ALLIANCE GROUP

Health Guard ID

Designed exclusively for New York City Police Department

Developed by
AR Alliance Group Inc.

U.S. Provisional Application
No.16714356

HEALTH GUARD ID

HEALTH GUARD ID

An immediate access to life-saving information

Health Guard ID (HG ID) *mobile application provides access to vital information using modern technologies, such as a certified EHR or biometric authentication when the Internet and cellular network are not available.*

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HEALTH GUARD ID PRODUCT

HG ID can be used by active law enforcement officers, administrative personnel, retired officers, their family members, veterans, etc.

It is an important and necessary tool that can save lives of firefighters (MDFRD), school students (MDCPS) and other vulnerable populations when no internet or cellular network is available.

HG ID can also be used to track vaccinations during pandemics; prevent human trafficking; provide authorized access to secured facilities and much more.

This software can securely store biometric information and other essential personal identifiers.

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HEALTH GUARD ID FOR LAW ENFORCEMENT OFFICERS

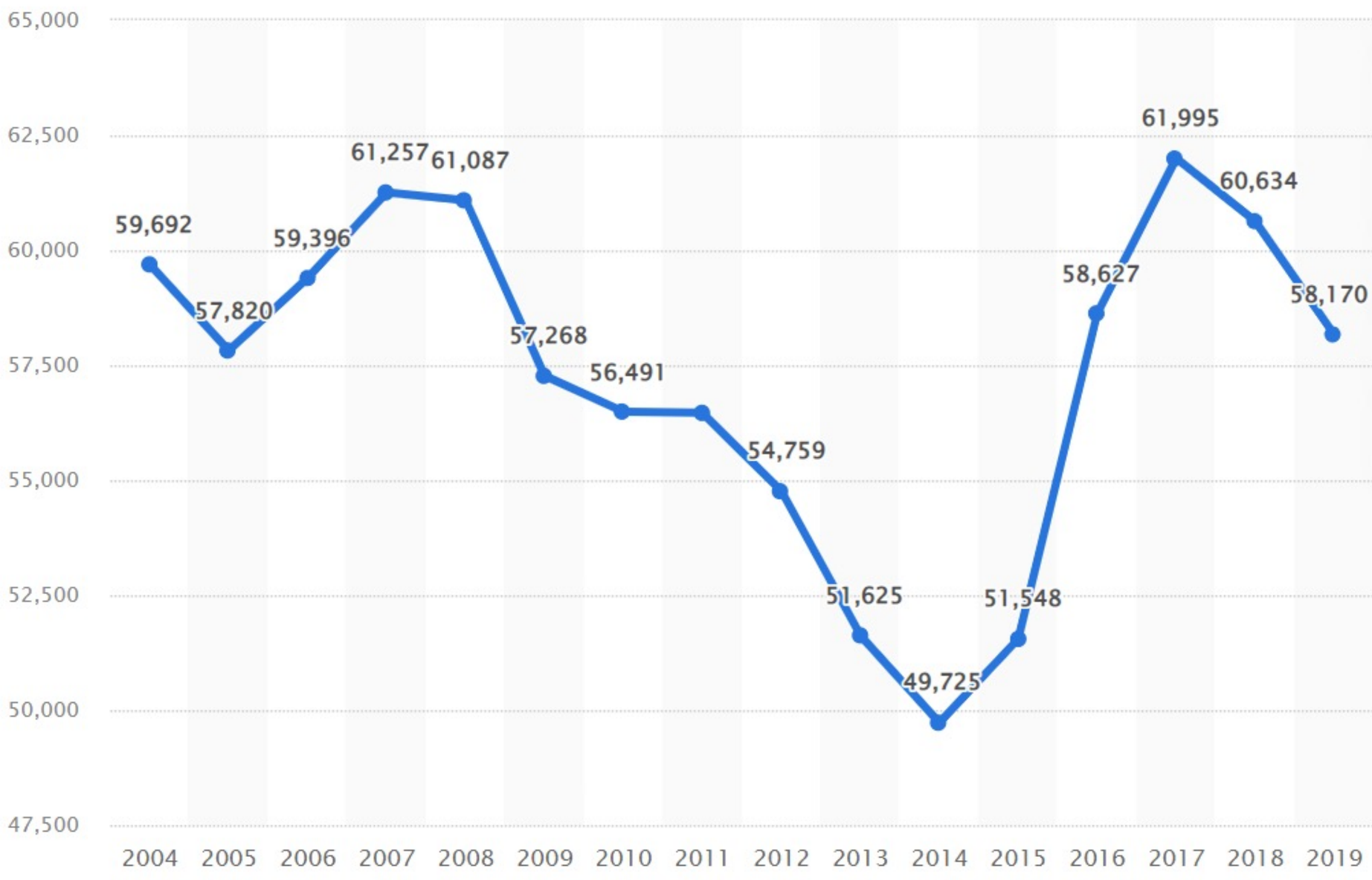
NYPD is the largest and one of the oldest municipal police departments in the United States, with approximately **36,000 officers** and **19,000** civilian employees.

- *In NYC, 4.2 police officers per thousand people, according to the recent data*
- *Officers come into contact with 17% of the population annually;*
- *There have been 18898 assaults against law enforcement officers in 2021, resulting in 2886 injuries in 2021.*

