



Digital Health & Care
Northern Ireland

DELIVERING CARE TOGETHER



StopCOVID NI

Digital Contact Tracing Smartphone App



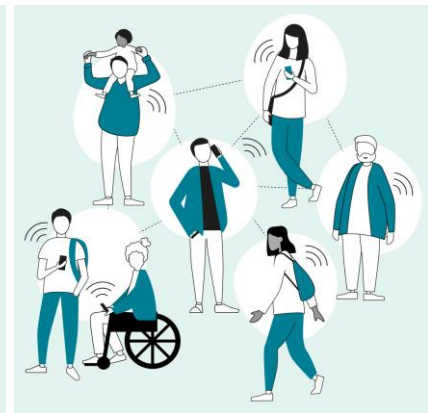


Dr Michael McBride
Chief Medical Officer
for Northern Ireland



The COVID-19 Test, Trace and Protect (TTP) programme, coordinated by the Chief Medical Officer and his team, launched the public communications campaign on 06th July 2020 asking Northern Ireland citizens to play their part in controlling the risk of a second wave of the virus.

The campaign brings public awareness to the extensive operations put in place over the last two months by the Department of Health and the Public Health Agency (PHA) for testing and tracing of individuals with symptoms or who have been in contact with someone who has the virus.



Digital technology plays a big part in delivering the range of integrated services for the TTP programme with new systems being built during the pandemic to:

Help citizens check symptoms and navigate official guidance

Check entitlement to shielded services

Request a drive-in or home-delivery test for the virus

Manage the flow of test results back to HSC systems

Alert citizens anonymously that they are at risk from the virus

Allow citizens to self report contact tracing information

Support the PHA contact tracing team to manage cases

COVIDCare NI

Shielded Registry

Testing Portal

Test Registry

StopCOVID NI

Digital Self Trace

Dynamics



The Northern Ireland 'StopCOVID NI' free smartphone app helps to speed up the process to identify people at risk of catching the virus, and slow down its spread.

Using the app along with existing public health measures will help the public to stay safe when they meet up, socialise, work or travel.

It uses the Google and Apple interface to access Bluetooth and anonymously record other nearby phones. If a user has a positive test for COVID an alert is sent to all other users. Their app then runs a probability check to determine whether there is any risk to the user, and if relevant provides advice to self-isolate.





Digital smart phone apps do not replace existing contact tracing processes, which are commonly used to protect the public from infectious diseases and health concerns like food poisoning.

The StopCOVID NI app will augment the Public Health Agency's Test, Trace and Protect programme by:

- Alerting people that they are at risk of infection where it would be impossible to do so under existing methods;
- Send alerts more quickly than can be achieved through existing methods.

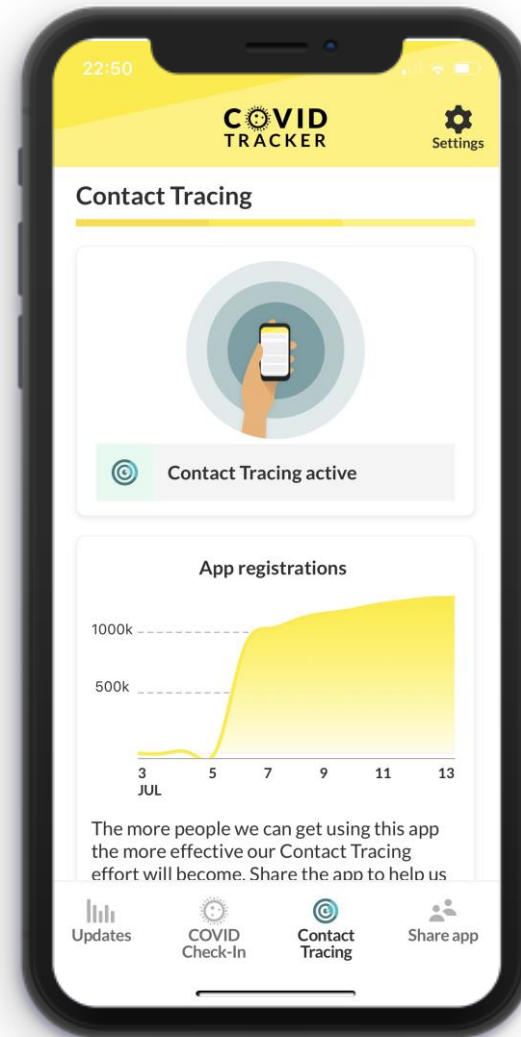
The 'Glider Scenario' – a common illustration of the benefit of the app is for a citizen travelling to work on the bus who subsequently tests positive for the virus. They could perhaps identify their neighbour but not the passengers in the rows in front and behind, all of whom may be at risk of infection. The app would automatically and anonymously alert them once the infected passenger had received their test result.

