South Africa

Iwuji Collins, AHRI, Brighton and Sussex Medical School, University of Sussex, Brightin, UK

AHRI.Optimised electronic patient records to improve clinical monitoring of HIV-positive patients in rural South Africa (MONART Trial) 27 March 2020 to 30 June 2024

Study Documentation

October 18, 2024

Metadata Production

Metadata Producer(s)	Africa Health Research Institute (AHRI)
Identification	DDI.AHRI.MONART.MainStudy.2024.v1

Table of Contents

AHRI.Optimised electronic patient records to improve clinical monitoring of HIV-positive patients in rural South Africa (MONART Trial) 27 March 2020 to 30 June 2024

Overview

Identification	AHRI.MONART.MainStudy.2024.v1
Version	v1.0.0

Abstract

In our formative research, analysis of antiretroviral treatment (ART) data manually entered in the Three Interlinked Electronic Registers (TIER.Net) showed poor viral load monitoring (VLM) and inadequate management of virological failure in HIV-positive patients on ART in rural KwaZulu-Natal, South Africa. ART interruption was high, with nearly half of patients falling out of care within 5 years of starting ART. Non-Nucleoside reverse transcriptase pre-treatment drug resistance exceeds 10% in the setting; the threshold required to trigger in a change in first-line ART using the public health approach. These factors are contributory to increasing HIV drug resistance (HIVDR) in this setting. HIVDR is associated with increased morbidity and mortality with the risk of transmitting drug-resistant HIV to sexual partners. We presented these findings to healthcare providers, policy makers and community representatives with brainstorming of health system challenges and potential interventions. This study aims to complement these findings by investigating the clinical and process impediments in VLM within the health system and to develop a quality improvement package (QIP) to address the gaps. The stakeholders recommended such QIP would utilise the viral load (VL) champion model, a named healthcare provider who would be the focal point for ensuring proper administrative management of viral load tests and results through identification of those who need tests and triaging of results for action. This QIP will be supported by technological enhancement of the routine clinic-based TIER.Net software which will allow daily automatic import of results from the National Health Service Laboratory (NHLS) to TIER.Net and development of a dashboard system to support VLM. In addition, results of contact tracing will be recorded and followed up pro-actively if not initially successful.

We will evaluate the effectiveness of these interventions compared to current care for improving VLM and virological suppression using an innovative effectiveness-implementation hybrid cluster-randomised design in 10 clinics. A within-trial health economics analysis will be undertaken using recommended methods to examine the cost-effectiveness of the intervention compared to standard care. Finally, we will use a mixed-methods approach to undertake a process evaluation assessing acceptability, fidelity, adaptation and contexts in the implementation of the interventions.

Design: Cluster randomised trial of 10 primary health care clinics (5 x 2) located in the Africa Health Research Institute (AHRI) demographic surveillance area, uMkhanyakude district, South Africa.

Population and Intervention: Quality improvement package (QIP) delivered to healthcare staff including augmentation of an existing electronic ART database (TIER.Net)
Aim: We aim to demonstrate that a staff-centred QIP and technological augmentation of TIER.Net would result in optimal VLM of patients on ART, prompt clinical management of virological failure and an overall improvement in virological suppression

Objectives
1. To identify health system specific gaps in VLM.
2. To develop and train healthcare provider on a QIP using the VL champion model
3. To augment TIER.Net with a dashboard system that includes the latest laboratory results imported from the NHLS.
4. To evaluate the effectiveness of the QIP.
5. To evaluate the cost and cost effectiveness of the intervention compared to standard care
6. To undertake a process evaluation assessing acceptability, fidelity, adaptation and contexts in the implementation of the intervention.
7. To write up a best practice document, describing what is required and operationally, recommendations on how to successfully implement the QIP for a national scale-up if proven successful

Major variables: As documented in study questionnaire

Kind of Data	Clinical Data
Unit of Analysis	Individuals within a cluster defined by clinics

