

# OpenMRS, Inc. Board Meeting New York July 21-22, 2014

## I. Introductions

### ● Bailey, WHO

- knowledge and information management for the developing world (trained in library sciences)
- approach not IT or public health but leveraging power through sharing knowledge → platform independent
- not in informatics but in communications at WHO → translate stories from one community to another
- took over WHO website 2 years ago
- was static, content posted manually, lots of reposting and republishing it, not searchable, no update in 10 years
- what doesn't get measured doesn't get done
- half of their users were coming in from mobile devices but staying for <5 seconds → got funding to fix this → # of visitors from mobile devices quadrupled, and they stayed and searched
- read once, write many (WORM) → created document management system for WHO and he used it for the website
- one document of record for each document
- manually updating web pages and links → tangled knot ==> importance of taxonomy → use context management system to tag each item with meta-data → improve searchability and create dynamic pages by entering desired fields so whenever someone published something on the field it would automatically populate on the page
- could use these tags to manage users' preferences for information access
- now in charge of communications focal point for all health systems and health issues at WHO
- dampened enthusiasm at WHO for developing software → get people to use tools (teach) but don't create and manage the tools
- scale with a minimum of investment and a maximum of knowledge sharing
- change in Director Generals → those who replaced them were proprietary in outlook and wanted WHO stamp on things → fired Chris because of his principles in fighting proprietary software (wanted OpenMRS to be either owned by WHO or create a competitor)
- after Tim and Ariel left, Chris had no support
- WHO wanted to "bring OpenMRS home" because they believed they had paid for its development → Chris said "go ahead, it's free and you can put the WHO brand on it"

- importance of the data model → why is the OpenMRS data model important? Because it's focused on the patient and not on the conditions → people-centered health care within WHO's health for the community
- Chris' career at WHO was disrupted for his principles and is now writing portions of the DGs' speeches that include the implementation of those principles
- Mitchell Baker, Mozilla
  - 1990s → Netscape
  - internet and web explosion → Netscape floundering but browser is the key to unlock the 'net
  - point of control
  - stuck on client side because had to go through Microsoft
  - made source code open-source → Mozilla
  - what they were building should be of use to commercial companies
  - period of failure → Netscape dying -- losing to IE
  - Netscape bought by AOL → kill it
  - Mozilla group within Netscape → legitimate open-source product
  - challenging to management of the company that wanted to control activities of volunteers
  - had a virtual organization for many years
  - Firefox was right product at the right time because IE was having problems
  - instant success
  - started talking to the search engines → they were afraid of Microsoft, liked Firefox
  - Google Search → generated lots of revenue from ads
  - consumer internet is very hard
  - linear growth curve for years
  - Chrome released → "lapped" Firefox
  - Google spending billions on Chrome
  - few years ago → Firefox OS for phones
  - more and more devices will be smart → the underlying infrastructure needs to be open
  - now most likely option to move data is through Google
  - open operating system for phones → now in 15 countries in Latin America and now Asia
  - focus on affordable phones while Google is chasing Apple in the high-end phones
  - now → aiming for a \$35 smartphone
  - mission of Mozilla → open network in everyone's hands
  - mobile becoming "computing" → first experience is wide open
  - underlying the product → opportunities to create = important driver for affordable computing

- now dealing with hardware manufacturers
- international communities growing
- that community is the key legacy of Mozilla
- shift to mobile is hard → 2 silos in most places, 1 silo in others
- mobile for development efforts
- "I just couldn't say no" to Paul, OpenMRS, Inc.
- Joaquin Blaya, eHealth Systems Chile
  - community-elected Board member (by implementers)
  - wanted to work in developing countries → PIH → Hamish
  - project in Peru → TB web system for results of rapid TB test
  - Darius and Joaquin → put form on Web → built in 2 days = core of Joaquin's PhD → improved clinical care by getting data from the lab to the doctor → 20% faster TB cure
  - OpenMRS founded...
  - PIH EMR = branding was not their forte → eChasqui → implemented in 12 health centers
  - realized that this idea needed to spread → learned about OpenMRS → not being picked up in Latin America because there were no service providers → want a contract and tech support and a help desk → Joaquin created a company in Chile to do this
  - what could their role be? ==> mobile health and chronic diseases → chronic disease management system → automated phone call to DM patients about meds, foot care, diet, exercise, etc. → info to patient or care providers depending on answers
  - implemented a year ago in a # of health centers → lowered a1c by 1.1%
  - now going regional and probably nationally through MOH → 30K patients first → if similar results → expand nationally
  - based in OpenMRS and Verboice open-source system for automated phone calls
  - if it wasn't for OpenMRS, he would have no company
  - looking to go to Peru, Brazil, and elsewhere
  - focus is DM and HTN but content is pluggable
  - business model is service provider to the MOH, not a software provider → paid by number of patients enrolled (\$2.50 per patient per month)
- Aamir Khan, IRD
  - MD and public health
  - trained at Hopkins
  - MDRTB system → OpenMRS
  - going nationwide in Pakistan and now Nepal and Tajikistan → national online systems

