

Curriculum Vitae
Martin C. Were, MD, MS
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mwere@regenstrief.org
05/01/15

ACADEMIC TRAINING:

5/2008 M.S. Indiana University, Clinical Research, Indianapolis, IN
6/2001 M.D. Harvard Medical School, Boston, MA
6/1997 B.S. Harvard College, Cambridge, MA; Magna cum Laude, Biochemistry & Molecular Biology

ADDITIONAL TRAINING:

8/2006 - 7/2008 Fellow, Medical Informatics, Regenstrief Institute Inc. & Indiana University
7/2001 - 6/2004 Resident, Internal Medicine/Categorical, Brigham and Women's Hospital & Harvard Medical School, Boston, MA

ACADEMIC APPOINTMENTS:

7/2015 - Present Associate Professor of Medicine, Indiana University, Indianapolis, IN
7/2008 - Present Research Scientist, Regenstrief Institute, Inc., Indianapolis, IN
7/2008 - 6/2014 Assistant Professor of Medicine, Indiana University, Indianapolis, IN
8/2004 - 7/2006 Instructor in Medicine, Emory University, Atlanta, GA

HOSPITAL APPOINTMENTS:

8/2006 - Present Attending Physician, Eskenazi Health & Wishard Health Services, Indianapolis, IN
7/2004 - 7/2006 Attending Physician, Emory Crawford Long Hospital, Atlanta, GA

MAJOR ADMINISTRATIVE RESPONSIBILITIES:

02/2013 - Present Chief Medical Information Officer, Academic Model Providing Access to Healthcare (Indiana University - Moi University Partnership)
12/2013 - Present Project Coordinator & Lead, Health Informatics Training and Research in East Africa for Improved Health Care (HI-TRAIN)

HONORS:

2013 Young Investigator Award, Indiana University (Medicine)
2011 Top 11 mHealth Innovator, UN Foundation / Rockefeller Foundation / mHealth Alliance
2011 Scholar, The Harold Amos Medical Faculty Development Program of the RWJF
2011 Notable Paper, Informatics Year in Review, AMIA Symposium 2011
2011 Gold Star Poster, International AIDS Society
2011 Top 20% Faculty for Housestaff teaching, Indiana University
2010 Best Paper Selection (Health and Clinical Management), IMIA Yearbook of Medical Informatics
2008 1st Place Student Paper, AMIA 2008 Annual Symposium
2007 Distinguished Paper Award Finalist, AMIA 2007 Annual Symposium
1997 Ford Foundation Baccalaureate Incentive Award for Senior Biochemistry Thesis
1997 W. Barry Wood Scholar for Academic Achievement
1997 Magna cum Laude, Harvard University (Biochemistry)
1994 Howard Hughes Foundation Award for Summer Research
1991 Top National Student in Kenya, Kenya Certificate of Secondary Education

LICENSES AND CERTIFICATION:

2001 - 2004	Massachusetts Medical License (Limited) #211957
2004 - 2006	Georgia Medical License #05452
2004 - 2014	American Board of Internal Medicine #224760
2006 - Present	Indiana Medical License #01062469A

OTHER PROFESSIONAL ACTIVITIES:**Board Membership**

2011 - 2015	Board of Scientific Counselors, Lister Hill Center of the National Library of Medicine
2010 - Present	Editorial Board Member, Journal of American Medical Informatics Association

Professional Service

2013	Lead organizer, mHealth Evidence In-country workshop
2012 - Present	Faculty Mentor, Indiana University Residency Track in Global Health
2012	Organizer, mHealth Evidence Matters Panel, mHealth Summit 2012
2012 - 2013	mHealth Technical Advisory Group on Evidence, Impact and Scale in Reproductive, Maternal, Newborn and Child Health, World Health Organization
2011 - 2012	Search Committee Member, Regenstrief Institute Director, Center for Biomedical Informatics, Indiana University
2011 - 2012	Committee Member, Fellow selection, Regional East Africa Center of Excellence in Health Informatics, Indiana University
2011 - 2014	Member, Transitions of Care Working Group, Wishard Memorial Hospital, Indiana University School of Medicine
2011 - 2013	Member, Complex Discharge Readmission and Transition Care Committee, Indiana University School of Medicine
2011 - 2012	Member, Health Informatics Private-Public Partnership, Research & Evaluation Committee
2011 - Present	Founding member, Kenya Health Informatics Association
2011	Core contributor, Declaration on role of evidence in eHealth (Bellagio, eHealth Declaration)
2010 - 2014	Core Faculty, Regional East Africa Center of Excellence in Health Informatics
2010 - Present	Ad hoc reviewer, AMIA Annual Symposium Proceedings
2007 - Present	Ad hoc reviewer, Journal of General Internal Medicine
2009	Conference Planning Committee member, Building university-based health informatics programs

