApp before sending them, we are not talking about Snapchat filters. What you can do here is doodle on pictures, and add text and emoticons on them before sending. Select attach > Go to gallery > Select the image you wish to share. Once you do this, the image will open in WhatsApp's photo editor. On top right, you'll see options of adding text, emoticons and doodle. You can resize and change colours of all three once you add them to your image.

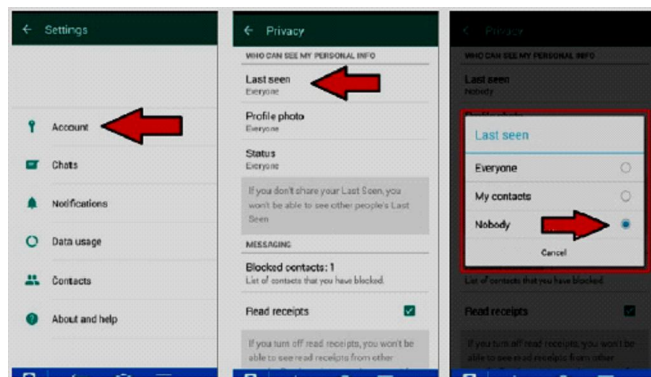


- n. **Format Text** - There's a good chance you're already aware of this feature but have never used it. Somehow, changing formats of text on WhatsApp never really caught on. We'll tell you again how to format text on WhatsApp as it is a handy feature to use. You can bold text on WhatsApp by starting it and following it with an asterisk '*'. Similarly, for italics, make sure the text is preceded and followed by an underscore sign '_'. You can also make your text appear struck off with Strikethrough. For that precede and follow it with tilde '~'.
- o. **Chat in different languages** - English isn't the only language in which you can communicate on WhatsApp. You would be glad to know that WhatsApp supports a number of Indian regional languages. If you ever want to type in a different language, open WhatsApp > Go to Settings > Select Chats > Click on App Language. You can then pick the language you wish to type in.
- p. **Add conversation shortcut** – our favourite friend - We all have a favourite friend with we are constantly yapping on WhatsApp. Rather than opening WhatsApp and going to their chat each time you want to talk to them, you can add a conversation shortcut on your home screen.



Just long press on the conversation, click on three dot on top of the page and click 'Add chat shortcut'.

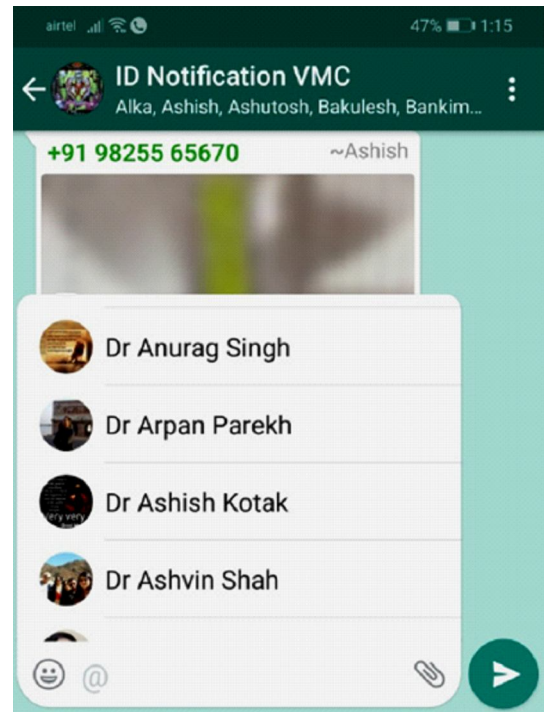
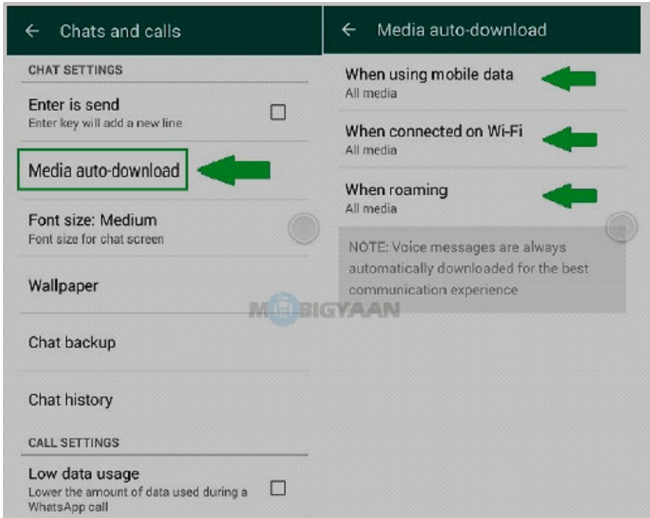
- q. **Turn off last seen** – Hey you don't want your parents to know you are still awake. Do you feel that people getting to know when you last opened your WhatsApp is intrusive? You'll be happy to know that WhatsApp lets you change that. Just go to Settings > Select Account > Click on Privacy > Choose Last Seen and then select the most suitable option.



- r. **Switch off media auto-download**. Don't load your mobile with tons of forwards and help save your mobile capacity storage. Almost on a daily basis

you perhaps receive a multitude of photos and videos on WhatsApp -- half of the m are actually not needed. If you are a part of any pesky Groups on WhatsApp, chances are you'll be getting a lot of "Good Morning, have a nice day" type of pictures and videos on a regular basis. You can manage what gets downloaded automatically and what doesn't. Go to Settings > Select Data usage and choose the most appropriate options.

s. In a chat answer box type @ and you will see the dp of all the members in that chat.