The Health Minister in the Republic of Ireland announced the launch of the 'COVID Tracker' app on 07th July. A successful adoption campaign resulted in over 1m downloads in the first few days.

The Republic of Ireland app was built by the Department of Health and Health Service Executive and includes a symptom checker and the Google / Apple Bluetooth function.

The Northern Ireland 'StopCOVID NI' app:

- Was built by the same company that developed the Republic's app;
- Exchanges the anonymous identifiers for infected users across the border, to protect all people across the island of Ireland;
- Takes a stripped-back approach, providing a more simplified user journey and further reducing concerns about privacy and data.



One million people have now downloaded Ireland's Covid-19 tracker app

Minister hails number of downloads in less than two days as a huge achievement

© Wed, Jul 8, 2020, 08:30 | Updated: Wed, Jul 8, 2020, 22:34

Sarah Burns, Martin Wall



Paul Reid, chief executive officer of the HSE, Minister for Health Stephen Donnelly and Dr Ronan Glynn, Acting Chief Medical Officer, Department of Health at the launch of the Covid Tracker App. Photograph: Gareth Chaney/Collins

Some one million people have now downloaded the HSE's new tracker app which is aimed at helping identify close contacts of those who test positive for Covid-19.

HSE chief executive Paul Reid said on Wednesday night the app comes at an important time as we begin to move about more "and will support us in managing future cases" of the virus.

"The app won't make you immune to the virus but it can help to reduce the risk. Lets keep it going. Please sign up and encourage your network to do so also," he said on Twitter.

In a statement issued by the HSE he added: "I would encourage those who have not yet downloaded the app to do so, and for the 1 million people who have already downloaded the app, I would ask them to share it with their friends and families. The more people who download the app the greater its impact will be."



The integration approach being used to exchange anonymous information between the Northern Ireland and Republic of Ireland apps is based on an emerging European standard for interoperability between Google / Apple based systems.

This means that, with appropriate attention to data privacy and sharing agreements, the Northern Ireland App will integrate with any other app that embraces the same integration approach.

Crucially, this now includes the rest of the UK. The announcement on the 18th June by NHSx that they are adopting the Google / Apple architecture, and a recent commitment that the interoperability work on the island of Ireland will form the basis for the UK wide interoperability strategy, we can say that it is highly likely that when the other UK jurisdictions go-live with an app it will integrate with StopCOVID NI



The question of distance

The Bluetooth system on smartphones transfers data between devices over a short distance, for example between your phone and your personal headphones. The greater the distance between the sending and receiving devices, the weaker the signal.

The StopCOVID NI app uses signal strength to approximate distance between two phones. This is challenging due to Bluetooth signals being different between types of phones with different components, and the different effects of situations and buildings.