Professional Organization Membership

2012 - 2014	Co-Chair, mHealth Alliance Evidence Working Group
2011 - Present	Member, Society of General Internal Medicine
2011 - 2015	Member, International AIDS Association
2011 - 2013	Member, Central Society of Clinical Research
2006 - Present	Member, American Medical Informatics Association
2006 - 2014	Member, Indiana Medical Society
2003 - Present	Associate, American College of Physicians
2000 - Present	Member, American Medical Association
1997 - 2006	Member, Massachusetts Medical Society

Grant Review Panels / Study Section

2012 International Development Research Center (IDRC), Canada. Review panel member, SEARCH grants.

ONGOING SUPPORT:

In Process *Pending* (Ministry of Education, Kenya). Institute of Biomedical Informatics, Moi University. Martin Were support - 40% FTE. Ongoing personnel and infrastructure support worth over \$1m per year.

07/2015 - 06/2017 *Pending* (Regenstrief Foundation) PI: Martin Were, Implementation Center for Global Health Informatics. \$750,000.

01/2013 - 12/2018 Norwegian Agency for Development Cooperation (Norad: QZA-0484). PIs: Martin Were & Abraham Siika, Health Informatics Training and Research in East Africa for Improved Health Care (HI-TRAIN), 17,959,665 NOK (~ \$2,382,390).

05/2014 - 11/2015 CDC Foundation (MOA #: 770-14-AMDT1 SC). PI: Martin Were. Rapid Baseline Situational Assessments for Improving Data for Decision-Making in Global Cervical Cancer Programs, \$749,982.

07/2013 - 06/2016 AbbVie Foundation. Overall PI: Bob Einterz; Informatics PI: Martin Were, mHealth and CDSS technologies to support Find, Link, Treat and Retain program for HIV at AMPATH in Western Kenya. Informatics sub - \$250,000 / year.

10/2012 - 09/2017 USAID (AID-615-A-12-0001). *AMPATH Plus* – supporting AIDS/HIV Care in Kenya within the AMPATH Program. PI: Sylvester Kimaiyo, Role: Co-Investigator. 4.2 FTE.

05/2013 - 06/2015 Regenstrief Institute, Inc. PI: Martin Were. Developing and evaluating a Smartphone-based system to support multimedia use in clinical care. \$71,390.

05/2012 - 03/2017 National Heart, Lung and Blood Institute ((1 U01 HL114200-01). Optimizing linkage and retention to hypertension care in rural Kenya. Role: Co-Investigator & Site PI. Sub-amount: \$18,233 per year.

09/2014 - 08/2019 NIIH/NCI (U54 CA190151-01). AMPATH-Oncology Institute: HPV and Cervical Cancer in Kenyan Women with HIV/AIDS. PI: Loehrer. Role: Co-Investigator 5% FTE.

11/2014 - 11/2015 Astra Zeneca. Healthy Hearts Africa project. PI: Kamano. Role: Co-Investigator 10% FTE. Sub-contract amount \$88,333.

PAST OTHER SUPPORT:

01/2011 - 12/2014 Robert Wood Johnson Foundation (RWJF Award ID: 68522). Harold Amos Medical Faculty Program. PI & Scholar: Martin Were, \$419,000.

05/2013 - 11/2014 Medtronics Foundation. mPowering Frontline Health Workers for non-communicable disease management. PI: Martin Were, \$250,000.

09/2009 - 03/2013 AHRQ (K08HS018539). Improving management of test results that return after hospital discharge, PI: Martin Were, \$577,000.

01/2009 - 01/2010 Tibotec Reach Initiative Award. Impact of using nurses instead of clinicians to care for stable HIV-infected patients. PI: Martin Were, \$94,000.

09/2008 - 09/2010 National Center for Research Resources (NCRR: KL2RR025760). KL2 Postdoctoral Faculty Scholar (Indiana CTSI Career Development Award). PI: Martin Were. 75% Salary Support.

