

Essential Apps for the busy GP

Dr Marcus Baw

[@marcus_baw](https://twitter.com/marcus_baw)

GP & Emergency Physician, Yorkshire

Clinical Informatician

Ruby/Rails programmer, other tech stuff - sysadmin for [CCIO Network](#)

Founder, [NHSbuntu/NHoS](#) and [openhealthhub](#)

Open source ~~enthusiast~~ zealot

generally sceptical about technology cure-alls..... like apps ;-)

A few good clinical apps?

But would a GP *really* use these instead of the web?

BNF



replaces the previous 'Athens Login Required' BNF/BNFC app

[interesting story](#) behind the journey towards an open BNF app

[Play Store](#)

[App Store](#)



BNF

Alpha-adrenoceptor blocking drugs

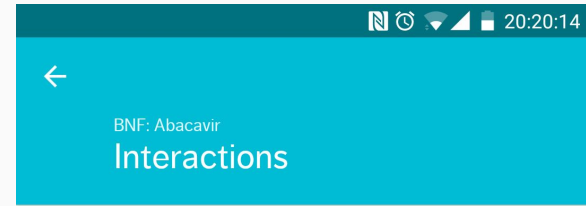
Prazosin has post-synaptic alpha-blocking and vasodilator properties and rarely causes tachycardia. It may, however, reduce blood pressure rapidly after the first dose and should be introduced with caution.

Doxazosin, **indoramin**, and **terazosin** have properties similar to those of **prazosin**.

Alpha-blockers can be used with other antihypertensive drugs in the treatment of resistant hypertension.

Prostatic hyperplasia

Alfuzosin hydrochloride, **doxazosin**, **indoramin**, **prazosin**, **tamsulosin hydrochloride**, and **terazosin** are indicated for benign prostatic hyperplasia.



BNF

Appendix 1 (abacavir).

Abacavir may have the following interactions:

Fosphenytoin sodium

fosphenytoin possibly reduces plasma concentration of **abacavir**

Methadone hydrochloride

Plasma concentration of **methadone** possibly reduced by **abacavir**

Orlistat

Potentially Serious

Avoid concomitant administration, or undertake with caution and monitoring

Absorption of **abacavir** possibly reduced by **orlistat**

Phenobarbital



MDCalc

calculates important clinical parameters

unfortunately does not integrate with your EPR

even more unfortunately, your EPR doesn't have much of this functionality

A bit USA-centric, but usable in UK

Play Store

Search "Creatinine" or "crcl"

FAVORITES RECENTS SPECIALTY ALL

ABCD² Score ★
Stroke risk after TIA: inpt vs outpt.

Centor Score (Modified/McIsaac) ★
Strep throat diagnosis and treatment.

CHA₂DS₂-VASc Score ★
Stroke risk in Afib, better than CHADS2.

Centor Score (Modified/McIsaac) ★

CALCULATOR NEXT STEPS EVIDENCE CREATOR

Estimates probability that pharyngitis is streptococcal, and suggests management course.

Use only in patients with recent onset (≤ 3 days) acute pharyngitis.

When to Use ▼ Pearls/Pitfalls ▼ Why Use ▼

Age range	3-14 years	+1
Group A streptococcus (GAS) rare under 3	15-44 years	0
	≥ 45 years	-1

Exudate or swelling on tonsils	No 0	Yes +1
--------------------------------	------	--------

