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/etpn.2023.004056</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


2023 Tunisia Mougou, 2023 https://openreview.net/forum?id=hVPoX722Ze

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 genomics data; the capacity to incorporate standardized medical vocabulary in both English and French languages; along with its alignment with ICD-10 standards.

Open Source ICD 10


2023 General Krasdomski-jones, 2023 https://policycommons.net/artifacts/3793598/laying-the-foundation-for-the-future/4598925

Prenatal, ANC EMR


Open Source Capacity Building


Thyroid Cancer Ultrasound Oncology

Bisquera, Valparaiso, Perez, Uy, Espiritu, Palago, Clarit. A Single Institution Experience on the Correlation of Kwak Thyroid Imaging Reporting and Data System Score (Kwak TIRADS) and Malignancy of Thyroid Nodules seen in a Tertiary Hospital Setting. World Cancer Research Journal, 10, e4296.

2023 Philippines Bisquera 2023 https://www.wcrj.net/article/2498

Medical Training


COVID Home monitoring


2022 Armenia Sikder 2022 https://europepmc.org/article/med/36350739

The software was designed and developed over 2 months using human-centered design and agile sprints. Once live, 5087 patient records were created for 439 unique patients.

HIV ART Disease Surveillance


2022 Mozambique Fatahia 2022 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3429963/

COVID


2022 Haiti Mirza 2022 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3745247/

Tuberculosis


2022 Botswana Slamiasang 2022 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3142783/

OMOP


Public Health Open Source


2022 General Wanger 2022 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10348654/

HIV ART


2022 Uganda Kisaka 2022 http://dispace.mak.ac.ug/handle/10570/110866
Maternity Labor, Delivery


2022 Uganda Ahimbisibwe 2022 http://dspace.mak.ac.ug/handle/10570/10513

An example of the use of the VecnaCARES maternal child health package using OpenMRS and their custom hardware package for sites with no infrastructure.

Open Source


2022 Global Paton 2022 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3971976

EMR Global Goods Open Source


Implementatio


ICD 11 API


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 Chemothera


Interoperabili


2022 Rwanda Fraser 2022 https://medinform.jmir.org/2022/5/e32305/

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. The EHR top uses were to access client data easily or quickly (62/90, 69%), update patient records (56/89, 63%), create new patient records (49/88, 56%), generate various reports (38/85, 45%), and review previous records (43/89, 48%). In addition, >90% (81/90) of respondents agreed that the EHR made it easier to make informed decisions, was worth using, and has improved patient information quality. ... In intervention sites, staff were significantly more likely to update existing records (P=.04), generate summaries before (P=.001) or during visits (P=.01)

HIV Adolescent


2022 Uganda Ahimbisibwe 2022 http://dspace.mak.ac.ug/handle/10570/10513

NTD


CDS


2022 Rwanda Fraser 2022 https://medinform.jmir.org/2022/5/e32305/

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. The EHR top uses were to access client data easily or quickly (62/90, 69%), update patient records (56/89, 63%), create new patient records (49/88, 56%), generate various reports (38/85, 45%), and review previous records (43/89, 48%). In addition, >90% (81/90) of respondents agreed that the EHR made it easier to make informed decisions, was worth using, and has improved patient information quality. ... In intervention sites, staff were significantly more likely to update existing records (P=.04), generate summaries before (P=.001) or during visits (P=.01)
Diabetes

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

Radiology, RIS

HIV MCH LTFU
2018 Holmes 2018 Helped understand the impact of pregnancy and sex on retention in care

HIV Drug Resistance Pediatric

EMR Open Source
2017 General Sydykova 2017 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5703976/

ANC, MCH

EMR

EMR Ebola
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 EPR
2017 Global Kasthurirathne 2017 http://doi.org/10.4338/ACI-2016-08-RA-0139

Interoperability Indicators Reporting DHIIS2

Patient Outcomes HIV
2016 Kenya Olney 2016

Interoperability API EPR

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

Implementati on HIV


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 Musunguzi, Daniel Kayiwa, Carl Fourie, Neal Lesh, Andrew Kanter, Constantin T. Yiannoutsos, Christopher Bailey.

2009 Global Seebregts, 2009

Nutrition

2007 Rwanda Allen 2007 Early work with OpenMRS in Rwanda

Tuberculosis


EMR Open Source


EMR Open Source

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

EMR Open Source

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

EMR Open Source


EMR Open Source

2006 Global Wolfe 2006

EMR Open Source

2006 Rwanda Allen 2006

EMR Open Source

2006 Kenya Wools-Kaloustian 2006 Identified LTFU as an issue


2005 Global Mamlin 2005 OpenMRS design and development underway

EMR
Tierney WM, Rotich JK, Smith FE, Bi, J, Odero WW, Vu N, Mamlin JJ, Einterz RM, Tierney WM. Identifying LTFU as an issue.

2005 Global Tierney 2005

EMR Early days

2002 Kenya Tierney 2002 This described the main precursor system of OpenMRS at AMPATH

EMR Early days

2001 Kenya Hannan 2001 This described the main precursor system of OpenMRS at AMPATH