07/2006 - 06/2008 National Library of Medicine. National Library of Medicine Medical Informatics Fellowship Program (Regenstrief Institute, Inc.). 100% support.

BIBLIOGRAPHY

ORIGINAL, PEER REVIEWED ARTICLES:

* Denotes First or Senior Authored paper

1. * **Were MC**, Mamlin BW, Tierney WM, Wolfe B, and Biondich PG. Concept Dictionary Creation and Maintenance Under Resource Constraints: Lessons from the AMPATH Medical Record System. AMIA Annual Symposium Proceedings. 2007 (PMID: 18576169).
2. * **Were MC**, Sutherland JM, Bwana M, Ssali J, Emenyonu N, and Tierney WM. Patterns of Care in Two HIV Continuity Clinics in Uganda, Africa: A Time-Motion Study. AIDS Care Journal. AIDS Care. 2008 Jul; 20(6):677-82. (PMID: 18576169).
3. * **Were MC**, Meeks-Johnson J, and Overhage JM. Enhanced Laboratory Reports: Using Health Information Exchange Data to Provide Contextual Information to Laboratory Results for Practices without Electronic Records. AMIA Annual Symposium Proceedings. 2008 Nov 6: 1174 (PMID: 18999174).
4. * **Were MC**, Abernathy G, Hui SL, Kempf C, and Weiner M. Using computerized provider order entry and clinical decision support to improve referring physicians' implementation of consultants' medical recommendations. Journal of American Medical Informatics Association. 2009 Mar-Apr; 16(2):196-202. (PMID: 18952934).
5. * **Were MC**, Li X, Kesterson J, Cadwallader J, Asirwa C, Khan B, Rosenman MB. Adequacy of hospital discharge summaries in documenting tests with pending results and outpatient follow-up providers. J Gen Intern Med. 2009; 24(9):1002-6 (PMID: 19575268).
6. * **Were MC**, Shen C, Bwana M, Emenyonu N, Musinguzi N, Nkuyahaga F, Kembabazi A, Tierney WM. Creation and evaluation of EMR-based paper clinical summaries to support HIV-care in Uganda, Africa. Int J Med Inform. 2010 Feb;79(2):90-6 (PMID: 20036193).
7. Kimaiyo S, **Were MC**, Shen C, Ndege S, Braitstein P, Sidle J, Mamlin J. Home-based HIV counseling and testing in Western Kenya. East Afr Med J. 2010 Mar 87(3):100-108.(PMID: 23057305).
8. Tierney WM, Achieng M, Baker E, Bell A, Biondich P, Braitstein P, Kayiwa D, Kimaiyo S, Mamlin B, McKown B, Musinguzi N, Nyandiko W, Rotich J, Sidle J, Siika A, **Were M**, Wolfe B, Wools-Kaloustian K, Yeung A, Yiannoutsos C; Tanzania-Uganda Openmrs Consortium. Experience implementing electronic health records in three East African countries. Stud Health Technol Inform. 2010;160(Pt 1):371-5 (PMID: 20841711).
9. * Noormohammad SF, Mamlin BW, Biondich PG, McKown B, Kimaiyo SN, **Were MC**. Changing course to make clinical decision support work in an HIV clinic in Kenya. Int J Med Inform. 2010 Mar;79(3):204-10 (PMID: 20089444).
10. * **Were MC**, Emenyonu N, Achieng M, Shen C, Ssali J, Masaba JP, Tierney WM. Evaluating a scalable model for implementing electronic health records in resource-limited settings. J Am Med Inform Assoc. 2010 May 1;17(3):237-44 (PMID: 20442140).
11. * **Were MC**, Kariuki J, Chepng'eno V, Wandabwa M, Ndege S, Braitstein P, Wachira J, Kimaiyo S, Mamlin B. Leapfrogging paper-based records using handheld technology: Experience from Western Kenya. Stud Health Technol Inform. 2010;160(Pt 1): 525-9 (PMID: 20841742).
12. * Chang KC, Overhage JM, Hui SL, **Were MC**. Enhancing laboratory report contents to improve outpatient management of test results. JAMIA. 2010 17: 99-103. (PMID: 20064809).
13. * Mohammed-Rajput N, Ribeka W, **Were MC**. Creating and Evaluating a Dynamic Study Randomization and Enrollment Tool within a Robust EHRs. AMIA Annu Symp Proc. 2010 Nov; 517-