Tender/swollen anterior cervical lymph nodes	No 0	Yes +1
--	------	--------

Toxbase



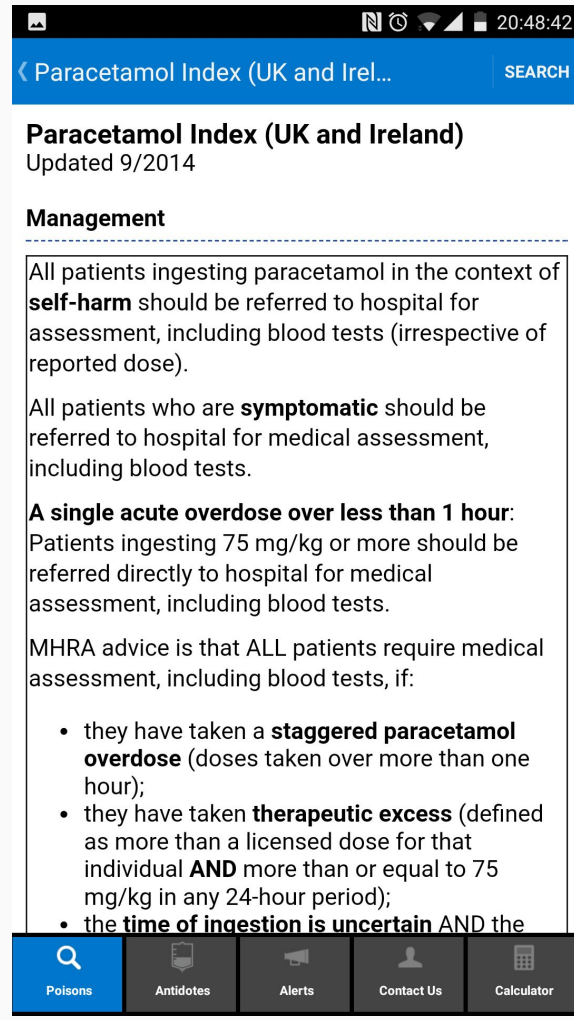
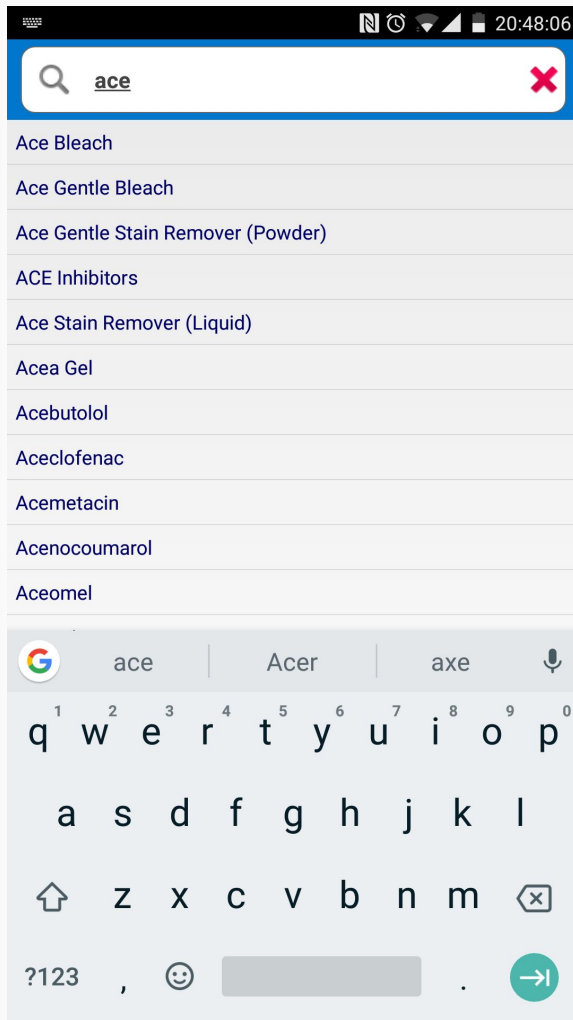
initial Toxbase offering via SkyScape was £60 to buy. Sorry but nope.

They've finally seen sense and produced a free app

Naturally they are paranoid about people misusing the information

[Play Store](#)

[App Store](#)



