Can one fairly incentivize the adoption of a digital contact tracing app?

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Spoiler:

The answer is yes, but only with “enablers that are not incentives” (in a narrow sense of the term, to be explained) and still greatly facilitate the adoption (so, it *is* an incentive, in a broader sense).

Contents

Definitions

1. Digital contact tracing apps: https://en.wikipedia.org/wiki/COVID-19_apps

2. Incentives: I use two possible definitions. **The proposed solution is an incentive in sense 1** but not in sense 2.

P= agent; F= action

Incentive 1: x is an incentive for P to F if x is a condition outside P and P is more likely to F if x occurs

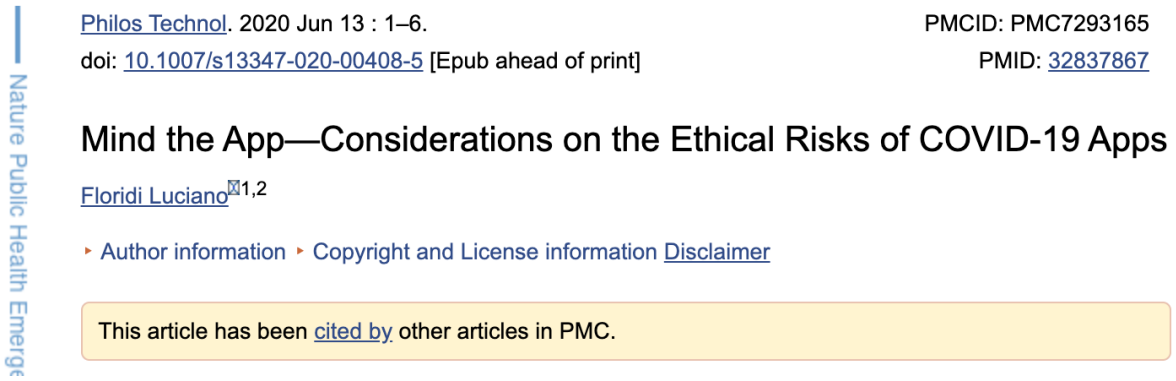
Incentive 2: x is an incentive for P to F if P triggers motivations (of a different kind) to F that P would not have in the absence of x

Section 1. The ethical problem with incentives

Non – academic COVID 19 emergency relevant sources:

Luciano Floridi's reflection on digital contact tracing apps

https://thephilosophyofinformation.blogspot.com/2020/04/mind-app-considerations-on-ethical.html



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Mind the App—Considerations on the Ethical Risks of COVID-19 Apps

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EU Privacy Authorities: e.g. Informal audition of the President of the Italian Privacy and Data Protection Authority (Garante per la Protezione dei Dati Personali), Antonello Soro

https://www.gpdp.it/web/guest/home/docweb/-/docweb-display/docweb/9308774

Section 1. The ethical problem with incentives

Incentive type distinction. If I understand Floridi's terminology (see Floridi, cit.)

- Endogenous = advantages connected to app outputs and use (advantage *from the app status,* e.g., of being non infected)
- Exogeneous = advantages connected to merely having/installing the app (advantage *for* [getting] *the app*, in Floridi's words)

Both appear hugely problematic.

Section 1. The ethical problem with incentives

- Endogenous = advantages connected to app outputs
  - Data quality problem: **incentive to trick the system** (see Floridi, cit.)
  - Informed consent problem: if there are *special rights and privileges* attached to the app, consent is not fully voluntary

Section 1. The ethical problem with incentives

- Exogeneous = advantages connected to merely having/installing the app (i.e., paying money to people who download the app, independently of infection status)
  - E.g. money. Problems
    - 1) data quality problem (e.g. Titmuss, gift relationship): people who do it for the sake of money, not public health, are less reliable in their app use
    - 2) corruption/ethical motivation crowding out argument (Titmuss, Deci, Frey, and many others)
    - 3) fairness problem: digital divide + “benefits the worst – off” argument not persuasive (requires general adoption). (Floridi, cit.)

Section 1. The ethical problem with incentives

- Possible solution: **move to compulsory system**, so you do not need to rely on incentives -> has many problems, not to be discussed here

+ data quality issues

Section 1. The ethical problem with incentives

Prima facie conclusion:

????

1) Must be ethical motivation [???]
2) No incentive is ethically viable [???]

Section 1. The ethical problem with incentives

Strategy to reject conclusion:

Reject (1): prudential motivation can be ethically **ok**

Reject (2): incentives that work by removing obstacles given pre-existing prudential and moral motivations are immune from most objections above

Section 2. Proposed solution

- The solution has two parts:

1) an “incentive 1 as meeting app users’ information needs” tackles the data quality, corruption, and informed consent problems
2) An “incentive 2 as removing digital competence gap issues” tackles the fairness problem

Section 3. Proposed solution

The proposed solution:

1 meeting app users' information needs

In a context of testing scarcity: some priority for notified app users in access to testing

Section 3. Answering data quality, corruption, informed consent objections

1) Data quality objection:

rapid access to clinical testing for notified app users does not corrupt data quality

(the incentive does not give you a motivation not to bring the app with you)

Data quality is not (necessarily) affected by the quality (selfish vs. moral) of motivations.

Section 3. Answering data quality, corruption, informed consent objections

How the solution avoids objections:

2) Corruption – moral crowding out objection:

The desire to access tests aligns with unproblematic prudential and moral motivation:

- to protect other people from contagion
- to take timely appropriate measures to protect one's own health

Section 3. Answering data quality, corruption, informed consent objections

How the solution avoids objections:

3) Informed consent objection:

A) People with a notification of possible contact have a right to more precise information about their risk

B) Fulfilling risk information needs is not a privilege

C) Having access to a right to priority in testing is not discriminatory against non-app users in general, if other (similar) high risk categories enjoy the same (or similar, or proportionate) speedy access to testing

Section 4. Proposed solution to the fairness problem

FAIRNESS problem

1. ownership of advanced smartphones (necessary for implementing the protocols) tracks social inequality,
2. any benefit provided to users is a gift to those who are already advantaged;
3. “benefits the worst – off” argument not persuasive (Floridi, op cit) – due to too small adoption (anyway, due to tech constraints)

Section 4. Proposed solution to the fairness problem

Proposed solution

1) free Bluetooth-based basic digital tracking devices requiring minimal digital skills (optimized for security and running a version of the contact tracing app)

2) The state subsidizes the purchase of smartphones able to run the app by providing subsidies equal to the cost of the free phone in (1)

Section 4. Proposed solution to the fairness problem

Proposed solution

free Bluetooth-based basic digital tracking devices

ADDRESSES the digital skills gap

Achieves a need based distribution *through self-selection*

Section 4. Proposed solution to the fairness problem

Proposed solution

(2) subsidizes the purchase of smartphones

people whose smartphones cannot run a COVID 19 app should not be pushed to purchase a simple phone (giving them less utility than a smartphone)

Section 4. Proposed solution to the fairness problem

Details about (1):

Should be configured ask consent for the COVID 19 app during the initial installation (even if the app can be de-activated at any time)

Call center assistance must be provided for all operations

Coupon should only be given after the app is installed (even if the app can be blocked at any time)

Section 6. Information gaps (other gaps may not be as obvious to me):

1) Economic/epidemiological: how severe is test scarcity to make priority desirable?
2) Economic/epidemiological: how advanced must clinical test capacity be?
3) Psychological: will people game the system?
4) Cost of the simple device with simplified app installation
5) Legal: is consent compromised?
6) Legal: discrimination? proportionality?