



August 19, 2020

REQUEST FOR PROPOSAL

Executive Summary

The Western Virginia Emergency Medical Services Council, Inc. hereinafter referred to as the Council, is inviting proposals from qualified vendors to provide the Council with an update to its handheld Protocol Application (the App). The selected vendor will be responsible for meeting or exceeding all specifications listed in the Request for Proposal (RFP).

The Council is a 501(c)(3) non-profit corporation funded by local governments and the Commonwealth of Virginia. The Council maintains a medical protocol document (the Protocols). The App serves to keep this document up to date and immediately accessible for reference by Emergency Medical Technicians (EMTs) performing life saving interventions on the scene of public 911 emergency calls. The Council seeks to update its App on the Google Play Store and the Apple App Store with new protocols, better usability and added functionality.

The current/old version of the App is available by searching "WVEMS Protocols" on either app store. The current/old PDF source document is available at: https://bit.ly/WVEMS_Protocols.

Company Information

The Council exists to assist local Emergency Medical Services (EMS) in the Western Virginia EMS region which consists of 12 counties and 7 cities in southwestern Virginia. Among other duties, the Council aggregates the opinions of physician Operational Medical Directors (OMDs) and publishes recommended medical and operational protocols. This protocol document serves as real-time guidance for provision of EMS by EMTs. The EMTs and OMDs are members of about 95 independent EMS agencies, many being local governmental departments. The WVEMS Protocols provide a means to standardize medical treatment and guidance across these organizations.

Project Timeline

The following is the Council's tentative schedule for the selection of a vendor:

1. Request For Proposal Posted: September 1st, 2020
2. Deadline For Filing Proposal: No later than **3:00 p.m. on October 16th, 2020** a bid shall be submitted via email to logan@vaems.org.
3. Staff Review of Proposals: October 20th, 2020
4. Award of Purchase: November 1st, 2020

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PART I: SELECTION CRITERIA

The prospective vendor will be evaluated, based in part on the following criteria:

1. Vendor's ability to provide delivery of the App in a timely manner (see Exhibit A).
2. The thoroughness and conformity of the proposal package and quality of the App.
3. Overall cost of the proposal to the Council, and the ability of the proposal to fulfill the Council's needs.
5. Extent of support offered by the vendor.

PART II: INSTRUCTIONS, CONDITIONS, AND LEGAL REQUIREMENTS

1. Provide pricing on all requirements as outlined in Exhibit "A". If there are discrepancies between unit prices and extensions, the Council reserves the right to clarify pricing with the affected vendors. Additionally, if a vendor is proposing above basic requirements to provide enhanced capabilities, please state these enhancements in the proposal.
2. Vendor agrees that failure on its part to list all cost components related to the purchase will not be accepted by the Council as an acceptable justification to re-quote the proposal. Vendor acknowledges that the original proposal and costs provided stand. However, vendor has the option of withdrawing a proposal at any time until a final contract is executed.
3. The Council reserves the right to cancel or renegotiate the purchase any time prior to an order being submitted.
4. Delivery schedules shall be part of the consideration. Time of delivery must be stated in definite terms, and must be met. If time varies on specific items proposed, the vendor shall so state the specific schedule to those items in the proposal sheet (Exhibit A). Once a vendor has been selected for award, the Council reserves the right to renegotiate delivery terms based on changing situations.
5. Vendor shall provide one copy of the proposal upon submission.
6. The Council has outlined the requirements herein in as much detail as is currently known. Please provide any exceptions, additional information, or suggestions that will aid in the Council's selection process (attachments are acceptable).