SIGN Guidance

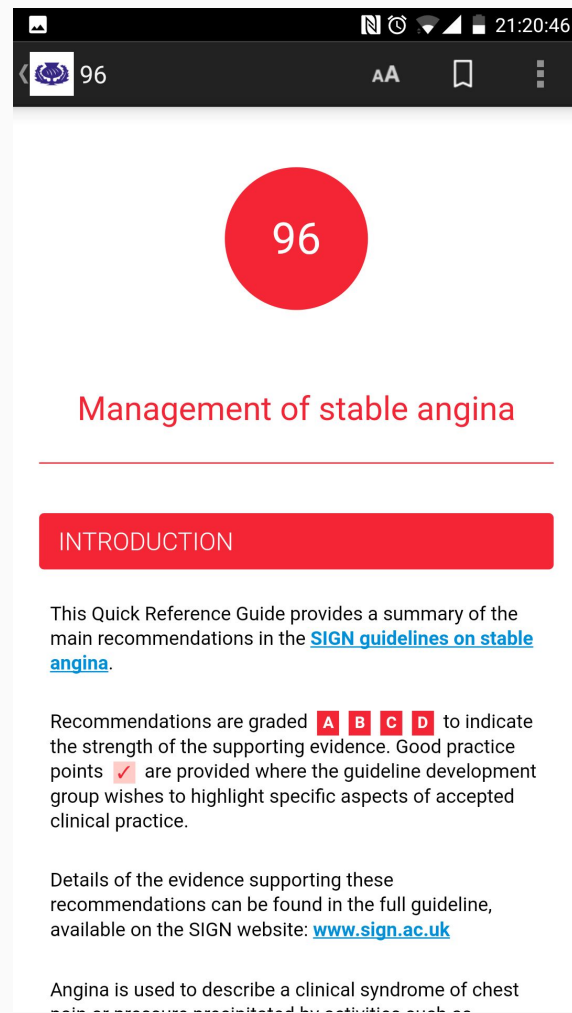
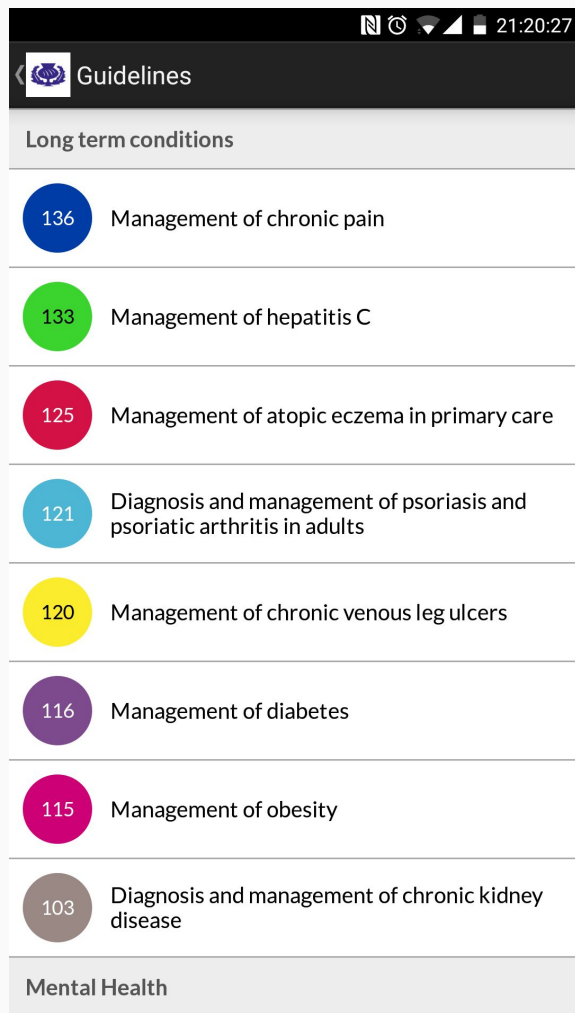


SIGN were early to recognise the potential of an App for guidance

Made a much better job of it than NICE's first few attempts!

[Play Store](#)

[App Store](#)

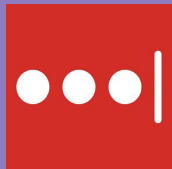


Others

- [MIMS app](#) - MIMS formulary
- [NICE Guidance app](#) - offline access to NICE guidance
- [Credible Meds](#) - QTc interactions
- [iResus](#) app - Resuscitation Council BLS/ALS guidance

Is there a pattern emerging? They're all **reference texts**.

