NHS COVID-19 App

Government response to the Ethics Advisory Board's key principles for an ethical and effective NHS COVID-19 contact tracing app

May 2020

Introduction

The NHS is responding to the coronavirus (COVID-19) pandemic with a range of solutions. The aims of these solutions are to help save lives, reduce pressure on the NHS, return people to life outside the home, and provide up-to-date advice and guidance to members of the public.

Traditional methods of manual contact tracing will play a crucial role in plans to suppress COVID-19, but advances in technology enable us to more rapidly and accurately identify who an infected person has had contact with.

That is why the NHS has developed a smartphone application for contact tracing called the NHS COVID-19 app. The app is intended for two purposes:

1. **As an automated public health contact tracing system**, offering a digital proximity cascade system to help slow / stop the transmission of the COVID-19 virus by notifying those who are showing symptoms to stay at home.
2. **As a means to collect additional data** in a privacy-safe way **for use by the NHS and Public Health** to help better understand COVID-19 and manage the pandemic.

While smartphones can be used to quickly and automatically determine whether someone has been in contact with a person with coronavirus symptoms, people understandably want to be reassured that the app is safe to use and that their privacy is properly protected.

We recognise that there are concerns about the unethical use of tracing technology and the vulnerability to misuse. Our approach seeks to address issues around civil liberties, human rights, the exclusion of those without smartphone technology - and notably, a fear that "mission creep" could eventually lead to unprecedented surveillance of society at large.

It is because of these concerns that the Ethics Advisory Board (EAB) was established. We hope that your expert guidance on the ethical challenges presented by the technology provides assurance that these concerns will be addressed.

We warmly welcome and support your advice and are committed to adhering to the principles you have defined:

1. **Value:** There must be good reason to believe that that the app will provide sufficient net-value back to the citizen or society as a whole so as to justify its introduction and any adverse consequences for individuals.

2. **Impact**: There must be good reason to believe the app will be an effective tool in controlling the outbreak of COVID-19.

3. **Security and privacy**: Data sharing should be proportionate, and transfers and storage should be secure. The data collected should be minimised and protected, so users' privacy is preserved.

4. **Accountability**: There must be a reliable and understandable decision-making process in place to manage the app - with clear democratic accountability, particularly with regards to introducing new functionality, data collection or use cases.

5. **Transparency**: Details on what data is gathered and why, as well as the app's code and underlying algorithms should be available publicly to enable scrutiny and give people the ability to object to decisions.

6. **Control**: Users should be able to see what data is held about them so that they can understand how it is impacting on decisions.

The full letter from the EAB, and detail on each of these principles, can be found here.

Executive Summary

The NHS needs as many people as possible to download the NHS COVID-19 app, because the more people that use it, the quicker we can stop the spread, protect the NHS, and help save lives.

People want to feel confident that the app will be an effective tool in the battle against coronavirus. But they also want to know that their privacy, data and rights are safeguarded.

This statement explicitly details our commitment to upholding the highest ethical standards in relation to the NHS COVID-19 app. In doing so, we hope to give the public the assurances needed to encourage them to download and use the app.

The ongoing development of the app will require that these ethical considerations be examined openly and transparently over time. As such, we welcome the continued oversight and constructive challenge provided by the EAB.

In addition, we will continue to seek expert advice and guidance on considerations relating to equality, human rights, information governance, legal, privacy and safeguarding.

We all have a role to play in the success of the NHS COVID-19 app. It is vital that members of the public who download and use the app do so responsibly. The continued oversight by the EAB is crucial. And I am pleased that we can adhere to the principles you have set for us.

At a minimum we will:

- Ensure the protection of user data is central to our approach
- Make the app voluntary to download and use
- Be clear about the decisions made in the app's development
- Communicate in clear and plain language
- Only roll out the app if we are confident it will help

The full detail of these and other commitments are set out below.

Thank you for your time and advice. We look forward to continuing to work closely together.

Detailed commitments

In response to the ethical principles put forward by the EAB, the NHS and Government have committed to the following.

EAB Principle #1: Value

Provide sufficient value back to the citizen or society as to justify its introduction and any adverse consequences for individuals. There must be good reason to believe the app will be an effective tool in controlling the outbreak of COVID 19.

Commitments:
- The value of the app will be clearly communicated to users
- The app will be used as part of a wider package of measures and with the sole purpose of responding to COVID 19 and better understanding the epidemic
- The decision to decommission the app will be assessed under clear criteria agreed in advance with the NHS and Public Health (PH). This will be published

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EAB Principle #2: Impact

There must be good reason to believe the app will be an effective tool in controlling the outbreak of COVID 19.

Commitments:
- The app will be simple and easy to use with appropriately worded advice and alerts
- The purpose of the app will be clear to users and wider society
- Where there are changes, these will be clearly articulated

EAB Principle #3: Security and Privacy

Data sharing and storage should be secure. The data collected should be minimised and protected, so users' privacy is preserved.

Commitments:
- Any data shared and stored will follow established NHS procedures for data security. Where there are changes, these will be clearly articulated
- The principles of data minimisation and privacy protection will safeguard the user's identify and data
- Users may give specific agreement to voluntarily provide additional data
- If there is a reasonable doubt relating to the app's security, it will not be deployed
- Commitments to the app's security will be published
- Users will be notified if any security or data breaches occur

- Should a data or security breach occur, a comprehensive assessment will be undertaken. This will include actions to mitigate the risk of any further breaches
- The app will not track a user's location without agreement. Only proximity to another user will be recorded
- Agreement will be sought from people who are willing to donate their data for research
- The data that is donated for research will only be made available to those who have been approved by the NHS

EAB Principle #4: Accountability

There must be a reliable and understandable decision-making process in place to manage the app - with clear democratic accountability, particularly with regards to introducing new functionality, data collection or use cases.

Commitments:
- We support the independent Ethics Advisory Board (EAB) now and for future iterations of the app
- We will ensure there is a clear governance structure and engagement path to ensure decisions are not made in isolation. Stakeholders, including the EAB, will be consulted in relevant decisions related to the app
- The EAB will be actively consulted in the development, design and implementation of the app
- There is a risk register which is available to the EAB for input and comment
- The effectiveness and impact of the app will be frequently monitored using thresholds to assess the suspension or withdrawal of the app
- The user can change their mind about using the app

EAB Principle #5: Transparency

Details on what data is gathered and why, as well as the app's code and underlying algorithms should be available publicly to enable scrutiny and give people the ability to object to decisions.

Commitments:
- Information about the data collected and how it will be used will be communicated to users in clear and plain language before they download the app or share any data
- All communications made via and about the app, will be transparent and proportionate.
- The app's source code and underlying algorithms will be publicly available
- Changes to the app's terms and conditions will be explained to the User
- Information that is in the public interest, such as data on app take-up, will be published
- A mechanism will be in place for users to feedback or complain

- Obligations to the legal, Caldicott Principles, Information Commissioner's Office and NHS Constitution will be honoured to protect the user's privacy
- The NHS will not:
  - Allow, for example, the police, security services or other law enforcement agencies to access unpublished app data, unless it is forced to do so by the courts
  - Allow app data to be used for insurance or marketing purposes
- The NHS is prepared to take all necessary action, including (where appropriate) recourse to legal proceedings to prevent such attempted access

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EAB Principle #6: Control

Users should be able to see what data is held about them so that they can understand how it is impacting on decisions.

Commitments:
- The minimum set of data required to use the app will be made clear to the user
- Downloading, using and deleting the app will be voluntary
- If any data is to be retained by the NHS when the app is deleted, this will be made clear to the user