

## Snapshot of the Strength of the Health Information System as a Source of HIV Data

Health information systems (HIS) are important tools in combatting the HIV epidemic, from the individual to the population level. Electronic health records contain individual patient information that helps clinicians provide high-quality care and can improve continuity of care across services and institutions. Laboratory information systems improve the submission of lab tests and the receipt of results. Logistic information systems can help forecast the need for medications and other commodities and reduce stockouts of antiretroviral drugs and other medications. Routine health information systems are used to compile this information for reports from facilities to the national level. Data use at all levels of the health system is necessary to monitor coverage of HIV interventions and progress toward targets. And finally, population-level surveys provide information on changes in behavior and HIV prevalence every few years; these data are needed to assess the impact of HIV programs over time.

## **HIV IN RWANDA**

- Adult HIV prevalence rate: 2.7<sup>1</sup>
- Prevalence rate for women: 3.4<sup>1</sup>
- Prevalence rate for men: 1.9<sup>1</sup>
- Number of adults living with HIV: 220,000<sup>2</sup>
- Number of new HIV infections in 2016: 7,500<sup>2</sup>
- Number of AIDS-related deaths in 2016: 3,300<sup>2</sup>
- People living with HIV who know their status: 87%<sup>2</sup>
- People who know their status and are on antiretroviral therapy (ART): 91%<sup>2</sup>
- People on ART who have achieved viral suppression: N/A<sup>2</sup>
- 1 UNAIDS. (2017). AIDSinfo. http://aidsinfo.unaids.org
- 2 United States President's Emergency Plan for AIDS Relief. (2018). Country Specific Information: Rwanda. Retrieved from <a href="https://www.pepfar.gov/countries/index.htm">https://www.pepfar.gov/countries/index.htm</a>
- 3 World Health Organization. (2018). Global Health Observatory: Rwanda Summary Statistics. Retrieved from <a href="http://apps.who.int/gho/data">http://apps.who.int/gho/data</a>
- 4 United Nations Statistics Division. (2016). 2020 World Population and Housing Census Programme. Retrieved from <a href="https://unstats.un.org/unsd/demographic/sources/census/censusdates.htm">https://unstats.un.org/unsd/demographic/sources/census/censusdates.htm</a>
- 5 United Nations Development Programme (UNDP). (2018) Human Development Indices and Indicators: 2018 Statistical Update. Retrieved from <a href="http://hdr.undp.org/en/2018-update">http://hdr.undp.org/en/2018-update</a>
- 6 International Telecommunications Union. (2017). ICT Development Index 2017. Retrieved from <a href="https://www.itu.int/net4/ITU-D/idi/2017/index.html">https://www.itu.int/net4/ITU-D/idi/2017/index.html</a>



## **Population**

11,918,000+3

Year of last census 2012<sup>4</sup>

Life expectancy at birth

65.3/69.9 years  $(m/f)^{3.5}$ 

**Total expenditure on health** 7.9% GDP<sup>3</sup>

Physician density

0.064 per 10,000<sup>3</sup>

Nurse & midwife density

0.832 per 10,000<sup>3</sup>

**Hospital bed density** 

16 per 10,000<sup>3</sup>

Internet users

20% of the population<sup>6</sup>

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## **HEALTH INFORMATION SYSTEM FACTS**

Indicator name	Status	Global* status	Title and details
Health strategy	yes	72%	Fourth Health Sector Strategic Plan July 2018 – June 2024
Health sector monitoring and evaluation (M&E) plan	no	42%	Monitoring & Evaluation Plan for the Health Sector Strategic Plan (HSSP III) 2014–2018
Health information system (HIS) policy	no	19%	
HIS strategic plan	yes	33%	
Core health indicators	yes	49%	Fourth Health Sector Strategic Plan July 2018 – June 2024; pages 20–30 of the Annexes.
HIS coordinating body	no	26%	
Master health facility list	yes	28%	Health Facility List 2018
Completed Heath Metrics Network assessment	no	56%	
Population census within the past 10 years	yes	49%	2012 Census
Availability of national health surveys	yes	100%	2014–2015 Demographic and Health Survey
Completeness of vital registration (births and deaths)	no	7%	Births and deaths estimated less than 90% complete
Electronic system for routine site-level data	yes	91%	https://www.dhis2.org/inaction
Health statistics office	yes	98%	http://www.statistics.gov.rw
Annual health statistics report	no	9%	Annual Health Statistics Booklet 2016
Health statistics website with latest data available	yes	49%	http://www.moh.gov.rw/index.php?id=188
Data quality assessment aligned with health sector strategy	yes	67%	