Some *actually* essential apps



LastPass

cross-platform password manager

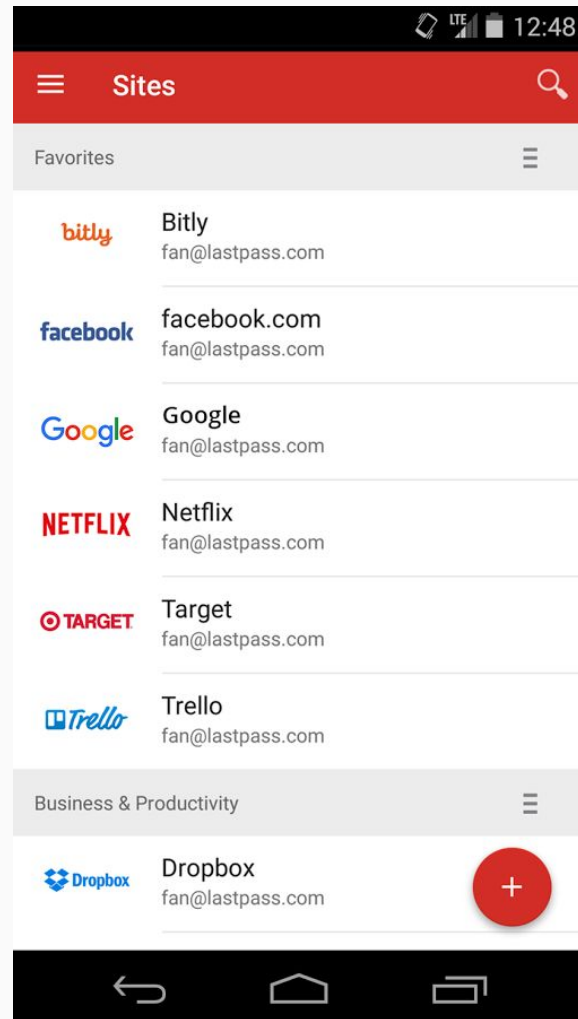
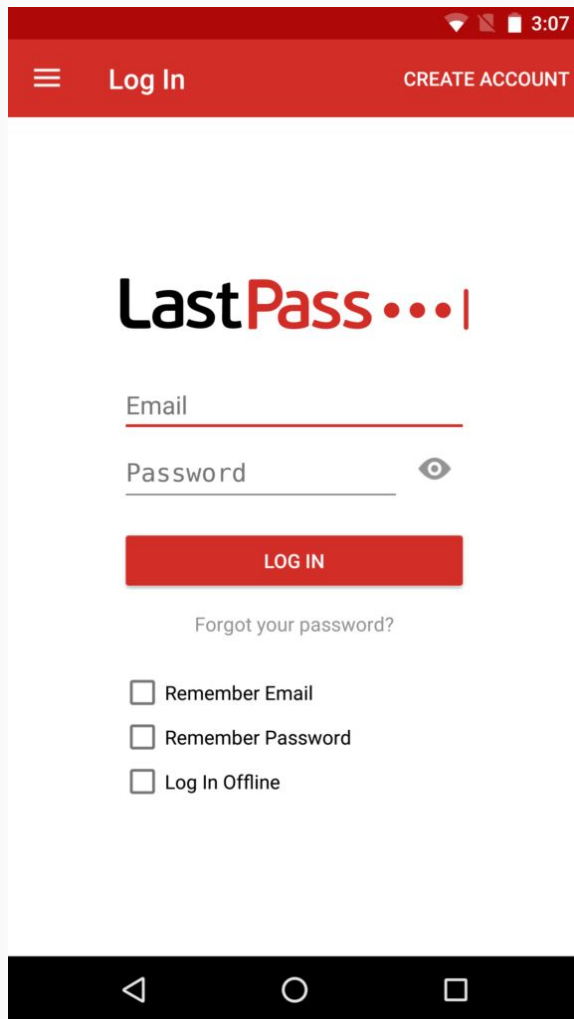
enables possibility of **single-site**
random passwords

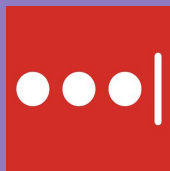
LastPass remembers all those
passwords so you don't have to.

