



OpenEMR

*One of the most versatile
electronic medical records
and operates*

in Linux, FreeBSD, MacOS X and MS Windows.

OpenEMR is a free medical practice management, electronic medical records, prescription writing, and medical billing application. These programs are also referred to as electronic health records. OpenEMR is licensed under the General Gnu Public License (General GPL). It is a free open source replacement for medical applications such as Medical Manager, Health Pro, and Misys. It features support for EDI billing to clearing houses such as MedAvant and ZirMED using ANSI X12. Medical claim and accounts receivable are accomplished through SQL-Ledger, which has been customized. Calendar features include categories for appointment types, colors associated with appointment types, repeating appointments, and the ability to restrict appointments based on type. There are customizable medical encounter forms, support for voice recognition software, electronic or scanned digital document management for records, and support for HL7 messages. The community is dedicated to guarding OpenEMR's status as a free, open source software solution for medical practices. Its members are comprised of software developers, as well as physicians and those with extensive medical and billing knowledge, all with the common goal of making OpenEMR a viable alternative to its proprietary counterparts.

Our mission

Built on a tradition of continuously sharing, changing and improving, the OpenEMR community strives to work together to create a high-quality electronic medical record and practice management system. Through open collaboration, the community is molding a stable, yet continuously improving product, thanks to the efforts of developers across the globe, brought together by their tenacity and the connectivity of the Internet.

History

OpenEMR was originally developed by Synitech and version 1.0 was released in June of 2001 as MP Pro (Medical Practice Professional). Much of the code was then reworked for HIPAA compliance and improved security, and the product was reintroduced as OpenEMR version 1.3 a year later, in June 2002. The project, now open source, evolved through version 2.0 and the Pennington Firm took over as its primary maintainer in January of 2004. Pennfirm did a good job of making the medical community more aware of OpenEMR, and as more developers and users became active in making improvements, the project's code base was moved to SourceForge in March of 2005, where it remains today.



OpenEMR is one of the most popular free electronic medical records in use today. SourceForge has recorded over 16,603 downloads to date. In fact Brady Miller's Virtual Appliance and the PennFirm version are all the same version of OpenEMR. These projects together total 19927 downloads to date. This is over ten times the number of downloads of the similar projects listed on SourceForge. OpenEMR is one of the most versatile electronic medical records and operates in Linux, FreeBSD, MacOS X and MS Windows. OpenEMR enjoys some of the broadest user support and developer

support. Currently there are practitioners in the United States, Puerto Rico, the Netherlands, Australia, Sweden, Israel, India, Malaysia, Nepal, and Kenya that are either testing or actively using OpenEMR for use as a free electronic medical records program. The development group has professional developers, security specialists, and physicians involved in the development process. Open Source Medical Software is a not-for-profit company that supports OpenEMR and its development.

Recently Open Source Medical Software has been working with the International Planned Parenthood Federation to start a pilot project. IPPF is interested in using OpenEMR in their clinics world wide. IPPF operates in 150 different countries, has 7 regional offices on 5 continents. The multilanguage capability in OpenEMR is one of the features that has attracted IPPF. Open Source Medical Software

Past Activities:

Samuel T. Bowen, MD, as the grantor of Open Source Medical Software, has been using computers and working on the development of electronic health records since 1998. As a physician in private practice, he realized the potential value of the use of database technology for these purposes. Currently, putting patient information into an electronic format is called an "electronic health record". The express intent of these electronic health records is to convert all existing paper records relating to a patient's health into an electronic format.

After seeking information on existing commercial electronic health record products, Dr. Bowen found the sleek performance and features of the commercial products desirable, but their soaring costs put a damper on his enthusiasm to utilize this type of electronic health record.

That was until he discovered a different type of software. Commonly called free, open source software, or FOSS, a community or core group develops a product that works much like commercial software but without the cost. Software developers, mainly volunteers, start these FOSS projects and in the course of development, they release their working software and the source code to the public, free of charge, for others to add and modify according to their own hearts' content.

Developing and using open source software for his medical practice appealed to Dr. Bowen because the program's code base is free of charge and because it could be modified and customized to suit his own needs. Dr. Bowen began volunteering in the Free Open Source Community in April of 2003. Initially, he participated in on-line forums and developed health record forms to assist in data entry.



