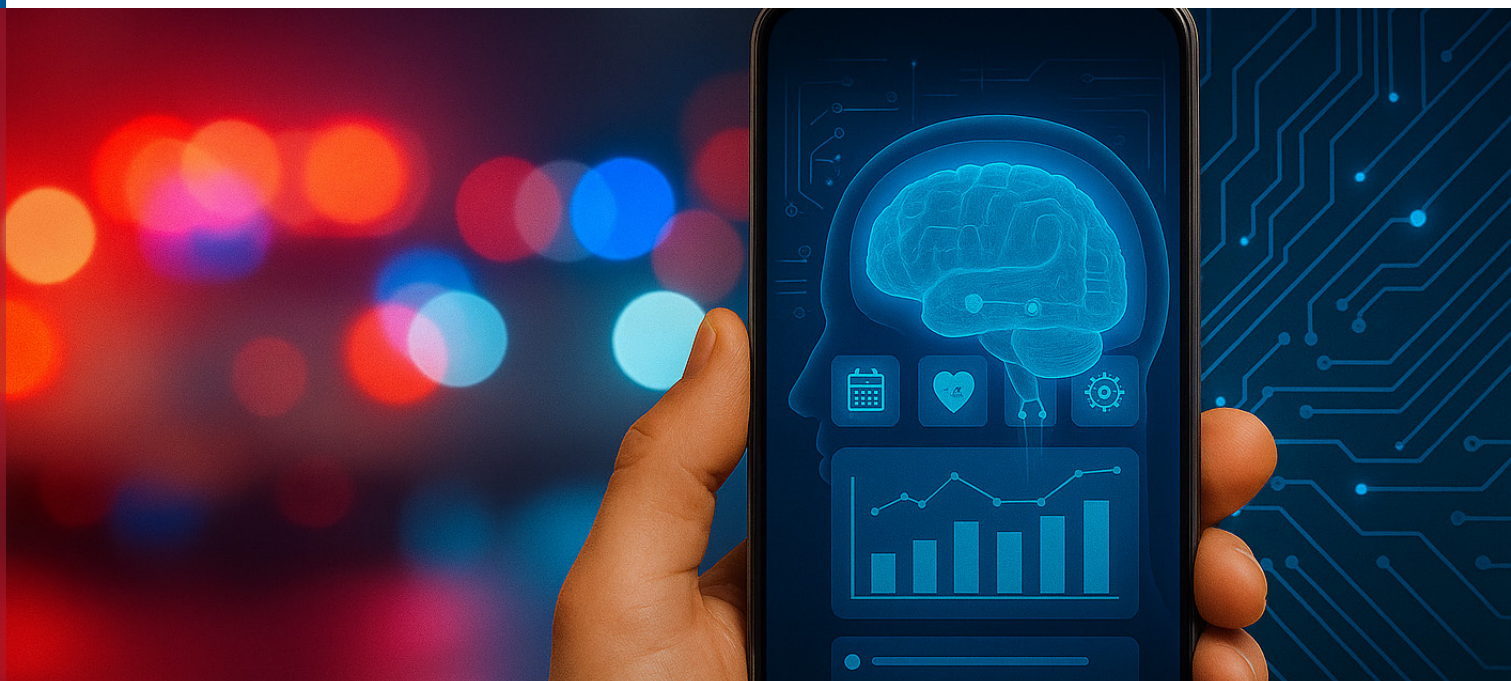


# A Qualitative Evaluation of Law Enforcement Officer Wellness Applications: A Focus on Mental Health



**June 2025**

**NIJ Contact:**

**Steven Schuetz**

Senior Physical Scientist

[steven.schuetz@ojp.usdoj.gov](mailto:steven.schuetz@ojp.usdoj.gov)

**CJTTEC Contacts:**

**Jeri D. Roper-Miller, PhD, F-ABFT**

Senior Fellow, Principal Scientist

CJTTEC Principal Investigator

[jerimiller@rti.org](mailto:jerimiller@rti.org)

**Michael Planty, PhD**

CJTTEC Co-Principal Investigator

[mplanty@rti.org](mailto:mplanty@rti.org)

**Suggested Citation:** Hofer, M., O’Keefe, G., Fontaine, E., Parsons, N., and Planty, M. (2025). *A Qualitative Evaluation of Law Enforcement Officer Wellness Applications: A Focus on Mental Health*. RTI International. <https://cjttec.org/>

This project was supported by the National Institute of Justice (NIJ), Office of Justice Programs (OJP), U.S. Department of Justice (DOJ), through award number 15PNIJ-23-GK-00931-NIJB. The opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect those of the Department of Justice. The recommendations detailed in this study are intended to be a good-faith overview, not an exhaustive list. The inclusion of a product or company in this report does not represent the DOJ’s, the NIJ’s, or CJTTEC’s recommendation, endorsement, or validation of product claims.



## TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>EXECUTIVE SUMMARY</b>  | <b>4</b>  |
| <u>Methodology</u>  | <u>4</u>  |
| <u>Results</u>  | <u>4</u>  |
| <u>Conclusion</u>   | <u>4</u>  |
| <u>Acknowledgments</u>  | <u>5</u>  |
| <b>1. PURPOSE</b>   | <b>6</b>  |
| <b>2. INTRODUCTION/BACKGROUND</b>   | <b>7</b>  |
| <u>Mental Health Services: Access and Use</u>   | <u>7</u>  |
| <u>Wellness Applications: A Focus on Mental Health</u>                                    | <u>7</u>  |
| <b>3. RESEARCH METHODOLOGY</b>  | <b>8</b>  |
| <u>Research Questions</u>   | <u>8</u>  |
| <u>Agency and Participant Selection</u>   | <u>8</u>  |
| <u>Interview Protocols</u>  | <u>9</u>  |
| <u>Analysis</u>   | <u>9</u>  |
| <b>4. RESULTS</b>   | <b>11</b> |
| <b>Theme 1: Application Selection</b>   | <b>11</b> |
| <u>Specifying Agency Goals for the Use of the App</u>                                     | <u>11</u> |
| <u>Evaluating Desired App Content and Design</u>  | <u>13</u> |
| <u>Specifying Preferences in App Administration</u>                                       | <u>14</u> |
| <u>Ensuring Compatibility with Technological Requirements</u>                             | <u>15</u> |
| <b>Theme 2: Agency Support</b>  | <b>16</b> |
| <u>Creating a Holistic Approach to Wellness</u>   | <u>16</u> |
| <u>Designating a Responsible Party to Lead Implementation</u>                             | <u>16</u> |
| <u>Engaging Key Stakeholders</u>  | <u>17</u> |
| <u>Ensuring Buy-In Across the Agency</u>  | <u>17</u> |
| <b>Theme 3: Strategic Deployment and Outreach</b>   | <b>19</b> |
| <u>Engaging Compelling Messengers at All Levels</u>                                       | <u>19</u> |
| <u>Sharing Information About the App in Many Formats</u>                                  | <u>21</u> |
| <u>Implementing App-Related Trainings to Demonstrate How the App Works</u>                | <u>23</u> |
| <u>Leveraging the App as an Integrated Communication Hub and Health Activity Platform</u> | <u>23</u> |
| <u>Regularly Promoting Specific App Features and Content</u>                              | <u>24</u> |
| <b>Theme 4: Sustainability</b>  | <b>24</b> |
| <u>Long-Term Financial Planning</u>   | <u>24</u> |
| <u>Regularly Updating App Content</u>   | <u>25</u> |
| <u>Updating Policies to Integrate the App with Agency Practice</u>                        | <u>25</u> |
| <u>Evaluating the Impact of the App</u>   | <u>26</u> |



|   |           |
|---|-----------|
| <b>5. CONCLUSION AND RECOMMENDATIONS</b>                        | <b>27</b> |
| Limitations   | 27        |
| <b>6. PRACTITIONER GUIDANCE FOR ADOPTION AND IMPLEMENTATION</b> | <b>28</b> |
| Reflective Checklist for Agency Readiness                       | 29        |
| <b>REFERENCES</b>   | <b>30</b> |

## LIST OF FIGURES

|   |           |
|---|-----------|
| <b>Exhibit 1: Overview of LEAs by type, geographical classification, size, and app usage</b>                                      | <b>9</b>  |
| <b>Exhibit 2: Semi-structured interview guide</b>   | <b>10</b> |
| <b>Exhibit 3: Qualitative themes and categories</b>   | <b>11</b> |
| <b>Exhibit 4: Agency-specific insights into three core areas of wellness app engagement: leadership, peer support, and family</b> | <b>20</b> |
| <b>Exhibit 5: Strategic approaches to overcoming challenges of wellness app adoption</b>  | <b>28</b> |

Cover image created via ChatGPT 4o on June 12th, 2025 using the following prompt:

*"Create a professional, visually striking image for a report cover, sized exactly 8.5 inches wide by 4 inches tall. The image should depict a person holding a smartphone, with the screen displaying a side profile of a head and a glowing blue brain to represent the intersection of mental health and mobile technology. Incorporate red and blue police sirens to visually connect the image to law enforcement. Use a realistic style with lifelike hands and eliminate any cartoon-like elements. Overlay circuit lines in the background to suggest technology and connectivity."*

## EXECUTIVE SUMMARY

This report examines the selection, implementation, use, and sustainability of wellness application products (apps) in law enforcement agencies (LEAs) as one approach to addressing the mental health challenges officers face as a result of occupational stress and trauma. Despite growing awareness of the mental health challenges related to the policing profession, barriers such as stigma, confidentiality concerns, and resource limitations continue to hinder wellness services utilization. Wellness apps are emerging as a promising solution, offering accessible, confidential support tailored to the unique mental health needs of law enforcement professionals; these apps are often included as part of a larger wellness program that addresses physical (e.g., fitness, nutrition, sleep) and financial wellness.

The Criminal Justice Technology Testing and Evaluation Center (CJTTEC) research team, in partnership with the Police Executive Research Forum (PERF), conducted a study that explores the perceptions and experiences of LEA practitioners who oversee, support, and actively advocate within their police departments for the integration and sustainability of wellness apps with a focus on mental health. By engaging with key agency stakeholders—including agency leaders, law enforcement personnel, wellness coordinators, and clinicians—we have compiled valuable research and insights that offer preliminary guidance and strategic considerations for effectively selecting, implementing, and sustaining these wellness apps to support mental health.

