

South Africa - Sesikhona! (we are here):
Use of smartphone-based GPS
technology to measure ultra-high
resolution mobility patterns of young
adults in rural KwaZulu Natal

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Report generated on: June 11, 2026

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Identification

SURVEY ID NUMBER

AHRI.Sesikhona.Phase3.Enrolment

TITLE

Sesikhona! (we are here): Use of smartphone-based GPS technology to measure ultra-high resolution mobility patterns of young adults in rural KwaZulu Natal

COUNTRY

Name	Country code
South Africa	ZA

ABSTRACT

This is a first of its kind study using smartphone-based GPS technology to record ultra-high resolution mobility patterns of approximately 800 young adults (comprising the Sesikhona! Cohort) aged 20-30 years in rural KwaZulu Natal.

The Sesikhona! study aims to:

- i) Determine typologies of movement in the age-group 20-30 in a HIV hyper-endemic population.
- ii) Quantify movements in and out of known high HIV risk locations.

The long-term aim of the study is to design a location-intelligent smartphone intervention using real-time, precision messaging targeting those at high risk of HIV acquisition, transmission, and treatment failure.

This study involves young adults aged 20-30 years who participated in the 2019 AHRI HIV survey and are resident members in Sothorn PIP area. The study collects longitudinal mobility data using a customized version of the Avicenna research platform, which uses Android location services to record the device's location at 30-minute intervals (initially every 5 minutes). Data are uploaded to a secure study server every hour. If location data were missing for 48-72 hours, participants were contacted by phone or visited at home) for troubleshooting. The study was conducted in 3 phases:

Phase I (Jun 2021 - Aug 2022): participants who consented to join the study were provided a smartphone or could opt to use their own device (smartphone), provided it met the technical requirements of the study protocol. In October 2021, an AHRI Connector app was introduced, enabling data upload via a secure VPN without requiring an data bundle on the device. Participants were followed for 6 months and completed monthly surveys assessing their experience, attitudes towards the study and protocol adherence.

Phase II (Jul 2022 - May 2023): all participants used their personal smartphones. To enhance study engagement, a gamified feature 'Wheel of Fortune' was introduced in October 2022, allowing participants to play daily for a chance to win prizes (data bundles, airtime and shopping vouchers). As in phase I, participants were followed for 6 months and completed the monthly surveys.

Phase III (Nov 2023 - Jun 2025): participants from phases I and II were re-consented and followed for an additional 12-18 months. During this phase, they completed a series of surveys covering sexual behaviour, mental health, mobility and travel, mHealth readiness, and adherence to the study protocol.

Demographic data and consent were collected using REDCap. All mobility data and survey responses were collected via the Avicenna Research Platform app.

KIND OF DATA

Survey data

UNIT OF ANALYSIS

Unique space-time records

Version

VERSION DESCRIPTION

v1.0.0

Scope

TOPICS

Topic	Vocabulary	URI
GPS technology, smartphone-based GPS, human mobility, young adults, HIV, mobile health, digital technology	Africa Health Research Institute	www.ahri.org

KEYWORDS

Keyword	Vocabulary	URI
Human mobility, HIV, GPS technology, digital technology, sexual behaviour, mental health, mobile health	Africa Health Research Institute	www.ahri.org

Coverage

GEOGRAPHIC COVERAGE

Movement patterns of Sesikhona! Participants anywhere in South Africa

UNIVERSE

A random sample of adults aged 20-30 years old who were resident in Southern PIPSA, participated in the 2019 HIV surveillance and consented to participate in the study

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
Nelisiwe Mtshali	AHRI
Nompumelelo Mkwanazi	AHRI
Prof. Frank Tanser(Principal Investigator)	AHRI
Prof Adrian Dobra	University of Washington
Prof Till Barnighausen	AHRI

PRODUCERS

Name	Abbreviation
Africa Health Research Institute	AHRI

FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
National Institute of Health	NIH	Funder
German Science Foundation	DFG	Funder
Academy of Medical Sciences Newton Fund	NAF	Funder

Sampling

SAMPLING PROCEDURE

Participants were randomly selected from the 2019 AHRI HIV surveillance program if they were aged 20-30 years old and

South Africa - Sesikhona! (we are here): Use of smartphone-based GPS technology to measure ultra-high resolution mobility patterns of young adults in rural KwaZulu Natal had participated in the HIV survey in 2019 and were resident members in the southern PIP.