source: https://www.lawenforcementtoday.com/police-brutality-race-numbers/

https://www1.nyc.gov/site/nypd/about/about-nypd/about-nypd-landing.page

THE NUMBER OF LAW ENFORCEMENT OFFICERS ASSAULTED IN USA



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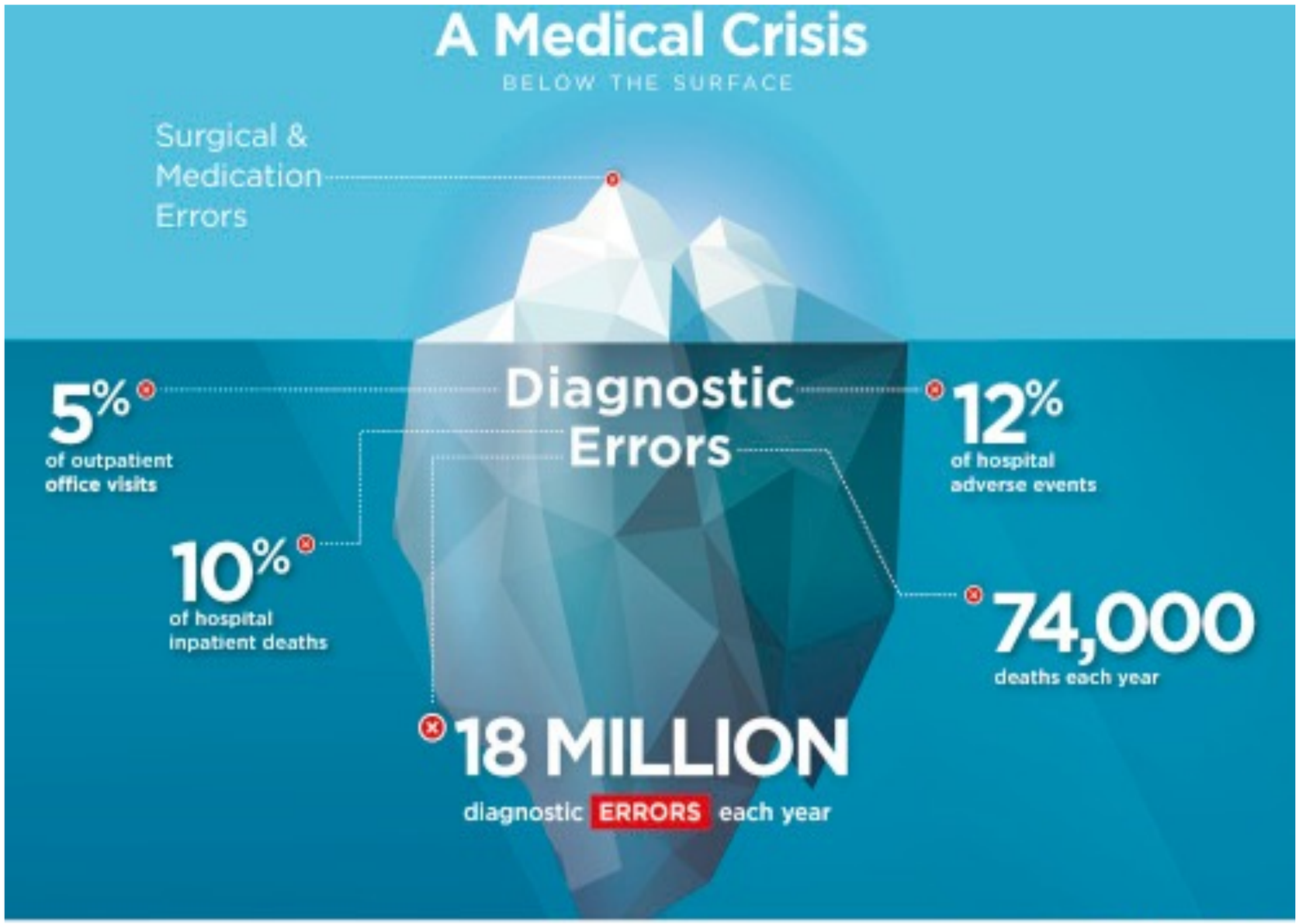
STATISTICS ON MEDICAL ERRORS



source:
https://www.sciencedirect.com/topics/medicine-and-dentistry/clinical-decision-support-system

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OBJECTIVES

Help to save lives of law enforcement officers by providing technological tools whenever there is an immediate threat to their lives or a severe injury when there is no access to the Internet and cellular network;

*Mitigate possible medical errors by promptly giving access to the vital personal information of a law enforcement officer (for example, blood type, allergies, chronic diseases, current medications, etc.) using biometric authentication through a connected **EHR** system, since time plays a crucial role in an emergency;*

Provide assistance in ensuring completeness, reliability, accuracy, relevance, timeliness, and availability of medical data in healthcare databases of the US Department of Health and Human Services.

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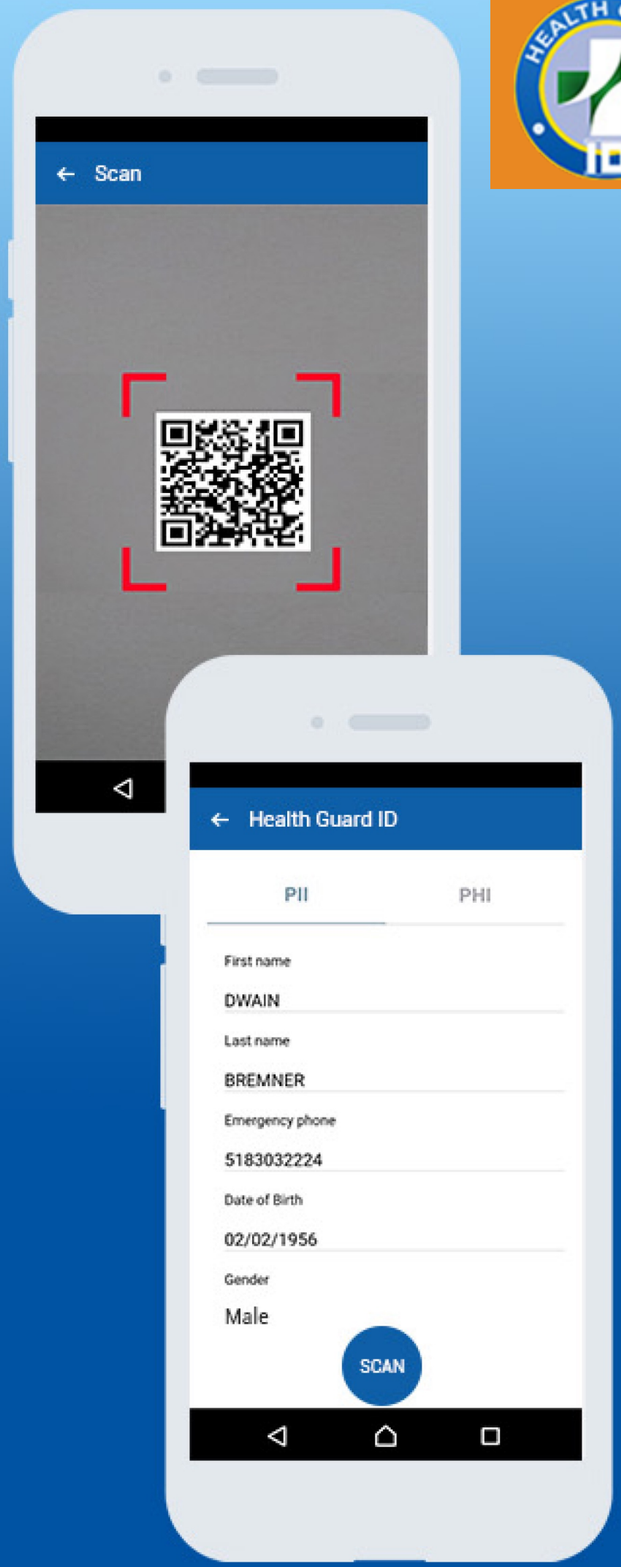

WHY AND WHEN MEDICAL IDENTIFIERS ARE IMPORTANT

A medical identifier provides access to critical personal information of the law enforcement officer within seconds.