21. (PMID: 21347032).
14. Vreeman RC, Nyandiko WM, Braitstein P, **Were MC**, Ayaya SO, Ndege SK, Wiehe SE. Acceptance of HIV testing for children ages 18 months to 13 years identified through voluntary, home-based HIV counseling and testing in western Kenya. *J Acquir Immune Defic Syndr*. 2010;55(2) (PMID: 20714272).
 15. * **Were MC**, Gorbachev S, Cadwallader J, Kesterson J, Li X, Overhage JM, et al. Natural language processing to extract follow-up provider information from hospital discharge summaries. *AMIA Annu Symp Proc*. 2010 Nov; 13: 872-6. (PMID: 21347103).
 16. * **Were MC**, Shen C, Tierney WM, Mamlin JJ, Biondich PG, Li X, Kimaiyo S, Mamlin BW. Evaluation of computer-generated reminders to improve CD4 laboratory monitoring in sub-Saharan Africa: A prospective comparative study. *J Am Med Inform Assoc*. 2011 Mar 1;18(2):150-5 (PMID: 21252053).
 17. * Shen C, Li X, Li L, **Were MC**. Sensitivity analysis for causal inference using inverse probability weighting. *Biom J*. 2011 Sep;53(5):822-37. Epub 2011 Jul 19 (PMID: 21770046).
 18. * **Were MC** and Meslin, EM. Ethics of implementing electronic health records in developing countries: Points to Consider. *AMIA Annu Symp Proc*. 2011:1499-505. Epub 2011 Oct 22 (PMID: 22195214).
 19. * Monda J, Keiper J, **Were MC**. Data Integrity Module for Data Quality Assurance within an e-Health System in Sub-Saharan Africa. *Telemed J E Health*. 2012 Jan-Feb;18(1):5-10. (PMID: 22150637).
 20. * Anokwa Y, Ribeka N, Parikh T, Borriello G, **Were MC**. Design of a Phone-Based Clinical Decision Support System for Resource-Limited Settings Information and Communication Technologies and Development ACM International Conference Proceeding Series 2012:13-24.
 21. * Rajput ZA, Mbugua S, Saleem JJ, Anokwa Y, Hartung C, Mamlin BW, Ndege SK, **Were MC**. The Development and implementation of a medical record system based population surveillance system in Rural Kenya. *J Am Med Inform Assoc*. 2012 Jul-Aug;19(4):655-659. (PMID: 22366295).
 22. * Cadwallader J, Asirwa C, Li X, Kesterson J, Tierney WM, **Were MC**. Using Computerized Provider Order Entry to Enforce Documentation of Tests with Pending Results at Hospital Discharge. *Applied Clinical Informatics*. 2012; 3: 154-163.
 23. Oluoch T, Santas X, Kwaro D, **Were M**, Biondich P, Bailey C, Abu-Hanna A, de Keizer N. The effect of electronic medical record-based clinical decision support on HIV care in resource-constrained settings: A systematic review. *Int J Med Inform*. 2012 Oct; 81(10):83-92. (PMID: 22921485).
 24. * **Were, M**; Nyandiko, W; Huang, K; Slaven, J; Shen, C; Tierney, W; Vreeman, R. Computer-Generated Reminders and Quality of Pediatric HIV Care in a Resource-Limited Setting. *Pediatrics* 2013;131:1–8. (PMID: 23439898).
 25. Blank E, Tuikong N, Misoi L, Kamano J, Hutchinson C, Kimaiyo S, Fustera V, **Were M**, Vedanthan R. Usability of implementing a tablet-based decision support and integrated record-keeping (DESIRE) tool in the nurse management of hypertension in rural Kenya. *Stud Health Technol Inform*. 2013;192:1002. (PMID: 23920776).
 26. Chemwolo B, Caloia D, Wools-Kaloustian K, Sidle J, Spitzer RF, **Were M**, Bell A, Tierney WM. Experience implementing electronic health records in the antenatal clinic of a teaching and referral hospital in Kenya. *Stud Health Technol Inform*. 2013;192:1126. (PMID: 23920900).
 27. Vedanthan R, Kamano JH, Naanyu V, Delong AK, **Were MC**, Finkelstein EA, Menya D, Akwanalo CO, Bloomfield GS, Binanay CA, Velazquez EJ, Hogan JW, Horowitz CR, Inui TS, Kimaiyo S, Fuster V. Optimizing linkage and retention to hypertension care in rural Kenya (LARK hypertension study):