## Methodology

The CJTTEC team conducted a small-scale exploratory qualitative study with nine LEAs. Through semi-structured interviews, we explored the agencies' app selection processes, deployment strategies, perceived barriers to implementation and sustainability, and perceived successes. Although some apps include a much larger suite of wellness resources and programs (e.g., physical and financial wellness), this study focused specifically on mental health. We used thematic data analysis to identify actionable insights and recommendations.

## Results

The CJTTEC team found that agencies benefit from selecting apps that align with clear overall mental health goals, such as reducing stigma, aggregating resources, and supporting peer networks, while also ensuring rapid access to clinicians and support personnel during crises or outside of standard work hours. Agencies stated that effective deployment depends on establishing agency-wide buy-in supported by leadership, peer advocates, and family engagement. Multi-format communication strategies, such as in-person training and routine app demonstrations, were associated with higher utilization rates. Agencies reported sustainability as a critical consideration, emphasizing the need for ongoing financial planning to maintain the availability of app-based resources and regular content updates, as well as monitoring usage trends to maintain app relevance and effectiveness. Challenges included technological compatibility issues, limited customization options, and the need to balance confidentiality with meaningful data collection.

## Conclusion

Wellness apps that have a focus on mental health offer a scalable solution to address the unique challenges faced by law enforcement officers. An app's success, however, depends on thoughtful selection, robust implementation, and sustained engagement strategies. Based on the findings



presented in this study, we provide guidance for agencies considering the adoption and implementation of these apps to improve officer mental health and foster a culture of holistic wellness. Future research should expand on these findings, exploring broader applicability, examining specific guidance for agencies of various sizes and resources, and assessing long-term outcomes.

## Acknowledgments

CJTTEC thanks the criminal justice stakeholders who shared their expertise—especially Sergeant Ashley Kierpaul (Michigan State Police) and Dr. Kathleen E. Padilla (Texas State University) for their subject matter review. Interviews with law enforcement users and wellness coordinators as well as engagement with vendors helped identify key challenges and considerations for adopting wellness apps, offering actionable guidance to support officer well-being. We also thank the following agency representatives for their valuable contributions.

**Kevin Shive**

*Chaplain*  
Golden Police Department  
Golden, CO

**Jesse Avery**

*Sergeant*  
Idaho State Police  
Meridian, ID

**Babette Rox**

*Lieutenant*  
Miami-Dade Police Department  
Doral, FL

**Chad Jordan**

*Director*  
North Carolina Department of Public Safety  
Raleigh, NC

**Erin Bloch**

*Lieutenant*  
Green Bay Police Department  
Green Bay, WI

**Diana Williams**

*Commander*  
Mesa Police Department  
Mesa, AZ

**Michelle Moore**

*Lieutenant*  
Mesa Police Department  
Mesa, AZ

**Samantha Reps**

*Captain*  
Olmsted County Sheriff's Office  
Rochester, MN

**Kenneth Klos-Weller**

*Lieutenant*  
Raleigh Police Department  
Raleigh, NC

**Zachary Gerdes**

*Psychologist*  
Washington State Patrol  
Olympia, WA

## 1. PURPOSE

In recent years, there has been a growing awareness of the substantial psychological and emotional demands placed on law enforcement officers, highlighting the critical impact of these stressors on their mental health. On average, police officers are exposed to more than three traumatic incidents every 6 months. These incidents often involve both high-intensity violence—such as armed altercations—and emotionally taxing situations, including responding to abuse cases, aiding victims of serious vehicle crashes, and encountering deceased individuals.<sup>1</sup> The intense nature of the profession increases the likelihood of serious negative consequences, including diminished job performance; heightened stress, depression, and anxiety; substance use disorders; and, in severe cases, suicidal ideation or suicide. As these challenges become more widely recognized, there is an urgent need for proactive mental health interventions and support systems to safeguard officer well-being and overall departmental effectiveness.<sup>2</sup> The importance of enhancing resources for law enforcement mental health is increasingly being recognized, but officers' service utilization continues to lag behind need.<sup>3</sup> Officers may hesitate to engage with mental health services because of the perceived stigma and fear of being labeled unfit for duty.<sup>4,5</sup> For some agencies, budgets and local resources limit the ability to offer such services. Technological solutions—in particular, wellness application software products (apps) targeted to law enforcement—are a promising strategy for improving the accessibility and use of mental health resources in many agencies.<sup>6</sup>

This study, conducted by the Criminal Justice Technology Testing and Evaluation Center (CJTTEC) in partnership with the Police Executive Research Forum (PERF), explores the insights and perceptions of agency practitioners who supervise and actively advocate within their police departments for the implementation of officer wellness apps with a focus on mental health. This report's main objective is to inform law enforcement stakeholders of key considerations for the selection and implementation of wellness apps with a mental health focus targeted to law enforcement officers. After hearing directly from practitioners about their experiences using these apps, the CJTTEC team can now present a critical opportunity to understand key considerations and challenges specific to the law enforcement community. This study is also relevant to wellness coordinators, clinicians working with law enforcement agencies (LEAs), police foundation executive boards, unions, researchers, and evaluators, and can help them better understand the issues, challenges, and successes associated with these apps. This report provides preliminary guidance and practical considerations for (1) selecting wellness applications, (2) strengthening the agency foundation for app implementation, (3) implementing a strategic deployment plan, (4) developing an ongoing outreach plan, and (5) planning for app sustainability over the long term within LEAs.



## 2. INTRODUCTION/BACKGROUND

Policing is considered one of the most stressful occupations leading to adverse mental health consequences.<sup>7-9</sup> Sources of stress include exposure to dangerous situations, traumatic events, persons experiencing crisis and violence, and child abuse, among others.<sup>10,11</sup> Additionally, dynamic shift work, long hours, and other organizational bureaucracy can create chronic stress.<sup>12</sup> These occupational strains associated with policing may result in officers experiencing a broad range of adverse mental health consequences, such as higher incidences of post-traumatic stress disorder (PTSD), anxiety, and depression.<sup>13-16</sup> Moreover, officers are more likely to experience substance abuse, divorce, burnout, mental illness, and suicide compared with the general population and with other occupations.<sup>17-21</sup>

### Mental Health Services: Access and Use

To address concerns about officer wellness and mental health, LEAs offer various programs to reduce stress and mitigate negative consequences. These include employee assistance programs (EAPs), therapy services, on-site psychologists, peer support initiatives, fitness programs, and other wellness resources.<sup>22</sup> Despite the availability of these programs, many officers underutilize voluntary mental health services, even though they face a heightened risk of poor mental health due to occupational stress. Several barriers may prevent them from seeking or engaging with these resources, including stigma, perceived inaccessibility, and a lack of available services.<sup>3,23,24</sup> Officers may be reluctant to access services directly due to the stigma of being perceived as weak or unfit for duty. They may also be concerned that any engagement with those services will negatively impact their professional opportunities or even lead to termination. Access to mental health resources also varies significantly across jurisdictions. Smaller LEAs or those with limited budgets may only have one or two EAPs or mental health programs, restricting their ability to offer comprehensive wellness solutions. To overcome these challenges, many LEAs are turning to apps that aggregate mental health resources. These apps provide officers with a confidential, easily accessible platform to access support, helping to bridge gaps in services while addressing barriers related to availability, accessibility, and stigma.<sup>6</sup>

### Wellness Applications: A Focus on Mental Health

Wellness apps are just one of many ways that LEAs can offer mental health resources to their officers. Typically, the apps complement the existing efforts of agencies to eliminate potential barriers to service utilization (e.g., concerns about confidentiality, lack of knowledge about services, accessibility of immediate support). Although the effectiveness of apps targeted to law enforcement has yet to be established,<sup>25,26</sup> emerging evidence among the general public suggests that smartphone and mobile apps may be an effective delivery strategy for psychological intervention, though further research is needed.<sup>27,28</sup> Wellness apps often include psychoeducational materials to improve knowledge of mental health-related topics, resources to apply skills (e.g., mindfulness), self-screening assessments, and links to other services and providers such as in-person or virtual counselors, which typically complement existing agency support services.<sup>6</sup> However, LEAs currently lack profession-specific guidance in selecting and implementing an app suitable for the agency's needs.

This study examines insights from practitioners about the perceived successes and challenges with the selection, adoption, and use of officer wellness apps to address mental health.

### 3. RESEARCH METHODOLOGY

To examine the adoption and use of officer wellness apps with a focus on mental health, the CJTTEC team partnered with PERF to conduct a small-scale exploratory qualitative study. We conducted semi-structured interviews with practitioners who were most involved in and knowledgeable about the selection and implementation of these apps and their associated mental health programs. Our goals were to explore how LEAs select, deploy, and utilize these products, and to understand the challenges and perceived successes that they encountered.

#### Research Questions

Three primary research questions guided our agency interviews:

1. How do LEAs select wellness apps to support their mental health programming?
2. How do LEAs implement wellness apps in their programs as it relates to officer mental health?
3. What are the barriers and facilitators to successful wellness app implementation as it relates to officer mental health?

#### Agency and Participant Selection

We recruited representatives from nine LEAs that implemented officer wellness applications. Though the sample number was limited, we sought to have a variety of perspectives represented in the agencies interviewed, including differences not only in the app(s) used but also in agency type (e.g., police department, sheriff's office, state agency), size, and geographic classification (**Exhibit 1**). We identified agencies through CJTTEC and PERF networks as well as public knowledge of an agency's use of an app (e.g., news articles, vendor websites). Agency representatives were responsible for the administration of wellness programming and included both sworn (e.g., sergeant, lieutenant, captain) and civilian (e.g., chaplain) positions.

Additionally, the CJTTEC team conducted brief outreach efforts with representatives from five vendors—mResilience, Cordico, Lighthouse Health & Wellness, MindBase, and Bulletproof Support Services. These apps were identified and subsequently highlighted in the 2022 CJTTEC landscape report: [Application Software Products that Aim to Address the Mental Health Needs of Law Enforcement Officers](#) <sup>6</sup>.<sup>6</sup> Vendor outreach was designed to understand any product updates since the initial landscape report and to confirm product specifications and subscription plans. This information was used to inform the semi-structured questionnaire used in the agency interviews. Some of these apps are marketed under the larger umbrella of general wellness apps and include concerns beyond mental health, such as physical fitness, family function, and financial health. This study focused primarily on wellness apps that addressed officer mental health.




