

HG ID PROGRAM

Designed exclusively for the United States Department of State



Developed by AR Alliance Group Inc.



THE NUMBER OF PEOPLE WHO DIED IN WARS SINCE 9/11

Military conflicts still claim thousands of lives across the globe. Since 2001, over **390,000 civilians** have been killed in wars across the globe. In many cases, an improper treatment of the wounded has been involved.

Over 7,000 active US Military

servicemen have sacrificed their lives for our country during the last 21 years. This number does not include thousands of veterans who passed away due to health complications accrued while in service.

In Ukraine alone, **over 4,000 civilians** have been killed in 2022, despite a huge assistance package provided to this country.

Source: <u>https://watson.brown.edu/costsofwar/figures</u> /2021/WarDeathToll





WAR IN UKRAINE: ASSISTANCE OF THE UNITED STATES TO THE UKRAINIAN PEOPLE

Since early 2014, the United States has provided **\$4.5 billion** to Ukraine for it to tackle and recover from the Russian military aggression, **saving thousands of civilian and soldiers' lives**.

Since 2017, the Department of State's Bureau of International Security and Nonproliferation has provided **over \$28.4 million** in Nonproliferation, Anti-terrorism, Demining, and Related Programs support to Ukraine through the Export Control and Border Security (EXBS) Program.

In March 2022, the US Congress approved another **\$13.6 billion** in spending to help Ukraine.

Source: <u>https://www.state.gov/u-s-security-</u> <u>cooperation-with-ukraine/</u>





REFUGEE CRISIS IN EUROPE

6.4 million Ukrainians have left their home country since the beginning of the Russian invasion, creating a major refugee crisis in Europe. Many of those refugees are women and children with pre-existing medical conditions that require special treatment. Shocked by the consequences of war, these people may not be able to take their medical documents with them abroad, or they may simply not be aware of their special medical condition.

This creates a major challenge to US strategic partners that accept refugees, such as Poland. Non-awareness of a refugee's special treatment needs and other clinical data may lead to delays in care delivery.

Source: https://data2.unhcr.org/en/situations/ukraine





CASUALTIES OF THE UKRAINIAN ARMED FORCES

According to US estimates, 1**1,000 Ukrainian soldiers had been killed in action** and over **18,000 had been wounded** by April 2022 all across the country.

Treatment of combat wounds requires rapidness and decisiveness. Since the wounded are treated in different hospitals and often even on a battlefield, it is quite a challenge to find out a soldier's blood type, allergies, and critical medical history in general. This may lead to life-threatening risks in treatment. For example, it may be impossible to know whether a soldier is allergic to a certain medication.



Source: <u>https://www.nytimes.com/2022/04/19/world/europe/</u> <u>russia-ukraine-donbas-strategy.html</u>



THE 2021 US ARMED FORCES POPULATION REPORT

Active personnel: *1,333,822*

Reserve personnel: 1,021,613

DoD's Active Duty and DHS's Coast Guard Active-Duty members represent the largest portion of the military force (39.4%), followed by Ready Reserve members (29.2%), and DoD civilian personnel (25.7%).

Each of these servicemen has a unique medical history, and many of them are currently stationed in "hotspots" across the world.

Source: <u>https://download.militaryonesource.mil/12038/</u> <u>MOS/Reports/2020-demographics-report.pdf</u>





POTENTIAL MILITARY CONFLICTS AND CRISES

As the tools & methods of warfare become more sophisticated, future wars and crises are likely to bring greater death and wounded tolls. The lethality of weapons and their ability to target critical infrastructure will require an even more rapid treatment of combat wounds.

This will create the following needs:

- To be able to quickly obtain a soldier's clinical data when no connection is available
- To securely store this data in a digital space immune from destruction and cyber threats

At the same time, an enormous financial liability and other bureaucratical obstacles imposed by nations all over the world may soon potentially prevent refugees from getting medical care due to their inability or unwillingness to undergo a set of tests to determine their clinical condition.









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.

HEALTH GUARD ID



U.S. Provisional Application No. 16714356





Help to save lives of servicemen and civilians 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 student (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;



Assist in ensuring the completeness, reliability, accuracy, relevance, timeliness, and availability of medical data in the health databases of the Department of Health and Human Services.





HEALTH GUARD ID – ANY PLACE TOAPPLY

A QR code may be applied on any spot of a soldier's uniform or civilian clothes. Not only does it help to obtain critical information in a matter of seconds and save a soldier's life, but it also helps to identify a deceased combatant or a civilian.

If applied on several spots, the needed information would be constantly available, including in cases when a certain body part is missing.





