# Open Source Electronic Health Records (EHR) Systems

## Overview

Open source electronic health records (EHR) adoption has been increased significantly in rural and community health centers typically providing health care to low-income and underserved communities[[1]](#footnote-1). Open source is often defined as the ability to copy, modify, use and distribute software source code[[2]](#footnote-2). One example of open source EHR is US Department of Veterans Affairs’s VistA system.

The objectives of this project are threefold. First, investigate the current state of open source, the newly emerging technologies in open source specifically related to EHR, use of open source for healthcare provider communities, interoperability standards, data exchange, and the commercialization of open source EHR products. Second, analyze at least three open source EHR software and use all of them to implement a few given clinical processes respectively. Third, compare the software customization processes and make a recommendation on how to select and implement open-source EHR.

## Major work and expected outcomes

* Review relevant academic and trade literature, white papers, non-published literature, copies of testimony by key experts in the areas of open source, as well as speeches and presentations
* Research and analyze at least three open source EHR software and platforms
* Customize the systems to implement given clinical processes and give recommendation on how to select and implement open-source EHR

## Type of project (estimation)

* Analysis/Research (60%)
* Implementation (40%)

## Skills/knowledge needed or will be gained

* Health Information Technology and Electronic Health Record (EHR) systems and applications
* Research skills including how to use library and online databases. The literature review may consist of accessing databases such as MEDLINE, the Cochrane Database of Systematic Reviews, PubMed, Academic Search Premier, and others
* Open source software implementation
* Academic writing skills

## Recommended team size

* One team consisting of 3 to 4 students

## Project owner/sponsor

## Dr. Chi Zhang, Assistant Professor, Department of IT, College of CSE, Kennesaw State University, chizhang@kennesaw.edu

1. America’s Health Centers. https://www.nachc.com/client/America%27s%20Health%20Centers%20updated%2009%2010.pdf [↑](#footnote-ref-1)
2. Open Source Initiative. http://www.opensource.org/ [↑](#footnote-ref-2)