Access to such life-saving medical data in emergency situations is a top priority since the lack of relevant, reliable and vital information can increase risks and lead to possible health complications.

Examples:

- *Some medications may interfere with others during the treatment and raise the risk of experiencing side effects. This can result in serious and often deadly complications;*
- *Allergies to certain medications can also cause severe deadly complications.*

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HEALTH GUARD ID PRODUCT

WHAT IS HEALTH GUARD ID?

The Health Guard ID is an innovative product for immediate and easy ***offline*** *access to critical medical data and later to the full medical information about an injured law enforcement officer via biometric authentication in cases when no network connection is available.*

HOW DOES IT WORK?

1. The information about a person is stored on a certified HIPAA compliant EHR;
2. For each person, QR code is generated right in the app. The QR code is an image that can store the necessary medical data, which applies to a selected surface or item. In addition, the QR code contains a fink to a secure website where full medical information is stored and readily available;
3.This information is available for use immediately upon scanning.

Simple steps to use HG

ID: Step 1: *Install, Log in.*

Step 2: *Scan, Get information.*

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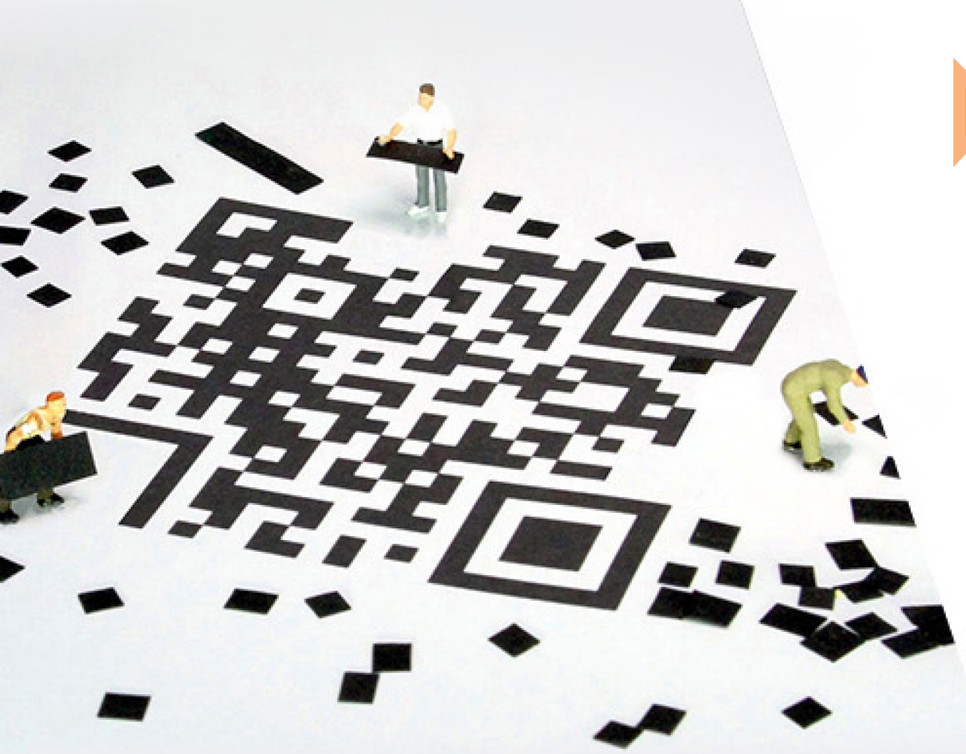

HEALTH GUARD ID PRODUCT

All patient data is stored on a secure EHR system fully compliant with HIPAA policies and regulations

The data from the QR code is encrypted to prevent unauthorized access and is accessible only through this special application with several additional levels of data protection

HIPAA code encoded in Health Guard ID QR grants access to only a specific patient's information.

NO SPECIAL EQUIPMENT NEEDED!

Any modern device (smartphone, tablet) can be used both online and offline. Our application is only needed to read the encrypted information, that is accessible via a QR code.

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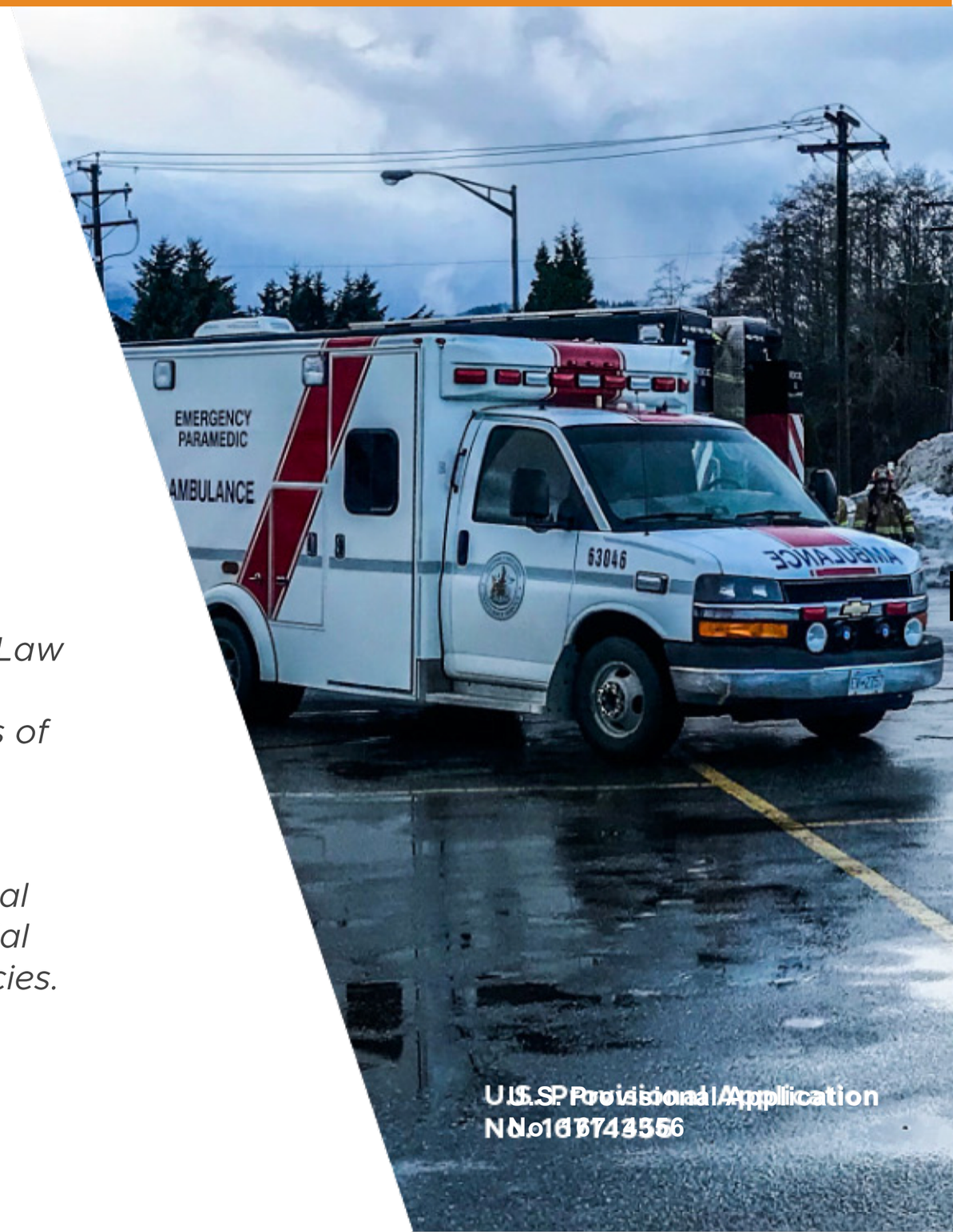
POTENTIAL BENEFITS OF HEALTHGUARD ID

