



An Roinn Sláinte
Department of Health

Summary of Comments by the Sub-group on Behavioural Change on the content and design of the COVID-19 Contact Tracing App

PREPARED ON BEHALF OF THE COVID-19 NPHET SUBGROUP – BEHAVIOURAL CHANGE AND BASED ON THE VERSION OF THE APP AS OF FRIDAY 24TH APRIL 2020

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This paper has been prepared by staff in the Department of Health.
The views presented in this paper do not represent the official views of the Department or Minister for Health.

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Executive Summary

This report is not “a list of changes to be made”, it is a series of suggestions and comments from members of the behavioural change subgroup aiming to improve the use of the App. Key themes from the responses were:

1. User actions

It should be made clearer what a user is asked to do, how often they are asked to do it, and why they are asked to do it. This information should be provided up front and in a brief standalone section.

2. Order of tabs

Consideration should be given to changing the order in which the tabs appear to better support the core objectives, with the “check-in” as the main screen when a user turns on the App and the first two tabs at the bottom of the App being the “check-in” and the “tracing” tabs, and then the “Updates” tab.

3. Check-in tab

Suggestions to address user experience issues are: (a) change the flow to allow people to move from “check-in history” back to the check-in page, (b) for people reporting symptoms provide direct links to advice (rather than links to a general page), (c) for people not reporting any symptoms provide specific instructions on what to do next with the App, (d) make it clear how often people can report symptoms each day (i.e. state only once a day), (e) consider whether people should be able to report twice a day (if no symptoms in the morning but some in the afternoon).

Suggestions to encourage daily check-in are: (a) explain why you want people to check in each day, (b) provide users with the option of an automated reminder to check-in, (c) positive feedback or other salience messages about the importance of checking in daily. Additional, ways of encouraging usage are discussed under the Updates tab (point 5).

4. Tracing tab

(a) provide information on how using the App helps tracing (non-technical how it works), making clear what data is used for and is not used for, (b) amend the current wording, and (c) try to provide a direct signal to a user not “in the App” if Bluetooth is turned off (e.g. a notification or symbol on the App icon).

5. Updates tab

The following suggestions are made: (a) change the current subsection headings (“Today’s fight” and “Latest update”) to headings that are unambiguous in meaning (e.g. “Today’s App fight” and “Latest health service figures”), (b) consider dropping the number of daily confirmed

cases graph, (c) present the country breakdown figure differently to avoid misunderstandings, (d) include some positive statistics in the updates sections (e.g. from the App, from the health service), (e) provide additional information in the Updates section that changes (e.g. the current restrictions, current health symptoms advice).

6. Additional comments

Additional comments were made in relation to (a) font size, (b) the App name (different views) and (c) for understanding how people reply to a question for subsequent estimates of risk factors.

Introduction

The App development team requested input from the PHET sub-group behavioural change and a behavioural study BRU, ESRI study on the design and content of the App. This report contains insights/views from members of the subgroup on how to improve the current version of the App relative to the Business Requirements of the App.

The members of the subgroup (and members of the BRU team in the ESRI) were asked to (i) read the business needs for the App, (ii) download the App and use on one or two days, (iii) provide comments/insights. The process was similar to a Delphi survey (getting views of experts) but it had only one round given the time constraints, as members were informed on Friday 24th April and asked for comments by 15.00 on Monday 27th April. The responses were collated by Robert Murphy, RSPU who is also a member of the subgroup and returned a completed questionnaire.

The version of the App did not include the Privacy statement, nor could the respondents see the text/process in relation to what happens if someone is asked to provide their data because they have become a confirmed case or if they have been in contact with someone who is a confirmed case. This report is not “a list of changes to be made”, it is a series of suggestions and comments to be considered, and agreed whether to make some of these changes as part of the development and testing of the App. This report collates the responses under common themes. The questions presented to the subgroup are provided in Appendix A. The focus of this report is on the use of the App rather than the download process. Members of the Group provided comments on the download experience during the development of the App. The membership of the subgroup is provided at Appendix B.

Summary of Comments

1. User actions

It should be made clearer what a user is asked to do, how often they are asked to do it, and why they are asked to do it. This information should be provided up front and in a brief standalone section.

"I think it needs to be made clearer what the app is for, who should use it, and how often we need to use it. I may have missed this information at the start of using the app, but now I can't seem to get back to that part of the app and can't find that detail on the app." Respondent 2

"Overall, there needs to be brief text in the App explaining what a user is asked to do and why (what the app does and how)." Respondent 5

"Primary aims of the app and why people should use it should be made much clearer, as well as the most important actions for them to take (check-ins, sharing app).