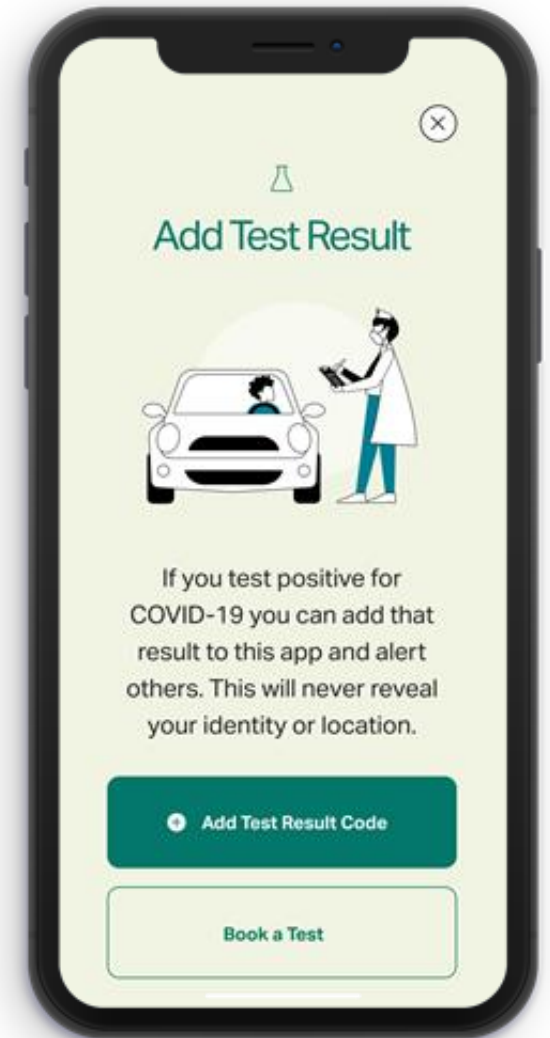
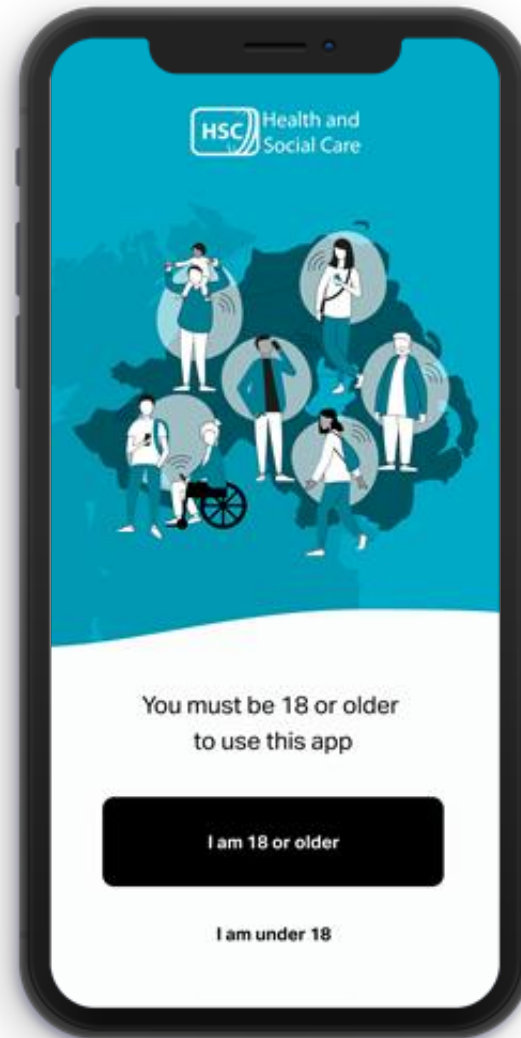
The Northern Ireland Digital team have reviewed the testing and evidence and built the app to use probability. The app combines the probability that the user was within a sufficiently close distance to one or more people who since tested positive for the virus with the duration of the interactions, and triggers alerts accordingly with advice to self-isolate.

The accuracy of this system is enough today that we will prevent infections and save lives, without being overly cautious and triggering unnecessary isolation advice. We will refine the system based on technology developments and close monitoring of performance.



In the first release the 'StopCOVID NI' app will be available to anyone over the age of 18 in Northern Ireland, we are working with Children's Commissioner and the Information Commissioner's Office to identify a way that younger people can get consent to use it without impacting anonymity.

Given that a user at risk from the virus will be asked to self-isolate to break the transmission chain, it is important to prevent improper triggering. Users will only be able send alerts to other phones once they have entered a unique code that is generated when the HSC receives a positive test result.



