

2016 Annual Report

OpenMRS is a global community dedicated to creating the world's most effective open-source EMR platform to improve healthcare delivery in low-resource environments





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Letter to the Community

Friends of the OpenMRS Community,

I'm excited to present to you our second annual OpenMRS Annual Report. Last year we shared with you our first attempt at describing the amazing work of our community, which encapsulated a description of what we've accomplished together, and established ambitious expectations for the future. As we enter into 2017, I'm proud to say that we've not only meaningfully grown as a community over the past year, we've become more efficient as well. As perhaps a simple example of this, the velocity of community growth has increased from 639 new members in 2015 to 1,126 new members in 2016.

I see our community members continuing to demonstrate their deep commitment to our core mission and values by working with low-resource and underserved areas around the world. The result of which has been a dramatic increase in implementations worldwide. This was clearly demonstrated at the largest ever Implementers' Conference in Uganda just one month ago, where over 400 implementers world-wide gathered at Speke Resort in Kampala. Taking into account your feedback at the event and subsequent Hackathon, we're investing even more resources into the community to ensure a collaborative and constructive ideation space where ideas big and small can flourish.

As we move into 2017, we do so with a deeper set of experiences and accomplishments that come from the organizational changes we underwent over this past year. I believe that our community has become stronger and more active over the past year, and that has been demonstrated in any number of ways, from implementation growth, to the rapidly growing volume of discourse on our online community presence.

OpenMRS is and continues to be a mission-driven community, committed to serving resource constrained environments by implementing better health record-keeping practices. We will continue to challenge ourselves to move forward with users at the front of our minds, so that we always solve real problems for real people in need.

We are proud to share this annual report with you, as it demonstrates how much a group of committed people can accomplish. It will also be a guide as we travel forward, together, to create and sustain efficient health delivery throughout the world. Let's continue onward, together, and put our minds to this great task ahead. Thank you for all that you've done to make OpenMRS a remarkable public good for the world.

Together we can accomplish amazing things. Paul Biondich, Project Leader



Mission & Strategy

The OpenMRS community believes that we can substantially improve the health of underserved populations by enhancing the utilization of health information.

We share a common mission, vision, and values to enable broad scale successful use of electronic medical record systems in diverse care settings to improve the health of under-served populations.

Community

To realize our vision, we committed in 2016 to the following strategic operational goals:

- Develop and evolve the foundational technical products of our community
- Develop and evolve a pre-configured electronic medical record application meant to be used directly in health delivery settings
- Actively encourage and support the development of additional OpenMRS Distributions, deriving and disseminating best practices and technologies from them
- Educate individuals, institutions, and companies on building, implementing, and maintaining OpenMRS and related health information technologies

- Help organizations successfully implement OpenMRS by cultivating and participating in an ecosystem of effective service providers
- Ensure that the operations of OpenMRS are maximized for efficiency and effectiveness for the community as well as external partners

Principles

In addition to our community values, we adhere to the Principles for Digital Development (<u>digitalprinciples.org</u>) that are living guidelines for technology enabled organizations.

Diversity

The OpenMRS Mission includes a commitment to fostering and supporting a community of inclusion that reflects our commitment to health equity as well as the communities that we serve. OpenMRS is committed to actively cultivating and leveraging a diverse community that is accessible to everyone.

OpenMRS Implementations

1,845 sites More than 6.3 million active patients

1,149 sites & 5.1 million active patients reported in 2015

Albania Argentina Armenia Australia Bangladesh Belarus Bhutan Bolivia Botswana Brazil Burundi Cambodia Cameroon Chile Colombia D.R.C. Ecuador Ethiopia Gambia Georgia Ghana Haiti

Honduras Hungary India Indonesia Israel Japan Jordan Kazakhstan Kenya Kiribati Kyrgyzstan Laos Lesotho Liberia Libya Madagascar Malawi Malavsia Mali Mexico Mozambique Myanmar

Nepal Nicaragua Nigeria Pakistan Peru Philippines Rwanda Senegal Sierra Leone South Africa Spain Sri Lanka Svalbard Tajikistan Tanzania Uganda Ukraine **United States** Vietnam Zimbabwe

OpenMRS Community Engagement

During 2016, our community members continued to support the OpenMRS mission through overwhelming community engagement, active development of our software products, and increased support of our implementations around the world. Our annual global meeting was held in Kampala, Uganda from December 6-11 and resulted in the largest meeting yet! Over 400 delegates from 26 countries attended to share their knowledge, experience, and challenges to fellow developers and implementers.

Here are a few 2016 stats from talk.openmrs.org, our online hub for community interaction:





27,689

Total Talk Visits



2,453

Talk Topics Created



19,311

Talk Posts Written

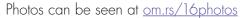
compared





2016 OpenMRS Implementers' Conference

OMRS16, organized and supported by the Uganda Ministry of Health and Makerere University Monitoring and Evaluation Technical Support and hosted at Speke Resort in Kampala, Uganda, marked the 11th annual global summit and was the largest meeting ever recorded with over 400 delegates from 26 different countries.