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7. The Council reserves the right to negotiate terms and scope of work with the highest ranked firm. If an agreement cannot be negotiated, the Council reserves the right to negotiate with any other vendor.
8. A final contract will be awarded to the most competitively priced and qualified proposal. Although price is of prime consideration, it is not the sole determining factor. The determination of the most qualified and most competitively priced proposal may involve all or some of the following factors: price, performance, previous experience and conformity to specifications in Exhibit "A"; delivery schedule; terms of payment; compatibility as required; other costs; and other objective and accountable factors which are reasonable.
9. The vendor shall defend, indemnify, and hold the Council, its officers, agents, volunteers, and employees harmless from any and all causes of action or claims of damages arising out of or related to the vendor's performance under this contract.
10. The Vendor shall be excused from performance hereunder during the time and to the extent that he/she is prevented from obtaining, delivering, or performing in the customary manner, by acts of God, fire, war, strike, and loss or shortage of transportation facilities. Vendor shall provide the Council satisfactory evidence that non-performance is due to other than fault or negligence on vendor's part. However, the Council may require compensation for any delays determined to be caused by circumstances under the control of the vendor. Standard delivery terms shall comply with the project timeline (beta testing with draft documents by December 2020, final version ready for "in the wild" by mid January 2021).
11. Any evidence of agreement or collusion among vendors acting to illegally restrain freedom of competition by agreement to propose a fixed price, or otherwise, will render the proposal of such vendors void.

PART I II: GENERAL INFORMATION

1. Exhibit "A" shall be signed by an authorized official of the company. By signing this exhibit, the vendor is indicating that he/she has carefully read the RFP, understands, and accepts all conditions stated herein.
2. The Council reserves the right to reject any and all proposals. The Council also reserves the right to select one or more vendors to provide the App as specified.
3. The Council will not reimburse vendors for any costs involved in the preparation and submission of proposals. Furthermore, this RFP does not obligate the Council to accept or contract for any expressed or implied purchases.
4. The Council reserves the right to request any vendor submitting a proposal to clarify its proposal or to supply additional material deemed necessary to assist in the selection process.
5. If an Exhibit "A" requirement cannot be met by a vendor, then the vendor should submit a "No Proposal" response for the item(s) affected. Alternate or equivalent items submitted for no proposal responses may be considered by the Council, unless otherwise specified.
6. All submitted proposals and information included therein or attached thereto shall become property of the Council and may be subject to the Virginia Freedom of Information Act (FOIA).
7. Vendor is requested to provide any exceptions, additional information or suggestions that will aid in the Council's selection process. **The attached Exhibit is a suggested list of requirements. If vendor needs to revise or make additions to the Exhibit, digital or typed alterations are allowed and should be identified as exceptions or modifications.**
8. The Council holds developer accounts with Google and Apple which will be made available for development.
9. Any questions regarding this RFP itself should be referred to Robert Logan via email at logan@vaems.org. Any questions regarding technical aspects of the project should be referred to Dr. Brian Ekey via email at brianekey@gmail.com.

EXHIBIT A

Project Description

BASIC FUNCTION: The WVEMS Protocols shall be provided as an electronic PDF produced by the OMDs. The current/old PDF can be downloaded at https://bit.ly/WVEMS_Protocols as an example for development. The PDF already includes internal links within the document and external links to other web resources. WVEMS recognizes that simple (direct) PDF distribution is possible, but there are several drawbacks. Neither Android nor iOS enable a simple way to add the PDF to the homescreen of a handheld device. Nor do they enable a simple way to bundle a standardized PDF reader with the document.

Therefore, WVEMS has created an App that is available to download from both app stores and exists as a standardized, stand alone application to interact with the PDF. The new/updated version should be nearly identical across platforms and retain the internal (and external) hyperlinks contained in the PDF. It should include the ability to search the document. Once downloaded, it is critical that the **basic functionality** of the App continue to work **with or without** internet connectivity. It is expected that users will frequently need to use the App without an internet connection. This **basic functionality** of the App should **never** require initialization or other internet access **except for the initial download** from the app stores.

The PDF **must be included** inside the executable itself. Requiring the App to “sync” or requiring the user to “login” after install is **not acceptable**. (Current feedback has shown that some users employ corporate management tools to remotely install the App on shared devices. If that shared device is then taken to a disaster area without internet, the App must provide **basic functionality** even if never before opened on that device.) Any user action that could result in a “network error” message should be literally viewed as life threatening.

