

Beating the high cost of software

Open-source and general public license programs cost little or nothing. Are they right for your practice?

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Name-brand practice-management software can cost hundreds or even thousands of dollars-no small expense, especially for a new practice. Still, you and your staff need the word processing, spreadsheet, documentation, patient tracking, and appointment-scheduling capabilities these programs provide.

Open-source and general public licensing (GPL) software titles-available free or at minimal cost-may offer a budget-friendly alternative.

OPEN-SOURCE VERSUS GPL

There are two types of “free” software:

- “free” as in no charge for its use. For example, Steve Gibson of [Gibson Research Corp.](#) provides many “no-cost” security tools to the public
- or “free” for distribution and modification.

With GPL-model software, users get free use of the source code for modification and distribution. This allows developers to set their own fee (usually nothing) for licensing and distribution.

With open-source software, the source code (the program's actual text, not the binary or executable form) is available but may have limitations on modification or distribution (see [Related Resources](#)).

Physicians should check for limitations on commercial use before obtaining a GPL or open-source title for their practice, because many of these programs are free only for personal use or in academic settings. Physicians can circumvent use limitations by purchasing a commercial license; this is still more cost-effective than buying a name-brand product.

WHY SOFTWARE IS FREE

Programmers devote time, energy, and resources to providing free, useful software to the public for the same reasons that physicians donate their time and expertise to free medical clinics.

Many programmers develop software for their own use, then make it freely available as a goodwill gesture. Many open-source products are a collaborative effort to improve the speed and stability of a software title or add features to it. Their efforts may lead to for-profit activities such as providing technical support, writing specialized codes for specific customers, or charging for enterprise use of the software.

Although most titles can be downloaded and used for free, the makers also accept donations to fund improvements to the software.

Popularity is crucial to GPL and open-source software. Projects that generate little interest or activity may be abandoned or left stagnant by the developer. By contrast, projects developed by multiple programmers are more likely to be improved or get new features. Popular software will also be reworked because many people depend on it every day.

IS IT READY TO USE?

Most free software comes ready to use in a binary format; its source code has been “compiled” to run on a central processing unit. The user only needs to download and install the program. Other free programs contain the source code, but it must be compiled by the user or a hired programmer in the appropriate programming language.

To use a medical analogy, the source code is akin to the chemical composition of a medication that lacks its delivery mechanism. By contrast, a compiled version is equivalent to medication in pill, liquid, or aerosol form.

BENEFITS OF OPEN-SOURCE, GPL SOFTWARE

Cost is the most obvious benefit. For example, [OpenOffice](#)-a Microsoft Office-compatible package that provides a word processor and spreadsheet, presentation, and drawing programs-is free to use. By contrast, Sun's StarOffice 7, sells for \$79.95, and Microsoft Office Standard Edition is \$399 for new users and \$239 for upgrades.

Stability. Because the source code is available, the open-source or GPL program may be more stable and reliable than the name-brand version because numerous contributors have reviewed, tested, and modified the source code.

RISKS AND POTENTIAL DRAWBACKS

Fewer features. Proprietary software titles typically provide more features than do their open-source and GPL counterparts.

However, you can add features to a GPL or open-source program or pay a programmer to adapt the program to your needs. The GPL/open-source community welcomes modifications, but asks that changes be published and made available to the community in return (see [Related Resources](#)). As a result, solutions are often developed quickly because other programmers are constantly fixing problems or adding features.

Lack of security. Because the source code is freely available, open-source and GPL programs are vulnerable to hackers and viruses. Security features also tend to be added quickly, however, because of the constant upgrades.

No warranty, support agreement. Unlike proprietary programs, open-source or GPL software does not come with a warranty or support guarantee.

For many popular projects such as OpenOffice, however, free support is available via e-mail. Many companies-such as [RedHat](#) software, which provides a free version of the Linux operating system-provide support for a fee.

Limited availability. Few open-source or GPL programmers write medical applications, and most GPL or open source programs were written for hospital systems, not for individual users. Physicians thus should be proficient in rewriting source code or pay a programmer to modify the code to his or her needs. The latter option might be more worthwhile for a group practice.

The [table](#) below lists open-source and GPL titles useful to clinical practice.

WHERE TO FIND FREE SOFTWARE

Many free programs are available on the Internet for download, but finding them requires some perseverance (See “[Speeding up your Web search](#),” Psyber Psychiatry, May 2003). Use key words such as “freeware,” “free,” or “open source” in conjunction with the type of program (eg, “document” or “database”).

Many open-source or GPL projects are centrally stored at two sites, [SourceForge](#) and [Freshmeat](#). Browse the categories for the type of program you need, such as databases, utilities, firewalls, etc. These sites offer source code and version information for programmers as well as precompiled software for the public.

Table
Relevant open-source and GPL software titles

Type	Software	URL
Office document	OpenOffice *	www.openoffice.org
Instant messaging	GAIM *	http://gaim.sourceforge.net
Web browser	Firefox *	www.mozilla.org/products/firefox/
Database	Firebird *	http://firebird.sourceforge.net
Application server	Zope *	www.zope.org
Practice management	FreeMED	www.freemed.org
Clinical database	SQL Clinic	www.sqlclinic.net
Electronic Medical Record	Open EMR	www.openemr.net
* available in binary format and ready to use		

Related Resources (accessed Feb. 20, 2004)

GNU Project. GNU General Public License (example of free-distribution license). <http://www.gnu.org/copyleft/gpl.html>

GNU Project. Various licenses and comments about them. <http://www.gnu.org/licenses/license-list.html>.

GNU Project. Terms and conditions for copying, distribution, and modification <http://www.gnu.org/copyleft/gpl.html#SEC3>

Open Source Initiative. The open source definition. <http://www.opensource.org/docs/definition.php>

If you have questions about these products or comments about Psyber Psychiatry, [click here](#) to contact Dr. Luo or send an e-mail to Current.Psychiatry@dowdenhealth.com.

Disclosure

Dr. Luo reports no financial relationship with any company whose products are mentioned in this article. The opinions expressed by Dr. Luo in this column are his own and do not necessarily reflect those of CURRENT PSYCHIATRY.