Northern Ireland citizens who wish to download and use the app will be instructed by their respective app store (Apple AppStore or GooglePlay) if they haven't already to update their operating system to the most recent version that includes the Apple / Google Bluetooth interface.

For some users this will be a problem, in that the new Operating System features are not supported on older iPhone models (iPhone 6 and earlier). They will not be able to download and use the new Operating System update or the StopCOVID app.

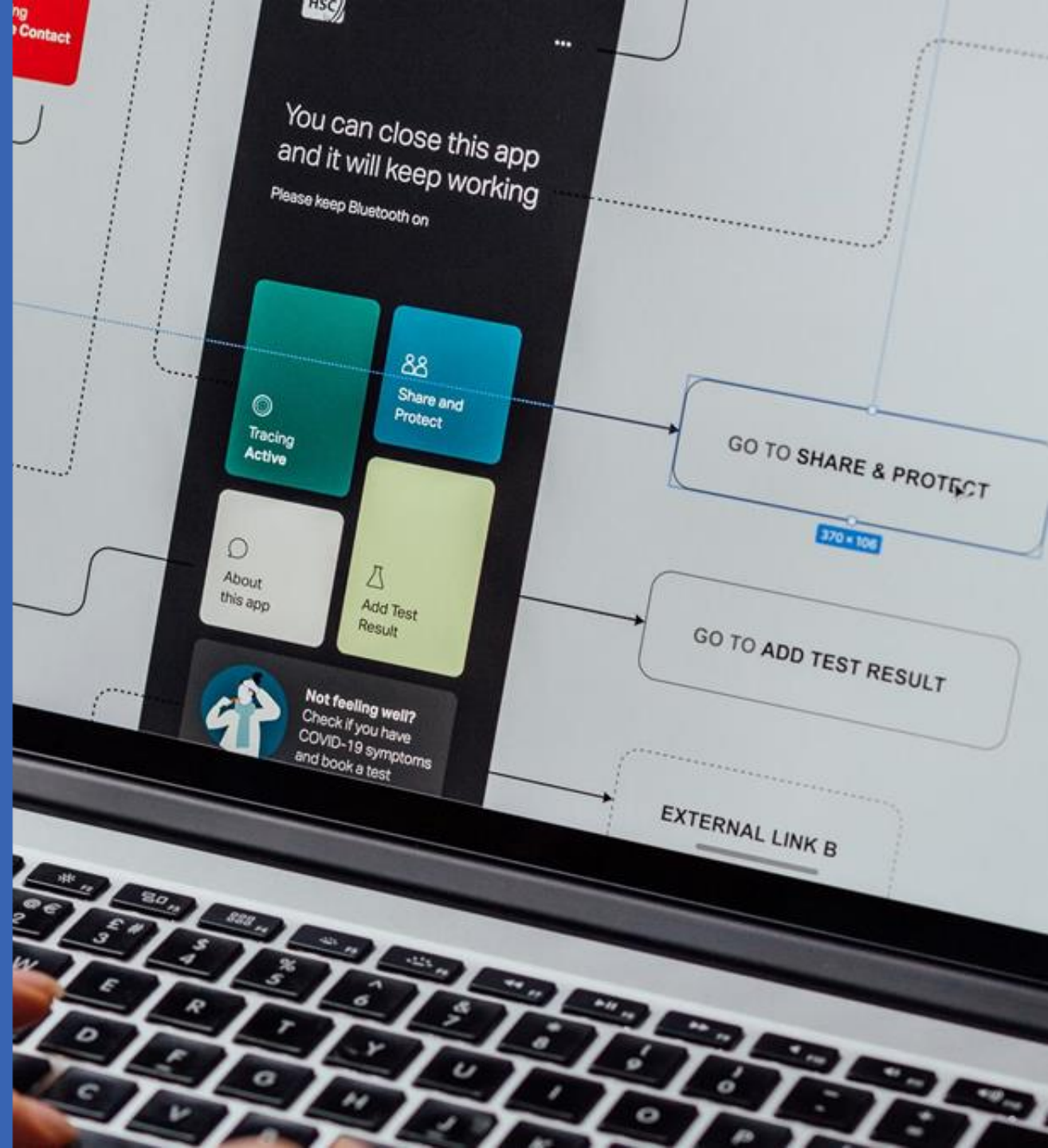


The StopCOVID NI app does not ask users for any personal information at any time. The app stores non-identifiable, randomly generated codes for other phones that it detects. It uses this information to compare against an up to date list that it retrieves periodically of devices where the user has a positive test.