Scope & Coverage

Keywords	HIV, viral load monitoring, virological failure, drug resistance, viral load champion
Topics	HIV
Time Period(s)	2023-2024
Countries	South Africa

Geographic Coverage
14 clinics in Hlabisa subdistrict

Universe
People living with HIV on antiretroviral therapy

Producers & Sponsors

Primary Investigator(s)	Iwuji Collins, AHRI, Brighton and Sussex Medical School, University of Sussex, Brightin, UK
Other Producer(s)	Africa Health Research Institute (AHRI)
Funding Agency/ies	Royal Academy of Engineering (RAEng) , Funder
Other Acknowledgment(s)	Khumalo Sfundo , Data Manager , Africa Health Research Institute Mazibuko Lusanda , Statistician , Africa Health Research Institute

Sampling

Sampling Procedure
Cluster randomised sampling

Data Collection

Data Collection Dates	start 2023-02-01 end 2024-06-30

Accessibility

Access Conditions
Access to the data requires accurate completion of the online data access application form accessible on the AHRI Data repository(<https://data.ahri.org/>). Data users are required to abide by the data use conditions stipulated on the application for access to the data. Failure to do so may result in their data access privileges being revoked by the Data Custodian. In order to recognise the effort and intellectual contributions of AHRI investigators in producing and curating the data, users of AHRI data must acknowledge the source of the data and abide by the terms and conditions under which the data is accessed and must cite the dataset in publication using the citation provided as part of this documentation. All analytical datasets published on the AHRI Data Repository are assigned digital object identifier (DOIs) and the DOIs can be found on the Data Repository under Study Description tab - Access policy. AHRI data users are required to always cite the dataset using the relevant DOI.

Citation Requirements

Iwuji, C. (2024). AHRI.Optimised electronic patient records to improve clinical monitoring of HIV-positive patients in rural South Africa (MONART Trial) 27 March 2020 to 30 June 2024 [Data set]. Africa Health Research Institute. DOI:https://doi.org/10.23664/AHRI.MONART.MAINSTUDY.2024

Files Description

Dataset contains 1 file(s)

AHRI.MONART.MainStudy.2024.v1	
# Cases	4200
# Variable(s)	69

Variables List

Dataset contains 69 variable(s)

File AHRI.MONART.MainStudy.2024.v1

#	Name	Label	Type	Format	Valid	Invalid	Question
1	pid	PID	discrete	character-8	4200	0	-
2	event	redcap_event	discrete	numeric-9.0	4200	0	-
3	sex	Sex of the participant	discrete	numeric-9.0	4200	0	-
4	facility	Clinic	discrete	numeric-11.0	4200	0	-
5	pd_calc_..	Calculated age	continuous	numeric-8.0	4200	0	-
6	personal ..	Complete?	discrete	numeric-10.0	4200	0	-
7	dq_artin ..	Date of ART initiation:	discrete	character-11	4200	-	-
8	dq_endch ..	Date of Last attendance prior intervention:	discrete	character-11	4200	-	-
9	dq_start ..	Start date of chart review (calculated automatically bysubtracting 15 months fro	discrete	character-11	4200	-	-
10	dq_vl_av ..	Are viral load results available?	discrete	numeric-8.0	4198	2	-
11	dq_outco ..	Is there an outcome?	discrete	numeric-8.0	604	3596	-
12	dq_outcome	What is an outcome?	discrete	numeric-14.0	105	4095	-
13	dq_outco ..	Date of [dq_outcome]	continuous	numeric-11.0	105	4095	-
14	dq_art_c ..	ART treatment code in Tier	discrete	numeric-67.0	4187	13	-
15	dq_art_o ..	Other ART treatment in Tier	discrete	character-20	68	0	-
16	dq_datac ..	Date of data Collection:	continuous	numeric-11.0	4188	12	-
17	dq_vl1date	Date of VL1 test	discrete	character-11	3370	-	-
18	dq_vl1re ..	What is the result of VL1?	continuous	numeric-12.0	3369	831	-
19	dq_vl_ot ..	Are there other VL documented in Tier	discrete	numeric-8.0	3365	835	-
20	dq_vl2date	Date of VL2 test:	discrete	character-11	881	-	-
21	dq_vl2re ..	What is the result of VL2?	continuous	numeric-12.0	880	3320	-
22	dq_vl_ot ..	Are there other VL documented in Chart	discrete	numeric-8.0	876	3324	-
23	dq_vl3date	Date of VL3:	discrete	character-11	142	-	-
24	dq_vl3re ..	What is the result of VL3?	continuous	numeric-12.0	141	4059	-
25	dq_vl_ot ..	Are there other VL documented in Chart	discrete	numeric-8.0	141	4059	-
26	dq_vl4date	Date of VL4:	discrete	character-11	22	-	-
27	dq_vl4re ..	What is the result of VL4?	continuous	numeric-12.0	22	4178	-
28	dq_vl_ot ..	Are there other VL documented in Chart	discrete	numeric-8.0	22	4178	-
29	dq_vl5date	Date of VL5:	discrete	character-11	6	-	-
30	dq_vl5re ..	What is the result of VL5?	continuous	numeric-12.0	6	4194	-
31	data_ext ..	Complete?	discrete	numeric-10.0	4200	0	-

