

Statement of Work

Introduction/Background

The Community Health Worker under the PHA CARES (COVID-19 Action Research and Educational Services) program will provide CHW services primarily to residents in Philadelphia Housing Authority developments and Housing Choice Voucher (Section 8) residents. The CHWs will conduct COVID-19-related health education about COVID-19 and to prevent transmission of COVID-19, including explaining the purpose of contact tracing, promoting social distancing, wearing of masks, and using hand sanitizers. The CHWs may be asked to do home visits and phone contact to enhance communications between ambulatory care, clinic patients and the health care team, with the goal of improving participation in the plan of care and ensuring positive health outcomes. Interaction between the CHW and the patient is designed to promote positive behavior change, such as protocol adherence, regular health monitoring, and the importance of addressing health issues.

Current System

No automated solution exists. The existing process is to manually input data into an excel spreadsheet. This data is gathered by Community Health Workers performing visits and filling out physical forms.

System Goals

The COVID Tracking application will streamline and standardize the note-taking process that occurs between the Community Health Worker and Philadelphia Housing Authority residents. The web app will feature a guided approach with a user-friendly responsive interface. Administrators will be able to generate reports of the data for analysis.

Scope of Work

This document identifies the required system capabilities at a high level. Later documents will specify the detailed requirements. The items listed are subject to change as the project moves forward. These capabilities are required:

- Record patient survey responses
 - Community Health Workers will easily be able to record communications with residents
 - Community Health Workers will experience a standardized, guided web form layout
 - Community Health Workers can select from pre-approved selections for form fields
- Manage login and profiles
 - The system will allow users from different organizations to use the application by providing its own login system
 - The system will restrict user permissions based on assigned roles and organization membership
 - Administrators will be able to create and manage employees use to access the system
 - Administrators will be able view and manage patient profiles

- Track record changes
 - The system will keep track of any changes made to stored data
 - The system will keep track of changes instead of deleting old information
 - The system will record the reason for any changes to stored data
- Excel exports
 - The system will be able to export data in excel format
 - The system will differentiate extracted data based on user role
 - The system will aggregate monthly data
 - The system will be able to export aggregate data in PDF format
- Maintain patient records
 - Community Health Workers will be able to edit information related to their interactions with residents
- Data Upload
 - The administrator will be able to upload older data from excel into the system

Possible Features

Due to time constraints, we do not expect to implement the following features:

- Patient surveys that determine the quality of interaction

Besides the functional requirements previously listed, if time permits will we focus on the following features:

- Health education text messages
- Search and generate reports for different spans of time (month, quarter, year, YTD)

Expected Benefits

The primary business benefit of the new system will be to increase ease of use and accessibility for the Community Health Workers. The application will be designed with a user-friendly interface. We will provide user instructions and system documentation that outlines how to use each system function. Furthermore, since the system is a web-based interface, it will be accessible from any device that has a web browser. The specific benefits include:

- Will allow users with no prior Excel knowledge to input data into a user-friendly form
- Will allow easy tracking of who CHWs are working with and the associated information regarding them
- Community Health Workers will have a single place where they can track and monitor the information that they gather to assist in protecting and educating the local community.
- Interactions between CHW and residents will be shortened
- Will efficiently provide an overview of the data for reporting to the PHA

Project Timeline

Analysis Phase (semester 1):

- Project Team will provide Client with various requirements gathering and analysis documents throughout the entire semester
- Client will review all documents, and answer questions in a timely basis
- Each document will further define the requirements of the system

Design Phase (semester 1):

- Team will move from analysis to design, building screens and other user interface items
- Client will review all documents and provide feedback

Build Phase (semester 2):

- Team will work in 3 iterations, or sprints, to develop the software
- Client will review the software and be required to devote time to testing after each phase
- Teams will also test via a defined Quality Assurance and Testing Plan

Implementation Phase (semester 2):

- Team will fully document the system via a User Manual and a Support Manual
- Team will move the software from a development, to QA, to production environment
- Team will train main users
- Client will sign off