NCVHS Testimony on Meaningful Use

April 28th, 2009

Today I will present this testimony to the National Committee on Vital Health and Statistics (NCVHS) Good morning. My name is Fred Trotter.

Introduction

I represent a community of health software developers and clinical users that respect software freedom. This community operates in the legacy of the VA VistA underground railroad. There are several important commercial EHR vendors that respect software freedom they are an important part of our community but they are only a part and certainly not a majority. While FOSS (Free and Open Source Software) vendors are critical to our community. I hope to convince you today that the notion of 'vendors' is too small for the task of computerizing healthcare. I hope to convince you that we need an open software community to solve this problem. I believe this because this is the only thing that has substantially worked so far and that given the magnitude of this problem, this is the only thing that has any chance of working in the future. Before we can move into that future, we need to have a candid dialog about the failure that typifies current health IT.

Relevant Biography

I appreciate the opportunity to testify today. More importantly I am thankful that you have chosen to invite a person from our community to speak to you. I must discuss why I am qualified to be a representative of my community. This important because legitimacy here is not earned with degrees or certifications. The FOSS community respects me because I have made substantial code and documentation contributions under FOSS licenses. I am the original author of FreeB (http://freeb.org) which is the first billing engine that supports both paper formats and X12 available under the GPL. Several projects adopted FreeB, and although few projects still use the original version, almost all of the second generation FOSS billing systems have been built in response to FreeB. Because of FreeB, at one time code that I had written was accepted into more projects than another single FOSS contributor (although that accolade now goes to members of the <u>Mirth project</u>). I won the <u>2004 LinuxMedNews</u> innovator of the year award for my work on FreeB. I am also the primary author of the WorldVistA 'What is VistA Really' vistapedia article. I developed mutual respect for many different FOSS EHR projects through my FreeB work. Since that time I have tried remain neutral to any given project or codebase, instead working to further the community as a whole. I no longer have a leadership role on any given project, though I professionally support several codebases. Currently I am the Chief Architect of the HealthQuilt project hosted at the University of Texas School of Health Information Sciences. HealthOuilt is focused on the use of FOSS interoperability software for the purposes of Health Information Exchange in Houston, T.X. and is funded be the Cullen Trust for Healthcare. This testimony would have been impossible to arrange without the help of the UT system folks here in Washington D.C. and the U.T. SHIS people back in Houston. Thanks!

I say these things not to impress the executive subcommittee, you already think I know something or you would not have invited me. I say this to communicate to the larger FOSS community why I am qualified to speak for the clinicians and programmers in the health FOSS movement. I must do this to offset the hubris of merely presuming that one can represent an entire community, whose opinions and priorities differ significantly. I hope my testimony is representative of the many emails and conversations I have had about this over the previous few days. I should note that Dr. Ignacio Valdes (of LinuxMedNews) and Will Ross (of Medocino Informatics) have both maintained similar project neutrality and I have relied on their council heavily.

I am a <u>Hacktivist</u>, which is in itself a controversial title and deserves explanation. The '<u>Hacker</u>' part of what I do has nothing to do with breaking into computers. That is called Cracking and true Hackers have little respect for it. The difference between a Hacker and a Cracker is similar to the difference between a graffiti artist and a simple vandal. A Hacker (for our purposes) is a person who solves complex software problems with panache. (http://www.catb.org/~esr/faqs/hacker-howto.html#what_is)

A Hacktivist is a person who Hacks for social change. I am also an entrepreneur and I charge for services and support of FOSS health software, including EHR systems. I see no contradiction between having a purpose of promoting social change and a profession of software consulting. One way to formalize this pairing is with the concept of a <u>not-only-for-profit businesses</u>.

Why are we here?

Of course I do not mean in this question in <u>the global sense</u>, but rather why is the United States government proposing that we fund EHR systems in this manner? Every other major industry computerized themselves decades ago. Why didn't healthcare follow suit? It might be helpful to consider for a moment what was -not- the problem. Technology was not the problem. Thirty years ago, we had SQL database systems driving complex OOP applications. We had the ability to do thin clients, and thick clients, distributed software architectures and just about every other technology that drives modern EHR applications. Do not get me wrong, I love web 2.0 technologies, super-thin browser clients, Aspect Oriented Programming and Service Oriented Architectures, but those kind of recent innovations make the development and deployment of EHR applications 'easier', rather than 'possible'. Technologically we had everything we needed to computerize this industry thirty years ago. Why didn't it happen?