- now mHealth integration
- Global Fund Committee → 18 countries
- offices in Dubai and JoBurg and Singapore → large company of >600 people
- model been driven by OpenMRS as centerpiece and mHealth technologies
- doing projects around HIV, TB, malaria in dozens of countries
- piggybacked on MOH funding → scale
- also DM, COPD, asthma care being supported
- growth has been exponential → managing growth has been a challenge
- need for other groups like them (IRD) → how to catalyze?

● Bill Tierney, Regenstrief (Chair)

-

● Paul Biondich, Regenstrief (President and CEO)

- purpose of today is understanding OpenMRS' history and its target population
- when we get to strategy, we have to be on the same page
- about Paul → didn't want to go to Kenya in 2004
- wanted to improve peds care in the U.S.
- had a conversion moment in Kenya → the work in the U.S. was optimizing a fairly good system where he could do bigger, more fundamental work in Kenya
- living dual life of his K-award and pre-OpenMRS
- open-source to him was a curiosity, ? religious zealotry, more about the ideas than the practicalities of it
- aligned with ideas → appreciation of freedom, but as a clinician → ideas are not enough
- Hamish and PIH → worked collaboratively because that was the best way to work in Indianapolis and Boston → "This is what open-source is!"
- responding to needs → realizing the models around them → we are not as strategic as we think we need to be
- strong allegiance to an underserved population
- started off with AMRS garage project → Clem downplayed it, only Paul or Burke can lead it because it's a ton of work that can't be done remotely on a small portion of your time
- as OpenMRS got impact, the Regenstrief Institute started appreciating it → formal Global Health Informatics Program in CBMI
- Regenstrief is a fundamental partner to OpenMRS, but it is not OpenMRS
- think carefully how OpenMRS can be useful to nonprofits as it can to the big for-profit companies
- Regenstrief Institute is the catalyst of the discussion between OpenMRS and outside partners

- Mitchell: questioning the mid-term leadership implications of OpenMRS, Inc. because of the needs of running the Global Health Informatics Program

## II. Meeting goals and review of agenda

- can shorten the history discussion because of the above background by Board members

## III. OpenMRS history: implementation/users

- see some of the history above
- broader view of HIS now than several years ago
- change from reporting culture (how money is being spent) to managing care
- deviants out in the field (e.g. AMPATH, PIH) → **patient-centered**, developed EHRs
- the small examples that worked needed to be scaled → couldn't → needed to change approaches
- from 2006-12 → systems being implemented by implementers outside of AMPATH and PIH, working for the MOH or peri-MOH (e.g. NGOs)
- people started using OpenMRS outside of a typical patient record (e.g. NCD)
- implementers scaling while countries starting to look at it as a resource
- 2012-present: countries making decisions to implement OpenMRS nationally, first being Rwanda → wanted Paul et al. to develop a system for the country → they said "no" because a) they were not set up to do that, and b) that would fail without developing local human and tech capacity to be self-sufficient
- some countries choose EHR systems (Rwanda, Bangladesh), some choose EHR standards that EHRs must meet (Kenya)
- Joaquin: most countries don't understand the above sentence but are responding to pitches from vendors → can be told that if they choose the system or the standards, they can have and merge the data provided by the EHRs
- corporate engagement in implementation → EMC, HP, ThoughtWorks, others are pinging Paul saying they would like to implement for a state in India or experimental implementation for their own development team → small bites that could grow ==> not sure we know what partnerships with them might mean
- OpenMRS used as an EHR and as a platform, but in places like India → clinics and hospitals are the same (blended in/outpatient care) → OpenMRS implemented as a hospital system too
- OpenMRS, Inc. was formed to support and coordinate development work, but the work in hospitals is NOT being coordinated.
- Should it? What should be the scope of OpenMRS development that the Inc. should support?