File AHRI.MONART.MainStudy.2024.v1

#	Name	Label	Type	Format	Valid	Invalid	Question
32	dqc_star ..	Start date of chart review (calculated automatically bysubtracting 15 months fro	discrete	character-11	4200	-	-
33	dqc_miss ..	Is the clinical chart missing?	discrete	numeric-8.0	4199	1	-
34	dqc_outc ..	Is there an outcome?	discrete	numeric-8.0	2047	2153	-
35	dqc_outc ..	What is an outcome?	discrete	numeric-14.0	18	4182	-
36	dq_outco ..	Date of [dqc_outcome_2]	continuous	numeric-11.0	18	4182	-
37	dqc_art_ ..	ART treatment code in Chart	discrete	numeric-67.0	3606	594	-
38	dqc_art_ ..	Other ART treatment in Chart	discrete	character-31	37	0	-
39	dqc_data ..	Date of data Collection:	continuous	numeric-11.0	4199	1	-
40	dqc_wast ..	Is there an evidence of VL1 blood test request documented on chart?	discrete	numeric-8.0	3602	598	-
41	dqc_vl1d ..	Date of VL1 test	discrete	character-11	3020	-	-
42	dqc_vl1r ..	Is VL1 result written in the chart?	discrete	numeric-8.0	3598	602	-
43	dqc_vl1r ..	What is the result of VL1?	continuous	numeric-12.0	2564	1636	-
44	dqc_vl1l ..	Lab copy of VL1 filed in chart:	discrete	numeric-8.0	3611	589	-
45	dq_vl_ot ..	Are there other VL documented in Chart	discrete	numeric-8.0	3603	597	-
46	dqc_wast ..	Is there an evidence of VL2 blood test request documented on chart?	discrete	numeric-8.0	649	3551	-
47	dqc_vl2d ..	Date of VL2 test:	discrete	character-11	649	-	-
48	dqc_vl2r ..	Is VL2 result written in the chart?	discrete	numeric-8.0	648	3552	-
49	dqc_vl2r ..	What is the result of VL2?	continuous	numeric-12.0	585	3615	-
50	dqc_vl2l ..	Lab copy of VL2 filed in chart:	discrete	numeric-8.0	652	3548	-
51	dq_vl_ot ..	Are there other VL documented in Chart	discrete	numeric-8.0	652	3548	-
52	dqc_wast ..	Is there an evidence of VL3 blood test request documented on chart?	discrete	numeric-8.0	80	4120	-
53	dqc_vl3d ..	Date of VL3:	discrete	character-11	79	-	-
54	dqc_vl3r ..	Is VL3 result written in the chart?	discrete	numeric-8.0	79	4121	-
55	dqc_vl3r ..	What is the result of VL3?	continuous	numeric-12.0	75	4125	-
56	dqc_vl3l ..	Lab copy of VL3 filed in chart:	discrete	numeric-8.0	79	4121	-
57	dq_vl_ot ..	Are there other VL documented in Chart	discrete	numeric-8.0	78	4122	-
58	dqc_wast ..	Is there an evidence of VL4 blood test request documented on chart?	discrete	numeric-8.0	9	4191	-

