#### Innovation

The Department of Health in England isn't going to save the NHS; others have to help...

Telling the difference between outright quackery and meaningful progress – incumbents imagine all being tarnished with the same brush.

How many of the research and innovation parks that laud themselves as the future encourage an AMR solution startup compared to the next techco that wants people to click more ads?

## There's no list/map of (new) places to get your scan

There's no list of the new "community diagnostic centres" which your GP can refer you to directly for a scan. Your GP may have been told when one opened up in the same administrative area, but not across boundaries or other places that are convenient for you to go (which may make very little sense purely geographically – the most convenient for me is Addenbrookes, the next most convenient is UCLH). There's no list of centres, there's no way for you to know where you can go, and what to do about it.

A list, a map, and you can ask your GP to refer you directly to there for the scan you need.

#### The NHS app doesn't help grandpa make a better decision at 4am

In the dead of night, a grandfather awakens with difficulty breathing. Is it merely a matter of fear, or should he awaken his wife? Should she summon an ambulance? What guidance can he seek to make an informed decision? He may be wearing an apple watch, an oura ring, and a fitbit, and none of them will help.

Lobbying Apple to put the same display on the overnight Nightstand mode display as it buries in the Vitals app on the Watch is something that would reduce distress and concern, and unnecessary NHS load (an apple watch is cheaper than the average ambulance callout). Any organisation could write guidance to be reused worldwide if Apple offered this functionality via widgets, but they don't, so no one can – there is a large role for civil society – organisations who aren't seeking to make money off the process, and who exist to offer public good.

Whether you have a smartwatch or not, the NHS App offers nothing to assist you beyond what you'd get from calling 111. How many third party services could exist that would help you without handing your data to the large commercial outfits who will data mine dementia for cash? DH/E suggests the answer is "none" which seems unlikely. The advantages of tech based personal monitoring are stifled by commercial motives. Good measurement of a patients condition is useful to both the patient and their carers.

### **Turkey Teeth on Steroids**

The agenda of Trump2 suggests that new treatments are more likely to be tested for efficacy but not safety. Challenge trials for high consequence diseases, novel treatments for dementia, many new mRNA treatments, all may appear. There will be the odd success amid the deluge of outright quackery. Sorting the useful from the placebo or harmful is an unaddressed challenge an collaboration ecosystem can step up to. DH/E won't.

When the <u>Church Lab at Harvard</u> created a custom mRNA covid vaccine in March 2020, the future had arrived it just wasn't evenly distributed yet. An area's organisational ecosystem can use similar innovations for a whole range of conditions – but this will require public knowledge and public interest organisations working with clearly aligned incentives. The Department of Health in England can't do it, nor any one ICB, but the wider ecosystem can do things the NHS bureaucracy can't.

Some of the US innovations will work, they may even make vaccines for cancer work at scale in practice, and mitigating treatments for dementia.

# Cancer care for your cat and for you (the latter needs no10's close attention)

Blood tests for cancer are starting to work at scale, and mRNA treatments for cancer are following close behind. In the lifetime of this Parliament it is likely that you will be able to cure cancers in your cat at reasonable cost; it is untenable that the NHS won't offer the same treatment for you.

By the end of this Parliament both tests and treatment could be rolling out (for humans), but only if there's close scrutiny of the process DH/E and others will follow to keep it on the standard regulatory path and out of the slow "too complicated" lane. Such investment would free up around 20% of the NHS budget over time which is currently spent on cancer and the consequences of cancer.

There should also be a clear and ready path to roll out any new mRNA vaccines that appear for the viruses that cause cancer, just as HPV vaccines eradicate cervical cancer, as Epstein-Barr seemingly causes MS, and it seems some viruses cause cancer and possibly dementia.

"Prevention" has been the hobby horse of DH for decades, vaccines are the only "prevention" that is so effective many forget what has been successfully prevented.