- *The level of mortality and disability among law enforcement personnel will decrease;*

- *Appropriate and timely medical care without delays will be delivered, preventing minor problems from developing into major ones;*

- *The number of **unnecessary** medical tests and procedures will be reduced, saving funds for the Law Enforcement Agencies Budget.*
  These savings can be reallocated for other needs of the Law Enforcement Agencies;

- *Integrity, security, accumulation of all medical records in a single database can be beneficial during natural disasters and other emergencies.*



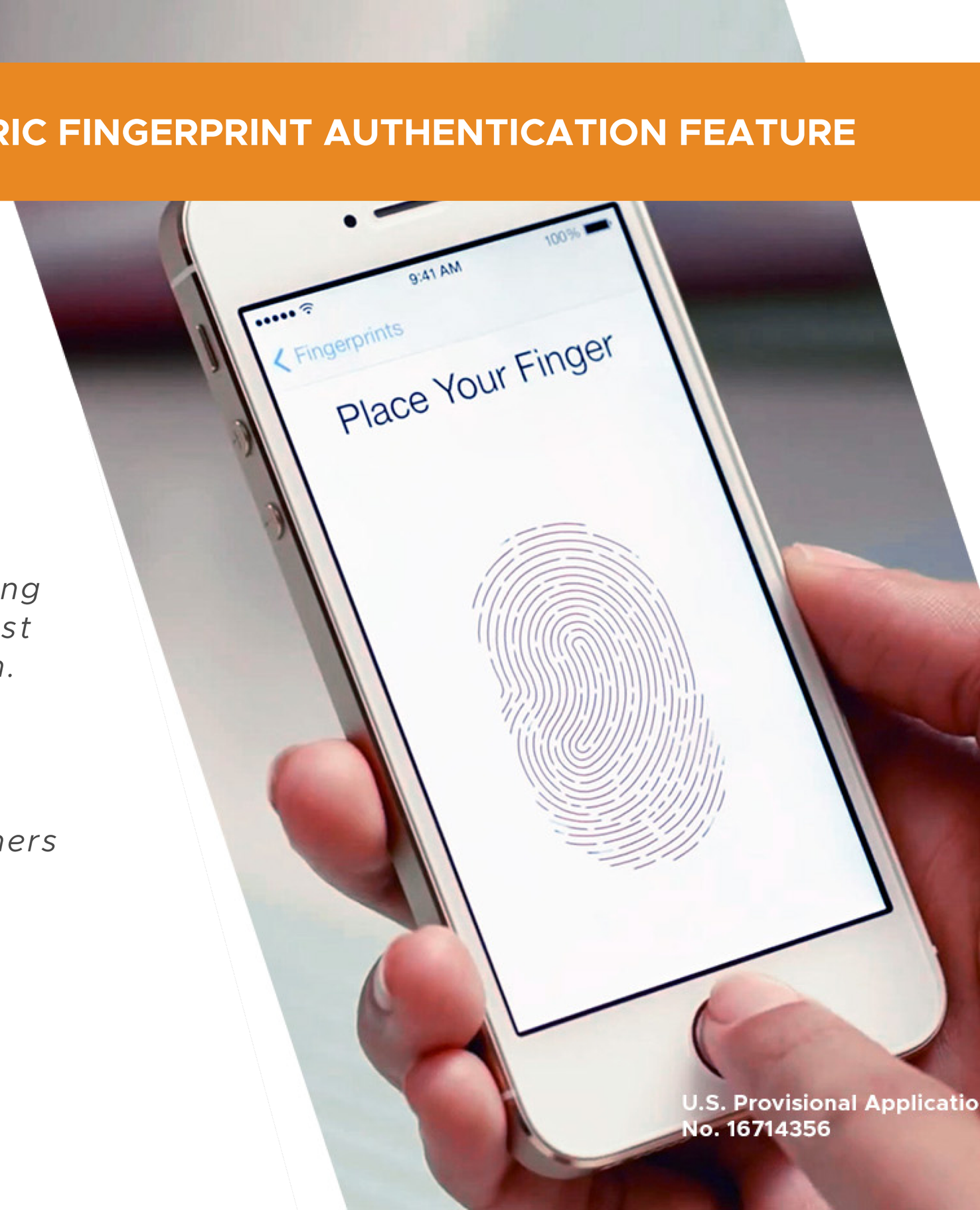
U.S. Provisional Application No. 63/743,556

BIOMETRIC FINGERPRINT AUTHENTICATION FEATURE

Accurate identification of patients using their fingerprints

Biometric Fingerprint Scanning Technology is one of the most secure ways of identification.

In the past few years, scanners have appeared in different locations, such as police stations, hospitals, high-security buildings, etc.



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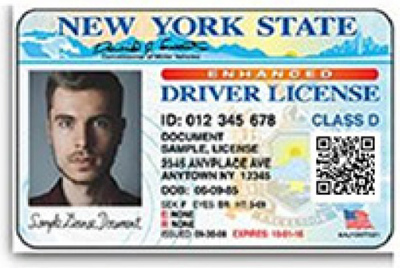
PLACES WHERE THE QR CODE CAN BE PRINTED ON.
TYPES OF QR CODES

- *Driver's license*
- *ID cards*
- *Refrigerator magnets*
- *Wristbands*
- *Wearable jewelry*
- *Window decals*



The bigger the QR image, the better the quality, and the more information is accessible.

www.healthguardid.com
HIPAA code FLORIDA1234

John Doe
DoB: 08/15/1953

Approximately:
1.6 inch x 1.6 inch.