File AHRI.MONART.MainStudy.2024.v1

#	Name	Label	Type	Format	Valid	Invalid	Question
59	dqc_vl4d ..	Date of VL4:	discrete	character-11	9	-	-
60	dqc_vl4r ..	Is VL4 result written in the chart?	discrete	numeric-8.0	8	4192	-
61	dq_vl4re ..	What is the result of VL4?	continuous	numeric-12.0	9	4191	-
62	dqc_vl4l ..	Lab copy of VL4 filed in chart:	discrete	numeric-8.0	9	4191	-
63	dq_vl_ot ..	Are there other VL documented in Chart	discrete	numeric-8.0	9	4191	-
64	dqc_wast ..	Is there an evidence of VL5 blood test request documented on chart?	discrete	numeric-8.0	2	4198	-
65	dqc_vl5d ..	Date of VL5:	discrete	character-11	2	-	-
66	dqc_vl5r ..	Is VL5 result written in the chart?	discrete	numeric-8.0	2	4198	-
67	dqc_vl5r ..	What is the result of VL5?	continuous	numeric-12.0	2	4198	-
68	dqc_vl5l ..	Lab copy of VL5 filed in chart:	discrete	numeric-8.0	2	4198	-
69	data_ext ..	Complete?	discrete	numeric-10.0	4200	0	-

Variables Description

Dataset contains 69 variable(s)

File : AHRI.MONART.MainStudy.2024.v1

pid: PID

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-] [Invalid=0 /-]
Notes	subjected to a carryforward operation

event: redcap_event

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
1	Baseline	2100	50.0%
2	Follow_Up	2100	50.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

sex: Sex of the participant

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
1	Male	1080	25.7%
2	Female	3120	74.3%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

facility: Clinic

Information	[Type= discrete] [Format=numeric] [Range= 1-14] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
1	Ezwenelisha	300	7.1%
2	Gunjaneni	300	7.1%
3	Hluhluwe	300	7.1%
4	KwaMsane	300	7.1%
5	Macabuzela	300	7.1%
6	Machibini	300	7.1%
7	Madwaleni	300	7.1%
8	Mpembeni	300	7.1%
9	Mpukunyoni	300	7.1%
10	Mtubatuba	300	7.1%
11	Nkundusi	300	7.1%
12	Ntondweni	300	7.1%
13	Sipho Zungu	300	7.1%
14	Somkhele	300	7.1%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

pd_calc_age: Calculated age

Information	[Type= continuous] [Format=numeric] [Range= 17-90] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-] [Invalid=0 /-] [Mean=43.561 /-] [StdDev=12.373 /-]
Notes	subjected to a carryforward operation

File : AHRI.MONART.MainStudy.2024.v1

personal_information_complete: Complete?

Information	[Type= discrete] [Format=numeric] [Range= 0-2] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-] [Invalid=0 /-]
Notes	subjected to a carryforward operation

Value	Label	Cases	Percentage
0	Incomplete	0	
1	Unverified	0	
2	Complete	4200	100.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_artinitiationdate: Date of ART initiation:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-]

dq_endchartdate: Date of Last attendance prior intervention:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-]

dq_start_datechart_rev: Start date of chart review (calculated automatically bysubtracting 15 months fro

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-]

dq_vl_available: Are viral load results available?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=4198 /-] [Invalid=2 /-]

Value	Label	Cases	Percentage
1	Yes	3369	80.3%
2	No	829	19.7%
Sysmiss		2	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_outcome_yn: Is there an outcome?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=604 /-] [Invalid=3596 /-]

Value	Label	Cases	Percentage
1	Yes	105	17.4%
2	No	499	82.6%
Sysmiss		3596	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_outcome: What is an outcome?