- More information when the app is first used.
- An "about" page that can be referred to later (which can also include information about who developed the app and address privacy concerns)." Respondent 6

2. Order of tabs

Consideration should be given to changing the order in which the tabs appear to better support the core objectives, with the "check-in" as the main screen when a user turns on the App and the first two tabs at the bottom of the App being the "check-in" and the "tracing" tabs, and then the "Updates" tab.

"Given that the main functions of the app are the symptom checker and the contact tracing, would it be better to have the symptom checker screen as the main screen when you open the app rather than the updates screen? I know the "covid check-in" in lay appears at the top of the updates screen already but maybe it could be made bigger? I just feel like we should really focus on making it as simple as possible to report symptoms and share contacts for tracing. The updates are important for engagement, but after all are secondary." Respondent 4

“If Check-in is what someone should do each day, should it not be the first tab (Updates the 3rd tab).” Respondent 5

3. Check-in tab

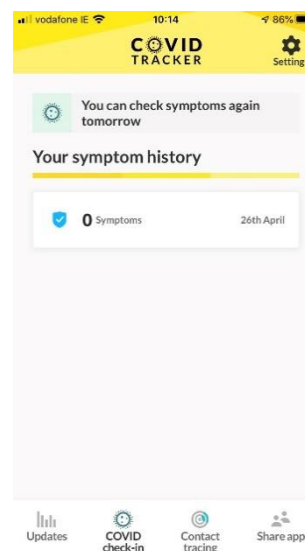
Suggestions to address user experience issues are: (a) change the flow to allow people to move from “check-in history” back to the check-in page, (b) for people reporting symptoms provide direct links to advice (rather than links to a general page), (c) for people not reporting any symptoms provide specific instructions on what to do next with the App, (d) make it clear how often people can report symptoms each day (i.e. state only once a day), (e) consider whether people should be able to report twice a day (if no symptoms in the morning but some in the afternoon).

Navigating the check-in page

“When I viewed my symptoms history I could not go back to my original check-in page.”

Respondent 5

“Symptoms history: I clicked to check my history and couldn’t return to the previous screen. It’s not clear how to move forward or what I should do next.” Respondent 3



Direct links for people with symptoms

“Provide more direct links for when someone reports a symptom, when I reported a “cold or flu” I was told to self-isolate but the link I was provided with was to a general webpage not directly to self-isolation section (and it was not easy to find the self-isolation section).” Respondent 5

Instructions for people without symptoms

“The instructions for use need to be clearer. Once I had entered in that I had not symptoms, there wasn’t a clear instruction then about what I needed to do.” Respondent 2

"It is worth testing breakoff at the page that starts "Hi There". Is it possible that those without symptoms will be more likely to just breakoff here. Is it possible that people without symptoms might think at this point that it is not as important for them to check in? Is this step needed?"

Respondent 1

Frequency of reporting of symptoms

"Add text so that it is clear that you can only report symptoms once a day." Respondent 5

"Potentially include an option to revise that day's symptoms (e.g. if you check in in the morning but develop symptoms later on)" Respondent 6

Suggestions to encourage daily check-in are: (a) explain why you want people to check in each day, (b) provide users with the option of an automated reminder to check-in, (c) positive feedback or other salient messages about the importance of checking in daily. Additional ways of encouraging usage are discussed under the Updates tab (point 5).

Encourage daily check-in

"If you want people to check in each day, you need to (a) explain why you want them to do that and (b) have an automatic reminder built into the process (either a reminder that pops up on the phone or a text that is received)." Respondent 5

"Ideas to promote regular symptom check-ins:

- Daily notifications (but need to be careful as some may find this annoying – potentially allow people to schedule them for a certain time)
- A check-in "streak" feature as used in other apps e.g. Duolingo
- Some sort of positive feedback after each check in saying thanks and emphasising the importance of the contribution
- More salience for the message that it's just as important to check in when you don't have symptoms."

Other forms of engagement could encourage further app participation (e.g. daily record of mental wellbeing)." Respondent 6

4. Tracing tab

(a) provide information on how using the App helps tracing (non-technical how it works), making clear what data is used for and is not used for, (b) amend the current wording, and (c) try to provide a direct signal to a user not “in the App” if Bluetooth is turned off (e.g. a notification or symbol on the App icon).