The first project he assisted on was TORCH (Trusted Open source Records for Care and Health). By October of 2003, Dr. Bowen decided EMR would be the primary focus of development. Because of its relative ease of use, staff members adapted well to using

the developing OpenEMR and are using the program to keep track of patient visits and notes. Office staff are now able to scan and save documents into OpenEMR and the days of "hunting" for charts have vanished, along with transcriptions and the associated cost of paper and printer toner.

Dr. Bowen began volunteering in the forums for OpenEMR in October of 2003. This activity involves monitoring the on-line OpenEMR users forum, Help forum, and developers forum. Dr. Bowen assists new users, primarily single physicians and small physician practices, to install and operate OpenEMR. Additionally, Dr. Bowen has helped develop clinical forms and software to load images into the OpenEMR database. He has also helped test the contributions of OpenEMR developers and given them guidance as to which features are the most helpful and relevant to medical practice.

During these volunteer activities, Dr. Bowen realized that OpenEMR was very popular among rural health centers, county health departments, urban clinics, and other clinics that are committed to providing free health care to target populations of disadvantaged individuals. These clinics and practices always have low operating budgets and benefit from using an electronic medical record system. There is improved organization, fewer paper costs, and fewer costs for buildings (less chart storage). The program lowers barriers to quality health care to indigent populations in a variety of settings.

OpenEMR is currently being used in North Carolina, Virginia, Arkansas, Tennessee, New Mexico, California, and the Northeastern United States. Among the larger health clinics using OpenEMR is Women's Health Services of Santa Fe, New Mexico.

OpenEMR is a free open source software electronic health record. The program provides an electronic health record for all aspects of health care in a physician office practice. It includes scheduling and electronic billing. OpenEMR is currently being developed by a group of volunteer programmers/developers. The development site is hosted at "SourceForge" (<http://sourceforge.net/projects/openemr>). SourceForge provides space for this type of project to hold a simple web page; project files; forums for on-line discussions of the project, its installation and use, and the source code of the project, which can be viewed directly.

There are a number of other free open source electronic health records. TORCH is also a free open source software electronic health record and is available through SourceForge (<http://sourceforge.net/projects/torch/>).

The software can be downloaded for free from SourceForge 24 hours a day, 7 days a week. Active development of the software occurs at the homes of the volunteer developers and then it is up-loaded to the servers at SourceForge.

There is an active on-line forum at SourceForge where users learn how to install and operate OpenEMR. All four of the directors actively assist users in the forums to install, operate, and customize OpenEMR.

Online back-up copies of the software source code are kept on the individual computers of the volunteer developers. Additionally, back-up copies are kept in Hickory, North Carolina, on servers operated by Dr. Bowen at <http://www.oemr.org/>. Free downloads are also available from the server in Hickory, North Carolina at <http://www.oemr.org/>.

All of the activities of this organization have been through volunteer time to this date. One of the board members, Roderick Roark, does own and operate a software development company, Sunset Systems, which does commercial work developing new features for OpenEMR. Mr. Roark has a separate client list that is not involved with this organization in anyway. These clients pay Mr. Roark to develop new features or to customize for EMR. Another Board Member, Dr. Michiel Bosman, runs a network of outpatient mental health centers in the Netherlands. Dr. Bosman has two fulltime developers working on new features for OpenEMR. Mr. Roark and Dr. Bosman then release these features under the GPL licensing. These features are redistributed to the other physicians, practices, and clinic users of OpenEMR for free.

The amount of time spent on Open Source Medical Software varies by the participant. Currently, there are no permanent full time employees. The amount of time contributed by the volunteers varies from 1% to 50% of their week. Typically, volunteers spend about 15% of their week on the project.

In general, the developers maintain ownership of the intellectual property rights of the software created in this way. The software is then released for use under the Gnu Public License (GPL) for free distribution, copying, and use.

Current Activities

Open Source Medical Software is a new organization incorporated under North Carolina law on March 15, 2005. The current distribution of OpenEMR and other free open source electronic health records will continue as noted under past activities. There are an average of 700 downloads of OpenEMR per month from the servers at SourceForge.

Open Source Medical Software does not currently have any income and has no paid employees. All of its current members are volunteering their time to actively develop OpenEMR and improve its functionality. As of this application date, there are no fund raising activities taking place. Current activities consist of initial organization and planning of fund raising activities.