**Exhibit 1:** Overview of LEAs by type, geographical classification, size, and app usage

| Department                                 | Agency Type | Geographical Classification | Size Category* | App Employed          |
|--|-------------|-----------------------------|----------------|-----------------------|
| Golden Police Department                   | Municipal   | Suburban                    | Small          | Lighthouse/Sharepoint |
| Green Bay Police Department                | Municipal   | Urban                       | Midsized       | Cordico               |
| Idaho State Police Department              | State       | Rural                       | Midsized       | Cordico/Mindbase      |
| Mesa Police Department                     | Municipal   | Urban                       | Midsized       | Peer Connect          |
| Miami-Dade Police Department               | County      | Urban                       | Large          | Cordico               |
| North Carolina Department of Public Safety | State       | Urban/Rural Mix             | Large          | Lighthouse            |
| Olmsted County Sheriff's Office            | County      | Rural                       | Small          | Cordico               |
| Raleigh Police Department                  | Municipal   | Urban                       | Midsized       | Cordico/Lighthouse    |
| Washington State Patrol                    | State       | Suburban/Rural              | Midsized       | Lighthouse            |

\* The size category is based on the number of sworn officers, with "small" agencies having fewer than 50 officers, "midsized" agencies employing between 50 and 999 officers, and "large" agencies with 1,000 or more officers.

## Interview Protocols

For our interviews, the CJTEC team targeted law enforcement and wellness professionals most knowledgeable about and involved in their agency's app selection and implementation. We developed a semi-structured interview guide to facilitate our discussions (**Exhibit 2**). Agency participants were asked about the process of developing wellness programming and their decision to provide an app to their staff. Interview topics included the availability and utilization of app data, feedback from agencies to app vendors, costs, and sustainability. Agency leaders were asked about perceived barriers and facilitators of effective implementation and officer use of the apps.

The topics covered in the interviews were informed by a review of the scientific literature, vendor documentation, and outreach to vendors to understand changes and updates made to their products since the 2022 CJTEC wellness apps landscape report. We also adapted the interview guide as appropriate. For example, when some agencies reported switching between apps ("app-hopping") we included questions to capture these perspectives systematically.

Our in-depth semi-structured interviews took place between October 2023 and March 2024. They were held virtually using Zoom and led by an experienced facilitator. The interviews ranged from 30 to 60 minutes; length was primarily determined by participants' willingness to engage with interview questions. Two note-takers took detailed summary notes reflecting interview content. Following the interviews, notes were aggregated and reviewed, and differences were resolved by consensus.

## Analysis

The final interview notes were used as data for qualitative analysis. Notes were aggregated across all participants and sorted structurally by interview question. The data corpus was then examined by two coders who independently identified and generated themes using the general framework for thematic analysis.<sup>29</sup> A third reviewer assessed the initial coding for consistency. Finally, the research team examined these preliminary themes and subcategories for patterns and clustered them into conceptual themes, which were refined through team consensus.<sup>30</sup>


**Exhibit 2: Semi-structured interview guide**
**Interviewee Involvement with App Administration**

1. Please begin by telling us a little bit about your current position and the way in which you are involved with the administration of the mental health application(s).

**Selection of Mental Health Application**

2. Tell us about the wellness resources available to officers at your department.
  - a. How does the app fit within the resources your agency is offering overall?
3. What was the reason your agency decided to deploy an officer mental health app?
4. When did the agency start using the current mental health wellness app?
  - a. Is the current product the first mental health app you have used?
5. Why did you select this particular app?
  - a. What factors impacted your selection of this app, such as cost, available programs, ease of use?
  - b. Did you have an opportunity to customize the app? In what ways?
  - c. What factors influenced how you customized the app?
  - d. Where did you get your information? (e.g., another agency using the app, vendors, agency review team)

**Implementation of Mental Health App**

6. What steps did your agency take to introduce and roll out the app to officers?
  - a. Initial communications about the app
  - b. Involvement of peers/leadership in rollout
  - c. Training to use the app
  - d. Development of agency policies related to the app
  - e. How are champions for implementation identified?
7. How do you feel the rollout of the app has gone?
8. Is your agency considering any strategies to continue to communicate about or remind officers about the app?
  - a. If yes, what strategies?
  - b. If yes, how often will they deploy these strategies?

**Feedback on Mental Health App**

9. What is your impression of the app at this time?
10. What feedback have you received about the app from officers?
  - a. Challenges/concerns about the app or using the app
  - b. General perception of officer use of the app
  - c. Commonly used resources
  - d. Positive feedback about the app

**Potential Impacts**

11. Based on your impression, have you seen any impact from the app?
  - a. Officer use of mental health and well-being services
  - b. Benefits to officer well-being
  - c. Organization-level climate (e.g., stigma)
  - d. Organization-level performance impacts (e.g., turnover, absenteeism)
  - e. Number of officer-related incidents and/or complaints

**Data Availability**

12. Do you have any data about officers' use of the app since it has been rolled out?
  - a. If yes, has your agency analyzed the available data?
  - b. If yes, how do you use the data?
    - i. Internal reports? Analysis with other data (e.g., sentinel events, officer time off/out sick)?
    - ii. Variability in utilization trends? (e.g., times the app has been used more)
      - If yes, what is the reason for variability?

**Lessons Learned**

13. When thinking about the process by which your agency selected and rolled out the app, are there any "lessons learned" you think are important for other agencies to be aware of?

## 4. RESULTS

**Exhibit 3** below presents key themes and associated subcategories that emerged through analysis of the qualitative data set, including participant recommendations for (1) application selection; (2) agency support; (3) strategic deployment and outreach; and (4) sustainability. These themes were derived directly from participants' comments about app selection and implementation within their agency. The four key themes therefore aim to capture the nuances of participants' experiences, exploring the issues they raised about the factors they saw as barriers and facilitators to effective app implementation.

**Exhibit 3: Qualitative themes and categories**

| Theme                                    | Category   |
|--|--|
| <b>Application selection</b>             | Specifying agency goals for the use of the app                               |
|  | Evaluating desired app content and design                                    |
|  | Specifying preferences in app administration                                 |
|  | Ensuring compatibility with technological requirements                       |
| <b>Agency support</b>                    | Creating a holistic approach to wellness                                     |
|  | Designating a responsible party to lead implementation                       |
|  | Engaging key stakeholders  |
|  | Ensuring buy-in across the agency  |
| <b>Strategic deployment and outreach</b> | Engaging compelling messengers at all levels of the organization and at home |
|  | Sharing information about the app in many formats                            |
|  | Implementing app-related trainings   |
|  | Leveraging the app as a communication hub and health activity resource       |
|  | Regularly promoting specific app features and content                        |
| <b>Sustainability</b>                    | Long-term financial planning   |
|  | Regularly updating app content   |
|  | Updating policies to integrate the app with agency practice                  |
|  | Evaluating the impact of the app   |

The qualitative findings derived from the analysis of the nine agency interviews, including captured statements and sentiments, have been anonymized to ensure privacy. Agencies have been assigned random numerical identifiers, which were inconsistent across the data, and the specific wellness apps they used are not disclosed in interview statements.

### Theme 1: Application Selection

A majority of participants emphasized the app selection process as a critical driver of successful app implementation. Across interviewed agencies, different stakeholders were involved in deciding whether to move forward with a particular app, but a common insight from all participants was the importance of selecting apps that met the unique needs and preferences of their agency and officers. Agencies often described some trial and error before they arrived at a mental health wellness app that met agency and

officer needs; it was not uncommon for agencies to transition between different apps before identifying the solution that was most suitable and effective for their department.

Participants identified several key categories that were critical to the app selection process: (1) specifying agency goals for the use of the app, (2) evaluating desired app content and design, (3) specifying preferences in app administration, and (4) ensuring compatibility with technological requirements.

### Specifying Agency Goals for the Use of the App

Even though officer wellness apps may be used to fulfill a variety of purposes, agencies often have specific goals they wish to meet through their use. Participants generally reported that close alignment between an agency's goals for the app and its content and features were critical to the longevity of the technology. LEAs invested in a wellness app for their officers for various reasons, such as providing an access point for internal and external wellness resources for agency members and their families

and to aggregate existing resources into a centralized repository. When defining goals, participants emphasized the importance of considering existing health and well-being resources, the need for aggregating and disseminating these resources to all employees, and ongoing wellness needs that may be met through an app. They also described that a lack of intentionality in planning the selection, implementation, and administration of the app could be interpreted by officers as evidence that the app was being implemented to merely “check a box” rather than to provide true value to officers. Peripheral to these goals, agency representatives also noted other items to consider, including the maturity of an agency’s wellness program, its data tracking preferences, its need for specific types of wellness support, and how an app may fit into its broader wellness program. The following are examples of agency-specific goals:

- **Agency 1:** “[Vendor app] was selected to support the wellness goals defined by the peer support program.”
- **Agency 2:** “[Vendor app] was selected for the specific goal of reducing stigma around wellness.”
- **Agency 3:** “[Vendor app] was implemented to make resources available 24/7 for staff goals.”
- **Agency 4:** “Chose [vendor app] to link the app with in-house psychological services, chaplains, and peer programs.”
- **Agency 5:** “[Vendor app] was chosen to meet the department’s goals for comprehensive peer support.”

Some agencies in earlier stages of creating a wellness program reported that implementing a wellness app was an efficient way to provide their officers with basic, curated resources. On the other hand, agencies with more robust wellness programming—including peer support, clinical counseling services, chaplaincy, EAPs, and physical fitness trainings and programming—commonly implemented wellness apps for the purpose of aggregating related resources into one easily accessible platform. Agency representatives stated that by housing information about all wellness resources in one centralized location, they could direct officers to the app to explore and utilize those resources whenever the need arose, for either preventive programming or immediate acute crisis support (i.e., wellness apps provide 24/7 support for officers). Participants reported that the aggregation of resources was especially beneficial to geographically dispersed agencies, such as state or county LEAs, because it made wellness resources accessible to all members of their agency regardless of location.

Some participants reported seeking apps that delivered specific types of wellness resources. For example, participants described many available apps that connect sworn and professional employees to peer support services. Depending on their agency’s goals, participants had specific preferences for how apps facilitated this support. These apps were either proactive or reactive in their approach to initiating peer support contact. Proactive apps enabled individuals to anonymously report that they or a colleague would benefit from peer support services; some even integrated with the agency’s computer-assisted dispatch or records management systems, allowing peer support officers to proactively check in with individuals who were involved in stressful calls for service. Apps with a reactive approach provided contact information for members of the peer support team, but officers had to self-initiate contact.

Agencies prioritizing peer support facilitation included:

- **Agency 6:** “Selected [vendor app] to meet the department’s goals for comprehensive peer support, enabling structured, accessible connections.”