Data collection

DATES OF DATA COLLECTION

Start	End
2023-11-01	2025-06-30

Data Processing

DATA EDITING

Raw uncleaned space-time data records obtained from Sesikhona! participants via the Avicenna app

Survey responses from Sesikhona participants via the Avicenna app

Access policy

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

Mtshali, N., Mkwanazi, N., Tanser, F., Dobra, A., & Barnighausen, T. (2026). Sesikhona! (we are here): Use of smartphone-based GPS technology to measure ultra-high resolution mobility patterns of young adults in rural KwaZulu Natal [Dataset]. Africa Health Research Institute.

DOI: <https://doi.org/10.23664/AHRI.SESIKHONA.PHASE3.ENROLMENT>

Metadata production

DDI DOCUMENT ID

AHRI.Sesikhona.Phase3.Enrolment

PRODUCERS

Name	Abbreviation
Africa Health Research Institute	AHRI

Data Dictionary

Data file	Cases	Variables
AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0	205	82

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Cases: 205

Variables: 82

Variables

ID	Name	Label	Question
V127	llntID	Participant ID	
V128	pi_sex	Sex	
V129	pi_dob	Date of Birth	
V130	pi_age	Current Age	
V131	userid1_ethica	Ethica User ID	
V132	pi_dod	Date of death	
V133	prev_enrolled	Participated	
V134	pc_attmp1_phonecnt	Conducting Telephone Contact: Attempt - One	
V135	pc_attmp1_phonecntdatetime	Call Attempt Date and Time	
V136	pc_attmp1_phonecntoutcome	Outcome of Contact Attempt	
V137	pc_attmp1_resident	Do you still live in the AHRI surveillance area?	
V138	attempt1_part	We need to know if you are still interested in the study?	
V139	pc_phone_type1	What type of phone are you currently using?	
V140	pc_phone_brand	Brand or model of the phone	
V141	pc_enough_space1	Does the phone have space? Probe without leading (space to install the study apps	
V142	pc_attmp1_willing_discuss	Is the participant eligible and interested in the study?	
V143	pc_attmp1_scedulevst_date	Please schedule suitable date to enroll participant	
V144	pc_attmp1_arrange_callback	If NO, find out if there is a better time to call?	
V145	pc_attmp1_callback_date	Arranged Call Back Date	
V146	pc_attmp1_callback_sameornot	Can call using the same phone number?	
V147	pc_attmp2_phonecntdatetime	Call Attempt Date and Time	
V148	pc_attmp2_phonecntoutcome	Outcome of Contact Attempt	
V149	pc_attmp2_resident	Do you still live in the AHRI surveillance area?	
V150	take_part_2	We need to know if you are still interested in the study?	
V151	pc_phone_type2	What type of phone are you currently using?	
V152	pc_phone_brand2	Brand or model of the phone	
V153	pc_enough_space2	Does the phone have space? Probe without leading (space to install the study apps	
V154	pc_attmp2_willing_discuss	Is the participant eligible and interested in the study?	
V155	pc_attmp2_scedulevst_date	Please schedule suitable date to enroll participant	
V156	pc_attmp2_arrange_callback	If NO, find out if there is a better time to call?	
V157	pc_attmp2_callback_date	Arranged Call Back Date	
V158	pc_attmp2_callback_sameornot	Can call using same phone number?	
V159	pc_attmp3_phonecnt	Conducting Telephone Contact: Attempt - Three	
V160	pc_attmp3_phonecntdatetime	Call Attempt Date and Time	
V161	pc_attmp3_phonecntoutcome	Outcome of Contact Attempt	
V162	pc_attmp3_resident	Do you still live in the AHRI surveillance area?	
V163	take_part3	We need to know if you are still interested in the study?	