(a) How the information from the App helps tracing

“Explain how tracing works relative to the App. This is currently not explained.” Respondent 5

“More detail needed on how data is used to achieve app aims:

- To provide reassurance data is not used for other means – e.g. people could worry location information is being used to check they are complying with regulations.
- To provide reassurance the app is effective (some people have been saying Bluetooth is not a good means of detecting close contacts).
- To clarify what can be achieved with only some permissions turned on (some people may be OK with Bluetooth being turned on, but not sharing location).” Respondent 6

(b) Current wording

“Make the text in the first box (1) bigger and (2) easier to understand – lots of the text could be phrased better. “Drop the second box re “App registrations”.” Respondent 5

“A comment on language – ‘Thanks for being a tracker!’ This exclamation mark could make this seem a bit patronising. Could we make this work harder using an emotional/altruistic appeal? ‘Thanks for being a tracker. Contact tracing helps save lives’ ‘The more people we can get using the app’ change to ‘The more people that use the app’.” Respondent 3

Title of the tab - “Is the correct title for the tab? This section is not actually “contact tracing” per se, rather it provides info that HSE can use to trace. Would “Contact tracking” or “Tracking” be more appropriate?” Respondent 5

“Should we test for which is the most trusted organisation to list here, HSE or others?” Respondent 3

(c) Making people aware (when not in the App) if Bluetooth is off

“Provide notification if Bluetooth is turned off by means of not clicking on the App (if I turn it off by accident, it will be clear it is off when I click on the App, but if I just look at the App icon it is not clear).” Respondent 5

“If Bluetooth is turned off (outside the app) is there the potential to send a notification to alert people that tracking is no longer working to prompt them to turn it back on?” Respondent 6

5. Updates tab

The following suggestions are made: (a) change the current subsection headings (“Today’s fight” and “Latest update”) to headings that are unambiguous in meaning (e.g. “Today’s App fight” and “Latest health service figures”), (b) consider dropping the number of daily confirmed cases graph, (c) present the country breakdown figure differently to avoid misunderstandings, (d) include some positive statistics in the updates sections (e.g. from the App, from the health service), (e) provide additional information in the Updates section that changes (e.g. the current restrictions, current health symptoms advice).

Ambiguous and potentially confusing headings

“The page “Today's fight” is very interesting and I can see more clearly now why having this would be a good feature in terms of informing and motivating people. At first glance, it wasn't clear to me what this page was doing from looking at the title. I wonder whether “Today's summary” or something more intuitive as to the function of the page is better. I don't have a very strong opinion on this but just to note at least some potential for confusion given “today's fight” is an ambiguous heading” Respondent 1

“Today’s fight” and “Latest update”: “There are two sections “Today’s fight” (which is the day in question, and stats from the App) and “Latest update” (which is cumulative, may include today’s stats, but all the stats are from sources other than the App). As a user glances from one section to another they may confuse this. Change “Today’s fight” to “Today’s App fight”. Change “Latest update” to “Latest health service figures” Drop “The national picture” from the logo with the map “Tap for county breakdown” is sufficient.” Respondent 5

“Change the term “Total check-ins today” to “Total App check-ins today”. Change the term “Feeling good” to “No symptoms” (as it is not a measure of whether people are “Feeling good”).” Respondent 5

Consider dropping the number of daily confirmed cases graph

“I have questions about including the “number of daily confirmed cases graph”. Confirmed cases are a function of other unshown variables such as the number of tests conducted and the length of time from test to result. I’m not sure how much additional information it really adds and again seeing cases continuing to trend upwards even in the face of restrictive measures may be demotivating and somewhat misleading given my points above. Respondent 4

Present the country breakdown figure differently

“County breakdown – I think this should be scaled proportionately to each county’s population. Otherwise it makes the risk look very very low in counties with smaller populations.” Respondent 4

Include positive statistics

“It would be good to include some element of feedback in the section currently showing total case numbers, deaths, hospitalised and ICU’s to show that people’s efforts are making a difference, similar to the message given by “flatten the curve” type graphics. Perhaps this could be the number of people recovered each day? It would be demotivating to continually make an effort to fill in symptoms and change behaviour in my day to day life and never see any feedback showing that my efforts are improving the situation. Is there a statistic, number, or different graph we can use to show people how their efforts are having a positive impact?” Respondent 4

“In the “Today’s fight” (“Today’s App fight”) include some positive statistics from the App use, e.g. the number of contract traces that took place through the App. In the “Latest update” (“Latest health service figures”) section include some positive statistics, e.g. the number of people who recovered or the number discharged from hospital.” Respondent 5

CURRENT RESTRICTIONS (INCLUDE AND UPDATE AS CHANGE): It would be good if we could include a screen for showing the current restrictions (on movement, travel etc.) which can be updated when they change. This could use a flow chart style as suggested by the ESRI’s study to show how different

elements of the guidelines apply to different cohorts. If this can be made interactive, it might be even better. Respondent 4

ADVICE FOR SYMPTOMS “Currently you can only see advice for your symptoms right after you’ve checked in, this could be made available at any time, or at least have a link to HSE advice somewhere.” Respondent 6

6. Additional comments

Additional comments were made in relation to (a) font size, (b) the App name (different views) and (c) for understanding how people reply to a question for subsequent estimates of risk factors.

