OpenMRS Evidence Hub

Have you written a published paper about OpenMRS? Know of one that's not listed here? Add it!

This page is our online repository of the many studies conducted exploring OpenMRS. Collectively, these studies provide strong evidence for a variety of use cases: the impact of EMR use on care, secondary data use for site or regional or global program guidelines improvement, and the community open source model. The OpenMRS Community maintains the OpenMRS Evidence Base and adds new studies as they are discovered.

Over 3,860 publications are noted online involving OpenMRS - search query here.

Note
This page is new and a work in progress as of August 2023. We are updating this with the thousands of articles published on OpenMRS with a bias towards recent articles from within the last few years.

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation</th>
<th>Year</th>
<th>Country</th>
<th>Reference Key</th>
<th>URL</th>
<th>Misc. Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMR IPV, GBV HIV Index Case Testing (ICT)</td>
<td>Mbah, Rogers, Honoré, Ngend. A Review of Index Case Testing Induced Intimate Partner Violence and Electronic Management of Information in HIV Care. xx (2023).</td>
<td>2023</td>
<td>Cameroon</td>
<td>Mbah 2023</td>
<td>10.4236/ietpn.2023.124005</td>
<td>Recommendations: • Data tools for HIV/AIDS should integrate IPV indicators. • Include management of IPV survivors in existing EMR systems. • Develop more comprehensive EMRs that include complete care continua, especially for low-income settings. • Countries with limited resources should consider OPENMRS to implement EMR. • Screening for IPV among HIV patients should be scaled up to reduce IPV incidence. • IPV counseling services should be offered post-HIV test counseling to control IPV incidence rates.</td>
</tr>
</tbody>
</table>
Interoperability Standards


Open Source EMR ICD 10 Capacity Building


Open Source CDS HIV


Prenatal, ANC EMR


CDS HIV


Open Source Software Architecture, Architectural Smells, Software Performance


Thyroid Cancer Ultrasound Oncology


Medical Training Capacity Building


COVID Home monitoring


HIV ART Disease Surveillance


COVIT


Tuberculosis


OMOP


Public Health Open Source


HIV ART


Testing three EHR systems to determine their suitability for meeting the requirements discussed by working groups. Assessing the capability to integrate both clinical data and genomic data; the capacity to incorporate standardized medical vocabulary in both English and French languages; along with its alignment with ICD10 standards.

Results: The 30 days initiation rate was 62.7% before and 90.8% after the T&T policy rollout.
CDS

2022 Rwanda
Fraser 2022
https://doi.org/10.7755/biomedica.2021_clean.pdf
A survey of user experience of a well established HIV implementation by the Rwanda MOH. Part of a larger OpenMRS research study of 112 health facilities in Rwanda.

Maternity Labor, Delivery

2022 Kenya
Dinh 2022
https://doi.org/10.7755/biomedica.2021_clean.pdf
An example of the use of the VecnaCARES maternal child health package using OpenMRS and their custom hardware package for sites with no infrastructure.

HIV Adolescent

2022 Uganda
Ahimbisibwe 2022
Factors associated with adherence to ART among adolescents attending HIV clinic at China-Uganda Friendship Hospital-Naguru, Uganda.

NTD
2022 Colombia
Ochoa 2022

Open Source
2022 Global
Paton 2022

Maternity PMCT HEI Mentor Mothers

2021 Mozambique
Carlucci 2021

EMR Global Goods Open Source

2021 Global
Verma 2021

Implementati on on EMR Emergency
Mamlín, Burke W., Jennifer E. Shivers, Nancy K. Glober, and Jonathan J. Dick. "OpenMRS as an emergency EMR—How we used a global good to create an emergency EMR in a week." International Journal of Medical Informatics 149 (2021): 104433.

2021 USA
Mamlín 2021

ICD 11 API

2020 Rwanda
Mugisha 2020
https://ebooks.iospress.nl doi/10.3233/IHTD00549

Machine Learning HIV

2020 Kimaina 2020
Translation of AMRS-based research for improving patient care. This study was one of the precursors for a large research study on the use of machine learning to improve loss to follow up of HIV patients in Kenya

Oncology Chemotherap y

2019 Uganda
Kabukye 2019
https://ebooks.iospress.nl doi/10.3233/IHTD00549

Oncology Chemotherapy

2019 Uganda
Kabukye 2019
https://ebooks.iospress.nl doi/10.3233/IHTD00549

Interoperability Patient Transfer

2019 Tanzania
Rweikiza 2019

Diabetes

HIV
2019 Kenya Humphrey 2018 Helped understand the link between parental viral suppression and child suppression

Radiology, RIS

HIV Drug Resistance Pediatric

EMR Open Source
2017 General Syedkova 2017

ANC, MCH

EMR Ebola
2017 Global Bashiri 2017 The rapid assembly of a community of designers and developers to build a new tablet based UI and workflow for an Ebola treatment program in Sierra Leone. One of a handful of EHR like applications actually implemented and used for clinical care during the Ebola outbreak.