Better quality and possibility to place: HIPAA code, web-link, Date of QR code creation, DOB, Name along with QR code.

0.75 inch x 0.75 inch

Max 234 characters

0.9 inch x 0.9 inch

Max 279 characters

1.2 inch x 1.2 inch

Max 587 characters

Patent pending
U.S. Provisional Application No.: 62/857,937

EFFECTIVE UTILIZATION OF QR CODE

It is recommended to apply QR code to several places of an employee's coverall/uniform or other items. Since the QR code may be damaged, spoiled, or entirely wiped out during an emergency, it is better to prevent the information from a complete inaccessibility.

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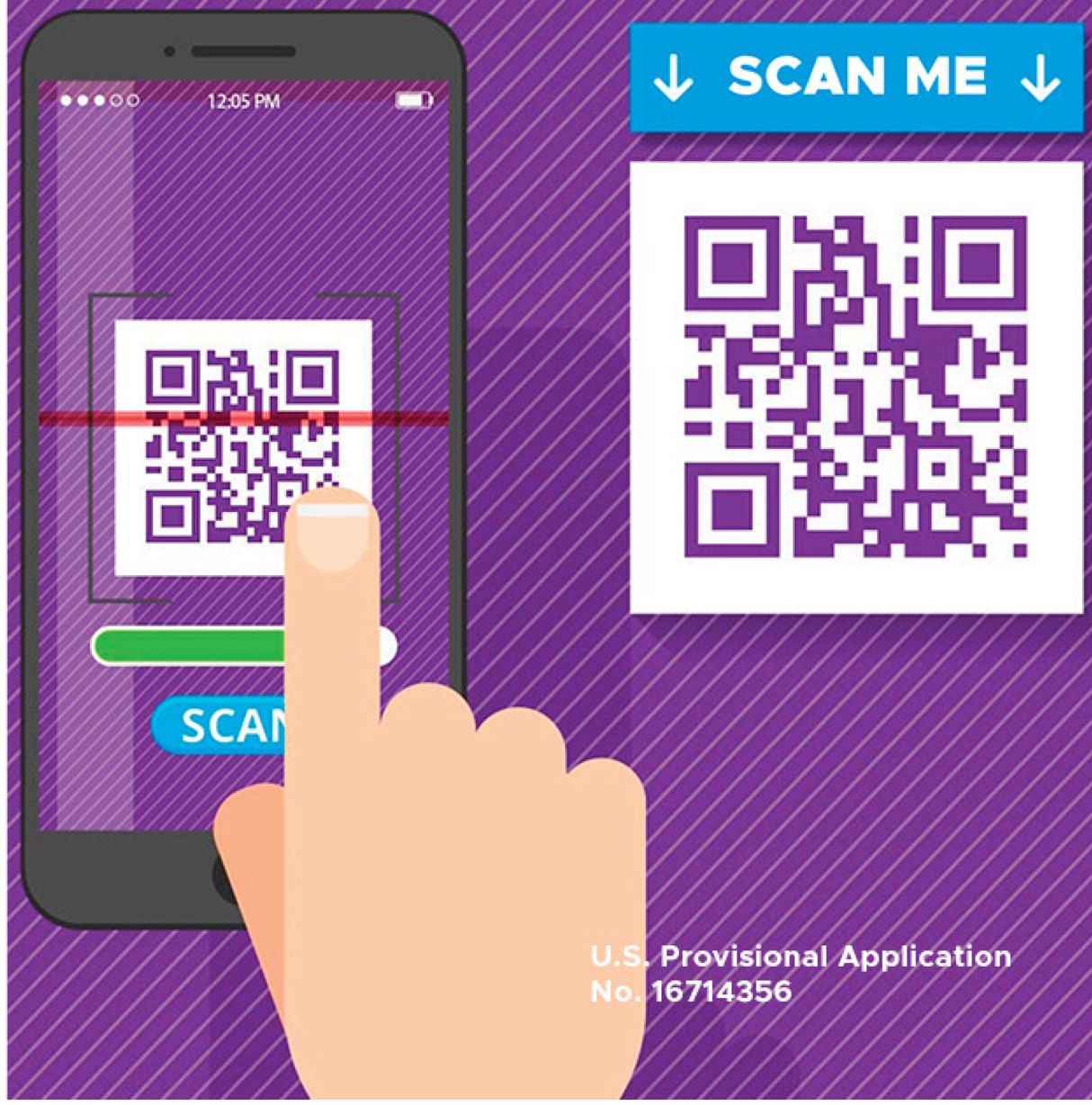
HEALTH GUARD ID WITHOUT THE INTERNET AND MOBILE NETWORKS

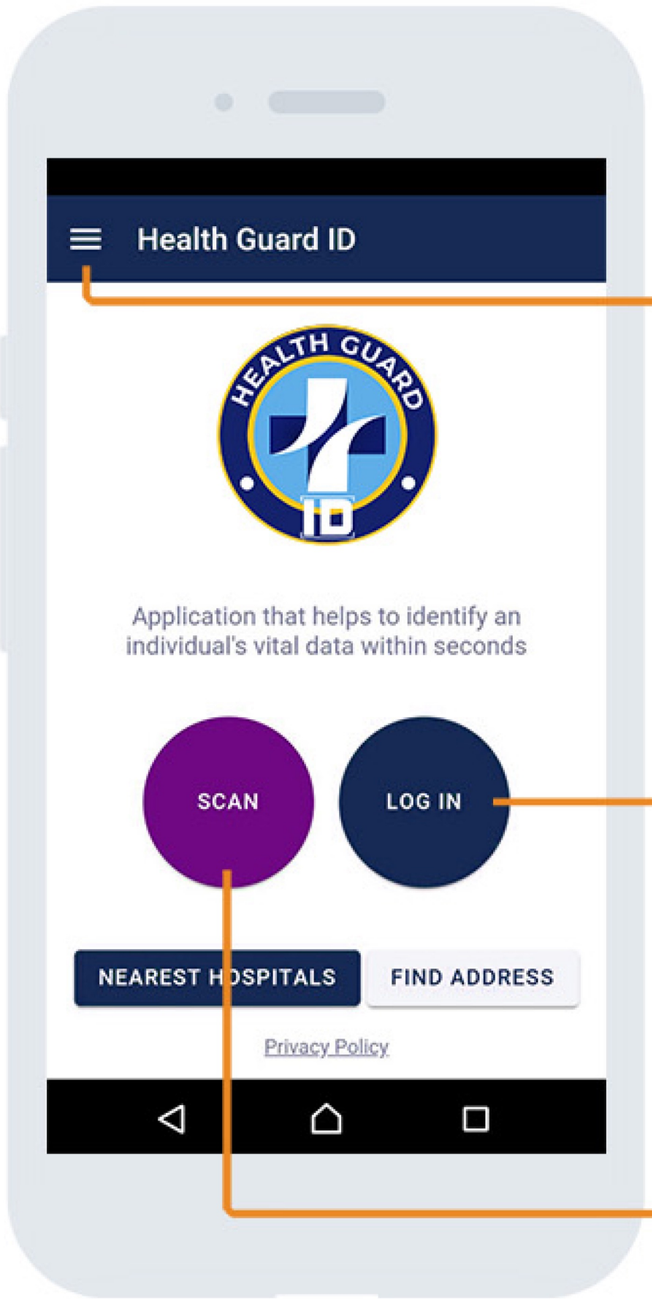
Even if there is *no internet or cellular connection, the first responder will get access to the following essential data by simply scanning the QR code:*