<u>The problems in Health IT are political, not technical.</u> By political I mean that the problem lies in the relationships between organizations and individuals involved in the delivery of healthcare.

Doctors, so far, have been reluctant buyers of EHR software. For good reason. EHRs slow doctors down and doctors are incented to see as many patients in a day as possible. EHRs get in the way of that, and so doctors have hesitated to adopt them. Generally, the way doctors are paid discourages them from using technology to improve the quality of their care. This funding should change that temporarily at least, which is a good thing.

The other side of that coin is that proprietary Healthcare IT vendors have been unsuccessful at selling anything that is not directly related to improving coding to doctors. Many modern proprietary EHR systems are little more than 'coding justifiers', they are not designed to improve the quality of care but to substantiate the increased code complexity of a given procedure. Even these EHR systems are woefully under-adopted.

We are funding EHRs because we have experienced massive, and unprecedented market failure. No proprietary EHR company has approached the market dominance that is typical in other software industries. Microsoft has about 80% market share of the desktop computing space. All of the other desktop operating system vendors combined split the remaining 20% market share. Why is there not Microsoft in medicine? Heck even Microsoft, would like to be "the Microsoft of medicine" and regularly fails in this endeavor. The largest Health IT vendors barely make it to double digit market footprint and those few that do achieved that status do so through mergers and acquisitions rather than dynamic growth. In the EHR space 1% of the market makes you a big player.

Why is there no 'Microsoft of Medicine'?

The reason that there is no Microsoft of Medicine is that generally, healthcare does not have the same dynamics as the operating systems. When Microsoft software developers code operating systems they are essentially negotiating the requirements from other technologists, the engineers who designed the microchips in computers. Making an operating system is very complicated, but there is also a very specific set of requirements that is totally and accurately defined.

Most proprietary EHR development follows a tragic pattern of 'spec seeking bloat'. The basic development process typically looks like this.

- 1. Develop Software at one clinic/hospital solve that organizations problem
- 2. Start selling it in other places
- 3. Start meeting new requirements from new customers
- 4. Recognize that the current codebase is becoming unmanageable spaghetti
- 5. Have big meeting where we all agree that the now we really 'know what the software should look like'
- 6. Write a new spec based on lessons learned from previous version
- 7. Go code to new spec
- 8. Release 2.0 version.
- 9. Users hate it they all want previous version back.
- 10.Developers scramble to make latest version work as well as previous version
- 11.Return to step 3 and repeat until spec is so large that it is not possible to even consider implementing it

This is the reason that 'mature' proprietary EHR systems seem so bloated. An EHR is impossible to top-down architect. The product must be modified so much 'on the ground' that the higher level organization becomes meaningless.

It is impossible to create a 'spec' for an EHR system that is sufficiently complex. Trying to do this is the constant ongoing attempt to make healthcare work the way a microchip does. This is the reason why the current CCHIT 'feature bucket' certification is met with such resistance within the FOSS community, it is simply wrong way to approach the problem.

About Medical Manager wasting away

Most of the following information is pulled from a page that I maintain on the <u>History of Medical</u> <u>Manager</u>. http://docs.mirrormed.org/index.php/Medical_Manager_History

In the 1980's it was estimated that 80% of all doctors using practice management systems used medical manager. If there was a company that had the opportunity to become the Microsoft of Medicine, it was Medical Manager. During the dot- com boom and bust Medical Manager was sold several times. Each time the software ownership was sold Medical Manager support staff were let go to increase profits. Medical manager is now a ghost. It's market share has been gutted. Its dominance has been regulated to a footnote in Health IT history. Medical Manager is important because it shows the basic temptation of with proprietary systems.

First a proprietary company releases a well-designed software system. The proprietary company supports their customers with passion. Soon their user base and adoption grows. Then the company is sold. The new management must take the same asset and now make more money on it. How do they do that? They decrease the number of support staff and attempt to force expensive upgrades on their customers. This process or variations on it, are the inevitable results of vendor lock-in, and this pattern

is generally predicted by the <u>economic models of vendor lock-in</u>. (If anyone from SAGE is listening please consider releasing Medical Manager under the GPL, it would breath new life into the product. If you would like to try this, let me know and I will do what I can to help)

Sometimes proprietary software companies waste away and sometimes it dies of a stroke.

About AcerMed's massive stroke

When someone discusses the process for selecting a proprietary EHR vendor, they typically recommend a product similar to AcerMed. AcerMed was CCHIT certified, and rated as best in Klas. They had enthusiastic users and capable software engineers. I have no evidence that AcerMed was anything other than an honest company. However, <u>they were sued out of existence</u>. Hundreds of AcerMed customers had to scramble to find new software.

