Covid-19: Scotland launches contact tracing app with England and Wales to follow

Jacqui Wise

Scotland has launched its own contact tracing app for covid-19 based on the same Apple and Google toolkit used for the Northern Ireland and the Republic of Ireland apps.[1]

The day after the Scottish government's announcement the Department of Health and Social Care said that a covid-19 app will be available across England and Wales on 24 September. Launch of the app has been delayed while NHSX initially tried to develop a centralised system in which anonymised data from people with covid-19 symptoms could be held on an NHS database.

The UK government was forced to make a U turn in June after testing in the Isle of Wight found the app only recognised 4% of Apple phones and 75% of Google's android devices.[2] It has since been developing a decentralised model that uses the Apple and Google application programming interface but incorporates extra features. This has been tested over the past month in the Isle of Wight and the London borough of Newham.

Ireland released its contact tracing app at the beginning of July and Northern Ireland followed on 30 July.

Scotland was originally working with the NHSX England app team but on 31 July announced it would develop its own version using the same software as the Republic of Ireland. A spokesperson for Scottish government told *The BMJ*, "The total costs are still being finalised but the overall cost of the technical development will be less than £300 000 (€324 000; $384 000)."

In the first two days the Protect Scotland app has been downloaded nearly 600 000 times. The Scottish government said the app would offer an additional level of protection, supporting NHS Scotland's Test and Protect system in driving down the spread of covid-19 across the country.

First Minister Nicola Sturgeon said, "The more people who download and use the app, the more effective it can be in helping to make connections that may otherwise have been missed. This will allow people to self-isolate quickly if they are exposed to the virus, reducing the risk of them infecting others."

All the apps use Bluetooth to anonymously alert users if they have been in close contact with someone who has tested positive for covid-19 and advises them to self-isolate. They do not store details on an individual or their location but use encrypted, anonymised codes exchanged between smartphones to determine close contacts—defined as people who have been within two metres of someone who has tested positive for 15 minutes.

The covid-19 app to be launched in England and Wales—originally called the NHS Test and Trace app—has several extra features compared with the Scottish version. It will allow people to scan QR codes to check in at venues and if someone later tests positive for covid-19 who has visited the same establishment they will be alerted. The app will also send alerts to let users know the level of coronavirus risk in their postcode district, can be used to book a covid-19 test, and includes a symptom checker.

Health and Social Care Secretary Matt Hancock said, "We need to use every tool at our disposal, including cutting edge technology, to control the spread of the virus. The launch of the app later this month across England and Wales is a defining moment and will aid our ability to contain the virus at a critical time." He added: "QR codes provide an easy way to collect contact details to support the NHS Test and Trace system."

Latest findings from the fourth round of Imperial College London's React-1 study show that an estimated 13 people per 10 000 were infected between 22 August and 7 September, compared with four people per 10 000 between 24 July and 11 August 2020.[3] Cases are doubling every seven to eight days whereas they were halving every eight to nine days at the end of June.

The results of tests from 150 000 volunteers show that cases are no longer clustering in healthcare or care home settings, as seen in May and June, but are being seen more widely in the community.

Infections are increasing across all adult age groups below the age of 65 years and across all areas of the country, with higher rates seen in young people aged 18 to 24 years. Infection is highest in Yorkshire and the Humber, the North East and the North West.

The R number for the UK was reported to be between 1 and 1.2 on 11 September.

1   Protect Scotland app launches. www.gov.scot/news/protect-scotland-app-launches.

2   Wise J. Covid-19: UK drops its own contact tracing app to switch to Apple and Google model. *BMJ* 2020;369:m2472. doi: 10.1136/bmj.m2472 pmid: 32561511

3   Imperial College London. REACT study findings. September 2020. www.imperial.ac.uk/medicine/research-and-impact/groups/react-study/real-time-assessment-of-community-transmission-findings.