Use a **very strong master password** -
also optional fingerprint auth on app

[Play Store](#)

[App Store](#)





LastPass

cross-platform password manager

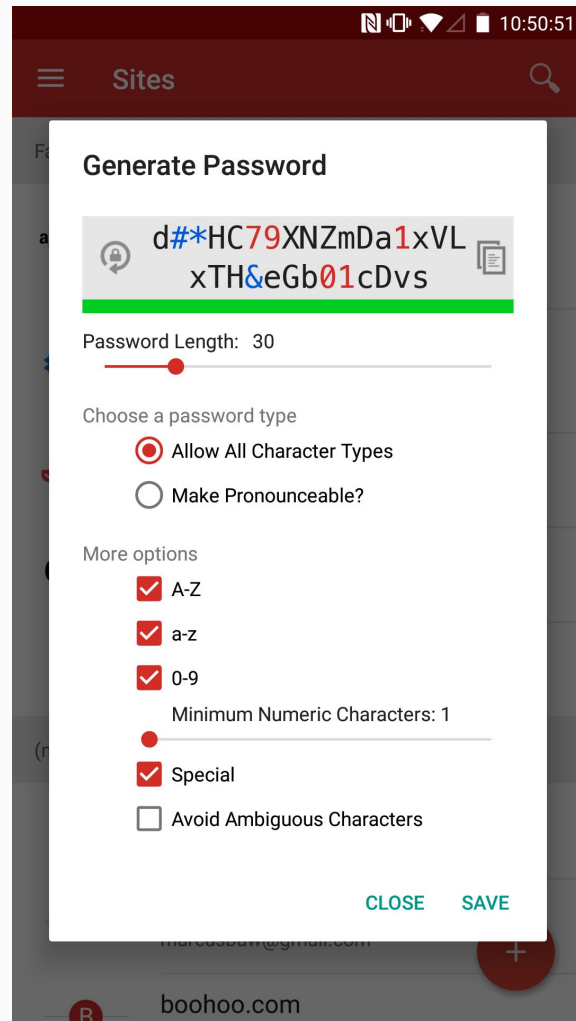
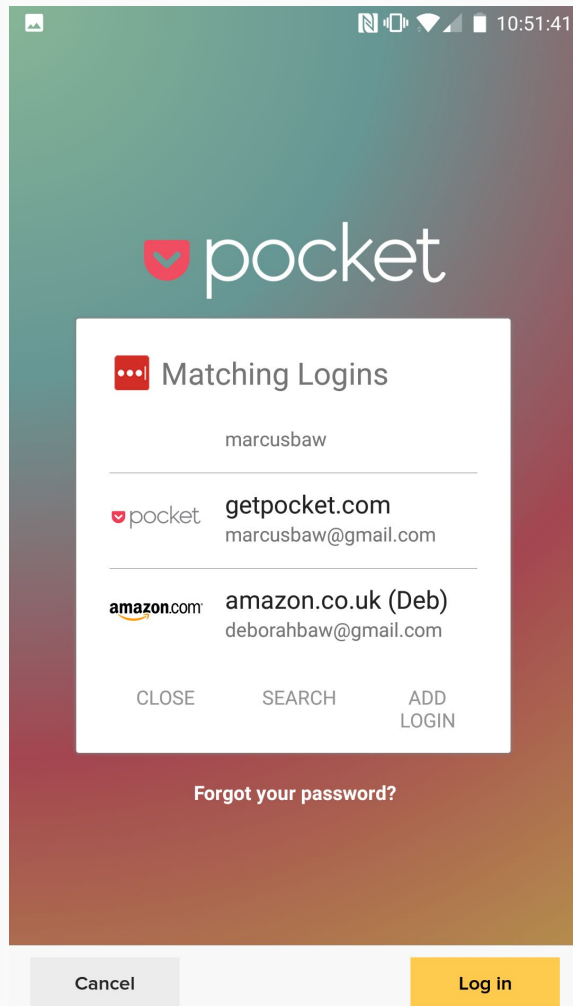
enables possibility of **single-site**
random passwords

LastPass remembers all those
passwords so you don't have to.