Kept Honest ClearHealth vs. MirrorMed

I support the ClearHealth codebase under the trademark MirrorMed. The codebase is 95% the same, but I can support a ClearHealth instance, and ClearHealth Inc. can easily support a MirrorMed instance.

ClearHealth Inc cannot charge too much for its software, or I would undercut them. I cannot charge to much, or they would undercut me. If I am not responsive in my support my clients will go to ClearHealth Inc. If ClearHealth is not responsive... you get the idea.

Because ClearHealth and I are sharing code under the GPL, neither of us can get away with the shennigans that are common in the proprietary industry. Hard things are expensive, but easy things are cheap. If either I or ClearHealth Inc. go out of business, our clients would not be trapped or abandoned. The GPL insulates clients from the kind of corporate failure that AcerMed experiences. If Medsphere went out of business tomorrow, OpenVistA would be just fine.

If Medical Manager was available under the GPL, Medical Manager would never have tried any of the shennigans that they did. Ironically, if Medical Manager had been available under the GPL, SAGE would currently have deeper market penetration than it does now.

About VA VistA

Most of the following information is pulled from the pages that I maintain on the <u>What is VistA Really</u> and <u>Why is VistA Good?</u>

Almost everyone can admit that VistA is an excellent EHR system. Recent research shows that VA VistA operating at VA hospitals accounts for more than half of the advanced hospital EHR systems deployed in the United States.

What is not commonly understood is 'why' it is so good. How did it happen that a system developed by federal employees leads the way as the most widely deployed advanced EHR system in the United States? The reason is that VistA, unlike proprietary EHR systems, evolves.

From <u>Evolutionary Dynamics: Exploring the Equations of Life</u> by <u>Martin A. Nowak</u> http://www.ped.fas.harvard.edu/people/faculty/

The main ingredients of evolutionary dynamics are **reproduction**, **mutation**, **selection**, random drift, and spatial movement. Always keep in mind that the population is the fundamental basis of any evolution. Individuals, genes,

or ideas can change over time, but only populations evolve.

Each VA hospital employs its own VistA programmers to solve the problems of the local hospital. That makes each hospitals instance of VistA an 'individual'. The VistA instances at all of the hospitals combine to form the required population. The mechanism for reproduction is the ability to copy source code. The mechanism for positive mutations is the ability of each local VistA programmer/clinician pairs to improve the VistA source code. The process of selection is the ability for V.A. clinicians and administrators to recognize superior work at another hospital and 'kill' the local programming effort in that area in favor of adopting the foreign code.

This is not some abstract plan. Medication barcoding was developed at a local VA hospital and then taken nationwide. This is a high-profile example of a process that is constantly repeated across the VA institutions (or it used to be).

Competing, decentralized, collaborative software development are both hallmarks of FOSS development and requirements for software to evolve. This stands in stark contrast to the recent decision to integrate a proprietary lab system into VistA. That proprietary system is incapable of evolving precisely because it cannot be freely copied. This is the reason that the <u>VistA community was</u> <u>upset about this</u> http://www.modernhealthcare.com/article/20090203/REG/302039997

I was surprised to hear that the bureaucrat that decided to go with a proprietary, static lab component defended the decision by saying ' we are taking an evolutionary approach'. People like this are very dangerous to the VA VistA community. They have learned to speak our language without respecting our values. They are pharisees who embrace the form, but not the spirit of our community. Because of these kinds of decisions, the majority of major VistA innovations over the last two years have been outside the VA.

There is a small chance, that someone from a congressman or senator's office might read this. You should know that unless you are getting VistA advice from <u>a card carrying member of the underground</u> <u>railroad</u>, **you are getting bad VistA advice**. Personally I am a VistA novice, but I now know enough to know that the majority of VA bureaucrats are either making good decisions because A. they are listening to railroad card holders or B. they -are- a card carrying underground railroad member or C. sheer dumb luck. It is painfully obvious to those of use in the community that most VA bureaucrats typically have no idea what they are babbling about. Read my VistA articles above and then find yourself someone who actually codes in MUMPS to advise you directly. Once you get it, never ever let go of that direct programmer contact. Remember that VistA happened as a rebellion by clinicians and programmers against the VA bureaucracy. I also find that Roger Maduro and the board members of WorldVistA tend to be informed and right-headed when it comes to VA VistA.

