NowSecure

mHealth Apps Diagnosed with Poor Security

Vulnerabilities put patients at risk of personal health information exposure.

Mobile health (mHealth) apps drive a digital revolution of connected care. Mobile apps empower patients to track their health and activity, engage in telemedicine, schedule appointments, submit paperwork and fill prescriptions. Point-of-care apps streamline electronic health records management, ease collaboration and scheduling and boost efficiency of physicians and clinicians. And mHealth apps paired with Internet of Things (IoT) medical devices expedite testing in hospitals and medical offices and enable remote patient monitoring of those with chronic conditions such as high blood pressure or diabetes.

However, mobile app security and privacy concerns hamper adoption due to the sensitive nature of Personal Health Information.[1] mHealth app makers and healthcare providers will quickly lose the trust of patients if the app is breached or exposes private data. In addition, health apps and connected devices that collect or use consumers' health information must comply with the Federal Trade Commission's Health Breach Notification Rule or risk fines of $43,792 per violation per day.[2]

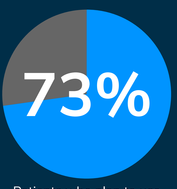
[1]CodeX, "Why mHealth apps are bad at privacy, and what they can do about it," Sept. 30, 2021
[2]NowSecure, "2022 mHealth App Security and Privacy Trends," March 3, 2022

mHealth Apps Engage Users

People tap health and fitness mobile apps to track everything from fitness and nutrition to menstruation and sleep patterns.

> 350,000
health apps found in top app stores worldwide[3]

$155.9 billion
Estimated mHealth app revenue by 2032[4]



Patients who plan to use telemedicine post-pandemic[5]

[3]mHealth Intelligence, "Key Features of mHealth Apps & Trends in Use," May 13, 2022
[4]Fact.MR, "mHealth Apps to Witness US$ 155.9 Billion Market Opportunity in 2032, Registering 14.3% CAGR," Nov. 16, 2022
[5]Doximity, "State of Telemedicine Report, Second Edition," February 2022

Top 10 Medical Apps

App Store rankings show a mix of electronic medical records, insurance providers and drug-related apps.[6]

1. Sydney Health
2. MyChart
3. healow
4. Healthy Benefits Plus
5. GoodRx: Prescription Saver
6. APPatient
7. Delta Dental Mobile App
8. BCBSM
9. CVS Caremark
10. Teladoc Health: Virtual Care

[6]Apptopia, "Top iOS Apps," Jan. 3, 2023

Most Popular Health & Fitness Apps

The most downloaded apps in the United States in the first half of 2022 included a few fads.[7]

[7]Apptopia, "The Most Downloaded Health & Fitness Apps in H1 2022," July 26, 2022

Apps Expose Personal Health Information

Poor security and privacy practices undermine user trust, damage brand reputation and incur regulatory fines and legal settlements.

Feelyou
A vulnerability in the anonymous mental health app accidentally exposed the email addresses of nearly 80,000 users.[8]

Kurbo by WW
The U.S. Federal Trade Commission fined WW International $1.0 million because its Kurbo by WW mobile app violated the Children's Online Privacy Protection Act (COPPA).[9]

Docket
A researcher reverse engineered the health app and accessed QR codes containing COVID-19 vaccination records.[10]

Flo
The FTC ordered the period and fertility tracking app to complete an independent privacy audit and obtain users' content before sharing personal data.[11] Flo Health also faces a consolidated class-action lawsuit.[12]

[8]Daily Dot, "Anonymous mental health app Feelyou accidentally exposed 70,000 personal emails," July 18, 2022
[9]CBS News, "Weight Watchers diet app collected data on kids as young as 8, FTC says," March 4, 2022
[10]HealthITSecurity, "Health App Security Bug Exposed COVID-19 Vaccine Records," Nov. 2, 2021
[11]The New York Times, "Flo Settles FTC Charges of Misleading Users on Privacy," Jan. 13, 2021
[12]Law Street, "Flo Health Files Response to Amended Class Action Complaint," Aug. 10, 2022

Apps Have Unhealthy Security

NowSecure MobileRiskTracker benchmark testing reveals hundreds of mHealth apps have security and privacy vulnerabilities.

[13] HealthTech Zone, "Benchmark Analysis Finds Security Weaknesses in mHealth Apps," Dec. 15, 2022
[14]HealthTech Zone, "Benchmark Analysis Finds Security Weaknesses in mHealth Apps," Dec. 15, 2022
[15]NowSecure, MobileRiskTracker, Dec. 27, 2022
[16]NowSecure, MobileRiskTracker, Dec. 27, 2022

Make Privacy by Design the Default

mHealth app makers can quell security and privacy concerns by taking a privacy by design approach to secure mobile app development, upskilling developers on secure coding practices, integrating mobile application security testing throughout the dev process and engaging in mobile pen testing for deeper coverage of high-risk apps. Additionally, healthcare organizations should vet all mobile apps before deploying them to reduce risk in the supply chain.

Get a demo to see how NowSecure Platform helps mobile security and app development teams safeguard their apps and explore NowSecure Mobile Pen Testing as a Service (PTaaS).

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