## **OpenMRS history: community process**

- initially Paul, Burke, Hamish, and one programmer in Indianapolis and one in Boston
- didn't lock it down because it was easier and it didn't occur to them that anyone else would be interested
- initial software development was self-service, and others wanted to jump in
- Chris Seebregts volunteered to create the implementers community → raised funds for the initial implementers meetings
- from a software development team to a community development team
- Google Summer of Code was important to OpenMRS → gave big boost to growing the developer community → was very popular with potential summer students
- didn't realize there was a whole ecosystem of people willing to do philanthropic stuff with their time
- Mitchell: this model allows for people to dedicate some fixed time to focus on an open source project [apparently companies allow and even encourage their developers to do this → social impact programs].
- Paul: yes, but they chose us → chopped tasks into small pieces that a SOC person could contribute to and could be brought back to the larger community
- Google SOC created visibility for OpenMRS → academic and corporate partnerships
- OpenMRS has gotten better at handing out small pieces of work to do, which is unusual for health-related open source projects
- ThoughtWorks came in → successful engagement → entire program of development on top of OpenMRS
- universities are good at teaching computer science but teaching engineering and development → look for projects for their students → increasing # building practicums around OpenMRS

## **OpenMRS history: resourcing**

- phase 1: self-interest, with AMPATH and PIH building a system to make their needs
- Bill: story of AMRS and CDC...
- phase 2 → internally funded by Paul, Bill, Hamish, etc. leveraging clinical care funds and personal discretionary funds
- Chris S → funding for implementers
- phase 3 → collaborative by Regenstrief, PIH, ThoughtWorks → funding not for implementation but for OpenMRS
- CDC came in → \$150K/year to support OpenMRS core development

- balance between what Inc. does → core development vs training and coordination of the implementer community
- Chris: we've said "no" to opportunities, too, e.g. Gates → suggesting that all grantees use OpenMRS → WHO didn't agree, didn't pick winners because they (and Gates) didn't have the intelligence to dictate that
- Rockefeller Foundation → Transforming Healthcare Initiatives → chose a focus on HIT which fit with prior focus on measurement and evidence of prior initiatives
- Mitchell: having the ability to get grants, etc. is very different from what Mozilla can do
- Chris: it's an advantage and a trap because the bottom can drop out
- Bill: role of the Board in helping OpenMRS, Inc.'s leaders decide which opportunities to pursue → some might require control over decision-making, others might build capacity that might be difficult to maintain
- Mitchell: also help with evolving relationship between OpenMRS, Inc. and the implementer community and their organizations, e.g. Regenstrief
- Aamir: implementers need better and better software, and OpenMRS will have to evolve to allow and facilitate this development
- what obligation will the implementers have to maintain the OpenMRS platform (hence, OpenMRS, Inc.)
- the IRS may be a problem for us because if OpenMRS, Inc. develops software, that will generate value that the IRS may have problems with → Mitchell → that's why Mozilla has a for-profit subsidiary
- Aamir → social business model: each TB screening CXR costs \$5
  - \$1 lease-to-own XR machine
  - \$1 screener incentives
  - \$1 screening center operations
  - \$0.5 GP treatment incentives
  - \$0.5 mobile phone data system
  - \$1 "profit" for reinvestment
  - where would the HIT platform (i.e., OpenMRS) funding sit in such a model?
  - other tests using this model screen for DM, COPD, asthma, anemia, HTN

### Q&A session

- Bill: what about OpenHIE? Is there any relationship between OpenMRS, Inc. and OpenHIE? If any??
- Paul: OpenHIE is a framework which point of care technologies like OpenMRS can plug into a larger framework. Also serves as a foundation for technical reference implementation within OpenHIE. Outstanding question as to whether OpenMRS, Inc's mandate might broaden to other technologies and development activities beyond OpenMRS.