Use a **very strong master password** -
also optional fingerprint auth on app

[Play Store](#)

[App Store](#)





Trello

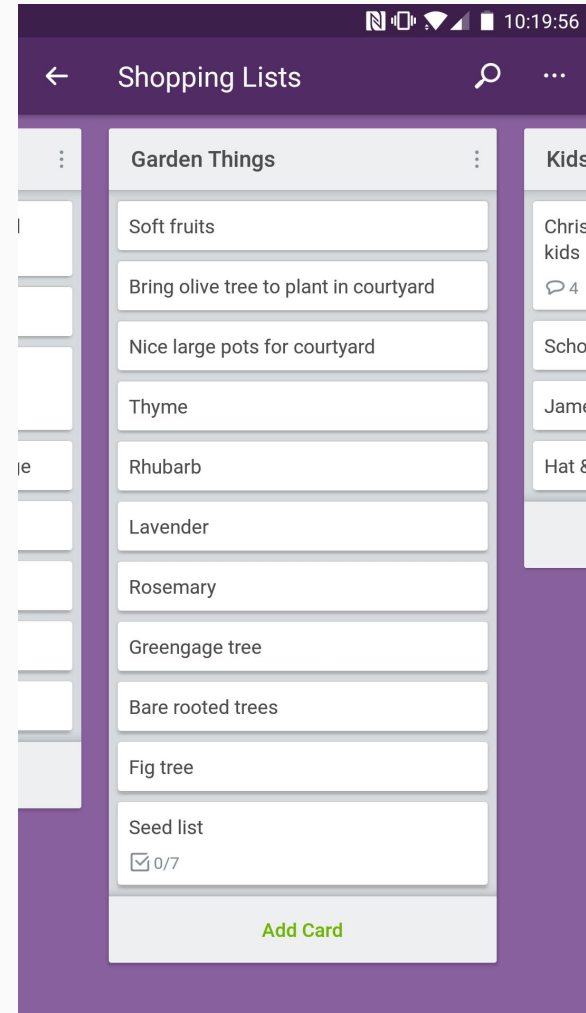
Digital version of Post-its on a board

Manage projects, lists, todos

Sync across teams, devices, desktop

[Play Store](#)

[App Store](#)



IFTTT



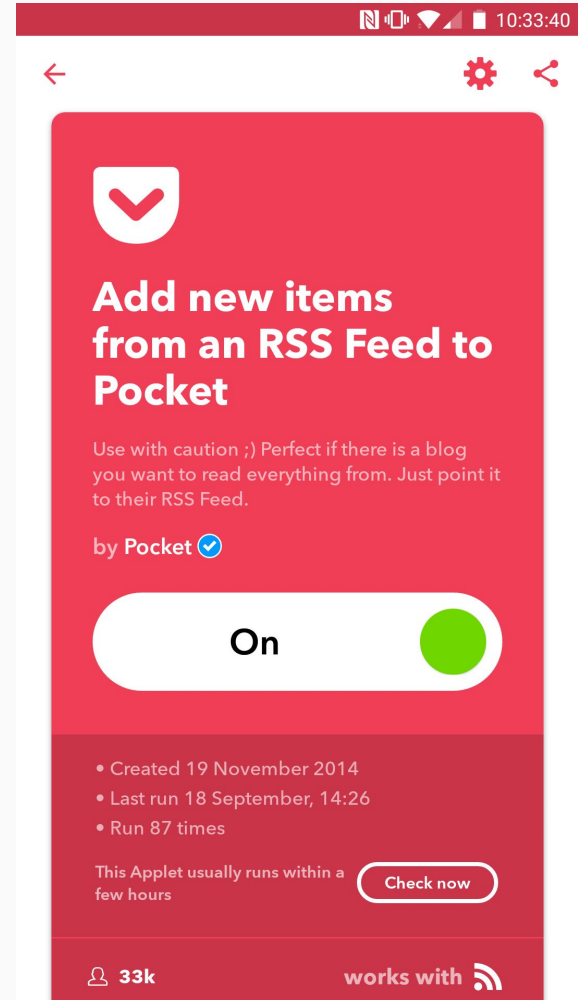
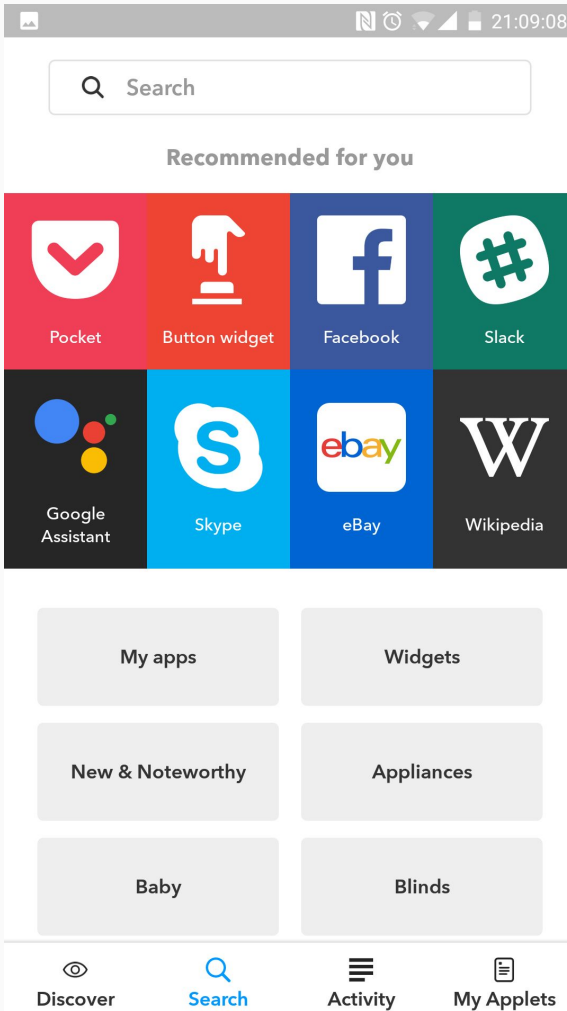
If This Then That