I hope this will cover most of the day to day requirements

Data Logger Thermometers for Vaccine Temperature Monitoring

Bhavesh Shah

Past President, Vadodara IAP Branch, Ex-member, EC CMIC, Member, Digital IAP



Complete and accurate records of vaccine temperature history are vital to preserving vaccine potency and patient safety. Every vaccine storage unit must have a temperature monitoring device, and investing in reliable devices is less expensive than replacing vaccines wasted due to inaccurate temperature readings.

Certain types of temperature monitoring devices have significant limitations and should not be used to measure temperatures in a vaccine storage unit. These devices can be difficult to read and, because they only show the temperature at the exact time they are read, may fail to detect temperatures outside the recommended range. CDC does not recommend the following temperature monitoring devices:

- Alcohol or mercury thermometers, even if placed in a fluid-filled biosafe liquid vial
- Bi-metal stem temperature monitoring devices
- Food temperature monitoring devices
- Chart recorders
- Infrared temperature monitoring devices

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- Temperature monitoring devices that do not have a current and valid Certificate of Calibration Testing

Devices sold in hardware and appliance stores are generally designed to monitor temperatures for household food storage. They are not calibrated and not accurate enough to ensure vaccines are stored within the correct temperature range. Using these devices can pose a significant risk of damaging expensive vaccines.

CDC recommends the use of a continuous monitoring and recording digital data logger (DDL) with a current and valid Certificate of Calibration Testing (also known as a Report of Calibration), set at a minimum recording interval of at least every 30 minutes. Unlike a simple minimum/maximum thermometer, which only shows the warmest and coldest temperatures reached in a unit, continuous monitoring and recording DDLs provide detailed information on all temperatures recorded at preset intervals. DDLs provide the most accurate storage unit temperature information, including details on how long a unit has been operating outside the recommended temperature range (referred to as a temperature excursion).

For effective temperature monitoring, data logger setup must mimic the conditions and physical properties of stored vaccines. A data logger with an external probe kept in glycol-filled bottle effectively accomplishes this with minimal effort or expense. By contrast, loggers featuring sensors designed to record air temperature have been proved unacceptable for use as vaccine temperature monitors.

The purpose of vaccine temperature monitoring is to ensure that liquid vaccines are stored at the temperatures required to preserve their efficacy. All vaccine storage refrigerators withstand thermal

gradients and fluctuations in response to a variety of mechanical and use factors. As long as the liquid vaccines are maintained within the proper temperature range, the minutia of refrigerator air temperature variations is irrelevant. The thermal mass added by vaccine vials and packaging slows heat transfer between refrigerator air and the contained vaccine. As a result, the vaccines experience smaller and less frequent temperature fluctuations than in the surrounding air.

The disparity between the temperature behavior of air and stored vaccines makes it difficult to effectively predict vaccine temperatures using only air temperature data. In this case, a data logger with an air-temperature sensor is simply measuring the wrong parameter (e.g. air temperature instead of the vaccine kinetic temperature). Often dramatic temperature differences occur between liquid vaccines and the surrounding refrigerator air at the same point in time. To accurately determine stored vaccine temperature, it is imperative to choose a thermometer setup that mimics the conditions and physical properties of the stored vaccines. Data logger probe in glycol setup is an extremely simple, inexpensive and effective way to accomplish this. Assuming that the two are interchangeable is simply wrong, and is almost guaranteed to result in product wastage and accidental administration of spoiled vaccine. Any data logger that is set up to measure only air temperature is NOT a viable vaccine temperature monitor. On the other hand, data logger probe installed in liquid-filled bottle (e.g., ethylene glycol) is an extremely simple, effective, and inexpensive way to replicate the thermal conditions inside stored

vaccine vials. Data loggers with probes kept in glycol matches the reference thermocouple measurements more closely than the stand-alone loggers, which measures air temperature. This comes as no surprise, because the glycol acts as a thermal buffer, reducing probe sensitivity to air temperature fluctuations within the refrigerator cabinet. The thermal mass of a glycol-filled bottle is very close to that of a liquid vaccine in a vial.

In order to qualify a data logger as a viable vaccine temperature monitor, the logger should reproduce liquid vaccine temperatures to within the manufacturer stated accuracy, over the entire range of 0 °C to 10 °C. A minimum accuracy of ± 0.5 °C is sufficient for this application. If the logger's

deviations exceed the manufacturer's specifications, the device is out of tolerance and should be re-calibrated or replaced.



Minimum design features and specifications of Digital Data Loggers

Based on studies using digital data loggers, devices that fulfill the following list of minimum design features and specification requirements can be used to successfully monitor refrigerated vaccine temperature when combined with the proper setup and measurement techniques.

- (a) External, detachable temperature probe (to be kept in ethylene glycol or propylene glycol-filled bottle) with preferably > 1 meter cable length
- (b) Continuous temperature monitoring : At least one reading/15-30 min
- (c) Memory
 - Capacity 4000 readings (39 days recording at one reading/15 minutes)
 - Device stops recording when memory is full, reset after data download
- (d) Temperature range: -20 °C to 40 °C (for refrigerated vaccine monitoring)
- (e) Uncertainty: ± 0.5 °C in the range of -1 °C to 15 °C (Often listed as device "accuracy" by manufacturers)
- (f) Battery life: 6 months minimum
- (g) Integrated Liquid Crystal Display (LCD) with minimum:
 - Last measured temperature displayed in °C or °F
 - Hi/Lo alarm status indicator
- (h) Alarm capabilities
 - Factory set, end-user adjustable
 - Alarm activation at 2 °C (low) and 8 °C (high)
- (i) Download/ archival software

- Download data via standard computer ports (e.g., USB)
- Graphical presentation of date/time/temperature data
- Display alarm configuration details and total time outside high/low thresholds
- Data export capability (e.g., csv, Excel, txt)



Setting up of digital data logger

The most critical consideration for users determining digital data logger setup and placement is whether or not the resulting device measurements will be indicative of stored vaccine temperatures. In order to achieve this, the data logger probe must be installed so that it is subject to the same thermal conditions as nearby stored vaccines. This feature is absolutely essential to obtain meaningful temperature data, and subsequently, to determine whether stored vaccines are effective and safe for patient administration.