- **Agency 7:** “Chose [vendor app] to support wellness goals specifically defined by our peer support program, facilitating peer support as an integral part of the agency’s wellness strategy.”

Finally, participants also emphasized the importance of considering an app’s data collection abilities. Prior to deployment, agencies must decide whether they want the selected app to collect any data, and if they do, identify what specific data the app should collect. Some participants decided to leverage apps with data tracking features specifically to identify trends in the utilization of mental health and wellness resources. Participants reported that apps with data tracking capabilities enhanced their data-driven decision-making regarding offered wellness programs, helped secure funding for wellness initiatives that were used frequently, and helped develop resources where gaps in programming were identified. However, many participants stated that certain considerations—i.e., widespread mental health stigma and concerns for negative professional consequences related to app use—led them to prefer apps that could provide users with complete anonymity. Apps with this type of functionality may offer logins that all users can share and minimize tracked data, effectively ensuring that personal data is not linked to specific users. But even while maintaining individual anonymity, apps may provide agency management with aggregated usage metrics, such as app usage frequency, feature popularity (e.g., self-assessment modules), and general user behavior (e.g., average duration of a session) to gauge overall engagement. Agencies that prioritized data tracking and confidentiality included:

- **Agency 8:** “Chose [vendor app] specifically to enable tracking of peer support stats, which allowed them to align the app with their data collection and reporting goals.”
- **Agency 9:** “Emphasized the importance of confidentiality within the app to ensure that officers felt secure in using the resources without concerns about personal data tracking.”

## Evaluating Desired App Content and Design

Participants also emphasized the need to identify the core content that is desired in an app to ensure it aligns with overarching agency goals. Factors discussed by participants included (1) the availability of app resources, (2) the level of customizability, and (3) the need to ensure usability and user-friendly design.

### Availability of App Resources

Participants discussed many types of resources they desired in a wellness app for officers’ mental health, including pre-populated resource libraries aggregating articles, videos, policies, and self-assessments; direct access to psychological counseling through hotlines, culturally competent therapist finders, partnerships with referral services, and integration with agency-specific EAPs; and access to regional or agency-specific peer support services. Specific examples of resource-focused app selection include:

- **Agency 1:** “Opted for [vendor app] because of its extensive library of wellness materials, making it easier for officers to access diverse resources.”
- **Agency 2:** “Found [vendor app’s] comprehensive content highly attractive as it provided a strong foundation for wellness support within the agency.”

Furthermore, participants and vendors discussed the need to consider whether access to app resources relied on the availability of an internet or cellular connection. Geographically dispersed, remote, or rural agencies may require an app that has offline capabilities to ensure accessibility to all staff members.

### Level of Customizability

Additionally, participants reported that successful app implementation typically involved customizing their app to reflect the culture and resources of their agency. In many cases, an app's lack of available customizations was cited as a key reason for its failure in a particular setting. Common customizations included images of the agency's badge and regularly updated lists of agency-specific peer support officers, chaplains, and mental health providers. Additionally, some agencies included pictures and bios alongside the contact information for agency-specific wellness contacts, which participants believed helped to cultivate a sense of connection to the wellness contacts. Many apps provide self-assessment tools for common mental health concerns (e.g., depression, post-traumatic stress injuries, substance use) and offer flexibility in how these are presented in the app, which allowed some agencies to customize the types of self-assessments available to officers as needed. For instance, one agency positioned an alcohol use self-assessment near the top in their app after they identified substance use as a primary topic of interest among department staff.

Agencies that highlighted the importance of customization in app selection include:

- **Agency 3:** "Chose [vendor app] for its customizable content, allowing the agency to tailor resources to meet their specific needs."
- **Agency 4:** "Selected [vendor app] because its design made it easy to aggregate and organize wellness resources in a way that fit their agency's structure."
- **Agency 5:** "Customized their app's content to include mental health assessments and local resources, providing officers with direct access to relevant, personalized support."

### Specifying Preferences in App Administration

In addition to identifying desired content for the app, participants also reported preferences related to the administration of the app, including (1) expectations for the vendor relationship, (2) the need for administrative privileges to modify app content, and (3) internal data tracking features of the app.

#### Expectations for the Vendor Relationship

Agencies frequently selected wellness apps that integrated adequately with existing systems or were commonly used by neighboring agencies. However, they occasionally switched apps due to administrative or compatibility issues. A key factor influencing their choice of vendor was the quality of the business relationship, with agencies preferring vendors who demonstrated responsive communication and a commitment to timely updates. Agencies valued vendors who kept them informed of new features and provided reliable support for app customization and technical troubleshooting. Examples of agency experiences that noted customer service and vendor relationships include:

- **Agency 6:** Switched to [vendor app Y] from [vendor app X] largely due to customer service issues, reporting that "vendor X would take months to respond," while "vendor Y responds in about 5 minutes."
- **Agency 7:** "Appreciated having a single point of contact with [vendor] who provided consistent feedback and responded within 24 hours."
- **Agency 8:** "[Vendor] has strong customer service, but you have to reach out to them first."
- **Agency 9:** "Faced challenges when [vendor] updated its system, requiring officers to delete and reinstall the app, which 'kicked everyone out of the app.'"





### Need for Administrative Privileges to Modify App Content

Participants reported diverse preferences related to administrative privileges within the app. *Administrative privileges* refers to the highest level of access and control granted to an app administrator to perform certain tasks within the app. Depending on the level of access, some apps allow agencies to complete app updates in-house rather than through the vendor, which some agencies preferred. For example, some agencies preferred to hold administrative privileges that allowed them to modify or add app content as desired, enabling them to remain responsive to agency needs. However, other agencies with more limited capacity or less wellness programming voiced that they appreciated the additional support from vendors who could implement updates on their behalf. Overall, administrative privileges were reported to help agencies send timely notifications about specific content or events on their own through the app. Agencies provided specific examples of how administrative features influenced their app selection:

- **Agency 1:** “Customized administrative options within the app to make peer support contacts easily accessible to users.”
- **Agency 2:** “Embedded peer support team details within the app to streamline administration and enhance support access.”

### Ensuring Compatibility with Technological Requirements

Several participants reported that their agencies’ technological requirements led to unexpected challenges with app implementation. Today’s agencies often implement best-practice cybersecurity measures to protect their data, including robust firewalls that prohibit agency-issued devices from accessing certain software.<sup>31</sup> However, participants reported that individuals tasked with app selection were not always intimately familiar with their agency’s technological requirements. Some participants reported frustration when discovering—often after significant effort and resource expenditure—that the app they had chosen was not compatible with their agency’s technological requirements. Following are specific examples of technological compatibility issues that agencies encountered:

- **Agency 3:** “[Vendor app] was chosen [over another app] because of difficulty getting Apple certification on agency phones... should have ironed out technical issues (Apple, Android) for agency phones.”
- **Agency 4:** “Found challenges with [vendor app], which was constantly crashing and required frequent redownloads... [another vendor app] was a better fit, offering greater customization and responsiveness.”
- **Agency 5:** “Staff described the [vendor app] app as ‘clunky,’ partly due to its slower interface...lacks preloaded content which reduces accessibility, especially video/audio materials.”

These experiences underscore the importance of thorough compatibility checks with agency technology infrastructure to avoid implementation setbacks and encourage app engagement among users. Potential technology and infrastructure considerations may include:

- **Device compatibility:** Ensure the app is supported on department-issued and personal devices (iOS, Android, desktops).
- **Secure network access:** If using agency Wi-Fi, verify that firewalls or VPN settings do not block app functionality.



- **Stable connectivity:** Ensure adequate internet bandwidth in stations and remote locations where officers may access the app and confirm that the app functions effectively on mobile data for field officers.
- **Offline functionality:** Check whether critical resources are available without an internet connection.

## Theme 2: Agency Support

Participants described several strategies for developing a strong agency foundation from which to implement a wellness app. Specifically, participants highlighted the need to (1) taking a holistic approach to wellness, (2) designating a program “champion,” (3) engaging key stakeholders, and (4) ensuring officer buy-in across the agency.

### Creating a Holistic Approach to Wellness

A holistic approach to health and wellness—one that supports not only mental health but also the physical, financial, and spiritual well-being of agency staff—was consistently associated with more successful wellness programs, including higher rates of app utilization. Participants leveraged app customizability to develop a holistic wellness tool that offered a wide range of preloaded app libraries. Popular tools included sleep resources, physical fitness challenges, nutrition advice, and resources for financial well-being. Moreover, agencies recommended normalizing app use by guiding staff back to the app for a wide range of information and events. Specific examples of agencies’ holistic approaches include:

- **Agency 6:** “[Vendor app] was customized to integrate a variety of wellness components, such as fitness, nutrition, sleep, and a wellness toolkit that encompasses holistic health resources, allowing officers to access resources across multiple wellness areas.”
- **Agency 7:** “[Vendor app] serves as a central hub to host resources, including wellness activities like stretch sessions, family outings, and financial education programs, to address physical, social, and financial aspects of wellness.”
- **Agency 8:** “[Vendor app] was configured to include training and resources in areas such as mindfulness, physical wellness activities, and regular wellness education sessions to support a comprehensive approach to officer health.”
- **Agency 9:** “[Vendor app] offers targeted wellness resources, such as assessments for depression, PTSD, and alcoholism, and support from peer and chaplain resources to address physical, mental, and spiritual wellness.”

### Designating a Responsible Party to Lead Implementation

While not all agencies had a dedicated point of contact for app implementation, many agency representatives stated that the process would have been more successful and sustainable if they had someone filling this role. There was no consistent choice for the “correct” point of contact. Instead, agencies assigned this responsibility based on their priorities, organizational structure, and staff interest. The designated point of contact varied: some were officers with a strong interest in officer wellness, and others were staff members within wellness or mental health units. In some cases, the position was assigned as an administrative responsibility. Overall, participant narratives revealed that the assignment of app implementation to an appropriate responsible party depended largely upon internal culture and climate. For example, one agency stated that having a non-sworn employee in charge of app implementation negatively affected officers’ perceptions of the app’s potential utility, suggesting that



officers would have preferred a sworn employee as their point of contact. Agencies provided specific examples of how app implementation and its success within the department was influenced by a dedicated champion:

- **Agency 1:** “It [app implementation] needs to be done in person...find someone through the peer support team because they’re considered trustworthy and comfortable to work with.”
- **Agency 2:** “Champions were at the captain level and included two information technology personnel who could coordinate on app use and address any technical issues.”
- **Agency 3:** “Asked the peer support team members to champion the apps to ensure the app reached a wide audience and was presented by those trusted by officers.”
- **Agency 4:** “Chose [an internal officer] to roll out because this stuff is better coming from a peer.”