- study protocol for a randomized controlled trial. *Trials*. 2014 Apr 27;15(1):143. (PMID: 24767476).
28. Bloomfield GS, Vedanthan R, Vasudevan L, Kithei A, **Were M** and Velazquez EJ. Mobile Health for Non-Communicable Diseases in Sub-Saharan Africa: A Systematic Review of the Literature and Strategic Framework for Research Journal: *Globalization and Health*. *Globalization and Health* 2014, **10**:49 doi:10.1186/1744-8603-10-49. (PMID: 24927745).
29. * Vedanthan R, Blank E, Tuikong N, Kamano J, Misoi L, Tulienge D, Hutchinson C, Ascheim DD, Kimaiyo K, Fuster V, **Were MC**. Usability and feasibility of a tablet-based Decision-Support and Integrated Record-keeping (DESIRE) tool in the nurse management of hypertension in rural western Kenya. *International Journal of Medical Informatics* 2015; **84**: 207-219. (PMID: 25612791).
30. * **Were MC**, Siika A, Ayuo PO, Atwoli L, Esamai F. Building Comprehensive and Sustainable Health Informatics Institutions in Developing Countries: Moi University Experience. *Stud Health Technol Inform (MedInfo 2015)* (*In press*).
31. * Keny A, Wanyee S, Kwaro D, Mulwa E, **Were MC**. Developing a national-level concept dictionary for EHRs implementations in Kenya. *Stud Health Technol Inform (MedInfo 2015)* (*In press*).
32. * **Were MC**, Kessler J, Shen C, Sidle J, Macharia S, Lizcano J, Siika A, Wools-Kaloustian K, Kurth A. A Time Motion Analysis of Secondary HIV Transmission, Prevention, Counseling and Antiretroviral Adherence Messages in Western Kenya. *JAIDS* 2015 (*In press*).
33. Tierney WM, Sidle JE, Diero LO, Sudoi A, Kiplagat J, Macharia S, Shen C, Yeung A, **Were MC**, Slaven JE and Wools-Kaloustian K. Assessing the Impact of a Primary Care Electronic Medical Record System in Three Kenyan Rural Health Centers. *Journal of American Medical Informatics Association* 2015 (*In press*).

CASE REPORTS, REVIEWS, CHAPTERS AND EDITORIALS

Textbook Chapters

1. **Were, MC**. Urinary Tract Infections. In: Glasheen JJ (ed). *Hospital Medicine Secrets*. Mosby Elsevier, Philadelphia, PA. 2007: 295-299.
2. **Were MC** Thyroid Disorders. In: Williams MV, Flanders SA, Whitcomb W, Cohn S, Michota F, Holman R, Gross R, and Merli GJ, eds. *Comprehensive Hospital Medicine*. Mosby Elsevier, Philadelphia, PA. 2007: 509-515.

INVITED LECTURES & PRESENTATIONS

International

- | | |
|--------------|--|
| 22 Jan, 2015 | eHealth in developing countries. AfyaBora Fellowship program (University of Washington). Nairobi, Kenya. |
| 26 Mar, 2014 | Keynote Address: Towards Coherent mHealth In Africa: Unpacking Strategies To Achieve Broad-Based Adoption. 2nd Annual Mobile Health Africa Congress 2014. AMC International. Nairobi, Kenya. |
| 17 Mar, 2014 | Health Information Technology in public care settings. IBM Research Symposium, Nairobi, Kenya. |
| 28 Feb, 2013 | mHealth for the developing world: AMPATH Kenya. mHealth Competence Center Presentation. Mobile World Congress. Barcelona, Spain. |
| 14 Feb, 2013 | Health Information Technology for Reproductive Health in Developing Countries. 37 th Annual Scientific Conference of Kenya Obstretical and Gynaecological Society (Plenary Presentation). Eldoret, Kenya. |