- Choose a bottle/vial a. If a detachable probe data logger comes with a manufacturer-supplied, liquid filled vial, use this. Otherwise, select a transparent glass or plastic vial that satisfies the following:
 1. Minimum bottle diameter = 4 x probe sheath diameter
 2. Minimum bottle height is chosen so that probe tip is immersed below the top of the container to a depth at least 10 x probe sheath diameter, without touching the bottom of the bottle
 3. Sealable lid is preferred to avoid leaks and spills, with entry hole for logger probe. A pierceable, rubber septum type cap works well.
- Completely fill the vial with glycol (alternative liquids may be acceptable)
- Insert data logger probe through the center of the cap to a minimum depth of 10 x the sheath diameter. Make sure there is plenty of space between the probe tip and the bottom of the bottle or vial.
- Adjust the probe so that the entire immersed length is centered within the bottle. The probe tip must not be touching the walls of the bottle. To prevent the probe from shifting every time the cable is touched; fix the cable to the outside of the bottle with tape.
- Place the bottle in a plastic tray in the center of the refrigerator. a. The tray is needed because wire refrigerator shelves don't provide a stable base and the bottles fall over, while placement directly on glass refrigerator shelves can cause unwanted heat transfer to and from the bottle, skewing measurement results.
- Make sure the bottle is not positioned directly under cooling vents, close to walls, or on either the top-most or bottom-most refrigerator shelves. The logger should be in the center of the refrigerator.
- If the probe cable length allows, position logger readout unit outside of the refrigerator in an easy to read location, such as hanging on the refrigerator door.
- Allow for logger and glycol bottle equilibration before saving measurements.
 - (a) Ambient start (glycol-filled bottle and probe at room temp) – 3 h for equilibration inside refrigerator
 - (b) Cold start (ambient probe inserted into ethylene glycol-filled bottle kept in refrigerator) – 2 h for equilibration inside refrigerator.
- At scheduled download time, detach logger readout unit from probe, leaving the probe in glycol bottle setup undisturbed inside the refrigerator.
- Connect main unit to computer and download data.
- Restart logger recording and reattach unit to probe as soon as possible.

Validation of digital data logger

A regular validation schedule, such as annual ice point checks, is required to maintain traceability as well as confidence in measurement accuracy. Provided that a structured validation protocol is followed, digital data loggers can be used to stably monitor temperature for many months or years. Ideally, a data logger used for vaccine temperature monitoring should produce temperature data that closely replicates the conditions inside stored vaccine vials.

When ice melts, the resulting mixture of ice and water has a temperature of exactly 0.00 °C under normal atmospheric pressure. This is a fundamental, physical property of water. We call the temperature equilibration of ice and water the “ice melting point”.

An ice melting point check is a frequently-used method and ideal approach for data logger validation. The measurement setup is straightforward and requires less than an hour of hands-on time. By immersing a thermometer in a properly-constructed ice melting point (a mixture of liquid water and solid ice) and allowing it to equilibrate, we can easily determine the device’s accuracy at 0 °C with an uncertainty of ± 0.002 °C. Because the ice melting point occurs at exactly 0.00 °C, we would expect each data logger placed in the ice and water mixture to record a temperature within the range of 0 °C \pm the manufacturer-stated accuracy. If the logger temperature readings fall outside this range, this is an indication that the logger should be removed from service and calibrated or replaced. Before putting a newly calibrated or replacement logger into service, the user should perform another ice point check on the device to verify that it is within specifications.

- At a minimum, data loggers used in vaccine temperature monitoring should be measured at the ice melting point on an annual basis.
- All new or recalibrated loggers must undergo ice melting point validation testing to determine if they are operating within required specifications before they are placed into service.

- Any logger that produces questionable data or shows signs of measurement drift should also be measured at the ice melting point, regardless of whether it is due for annual validation.
- In order to successfully use these ice melting point checks as a means of maintaining data logger traceability, users must be able to present documentation of regular checks and measurement results. Validation records must be kept up-to-date and include historical data points to span the entire lifetime of the device.

Availability of Digital Data Logger in India

Though there are many manufacturers in India making Digital Data Loggers for different purposes, but to the best of my knowledge, none is manufacturing Digital Data Logger which qualifies for vaccine temperature monitoring with “Minimum design features”. I feel that such a gadget is much needed. Indian Academy of Pediatrics can certainly raise the demand and do something to make it available to Pediatrician. Sooner or later it is going to be one of essential gadgets for Pediatricians, so I thought it was worth discussing to make you aware of this new CDC recommended gadget.

You can search for Digital Data Logger by typing (In Google) “Temperature loggers approved by CDC’s Vaccines for Children (VFC) programs”. It is available at \$ 145 onwards. You may request your friend or relative to bring it for you while coming to India if you don’t want to wait for its availability in India.

Further reading :

1. URL : <https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf>
2. URL : <http://nvlpubs.nist.gov/nistpubs/ir/2012/NIST.IR.7899.pdf>
3. URL : <https://www.nist.gov/sites/default/files/documents/2017/04/28/Ice-Melting-Point-Validation-Method-for-Data-Loggers.pdf>
4. URL : <http://www.vfcdataloggers.com/>
5. URL : <https://traceable.com/refrigerator-freezer-thermometer-traceablelive-wifi-datalogging-with-remote-notification.html>

Point of Care Testing in OPD Practice – My Experiences

Gaurav Gupta

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What do I mean by POCT?