#### **IV. Review of target populations, and their respective needs**

##### A. End-users

- Point of care system for clinics
- Point of care system for hospitals → meet their needs
- System that does x or y form of patient-centric data capture
- Patient-centric system that integrates with z technology
- Super easy "application" with instructions (vs. platform)
- Up-to-date, non-technical user documentation

##### B. Implementers

- Platform on which broad scale POC system can be built (distribution)
- "Disease vertical" customized system
- Platform which allows unique ideas to be done more efficiently using platform
- Easy ways to contribute to core software
- Infrastructure that allows implementers to extend core documentation
- Do we separate implementers from health system managers? Are their needs different?
- 

##### C. Commercial/corporate

- Something that they can "easily contribute to" as part of a social impact program
- Something that they can easily build products against
- A milieu that they can connect to data holders

##### D. Academia/research

- Substrate for applied learning experience
- Classroom curricular content
- Technical "lab"
- Getting data out → reporting and extracting data, interfacing with HIEs and data analysis systems (would also be under implementers and even end-users)

#### **V. Review of OpenMRS, Inc. starter business plan**

- Produces and services: OpenMRS, Inc. will:
  - maintain the open-source license and trademark to ensure free and open access to the community's work on OpenMRS
  - further develop and enhance the OpenMRS online portal
  - provide formal OpenMRS-related training and consultative services to promote local ownership and capacity level within resource-poor countries and stimulate local business ecosystems
- what about credentialing and certification? Should OpenMRS, Inc. be responsible for this? could it be part of a sustainability plan → income?

- what about training, too?
- maintain a resource pool of consultants?
- what about code review, especially for the core components of OpenMRS?

## **VI. Strategy 1: Role of Inc. vs. role of community**

- the community has been in place for 10 years -- before OpenMRS, Inc.
- there are soft and challenging spots in the pre-OpenMRS, Inc.
- can partner organizations do some of the community work?
- community is mostly implementers creating niche products that don't have the focus to produce something useful to everyone → can they own or heavily contribute into such processes? If not, then who owns them?
- to date, the Regenstrief Institute has owned a lot of this by raising funds, and because it is more aligned with organizational mission (unlike PIH → care providers, not developers)
- Darius: there are other Regenstrief-like organizations that might be willing to partner with OpenMRS on specific implementations
- OpenMRS, Inc. should not be a provider of services that are on top of OpenMRS
- Mitchell: that's OK, it could make sustaining OpenMRS a challenge. OpenMRS, Inc. could be a partner with implementers, though
- Joaquin: what about OpenMRS core code changes: that should be the responsibility of OpenMRS, Inc.
- Mitchell: Mozilla has one product, a browser → the actual end-user piece that Mozilla ships
- makes sense that OpenMRS, Inc. doesn't want to be doing installations, support, etc.
- sometimes it's helpful to have a funding source that's scales with implementation of the product -- varies with the amount and complexity of the work
- could there be payments for use of the platform? what would the IRS say about that?
- some components, e.g. billing, could generate more revenue than others → would that drive the development of OpenMRS in some way, for better or for worse?
- need to minimize the number of separate systems that operate within a health system → better to have modules that sit on a common platform → they could provide revenue to OpenMRS, Inc.
- building modules and components/capabilities that are generalizable need input from the Board and/or the OpenMRS community. Modules and apps that are program/provider specific would be less useful and require less oversight from OpenMRS and/or its Board
- Joaquin: OpenMRS, Inc. needs 1-2 development teams that
  - does needs assessments
  - build and maintain the generic data model -- which OpenMRS has supported up to now

- may (will) need core development to accommodate missing modules, e.g. billing
- Mitchell: depends on how many people are going to follow you
- the demands for development is more than the people volunteering to do the work and may not be aligned to the needs of the community
- Paul: a group came to him and said "We don't see a mobile client for OpenMRS, and we want to develop one" → they didn't know that there are 10-15 people working on this now → this could/should be a role for OpenMRS, Inc. to coordinate development in key areas of need
- there is a ticketing process that is pretty one-dimensional
- if there are 5 groups interested in billing, they could be organized into a group that can decide when they want to meet, how they want to push the design forward, etc.
- Joaquin: OpenMRS, Inc. needs a "Key needs" list that it manages and tries to find resources to meet
- should there be a project management function in OpenMRS, Inc.?
- without central leadership, development is uncoordinated and may not meet minimal requirements for acceptability
- Joaquin: we implementers don't feel threatened by OpenMRS
- Paul: we've worked hard to earn the trust of the OpenMRS developer community
- Mitchell: what do we have to do to maintain that trust? Might it be threatened by OpenMRS, Inc. certifying developers, implementers, etc.?
- Joaquin: certification adds a lot of complexity
- Joaquin: I think that OpenMRS, Inc. needs to do the project management alongside community development activities
- Chris: as an initiative grows, trust becomes personal, depending on leaders, which may be tough for one person (Paul) → need diversification of trust. It might be hard for Paul to back out of leadership if so much of the activities and trust are focused on him
- Paul: this is why I've emphasized that the Regenstrief Institute is a core participant in OpenMRS but doesn't own or direct OpenMRS
- Chris: as Paul Farmer backed out of day-to-day leadership of PIH, the core of the organization has changed, and not necessarily for the better
- Paul: the seven people on the core leadership team come up with solutions to problems and issues that they vet with the OpenMRS community, but they make the ultimate decisions → and are transitioning out of that role
- there may be multiple solutions for specified needs (e.g. hospital billing systems), some better than others → OpenMRS right now doesn't pick one as the "official" OpenMRS version, but they do indicate reference implementations for various modules/components/apps.
- Paul: in the early days the OpenMRS team developed a substrate onto which products could be built, and now we are discussing OpenMRS both providing the substrate but also dispensing products for the end-users → something a user could download and use, e.g. comes with a concept dictionary.