ONLINE FUNCTION: If an internet connection exists the App should provide additional online functionality **in the background**. All online functions should be **transparent to the user** and not interfere with the basic functionality. The App should listen in the background for **push alerts from WVEMS**. These messages should pop-up on a user device much like a text message. Permissions should default to “show messages”, but could be changed by the user. The App should display an icon badge (similar to e-mail or messaging apps) on the home screen with the number of unread messages. Once opened, the App should display an unread message indicator and allow for viewing and archiving of messages. Actual messages would be delivered very **infrequently**, approximately **once per month**. The method and permission needed for WVEMS to author and submit these messages is negotiable (simple text, e-mail, web interface, etc). Messages would be primarily text based, but should be able to provide simple hyperlink functionality (such as to link to a webpage for more information, or link to the new version of the App in the app store). The ability to display embedded images would be a nice bonus.

PROJECTED UPDATES: Updates to the PDF are published approximately twice per year. The council seeks to develop a long term relationship with the developer so that future updates are rather seamless and do not require further RFPs. Update functionality may be left to the native auto-update behavior of Android/iOS devices, but auto-updates should be encouraged and supported as much as possible. WVEMS would prefer a streamlined process to update the App with the new PDF and then publish the new version to the stores for native auto-update. Prior versions of the PDF should be included in the newer versions in an accessible “archive”. The new version of the PDF to be included in the App should be available by the end of 2020. The current/old PDF can be used for development.

THE CURRENT VERSION: Our current/old app can be found under “WVEMS Protocols” in either app store. We seek to keep this name but expand the functionality and improve the user experience. Specific concerns we have with the current version include a use of an unnecessary splash screen and limited offline search functionality. In addition, the current iOS version includes unnecessary functionality that is not present in the android version (WVEMS seeks to keep the two versions essentially identical). The current version also lacks push notifications or an archive of prior versions.

Optional Side-by-side Display: The PDF document is already scaled to an 8.5” x 14” print form factor with large font sizes. This should display well in portrait on most handheld devices, but the font is too small to display in landscape on average phones. Tablets (and other larger format screens) may benefit from a special side-by-side layout in landscape that should be hidden and inaccessible on an average phone.

Stakeholders

The protocol document itself is created by the regional medical direction committee. This committee is mostly comprised of volunteer physicians who create the PDF independently. The PDF serves as the source document for the App. WVEMS is responsible for distribution. The Council bears the financial responsibility and holds overall copyright for the document.

WVEMS (the Council) for matters relating to the RFP itself and finance/administration, contact:
Robert Logan, Ph.D. <logan@vaems.org>
540.562.3482

The Lead Designers for matters relating to content, design and technical aspects:
Dr. Brian Ekey <brianekey@gmail.com> & Dr. Eric Stanley <dr.ericstanley@gmail.com>
540.200.8433

Timetable for Development:

The Proposal must clearly state a timeline to provide the App “in the wild” for testing, revisions, and for final publication. The new PDF shall be available at the end of December 2020.

Fundamental Interaction:

The App should appear like any other native application on the Android or iOS device. Tapping the App icon should take the user to the Table of Contents (ToC) page (**not a splash screen**). The links (internal and external) within the document should function as expected. External links should open in the default browser (**not inside the App**).

Specific Interactions:

Back: Android's back button should return the user to the previous page (which is not necessarily the ToC). iOS should have a typical "back arrow" displayed when appropriate.

ToC: The App should always have an easily accessible shortcut to the ToC page.

Search: The App should enable searching within the document (even without internet).

Scroll: Swiping the screen **up and down** should scroll through the entire document.

Snap: The current page should snap to the center of the screen once the user stops scrolling.

Zoom: The default zoom level should display at least one entire page ("full page"). This page should be as large as possible without cutting off content. Letterboxing is appropriate. Spreading or double tapping the page should zoom in on that part of the page. Users should be able to drag the page around while zoomed in (but not scroll to another page). Pinching or double tapping again should return the user to the standard "full page" zoom level with the page centered (and the ability to scroll through the document restored). Links should work in full screen **and while zoomed in**.

Offline: The App must function regardless of the availability of the internet. The App should include the entire document and any necessary rendering engine as a stand alone package. (External links do not need to be cached. They should simply open in an external browser... that would then fail to load if the internet was not available. It would be obvious to the user that this was a limitation of the internet, not a failure of the program.)

Dependability: The App must function without fail. Errors could literally hurt people.