It simply means tests that I do with a fingerprick whole blood sample that provides screening results in my OPD within a few minutes. These are used to make immediate treatment decisions.

What tests do I do?

I do the following tests; Hb, TLC and DLC, card tests for Dengue (Ns1 Ag, IgG and IgM antibodies), Typhoid ELISA(ENTEROCHEK), and Malarial Ag. Also Urine dipstick for Leucocyte esterase and nitrite for UTI.

What are the benefits of POCT?

The important benefits include fast results, accurate screening tests, actionable changes in treatment, preventing antibiotic abuse. Equally important, parental apprehension of venepuncture in kid, traveling outside the doctor clinic for tests, waiting for hours for reports etc. is avoided. Also, earnings multiplied and I can charge premium for the convenience.

What are the practical aspects of implementing this in OPD setup?

The space needed for equipment is very small, just around 1 foot by 1 foot. Staff can easily be trained to handle the testing and equipment within days. Since we run a 'dry' lab, there is no manipulation of the blood sample, just a drop of blood is collected and microcurvette or the pipette sucks out the blood easily from the finger itself. Since we need to give printouts of the reports, the staff clicks a photo and sends it on WhatsApp to the computer which has web access to WhatsApp, from where a printout of the reports is taken.

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What are the challenges / potential problems with POCT?

Limited number of tests can be done as we are using whole blood and only doing finger prick testing. Accuracy of the results can vary depending on the kit used, and card tests may be less reliable than more expensive lab based tests. Some doctors are concerned about the medicolegal implications of doing tests in the clinic, but this is no different from checking blood sugars or any other bedside tests. In fact, since the samples are in a controlled environment the chances of false tests is actually reduced. Some states like Punjab require that all dengue tests be confirmed in the State designated lab. I ask in writing to the parents to visit the designated lab. Finally monitoring of disease like Dengue will still require going to a regular lab as platelets cannot be done.

There are challenges to the workflow, and the patient sometimes needs to wait for a few minutes for the test results while the next patient is being examined. If more than 1 patient needs to be tested, the waiting time may go up. Samples need to be marked accurately.

Future tests that I am planning to add

I am looking at Vit D levels and *H. pylori* testing in the near future. Also, stool test for Rotavirus antigen is being planned.

Final words

I really enjoy the additional diagnostic information available to me within minutes – it has become a part of my detailed clinical examination in many situations.

Parents are really apprehensive about venepuncture and also about going to an outside lab for basic fever

workup; their trust is reinforced by results being done in house. Finally, the quick results allow me to take

scientifically informed decisions with improved accuracy.

Some real life example of clinical utility of POCT

Clinical profile	Question / Issues	Result	Action
Abhi, 4 year old child came with 2 days h/o fever, now peaking at 104 F, at 830 PM, Parents panicking about Dengue / serious infection.	OPD labs closed at this time. Hospital labs will give report after 2 hours, meaning that I would be awake and counseling the parents at midnight.	Counts – 8400 with 64/28/ 6/2/0 Typhoid, Dengue & Mal Ag Negative Urine Negative	Reassured parents about likely Viral infection. Next morning phone call revealed child's fever is reducing. Antibiotics avoided
Shruti 2.5 yr old has H/o Pica for a few weeks	Parents apprehensive about venepuncture How long to give iron, & will it work?	Hb 9.2 Rpt Hb after 1 month 11.0	Increasing trend of Hb reassured parents, and pica habit gradually diminished as well
Kamlesh 5 yr old girl from low Socioeconomic status has h/o fever * 15 days.	Parents have done tests from lab of doubtful accuracy with nonspecific results, not keen on going out for further tests – costs also a concern	Testing revealed strongly Positive ELISA for Typhoid (ENTEROCHEK) Counts 3000 with 40/55/3/2/0 Dengue & Malaria Neg	Clinical suspicion of Typhoid confirmed within 5 minutes, Blood c/s & Widal suggested – Antibiotics started.
Inder, 7 yr boy with h/o high fever and severe body aches for 3 days during monsoons, mild non specific macular rash on the body, H/o fever in father and mother also in the last week – now improving	Is it Viral or Dengue – given the epidemic of dengue going on?	Dengue ns 1 Ag: Strongly Positive TLC 1800 with 35/57/6/2/0 Parents tested – both tested positive for Dengue as well!	Increased fluid intake and PCM suggested, NSAIDs & Antibiotics avoided. F/u with Platelet count in lab recommended.
Gauri, 6 years old with h/o recurrent URI – usually given antibiotics by parents – since this is what the doctor does – comes with high fever 102 f for 2 days with typical runny nose and cough and some body aches, mild throat congestion	Parents want to give Antibiotics as always ... to 'prevent' complication of Viral infection...	TLC 6500 with 45/50/ 5/0/	Counseled about likely viral nature of illness, Parents agree to go with a prescription of 'delayed' antibiotics, child improves the next days with fever reducing and a rash visible s/o viral exanthema – Antibiotics avoided
3 year old Poorvi with dribbling urine for 2 days with mild fever	Is it UTI?	Urine dipsticks reveal 3 + leucocytes & 2 + nitrates with some proteins and blood traces as well	Clinical suspicion of UTI appears to be confirmed, Urine sent for r/e & c/s – antibiotics started within minutes of seeing the child
Ganesh 4 yr old boy with fever upto 102 F * 3 days with some bodyaches, no significant cold or cough. Looks a little unwell	Is it viral or bacterial, given lack of viral syndrome or any focus, are antibiotics scientifically indicated?	TLC 18,000 with 88/7/5/0	High TLC above 15,000 along with Low ANC below 1500 is suggestive of Bacterial Infection. Broad Spectrum Antibiotics Started