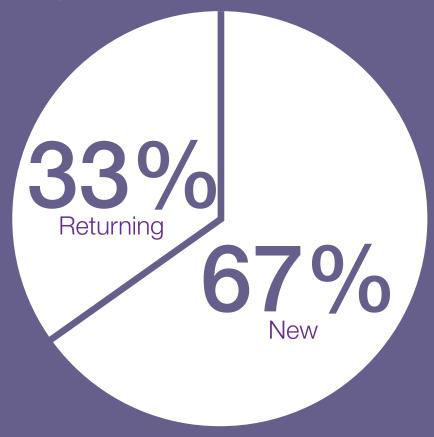






Open/MRS Code Contributions

Committers in 2016:



168 developers from around the globe made 5,686 commits to 100 code repositories in the OpenMRS github organization in 2016.

OpenMRS Core:

68 people made 368 commits

Radiology Module:

19 people made 600 commits

Software Developer Kit:

7 people made 348 commits

OpenMRS Products

In 2016 we introduced a new Platform release line and two new Reference Application releases, as well as multiple maintenance releases for each of the supported Platform release lines: 2.0.x, 1.11.x, and 1.10.x.

February Platform 1.10.4	April Platform 1.11.6	June Platform 1.12.0	July RefApp 2.4	November <i>RefApp 2.5</i>	December Platform 2.0.2
		7 70.110 111 111 111	Platform 2.0.0	Platform 1.11.7 Platform 2.0.1	

Platform

Version 2.0 Volunteer Release Manager - Mayank Sharma

In 2016, OpenMRS released one of the most significant updates to the Platform since OpenMRS began.

Key elements in Platform 2.0 include:

- 65 new features. 201 bug fixes, including significant upgrades to the tech stack: Java 8, Hibernate 4.x., and Spring 4.x.
- Support for the new FHIR standard
- Support for Open Web Apps
- Core support for allergies, prescription & lab orders.
- Builds on REST web services, so any other system in a healthcare enterprise can talk to OpenMRS.

For more details, see the Release Notes

Reference Application

Version 2.4 Volunteer Release Manager - James deGraft-Johnson Version 2.5 Volunteer Release Manager - Tadeo Taremwa

The OpenMRS Reference Application is a graphical user interface built on top of the OpenMRS Platform, that provides point-of-care EMR functionality. The two versions released in 2016 added incremental improvements to functionality, and provided bug fixes.

Features of the reference application are:

- Location based login
- Role based home page
- Multilingual
- Registration
- Patient search
- Patient Summary
- Patient Visits
- Active Visits

- Capture Vitals
- Capture Allergies
- Visit Notes
- Configure Metadata
- Manage Forms
- System Administration
- OpenMRS Atlas
- Admissions Discharges
- & Transfers



Community Voices

During the 2016 Implementers' Conference, members of the community shared three dominant themes about the positive aspects of the community.

First, community members expressed belief in the goal to implement electronic medical records (EMRs) and supported the overall mission of OpenMRS. In one interview a community members stated, "I want to save lives." Members of the community also expressed their "belief in health equity" and "contributing to the global community."

Second, community members said that the community as a whole is a consistent positive aspect of OpenMRS. One interviewee described the community as "vibrant, smart, and dedicated to the cause where you get to meet people from many walks of life." Others commented, describing the community as "generally a bunch of great guys" and "I love the community members."

Third, community members lauded their involvement in OpenMRS as a way to develop skills and enhance their learning.

The clear strength of the OpenMRS community is the community members themselves. They are a selfless group of people who share the goal to create positive change throughout the world. OpenMRS continues to make progress in development, deployment as well as implementation of HIT solutions, with implementations consistently resulting in positive outcomes. These prior successes are what continue to drive the members and the community forward.

OpenMRS Community Voices

"We provide free HIV care and treatment within Kenya... OpenMRS ...allows us to report patient information to management and allows us to meet donor-reporting requirements. With this electronic system, it allows us to analyze our data much faster."

- Edwin Mulwa, Kenya

"We started with OpenMRS using it in 17 sites and we scaled up to even more sites. With our adoption of OpenMRS, we've learned how easy it is to use and scale up. We now have 190 hospitals using OpenMRS and we intend to scale it up even more."

- Gibril Gomez, Gambia

"We started using OpenMRS a long time ago when there weren't as many goodies as there are now. We are in the process of migrating all our systems to use one common database using the API from OpenMRS."

- Chimwemwe Kachaje, Malawi

"We've implemented OpenMRS in different countries and developed our own modules as well. We're working on OpenSRP with OpenMRS which will be a mobile client for OpenMRS."

- Maimoona Kaiser, Pakistan





Outreach Programs

Google Summer of Code

2016 Program Administrator: Suranga Kasthurirathne 10 projects - 20 OpenMRS mentors, with students from Sri Lanka, Cameroon, India, and the Ukraine.