- 13 Jan, 2013 Resources and approaches for mHealth Research. mHealth Alliance In-Country workshop. Zanzibar, Tanzania.
- 02 Sep, 2011 Computerized Clinical Decision Support. AMPATH, Moi University, Kenya.
- 05 Aug, 2011 eHealth evaluations. The Bellagio eHealth Evaluation Group / WHO Global eHealth Meeting. Bellagio, Italy.
- 12 Sep, 2010 Leapfrogging paper-based records using handheld technology: Experience from Western Kenya. MedInfo, Cape Town, South Africa.
- 24 Mar, 2010 Electronic Health Records – an overview. University of Washington (UNITID HIV Management Program), Nairobi, Kenya.
- 16 Dec, 2009 Implementation plan for electronic medical records – Coptic Hope Center Clinics (Lecture). Nairobi, Kenya.
- 15 Sep, 2009 Computerized Clinical Decision Support Systems. OpenMRS Annual Conference, Cape Town, South Africa.
- 29 May, 2008 AMPATH Medical Record System. Center for Infectious Disease Research Zambia (CIDRZ), Lusaka, Zambia.

National

- Oct 31, 2013 mHealth in context. Wireless Health 2013, Baltimore, MD.
- Jun 12, 2013 Evidence in mHealth (Webinar). Tech4Change, Washington, DC.
- Oct 04, 2012 Evaluating Role of Health Information Technology in Patient Care. Harold Amos Medical Development Scholars Annual Meeting. Las Vegas, NV.
- Jul 25, 2012 Information and Communication Technologies, Social Media and M-Health for Care Treatment and Comprehensive Management of HIV/AIDS (Panel). AIDS 2012, Washington DC.
- Mar 21, 2012 Using health information technology in care transitions. Scottsdale Institute Avoiding Readmissions Through Research (ARC). Webinar.
- Dec 07, 2011 mHealth testbeds – a Provider & Care Organization Perspective. mHealth Summit. Washington, DC.
- Oct 24, 2011 Ethics of implementing Electronic Health Records in developing countries: Points to Consider. American Medical Informatics Association Annual Symposium. Chicago, IL.
- May 05, 2011 Who should be responsible for test results returning after hospital discharge? Society of General Internal Medicine Annual Meeting, Phoenix, AZ.
- Feb 25, 2011 Health Systems Research – Case Studies in East Africa. Massachusetts Institute of Technology (Course #HST 184), Cambridge, MA.
- Nov 14, 2010 Natural language processing to extract follow-up provider information from hospital discharge summaries. American Medical Informatics Association Annual Symposium 2010, Washington, DC.
- Nov 19, 2009 Keys to Success in Global Health Partnership. ASTMH 58th Annual Meeting (Panel Discussion). Washington, DC.
- Nov 16, 2009 Advancing Transitional Care through Informatics Research, Development, and Applications (Panel). Annual Symposium of AMIA, Washington, DC.
- May 27, 2009 On the Move – Mobile Health. Global Health Council's 36th Annual International Conference. (Panel Discussion), Washington, DC.
- May 26, 2009 OpenMRS and the AMPATH Medical Record System. Global Health Council's 36th Annual International Conference (Moderated Discussion), Global Health Council's 36th Annual International Conference, Washington, DC.
- May 26, 2009 Incorporating Technological Advances in Population-Wide HIV Screening (Panel Discussion). Global Health Council's 36th Annual International Conference. Washington, DC.

- Oct 10, 2008 Using computerized Provider Order Entry and Clinical Decision Support to Improve Primary-Care Physicians' Implementation of Consultants. American Medical Informatics Association. Washington, DC.
- Oct 02, 2008 Using an informatics tool to improve implementation of recommendations by consultants. NLM Informatics Training Conference, Washington, DC.
- May 13, 2008 Role of informatics in care coordination. Biomedical and health informatics lecture series. University of Washington, Seattle.

Regional

- Apr 13, 2015 Informatics in Sub-Saharan Africa. Grand Rounds Vanderbilt Institute of Global Health, Vanderbilt University, Nashville, TN.
- Oct 24, 2013 Transforming Health Care in Africa: The Kenyan Story". *Women and Global Development Forum*. The Chicago Council on Global Affairs. Chicago, IL.
- Sep 29, 2011 Clinician-Targeted Mobile Technologies for HIV Care: USAID-AMPATH Experience, Abbott Laboratories, Abbott Park, IL.
- Mar 5, 2010 Tackling HIV-AIDS in Western Kenya. GlobMed Global Health Summit, Evanston, IL.

