

Opt-in didn't work for digital contact tracing in Australia, but does that justify an 'opt-out' approach? Not yet – at least in Australia

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Opt-in mobile phone digital contact tracing apps have been proposed as one way to contain the spread of COVID-19.¹ Promoted as an effective tool to facilitate the reopening of society the apps have not been a panacea, having varying levels of effectiveness. The Australian government's COVIDSafe app was launched in late April, towards the end of Australia's first wave. The app was seen as a key part of the response to the pandemic. The first real test for the app came as Victoria faced a second wave of coronavirus. Cases spread rapidly overwhelming contact-tracing efforts.² The COVIDSafe app had limited effectiveness with Victorian state health officials revealed that the app was not that useful in undertaking contact tracing activities.³ Victoria relied on a regime restricting residents' movement through lockdowns and curfews. The Victorian experience highlights some of the limitations of reliance of opt-in digital contact tracing.

This draft paper addresses some of these limitations, building upon previous work of the authors.⁴ As the app failed to deliver what is promised and what was needed in assisting in contract tracing with the revived wave it might be asked why more effort was not made to encourage uptake of the app. In this context it might perhaps be suggested that to ensure efficacy in promoting public health outcomes, the app or other forms of digital contact-tracing should remain voluntary, but the framework for any use should instead be opt- out not opt-in. This might be thought to 'nudge' parties to the preferable outcome. We suggest however that such a measure cannot be considered without ensuring the other features of the COVIDsafe app or other forms of digital contact-tracing are consistent with best ethical practice. Digital contact-tracing must be designed as part of a system taking into account broader policy objectives relating to the virus, but not at the expense of other rights and freedoms.

The COVIDSafe app in Australia is voluntary requiring users to opt-in by downloading the app to their phone. The app uses Bluetooth to identify other individuals who have installed and are running the app. When another phone comes into proximity for a specified duration the unique ID is recorded.⁵ Should an individual be diagnosed with COVID-19 they can then choose to share this with other people who have used the app.

The App was received 6 million downloads in the first month.⁶ The target was 40% of the population, however use was much lower.⁷ While there is debate around what is the minimum level for a population to have some protection, the more users equals greater effectiveness,⁸ even if it is limited to checking-in people at businesses.⁹

The launch of COVIDSafe app was framed by debates about privacy and how user data was handled. The centralised nature of the architecture, the choice of vendor – Amazon, and a general the lack of regard the government had in relation to technology projects created debates surrounding the merits of the app.¹⁰ The government attempted to allay community concerns by passing legislation enhancing the privacy protections

¹ Kelly Servick 'COVID-19 contact tracing apps are coming to a phone near you. How will we know whether they will work?' *Science* (online, 21 May 2020) <https://www.sciencemag.org/news/2020/05/countries-around-world-are-rolling-out-contact-tracing-apps-contain-coronavirus-how>; Nicolás Rivero 'Global contact tracing app downloads lag behind effective levels' *Quartz* (online, 16 July 2020) <https://qz.com/1880457/global-contact-tracing-app-downloads-lag-behind-effective-levels/>

² Victorian cases peaked at 686 new daily cases on 4 August <https://www.dhhs.vic.gov.au/victorian-coronavirus-covid-19-data>

³ <https://www.abc.net.au/news/2020-07-15/coronavirus-app-limited-use-in-victoria-200-contacts-found/12456454>; <https://www.innovationaus.com/another-2m-spent-on-covidsafe-app/>; <https://www.smh.com.au/national/covidsafe-app-yet-to-trace-useful-number-of-unique-cases-despite-second-wave-20200725-p55fd7.html>; <https://www.smh.com.au/politics/federal/victorian-officials-stopped-using-covidsafe-app-as-second-wave-grew-20200804-p55ihd.html>

⁴ Adam Ladders and Jeannie Marie Paterson, 'Scrutinising COVIDSafe: Frameworks for Evaluating Digital Contact Tracing Technologies' (2020) *Alternative Law Journal* <https://doi.org/10.1177/1037969X20948262>

⁵ <https://www.health.gov.au/resources/apps-and-tools/covidsafe-app>

⁶ <https://www.abc.net.au/news/2020-06-02/coronavirus-covid19-covidsafe-app-how-many-downloads-greg-hunt/12295130>

⁷ <https://www.itnews.com.au/news/covidsafe-likely-to-fall-short-of-40-percent-target-itnews-poll-547608>

⁸ <https://www.technologyreview.com/2020/06/05/1002775/covid-apps-effective-at-less-than-60-percent-download/>; <https://www.smh.com.au/national/critics-of-victoria-s-contact-tracing-system-misunderstand-some-key-facts-20200908-p55tju.html>

⁹ For example this ranges from pen and paper through to digital sign-in apps so that businesses can know who has been on their premises.