Automate the web services you use, reducing the time you spend on admin tasks

Unfortunately **not one** clinical application has an interface that can be used by IFTTT

Play Store

App Store



Podcasts



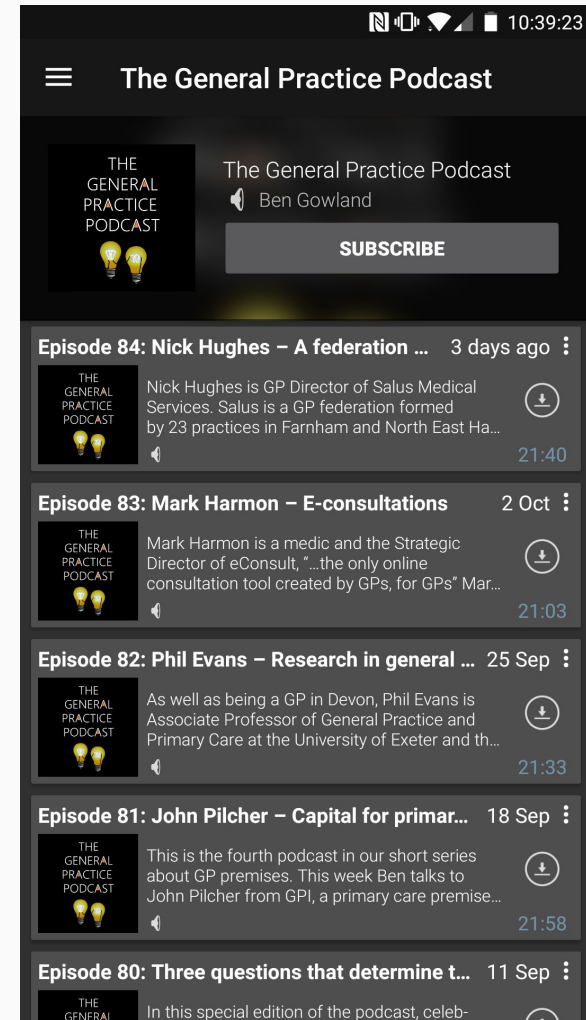
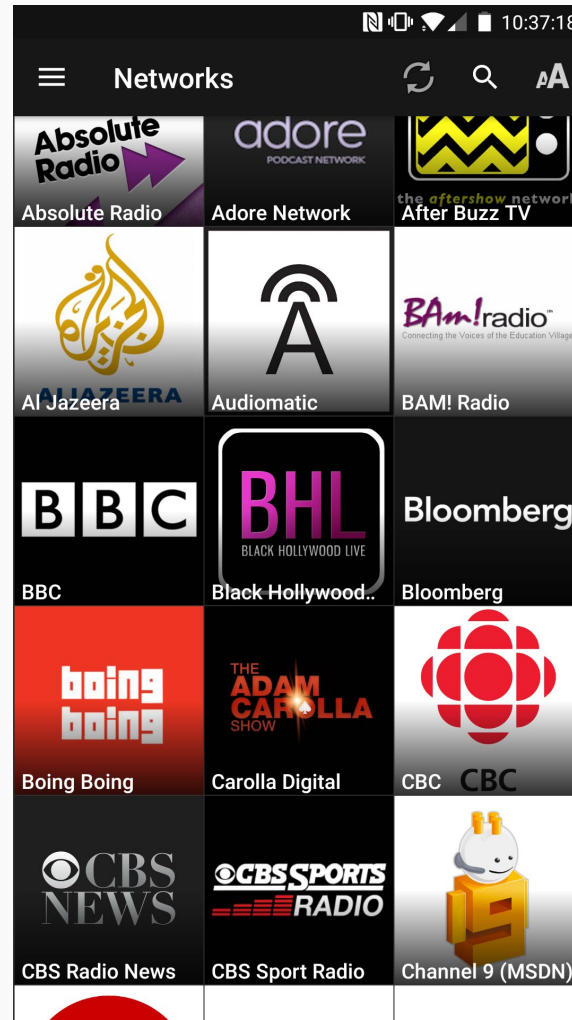
Podcasts are an excellent way of learning and keeping up to date