ID	Name	Label	Question
V164	pc_phone_type3	What type of phone are you currently using?	
V165	pc_phone_brand3	Brand or model of the phone	
V166	pc_enough_space3	Does the phone have space? Probe without leading (space to install the study apps	
V167	pc_attmp3_willing_discuss	Is the participant eligible and interested in the study?	
V168	pc_attmp3_scedulevst_date	Please schedule suitable date to enroll participant	
V169	hms_contact_attmp1	Conducting Contact Attempt - One?	
V170	hms_datetime_attmp1	Attempt Date and Time	
V171	hms_was_contacted_attmp1	Was the participant contacted?	
V172	hms_wasnt_contacted_attmp1	Why not?	
V173	hms_verify_attmp1	Please confirm that you are speaking to the correct Participant	
V174	hms_recruitment_attmp1	Have you introduced the study to the participant over the phone?	
V175	hms_attmp1_interested	Is the participant interested in the study?	
V176	hms_attmp1_notcontacted	Why not?	
V177	hms_resch_vsdate_attmp1	Reschedule next visit date	
V178	hms_contact_attmp2	Conducting Contact Attempt - Two?	
V179	hms_datetime_attmp2	Attempt Date and Time	
V180	hms_was_contacted_attmp2	Was the participant contacted?	
V181	hms_wasnt_contacted_attmp2	Why not?	
V182	hms_verify_attmp2	Please confirm that you are speaking to the correct Participant	
V183	hms_recruitment_attmp2	Have you introduced the study to the participant over the phone?	
V184	hms_attmp2_interested	Is the participant interested in the study?	
V185	hms_attmp2_notcontacted	Why not?	
V186	hms_resch_vsdate_attmp2	Reschedule next visit date	
V187	hms_contact_attmp3	Conducting Contact Attempt - Three?	
V188	hms_datetime_attmp3	Was the participant contacted?	
V189	hms_was_contacted_attmp3	Was the participant contacted?	
V190	hms_wasnt_contacted_attmp3	Why not?	
V191	hms_verify_attmp3	Please confirm that you are speaking to the correct Participant	
V192	hms_recruitment_attmp3	Have you introduced the study to the participant over the phone?	
V193	hms_attmp3_interested	Is the participant interested in the study?	
V194	hms_attmp3_notcontacted	Why not?	
V195	par_pathways	Participant pathways	
V196	ic_storage_percent	Free storage space percentage	
V197	ic_network_coverage	Network Coverage	
V198	app_ram_size	RAM Size	
V199	cal_contact_attmp1	Conducting Contact Attempt - One?	
V200	cal_datetime_attmp1	Attempt Date and Time	
V201	cal_was_contacted_attmp1	Was the participant contacted?	
V202	cal_wasnt_contacted_attmp1	Why not?	
V203	cal_verify_attmp1	Please confirm that you are speaking to the correct Participant	
V204	cal_recruitment_attmp1	Have you introduced the study to the participant over the phone?	
V205	cal_attmp1_interested	Is the participant interested in the study?	
V206	cal_attmp1_notcontacted	Why not?	
V207	cal_pathways	Participant pathways	
V208	termination_date	Date of Termination	

Total: 82

IINTID: Participant ID

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 205 Invalid: 0 Minimum: 1294 Maximum: 231046 Mean: 79371.546 Standard deviation: 52327.1
Type: Continuous Decimal: 0 Width: 12 Range: 1294 - 231046 Format: Numeric

PI_SEX: Sex

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 205 Invalid: 0
Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Male	73	35.6%
2	Female	132	64.4%