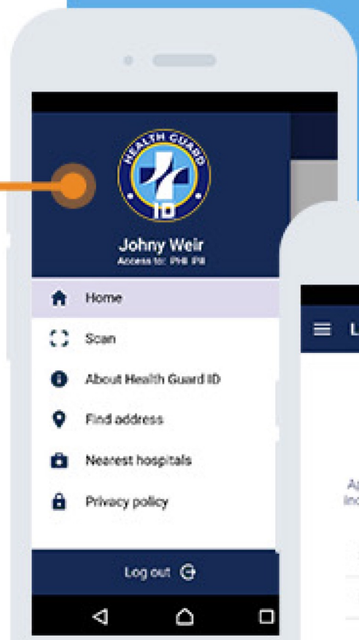
- *Full Name;*
- *Date of Birth;*
- *Address;*
- *Blood type and RH factor;*
- *Other critical data (including information on current and past diagnoses and medications, information on allergies and chronic diseases).*

Upon your request, we can enter any data that you consider important, and that meets a specific need.

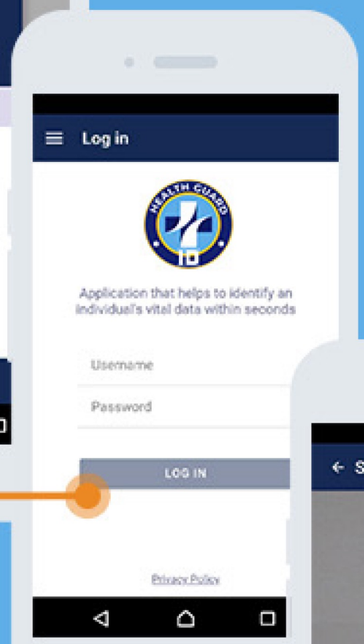


MAIN SCREEN.





Menu screen with settings



Authorization

Scanning QR image

Any other additional features can be added upon request

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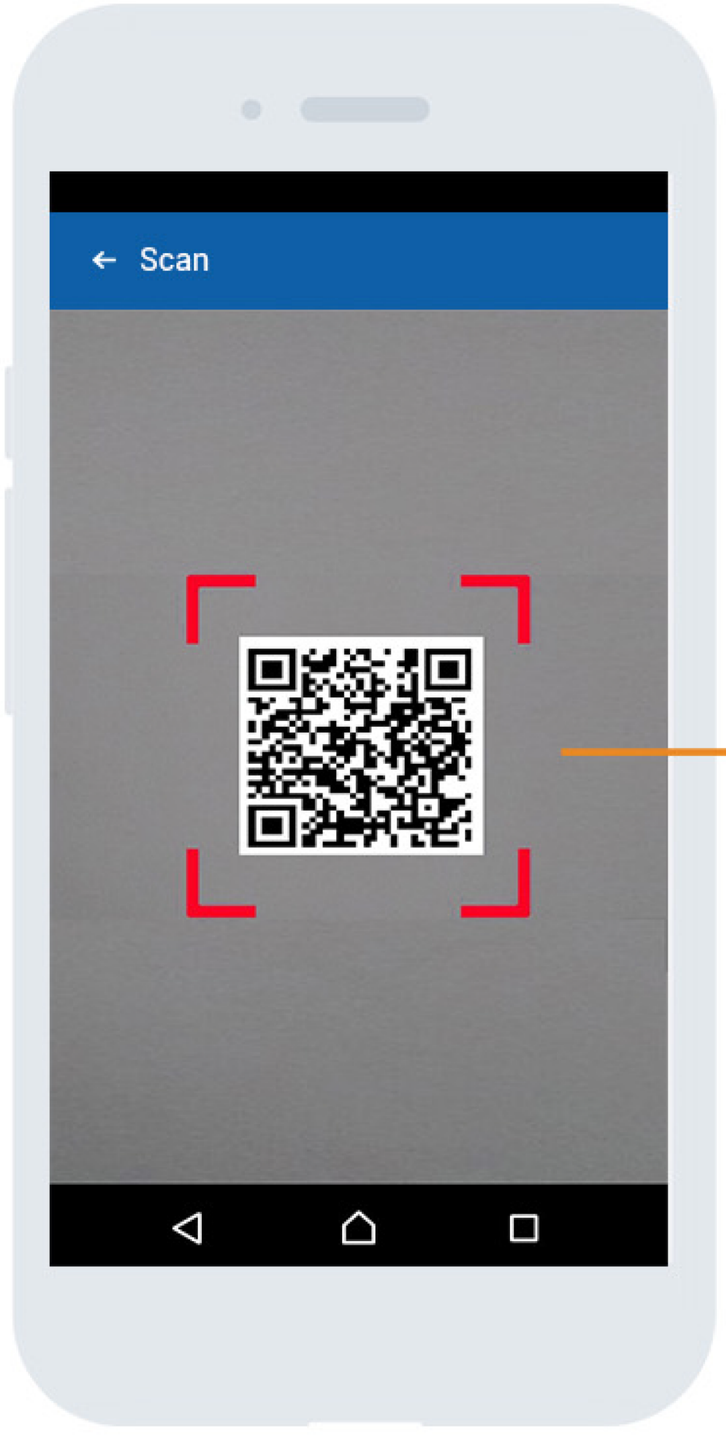
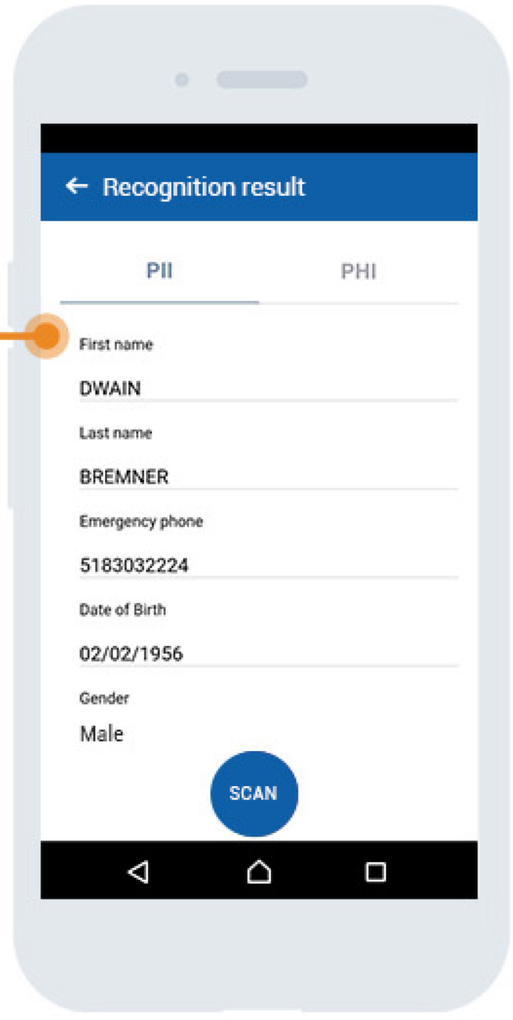
SCANNING OF QR CODE