Archive: Updates to the entire document are uncommon. We estimate one major and one minor revision per year. The App should include an "Archive" area that would allow users to choose which document they would like to be the active resource. Initially this would only include the current/old 2019 version and the new to-be-released 2020 version (Dec 2020). This list would grow as new versions were published and the App is updated.

Push Notifications: Occasionally time-critical information needs to be disseminated quickly. This is usually due to developing regional disasters or medication shortages. The App should include a "Notifications" area that would list all new (and previously read) announcements but should not interfere with basic functionality. The preferred implementation would be a system notification like a text message; and an app badge with a number indicating new notifications on the home screen. Once inside the App, the user could access the general menu to read the notification. Push notifications would clearly fail to populate if the internet is unavailable, but they should update once the network is available again. Push notifications should be seamless and invisible to the user.

Project Scope Requirements

We require development of the electronic App and assistance with distribution to the Google Play Store and the Apple App Store. The App should replace the current “WVEMS Protocols” as a new version (and automatically update if already enabled by the user). The App should be public and free to download. The app should have no age/content restriction. We expect a quote for initial development and then ongoing support. This project has no scheduled depreciation.

We would consider suggestions to App flow and design to improve user experience and to satisfy the various requirements of the two app stores. We recognize simple PDF reader apps are generally not accepted, and look to the developer to emphasize the additional functionality (such as push notifications and the archive) to resolve this roadblock.

We will perform the majority of QA and testing through direct interaction with the App, and would expect prompt assistance with bugs and errors.

We expect the App to be available for all recent phones and tablets running Android and iOS.

The base protocol document will be delivered as a PDF with embedded hyperlinks. The file format will be 8.5” x 14” with content covering the entire page (no margins). Fonts will be sized appropriately to be readable one page at a time at typical phone resolutions. We expect to have the new PDF ready by the end of December 2020 (approximately), and the App to be available shortly thereafter (by the end of January 2021).

We do not have any specific back-end mechanism to author the push notifications. We would consider any suggestions, or could use simple e-mail messages to the developer, who would then craft them into push notifications.

We may be interested in global analytics, but do not have a specific need for them at this time. It may prove useful to understand who/where the application is being utilized; or at least the number of downloads.

We expect developers to confer regularly with the lead technical designers for matters relating to content, design and technical aspects:

Dr. Brian Ekey <brianekey@gmail.com> & Dr. Eric Stanley <dr.ericstanley@gmail.com>
540.200.8433

Use Case: General

The primary use for the App would be real-time guidance for an EMT during an actual emergency. This necessitates a **very simple** and **intuitive** interface. We specifically want to remove any interaction or feature that is not absolutely necessary or may get in the way during an actual emergency. Specifically: Tapping the icon should take the user directly to the ToC (**no 'loading' or splash screens**, etc). Tapping a protocol should take the user promptly to that protocol (without having to wait for the network, etc). It should take a **maximum of two taps from the home screen** to present the EMT with the critical life saving protocol.