Seven Generations

My grandmother took a drug while she was pregnant with my mother than predisposed my mother to ovarian cancer. My mother died from ovarian cancer. I will pass my mothers genes to my daughters and granddaughters. As my grand-daughters consider their predisposition to ovarian cancer they will need to consider the contents of my grandmothers medical record as well as their genetic inheritance. The content of my grandmothers medical record could easily be relevant for a period of over 150 years.

The notion that a proprietary software vendor can be trusted with the responsibility of upgrading my grandmothers paper medical records into an electronic format that will be relevant to my grandchildren is like pre-selecting the East India Trading Company to provide the technology for the Apollo Space Missions. It should immediately strike anyone who considers the problem as a farce. Companies simply do not last for 150 years.

Making a laundry list of what an EHR should do is a little silly. It is equivalent to saying 'We should encode both modern and all future medical principles and make the computer do that'. We have only a vague idea what an EHR should do now, much less what it will need to do in the future.

I have extensively covered this in my article which <u>covers the concept of the seven generation test</u>, some of which I covered here. http://www.fredtrotter.com/2007/10/19/healthvault-failing-the-seven-generations-test/

Get out of the way. please.

I hope I have argued effectively that the proprietary vendor model will never delve true EHR requirements. I hope I have encouraged you to take a very-long term perspective on this problem. I hope I have shown you how dangerous proprietary licenses are to clinicians. But I do not need you to agree with me on these issues. (or for that matter to publicly admit that, secretly, you agree with me)

What I do need you to do is not create barriers to the commercialization of the evolutionary 'VistA' development model and ideals with your funding systems, or with your definitions of 'meaningful use'. Please do not allow yourselves to get caught up in proprietary thinking. Here are some general rules.

Tolls are not OK. <u>To quote from</u> ClearHealth CEO David Uhlman.

If "Meaningful Use" ends up requiring the American Medical Association's Current Procedure Terminology (CPT), proprietary editions of ICD9/ICD10 codes, direct electronic transmittal of prescriptions (after the RXHUB/SureScripts merger only one company provides this), then they are precluding a completely Open Source offering for healthcare.

These kind of proprietary systems cannot be freely redistributed and that is a requirement under FOSS licenses.

Expensive, feature bucket certifications are designed for black box systems and will not work for the FOSS community. VistA is waaaay beyond CCHIT standards and has to be 'dumbed down' to meet the certification requirements. The FOSS community has been working with CCHIT and they have been very responsive over the last two months. But they were unresponsive for the two years before that. If you make CCHIT the only way to get certified they will have no motivation to work with us. Give us the option to create an alternative certification body. If you give the FOSS community that option, I fully expect that CCHIT will work with the community to create a separate-but-equal certification method that works for FOSS but is still 'fair' to proprietary vendors.

Answers to specific questions

What is the "time to market" cycle from adoption of standards to installation across the client base?

This is impossible to answer. It depends on the standard and depends on the individual who is in control of an instance of a FOSS EHR. The vendors cannot control our clients the way proprietary vendors do. I can tell you that bad standards will be adopted more slowly than good ones.

How does that enable or constrain criteria for 2011 for eligible professionals?

I have no idea.

Hospitals?

I have no idea.

Later years?

Only FOSS EHR systems are going to be able to adopt to far-future standards. Not sure I can say more than that.

What are vendors' expectations with respect to increased product demand in 2011 and after, and how do they expect to meet it?

This is actually a question for the community and not the vendors. The existing vendors would say that they will scale their operations, and they will be able to that as well or better than any proprietary vendor. However, if the current vendors are unable to meet demand, the community will spawn new vendors to support existing projects. This is only possible with FOSS EHR systems.

From a technical perspective all of the FOSS EHR vendors I know of can scale with the 'cloud'. (the 'cloud' is another technology that is impossible without FOSS). Using that technology our vendors can easily provide an EHR instance for every provider in the country. So the technology scales all the way to a national level smoothly. If our community was exclusively chosen to deploy every EHR in the country we would need to scale our support staff for things like phone support, and that would take a year or two. Even this is 10 times faster than proprietary alternatives.

What are potential risks (for example, need for additional technical support to assure successful implementations) and how can they be mitigated?

With freedom comes responsibility. FOSS EHR users have the right to shoot themselves in the foot. We cannot give our clients true freedom and, at the same time, ensure that they will always do the right thing. The best FOSS EHR vendors will be those that develop a collaborative relationship with clients that make good decisions more likely. But no vendor can control a client. That's against the rules.