HG ID QR scanner is capable to read, decode and provide the necessary information in a readable format.





Result of scanning the Health Guard ID QR images by a proprietary app.

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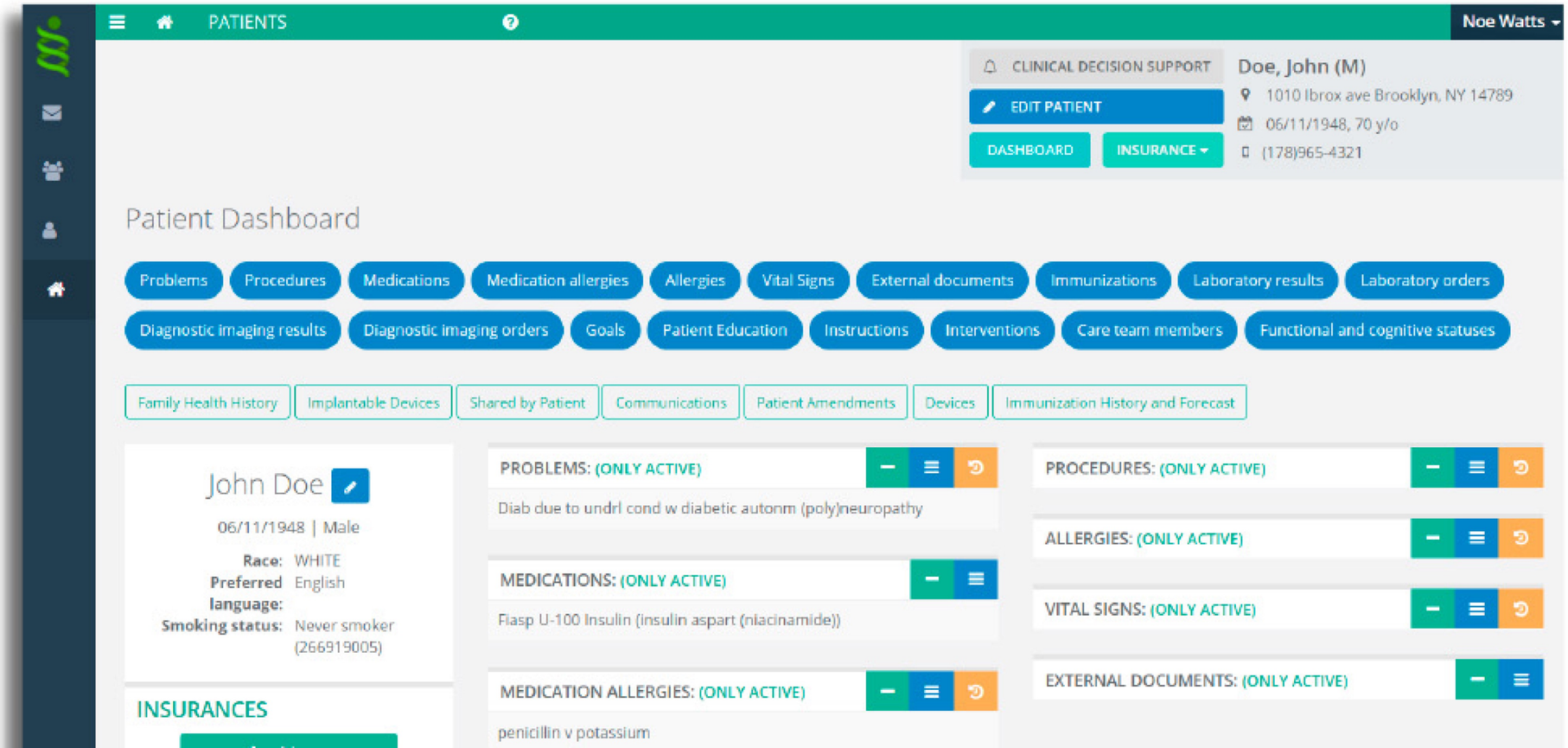
ONLINE FEATURES OF HEALTH GUARD ID

When Internet access is available, an authorized person will be able to see extended information about the law enforcement officer by scanning the QR code and clicking on the available link or scanning patient's fingerprint.