### Engaging Key Stakeholders

Agency interviewees agreed on the critical importance of engaging stakeholders across the agency for successful app implementation. Participants consistently identified key stakeholders as agency leadership and command staff, including chiefs, sheriffs, and supervisors, peer support officers, and/or other extant wellness providers (e.g., wellness coordinator, on-site psychologist, chaplain). In addition to this internal support, spouses, family support networks, and community mental health organizations can enhance wellness efforts by providing external support. According to participants, agencies often relied on the expertise of different parties at different stages of the app implementation process; employing a team-based, comprehensive approach helped agencies ensure that key personnel were involved in decision-making throughout the process. For example, command staff is often required to approve the investments in and implementation of an app, but peer support officers may be better suited to identify resource needs within the agency and ensure buy-in among officers.

Specific examples of how agencies strategically involved stakeholders include:

- **Agency 5:** “Top-down communication from the Chief discussed the app’s importance, features, and sought feedback from staff. Peer supporters were later involved to strengthen buy-in and encourage usage across the department.”
- **Agency 6:** “We have support for wellness efforts from the mayor downward. To ensure sustained engagement, we plan to incorporate the app’s use into critical incident response protocols and follow up through peer support.”

### Ensuring Buy-In Across the Agency

To ensure successful implementation and acceptance of wellness apps, agencies described extensive efforts to make the apps appealing and accessible to officers. Factors influencing acceptance included the agency climate (e.g., level of mental health stigma), app content and ease of use, officers’ comfort with technology, confidentiality practices, and the app’s integration with existing systems. The importance of these factors varied by agency, shaped by each organization’s unique climate, policies, and practices.

Participants consistently emphasized that agency-wide buy-in was essential, alongside continual, intentional efforts to build trust and awareness. Buy-in was generally driven by involving respected stakeholders, promoting the app’s utility, and ensuring its usability. Recommendations included (1) positioning the app as a central repository for wellness resources and (2) having trusted officers



advocate its value. Building trust was viewed as crucial, given the stigma surrounding mental health in law enforcement, where officers often fear negative consequences for seeking support. Strategies used by agencies to enhance app acceptance included:

- **Agency 1:** “We involved command staff, emphasizing that everyone was on the same page, and positive messaging about the app’s benefits.”
- **Agency 7:** “Older officers are usually resistant to apps...the decision to use [the app] is the issue and technology is the secondary issue. Having one-on-one conversations helps with this.”
- **Agency 8:** “We’re not doing the ‘neon lights,’ just trying to get minor engagements to roll officers in—it’s been a subtle push to integrate it into daily workflow in a natural way.”
- **Agency 9:** “We leveraged a top-down approach with communication from the Chief and outreach to spouses/support people to promote the app.”

### Addressing Confidentiality Concerns

Agency representatives reported that officers’ primary concern with app usage was maintaining confidentiality—a result of the pervasive stigma around seeking mental health support in the law enforcement profession—and confirmed the utility of directly addressing those concerns. Participants reported that it was helpful to emphasize the ways in which their selected app prioritizes officers’ confidentiality. In some cases, participants explicitly demonstrated how app data appears to them, outlining what data were tracked and how the data may be aggregated to provide useful—and completely deidentified—data. Across multiple agencies, confidentiality concerns regarding wellness apps were addressed through transparent communication, assurances of anonymity, and a focus on privacy. Agencies emphasized that collected data was either minimal or entirely deidentified, ensuring it was used solely for program improvement rather than individual monitoring.

Agency feedback about confidentiality concerns included:

- **Agency 2:** “Officers don’t worry about confidentiality. They know the confidentiality of wellness efforts is a priority and the department does not tolerate violations of this—transparency is key.”
- **Agency 3:** “We proactively addressed confidentiality concerns, explained what it [the app] tracks and doesn’t track, and sent that info through family networks as well. Often, family is better at disseminating this info to officers.”
- **Agency 4:** “We don’t have a lot of success with staff utilizing the app right now... they just have a hard time trusting that what they are doing in the app is not tracked.”

#### Confidentiality vs. Anonymity

**Anonymity** is when agency administrators do not know, do not collect, or do not have access to law enforcement officer personal information, such as name, social security, e-mail, or any other direct identifiers that can reveal an officer’s identity.

**Confidentiality** refers to protecting law enforcement officer personal identification identifiers from being revealed to agency administrators. Vendors or products may collect this information for operational purposes but take steps to protect it and promise not to reveal it.



## Theme 3: Strategic Deployment and Outreach

According to participants, after selecting an app and ensuring a strong climate for implementation, agencies should develop a strategic outreach and communication plan to help effectively deploy the app within their organization. To be successful, participants suggested that the strategic deployment plan specify (1) who will communicate to officers about the app, (2) the methods by which the information will be disseminated, and (3) the information that will be highlighted.

Agency representatives also reported the importance of developing a continuous outreach strategy to implement after wellness app deployment, to foster engagement with the technology. Participants voiced the perception that presenting the app as more than just a wellness resource helped to fully integrate it into agency operations. They suggested that the outreach plan should comprehensively integrate agency activities within the app, promoting familiarity with the app by building knowledge of its specific features. Agencies typically achieved this by transforming the app into a central communication hub and utilizing it to house additional resources, such as agency policies, or to facilitate interactive health-related activities. By consolidating information and encouraging routine interaction with the app, agency stakeholders reported improved familiarity and reduced confidentiality concerns among officers.

### Engaging Compelling Messengers at All Levels

Agencies that successfully implemented wellness apps for mental health reported using a multi-level communication approach, engaging messengers at different organizational levels. This included appointing dedicated champions, securing leadership support, and involving peer support officers to promote the app effectively.

Participants emphasized that identifying champions is crucial for encouraging app adoption. These champions, often members of the peer support team, were described as enthusiastic advocates who promoted the app informally and encouraged officers to explore its features. Champions also played a key role in keeping officers informed about updates and features, making them the primary points of contact for app-related questions.

Participants acknowledged that the role of a champion can be challenging, not only because of organizational culture but also because of the demands of keeping up with technology. To address this, some agencies appointed an additional “logistic point person” responsible for the technical aspects of the app, including (1) assisting officers with app usage, (2) keeping content current, and (3) reporting any issues to the vendor. By involving both a promotional champion and a logistic expert, agencies optimized officer engagement while ensuring smooth technical support.

### Fostering a Culture of Wellness Through Leadership Involvement

Participants also emphasized that a strong wellness culture is more easily sustained when leadership actively endorses and participates in wellness initiatives. Officers may initially be skeptical, but participants noted that leadership involvement generally fostered positive attitudes toward app adoption. Leaders who initiated discussions and showed visible support for the app encouraged agency-wide buy-in. Successful app implementation involved prioritizing a wellness-centered culture where officers felt their mental health was valued, further reinforcing the app’s role as a quality wellness tool.

### Engaging Peer Support Officers

Peer support officers played a vital role in promoting app usage, especially in agencies where those officers are respected, trustworthy figures. Agencies that actively involved their peer support teams in



consistently promoting the app experienced higher levels of officer engagement compared with those that engaged peer support networks infrequently or not at all. Peer support officers encouraged app use in both formal interactions and informal daily conversations, building a culture of app utilization. Participants agreed that ongoing involvement from peer support officers was essential not only for initial app implementation but also for maintaining its value as a lasting resource within the agency.

**Exhibit 4:** Agency-specific insights into three core areas of wellness app engagement: leadership, peer support, and family

| Agency #        | Leadership Engagement   | Peer Support Engagement  | Family Engagement   |
|-----------------|---|--|---|
| <b>Agency 1</b> | "Leadership involvement has been vital. We have monthly wellness meetings with the Colonel, covering topics related to the app and overall wellness to show leadership's commitment to these initiatives."                          | "Peer support team members actively introduced the app to new hires and made sure officers knew they could reach out for help. The team's involvement has been instrumental in building trust with app users." | "We distributed QR codes and informational handouts to family members to help them download and understand the app, making it easier for them to engage with wellness resources alongside their loved ones."                    |
| <b>Agency 2</b> | "The Chief's top-down support was key; he communicated the importance of wellness and personally signed letters to officers' families about app use, which fostered trust and highlighted the department's commitment to wellness." | "Initially, peer support was not part of the rollout, but their later involvement helped re-engage officers. Their presence at roll calls and personal guidance improved the app's reception significantly."   | "The Chief sent a letter to the spouses and support people of officers, inviting them to use the app. This approach helped family members feel included in wellness efforts, creating a support network beyond the department." |
| <b>Agency 3</b> | "Approval from the Chief and command staff was the first step. Leadership buy-in allowed the wellness team to introduce the app with confidence, knowing they had strong support behind them."                                      | "Our wellness team, including the peer support leader, was among the first to use the app. Their familiarity and endorsement of the app encouraged broader use across the department."                         | "Our family team coordinates annual outings that foster a sense of community and connect family members with wellness resources, helping normalize the app and its features."   |
| <b>Agency 4</b> | "Our Office of the Chief backed the rollout, but we learned that leadership visibility needed to extend beyond initial communications. Continuous top-down messaging helped show commitment."                                       | "The peer support team became champions for the app, helping officers feel comfortable accessing mental health resources. Having well-known peers endorse the app made a noticeable difference."               | "We emphasized the app's family-friendly design, ensuring that officers' loved ones could also access resources. By normalizing wellness at home, we supported a stronger wellness culture overall."                            |
| <b>Agency 5</b> | "The new Chief's focus on officer wellness helped drive app adoption. His support in rolling out wellness programs underscored the priority of mental health, setting a precedent across ranks."                                    | "Peer supporters were specifically asked to champion the app, ensuring officers could readily access peer contacts within the app. This ongoing support has strengthened trust and app usage."                 | "During the app rollout, we sent regular updates and information to family members about app resources, particularly for peer support. Family engagement has been key to reinforcing our wellness culture."                     |
| <b>Agency 6</b> | "Leadership buy-in, starting with the sheriff and command staff, created a unified message about the importance of wellness. This buy-in allowed us to implement the app as a valued resource for all staff."                       | "Peer support members' involvement was critical. They promoted the app in a positive light and made themselves available for questions, which helped officers feel more comfortable with the new resource."    | "We met with officers' loved ones to introduce them to wellness resources, including the app, so they could better support officers in times of need. This has helped create a network of understanding and support."           |
| <b>Agency 7</b> | "Command-level support ensured app integration within psychological services. Leadership's support for mental health services and app adoption gave officers confidence in using wellness resources."                               | "Peer support was integrated from the start, with members featured in the app, including bios and contact info. This gave the app a familiar, approachable feel and encouraged officers to explore it."        | "We created separate logins for family members to allow them easy access to wellness resources, knowing they play a vital role in supporting officers' well-being."   |
| <b>Agency 8</b> | "Our leadership, including the mayor's office, provided full support and funding for wellness. This top-down approach has been critical in promoting a wellness culture."   | "We plan to integrate peer support fully in the app's deployment. Having these trusted team members involved will ensure officers see the app as a supportive and reliable tool."                              | "Our leadership is considering tailored resources for family members, especially for certain wellness groups (e.g., grief, addiction support), to make sure officers' families feel supported."                                 |
| <b>Agency 9</b> | "The wellness coordinator emphasized that leadership buy-in, especially at the highest levels, was essential to introducing the app and setting wellness as a priority across the department."                                      | "The wellness coordinator worked closely with peer support to pilot the app with a small group first. This collaboration helped build early positive feedback and trust in the resource."                      | "The wellness coordinator made sure that families were included in the initial pilot phase of the app rollout, emphasizing that support extends to the home environment."   |