If the app user receives a positive test themselves, they will share their non-identifiable, randomly generated code with a service operated by the Health and Social Care authorities in Northern Ireland.

The app has been developed in line with expectations published by the UK ICO:

<https://ico.org.uk/media/for-organisations/documents/2617676/ico-contact-tracing-recommendations.pdf>



To coincide with the launch of the app an advertising campaign will run to raise awareness of the app and encourage people to download it. The campaign includes TV, radio, outdoor, digital and social media advertising as well as Google search ads.

You can view the TV ad here <https://youtu.be/KU3Yv2qmpIA>

The campaign poster below, will feature on a range of outdoor advertising sites.

Social media advertising will go out on Facebook, Twitter and Instagram #StopCovidNI.

You can support the campaign by downloading the StopCOVID NI app and let people know you are using it through your social media channels or sharing the app with friends, family and work colleagues.

Stay safe, save lives.



The 30 second TV and radio advertising campaign is being developed in accordance with style of The Executive Office COVID-19 campaign and builds on the recently launched TTP adverts.

The messaging is simple and makes the point that a large proportion of people who test positive don't have symptoms - motivating people to download the app to protect themselves and their families.



The app is effective in identifying individuals who meet the Public Health case definition for a close contact (greater than 15 minutes in duration within a distance of 2m or less). The Public Health definition also consider mitigations, like wearing of PPE for one of the individuals in the proximity event. This is assumed to effectively reduce the risk of infection, and with appropriate mitigations in place the traditional contact tracing service would discount a close contact from follow-up.

The app is not context aware, it does not know when an individual is wearing PPE or a proximity event is subject to other mitigations that would otherwise reduce the risk of acquiring the virus (e.g. perspex screens).

As such our guidance for workers who use fitted PPE equipment while in a work environment is to download and use the app as normal, but disable the Bluetooth function on their phones in environments where they are protected through PPE or other mitigations.