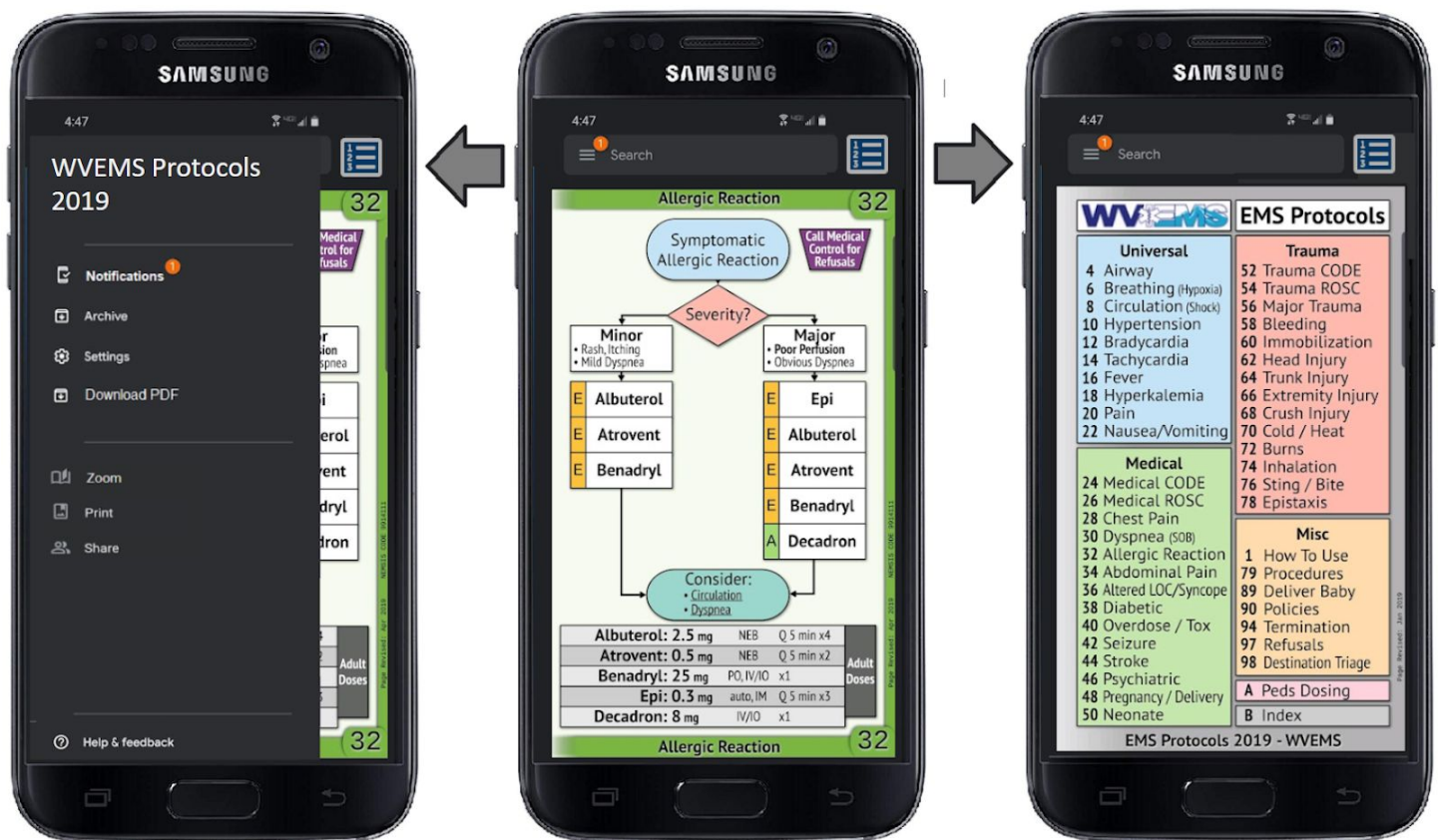


The search function should be obvious and conspicuous. Results for searches could include thumbnails of individual pages, or simply advance through the document while highlighting the term.

The **permanent link to the table of contents page** should be displayed on the right side in easy reach of the user's thumb. The icon should be conspicuous. The color of the ToC icon should be coded to the version that is being displayed to give a quick visual indicator of which version is active (to help avoid accidentally using the wrong version). Ex. A blue icon for 2019, magenta for 2020, evergreen for 2021 or something similar.

Use Case: Menu

The left sided “three line” or “hamburger” menu should have global application options, such as Notifications, Archive, Settings, Download, Help, etc. It should display a message indicator (with a number, similar to the app badge on the home screen) if there are push messages to read. This could also be activated in the standard manner with a swipe from the far left of the screen. It should also have options specific for that page, such as zoom, print, share, etc. The right side should have the permanent link to the ToC.



Usability and simplicity are of paramount importance, and WVEMS would consider any suggestions to improve functionality. Ideas that have been considered include: The developer could consider a different layout or button style. The developer could consider the integration of the iOS “back button” along with the menu, search, and ToC button; or the iOS “back button” might be unnecessary. (The Android system back button should always function as expected.) The developer may consider nesting the search bar inside the menu and/or floating the ToC button over the document.

Please contact the technical developers directly for any further clarification:

Dr. Brian Ekey <brianekey@gmail.com> cel - 540.200.8433