## Engaging Family Members

Some agencies recognized the benefits of engaging officers' families in wellness initiatives. By informing families about the app and its resources, agencies found that family members often became advocates for app usage. One agency shared how it introduced the app to family members during recruit training, building familiarity early on. Agencies also created separate logins for families, giving family members access to relevant resources while keeping data segregated for analysis. Although not addressed in this study's interview process, many of the wellness apps integrate expert-developed materials specifically tailored to law enforcement families and the challenges they face, including access to guidance and peer support networks specifically for law enforcement spouses. This approach allowed families to benefit from wellness resources and understand the support available to their loved ones, enhancing the agency's holistic approach to mental health support.

Interviewed agency representatives overwhelmingly emphasized the importance of leadership, peer support, and family engagement in wellness app initiatives. **Exhibit 4** provides a high-level summary of shared themes and approaches among agencies in successfully implementing wellness apps, with a focus on messenger involvement throughout wellness app deployment.

## Sharing Information About the App in Many Formats

Beyond identifying champions to promote the app, agency representatives also emphasized the importance of developing systematic plans for communicating information about the app, including disseminating information through various formats. By sharing information about the app in multiple formats, agencies could initiate a broad awareness campaign, ensuring both sworn and professional staff learned about the app and its features. Moreover, agencies that intentionally aimed to cultivate a culture of wellness often described an effort to consistently remind officers of available resources to encourage engagement. Agency representatives used several popular methods to disseminate information about wellness apps to members of their organization, including online, in-person, and printed materials (e.g., posters, fliers, mailings). Participants also benefited from the agency's information technology (IT) support, who directly installed the app on agency-issued mobile phones, when possible.

## Online Communications

Online communication was a popular strategy for disseminating information about an agency's wellness app. The most common method of online dissemination was via emails, which contained information about the app's purpose and how to access it, including QR codes to download the app and login information. These emails often came from one or more of various groups, such as the Office of the Chief, IT, or the wellness team/peer support. In addition, some agencies shared information about the app in their periodic newsletters and on internal websites, where instructional videos could be linked. However, participants also acknowledged that online communication should not be the sole method of communication about the app because this format could exclude people who do not regularly read emails or newsletters or visit internal websites.

Agency feedback about online communications included:

- **Agency 5:** "We used newsletters to remind officers about app features and linked instructional videos to internal platforms."
- **Agency 6:** "Online access to resources, such as instructional videos and periodic updates, helped engage users initially."



### In-Person Outreach

Agency representatives found that in-person communication about the app typically yielded more success than online methods. In-person conversations felt more personal to officers and could more effectively dispel the stigma associated with seeking out wellness resources. Participants outlined several common opportunities for in-person outreach about the app, including during new hire trainings, in-service trainings, roll calls, and acute times of need (e.g., post-critical incident debriefings). In general, participants found that these settings provided occasions to engage officers directly and foster a more accepting attitude toward the app.

Agency feedback about in-person outreach included:

- **Agency 7:** "Roll calls and post-critical incident debriefings were used to introduce the app and combat stigma."
- **Agency 8:** "Wellness training sessions integrated discussions about the app, normalizing its use and benefits."

### Print Materials

Many participants also used printed materials such as posters, fliers, and postcards provided by vendors to assist in promoting the app. These materials typically featured a unique QR code officers could scan to download the agency's app, as well as a brief overview of the available resources on the app. Some participants stated that their agencies displayed posters in common spaces and that the fliers and postcards were given directly to officers or mailed to them and their families. One agency representative specifically commented on the perceived effectiveness of their vendor's creative marketing strategies to capture officers' attention through print materials. For example, at first glance, some posters appeared to be announcing a missing animal, but upon closer examination they actually provided information about the wellness app. Although such creative approaches were not widespread among the agencies in this study, they were reported to positively impact officer engagement when implemented. In some agencies, however, participants saw print materials as less effective, and they were rarely used.

Agency feedback about print materials included:

- **Agency 9:** "We distributed fliers with QR codes for app downloads and placed posters in common areas (break rooms and elevators)."
- **Agency 1:** "Creative print campaigns, like posters mimicking missing animal ads, were used to capture attention."

### Automatic Download of Apps to Work Mobile Phones

One significant hurdle before an officer can begin using an app is the initial download onto their phone. Agencies that provide company-issued phones can overcome this obstacle by exploring the option of pre-installing the app through IT support. This method was advantageous because it ensured officers could not delete the app without IT assistance, meaning they would always have access to the app on their company-provided phone.

Agency feedback about automatic downloads included:

- **Agency 2:** "IT pre-installed the app on agency-issued phones to overcome download reluctance."
- **Agency 3:** "Pre-loading the app ensured it remained accessible, as officers could not delete it without IT assistance."

## Implementing App-Related Trainings to Demonstrate How the App Works

Participants described how demonstrations of the app facilitated engagement with the technology, enhancing its accessibility in critical moments when an officer may be open to seeking out resources. Representatives from agencies that have successfully implemented wellness apps recommended demonstrating the app to officers outside the context of an acute need—i.e., in a calm state, when they would be better able to retain information. This step was seen as particularly important to address generational differences in the level of acceptance and trust in technology.

Agency feedback about app-related trainings included:

- **Agency 4:** “We incorporated app training into quarterly sessions, using videos to demonstrate its features while emphasizing its anonymity. Captains trained all staff members during these sessions.”
- **Agency 5:** “Training on the app was included in supervisor training sessions, which showed participants how to download and navigate its features effectively.”

## Leveraging the App as an Integrated Communication Hub and Health Activity Platform

Agencies that successfully implemented wellness apps highlighted their value as centralized communication hubs for both agency updates and wellness matters. Apps were also used to share information about agency activities, such as upcoming trainings, and as platforms for event registration. By offering these features, the apps provided officers with neutral, non-wellness-related reasons to engage, which increased comfort and familiarity with using the app for agency business. Some agencies extended this functionality further by hosting agency policies on the app, enabling officers to access routine procedural information. This integration of agency communication into the app not only streamlined access to critical resources but also helped reduce confidentiality concerns by normalizing app interactions beyond wellness-related purposes.

In addition to serving as communication hubs, wellness apps also helped facilitate health-related programming and activities for some agencies. Fitness and nutrition challenges hosted on the app encouraged officers to interact with the platform for proactive, health-oriented reasons. This approach helped officers associate the app with diverse everyday functions rather than solely as a tool for mental health crises. By fostering regular interactions through engaging and practical activities, agencies cultivated familiarity with the app, making it more likely for officers to turn to its wellness features when needed.

Agency representatives emphasized that these strategies of integrating communication and health-related functions into the app were essential to building trust and maintaining engagement. By positioning the app as an integral part of daily agency life, organizations ensured its long-term success and utility for both wellness and operational needs. Agency feedback about utilizing their chosen wellness app as a communications hub and health activity resource included:

- **Agency 6:** “We use the app to post events and send push notifications, centralizing resources and updates in one place.”
- **Agency 7:** “The app became our dashboard for housing and facilitating all types of information, from policies to wellness resources.”

## Regularly Promoting Specific App Features and Content

Because apps currently on the market vary greatly in terms of their curated holistic wellness resources, participants reported it was important to regularly highlight specific features of the app. By doing so, officers who may have preconceived notions of what the app provides are exposed to features that may not be immediately apparent. Some agencies leveraged awareness months to spotlight relevant app features. For instance, during alcohol use awareness month, one agency showcased resources in the app for self-assessing alcohol use and seeking assistance for such concerns. Other approaches included leveraging the app's internal data tracking capabilities to identify "trending" topics and resources that were visited more frequently, or to generate relevant content responsive to specific needs. For example, after noting a rise in interest in separation and divorce-related resources, one agency curated additional resources and placed them in a prominent location in the app. In another example, one agency created awareness campaigns around important topics that were accessed less frequently, such as improving sleep hygiene and the benefit of adopting mindfulness practices. By strategically using trending topics, agencies subtly encouraged officers to engage naturally with the app, which helped build sustained engagement.

Agency feedback about highlighting specific app features and content included:

- **Agency 8:** "Monthly newsletters introduced different aspects of the app, showcasing features like sleep sounds and mindfulness tools that officers weren't initially aware of."
- **Agency 9:** "We used trending topics like separation and divorce to direct our time and curate additional resources officers wanted to access."
- **Agency 1:** "Trending data helped us identify key features to highlight, like fitness and weight loss modules, which officers frequently accessed."

## Theme 4: Sustainability

Participants reported that the initial deployment of an app did not typically include systematic planning for its long-term sustainability, though most emphasized the importance of such planning. Categories addressing sustainability included (1) long-term financial planning, (2) regularly updating app content, (3) updating policies to integrate the app with agency practice, and (4) evaluating the impact of the app.

### Long-Term Financial Planning

Participants emphasized that sustainability planning must consider funding streams, app costs, and agency budgets. Running out of grant funding was one of the main reasons for retiring an app or switching to a new vendor. Discontinuity was reported to negatively impact long-term utilization because of the confusion caused, the need to regain trust in the data protections offered by a new app, and increased risk that the app would be deprioritized, reducing new content and updates and decreasing its relevance. Agency representatives recommended leveraging grants for initial app implementation but stressed the importance of incorporating funding for app maintenance into municipal-level or agency-level budgets to ensure the app's long-term sustainability.