PI_DOB: Date of Birth

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 205 Minimum: 1990-07-10 Maximum: 2021-10-21
Type: Discrete Width: 11 Range: - Format: character

PI_AGE: Current Age

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 205 Invalid: 0 Minimum: 2 Maximum: 33 Mean: 27.098 Standard deviation: 4.255
Type: Continuous Decimal: 0 Width: 12 Range: 2 - 33 Format: Numeric

USERID1_ETHICA: Ethica User ID

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 205 Invalid: 0 Minimum: 39636 Maximum: 63072 Mean: 48507.893 Standard deviation: 6383.619
Type: Continuous Decimal: 0 Width: 12 Range: 39636 - 63072 Format: Numeric

PI_DOD: Date of death

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 1 Minimum: 2023-10-07 Maximum: 2023-10-07
Type: Discrete Width: 11 Range: - Format: character

PREV_ENROLLED: Participated

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 203 Invalid: 2
Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Phase 1	160	78.8%
2	Phase 2	43	21.2%
Sysmiss		2	

PC_ATTMP1_PHONECNT: Conducting Telephone Contact: Attempt - One

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 200 Invalid: 5
Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	200	100%
Sysmiss		5	

PC_ATTMP1_PHONECNTDATETIME: Call Attempt Date and Time

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 200 Minimum: 2023-11-13 Maximum: 2024-05-18
Type: Discrete Width: 11 Range: - Format: character

PC_ATTMP1_PHONECNTOUTCOME: Outcome of Contact Attempt

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 200 Invalid: 5
Type: Discrete Decimal: 0 Width: 12 Range: 1 - 4 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Call was answered	96	48%
2	Call gone to Voicemail	54	27%
3	Phone remains unanswered	33	16.5%
4	Number does not exist	17	8.5%
Sysmiss		5	

PC_ATTMP1_RESIDENT: Do you still live in the AHRI surveillance area?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 92 Invalid: 113
Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	18	19.6%
1	Yes	74	80.4%
Sysmiss		113	

ATTEMPT1_PART: We need to know if you are still interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 95 Invalid: 110

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Yes	89	93.7%
2	No	6	6.3%
Sysmiss		110	

PC_PHONE_TYPE1: What type of phone are you currently using?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 85 Invalid: 120

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Smartphone	77	90.6%
2	Non-smartphone	8	9.4%
Sysmiss		120	

PC_PHONE_BRAND: Brand or model of the phone

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 77 Invalid: 128

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Samsung	32	41.6%
2	Huawei	9	11.7%
3	Nokia	5	6.5%

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4	Xiaomi	3	3.9%
98	Other	28	36.4%
Sysmiss		128	

PC_ENOUGH_SPACE1: Does the phone have space? Probe without leading (space to install the study apps)

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 66 Invalid: 139

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	2	3%
1	Yes	64	97%
Sysmiss		139	

PC_ATTMP1_WILLING_DISCUSS: Is the participant eligible and interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 64 Invalid: 141

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	64	100%
Sysmiss		141	

PC_ATTMP1_SCEDULEVST_DATE: Please schedule suitable date to enroll participant

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 63 Minimum: 2023-11-13 Maximum: 2024-05-31

Type: Discrete Width: 11 Range: - Format: character

PC_ATTMP1_ARRANGE_CALLBACK: If NO, find out if there is a better time to call?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 3 Invalid: 202

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	2	66.7%
1	Yes	1	33.3%
Sysmiss		202	

PC_ATTMP1_CALLBACK_DATE: Arranged Call Back Date

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 1 Minimum: 2024-01-18 Maximum: 2024-01-18

Type: Discrete Width: 11 Range: - Format: character

PC_ATTMP1_CALLBACK_SAMEORNOT: Can call using the same phone number?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 1 Invalid: 204