Especially good when travelling/commuting as it's hands-free

No single best crossplatform option for podcasting apps...

iOS: use [iTunes/Podcasts](#)

Android: [Podcast Addict](#)



Others

- [Zapier](#) -like IFTTT but more integrations, more complex
- [Xero](#) - online accountancy on desktop and app
- [Maps](#) - Google (or Apple) Maps essential for locums doing Home Visits!

The missing clinical apps

- Easy and convenient gathering of information for CPD, appraisal, revalidation, 360° feedback
- Fully interactive and comprehensive real-time mobile access to the clinical record, **complete with prescribing**
- Smartphone-based tools and instruments (eg for clinical photographs, dermatoscope) that **integrate properly** with the native clinical record
- Clinical messaging: intra-team, inter-team, with **clinically appropriate persistence** to the record
-

Why aren't there any good apps?

- medical professionals are a globally **small market**
- EPR vendors aren't all that interested in apps (they already **have** our money, apps & interfaces will only *reduce* their power/control)
- **interfaces** usually absent.
- where APIs present they're **proprietary/exclusive** and functionally poor
- **Information Governance** requirements are (for good reason) stringent
- **99.999% uptime** required from the get-go

So... what's the problem?

**chronic subacute
hypoinfrastructuralism**

telephony



maps



OpenStreetMap



Google Maps

payments



and that is why Uber exists



How would we make things
better?

Things that need to exist

- **bookings APIs**- GP, hospital, **social care**, ambulances, blood tests, physio
- **register APIs** - ODS data, every practitioner of anything, anywhere
- **comms APIs** - secure comms channels between pts/clinicians
- **calculations APIs**- MEWS, centiles and other hard clinical scoring API-ified
- **consent APIs** - for data sharing, procedures, organ donation...
- **map layers** - GP/CCG boundaries, hospitals/UCCs, disease prevalence...
- **3rd party APIs**- pharmacies, private sector, home care, food service...

Ways to get involved

- [BCS PHCSG](#) - this group! - Conference tomorrow 13.10.17 here!
- [onehealthtech](#) - open community for health tech events nationwide
- [openhealthhub](#) - coalition of online forums for health tech, also quietly developing [NHoS](#), an open source desktop OS for the NHS
- [INTEROPen](#) - industry group co-ordinating development of shared, common data structures that will
- [NHS Hack Day](#) - inclusive health-hacking community with regular events for clinicians and developers

Questions

Interesting app-related **conversations**

Secure messaging apps

Secure messaging?

<https://www.securemessagingapps.com/>