Local

- Apr 30, 2014 Sustaining a health informatics program in a developing country. Regenstrief Institute Work In Progress, Indianapolis, IN.
- Apr 15, 2013 eHealth in developing countries. Global Perspectives on Health Policy and Health Systems. Indiana University School of Medicine, Department of Public Health. Course #: PBHL P670, Indianapolis, IN.
- Sep 12, 2012 Evaluating a comprehensive PMTCT program. Regenstrief Work In Progress, Indianapolis, IN.
- Apr 19, 2012 Graduate Course - Global Perspectives on Health Policy and Health Systems. Course Number: PBHL P670. IU School of Medicine, Department of Public Health, Indianapolis, IN.
- Oct 31, 2011 Ethics of Implementing Electronic Medical Record in Developing Countries: IU Center for Bioethics (PredictER talk), Indianapolis, IN.
- Apr 12, 2011 Teaching Skills in Research Research Ethics (session co-lead - Informatics, Electronic Health Records, and Privacy in Research - Kenneth Goodman; Martin Were), Indianapolis, IN.
- Oct 29, 2010 Grand rounds: How medical informatics affects your clinical practice. Department of Medicine, Indiana University School of Medicine, Indianapolis, IN.
- April 20, 2009 Teaching Skills in Research; Research Ethics (session lead). Indiana University Center for Bioethics. Indianapolis, IN.

TECHNOLOGICAL AND OTHER SCIENTIFIC INNOVATIONS

Innovation	Significance
<p>mUzima (Mobile application for health): An open source Android-based smartphone application for use by providers in resource-limited settings. Features include generic data collection and retrieval, tele-consultation and media management.</p>	<p>This is one of the few mobile applications that integrate seamlessly with the OpenMRS electronic health system that is being rolled out nationally in several countries.</p>

Innovation	Significance
mUzima Security & Device Management Application: A comprehensive application that enables organizations to comprehensively manage and secure their Android devices.	Security of patient data remains a key issue in developing country settings that are increasingly using mobile health applications. Our application helps provide the needed device management and security features.
Computerized Clinical Decision Support System for OpenMRS: A mobile and OpenMRS-based application to provide alerts and reminders to providers taking care of patients in resource-limited settings.	We have demonstrated through a randomized study that use of this system significantly improves quality of HIV care provided to patients in resource-limited settings (Ref #24).

MENTORING

1. Thomas Mwogi, MB ChB. *Role:* Fogarty Informatics Fellowship Faculty Mentor. *Primary Project:* eLearning Platforms. *Inclusive Dates:* 2014 – Present.
2. Keny Aggrey, MB ChB. *Role:* Fogarty Informatics Fellowship Faculty Mentor. *Primary Project:* Decision support for immunization. *Inclusive Dates:* 2011 – Present.
3. Leonard Njeru, MB ChB. *Role:* Fogarty Informatics Fellowship Faculty Mentor. *Primary Project:* Computerized Decision Support Systems for Chronic Disease Management. *Inclusive Dates:* 2012 – 2014.
4. Judy Wawira, MB ChB. *Role:* Fogarty Informatics Fellowship Faculty Mentor. *Primary Project:* Mobile and computerized decision support for resource-limited settings. *Inclusive Dates:* 2011 – 2013.
5. Jason Cadwallader, MD. *Role:* Residency Mentor, NLM Fellowship Faculty Mentor, Project Advisor. *Primary Project:* Using health information technology to improve management of test results returning after hospital discharge. *Inclusive Dates:* 2008 – 2010.
6. Yaw Anokwa, PhD (University of Washington). *Role:* PhD Advisor and Project Mentor. *Primary Project:* Open Data Kit application for clinical care in developing countries. *Inclusive Dates:* 2011 – 2012.
7. Mustafa Fidahusseini, MD. *Role:* National Library of Medicine Informatics Fellowship Mentor and Fellowship Project Advisor. *Primary Project:* Evaluation of a patient-provider attribution algorithm. *Inclusive Dates:* 2009 – 2012.
8. Jonathan Monda, MB ChB. *Role:* Fogarty Informatics Fellowship Faculty Mentor. *Primary Project:* Approaches to data quality in electronic health records. *Inclusive Dates:* 2010 – 2012.
9. Sergey Gorbachev, MD. *Role:* National Library of Medicine Informatics Fellowship Mentor and Fellowship Project Advisor. *Primary Project:* Using natural language processing to analyze hospital discharge summaries. *Inclusive Dates:* 2009 – 2010.
10. Nareesa Mohammed, MD MPH. *Role:* National Library of Medicine Informatics Fellowship Mentor and Fellowship Project Advisor. *Primary Project:* Research tools to evaluate computerized decision support interventions. *Inclusive Dates:* 09/01/09 – 06/30/2011
11. Samuel Kimani, MB ChB. *Role:* Internal Medicine Residency Advisor. *Inclusive Dates:* 06/2008 – 05/2011.
12. Kevin Chang, MD. *Role:* National Library of Medicine Informatics Fellowship Mentor and Fellowship Project Advisor. *Primary Project:* Enhanced Laboratory Reports. *Inclusive Dates:* 07/01/08 – 06/30/2010.
13. Sheraz Noormahamed, MD. *Role:* Indiana University-Purdue University at Indianapolis, Masters in Informatics Advisor. *Primary Project:* Approaches to computerized decision support for HIV care in resource-limited settings. *Inclusive Dates:* 1/1/09 – 12/31/10.