Information	[Type= discrete] [Format=numeric] [Range= 1-3] [Missing=*]
Statistics [NW/ W]	[Valid=105 /-] [Invalid=4095 /-]

Value	Label	Cases	Percentage
1	Transfer Out	67	63.8%
2	Lost To Follow	28	26.7%
3	Death	10	9.5%

File : AHRI.MONART.MainStudy.2024.v1

dq_outcome: What is an outcome?

Value	Label	Cases	Percentage
Sysmiss		4095	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_outcome_date: Date of [dq_outcome]

Information	[Type= continuous] [Format=numeric] [Range= 1892950659000-2032110652000] [Missing=*]
Statistics [NW/ W]	[Valid=105 /-] [Invalid=4095 /-] [Mean=2012602004723.81 /-] [StdDev=15561078550.491 /-]

dq_art_code_tier: ART treatment code in Tier

Information	[Type= discrete] [Format=numeric] [Range= 1-95] [Missing=*]
Statistics [NW/ W]	[Valid=4187 /-] [Invalid=13 /-]

Value	Label	Cases	Percentage
1	TDF (Tenofovir)+3TC (Lamuvidine)+DTG (Dolutegravir) = 1T30	3950	94.3%
2	TDF(Tenofovir)+3TC (Lamuvidine)+EFV (Efavirenz) = 1T3E	6	0.1%
3	TDF (Tenofovir)+FTC (Emtricitabine)+EFV (Efavirenz) = 1TFE	116	2.8%
4	AZT (Zidovudine)+3TC (Lamuvidine)+EFV (Efavirenz) = 1Z3E	11	0.3%
5	ABC (Abacavir)+3TC (Lamuvidine)+EFV (Efavirenz) = 1A3E	15	0.4%
6	AZT (Zidovudine)+3TC (Lamuvidine)+LPV/r (Lopinavir/ Ritonavir)= 1Z3L	18	0.4%
7	ABC (Abacavir)+3TC (Lamuvidine)+LPV/r (Lopinavir/Ritonavir)= 1Z3L	3	0.1%
95	Other	68	1.6%
Sysmiss		13	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_art_other: Other ART treatment in Tier

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=68 /-] [Invalid=0 /-]

dq_datacollectiondate: Date of data Collection:

Information	[Type= continuous] [Format=numeric] [Range= 2004428833000-2034753388000] [Missing=*]
Statistics [NW/ W]	[Valid=4188 /-] [Invalid=12 /-] [Mean=2020261688579.75 /-] [StdDev=10621686290.56 /-]

dq_vl1date: Date of VL1 test

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=3370 /-]

dq_vl1result: What is the result of VL1?

Information	[Type= continuous] [Format=numeric] [Range= 18-3460000] [Missing=*]
Statistics [NW/ W]	[Valid=3369 /-] [Invalid=831 /-] [Mean=3801.638 /-] [StdDev=77935.282 /-]

dq_vl_other_1: Are there other VL documented in Tier

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=3365 /-] [Invalid=835 /-]

Value	Label	Cases	Percentage
1	Yes	881	26.2%
2	No	2484	73.8%
Sysmiss		835	

File : AHRI.MONART.MainStudy.2024.v1

dq_vl_other_1: Are there other VL documented in Tier

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_vl2date: Date of VL2 test:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=881 /-]

dq_vl2results: What is the result of VL2?

Information	[Type= continuous] [Format=numeric] [Range= 19-3770000] [Missing=*]
Statistics [NW/ W]	[Valid=880 /-] [Invalid=3320 /-] [Mean=7931.638 /-] [StdDev=130492.253 /-]

dq_vl_other_2: Are there other VL documented in Chart

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=876 /-] [Invalid=3324 /-]

Value	Label	Cases	Percentage
1	Yes	142	16.2%
2	No	734	83.8%
Sysmiss		3324	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_vl3date: Date of VL3:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=142 /-]

dq_vl3results: What is the result of VL3?

