

Some thoughts about the Government Covid Track & Trace system

Updated 29/6/20

Card payments have now overtaken cash as the most common form of payment. The question is whether this facility could form part of a simple Track and Trace system for Covid 19

The Proposal

There should be central database, maintained by Department of Health & Social Care UK, using info supplied by card companies, linking card nos to a contact-identity (either an email address or a mobile phone no)

All costs would be borne by the Department of Health & Social Care UK and these would be substantially less than those systems which have suggested so far. Most of the IT work would be carried out by the Department itself

As regards security, the only info held by the Department would be a list of 16-digit card nos (without CSV) + a contact entity (mobile phone or email address). This is hardly sensitive info and is what most people willingly divulge to pubs/restaurants etc

All customers entering pubs (+ restaurants, nightclubs, cafes etc) would swipe their cards on entry, using a device as that used to take payment (with swipe facility). Entries could be saved to a local storage device and uploaded as convenient (eg daily or weekly) to the Department (within of course the incubation period)

When cases are diagnosed, the medical body involved would get the patient to swipe all their cards in order to upload each card no to the Department.

Scenario 1

Customers **A** and **B** both enter pub **XXXX** at different times on the same day. Some days later customer **B** is diagnosed positive for COVID

The system would then:

Contact pub **XXXX** and warn them of the infection

Contact Customer **A** and all other customers who entered the pub on any day that customer **B** entered the pub within the 2 weeks before the diagnosis

Similar warnings would be sent automatically to all members of staff

A typical fully automated warning sent by text or email to Customer **A** would say:

You swiped into pub **XXXX** at yy/mm/dd/hh:mm

A positive test case swiped in at yy/mm/dd/hh:mm

For more info pls reply to this communication

The pub would be closed temporarily until a full cleansing operation had been carried out

Extension to Shops, Motorway Service Stations etc

The system could be extended to shops and motorway service stations based on payment transactions. This could include self-service pumps with auto card payment at the pump on the same day

People without cards

People without credit or debit cards (guestimated 5% of the population) could apply for a special NHS card with a 16-digit card no and contact-identity but no purchase facility

People who wished to enter a pub/restaurant without their card would be required to complete a paper form. In the event of a positive diagnosis linked to that establishment, then the proprietor would be notified and the onus would be on them to contact the individual concerned.

People without cards who are diagnosed would be required to complete a form listing all contacts and pubs etc visited during the previous 2 weeks

Cards with no Contact Entity

If there is no contact entity linked to a card with a possible hit, then the card company would be notified telling them that the holder of that card is at risk. In fact, if the card company did not notify the card folder in this situation - they could possibly be liable. That would help concentrate the mind, even if it clenched the teeth!

Population Coverage

It would not be a huge task for card companies to supply this information and, with appropriate publicity (as a means of life protection + rescue of the economy), it could fly

Nor would it be imperative for the database to be complete before full launch. Indeed a steady transfer would ease the workload. The requirement for the card companies need not be mandatory - even just a 50% initial take-up would be better than no system at all. But they could offer it to their cardholders as a potentially life-saving bonus

Background

This paper was produced from a discussion page on the **Times UK OnLine** website on **25/6/20**

Suggested Extensions

Suggestions have been made by various commenters. These include the addition of NI nos and NHS nos. These should be resisted as they can only delay implementation of the system. However, experience from such a system will be invaluable when considering such issues