PERSONAL STATEMENT

Dr. Were is an Associate Professor of Medicine at Indiana University School of Medicine and a Research Scientist at Regenstrief Institute, Inc. He also serves as the Chief Medical Information officer for the AMPATH program in Kenya. AMPATH works in over 70 Ministry of Health clinics and serves a catchment area of over 3 million people in Western Kenya. Dr. Were is the project coordinator and Principal Investigator for the Health Informatics Training and Research in East Africa for Improved Health Care (HI-TRAIN) program. HI-TRAIN is a university-based health informatics program that is implementing Masters and PhD degree training in Health Informatics in Kenya and Uganda.

Dr. Were's primary area of research is in the field of Global Health Informatics. Over the past eight years, he has conducted rigorous evaluations of electronic health record and computerized clinical decision support systems, evaluated mobile health (mHealth) applications, workflow analysis, concept dictionary management, and conducted implementation science research around scaling of health information technology in resource limited settings. He has authored 33 peer-reviewed manuscripts, has been recipient of multiple competitive grants as principal investigator totaling more than \$6 million.

Dr. Were has also been involved in program development and innovation. He is currently actively involved in capacity building in Health Informatics in resource-limited settings through the HI-TRAIN program. He leads the award-winning Computerized Clinical Decision Support and mobile Health Program for the Indiana University-Kenya partnership. His team has developed and implemented innovative solutions in these areas to meet needs in resource-limited settings. He provides leadership in the development of the provider-facing mobile application (mUzima) that has capabilities for data collection, retrieval, biometrics, tele-consultation, media management, among others. He is also involved in work around vocabularies and semantic interoperability, especially at the national level.

Dr. Were received a B.A. degree in Biochemistry from Harvard University and an M.D. degree from Harvard Medical School. He completed an Internal Medicine residency program at the Brigham and Women's Hospital & Harvard Medical School. In 2006, he joined the Regenstrief Institute, Inc. as an NLM-sponsored Medical Informatics fellowship. During this time, he also received a Masters in Clinical Research degree. He became faculty at Indiana University in 2008 as an Assistant Professor of Medicine and received promotion to Associate Professor of Medicine in July 2014. From 2011-2015 he served on the Board of Scientific Counselors at Lister Hill Center of the National Library of Medicine (NLM). He also co-chaired the mHealth Alliance Evidence Working Group from 2012 to 2014, and was a Harold Amos Medical Faculty Program Scholar (RWJF) from 2011 to 2014. In addition to research and program development in Global Health Informatics, Dr. Were continues to serve as a Staff Hospitalist at Eskenazi Hospital, Indiana University.

REFEREES:

1) William M. Tierney, M.D.

President and CEO, Regenstrief Institute, Incorporated
 Chancellor's Professor and Sam Regenstrief Professor of
 Health Services Research
 Associate Dean for Clinical Effectiveness Research
 Indiana University School of Medicine
 410 West 10th Street, Suite 2000
 Indianapolis, IN 46202
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2) Robert M. Einterz, M.D.

Associate Dean for Global Health
 Professor of Clinical Medicine
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