How to Break your Phone Addiction

Manoj V Ambwani

Chairperson CMIC-IAP 2017-18, Consultant Pediatrician, Vadodara

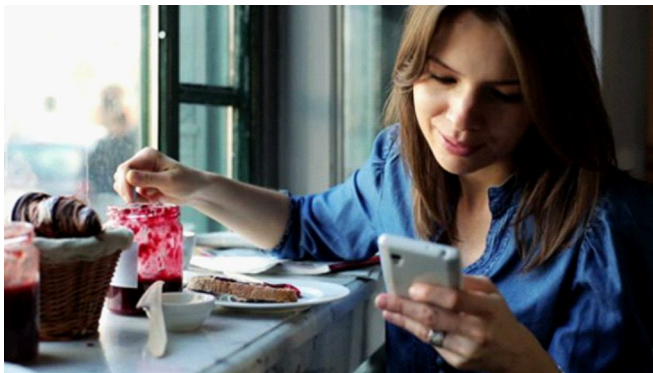
How long do you think the average WhatsApp message or work email goes unread? Ten minutes? Five minutes? One minute?

Try six seconds.

In reality, 70 percent of people read their WhatsApp message or office emails within six seconds of arriving.

Yes, we have a problem. Instead of improving our lives, technology is increasingly getting in the way of enjoying our lives. And the biggest source of trouble is that device that's with you wherever you go.

Some might say that they're not addicted to technology — they just enjoy it. But those same people probably say things like, "I wish I had more time to do the things I love." As Thoreau once said, **"The price of anything is the amount of life you exchange for it."**



Think again my friend

Install an App to know the amount of time you spend on your mobile.

Well, people average three hours a day on their phones. In the pre-smartphone era that number was just 18 minutes. And what happens when you ask

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young adults if they'd rather have a broken bone or a broken phone?

There's a study that was done asking people, mainly young adults, to make a decision: If you had to break a bone or break your phone what would you prefer? Forty-six percent of people would prefer to have a broken bone than a broken phone. But even for the 54 percent of people who say they'd prefer to have a broken phone, it wasn't a snap decision.

They agonized over it.

And if you have kids, this issue is even more serious. Children don't learn empathy and emotional intelligence from screens. And Adam says kids now spend 20 percent less time playing face-to-face. Guess where that time went? Exactly.

No doubt, Steve Jobs changed the world with the iPad. But what most people don't know is he wouldn't let his children use one. As he told The New York Times in 2010, "We limit how much technology our kids use in the home."

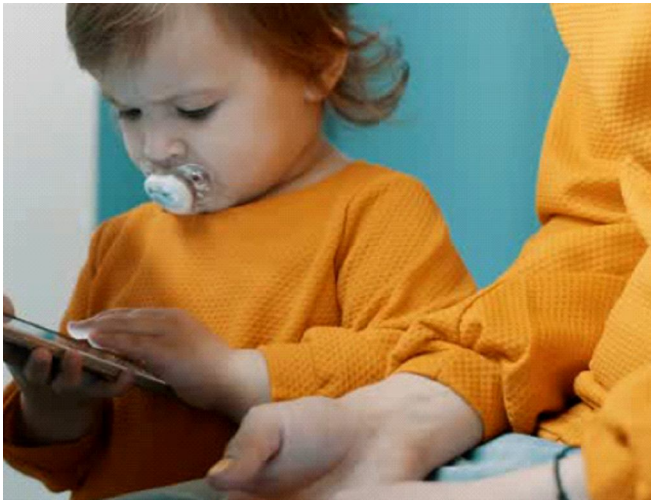
Alright, "scared straight" time is over. The question of the hour is, "What the heck is going on here and what can we do about it?" Let's get to it...

Are we really phone junkies?

Phones aren't drugs. So why do we get addicted? Because addiction is not about pleasure.

If it was, you would literally be addicted to chocolate. Think about it: Thousands of people have surgery every day and are given very strong painkillers. But exceedingly few become addicted. Why?

Because addiction is about soothing psychological distress. It's using something to cope with a problem in life.



Adult pacifiers

We live in an age of anxiety. And phones can soothe that anxiety. But they can also add to that anxiety. Some researchers refer to smartphones as "adult pacifiers." We get cranky, bored, or distressed and the pacifier soothes us.

"Don't" say "can't"

I know you need the phone. How can we use it judiciously.

The Apps are the reason for our distraction or time pass. Whatever you call it!

Apps which are to be blamed the most

1. WhatsApp
2. Facebook
3. Instagram
4. Twitter
5. Telegram
6. Mailing Apps
7. News Apps
8. Gaming Apps
9. YouTube

The list can go on and on.

Let's reason out one App.

Whats App

Question :

I am in a Clinical group and the discussion on the new cases and different topics help me. It is as good as attending a conference. I want to be taking part in such a resourceful discussion.

Solution :

I agree. But turn off the group notification to mute. Read the posts at the end of the day or whichever slot you have allotted to read peacefully and enjoy the discussion.

Question :

My wife and my children need to communicate and I need to be available for them 24*7.

Solution :

I fully agree. Keep a different message tone and never keep them on mute.

You will be able to answer their message even in a busy OPD. All other groups and messages should be on mute. They should not distract you at all.

Also you can pin 3 important people in the chats and they will remain on the top always.

For example 3 members of your family or 3 groups.

Request for removing certain Apps (which are the cause of distraction) Facebook, Instagram, Twitter, Games, News Apps, etc.

Charge it away from you

When you don't absolutely have to have your phone by your side, put it somewhere you can't easily reach it. Across the room is a good option. Charging point should be far away.

(Remember the joke of how a dog is tied to the leash and we to our mobile and charging points)

Change to a simple mobile

If you still are very firm about cutting your mobile



addiction shift to a simple mobile like Nokia 216 or 3310. No more smartphone. Keep the second emergency phone a simple mobile. Switch off the smartphone as soon as you are home.