I think there is a danger that the single/small group practitioner(s) will be unfairly hurt by these technology requirements. I hope that our community will be able to address the specific cost and technology requirements that this user group has. I am afraid that technology requirements will force small practices into larger groups, which may not be the best way for those clinicians to provide care. I am advocating for a 'simple as a toaster' sub-projects within the FOSS community to help prevent this.

How will vendors need to adapt their product development and upgrade cycles to synchronize with progress toward increasingly robust requirements for meaningful use, information exchange, and quality reporting?

VistA is already way ahead of everyone. Other projects like ClearHealth/MirrorMed, OpenEMR, OpenMRS, Tolven, etc etc will have to catch up. Even with the other projects playing catchup, the limiting factor here will be how much technology a client can implement in a short period of time. Please read David Uhlman's blog post below for more insights on this issue.

What changes are anticipated in the vendor marketplace between now and 2016 as a result of the incentives?

The incentives are going creating an 'political environment' that could replicate the focus on quality that is already found in the VA. This will replace the procedure farming that currently the most profitable clinical business tactic. Once that happens the basic 'evolvability' of FOSS will cause a blossoming of different systems designed to increase quality. Essentially the VistA programmer/clinician pair programming model will spread like wildfire outside the VA, even as it continues to be killed off inside the VA.

Vendors that currently have investments in VistA or other mature projects like ClearHealth, OpenEMR, OpenMRS, or Tolven will have a considerable advantage over newer FOSS vendors and proprietary vendors.

Over the next 50 years, it will become increasingly difficult to compete as a proprietary vendor. Only

those who can achieve and sustain Microsoft-like development savvy will be able to compete. FOSS EHRs will provide a floor and without substantial advantages, no one will consider using proprietary systems.

The value will move away from the code itself and into higher level processes like data mining for clinical rules. This will be just in time however, because without this kind of adaptability it will be impossible to cope with the coming deluge of genetics and protenomics information.

References

I have used information and ideas from the following resources extensively.

Free and Open Source Software in Healthcare AMIA Open Source Working Group White Paper (Dr. Ignacio Valdes) <u>http://www.amia.org/files/Final-OS-WG%20White%20Paper 11 19 08.pdf</u>

David Uhlmans ClearHealth CEO blog post on Meaningful Use <u>http://health365.wordpress.com/2009/04/26/idea-67-for-april-26th-2009-not-shooting-ourselves-in-the-foot-or-the-meaning-of-meaningful-use/</u>

Dr. Edmund Billings Medsphere CMO file posts to the Open eHealth Collaborative <u>http://groups.google.com/group/open-ehealth-collaborative/web</u>

OpenHealth Mailing List http://tech.groups.yahoo.com/group/openhealth/

LinuxMedNews.com http://linuxmednews.com/

Webinars and papers from Mendocino Informatics http://www.minformatics.com/

HardHats (VistA support list) http://groups.google.com/group/Hardhats

I would also like to thank the folks from <u>MOSS</u>, Dr David Kibbe, WorldVistA and the folks from U.T. SHIS for help and advice.

Thanks,

-Fred Trotter

Open Source Community Comments:

April 28th, 2009 at 10:42 Mark Spohr

has the advantage that software changes can be made quickly available

to clients because they don't depend on a single vendor.

- criteria for 2011

FOSS has an advantage over proprietary systems in that the software can be produced more quickly, by more vendors.

- later years...

FOSS is more sustainable since it is not dependent on a single vendor who may go out of business or run into difficulties in producing new software.

I would also criticize the CCHIT as an expensive gatekeeper who will

limit choice to established proprietary vendors. There should be a 'self-certification' process. Ideally, certification should not be on 'features' but on 'functions' and especially the ability to meet open interoperability standards.

All the best,

Mark

Mark Spohr, MD

will ross

April 28th, 2009 at 10:50

1. define foss on its first use.

"The Free and Open Source Software community, often referred to as the FOSS (F-O-S-S) community, respects me because I have made substantial code and documentation contributions under FOSS licenses."

2. disambiguate your reference to an open source license.

"I am the original author of FreeB (http://freeb.org) which is the first billing engine that supports both paper formats and X12 available under the open source General Public License, or GPL."

3. Insert "open source" occasionally as a full term. Like this:

"I should note that Dr. Ignacio Valdes (of LinuxMedNews) and Will Ross (of Mendocino Informatics) have both maintained similar open source project neutrality and I have relied on their council heavily."

ok, out of time. best of luck with your testimony.