Font size

“Overall it was straightforward to use and most of the comments below are fairly minor. General comment - is the text size really small? Presume this has been developed with the highest accessibility standards but on many screens there is loads of space and text seems tiny. I know NALA is advising but worth checking this isn’t an unnecessary barrier for some.” Respondent 3

Name of the App

“I know the app is still in development and testing on the app stores, but I just wanted to point out that any search for Coronavirus, Covid-19, or anything similar in the Google Play store returns the screen shown below, which only includes the official WHO apps. Will the team be working with Google Play and the Apple App Store to make sure that the Covid Tracker shows up when searched for? Respondent 4

“It looks great, I like the ‘Does what it says on the tin’ name and the ‘credible source’ branding is strong. Respondent 3

Responses to a question and implication for estimates

“The app is eliciting self-rated “any symptoms” after priming people to think about covid. Understanding more about how different people understand this question will be good. Will some people be far likely to indicate they have symptoms for a given level of physical effects? What might that imply for estimates of risk factors?” Respondent 1

Appendix A: Questions

Question 1: Taking into account the Tracing requirements (summarised below) are there aspects of the current App Design and Content which if amended might help to better achieve the business requirements?

1. Tracing

1.a Contact tracing: Purpose is to reduce the spread of COVID-19 through contact tracing by:

- Increase accuracy and completeness of the existing health care contact tracing procedures;
- Increase the speed with which the HSE can initiate public health procedures with regard to individuals who have been in close contact with an individual infected with COVID-19.
- Support and protect individuals who have come in contact with an individual infected with COVID-19 with guidance.

1.b Small-area Epidemiological Analysis: Purpose is for

- Data will be used to identify, monitor and manage 'transmission hotspots' of frequent and/or sustained close contact at a local level. This can drive positive health interventions based on locality, for example, targeted guidelines, health care resourcing, testing, social distancing measures.
- This data can also be overlaid with several other national datasets by the Central Statistics Office. This intelligence will complement national efforts to sustain social distancing measures and contact tracing, in combatting the spread of COVID-19.

Question 2: Taking into account the Engagement and Support requirements (summarised below) are there aspects of the current App Design and Content which if amended might help to better achieve the business requirements?

2. Citizen Engagement & Pandemic Support Requirements

2.a Engage citizens in the COVID-19 Response: Purpose is

- Individuals in Ireland are engaged and want to play their part in our active and determined fight against COVID-19;
- Engaging citizens actively reduces the feeling of helplessness, especially during periods of restricted movement.

2.b Syndromic surveillance: Purpose is to

- Ensure HSE Live and Primary Care resources are targeted to areas of most need by providing the "Worried Well" with a method of understanding their symptoms, and differentiating normal from abnormal;
- Provide a way for individuals to track their symptoms and facilitate their recall of symptoms over previous days;
- Provide a way for individuals to share symptom information with the health system to support small-area analysis to enhance the existing epidemiological models that are used to track and manage the spread of COVID-19, improving the geospatial view of the spread of symptoms, its relation to virus progression, and to inform policy making for, and the evaluation of, virus management measures.

Question 3: Taking into account the Feedback requirements (summarised below) are there aspects of the current App Design and Content which if amended might help to better achieve the business requirements?

3. Provide Citizens with Feedback on the Impact of their Efforts to Fight COVID-19

- Continuous feedback to citizens in regards to the impact their actions are having on the control of the spread of COVID-19 is vital to the sustained adherence to public health guidelines and measures.
- Provide indicators of progress in the fight against COVID-19, such as: Prevalence of wellness (no symptoms) by locality; Areas of sustained low social contact according to contact trace uploads (adjusted for population density); App participation numbers; Numbers of recovered community-treated cases (i.e. recovered at home); Improvement in average numbers of contracts traced due to the use of app in comparison to the manual tracing alone.

Question 4: Other issues on which you have views are welcome. For example, (a) the tracing takes place “in the background/is invisible” is sufficient information being provided to ensure that users feel it is working? (b) how best to encourage people to use the App each day? (would additional content be helpful)? (c) to ensure people feel informed and are comfortable with regard to privacy/ability to opt out of parts of the App and (d) what would be useful to test as part of the ESRI study?

Appendix B: Members of the Subgroup

For a number of reasons, it was not intended that all members of the subgroup would return a questionnaire (e.g. a member may already have been involved in the develop, the timeframe for replies was short etc.). The list of members is provided below, and * marks a member who returned a questionnaire. Six questionnaires were returned.

Covid-19 NPHEP Subgroup – Behavioural Change Subgroup Membership List Department of Health

Department of Health	Kate O’Flaherty (Chair)
Department of Health	Robert Mooney
Department of Health	Robert Murphy*
The Economic and Social Research Institute	Prof Pete Lunn*
University College Dublin	Prof Liam Delaney*
National University of Ireland Galway	Prof Molly Byrne*
<i>Safefood</i>	Dr Aileen McGloin*
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