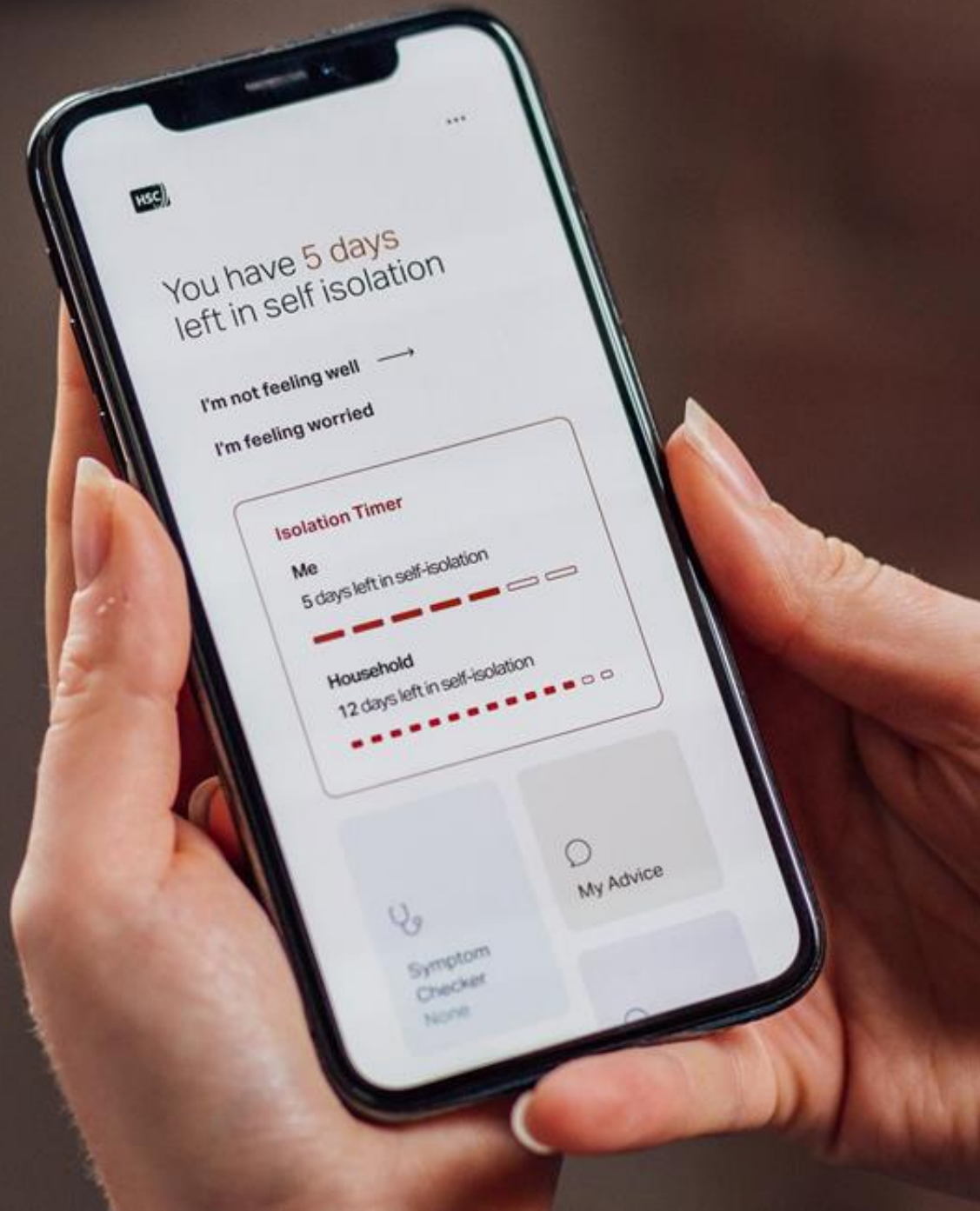
We recognise that there will be a number of different scenarios to consider and are happy to provide technical support for development of specific guidance. Please submit questions to StopCovidNIApp@hscni.net.