-Will Ross

alesha adamson

April 28th, 2009 at 13:47

1st - break a leg.

2nd - please forgive the terseness; I'm multi-tasking.

3rd - these are my opinions and thoughts, no one else or anything else is responsible for them. I am assuming your audience is not technical, are in fact beauracrats, and want to understand your perspective.

- there is a lot of Jargon. Need to define: GPL, Underground Railroad, Best in Klas.

- explaining the word Hacker and Hacktivist is like me trying to "fix" the use of the word "lady". Hacker got screwed down in the last century, this is not the time to try and fix it, leave more time for questions. Hacker is a word that scares a lot of people. Does the value of this part of the discussion outweigh the potential benefit?

- when you describe technologies "I love web 2.0 ..." and mentioning SQL/OOP; my experience is that

this type of talk alienates my non-tech audience and causes some to think I am hiding behind my profession. Others just dismiss me for being out of touch. You can say the same thing wothout the Jargon.

_ when you start talking about "specs" spell it out "requirements specifications." Do not assume they know SDLC.

_the first paragraph in the clearhealth mirrormed section is totally confusing to me. Do not assume they know that a code base can be shared, do not assume they know what "code base" means.

- when you call out sage and assert their market share would be improved with GPL, you are speculating. Your sage callout may generally be misplaced and this may not be the right time for it.

-you mention the modern hcare article but do not say what was in it. You jump right into attcking the author.

- re/consider pointing and calling people "beauracrat". You are there to influence beauracrats a.k.a. People who will vote on/define legislation

- by saying the only people worth listening to are U.Railroad card holders you do two things: 1. Minimize your value as a self identified novice 2. Suggest only a handful of people get it, that the next generation is un-teachable, the humans cannot evolve, or add value, and so on

- phrases like "babbling about" are derisive, maybe that's what you want to express?

- you do a drive-by on Mumps, does it have value in this way? More time for questions? Or explain the Mumps question.

I wish I had the time to be more involved - I certainly have more thoughts. I do not intend to play armchair testifier I am wishing you clarity, conciseness, and efficacy!

.alesha

Ignacio Valdes, MD, MS

Thank you for providing the opportunity for this important testimony on our nation's health IT future. This is an awesome challenge to our generous and virtuous American society requiring a different level of thinking than what got us to the current problems. Free and Open Source licensed software is precisely the different level of thinking that is required to solve the challenge of health information technology. Since Electronic Medical Record software is a public good like a lighthouse, not a private good like furniture or cars, Free/Open Source licensing provides the practical and legal basis for science-based, transparent, level playing field, health IT software that ensures efficient use of tax-dollars, ensures privacy, innovation and a thriving health information technology software eco-system.

A generous, virtuous society should settle for nothing less than this.

If the nation allows and funds with taxpayer money black-box, trade-secret, proprietary health IT software it will only ensure 'government certified alchemy'. The Alchemists where all trying to corner the market on turning lead into gold and kept their techniques secret from one another. The bad side effect was that everyone had to find out for themselves that mercury was poisonous. When the Alchemists abandoned that strategy and began to share techniques, the scientific method and the Renaissance began.

This is the choice that our nation faces, to become a nation of government certified health IT alchemy ushering in a medical digital dark age or a nation that reaffirms that transparency, and openness are the answer. A dark age of proprietary, opaque, rented, expensive cartel or monopoly favoring, innovation stifling, health IT infrastructure at taxpayer expense that will take 20 years to undo. Or will we become a nation with thriving, science-based, efficient, transparent, health information technology that will mark the start of a renaissance of medicine? Clearly, to ensure a generous, virtuous society Free/Open Source licensed health information technology is the only effective choice.

Government can ensure this transparency and level playing field by only funding the purchase of software that is licensed under licenses approved by the Free Software Foundation (best) or the Open Source Initiative (okay). Government can ensure a generous virtuous society with certification that does not penalize the individuals and corporations that choose to use, develop or sell Free/Open Source licensed health information technology.

Thank you,

Ignacio Valdes, MD, MS

Jeremy Coleman

April 29th, 2009 at 10:22

If small practices would buy into FOSS EHR's, that would give them the freedom to stay small and not group together to survive. If they "owned" their code, they could get together in groups and hire programmers to make changes. They could form Rural Provider IT Co-ops or such. These groups could combine monies and direct the changes to the software. This could create a system of co-op's that could share code and recreate the VA evolution process.