Information	[Type= continuous] [Format=numeric] [Range= 19-591000] [Missing=*]
Statistics [NW/ W]	[Valid=141 /-] [Invalid=4059 /-] [Mean=16425.489 /-] [StdDev=77691.475 /-]

dq_vl_other_3: Are there other VL documented in Chart

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=141 /-] [Invalid=4059 /-]

Value	Label	Cases	Percentage
1	Yes	22	15.6%
2	No	119	84.4%
Sysmiss		4059	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_vl4date: Date of VL4:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=22 /-]

dq_vl4results: What is the result of VL4?

Information	[Type= continuous] [Format=numeric] [Range= 19-375000] [Missing=*]
Statistics [NW/ W]	[Valid=22 /-] [Invalid=4178 /-] [Mean=37101.545 /-] [StdDev=108449.834 /-]

dq_vl_other_4: Are there other VL documented in Chart

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=22 /-] [Invalid=4178 /-]

File : AHRI.MONART.MainStudy.2024.v1

dq_vl_other_4: Are there other VL documented in Chart

Value	Label	Cases	Percentage
1	Yes	6	27.3%
2	No	16	72.7%
Sysmiss		4178	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_vl5date: Date of VL5:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=6 /-]

dq_vl5results: What is the result of VL5?

Information	[Type= continuous] [Format=numeric] [Range= 19-310000] [Missing=*]
Statistics [NW/ W]	[Valid=6 /-] [Invalid=4194 /-] [Mean=77365 /-] [StdDev=119844.858 /-]

data_extraction_ques_v_0: Complete?

Information	[Type= discrete] [Format=numeric] [Range= 0-2] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0	Incomplete	0	
1	Unverified	0	
2	Complete	4200	100.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_start_datechart_rev: Start date of chart review (calculated automatically bysubtracting 15 months fro

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-]

dqc_missingfile: Is the clinical chart missing?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=4199 /-] [Invalid=1 /-]

Value	Label	Cases	Percentage
1	Yes	586	14.0%
2	No	3613	86.0%
Sysmiss		1	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_outcome_yn: Is there an outcome?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=2047 /-] [Invalid=2153 /-]

Value	Label	Cases	Percentage
1	Yes	18	0.9%
2	No	2029	99.1%
Sysmiss		2153	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_outcome_2: What is an outcome?

Information	[Type= discrete] [Format=numeric] [Range= 1-3] [Missing=*]

File : AHRI.MONART.MainStudy.2024.v1

dqc_outcome_2: What is an outcome?

Statistics [NW/ W]	[Valid=18 /-] [Invalid=4182 /-]

Value	Label	Cases	Percentage
1	Transfer Out	13	72.2%
2	Lost To Follow	2	11.1%
3	Death	3	16.7%
Sysmiss		4182	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_outcome_date_2: Date of [dqc_outcome_2]

Information	[Type= continuous] [Format=numeric] [Range= 1915182507000-2031135807000] [Missing=*]
Statistics [NW/ W]	[Valid=18 /-] [Invalid=4182 /-] [Mean=2012695498000 /-] [StdDev=25564590323.194 /-]

dqc_art_code_chart: ART treatment code in Chart

Information	[Type= discrete] [Format=numeric] [Range= 1-95] [Missing=*]
Statistics [NW/ W]	[Valid=3606 /-] [Invalid=594 /-]