Google Summer of Code is a global program focused on bringing more student developers into open source software development. OpenMRS has been one of the core organizations for the GSOC outreach program for 8 years, offering projects for students that have the potential to save lives with improved health information systems. We have helped grow some amazing students that have continued beyond the GSOC program to contribute to the community in substantial ways.

Google Code In

2016 Program Administrator: Suranga Kasthurirathne Eight students closing 263 tickets with 13 mentors. Nji Collins of Cameroon and Mira Yang of the United States were named Grand Prize winners for OpenMRS.

Google Code-In is an opportunity for pre-University students to participate in a global, online, contest introducing teenagers to the world of open source. OpenMRS has been offering bite-size projects to these awesome teenagers since the inception of the program, and is proud to be the mentoring organization of the first African winner of the international Google Code-In contest, Nji Collins from Cameroon. (http://www.bbc.com/news/world-africa-38922819)

"This year GCI students made a significant contribution to the community by migrating key parts of our documentation to GitBook." - Darius Jazayeri

OpenMRS Distributions

As OpenMRS has matured over the last decade, we have seen more applications built on top of our platform. To support this growth, in October 2016 we introduced the OpenMRS Distributions Program.

Dis·tri·bu·tion distrə byooSH(ə)n/: noun
A particular configuration of the OpenMRS Platform,
OpenMRS modules, and other integrated applications,
that can be installed and upgraded as a single unit.

Currently Available Distributions are:



OpenMRS



Bahmni



eSaude



KenyaEMR



UgandaEMR

Learn more at om.rs/distributions

OpenMRS Partner Highlights

Our partners share our mission of improving healthcare with OpenMRS. We are grateful for all of our partners who contribute to the community in a number of different areas and ways. We couldn't tell all of our partner's stories in the space here, but we highlight a few of them in this current report. Look for additional partner stories and highlights in future OpenMRS publications.



Partners In Health (PIH) is a founding partner of OpenMRS and is a global organization relentlessly health committed to improving the health of poor and marginalized people. Sharing the same open source and collaborative philosophy as OpenMRS, PIH has been a critical partner in the core design and development of OpenMRS over 11 years. This alliance has helped PIH to expertly manage health data for implementations in 10 countries, in 93 sites, with over

500,000 active patients. OpenMRS' flexibility has enabled PIH to improve clinical care across the spectrum of health facilities, provide tools for clinical and programmatic research, and support Ministries of Health in building resilient health systems. The impact that PIH has made on both the OpenMRS system and the OpenMRS community is beyond measure.



Mekom Solutions is an OpenMRS service provider and implementer and is a growing tech provider for healthcare facilities in Cambodia and Laos. They provide healthcare facilities with

tailored, affordable and easy-to-learn OpenMRS solutions, based on the Bahmni and Reference Application distributions. The partnership with OpenMRS has led to an award from USAID for Development Innovation to create a Cambodia-focused OpenMRS distribution.

SolDevelo is an international software SolDevelo is an international software development firm committed to the OpenMRS mission, vision, and principles

as shown by their contributions to OpenMRS. They have made substantial contributions to the software development kit (SDK), quality assurance (QA) process, the Android client, and introduced a new Concept Dictionary Open Web App. Their contributions to core functionality makes working with OpenMRS easier and faster for a larger number of developers.

"Soldevelo's work on the SDK has brought back joy and fun developing on the OpenMRS platform and supporting implementations."

- Stephen S Musoke



Banda Health is committed to transforming healthcare with world-class technology in the poorest places on earth. Their core mission is to poorest places on earth. Their core mission is to provide the tools for health care workers to access and use critical health information at the

right time. In 2016, the Nairobi, Kenya-based Banda Health team started design and development on two new modules (Visit Tasks and Patient List) and contributed to the CoreApps and UICommons RefApp modules. Banda advocates for OpenMRS with partnering organizations and faith-based health institutions.



Looking Forward

Seizing the Opportunities for Growth and Sustainability

OpenMRS continues to provide critical support for health care delivery through our platform and reference app by facilitating the gathering of information and the translation of information to data and knowledge at the point of care. Our global community of independent and organizationally-sponsored volunteers work together to improve health care delivery, and are moving us closer to the goal of health equity for all. In 2016, we used our operational plan as our guide, and worked to meet each goal. As we enter into 2017, our vision and goals remain focused and intentional based on the current and anticipated needs of our community as well as our implementing partners. Therefore, we have established this year's plan with the intent to complete at least 75% of our goals.

We look forward to a successful year, led by the OpenMRS Community and our external partners.

Supporting Organizations

- AMPATH
- Centers for Disease Control, U.S.
- Fogarty International Center, NIH
- Google
- Harvard Medical School
- International Development Research Centre
- Jembi Health Systems
- Medical Research Council, South Africa
- Millennium Villages Project
- Partners In Health
- Regenstrief Institute
- Rockefeller Foundation
- Salesforce
- SolDevelo
- ThoughtWorks
- University of California San Francisco
- University of Washington
- World Health Organization
- ... and many others!

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