- what OpenMRS gives out is a "pre-product" in that it is not an EMR that can be downloaded, plugged, and played

## **VII. Strategy 2: OpenMRS' role in Health IT ecosystem: narrow or broadly focused?**

- will OpenMRS, Inc. be responsible ONLY for use of OpenMRS for EMRs and related products, or will it be responsible for its use in ANY product, even if not related to health care?
- the mission of **OpenMRS** is to improve health care delivery in resource-constrained environments by coordinating a global community that creates a robust, scalable, user-driven, open-source medical record system platform
- the above was the mission of the OpenMRS community before OpenMRS, Inc., but the community may have wider views of how OpenMRS might be used
- the mission of OpenMRS, Inc. is to coordinate the community to meet OpenMRS' mission
- Mitchell: not clear how this differs from the nonprofit
- the above mission statement comes from the application for OpenMRS, Inc., so it is the mission statement for BOTH OpenMRS and OpenMRS, Inc.
- what are the short-term priorities for OpenMRS and OpenMRS, Inc. right now?
- what is the vision for the governance structure? → Paul has a straw man...
- **ACTION:** Paul will work with Michael Downey and Burke Mamlin to create a document which describes that strawman governance model
- Joaquin: OpenMRS, Inc. needs to have a full-time COO who works 100% for OpenMRS, Inc. and lives and breathes OpenMRS
- Aamir: cooperation → collaboration → delegation... ==>> this is a taxonomy of volunteer involvement of someone who works on a project, then if he/she has been a productive member → becomes a collaborator, and then if he/she demonstrates vision and leadership → leadership activities and input into strategic development are possible
- there is no formal distributive form of governance of OpenMRS now, it's all one-off depending on which module is being worked on.
- the developer community can own various apps, but no one other than OpenMRS, Inc. can "own" the OpenMRS core software/platform
- who decides what's core? Leadership team.
- who decides on what's done to apps/modules that aren't core? Leadership team.
- Paul: there is a core OpenMRS downloadable which contains core modules → core release. There are other core modules which one can separately download. When I talk about distributed governance I'm talking about both core-downloadable and core-ancillary modules.
- 4 concentric circles of development:
  - 1: inner-most: core platform
  - 2: core apps → released with core release of OpenMRS

- 3: broadly useful, could in the future be considered as core apps → need evaluation
- 4: one-off apps serving users' very specific needs of a single implementation → could move to 3 if become more widely useful
- development in levels 3-4 have, in the past, predicted the future of OpenMRS development
- if the goal of OpenMRS, Inc. is to coordinate development activity, then the governance of this process is important for OpenMRS, Inc. to own
- Joaquin: suggested 8 functions of OpenMRS, Inc.
  - ensure that the long-lasting parts of of OpenMRS are developed and incorporated appropriately
  - owns and defines the brand
  - coordinates and develops key modules that multiple implementers want/need (pre-product)
    - who maintains it?
  - maintains website
  - implements quality control of core and core modules
  - maintains and updates roadmap
  - convenes implementer meetings
  - coordinates partnerships
  - maintains and evolves governance structure
  - establishes sustainable model and revenue stream to realize it
  - potential functions
    - certification of developers and modules/apps
- Bill: how much is OpenMRS going to grow? Will it be linear, exponential, or asymptotic? Could we be on the cusp of explosive growth? If so, how do we manage it?
- Mitchell: you have to stay focused on your mission and culture
- What is failure? If we can't link success into a revenue stream that sustains OpenMRS then we have really failed
- Chris: if there is explosive growth → create a **foundation** that can maintain the mission and culture
- Mitchell: if we are on the cusp of explosive growth, I'd be in favor of strengthening the center → protect the values of the system beyond what a tight leadership team can provide
- needs to be a layer that can align with national implementations