Value	Label	Cases	Percentage
1	TDF (Tenofovir)+3TC (Lamuvidine)+DTG (Dolutegravir) = 1T30	3459	95.9%
2	TDF(Tenofovir)+3TC (Lamuvidine)+EFV (Efavirenz) = 1T3E	46	1.3%
3	TDF (Tenofovir)+FTC (Emtricitabine)+EFV (Efavirenz) = 1TFE	42	1.2%
4	AZT (Zidovudine)+3TC (Lamuvidine)+EFV (Efavirenz) = 1Z3E	5	0.1%
5	ABC (Abacavir)+3TC (Lamuvidine)+EFV (Efavirenz) = 1A3E	4	0.1%
6	AZT (Zidovudine)+3TC (Lamuvidine)+LPV/r (Lopinavir/ Ritonavir)= 1Z3L	11	0.3%
7	ABC (Abacavir)+3TC (Lamuvidine)+LPV/r (Lopinavir/Ritonavir)= 1Z3L	2	0.1%
95	Other	37	1.0%
Sysmiss		594	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_art_other: Other ART treatment in Chart

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=37 /-] [Invalid=0 /-]

dqc_datacollectiondate: Date of data Collection:

Information	[Type= continuous] [Format=numeric] [Range= 2004078883000-2036735092000] [Missing=*]
Statistics [NW/ W]	[Valid=4199 /-] [Invalid=1 /-] [Mean=2018615642793.05 /-] [StdDev=13406266531.443 /-]

dqc_wastherevl1measure: Is there an evidence of VL1 blood test request documented on chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=3602 /-] [Invalid=598 /-]

Value	Label	Cases	Percentage
1	Yes	2610	72.5%
2	No	992	27.5%
Sysmiss		598	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

File : AHRI.MONART.MainStudy.2024.v1

dqc_vl1date: Date of VL1 test

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=3020 /-]

dqc_vl1resultavailable: Is VL1 result written in the chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=3598 /-] [Invalid=602 /-]

Value	Label	Cases	Percentage
1	Yes	574	16.0%
2	No	3024	84.0%
Sysmiss		602	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_vl1result: What is the result of VL1?

Information	[Type= continuous] [Format=numeric] [Range= 0-1890000] [Missing=*]
Statistics [NW/ W]	[Valid=2564 /-] [Invalid=1636 /-] [Mean=1621.837 /-] [StdDev=39696.126 /-]

dqc_vl1labcopy: Lab copy of VL1 filed in chart:

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=3611 /-] [Invalid=589 /-]

Value	Label	Cases	Percentage
1	Yes	2433	67.4%
2	No	1178	32.6%
Sysmiss		589	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_vl_other_1_v2: Are there other VL documented in Chart

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=3603 /-] [Invalid=597 /-]

Value	Label	Cases	Percentage
1	Yes	650	18.0%
2	No	2953	82.0%
Sysmiss		597	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_wastherevl2measure: Is there an evidence of VL2 blood test request documented on chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=649 /-] [Invalid=3551 /-]

Value	Label	Cases	Percentage
1	Yes	571	88.0%
2	No	78	12.0%
Sysmiss		3551	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_vl2date: Date of VL2 test:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=649 /-]

File : AHRI.MONART.MainStudy.2024.v1

dqc_vl2resultavailable: Is VL2 result written in the chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=648 /-] [Invalid=3552 /-]

Value	Label	Cases	Percentage
1	Yes	81	12.5%
2	No	567	87.5%
Sysmiss		3552	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_vl2results: What is the result of VL2?

Information	[Type= continuous] [Format=numeric] [Range= 0-1620000] [Missing=*]
Statistics [NW/ W]	[Valid=585 /-] [Invalid=3615 /-] [Mean=4726.588 /-] [StdDev=68600.742 /-]

dqc_vl2labcopy: Lab copy of VL2 filed in chart:

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=652 /-] [Invalid=3548 /-]

Value	Label	Cases	Percentage
1	Yes	571	87.6%
2	No	81	12.4%
Sysmiss		3548	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_vl_other_2_v2: Are there other VL documented in Chart

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=652 /-] [Invalid=3548 /-]

Value	Label	Cases	Percentage
1	Yes	79	12.1%
2	No	573	87.9%
Sysmiss		3548	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_wastherevl3measure: Is there an evidence of VL3 blood test request documented on chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=80 /-] [Invalid=4120 /-]

Value	Label	Cases	Percentage
1	Yes	68	85.0%
2	No	12	15.0%
Sysmiss		4120	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_vl3date: Date of VL3:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=79 /-]

dqc_vl3resultavailable: Is VL3 result written in the chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=79 /-] [Invalid=4121 /-]

Value	Label	Cases	Percentage
1	Yes	12	15.2%
2	No	67	84.8%
Sysmiss		4121	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_vl3results: What is the result of VL3?