Open Source Medical Software is a "new start-up" organization. The goals as outlined above are to disseminate this software system to free clinics, rural health clinics, public health departments, and community health centers. As a new start up with its main goal to improve health care through this use of this electronic product we believe that we help fulfill the goals of the GlaxoSmithKline Foundation of North Carolina are in the process of writing a grant proposal to this organization.

We have plans to start soliciting donations on the three web sites associated with this organization:

<http://www.oemr.org/>
<http://www.openmedsoftware.org/>
<http://sourceforge.net/projects/openemr/>

Open Source Medical Software has also opened a dialog with Patricia Sanchez, the director of the Women's Health Services of Santa Fe, New Mexico. This facility provides OB/GYN services to 15,000 indigent women in the Santa Fe area. The proposal to Ms. Sanchez is to write a joint grant with the Women's Health Services (with Women's Health Services as the primary recipient) to install, support and provide programming to customize OpenEMR for the Women's Health Services. We believe that this will improve the OpenEMR package in a way that will improve its use for all free, rural,

community and public health clinics in a way that will benefit all these organizations.

We have been waiting to initiate these activities on completion of the 501(c)(3). The 501(c)(3) status is a necessary first step to successfully complete all of these activities.

Future Activities:

Like a lot of physicians, practices, and clinics that use OpenEMR and other Free Open Source Software solutions, these projects are chronically starved for funds to further adequate development. Open Source Medical Software was created to help fund the development of free open source electronic health records; raise awareness of these products among the target physicians, practices, and health clinics; distribute the software; and provide support and maintenance of the software.

Software Development

Despite OpenEMR's relative success, the program still needs additional features and development, including the ability to check diagnoses with symptoms, check for drug-drug interactions, and improve compliance with the new emerging Health Information Technology Standards. Open Source Medical Software would help finance that development. Part of this project will be to fund full time software engineers to assist with this development.

Education

For this type of electronic health record to be of benefit to the public and to the target physicians, practices, and health clinic, these entities need to know about them. Open Source Medical Software will need to educate these health care workers in the benefits of free open source electronic health records. Funds will be necessary to raise awareness of these electronic health records.

Assistance

Modern software systems are complex sets of programs and electronic health records are no exception. Medical records need special expertise in maintaining and protecting the medical data that they contain. The staffs of the target medical practices and clinics will need training in how to install, operate, and maintain these systems.

The health clinics will need training on how to implement an electronic health record including the conversion from existing paper systems. This will include obtaining and setting up appropriate computer hardware. IT staff will need training in their use and maintenance.

Paradoxically, it has been rather difficult to give away a free software product. Program directors have difficulty believing that they can get a working software system for free. Their initial reaction is always "what's the catch?" After succeeding in convincing a director that the system is indeed free of charge the next reaction is "what's broken?".

We feel that having the 501(c)(3) status will give an easily understandable reason for directors to accept this system as a free product, that will enhance their productivity and reduce their cash expenditures. This should allow them to extend their services without having to increase their budgets.

The initial short term goal is to identify member clinics of the North Carolina Community Health Center Association that can benefit from this system and offer them assistance in obtaining computer hardware, installation of the system, training in its use and ongoing support of the system after it is installed and in use.

Intermediate range goals will include hiring a professional staff of information technology (IT) administrators to provide this service to the client clinics.

After successful introduction into the community Health Centers of North Carolina we intend to start offering this service to similar organizations additional states.

Listing of Board of Directors

Chairman:

Samuel T. Bowen, MD

144 38th Ave NW

Hickory, North Carolina 28601

Dr. Bowen is a medical doctor, licensed in 1987. He has been practicing in primary care, urgent care, and emergency medicine. He has been working with electronic media for storage of medical information since 1998. He is the owner and manager of a primary care facility with 14 employees.

Dr. Bowen volunteers for Open Source Medical Software and spends about 15 hours per week administering Open Source Medical Software, administering the organization's web pages (www.openmedsoftware.org and www.oemr.org), and helping users learn to install and operate OpenEMR in on-line forums.