**Parking lot topic discussion, after-action review, and wrap-up**

- things from day one discussion that need future thought
  - personnel needed for OpenMRS, Inc., e.g. need for COO who lives and breathes OpenMRS and runs it on a daily basis
  - process for decisions about development (what's core, delegation of development, directions to be encouraged, supported)
  - governance model
  - short term priorities, goals, and objectives
  - longer term strategic planning
- practical stuff not discussed that need near-term decisions: communication strategy

## DAY 2

### I. Review of Monday's discussion

- how to modify today's discussion?
- Board leadership structure
- 3- and 6-month activities for OpenMRS, Inc.

### II. Operational updates

#### A. 2013 activities

- Paul: wanted to have started a year ago
- Paul: was not clear we were gonna get nonprofit status
- Paul: in meantime, core activity → evolve how people work together
- in past, the founding organizations and people representing them made all decisions
- next step in organization construct → tease that apart
- move existing leaders to each team member has focus area over which he/she has authority
- first Board meeting → talked about roles of leaders → begin evolving to "divide and conquer" delegation of leadership
- a lot of progress had been made in this regard
- Paul thinks that step is more important than most people realize
- managing volunteers → before dedicating real effort to it, conversion rate from interest to real contribution had been low → being managed by M. Downey
- open-source community → volunteers have lots of options → have to find a way (quickly) for them to contribute → requires infrastructure
- OpenMRS Implementers Meeting → face-to-face opportunities, small revenue generator

#### B. Financial review

- **ACTION:** Paul will send out 2013 OpenMRS, Inc financial summary
- external accounting company (Milestone Advisors) providing service
- meeting sponsorships and grants and other support going into the OpenMRS, Inc.'s accounts

- role of Treasurer (once identified)
- Aamir: this is one of our primary responsibilities but don't waste face-to-face time on this
- C. IRS process and implications
  - call from IRS → emphasize education and community development over software development
  - they didn't accept our argument for being a supporting organization but could justify being a charity
  - we are now a 509(a)(1) charity nonprofit and NOT a 509(a)(3) support organization
  - 5 Board members with 3 named by IU and PIH → in the bylaws
  - other 2 nominated by a process established by the leadership team
  - role of the community in an (a)(3) model → from the supported organization(s), but now as an (a)(1) our bylaws may not be right → consider changing the bylaws on how the Board members are appointed
  - PIH has changed leaders → doesn't necessarily value OpenMRS the same way → demonstrates risks of tethering us to any organization
  - **ACTION:** Paul will edit the bylaws with leadership team's input and distribute them to Board members for approval
  - some Board appointments are ready to expire, but since the nonprofit was just established, can we start NOW?
  - Mitchell: the bylaws would have to be changed to allow this
  - **ACTION:** Paul to arrange edit of bylaws to change "end dates" for initial board members
  - initially we established a stagger among the Board members, with 2 (Bill and Mitchell) rotating off this year → they are both willing to stay on
  - Bill: if the IRS emphasized that we have to stay focused on education and community development, then our communication strategy has to emphasize this
  - Mitchell: but the mission is to improve health care, and education and community development is a means to that end → the mission statement above talks about managing the community supporting the OpenMRS platform
  - Paul: I'm getting pushback from other leaders about their wanting the nonprofit to take a more hands-on approach to software development → this is going to require careful management

● Q&A

- Joaquin: question from Hamish's email → when the leaders took more specific roles, how did that change decisions they made?
- Paul: the intention is to give them full decision-making authority in their assigned areas
- there are lots of interrelations between roles that result in some shared decision-making
- this is a work in progress
- Joaquin: the next step → does it get embodied into the nonprofit, and if yes, how?