Information	[Type= continuous] [Format=numeric] [Range= 0-375000] [Missing=*]
Statistics [NW/ W]	[Valid=75 /-] [Invalid=4125 /-] [Mean=9286.987 /-] [StdDev=46287.875 /-]

dqc_vl3labcopy: Lab copy of VL3 filed in chart:

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=79 /-] [Invalid=4121 /-]

Value	Label	Cases	Percentage
1	Yes	76	96.2%
2	No	3	3.8%
Sysmiss		4121	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_vl_other_3_v2: Are there other VL documented in Chart

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=78 /-] [Invalid=4122 /-]

Value	Label	Cases	Percentage
1	Yes	9	11.5%

dq_vl_other_3_v2: Are there other VL documented in Chart

Value	Label	Cases	Percentage
2	No	69	88.5%
Sysmiss		4122	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_wastherevl4measure: Is there an evidence of VL4 blood test request documented on chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=9 /-] [Invalid=4191 /-]

Value	Label	Cases	Percentage
1	Yes	8	88.9%
2	No	1	11.1%
Sysmiss		4191	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_vl4date: Date of VL4:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=9 /-]

dqc_vl4resultavailable: Is VL4 result written in the chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=8 /-] [Invalid=4192 /-]

Value	Label	Cases	Percentage
1	Yes	3	37.5%
2	No	5	62.5%
Sysmiss		4192	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_vl4results_v2: What is the result of VL4?

Information	[Type= continuous] [Format=numeric] [Range= 19-310000] [Missing=*]
Statistics [NW/ W]	[Valid=9 /-] [Invalid=4191 /-] [Mean=39821.556 /-] [StdDev=101874.508 /-]

dqc_vl4labcopy: Lab copy of VL4 filed in chart:

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=9 /-] [Invalid=4191 /-]

Value	Label	Cases	Percentage
1	Yes	8	88.9%
2	No	1	11.1%
Sysmiss		4191	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dq_vl_other_4_v2: Are there other VL documented in Chart

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=9 /-] [Invalid=4191 /-]

Value	Label	Cases	Percentage
1	Yes	2	22.2%
2	No	7	77.8%
Sysmiss		4191	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_wastherevl5measure: Is there an evidence of VL5 blood test request documented on chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=2 /-] [Invalid=4198 /-]

Value	Label	Cases	Percentage
1	Yes	2	100.0%
2	No	0	
Sysmiss		4198	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_vl5date: Date of VL5:

Information	[Type= discrete] [Format=character] [Missing=*]
Statistics [NW/ W]	[Valid=2 /-]

dqc_vl5resultavailable: Is VL5 result written in the chart?

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=2 /-] [Invalid=4198 /-]

Value	Label	Cases	Percentage
1	Yes	0	
2	No	2	100.0%
Sysmiss		4198	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

dqc_vl5results: What is the result of VL5?

Information	[Type= continuous] [Format=numeric] [Range= 141-385000] [Missing=*]
Statistics [NW/ W]	[Valid=2 /-] [Invalid=4198 /-] [Mean=192570.5 /-] [StdDev=272136.409 /-]

dqc_vl5labcopy: Lab copy of VL5 filed in chart:

Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=2 /-] [Invalid=4198 /-]

Value	Label	Cases	Percentage
1	Yes	2	100.0%
2	No	0	
Sysmiss		4198	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

data_extraction_ques_v_1: Complete?

Information	[Type= discrete] [Format=numeric] [Range= 0-2] [Missing=*]
Statistics [NW/ W]	[Valid=4200 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0	Incomplete	0	
1	Unverified	0	
2	Complete	4200	100.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.