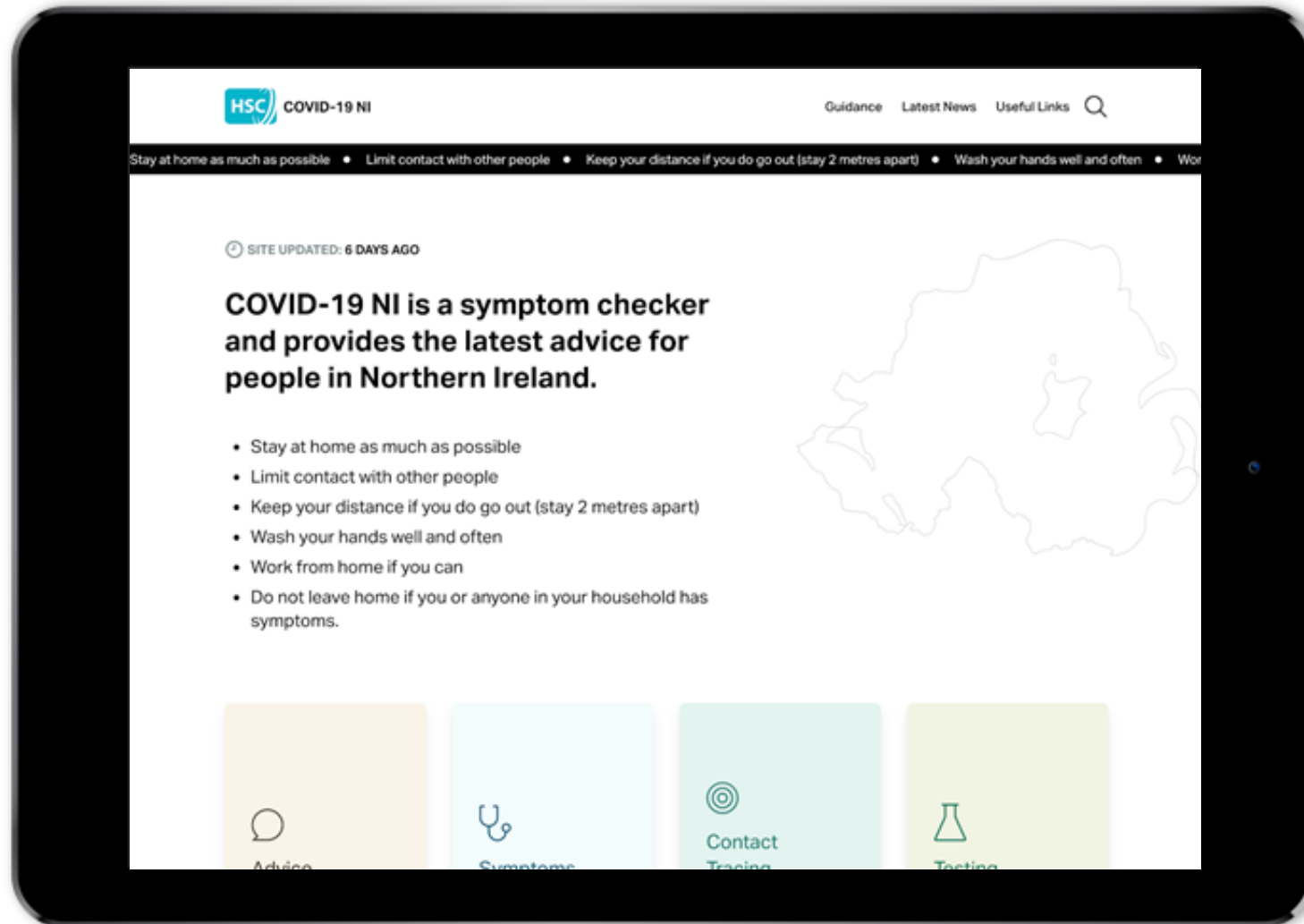
The StopCOVID NI app launch will be supported by a refresh of the existing Northern Ireland smartphone app that was launched on 27th March 2020.

The original app was called 'COVID-19 NI' and was downloaded by around 55,000 people in Northern Ireland looking for tailored information and to check their symptoms. It included a self-isolation countdown timer.

The name of the original app will be updated to 'COVIDCare NI' to mirror the new app, and the screens will be updated to integrate the user journey between the symptom checker and the dedicated proximity tracking app.

This will provide the best possible user experience while maintaining separation of the tracking features to avoid concerns about privacy and human rights.





The COVID-19 NI website will be maintained to offer symptom checker functionality and the ability to search for tailored advice and guidance.