You don't break habits. You replace them

Proximity is destiny, right? When you sit on the couch, make sure the phone is far away and a book is within reach. So now you're not just gritting your teeth trying to not check your phone. You're substituting a good habit for the bad one.

What you want to do is you want to find a behaviour that is a stand-in for the behaviour that you don't want to be doing.

Sum up

- "Don't" say "can't": You can always check your phone. But decide to be the kind of person who doesn't.
- Proximity is destiny: Put your phone across the room and laziness becomes a superpower.

- Use a "stopping rule": Leaving the house with your phone at 5 percent battery is extreme... but it'll work. Replace the smartphone with a simple Nokia 3310.
- You don't break habits. You replace them.
- Come closer to the people around you. Not by mobile but eye to eye contact.



Reach home and then put the phone away.

Netflix – Are you Totally Addicted?

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We Pediatricians keep saying please restrict the TV time - Screen time - Mobile Time of your kids to 1 hour or 2 hours a day.

Do we do that for us?

Are we allowed any number of hours?

Are we not answerable to any one?

No names – so and so, let's say Dr Good Pediatrician – watches whole cricket match – On a Sunday – 6-7 hours – One Day International between India Vs a Foreign country.

He watches 1 hour of Serial – Indian Idol – Voice India – Any other – or simply flicks through News Channels for 2 hours. Do we ever count our number of hours in front of the screen?

Also measure your hours of WhatsApping ??????

I purchased Netflix said by Dr Not so Busy Pediatrician. And he was so impressed and got addicted to the newly acquired toy – he has gone bonkers – watching 4-5 hours of Netflix a day. Oh My God.....

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So I did some research.

What is the cost of monthly subscription of Netflix?

Netflix has officially announced its entry into India and 129 other markets in Asia, the Middle East, and Europe. With the move, CEO, Reed Hastings said during his CES keynote address, Netflix is now available in "all major countries" of the world "except China", something he hopes will change soon.

Plans for the on-demand TV, movies, and video streaming powerhouse – now available in 190 countries start in India at Rs. 500 per month for access on 1 SD screen. For Rs. 650 per month you can watch HD content on 2 screens at a time, and Rs. 800 per month will get you 4K content on up to 4 screens simultaneously. You can sign up for Netflix via its website or the Netflix apps on , iOS, Windows, and other platforms.

You also have one month free subscription for you to try out. This is at Par with the USA pricing. The India pricing is virtually identical to that in the US, where Netflix's Internet video streaming subscription rates range from \$7.99 (Rs. 530 approximately) per month for 1 SD screen to \$11.99 (approximately Rs. 800 per month approximately) a month for 4 HD screens, including a free one-month trial.

In case you are wondering how Netflix will impact your data usage, according to company's own

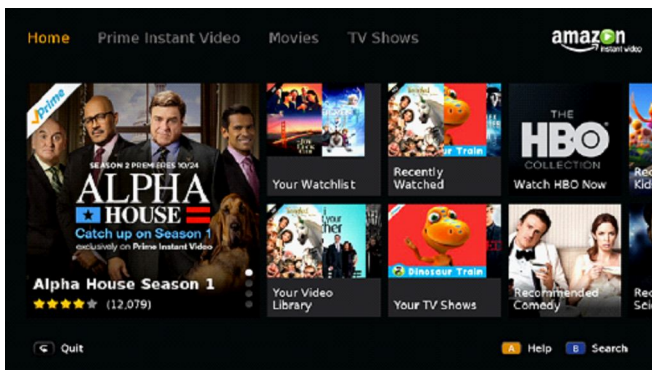
documentation, an HD stream can use up to 3GB of data per hour, while SD video can take anywhere between 300 and 700MB per hour. 4K Ultra HD streaming - if you have a fast enough connection to support that in the first place - will set you back by 7GB per hour.

What other options besides Netflix?

Amazon Prime Video

Following Netflix's footsteps, Amazon has introduced its Prime Video services in India. Like Netflix, Amazon has a large library of exclusive Hollywood, Bollywood and Tollywood movies along side Amazon original shows.

The e-commerce giant is also producing 18 new Amazon original shows in India which is highest outside the US. Amazon has priced its Prime service at Rs. 999 per year which is currently available at an introductory price of Rs. 499. If you want to try before buying 1-year membership then in that case you can opt for 1-month free trial.



Hungama

Hungama.com offers an on-demand Hungama Play service which is available across multiple platforms. Hungama has an armory of over 7 thousand movies across 12 languages which includes English, Hindi, Bengali, Telugu, Malayalam, Tamil and Punjabi. It works on both pay-per-view as well as on a monthly subscription basis.

While the subscription fee for a 30 days unlimited movies pack is Rs 249, it charges Rs 120 for one English flick and Rs. 60 for a Bollywood movie. Hungama also offers a free music streaming service where users can enjoy music in different languages.

Hotstar

A Star India subsidiary Novi Digital Entertainment launched its video on demand portal Hotstar with much fanfare. The Star Network backed app and website claims to have more than 35,000 hours of content in 7 different languages. Hotstar also stands out amongst all the competitors with live feed of various sports (especially cricket). Most of the Hindi serials and international series are available on Hotstar a day after television broadcast in India. Hotstar is available for free on both Android and iOS. Users can also enjoy a web version Hotstar for free of cost.

Erosnow

The digital arm of International Movie production house Eros, ErosNow is a video streaming platform which has more than 30 million subscriber thanks to its massive content portfolio. Apart from movies ErosNow also offers as a pretty large catalogue of TV shows from Sony TV and Pakistani Hum TV. Like Netflix Eros also has plans to air a few original shows very soon.