Budget strategies and concerns expressed by the interviewed agencies included:

- **Agency 2:** "We paid for the app for three years using grant money and are now working to demonstrate its impact using usage data to request sustainable funding from the city. If the city does not approve funding, we plan to reapply for grants."



- **Agency 3:** “The app is funded through the county’s wellness budget, which is sustainable for now. However, we regularly use data to justify the app’s continued value and maintain funding.”
- **Agency 4:** “The app was initially funded through the department’s budget as part of a chief’s wellness initiative. Financial constraints later forced us to reprioritize and switch platforms.”
- **Agency 5:** “Budget considerations led us to pilot the app with a limited number of profiles rather than committing to a full-scale rollout, ensuring we managed financial risk effectively.”

### Regularly Updating App Content

Although app content is usually developed before an app is initially deployed, participants agreed on the importance of regularly adapting and updating the app content and reviewing the customizations on an ongoing basis. In order to maintain relevance and continuously provide high-quality content, participants found that it was critical to verify that all resources aggregated through the app provided up-to-date information; this, in turn, helped maintain officer interest and engagement with the app. Some participants also described intentional efforts to modify app content based on data-driven decision-making, including reviewing and responding to app usage trends (e.g., building out popular content areas), soliciting direct feedback from officers on desired content (e.g., through informal conversations), and remaining aware of the changing landscape on police wellness.

Agency feedback on app content updates included:

- **Agency 6:** “Maintaining updated agency-specific content is crucial, but we lack a dedicated employee to oversee this task, limiting the app’s potential.”
- **Agency 7:** “Quarterly updates are based on usage trends, such as the popularity of fitness and nutrition features, to align with officers’ interests.”
- **Agency 8:** “Usage data informs us which resources officers find most helpful, allowing us to prioritize updates and address gaps in available content.”

### Updating Policies to Integrate the App with Agency Practice

When developing a strong implementation plan, some representatives reported that their agency reviewed and refined existing organizational policies or even considered the need for new ones. For example, security parameters on agency-issued devices may prohibit downloading or accessing apps, requiring policy updates prior to app implementation. When agencies adopted a wellness app for mental health support, a top priority was the need to clarify certain policies, including (1) how app data would be tracked and used, (2) the privacy of officers’ app usage, and (3) the confidentiality (and limits on confidentiality) related to any statements made to peer support officers or other mental health providers. To simplify the process of generating organizational policies related to app technology, one agency recommended amending existing policies on officer peer support—which commonly exist in agencies—to include app utilization. In one case, however, an agency made the explicit decision not to create organizational policies related to the adoption of a wellness app, as there was a concern that the perception of organizational oversight may discourage officers from using the app.

Agencies provided the following feedback related to wellness app policies:

- **Agency 9:** “We avoided creating specific policies for the app to ensure it remained a voluntary tool and did not deter officers from using self-assessments or seeking help.”



- **Agency 1:** “Our policies emphasize confidentiality through peer support rather than the app itself, which helps build trust without adding unnecessary governance.”
- **Agency 2:** “No formal policies were developed for the app, but confidentiality clauses in peer support policies indirectly supported its use.”

## Evaluating the Impact of the App

Given the financial and time investments inherent to implementing and administering a wellness app, some agency representatives emphasized the need to understand the impact of the app. Often, participants needed data on app utilization to secure longer-term funding to maintain and continue developing the technology, as well as to identify and route resources to directly address officers’ mental health and wellness concerns. Common strategies for evaluating app impact included examining app utilization trends and soliciting direct feedback from agency staff.

A primary concern of agency leadership was determining whether making an app available resulted in its use. Some agencies reviewed data on whether resource libraries and self-assessments were accessed, or whether the app facilitated increased contact with peer support officers or wellness providers. Most apps collect basic data related to logins and trends in app utilization, but participants emphasized that agencies must plan ahead to leverage such data. To protect users’ anonymity, most apps collect deidentified, aggregate data; as a result, some participants worked with vendors, when possible, to optimize the usability of this data. For example, an agency could ask a vendor to create multiple logins to help disaggregate the data into meaningful subpopulations. Most agencies that aimed to leverage app data had separate logins for officers and family members.

In addition to utilizing basic deidentified data provided by the app itself, some agencies directly engaged with officers to solicit feedback on their perceptions of the app. This reportedly helped them gain a nuanced understanding of officers’ preferences for content and presentation, allowing for continued and responsive adjustments to the app to promote its use. One agency implemented ongoing surveys to gauge staff perceptions of their wellness efforts. Officers within this agency reported feeling valued when the agency ended up providing the wellness programming they had suggested. The agency’s responsiveness to officer feedback and implementation of requested programming was perceived to have a positive impact on the agency’s wellness culture.

Agency feedback on evaluating the impact of wellness apps emphasized the importance of tracking usage trends, analyzing organizational outcomes, and addressing challenges in data collection to better understand how the app supports officer well-being. Specific statements included:

- **Agency 3:** “We periodically track app usage, but it’s not as comprehensive as it could be. We’d like to analyze trends to see which features, like peer support or assessment tools, are being used most.”
- **Agency 4:** “The app has helped reduce stigma and provided easy access to resources. We’re starting to analyze its impact on turnover and sick days as part of our wellness program evaluation.”
- **Agency 5:** “Confidentiality concerns have decreased over time as officers better understand the app’s purpose. We use limited data from the app to guide our wellness programming.”



## 5. CONCLUSION AND RECOMMENDATIONS

The results of this analysis highlight the benefits of an iterative, intentional process of wellness app selection, implementation, integration, and refinement of agency support for officers' mental health. An app was often a part of a broader wellness program, with mental health wellness being just one component. Many vendors market apps under this larger umbrella of wellness, including physical fitness and financial well-being. Participants reported that sustainability was an important consideration that typically did not directly inform initial app selection. In retrospect, failing to consider sustainability at early stages was perceived to have an adverse impact on the app selection and implementation process. Relatedly, when agencies neglected critical considerations associated with app selection, they often had to make course corrections that resulted in "app-hopping"—unplanned transitions to apps that better met their needs, goals, and financial projections—often after considerable investments had already been made into the app that was initially selected. The participants in this study recommended critical considerations and concrete guidance on app selection, preparation for implementation, and continued outreach and sustainability over the long term.

### Limitations

This study was limited by its small sample size, which makes the results less generalizable to a broader population of LEAs. The agencies included in the study represent early adopters of wellness apps, and their unique experiences may not reflect the challenges or successes of agencies with different organizational structures, budgets, technological capacities, or other resources. Additionally, agencies participating in the study may have been more motivated or had better resources to implement wellness apps, potentially skewing the findings toward more favorable outcomes. With a limited sample size, saturation—the point at which the information collected through interviews becomes repetitive and no new themes are identified—may not be possible. It is likely that certain themes or issues were not explored or not explored completely. Further, these interviews were conducted with the person most knowledgeable about the mental health program and app within the agency. These individuals may have less knowledge about the agency's procurement decisions or may not have been included in the process. These factors contribute to gaps in our understanding of app adoption and usage.

However, as an exploratory study, the primary goal was not to achieve generalizability but rather to gather detailed insights and lessons learned directly from practitioners charged with adopting, implementing, and operating these wellness apps for their officers. By examining these agencies' approaches to selecting, implementing, and sustaining wellness apps, the study provides valuable practical considerations for other LEAs considering these products. While the findings may not apply universally, they offer a foundation for further research and serve as a resource for agencies exploring similar initiatives. Future studies with larger and more diverse samples could build on this work to provide more comprehensive and widely applicable recommendations. Additionally, future research could collect officer-level feedback on the implementation, usage, and outcomes related to these apps. Officer-level data collected directly from the apps could help assess the impact on officer output and outcomes. For example, researchers could examine the association between sick days, complaints, or use of force in relation to app access and use. Finally, the mental health support within these apps is often packaged within a larger suite of wellness resources, including physical fitness, financial well-being, nutrition, and injury prevention. Assessing a wider scope of officer wellness may provide a more comprehensive assessment of the value and impact of these apps.



## 6. PRACTITIONER GUIDANCE FOR ADOPTION AND IMPLEMENTATION

To provide agencies with practical guidance in implementing wellness apps with a focus on mental health, **Exhibit 5** outlines common challenges encountered during adoption and implementation, along with corresponding resolutions identified from participant narratives to mitigate these issues.

**Exhibit 5:** Strategic approaches to overcoming challenges of wellness app adoption

| Challenge  | Resolution  |
|--|---|
| <b>Unclear agency goals</b>                            | Define specific wellness objectives—such as reducing stress, increasing peer support, or improving mental health literacy—to guide app selection.     |
| <b>Technological compatibility issues</b>              | Assess cybersecurity policies, data privacy regulations, and system integration requirements before selecting an app.                                 |
| <b>Limited connectivity in the field</b>               | Select apps that allow offline access of key resources to ensure usability in all operational environments.   |
| <b>Policy gaps in mental health and technology use</b> | Review and update agency policies to integrate the app into existing wellness programs, clearly communicating privacy and confidentiality guidelines. |
| <b>Resistance from officers due to stigma</b>          | Involve trusted peer support officers and leadership to champion the app, normalizing mental health support as part of overall wellness.              |
| <b>Lack of officer input in app selection</b>          | Actively solicit officer feedback on desired features, content, and design to enhance engagement and usability.                                       |
| <b>Unclear administrative roles</b>                    | Determine whether the agency requires administrative privileges for app management and identify responsible personnel for oversight.                  |
| <b>Vendor mismatch with agency needs</b>               | Conduct detailed discussions with vendors about customization options, data security, update frequency, and support services before committing.       |
| <b>Low adoption rates among officers</b>               | Implement strategic outreach through multiple stakeholders, including command staff, peer support teams, and family engagement.                       |
| <b>Sustainability concerns</b>                         | Plan for long-term funding and regular content updates to keep the app relevant and engaging.   |

## Reflective Checklist for Agency Readiness

Before adopting a wellness app to support officer mental health, agencies should use this checklist to evaluate their readiness and ensure alignment with their operational needs and wellness objectives.