- *PCP and contacts*
- *Active diagnoses, allergies, and medications*
- *Plan of treatment*
- *Common clinical data set*



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DEFINITIONS

PII *- Personal Identifiable Information is any data that can identify a person (Name, Address, DOB, Contacts).*

PHI *- Protected Health Information. PHI (blood type, diabetes type, allergies, heart implants, etc.) is also PI/, but it requires mandatory protection.*

Business Associate Agreements (BAAs) *- a specific type of legal contract that must be in place between parties that use, transmit, receive, or exchange PHI.*

Encrypted data *- a method that renders data unreadable without a key (password). Pursuant to HIPAA, encryption is required at rest and in transit.*

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HIPAA COMPLIANCE

TECHNICAL SAFEGUARDS BY HEALTH GUARD ID IMPLEMENTED IN ACCORDANCE WITH THE FEDERAL LAW CFR 164.312

(a)(2) Implementation specifications:
(I) Unique user identification. *Assigning a unique name and/or number for identifying and tracking user identity.*
(ii) Emergency access procedure. *Establishing and implementing procedures for obtaining necessary electronic protected health information (ePHI) during an emergency. Permissible by State DOH.*
(iii)Automatic logoff. *electronic procedures that terminate an electronic session after a predetermined time of inactivity.*
(iv) Encryption and decryption. *a mechanism to encrypt and decrypt ePHI.*

(e)(2) Implementation specifications:
(i)Integrity controls. *Security measures to ensure that electronically transmitted protected health information is not improperly modified without detection until disposed of.*
(ii) Encryption. *Implemented mechanism to encrypt ePHI whenever deemed appropriate.*

STATEMENT OF PURPOSE

1) Collect all PI/ and PHI by permission of information holders. Add to an electronic cloud-based HIPAA database (optional) or store in paper format
2) Name, address, DOB, contact *(PI/) printed on QR in a non-encrypted format; readable by any HG ID QR reader.*
3) Emergency medical information ***- active diagnoses/blood type/allergies/medications/surgeries;***
PHI encrypted in a QR code and readable only by HG ID QR decoder.

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HG ID QR CODE GENERATION

✓ *QRCoder is a simple library, written in C#.NET, that allows you to create OR codes. It does not depend on any other libraries and is available as .NET Framework and .NET Core PCL version on NuGet.*

✓ *QRCoder is a NET library, written entirely in C#, that enables you to generate OR Codes as defined by SO"'/IEC 18004. https://github.com/codebude/QRCoder/wiki/How-to-use-QRCoder*

The MIT License (MIT)

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HG ID QR CODE MOBILE APPLICATION

The list of technologies:

01. *Ionic Framework - https://ionicframework.com*

*Ionic helps developers build and implement remarkable **cross-platform** hybrid apps with the following features:*

- ***A single codebase** for Android, iOS, Electron, PWAs, and more.*
- ***Seamless functionality on** desktop, mobile, native, and web.*
- ***Access to** device features with a core library of **native AP/s.***
- *Full access to the native, including QR Code pattern recognition.*

https://ionicframework.com/docs/v3/native/qr-scanner/

- *Built with **common programming skills**: HTML, CSS and JavaScript.*
- *Based on web standards, **not proprietary languages.***
- *Agnostic framework: works across any **Angular,** React, Vue.*

02. *Interface - View part Angular*
http://angular.io

Angular is Typescript based web framework:

- *Supported by Google.*
- *Giant community (more than two million developers).*
- *Speed & performance.*
- *We use Angular in the iSmart EHR development and each developer in our team able to support Mobile and Web code.*
- *Typescript - Strictly typed language.*
- *Cross-browser support (IE 10, 11+, Edge, Mozilla 58+, Google Chrome 60+, Safari).*

03. *Apache Cordova - https://cordova.apache.org*
Apache Cordova is Node JS Based application builder for MacOS, Windows and Linux.

04. *Values of problems, medications, medication allergies, common allergies, procedures, religions, ranks, languages are being passed into the QR code pattern in* ***coded*** *(id) view.*

License

Ionic is an open source SOK released under a permissive MIT license. It can be used in personal or commercial projects for free. MIT is the same license used by such popular projects as jQuery and Ruby on Rails.

https://opensource.org/licenses/MIT

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FAQ

Is there a fee for using QR codes?

No.

The license to use QR codes stipulated by JIS (Japanese Industrial Standards) and the ISO is not necessary.
The specification for QR code has been made available for use by any person or organization. (Obtaining QR code Specification)
The word "QR code" is a registered trademark of DENSO WAVE INCORPORATED in Japan and other countries.

**/SO / IEC 18004:2015*
Information Technology - Automatic Identification and Data Capture Techniques - QR Code bar Code Symbology Specification.

What information can be accessed through a QR code?

Name, date of birth, address, phones, emergency contacts, gender, service branch, rank, status, primary language, secondary language, blood type, unique external ID in any EHR system, free text notes, common allergies, medication allergies, diagnosis codes, procedure codes, taken medications

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FAQ

How is data stored in the QR code assessed by Health Guard ID?

The QR code contains an encoded data string which can be decoded only via our application.
The client can determine forms and what is in them. Based on that information, each form will be encoded accordingly.
The decoder reads "form identifier," and, based on internal forms database, parses each form by how it was encoded.

Where can I put QR codes?

Army dog tags, custom shaped metal tags, metal business cards, charms, bracelets.

Are QR codes reliable?

QR Codes are very reliable; once a QR Code is generated or printed, it will not degenerate or lose the data it holds. It is only if the image becomes corrupt that the data can be lost. In cases when a QR Code is printed on a physical item (such as paper or a magazine), it is only when that item becomes damaged that the data can be lost. Even if part of a QR Code becomes unreadable, QR Codes have a built-in error correction feature that helps to ensure that a code is still readable regardless of a damage. Up to 30% of the code can be corrupt or missing, and the scanner can still read it.

Does a QR code have to be black and white?

Although most QR Codes are black and white, they don't have to be like this. A QR Code can have any color or even a combination of colors.

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FAQ

Can QR codes be inverted or mirrored?

The simple answer is No. Mirroring a QR code or inverting it will prevent "most" barcode readers from being able to decode the image and extract any data from it.
However, some modern scanners and the latest smartphone apps can determine that the code is inverted and still access the content. While this is not something technically supported in the QR Code specification, the additional capability of scanners may be able to figure out what is needed to "correct" the QR Code and read its data.

Can a QR code be rotated?

Yes, A QR Code is omnidirectional and can be read from any position in 360 degrees. QR codes always include position patterns (squares with dots in the middle) that help the scanner identify the correct orientation for the image.

Do QR codes have to have a certain size?

People often ask how big or small (in terms of physical surface area) a QR Code can be. Well, there are no technical limits. A QR code doesn't have to have a strictly-defined size and it can be printed in any required size. The surface area of a QR Code is only limited by its environment and its intended use, combined with the resolution of the scanning device.
There are no technical limitations.

Are QR codes HIPAA-compliant?

Yes, Health Guard ID QR codes contain an encoded string which is readable and can be decoded only with our application. Any other QR code readers can only read the name, address and emergency contact of a person.

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THANK YOU!

Website links: *Health Guard ID (ismartehr.com)*

www.wchsb.com

Email: *alexr@wchsb.com*