Spuul

Spuul, Singapore based company was amongst the first ones to fore in to video streaming business in India. Spuul has a wide range of Bollywood movies to offer. Apart from classical Indian telly shows like Fauji, Malgudi Days, Dekh Bhai Dekh; Spuul also offers more than a few popular YashRaj title. It offers number of titles for watching even without registration. To access the entire Spuul library one has to pay a monthly subscription fee of Rs. 300.

BoxTV

Backed by Times Group, BoxTV is another platform that offers video services. Under their fold, they offer content on various regional languages besides Hindi and English. On BoxTV movies are available in Tamil, Telugu, Urdu, Kannada, Malayalam, Bangla, Marathi, Bhojpuri and Odia. Its plans start at Rs. 199 per month but it also offers an advertisement ridden free version. Most of these streaming services focus on Hindi and other regional language movies.

As for regular soaps, you can always find them on official YouTube channels of respective entertainment networks. Netflix has an extensive English language library, but due to the way copyrights are distributed, don't expect it to be the same one as in USA.

Online Shopping – Mistakes we Make

Manoj V Ambwani

Chairperson CMIC-IAP 2017-18, Consultant Pediatrician, Vadodara

Online shopping is convenient and can often times save you money. But make sure you don't fall prey to one of these common mistakes when you're making purchases in your Pyjamas!



1. Getting sucked into a sale: With all the newsletters you may be signed up for, it's easy, with one click, to start browsing sales for things you don't need. Try not to roll marketing emails into one daily habit so you're not constantly distracted by deals for things you don't need.
2. Buying more to get free shipping: Just wait until you need to buy enough to pass the free shipping limit. If you can't do that, then check out other options first, like ordering from another store, or getting free shipping to a store. Don't spend extra money on something you don't need just to get free shipping. Amazon says shop for 499 and get shipping free.
3. Forgetting to search for promo codes: Why pay full price when you don't have to! Before you buy anything online, check for promo codes and

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online coupons to try to bring the price down or perhaps get a free shipping offer.

4. Not checking the return policy: Some stores, like Amazon, are very generous when it comes to returns. Others aren't. So when buying things like clothing, make sure you check the return policy. You don't want to be stuck with clothing that doesn't fit right.
5. Using debit instead of credit: Credit cards are generally more secure than debit cards. Credit cards also offer better consumer protection against unauthorized transactions. So as long as you pay your balance off in full, you'll want to reach for the credit card when making significant purchases online.

online shopping mistakes that we need to rectify

1. While it's okay to open an account with a username and password, you should never save credit card information on a retail website, no matter how secure it may seem.
2. Coupon codes represent another great way to save money – if you're willing to do the footwork.

The vast majority of online retailers offer this capability, but it takes a little elbow grease to find

the best ones. While some stores advertise coupon codes at the top of their web pages, there are plenty of other resources for sniffing them out. Coupon Duniya etc

3. Ignoring shipping costs when shopping online can mean spending a lot more than you think.

When you search for items online, make sure you filter results based on price plus shipping to get the most accurate number possible. Always check individual store policies, as well – particularly if you're shipping overseas, which can be quite expensive. And always check to see if you can purchase an item from an online shopping site offering free shipping.

4. It is always essential that you read the return policy whenever shopping online. Apart from knowing who is financially responsible for return shipping, you should find out how long a window you have to return an item, and whether a restocking fee is assessed.
5. Always read reviews on the item you're purchasing, as well as the store you're purchasing it from. This can give you a better sense of product quality, user experience, and overall security.
6. Shopping over public Wi-Fi at the cafe might seem like a good way to pass the time, but be careful. Information sent via insecure or public connections can be easily compromised by hackers, so it's best to wait until you're home

and on a private network before sending your credit card information.

7. Always use a separate credit card specifically for online shopping. That way, any would-be hackers only have access to that one card. If it falls into the wrong hands, you can easily remedy the situation with a call to the credit card provider, especially for cards with fairly low limits.
8. Always purchase from trusted sites. Don't chance your information with a retailer that offers rock-bottom prices, but no security.
9. If you're purchasing clothing or shoes online, be aware that every retailer, brand, and model has the potential to be completely different. Checking size charts can give you a better idea of how different garments fit, allowing you to order based on your measurements rather than your usual size. Nike always tells you to buy 1 size bigger and Puma says one size smaller.
10. Online shopping can mean a world of discounts, infinite selection, and an easy purchasing experience, but it can also be dangerous. Whether it compromises your identity or your budget, the repercussions can be serious and long-lasting. By all means, find deals and use discounts to get the best item for the best price, but make sure you're doing so safely, or you could suffer the consequences.

Happy and safe shopping to you all.

Four Rules of Composition for Landscape Photography

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Photography Monthly Magazine (UK) had a useful feature on landscape photography in their April 2007 edition. As part of it they had a page outlining four basic compositional rules that can be used when framing landscape images.

While I'm not always a fan of sticking strictly to the 'rules' of photography I think they are well worth knowing and keeping in the back of your mind as you shoot (whether it's so you can follow them or break them for effect). Here's the four 'rules' that they suggested are worth knowing (with a few of my own thoughts on each):

1. Diagonal Lines



Photo by Feuillu

Using diagonal lines can be a very effective way of drawing the eye of those viewing an image into it and to the main focal point.

The 'lines' need not be actual lines - they could be the shape of a path, a line of trees, a fence, river or any other feature in an image.

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Converging lines (two or more lines coming from different parts of an image to a single point) can be all the more effective.

Read more about using Diagonal Lines in your digital photography.

2. Geometric shapes



Photo by Mattijn

"Positioning key aspects of a landscape on points of a geometric shape help create a balanced composition." Perhaps the most common and easiest way to do this is to use a 'triangle' shape between objects in an image with three objects in a frame positioned with one to each side and one more central.