- ☐ Define agency goals.
  - What are the primary wellness challenges faced by officers?
  - What specific outcomes does the agency hope to achieve through the app (e.g., stress reduction, peer support, increased mental health literacy)?
  - How does this initiative align with the agency's broader wellness strategy?
- ☐ Evaluate technological compatibility.
  - What are the agency's cybersecurity and data privacy requirements?
  - Will the app integrate with existing agency wellness programs and IT systems?
  - Does the app function in low-connectivity environments where officers may need access?
- ☐ Engage stakeholders and officers.
  - How will the agency engage leadership, peer supporters, and wellness teams to promote the app?
  - How can officers provide input on app selection and feature preferences?
  - What concerns might officers have about confidentiality, and how can they be addressed?
- ☐ Ensure effective implementation.
  - Who will be responsible for managing and overseeing the app's implementation?
  - How will the agency communicate app availability and usage instructions?
  - What training or demonstrations will be provided to ensure officers understand the app's functionality?
  - How will the agency integrate the app into existing wellness resources?
- ☐ Plan for long-term sustainability.
  - What funding sources are available to support ongoing app costs?
  - How frequently will app content be reviewed and updated to maintain engagement?
  - How will the agency track and evaluate app usage to measure its impact?
  - How will the agency handle transition in personnel responsible for the app's administration?

By thoughtfully addressing these key considerations, agencies can make well-informed decisions that facilitate the successful implementation of wellness apps to support officer mental health. This approach not only enhances officer well-being but also fosters sustained engagement and ensures the long-term viability of the program.



## REFERENCES

1. Patterson, G. T. (2001). The relationship between demographic variables and exposure to traumatic incidents among police officers. *Australian Journal of Disaster and Trauma Studies*, 2001(2). <https://www.massey.ac.nz/~trauma/issues/2001-2/patterson2.htm>
2. Stogner, J., Miller, B. L., & McLean, K. (2020). Police Stress, Mental Health, and Resiliency during the COVID-19 Pandemic. *Am J Crim Justice*, 45(4), 718-730. <https://doi.org/10.1007/s12103-020-09548-y>
3. Richards, N. K., Suarez, E. B., & Arocha, J. F. (2021). Law Enforcement Officers' Barriers to Seeking Mental Health Services: a Scoping Review. *Journal of Police and Criminal Psychology*, 36(3), 351-359. <https://doi.org/10.1007/s11896-021-09454-x>
4. Velazquez, E., & Hernandez, M. (2019). Effects of police officer exposure to traumatic experiences and recognizing the stigma associated with police officer mental health. *Policing: An International Journal*, 42(4), 711-724. <https://doi.org/10.1108/pijpsm-09-2018-0147>
5. Drew, J. M., & Martin, S. (2021). A National Study of Police Mental Health in the USA: Stigma, Mental Health and Help-Seeking Behaviors. *Journal of Police and Criminal Psychology*, 36(2), 295-306. <https://doi.org/10.1007/s11896-020-09424-9>
6. Shute, R., Hofer, M. S., Mecray, M., Woodburn, B., Mitchell, R., Rineer, J., & Planty, M. (2022). *Landscape study of application software products that aim to address the mental health needs of law enforcement*. U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.
7. Brown, J. M., & Campbell, E. A. (1990). Sources of occupational stress in the police. *Work & Stress*, 4(4), 305-318.
8. Violanti, J. M., Charles, L. E., McCanlies, E., Hartley, T. A., Baughman, P., Andrew, M. E., Fekedulegn, D., Ma, C. C., Mnatsakanova, A., & Burchfiel, C. M. (2017). Police stressors and health: A state-of-the-art review. *Policing*, 40(4), 642-656. <https://doi.org/10.1108/PIJPSM-06-2016-0097>
9. Collins, P. A., & Gibbs, A. C. (2003). Stress in police officers: A study of the origins, prevalence and severity of stress-related symptoms within a county police force. *Occup Med (Lond)*, 53(4), 256-264. <https://doi.org/10.1093/occmed/kqg061>
10. Sherwood, L., Hegarty, S., Vallieres, F., Hyland, P., Murphy, J., Fitzgerald, G., & Reid, T. (2019). Identifying the key risk factors for adverse psychological outcomes among police officers: A systematic literature review. *Journal of Traumatic Stress*, 32(5), 688-700. <https://doi.org/10.1002/jts.22431>
11. Regehr, C., Carey, M. G., Wagner, S., Alden, L. E., Buys, N., Corneil, W., Fyfe, T., Matthews, L., Randall, C., White, M., Fraess-Phillips, A., Krutop, E., White, N., & Fleischmann, M. (2019). A systematic review of mental health symptoms in police officers following extreme traumatic exposures. *Police Practice and Research*, 22(1), 225-239. <https://doi.org/10.1080/15614263.2019.1689129>
12. Ma, C. C., Andrew, M. E., Fekedulegn, D., Gu, J. K., Hartley, T. A., Charles, L. E., Violanti, J. M., & Burchfiel, C. M. (2015). Shift work and occupational stress in police officers. *Safety and Health at Work*, 6(1), 25-29. <https://doi.org/10.1016/j.shaw.2014.10.001>
13. Marmar, C. R., McCaslin, S. E., Metzler, T. J., Best, S., Weiss, D. S., Fagan, J., Liberman, A., Pole, N., Otte, C., Yehuda, R., Mohr, D., & Neylan, T. (2006). Predictors of posttraumatic stress in police and other first responders. *Ann NY Acad Sci*, 1071, 1-18. <https://doi.org/10.1196/annals.1364.001>
14. Syed, S., Ashwick, R., Schlosser, M., Jones, R., Rowe, S., & Billings, J. (2020). Global prevalence and risk factors for mental health problems in police personnel: A systematic review and meta-analysis. *Occup Environ Med*, 77(11), 737-747. <https://doi.org/10.1136/oemed-2020-106498>
15. Liberman, A. M., Best, S. R., Metzler, T. J., Fagan, J. A., Weiss, D. S., & Marmar, C. R. (2002). Routine occupational stress and psychological distress in police. *Policing: An International Journal of Police Strategies & Management*, 25(2), 421-441. <https://doi.org/10.1108/13639510210429446>
16. McCanlies, E. C., Miller, D., Andrew, M. E., Wirth, O., Burchfiel, C. M., & Violanti, J. M. (2014). Posttraumatic stress disorder symptoms, psychobiology, and coexisting disorders in police officers. In J. M. Violanti (Ed.), *Dying for the Job: Police Work Exposure and Health* (pp. 155-168). Charles C. Thomas Publisher, Ltd.
17. Gershon, R. R. M., Barocas, B., Canton, A. N., Xianbin, L., & Vlahov, D. (2008). Mental, physical, and behavioral outcomes associated with perceived work stress in police officers. *Criminal Justice and Behavior*, 36(3), 275-289. <https://doi.org/10.1177/0093854808330015>
18. Violanti, J. M., Fekedulegn, D., Charles, L. E., Andrew, M. E., Hartley, T. A., Mnatsakanova, A., & Burchfiel, C. M. (2008). Suicide in police work: Exploring potential contributing influences. *American Journal of Criminal Justice*, 34(1-2), 41-53. <https://doi.org/10.1007/s12103-008-9049-8>
19. Hartley, T. A., Burchfiel, C. M., Fekedulegn, D., Andrew, M. E., & Violanti, J. M. (2011). Health disparities in police officers: Comparisons to the U.S. general population. *International Journal of Emergency Mental Health*, 13(4), 211-220. <https://www.ncbi.nlm.nih.gov/pubmed/22900455>
20. Ménard, K. S., & Arter, M. L. (2013). Police officer alcohol use and trauma symptoms: Associations with critical incidents, coping, and social stressors. *International Journal of Stress Management*, 20(1), 37-56. <https://doi.org/10.1037/a0031434>



21. Baker, L. D., Richardson, E., Fuessel-herrmann, D., Ponder, W., & Smith, A. (2023). Police burnout and organizational stress: Job and rank associations. *Policing: An International Journal*, 46(4), 682-693. <https://doi.org/10.1108/PIJPSM-01-2023-0004>
22. Bonner, H. S., & Crowe, A. (2022). Mental health programming for law enforcement: A first look at trends and perceptions of effectiveness. *Journal of Crime and Justice*, 45(5), 552-566. <https://doi.org/10.1080/0735648X.2022.2045209>
23. Padilla, K. E. (2023). A descriptive study of police officer access to mental health services. *J Police Crim Psychol*, 1-7. <https://doi.org/10.1007/s11896-023-09582-6>
24. Fox, J., Desai, M. M., Britten, K., Lucas, G., Luneau, R., & Rosenthal, M. S. (2012). Mental-health conditions, barriers to care, and productivity loss among officers in an urban police department. *Conn Med*, 76(9), 525-531. <https://www.ncbi.nlm.nih.gov/pubmed/23155671>
25. Golden, E. A., Zweig, M., Danieleto, M., Landell, K., Nadkarni, G., Bottinger, E., Katz, L., Somarriba, R., Sharma, V., Katz, C. L., Marin, D. B., DePierro, J., & Charney, D. S. (2021). A resilience-building app to support the mental health of health care workers in the COVID-19 era: Design process, distribution, and evaluation. *JMIR Formative Research*, 5(5), e26590. <https://doi.org/10.2196/26590>
26. Vilendrer, S., Amano, A., Brown Johnson, C. G., Favet, M., Safaeinili, N., Villaseñor, J., Shaw, J. G., Hertelendy, A. J., Asch, S. M., & Mahoney, M. (2021). An app-based intervention to support first responders and essential workers during the COVID-19 pandemic: Needs assessment and mixed methods implementation study. *Journal of Medical Internet Research*, 23(5), e26573. <https://doi.org/10.2196/26573>
27. Six, S. G., Byrne, K. A., Tibbett, T. P., & Pericot-Valverde, I. (2021). Examining the effectiveness of gamification in mental health apps for depression: Systematic review and meta-analysis. *JMIR Ment Health*, 8(11), e32199. <https://doi.org/10.2196/32199>
28. Marshall, J. M., Dunstan, D. A., & Bartik, W. (2020). Clinical or gimmick? The use and effectiveness of mobile mental health apps for treating anxiety and depression. *Australian & New Zealand Journal of Psychiatry*, 54(1), 20-28. <https://doi.org/10.1177/0004867419876700>
29. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
30. Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. A., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology*, 52(2), 196-205. <https://doi.org/10.1037/0022-0167.52.2.196>
31. IACP. (n.d.). *IT security*. Retrieved May 2025 from <https://www.iacpcenter.org/chiefs/it-security/>