¹⁰ Kobi Leins, Christopher Culnane and Benjamin IP Rubinstein 'Tracking, tracing, trust: contemplating mitigating the impact of COVID-19 through technological interventions' (2020) 213 *Medical Journal of Australia* 6 doi: 10.5694/mja2.50669

around the app, focusing on who could access, retention and other aspects.¹¹ Additionally, as the app started to be used in the community a number of issues were raised in regard to the difficulty of using the app effectively on Apple devices.¹² At launch Australia was just exiting the first wave meaning a reduced role for the app. The return to a semblance of normality meant the app faded into the background.

Better digital contact-tracing

Digital contact-tracing is an important tool in combating COVID-19 and supporting the reopening of economies. Other jurisdictions have taken varying approaches from mandating download of an app,¹³ to the repurposing of military and policing surveillance technologies to support contact tracing efforts, often in more authoritarian regimes.¹⁴

The opt-in approach of COVIDsafe was one aspect impacting the effectiveness of the app in Australia. Recommendations might be to move towards an opt-out approach. Nudge theories often advocate such measures which leave individuals with choice but rely on inertia bias to promote decisions deemed welfare enhancing. But such measures are only persuasive in a context of an effective product which is well governed to promote fair and equitable uses of the data collected. However, additional difficulties arise from the need that any approach is supported from the controllers of device operating systems – Apple and Google.¹⁵

While we agree with the importance of protecting privacy, we note that privacy is not the only right with the potential for harm. Lockdowns, curfews and other measures to combat the coronavirus also impact citizens. We believe that policy makers need to take a holistic picture balancing privacy with other interests – such as what level of restrictions on movement. Digital technologies can assist but need to be designed in an ethical manner to achieve objectives. If opt-in apps cannot alternative public health outcomes alternative data sources, such as mobile phone location data could be considered for digital contact tracing.¹⁶ However, such an approach opens up different ethical questions and privacy concerns.

An international team of researchers led by University of Melbourne colleagues inquired as to people's attitudes towards government surveillance. In Australia there was 78% support using mobile phone data for contact tracing and surveillance, with only 72% supporting an opt-in model.¹⁷ While in the US no level of tracking was deemed acceptable, while in the UK there was support for an opt-in approach.¹⁸

We believe that while current efforts are well intentioned the focus on opt-in mechanisms may not achieve the desired outcomes. Individual privacy protections need to be balanced against other rights and freedoms. Greater public discussion and understanding of community attitudes are important for example to help policy makers balance limited intrusions into privacy against greater freedom of movement. A purely voluntary approach to digital contact-tracing is misguided. Public health orders impose mandatory lockdowns and curfews. Yes, they curtail our liberties and freedoms. Should we not also consider limitations on privacy as part of the trade-off mix for rights and freedoms.

¹¹ *Privacy Amendment (Public Health Contact Information) Act 2020*.

¹² <https://www.abc.net.au/news/2020-04-26/coronavirus-tracing-app-covidsafe-apple-iphone-covid-19/12187448>

¹³ Qatar and Turkey: <https://www.technologyreview.com/2020/06/05/1002775/covid-apps-effective-at-less-than-60-percent-download/>

¹⁴ For a selection see 'Scrutinising COVIDSafe: Frameworks for evaluating digital contact tracing technologies' <https://journals.sagepub.com/doi/full/10.1177/1037969X20948262>

¹⁵ For example in the UK: <https://www.bbc.co.uk/news/technology-53095336>

¹⁶ In Israel the state used location data from mobile phones used for counterterrorism purposes for which was ultimately overruled by the Supreme Court requiring parliament to enact legislation to allow the surveillance to continue.

¹⁷ Simon Dennis et al, A Representative Sample of Australian Participant's Attitudes Towards Government Tracking during the COVID-19 Pandemic (Research Report, The University of Melbourne, 9 April 2020)

<https://psychologicalsciences.unimelb.edu.au/research/hubs/chdh/preliminary-results-covid-19-tracking-social-licence>.

¹⁸ Simon Dennis et al, Social Licensing of Privacy-Encroaching Policies to Address the COVID-19 Pandemic (Report, 6 July 2020) <https://stephanlewandowsky.github.io/UKsocialLicence/index.html>.