



MediKey, created by the Kosmos team from Thomas Jefferson High School, is a revolutionary app that enables secure, on-demand and swift sharing of relevant lifesaving medical history with Emergency Health Technicians (EMTs), regardless of consciousness of the patient. The EMT's phone securely retrieves encrypted patient's credentials from patient's phone using NFC technology to securely logon to a government database known as Blue button. Up-to-date, relevant, patient history information including drug hypersensitivity, blood type, current prescriptions, and allergies is then securely made available on EMT's phone, while adhering to HIPAA standards. Therefore, the EMT can then quickly develop a safe, well-informed and effective treatment plan to stabilize the patient.

MediKey allows the transfer of medical information even when the patient's phone is locked. This feature is the unique and defining feature of MediKey and lends itself to work well in the real world, where a patient may be unconscious or delirious.

Using NFC Technology and RSA Encryption, medical information is safely transferred between two devices.

The transfer utilizes 2048-bit encryption via TLS, which is an industrial standard when dealing with PII. The health information is immediately and securely deleted once the app is closed, because it is stored in RAM.

Downloading the MediKey app, the patient gives implied consent that they allow their information to be used to their benefit in an emergency situation.

MediKey stores the information on a secure database, as opposed to on the device or making it accessible through QR code to prevent medical identity theft.

**Delivering Health Information: Where you need it, when you need it.**