

# 10/22 Webinar- CDC Views on EN Apps

CDC Contact info

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## Topics

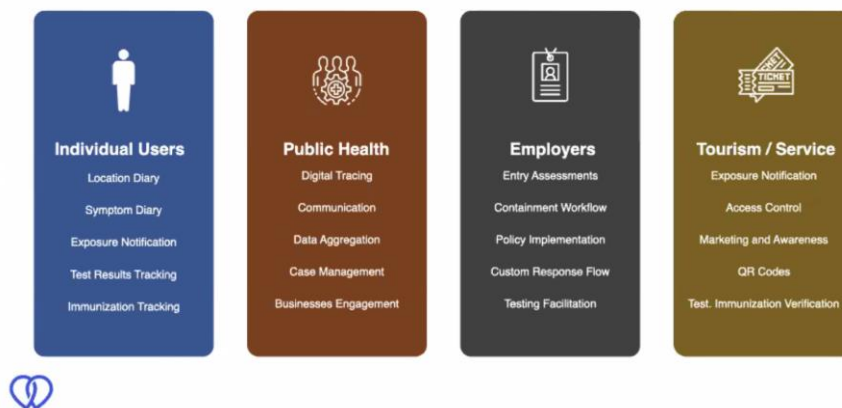
QR codes in GAEN Apps from PathCheck

CDC Views on EN Apps

## QR codes

Introduction of PathCheck. Note infographic below for areas of concentration that non profit has

### A Roadmap to Fight COVID and Emergence



Note PathCheck advocates for both ENX and PathCheck app (coexistence). Time for development is same for both. Differences between both solutions noted in graph below

Concerns for US States	iOS ENX in Settings or Android Barebones ENX App	Full featured PathCheck App	Comparison
Time Required	Submit the config file + Professional services	Use ready PathCheck app + Professional Services	Same
Adoption Boost	Android sends nudge to download Android ENX app No app for iOS	Nudge to download full app for Android Nudge to download full app for iOS	Same
Cost of Development Cost of Launch	Zero for development, Extra cost: Workflow/Legal/Comms	Zero for development, Extra cost: Workflow/Legal/Comms	Same
Cost of Maintenance, New features	Zero for barebones No extra features supported	Zero for PathCheck app Extra cost: Professional services	Similar costs
Test Verification workflow	State must deploy manually with PHA	Integration with manual or automated test partners	Full app same or better
Features for efficacy and behavior	Basic EN and verification	Communication, Engagement, Contextual Information	Full app promotes behavior change
Connection to Manual Contact Tracing	No. 'If you are exposed, call this number' will increase DoH workload	Rich automated communication platform will reduce DoH work	Full app better for Dept of Health
Customization for Schools / Employers	No additions possible	Employer specific in-app screens to connect on-site manual contract tracing	Dashboard for state to understand each cluster
Integration with Testing, Entry pass	No additions possible	Open standards, will support many testing partner	Full app can help restart economy
Rich insights and trends required for decisions	No additions possible	Insights by zip code, Understand super-spreader, index case, emerging clusters and spread analysis	Full app helps states decide lockdown/reopening policies

Sam notes that Google/Apple protocol doesn't have much interactions with other sensors in phone. Recently, QR codes have been enabled. PathCheck now is offering QA code implementation.

An example of this implementation is scanning a QR code interaction to privately transfer info to a restaurant to make sure customers are following state guidelines

## Questions

Do you know what endpoints are exposed would allow to do? What are the limitations and constraints with the camera?

Ans: There are basic set of restraints (have code open sourced and available ). Also it's a case by case basis - need to meet 4 or 5 criteria and what situation is. Somewhat gray area of what type of implementations can be done.

## CDC Views on EN




Mike Judd - Project Lead on EN Project Lead, Part of the Innovative Technologies Team in CDC

Purpose - Maximize information sharing and spread use of technology-EN

Mike notes the key questions on EN implementation. Infographic below illustrates these questions



## Key Exposure Notification Questions

	Physical Layer	<ul style="list-style-type: none"> <li>How do we reliably determine that an exposure occurred?                             <ul style="list-style-type: none"> <li>Does signal strength accurately and consistently translate to distance?</li> </ul> </li> </ul>
	Application Layer	<ul style="list-style-type: none"> <li>What features of an app make it acceptable to the public?</li> <li>How do we optimize user experience to promote public health system participation?</li> <li>How can we appropriately communicate risk to the user?</li> </ul>
	Public Health System Layer	<ul style="list-style-type: none"> <li>How do we rapidly and reliably validate lab results?</li> <li>How do we detect cross-jurisdiction exposures?</li> <li>How do we minimize the burden to health departments and labs?</li> </ul>

The main question they wanted to answer is whether this activity have sufficient public health value and how do we answer the questions?

Approach is establishing Exposure Notification Learning Lab to discuss information (invited anyone to join).They committed to a contract with the MIT Lincoln Laboratory to answer these questions. They're currently doing proximity testing to examine the efficacy of Bluetooth based proximity detection. They're also doing security and privacy tests, and end to end analysis among other things.

CDC's Approach is to aid states with making data driven decisions in EN implementation, share results with states rapidly and iteratively, partner with trusted public health organizations and not impede state that have pressures to move ahead.

## Current Progress

For the Physical Layer, they're testing proximity measurements in MIT's Autonomous Systems Development Facility to quantify performance of GAEN protocols in a variety of settings

For the application layer, they're evaluating the marginal improvements to contact identification over traditional contact tracing

For Public Health System layer, conducting ad hoc assistance to states (ex. Minimize delay in infection occurrence and notification)

## Questions

Despite best adoptions rates, Ireland has to go back to lockdown. Any comments?

In previous webinar, the Irish researchers said it's impossible to regulate individual behavior via app. It is not a replacement to social distancing. It is a complement to the bigger pieces.

Notes a rumor that app drains a lot of battery so people delete the apps quickly.

Question on distribution of information from other states. Also question on analytics and validity of them.

Summarizing information. CDC can't endorse one solution over another. Simply reporting on what has been successful. They're becoming more open in the analytics. Certain analytics that have been done recently. Needs discussion on what data should be gather and then request Google & Apple on data collection.

Question on recent change in CDC guidelines of exposure contact. How will that affect EN technology. Can we reflect changes in pandemic understand in OS?

Unfortunately, doesn't have authoritative understanding of this but can check on this in agency.

How much time of contact it takes to be recognized as exposed.

Needs interaction of 5 minutes. Under 5 minutes has 80% chance of missing. 1 minute interaction is impossible. There are some areas of research to look into this. 5 minutes is not the formal time minimum. Note that these apps haven't lost value but question on how to adapt and be inclusive of new guidelines

What about super spreaders? How to detect them and effectively contain the people around them while still preserving privacy?

A question that needs to be discussed. Privacy can be maintained but nothing has been specifically implemented for such a situation. An article from Atlantic is mentioned about

importance about reverse tracing. Apple and Google might be important in implementing these things.

<https://www.latimes.com/world-nation/story/2020-09-30/largest-covid-19-transmission-study-highlights-super-spreaders>

<https://www.theatlantic.com/health/archive/2020/09/k-overlooked-variable-driving-pandemic/616548/>