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Indicator name	Status	Global* status	Title and details
Performance of Routine Information System Management (PRISM) assessment conducted in any region or district	yes	47%	PRISM Report 2013
Percentage of facilities represented in health management information system reports is available	yes	74%	
Proportion of government offices using data to manage health programs (set and monitor targets) is available	no	40%	
Measles coverage reported to the World Health Organization (WHO)/UNICEF	yes	98%	WHO/UNICEF estimates of immunization coverage 2017 revision; page 8.
Data on the number of institutional deliveries available by district and published within a year	no	28%	Annual Health Statistics Booklet 2016, page 35
Policies, laws, and regulations mandating public and private health facilities to report indicators determined by the national HIS	no	33%	
Standards or guidelines for routine health information system data collection, reporting, and analysis	yes	51%	
Procedures to verify the data quality	yes	47%	Data Quality Assessment Procedures Manual 2016
Routine health information system forms allow for gender disaggregation	yes	60%	
At least one national health account completed in the past 5 years	no	35%	National Health Accounts Rwanda 2006 with HIV/AIDS, Malaria, Reproductive Health Subaccounts
Database of healthcare workers by district and main cadres updated in the past 2 years	yes	26%	
Annual data on tracer medicines and commodities in public and private health facilities available	yes	21%	
eHealth strategy	yes	58%	The National Health Strategic Plan 2009-2013
Completeness of disease surveillance reporting is available	yes	28%	

<sup>\* &</sup>quot;Global status" is the percentage of the 43 countries tracked by the <u>HIS Strengthening Resource Center</u> that have a positive result (yes/no) for the indicator. A positive result (yes) indicates that the indicator is available and current; a negative result (no) indicates that the indicator is unknown, not available, or not current.

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According to the 2010 and 2014/2015 Rwanda Demographic and Health Survey reports, the proportion of reproductive age women who were tested for HIV in the past 12 months and received the results of the test really did not change from survey to survey: 38.6 percent in 2010 and 38.4 percent in 2015/2016.<sup>7,8</sup> The proportion of men 15–59 years of age actually decreased slightly, from 37.7 percent in 2010 to 36.7 percent in 2015/2016, respectively.<sup>7,8</sup> However, the proportion of pregnant women attending antenatal care who received counseling on HIV, an HIV test, and the result was quite high: 92.2 percent in 2015/2016.<sup>8</sup>

According to the Rwanda Health Sector Annual Report 2016–17, 78 percent of people living with HIV were on ART. The percentage of adults and children who were on ART 12 months after initiation of treatment was estimated at 92.6 percent. Viral suppression of those on ART for 12 months was 86.4 percent.<sup>9</sup>

An updated eHealth policy is under development and is expected to include an HIS strategy as a component. The last publication regarding eHealth in Rwanda—the National E-Health Strategic Plan 2009–2013—outlined the creation of an eHealth system that is integrated and interoperable, in order to span and support the continuum of care across many settings and locations. The plan recognized that information technology training needs to realize this vision would be substantial and that collaboration and support from development partners would be necessary, to avoid duplication of efforts and to create a streamlined system. The plan also called for the creation of one unique electronic identification number for each citizen as one of the first steps to build such a system.<sup>10</sup>







<sup>7</sup> National Institute of Statistics of Rwanda (NISR), Ministry of Health–Rwanda (MOH), & ICF International. (2012). Rwanda Demographic and Health Survey 2010. Calverton, MD, USA: NISR/Rwanda, MOH/Rwanda, and ICF International. Retrieved from <a href="http://dhsprogram.com/pubs/pdf/FR259/FR259.pdf">http://dhsprogram.com/pubs/pdf/FR259/FR259.pdf</a>

<sup>8</sup> National Institute of Statistics of Rwanda, Ministry of Finance and Economic Planning, Ministry of Health, & ICF International. (2016). Rwanda Demographic and Health Survey 2014–15. Kigali, Rwanda: National Institute of Statistics of Rwanda, Ministry of Finance and Economic Planning/Rwanda, Ministry of Health/Rwanda, and ICF International. Retrieved from <a href="http://dhsprogram.com/pubs/pdf/FR316/FR316.pdf">http://dhsprogram.com/pubs/pdf/FR316/FR316.pdf</a>

<sup>9</sup> Republic of Rwanda Ministry of Health. (n.d.) Health Sector Annual Report: July 2015–June 2016. Retrieved from <a href="https://medicine.yale.edu/intmed/globalhealthscholars/sites/RW%20Health%20Sector%20Annual%20Report%202015-2016">https://medicine.yale.edu/intmed/globalhealthscholars/sites/RW%20Health%20Sector%20Annual%20Report%202015-2016</a> 333359 284 5061 v1.pdf

<sup>10</sup> Ministry of Health. (2009). The National e-Health Strategic Plan 2009–2013. Retrieved from <a href="https://www.isfteh.org/files/media/rwanda\_national\_ehealth\_strategy\_2009-2013.pdf">https://www.isfteh.org/files/media/rwanda\_national\_ehealth\_strategy\_2009-2013.pdf</a>