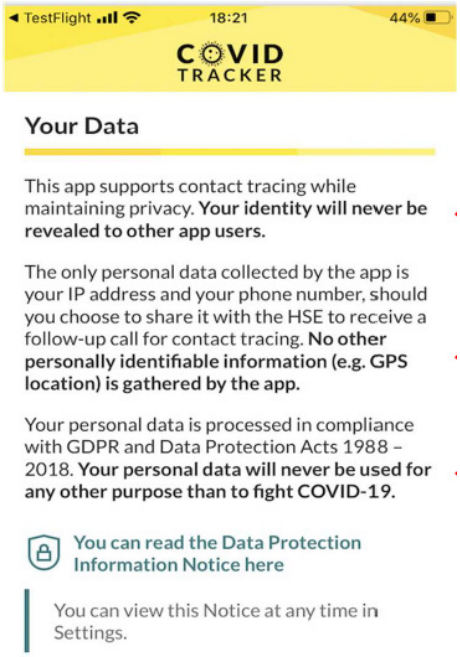
Refining Tracker App content with user experience, expert review and an experimental study

Issue: COVID Tracker Apps enable the notification of close contacts that are unknown to each other. The Covid Tracker App for Ireland will record if a user is in close contact with another user by exchanging anonymous codes that are held on the users' phones, and people who test positive for coronavirus will be able to choose if they want to anonymously alert other app users who they have been in close contact with. Achieving enough update and use of tracker apps is essential to their effectiveness. Research to inform the development of the app shows that most people in Ireland have access to smartphones (Gibney & McCarthy, 2020) and are willing to download the app when it becomes available (Callaghan et al., forthcoming). However, research also shows the importance of public trust in apps and in the privacy of app users (Gibney, McCarthy, & Lindberg, 2020). Officials responsible for developing the app wanted to use behavioural insights to help ensure that the app is easy to use, is trusted and supports users over time.

Response: The app development process was led by the Health Service Executive (HSE) and the Department of Health, in collaboration with the Government Chief Information Officer and An Garda Síochána, together with technical partners from the Irish private sector (Expleo, Nearform, Information Security Assurance Services Ltd. (ISAS), and EdgeScan) and scientific partners from Science Foundation Ireland. The overall approach involved development and testing, active engagement, and public health research. A range of documents are available on the HSE Covid Tracker App page https://www.hse.ie/!DW3Q7R. This case study focuses on two aspects of the public health research undertaken to inform the app development team.



First, the refinement of app content by using insights from user experience research and expert review. A mixed-methods user experiences research study using focus groups and cognitive interviews was undertaken with a baseline version of the app (Gibney, Bruton, & Doherty, 2020). The app was then reviewed and commented on by members of the COVID-19 National Public Health Emergency Team (NPHET) Subgroup – Behavioural Change (Murphy, 2020). Additional suggested refinements to app content was provided by a behavioural economist in the Department of Health and by the team undertaking a behavioural study. Second, it was decided to pre-test the effect of certain content, in particular additional privacy assurances and the format of hypothetical exposure notifications (Julienne & Lunn).

Impact: Insights from the user research and expert review were used to refine the app's content. A follow-up survey (4 to 5 days after participants downloaded a trial app) showed that most participants reported checking it daily and most had a positive overall impression of the trial app (Julienne & Lunn). The experimental pre-testing showed that additional privacy assurances (see bold above) increased trust, reduced privacy concerns, and increased consent, while participants who saw the redesigned hypothetical exposure notification were more confident they would know what they should and shouldn't do if they received a notification. The redesigned privacy notices and exposure notifications were adopted for the launch version of the app.

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The Research Services and Policy Unit is in the R&D and Health Analytics Division in the Department of Health and is a member of IGEES.

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The Department of Health reports referenced above are available under the heading "Further Documentation in relation to Research" at the link: https://www.hse.ie/!DW3Q7R

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