- **Hamish:** looked through the notes, at the moment we have a functional but informal structure → not adequate going forward
- need more formal structure around roles and responsibilities
- different organizations have different pros and cons concerning funding
- PIH and Regenstrief have been supportive (with blips from IU!) but not clear how other organizations might come in and establish relationships
- it would be great to get more core support from other organizations, especially financial support → unclear how we would do that
- financial management would need more structure, e.g. more than one person could be a PI on a grant
- Joaquin: if OpenMRS, Inc. applied for a grant, the people doing the work including being PI
- Hamish: what would be the circumstances under which that would occur? This could depend on the location and employment of the person wanting to be PI and the rules of the funding agencies
- Joaquin: we definitely need to sort this out, but we need higher level decisions made first, like who is working for OpenMRS, Inc. and overall roles and responsibilities
- **ACTION:** Paul will work with Hamish to mock up some potential models

### **3- and 6-month activities**

- gathering information about having a certification program
- **ACTION:** Paul will find business development help, do background due diligence on certification program
- deciding on personnel needed by OpenMRS, Inc. to meet its near-term needs (e.g. program manager)
- decide on a funding strategy
- generating a communication strategy and talking points, revised website, etc.
- **ACTION:** Chris Bailey will lead small group to develop OpenMRS, Inc. communication strategy
- scope of the organization
- sustainability plan
  - certification
  - support
  - alignment with other projects, orgs (e.g. OpenSRP)
  - service provider fees
- leadership/governance plan
- raising visibility
- software development strategy
- revised bylaws concerning Board membership

- target for formal plans → implementers meeting in Mozambique first week of December → Board of Directors members should consider attending
- global symposium on health system research in Cape Town → last week of December → Chris writing case stories
- Mitchell: Paul needs to use the Board of Directors members as he sees fit
- Bill: Paul needs help! He can't do all of this himself
  - hire a program manager
  - identify an OpenMRS community member who might want to move into leadership → mentor but also expect work
- Paul: what are foundational elements of communication strategy?
  - need a deck of talking points
  - pinpoint events where we ought to be proactive
  - create formalism about tracking where people are going → ask them what would help them
  - Mitchell: we have a Mozilla evangelism group who is out there spreading the story of Mozilla → they go through communication and press training → information, approach, techniques, etc.
  - need a narrative for the community, what an individual is working on, when to pitch a question to someone else (and to whom)
  - how would OpenMRS do this? and where -- at the implementers meeting?
  - Chris: what would evangelists say and do? what do you want those hearing the pitches do?
  - large health care organizations that have gotten lots of PEPFAR and Global Fund money have meetings and believe that OpenMRS is an unsophisticated open-source system that can't be helpful → need to educate them, perhaps for a full day at a meeting we put on → Aamir might be able to find money for that meeting
  - Chris: don't focus on OpenMRS the open-source software but on implementation and how people are using it
- **OpenSRP** (software registry platform) → people can create registries of condition-specific support tools (e.g. registry) on a standard Android platform that needs an EHR back-end to link to -- could it be OpenMRS? That is their vision, at least. They are contacting Paul → needs to engage and figure out
  - what they are asking of us?
  - what is in it for OpenMRS?
  - could this be a model for the future? Cost-sharing partnerships?
  - what resources should we invest in this?
  - who else is out there whom we might also partner with
- There are other organizations and initiatives like OpenSRP → how do we engage with them once they meet a specified level of sophistication?

## Board roles and responsibilities

- Chris: gotta have balance between tapping the experience of the Board vs. not allowing the Board to micromanage the company
- Mitchell: allow the President to lead and use the Board as needed and feel free to ask for help
- Aamir: Board to help with strategic planning, with special role of the community representative → there ought to be a sense for what the community wants and how the Board can meet it
- slide: roles and responsibilities for Board members...
- Mitchell: is the Inc. responsible for, or not responsible for, or discouraged from providing leadership for OpenMRS. What is the goal of the organization → support the community
- the original Mozilla: coordinating a community, don't touch the software, etc. → didn't last at all, needed to create a for-profit to develop software
- Paul: this is the tension we have all the time: supporting the community vs. supporting the platform
- Mozilla has a modular structure but haven't decided on what the product is → having problems with modules holding back overall development ==> Mozilla doesn't have it solved yet
- Paul: where should OpenMRS community land on the continuum between completely distributed and completely centralized? Where does OpenMRS, Inc support that stance?
- Bill: the above balance will probably change over time as OpenMRS grows, perhaps explosively
- Aamir: OpenMRS, Inc. should take the community and platform to the next level, and the Executive Director has to be the one to make it happen, with help from the Board
- Chris: one of the primary roles is representing OpenMRS to the outside community → not articulated in his role on the "roles" slide
- Aamir: we have to have OpenMRS represented in very important, high-level discussions
- Bill: should the Board also be representing OpenMRS at such meetings, since the Executive Director can't be everywhere. We will need talking points, best practices, what to say and how
- Chris: yes, we need a communication strategy
- Mitchell: raise the visibility of OpenMRS so it is always in the conversation
- Paul: OpenMRS leaders have been more traditionally passive, responsive to needs and now need to be more active and strategic
- Bill: the Executive Director has to balance the responsibilities for internal management of the company vs. externally representing the organization to the outside world. A COO can help a lot with internal management and this will be necessary because there is a lot happening "out there" and OpenMRS needs to be represented by the Executive Director and its Board
- Joaquin: OpenMRS lacks continuity because it is not the "full-time job" of most leaders, including the Executive Director
- Aamir: Hiring a full-time COO (or equivalent) would put financial and sustainability pressures on OpenMRS, Inc.
- Mitchell: agree with full-time help for Paul but it doesn't need to be a COO at this time -- could be a program manager first to try to get help without having to find a strong strategic partner in a COO. I'd start with a program manager to help deal with things that need daily attention.
  - what needs to be done right now?
  - what can Paul and the Board do?

