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Indicator framework to evaluate the public health effectiveness of digital proximity tracing solutions

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Key messages

- **Digital proximity tracing (DPT) is a new technology that has been increasingly adopted by countries to support conventional contact tracing efforts in combating the COVID-19 pandemic.**
- **This indicator framework is designed to support the evaluation of the public health effectiveness of DPT.**
- **The way DPT is implemented varies between countries, therefore the indicator framework provides a menu of options, which allows countries to choose indicators that are most suitable and feasible to measure in their setting.**

Executive summary

As they respond to the COVID-19 pandemic, countries worldwide have increasingly looked to digital technologies in support of public health measures for contact tracing. Digital proximity tracing, an approach that typically use smartphones or purpose-built devices to capture anonymized interactions between individuals and subsequently issue alerts, has shown promise in contributing to national contact tracing strategies. However, given that digital proximity tracing is still an emerging technology, methods for assessing and monitoring its effectiveness remain unclear. This document therefore seeks to provide national public health authorities with a list of indicators, developed in consultation with a broad range of national and regional stakeholders, that can be used as a basis for a standardized evaluation of the public health effectiveness of digital proximity tracing.

This indicator framework is intended for use by relevant national health authorities, public health and related institutions and their partners involved in the planning, implementation, monitoring and evaluation of contact tracing activities. It will be of most relevance to those with responsibility and oversight for the development and deployment of national digital proximity tracing solutions.

The proposed indicators aim to provide information on:

- the adoption and use of digital proximity tracing in the population;
- the capacity of digital proximity tracing to detect contacts at risk of infection;
- the speed with which digital proximity tracing solutions can notify contacts in comparison to conventional contact tracing mechanisms;
- barriers and enablers of digital proximity tracing approaches.

The document also provides a reflection on operational factors that may have an impact on the monitoring of digital proximity tracing applications (apps) and proposes different options for data collection for the indicators.

The information gained from these indicators can be used to assess and improve different aspects of digital proximity tracing implementation. This will help to increase its effectiveness in preventing transmission of SARS-CoV-2 and when evaluating its usefulness in the context of other pandemic mitigation measures.