Using Geographic Shapes in this way isn't something that I've done a lot of - but it is one technique to get balance in a shot and if you're clever, to lead the eye into it (in a similar way to the diagonal lines rule above).

You can see this illustrated (to a point) in the photomontage image to the right.



Photo by james_wicks



Photo by Leviathor

3. The Rule of Thirds

The Rule of Thirds gets trotted out more often than any other in all types of photography and is one of the first rules of composition taught to most photography students. While sometimes it can feel a little cliché it can also be a very effective technique in landscapes (although keep in mind that breaking this (and other rules) can also produce dramatic and interesting shots).

Position key points of interest in a landscape on the intersecting point between imaginary ‘third’ points in an image and you’ll help give your image balance and help those focal points to really capture attention.

Read more about using the Rule of Thirds in composing your shots.

4. Framing images

While adding points of interest to a foreground is an important technique for adding interest to landscape shots. A similar technique is to ‘frame’ the shot by adding interest to other parts of the edges of an image.

Perhaps the most common way of framing a landscape shot is to include an overhanging branch in the upper section of a shot. Similarly framing a shot with a bridge might work.

Rules are made to be broken?

Of course while knowing the rules can be important - knowing when to use them and when to break them is a talent that great photographers generally have.

Practice these techniques - but don’t get so worked up about them that they kill the creativity that you have.

Let me finish with a quote about Rules of Photography from Photographer Edward Weston to help give us a little balance on the topic:

“To consult the rules of composition before making a picture is a little like consulting the law of gravitation before going for a walk. Such rules and laws are deduced from the accomplished fact; they are the products of reflection.”

IAP Drug Formulary

Jeesson Unni

Editor-in-chief, IAP Drug Formulary,

The IAP Drug Formulary was officially released in 2005 and is now being used by nearly 20,000 pediatricians all over the country and abroad. More than 20,000 are using the IAP Drug Formulary mobile app. The Quarterly Web Update facility has made the contents quite dynamic. Changes are being made in the formulary as and when new developments in pharmacology and pediatric therapeutics became available.

After 53 Web Updates, the present 51st Web Update, contents are very different from that in the original book - IAP Pediatric Drug Formulary 2004. Therefore, every 3rd year a new hard copy edition of the book - latest being the 5th Edition - IAP Pediatric Drug Formulary 2019 - is being released here at the IAP CMIC National Conference at Kolkata on 8,9th Dec 2018.

The 6th Edition of 'Pocket Dose Book of Medicines in Children and Adolescents' is a very popular publication of the IAP Drug Formulary.

All these products are available for online purchase at www.iapdrugformulary.com. This website of the IAP Drug Formulary also provides the Online Search facility for the users with valid password. Those who became a member of the Indian Academy of Pediatrics on or before December 31st 2015 could avail of 1 free IAP Drug Formulary mobile app key by registering for the same at this website.

The IAP Drug Formulary mobile app is available in all platforms (iOS - iPhone, iPad, Android, Symbian and Blackberry) except the Windows version as the Windows has as yet not given their clearance despite regular application from our administrators. The user interface of the mobile apps has been

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improved to make it more user friendly. All quarterly Web Updates are automatically updated on these mobile apps.

All users are requested to register at the site - www.iapdrugformulary.com - as soon as they buy the software so that their CD Key would be available in our archives for recall in case the user loses the same. We would also be able to send the user newsletters regarding availability of latest updates if the user's e mail is available on the website registration form. Please read through installation and update tips available at the site.

The IAP Drug Formulary contains information regarding 630 odd drugs licensed for use in neonates, children and adolescents, which, to the best of our knowledge, is accurate and up-to-date. But every practitioner must, as we have always insisted, take individual responsibility for taking all precautions when dispensing and administering drugs to children.

The IAP Drug Formulary also has a section on Essential Medicines List, General information of administration medications for this target group and most useful IAP Recommendations on Drug Therapy of more than 520 pediatric illnesses encompassing all pediatric super-specialties; contributed by experts from respective IAP Sub specialty chapter.

We place on record, our sincere thanks to IAP President 2018 Dr Santosh Soans and IAP Hon General Secretary General Dr Remesh Kumar; our IAP President 2019 Dr Digant Shastri and the IAP Executive Board 2018 for their support, Executive Committee of IAPCMIC for their encouragement and help and all the IAP Sub Chapters and the contributors for their expert inputs. The IAP Drug

Formulary 2019 is the result of inputs from contributors who are experts in their respective specialties and we are indebted to them for sparing their time and expertise for this project. I request all Chairpersons and Secretaries of our sub chapters

to continue updating their respective chapters to make this quarterly web publication of the IAP a success. SIDSSOL Technologies Pvt. Ltd., Bangalore has continued to be very professional and astute in their work.

Mob Apps for the Pediatrician

Jeerson Unni

Editor-in-chief, IAP Drug Formulary,

Almost everything in one app

- Skyscape
- Epocrates
- Medscape
- IAP Drug formulary
- Pediatrics On Call

Calculators and convertors

- Ped(z) – Pediatric calculator

Medline search

- PubMed

IAP

- Immunisation app
- Growth charts
- Indian pediatrics

Differential Diagnosis

- Isabel
- Pediatrics On Call

Other useful apps

- Autism diagnosis – AIIMS
- TotsGuide
- Track and Act
- Surakshith
- Bal Suraksha
- Stri Suraksha
- Epilepsy – AIIMS
- Bone age –eatyourpeas.co.uk
- Anthropometric calculator
- ABG interpreter
- PICU guidelines
- Neomate

Journals

- Read by QxMD

Podcasts

- Podcast republic