Secretary
Rod Roark
Sunset Systems
3122 Evergreen Dr.
Fairfield, California 94533

Rod Roark is the owner of Sunset Systems in Fairfield, California. He has worked full time in software development since 1984. He has extensive experience in the development of successful commercial software, including: multi-user operating system development, e-commerce website offering custom built computers, website offering live multi-player backgammon, local area network system administration, awarded for technical excellence by PC Magazine, multi-user graphical client for playing contract bridge over the Internet, stock market analysis and charting system for institutional investors, source library maintenance system, and has been a major contributor to OpenEMR, an open source medical records and practice management system.

Mr. Roark is experienced with MS Windows (NT, 95, 98, 2000, XP), Linux, HP-UX, BSDI, Mac OS, Netware, Apache web server, Sybase, PostgreSQL, MySQL, Servlet/JSP engines, TCP/IP, Samba, IBM mainframes and has used the following programming languages: C, C++, Java, HTML, JavaScript/DOM, SQL, XML, JSP, ASP, Perl, PHP, Assembler languages, UML, Bash, JDBC, FMC, and STL.

Rod Roark volunteers with Open Source Medical Software. He intermittently assists Dr. Bowen with the organization's web server, and spends 10-15 hours communicating with users on how to install and operate EMR.

Rod Roark develops OpenEMR features professionally when contracted to do so from



members of his client list. He spends 40-50 hours a week on this development. These features are released to the project free of charge under the Gnu Public License.

Treasurer
Andres M. V. Paglayan
15 Camino Esperanza
Santa Fe, New Mexico 87507

Andres Paglayan is the health data analyst and information technology director of Women's Health Services of Santa Fe, New Mexico. He works as a consultant for the Supreme Court of New Mexico Judicial Information Division and is an instructor in PHP and MySQL web application programming at the University of New Mexico. He has worked with computers and local area networks since 1996. He is primarily self-trained. He has worked with DOS, Microsoft Windows, and Linux. He has experience programming in PHP, PERL, C, MySQL, Microsoft Access, and Adabas.

Andres Paglayan volunteers with Open Source Medical Software. He spends 10-15 hours communicating with users on how to install and operate OpenEMR. He intermittently develops new features for OpenEMR which he release to the project

free of charge under the Gnu Public License. Mr. Paglayan has been active in promoting OpenEMR in New Mexico in an effort to receive public funds for the Women's Health Services of Santa Fe, New Mexico. Women's Health Services of Santa Fe, New Mexico is a not-for-profit organization.

Vice Chair:
James E. Perry, Jr.
11201 Poplar Grove Court
Laurel, MD 20708

James Perry has been working as a software developer since 1987. He has extensive experience with database application with expertise in the following areas: Oracle Certified Application Developer in Oracle Financials, e-Business Suite applications including customized Oracle Financials (GL, AP, PO, AR, Assets, and PA), Oracle HRMS/Payroll modules and associated custom applications. He has a strong background in Database Administration, PL/SQL, interfaces, SQL, Java, and the Oracle Developer toolset.

Oracle 8i/9i/10g, Oracle Federal Financials, Oracle 11i, Developer/2000, Designer 6i/9i, Unix/Linux, Forms 4.5/6i/9i, Unix Shell Scripting, Delphi, Pascal, Reports 2.5/6i, Win32/eVC++, COBOL, PL/SQL, SQL, C/C++, Java, PHP, Visual Basic, LISP, Oracle Financials 10.75C-11.x, Erwin, and Rational ClearCase.

James Perry volunteers with Open Source Medical Software. He spends 10-15 hours communicating with users on how to install and operate OpenEMR. He intermittently develops features for OpenEMR that he release to the project free of charge under the Gnu Public License.

Executive Vice-President of Marketing:
Michiel Bosman, MD MS MMM
Dr. Bosman is a medical doctor licensed in

1995. He is a Consultant Psychiatrist in the Netherlands.

He is CEO of **Bosmann GGz**, a network of outpatient mental health centers in major cities in the Netherlands.

Furthermore Dr. Bosman is President of the **European College of Physician Executives**, a not-for-profit organisation whose sole purpose is to support physicians in acquiring the leadership skills and credentials necessary to effectively lead at all levels in organizations and in all sectors of the health care industry.

In 2007 Dr. Bosman earned his Master of Medical Management degree from **Carnegie Mellon University**.

Conflict-of-Interest Policy

A conflict of interest policy was discussed prior to the initial board meeting. Since the board members include software developers, we felt it would be necessary to adopt a conflict of interest policy to avoid any appearance of impropriety. The policy was



written after reviewing similar documents of not-for-profit organizations. This policy was reviewed by each board member and then voted on at the first board meeting prior to any financial arrangements or contracting.