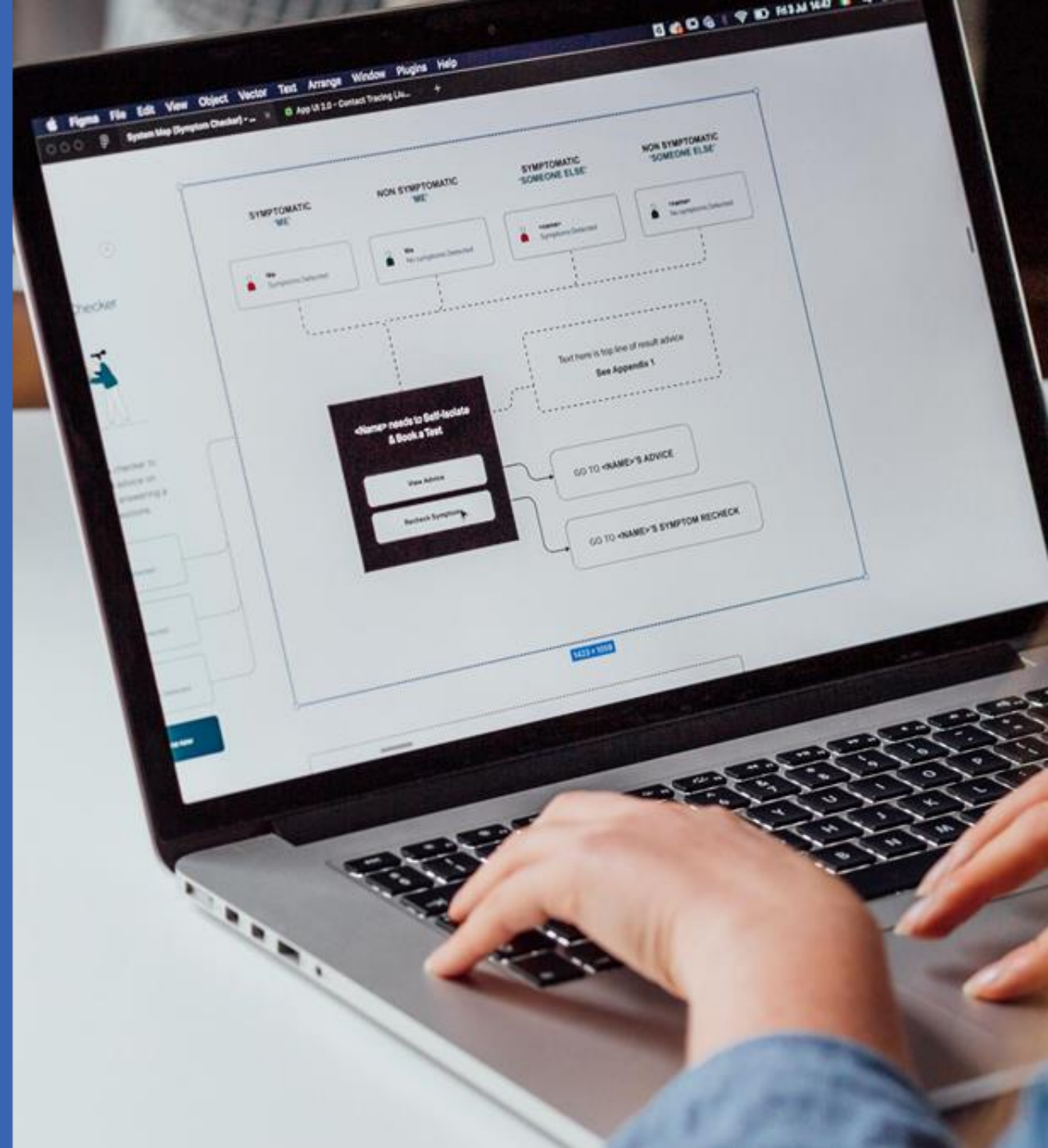
The website is useful for people who do not have a smartphone or are unable to use smartphone apps.

The proximity tracking features of the new StopCOVID NI app are not available to website users.

After go-live the system will be monitored by DHCNI and PHA teams to see how many people in Northern Ireland download the app. The number of times a positive test result code is entered by a user to release their unique identifier will be tracked, and the total number of other users that are alerted as being at risk of infection will be reported.

Through close scrutiny of these figures the sensitivity of the app will be clear, and adjustments to the probability calculations will be agreed with the PHA and CMO.

A further release of the app is expected in August or September to adopt some improvements to the accuracy of the Bluetooth system. These are currently being developed by Apple and Google and are not yet available in the live versions.



Digital Health and Care Northern Ireland (DHCNI) is a newly formed partner to the Health and Social Care system. It is led by the Department of Health and is primarily an amalgamation of the Health and Social Care Board's former eHealth and Care Directorate and the Public Health Agency's Centre for Connected Health and Social Care.



DHCNI sets the vision and strategy for Digital Transformation in Health and Social Care, directs and oversees the central budget for Digital investments and works in partnership with, and commissions projects and services from, the Business Services Organisation. DHCNI also aims to bring together the disparate Digital functions across the six Trusts: collaborating to develop a region wide strategy; building an integrated and collaborative leadership and governance function; facilitating shared decision making; setting policies and standards for IT and Information across Health and Social Care; and providing services and support where relevant.