WHY AND WHEN MEDICAL IDENTIFIERS ARE IMPORTANT

⊲ ← Health Guard ID PII PHI First name DWAIN Last name BREMNER Emergency phone 5183032224 Date of Birth 02/02/1956 Gender Male \triangle \triangleleft

← Scan

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.



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.



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, which is accessible via a QR code.

- The level of mortality and • physical health impact among students and staff *will decrease;*
- Appropriate and timely • medical care without delays will be delivered, preventing minor problems becoming *major ones;*
- Integrity, security, accumulation of all medical records in a single database is invaluable during natural disasters and other emergencies.



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



BIOMETRIC FINGERPRINT AUTHENTICATION FEATURE

Accurate identification of the sick and wounded 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, highsecurity buildings, etc.



U.S. Provisional Application No. 16714356



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
- Military dogtags

accessible.

www.healthguardid.com HIPAA code FLORIDA1234



John Doe DoB: 08/15/1953

0.75 inch x 0.75 inch



Max 234 characters



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

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.

0.9 inch x 0.9 inch



Max 279 characters 1.2 inch x 1.2 inch



Max 587 characters



EFFECTIVE UTILIZATION OF QR CODE

It is recommended to apply QR code to several places of a person's coverall/uniform or other items since the QR code may be damaged, spoiled, or entirely wiped out during an emergency.







HEALTH GUARD ID

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 will meet the specific purpose.









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Authorization

Scanning QR image





1. Username and password are required to log in and access PHI.

2.By clicking "Log in and save" your session will be extended for HIPAA regulated amount of time.

3.By clicking "I forgot my credentials" you will see notification how to restore your credentials.

4. Internet access is required for initial login.



AUTHORIZATION

PHI data seen on the screen after a successful authorization and scan by a proprietary app



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;

| 2 | PATIENTS | 3 | |
|-----------|--|--|---|
| 8 | | | CLINICAL DECISION SUPPORT Doe, John (M) |
| ⊠ | | | ✔ EDIT PATIENT ♀ 1010 lbrox ave ∅ 06/11/1948, 70 |
| * | | | DASHBOARD INSURANCE - 0 (178)965-4321 |
| | Patient Dashboard | | |
| * | Problems Procedures Medications | Medication allergies Allergies Vital Signs | External documents Immunizations Laboratory results L |
| | Diagnostic imaging results Diagnostic in | maging orders Goals Patient Education Instru | ctions Interventions Care team members Functional and |
| | Family Health History Implantable Devices | Shared by Patient Communications Patient Amendme | ents Devices Immunization History and Forecast |
| | John Doe 🗾 06/11/1948 Male | PROBLEMS: (ONLY ACTIVE) | - = つ PROCEDURES: (ONLY ACTIVE) |
| Sr INS | | Diab due to undrl cond w diabetic autonm (poly)neu | ALLERGIES: (ONLY ACTIVE) |
| | Race: WHITE Preferred English | MEDICATIONS: (ONLY ACTIVE) | |
| | Ianguage: Smoking status: Never smoker (266919005) INSURANCES | Fiasp U-100 Insulin (insulin aspart (niacinamide)) | VITAL SIGNS: (ONLY ACTIVE) |
| | | MEDICATION ALLERGIES: (ONLY ACTIVE) | EXTERNAL DOCUMENTS: (ONLY ACTIVE) |
| | | penicillin v potassium | |





DEFINITIONS

Pli - 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 requires mandating 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.

HIPAA COMPLIANCE 4142422F 53 00424301 :30 24E4E4EB33B0CC **038D7** 1C89E9A361 3DC89A54E0'898609





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

HIPAA COMPLIANCE



✓ 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"/IEC18004. https://github.com/codebude/QRCoder/wiki/How-to-use-QRCoder

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The list of technologies:

- **1.** *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/gr-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.
- 2. 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).



- 3. Apache Cordova https://cordova.apache.org Apache Cordova is Node JS Based application builder for MacOS, Windows and Linux.
- 4. Values of problems, medications, medication allergies, common allergies, procedures, religions, ranks, languages are being passed into QR code pattern in **coded** (id) view.

License

Ionic is an open source SOK released under a permissive MIT license. This means you can use lonic in your own 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



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.

*/S0/IEC18004:2015

Information Technology - Automatic Identification and Data Capture Techniques - OR 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



How is data stored in the QR code generated 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.



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.

Cana 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.



THANK YOU!

Website links:

<u>Health Guard ID</u> <u>www.wchsb.com</u>

Email:

alexr@wchsb.com

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

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