Any board members or other employees who have a conflict of interest or potential conflict of interest are required to recuse themselves from any board discussions concerning the proposed arrangement, whether or not the arrangement is accepted and any possible compensation for the arrangement. The board is required to seek alternative bids from other vendors and to preferentially accept another vendor (with no conflict of interest) if that bid is of equal quality and price.

How the Software is Distributed

The computer health care programs, representing intellectual property which have been created by computer developers in a voluntary way, are downloaded from the Internet anonymously and free of charge by



individual physicians, medical practices, and clinics. The nature of the computer programs is to support medical offices. Services to these groups or individuals are made in the form of technical computer support.

Goods and Services

Goods and services are only provided to individuals and groups who are interested in the use or development of medical software. The software and technical support will only be provided to those who do not intend to sell it to others. The licensing of the electronic software requires that the program not be resold and it is not to be bundled with software of another type of licensing.

Fund Raising Activities

We anticipate starting fund raising by soliciting donations on our web page <http://www.openmedsoftware.org/> and also on the development site at <http://sourceforge.net/projects/openemr/>.

This is to consist of a static statement about the purpose of the organization and the purpose that the funds are intended to be used for. It will also include a link to the Open Source Medical Software System web page for potential donors to learn more about the organization. We would like to include a statement about the donation being tax deductible.

Foundation Grant Solicitations. We intend to apply for grants in the state of North Carolina initially for start-up funds to hire a full time staff to include a director. We will also need one or more developers to assist in developing and improving the electronic health record. As a separate project, we will seek financial assistance for marketing. Since our primary goal is to facilitate the use of this electronic health care record and practice management program to low income, rural and free health clinics, these

clinics and practices will need some venue to learn about our program and its advantages to their practices and clinics.

This electronic health record and practice management program is already being used in multiple states. With the new federal push to get all US citizens on an electronic health record in the next ten years, there will be a lot of medical practices and clinics looking for a way to accomplish this on limited budgets. We believe that the Department of Health and Human Services, in particular, the Bureau of Primary Health Care, will be interested in this type of program. After the initial start-up has been accomplished, we believe that federal assistance will be necessary to achieve our goals in the multi-state area in which this program is already being used.

We expect that the foundation grantors, and potentially the federal grantors, will require that some or all of the funds donated in this fashion be accounted for using fund accounting. When required by the granting organization, the program budgets will be divided and ruled according to regulations outlined by the money's donors.

Intellectual Property Rights

Software intellectual property and copyrights are retained by the individual developers. The software is released to be used under the Gnu Public License (GPL). This license requires that the software source code be released to the end user to be maintained and modified as the end user wishes. While not specifically required by the GPL, the developers on this project donate their time and software source code for free.

Copyrights, trademarks, and patents for intellectual property which are owned by Open Source Medical Software will be retained by Open Source Medical Software,

unless otherwise specified in the regulations of the GPL of the Free Software Foundation. It is the specific intent of Open Source Medical Software to release all software source code free of charge under the Gnu Public License. Intellectual property of the organization includes logos, documents, computer programs, literature, artwork, and scientific studies.

There are no fees charged for this software.

Donations in Kind

Contributions including patents, trademarks, copyrights, works of art, and licenses will be accepted. We require that software code donations be released to Gnu Public Licensing (GPL). All contribution specifications by the donor will be honored as long as they do not conflict with the GPL.

Close Association

A close association exists between Open Source Medical Software and the medical practice of Samuel T. Bowen, MD and Apollo HealthCare, PA. Dr. Bowen owns Apollo HealthCare, PA as the single shareholder of a sub chapter S corporation. Apollo HealthCare, PA is currently supplying the facilities, general business supplies, servers and internet access for Open Source Medical Software. Dr. Bowen has donated this free of charge.

In Event of Dissolution

The Articles of Incorporation, filed with the State of North Carolina for Open Source Medical Software, on page 2, paragraph 1, article 8. Distributions Upon Dissolution allow for distribution of all assets to similar organizations with 501(c)3 exempt status or if not so disposed, the Superior Court of the county in which Open Source Medical Software has its principal offices is to distribute any remaining assets to organizations organized under 501(c)3.