- what kind of person(s) do we need to fill in the gap?
- what are the next steps, and what the timing needs to be → we need a growth model
- formal structures are emerging from informal processes → now formal structures are needed to deal with increasing activities and complexity
- how to nurture and grow executive leadership that can effectively serve the organization and mission
- there is ambiguity on things that OpenMRS, Inc. can do
- there will be a period of conceptualization of issues like certification
- going from idea to strategic direction → building the Inc.
- funding sources need to be contacted and nurtured

### **Board and future meeting logistics**

- should Paul be a member of the Board?
- if so, we'd need to add another member to keep the total odd
- we may want to grow it slowly as needed -- if it's too big now → unwieldy?
- Paul: that's a decision that the Board should make
- Bill is the **Interim Chair** -- need to consider changing or making him the Chair (not interim)
- we need a **Treasurer** (doesn't need to be a member of the Board) → we have an external firm doing our financial work for us → could be from Regenstrief now (convenience, knowledge of OpenMRS and past history) ==> could it be Thane?
- we need a **Secretary** (doesn't need to be a member of the Board) → vice chair, prepares the agenda, etc.
- Bill: I am willing and interested in serving as full time chair, but also don't want to create perception of Regenstrief disproportionate role in community, happy to hand over leadership to another board member. How about Mitchell?
- Mitchell: Appreciative, but don't have domain expertise in health. Bill has gravitas and right skill sets to lead board, thinks he should be chair
- Remainder of board in strong agreement
- **ACTION:** Bill Tierney was unanimously endorsed as Board Chair
- **ACTION:** Treasurer and Secretary role will be done collectively by board for now, once Inc. grows, will reconsider. Paul will facilitate these processes with outside help (Milestone Advisors, etc)
- Aamir: should we have a member from the developing world as a member of the Board (e.g. someone from sub-Saharan Africa or South Asia or East Asia)? Otherwise it's 2 people from the global south and Americans → perception issue that we need to consider among our clients which will include large public health organizations working with governments.
- Mitchell: OpenMRS, Inc. having credible board members that are specifically selected for their skills vs. having people who might not be effective Board members (lacking the necessary skills)... fully community driven board membership might not be best way to find that balance

- if OpenMRS is staged to take off with explosive growth, we don't want people on the Board who don't have the skills to manage such finances. So there's a tension between OpenMRS as a community-based organization and having a Board with the necessary skills to manage an explosively growing organization
- could there be regional councils that provide information and advice to the Board?
- **ACTION:** work with Joaquin to lay out “community representative” communication/engagement strategy... “how will the community speak to the OpenMRS board?”
- need a Board meeting between now and Maputo meeting in early December
- in the short-term should we have quarterly meetings? bimonthly? → if we have a meeting between now and Maputo and then meet face-to-face in Maputo, then we'll be meeting every 2 months for a while → see how it works
- **ACTION:** Bill will convene board meetings every 6-8 weeks, can transition to less frequently over time
- can we have people sit in for members (non-voting) → make the suggestion to Bill (Chair) who will default to "yes" unless there will be sensitive things discussed
- we have applied for D&O insurance for the Board → will consummate soon
- **ACTION:** Paul to work with Mitchell's colleague at Mozilla to support finalizing D&O plan
- what most important things do we need to get done before meeting in Maputo in December?
  - communication/visibility plan
  - drafts of service offerings for OpenMRS, Inc.
  - drafts of governance plan

### **Meeting wrap-up**