Open Source EMR

Interoperability Indicators Reporting DHIS2

Patient Outcomes HIV
2016 Kenya Olney 2016

Interoperability API EMR
LTFU HIV

2015 Geng 2015
Identified LTFU patients to be tracked to help understand what was going on.

Informatics Capacity Building
"These are good problems to have…": establishing a collaborative research partnership in East Africa. Tierney WM, Nnyando MC, Shen C, Siika A, Ayuo PO, Atwoli L, Esamai F. Stud Health Technol Inform. 2015;216:520-4.

2015 Were 2015
Building informatics capacity in Kenya; additional information on AmpathMRS. Per Ampath: “The publications using AMRS have helped us identify key gaps in the HIV care and treatment program including the high rate of LTFU from the first paper we published. We also used AMRS to inform MOH about VL testing in pregnancy a few years ago though this was not published as a paper. More recent use of AMRS data has been in IeDEA analysis that have looked at a number of things including new guideline adoption.”

Decision Support (CDS)

2012 Kasthurirathne 2012
http://dl.acm.org/citation.cfm?id=2382866

Open Source Modular

2012 General de Abajo 2012
https://www.igi-global.com/chapter/content/id4993

Implementation on EMR Open Source

2011 Global Mohammed-Rajput 2011
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3243141/

Decision Support (CDS)

2011 South Africa Holland 2011
https://journals.co.za/doi/abs/10.10520/EJC28115

MCH Reproductive Health

2010 Nigeria Thompson 2010
https://ebooks.iospress.nl/volumearticle/13451

Early implementation of OpenMRS for maternal-child health

Implementati on Capacity Building

2010 Global Seeberegs 2010

A second paper on the openMRS implementors and community

HIV

2013 Were 2013
One of the most important clinical evaluation studies of the impact of OpenMRS in improving care.

Decision Support (CDS)
Manders 2010
A second paper on the openMRS implementors and community

HIV

2010 Tanzania Uganda Kenya Tierney 2010

A second paper on the openMRS implementors and community

MCH

2010 Kenya Manders 2010
Helped look at sustainability of firstline regimens

PMTCT HIV MCH

2010 Kenya Nyandiko 2010
Helped assess the effectiveness of the PMTCT program.
Global


Important early paper on OpenMRS community with Chris Seeberg as one of the 4 co-founders as first author.

Implementati on of HIV


2007 Rwanda Allen 2007 https://books.google.ca/books?id=erdisplayed=KAnvAg AAQBAJ&sig=IhgD3kpiqiA4_N hdRh2KtO6o9HJ&redir_esc=y#v=onepage&q =openmrs&f=false Early work with OpenMRS in Rwanda

EMR Open Source

Christopher J. Seebregts, Burke W. Mamlin, Paul G. Biondich, Hamish S.F. Fraser, Benjamin A. Wolfe, Darius Jazayeri, Christian Allen, Justin Miranda, Elaine Baker, Nicholas Musungi, Daniel Kayiwa, Carl Foutie, Neal Lesh, Andrew Kanter, Constantin T. Yannioutos, Christopher Bailey.


Important early paper on OpenMRS community with Chris Seeberg as one of the 4 co-founders as first author.

EMR Open Source


2007 Rwanda Allen 2007 https://books.google.ca/books?id=erdisplayed=KAnvAg AAQBAJ&sig=IhgD3kpiqiA4_N hdRh2KtO6o9HJ&redir_esc=y#v=onepage&q =openmrs&f=false Early work with OpenMRS in Rwanda

EMR Nutrition Rural


2007 Rwanda Allen 2007 Early work with OpenMRS in Rwanda

Tuberculosis Labs


EMR Open Source


2007 Kenya Tierney 2007 General background on the early days of OpenMRS, it’s precursor system and AmpathMRS.

EMR Open Source


EMR Open Source


2006 Global Wolfe 2006 Post version of the previous paper in the first year.

EMR Open Source


2006 Global Mamlin 2006 The first OpenMRS paper the year we first launched in Kenya, Rwanda and South Africa.

HIV LTU


2006 Kenya Wools-Kaloustian 2006 Identified LTU as an issue


EMR Open Source


EMR Open Source


EMR Open Source


2003 Kenya Rotich 2003 This described the main precursor system of OpenMRS at AMPATH

EMR Open Source


2002 Kenya Tierney 2002 http://www.ncbi.nlm.nih.gov/pubmed/12463933 This described the main precursor system of OpenMRS at AMPATH

EMR Open Source


2001 Kenya Hannan 2001 http://www.ncbi.nlm.nih.gov/pubmed/11604811 This described the main precursor system of OpenMRS at AMPATH