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	1	100%
Sysmiss		204	

PC_ATTMP2_PHONECNTDATETIME: Call Attempt Date and Time

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 81 Minimum: 2023-11-16 Maximum: 2024-06-05
 Type: Discrete Width: 11 Range: - Format: character

PC_ATTMP2_PHONECNTOUTCOME: Outcome of Contact Attempt

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 81 Invalid: 124
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 4 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Call was answered	28	34.6%
2	Call gone to Voicemail	40	49.4%
3	Phone remains unanswered	11	13.6%
4	Number does not exist	2	2.5%
Sysmiss		124	

PC_ATTMP2_RESIDENT: Do you still live in the AHRI surveillance area?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 25 Invalid: 180
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	6	24%
1	Yes	19	76%
Sysmiss		180	

TAKE_PART_2: We need to know if you are still interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 27 Invalid: 178
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Yes	24	88.9%
2	No	3	11.1%
Sysmiss		178	

PC_PHONE_TYPE2: What type of phone are you currently using?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 22 Invalid: 183
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Smartphone	20	90.9%
2	Non-smartphone	2	9.1%
Sysmiss		183	

PC_PHONE_BRAND2: Brand or model of the phone

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 19 Invalid: 186
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Samsung	7	36.8%

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2	Huawei	1	5.3%
3	Nokia	0	0%
4	Xiaomi	2	10.5%
98	Other	9	47.4%
Sysmiss		186	

PC_ENOUGH_SPACE2: Does the phone have space? Probe without leading (space to install the study apps

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 18 Invalid: 187

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	18	100%
Sysmiss		187	

PC_ATTMP2_WILLING_DISCUSS: Is the participant eligible and interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 18 Invalid: 187

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	18	100%
Sysmiss		187	

PC_ATTMP2_SCEDULEVST_DATE: Please schedule suitable date to enroll participant

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 17 Minimum: 2023-11-16 Maximum: 2024-05-04
Type: Discrete Width: 11 Range: - Format: character

PC_ATTMP2_ARRANGE_CALLBACK: If NO, find out if there is a better time to call?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 1 Invalid: 204
Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	1	100%
Sysmiss		204	

PC_ATTMP2_CALLBACK_DATE: Arranged Call Back Date

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 1 Minimum: 2024-04-27 Maximum: 2024-04-27
Type: Discrete Width: 11 Range: - Format: character

PC_ATTMP2_CALLBACK_SAMEORNOT: Can call using same phone number?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 1 Invalid: 204
Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	1	100%
Sysmiss		204	

PC_ATTMP3_PHONECNT: Conducting Telephone Contact: Attempt - Three

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 52 Invalid: 153

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	6	11.5%
1	Yes	46	88.5%
Sysmiss		153	

PC_ATTMP3_PHONECNTDATETIME: Call Attempt Date and Time

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 46 Minimum: 2023-11-29 Maximum: 2024-06-05

Type: Discrete Width: 11 Range: - Format: character

PC_ATTMP3_PHONECNTOUTCOME: Outcome of Contact Attempt

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 46 Invalid: 159

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 4 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Call was answered	9	19.6%
2	Call gone to Voicemail	31	67.4%
3	Phone remains unanswered	6	13%
4	Number does not exist	0	0%
Sysmiss		159	

PC_ATTMP3_RESIDENT: Do you still live in the AHRI surveillance area?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 9 Invalid: 196
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	2	22.2%
1	Yes	7	77.8%
Sysmiss		196	

TAKE_PART3: We need to know if you are still interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 9 Invalid: 196
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Yes	8	88.9%
2	No	1	11.1%
Sysmiss		196	

PC_PHONE_TYPE3: What type of phone are you currently using?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 8 Invalid: 197
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Smartphone	7	87.5%

South Africa - Sesikhona! (we are here): Use of smartphone-based GPS technology to measure ultra-high resolution mobility patterns of young adults in rural KwaZulu Natal

2	Non-smartphone	1	12.5%
Sysmiss		197	

PC_PHONE_BRAND3: Brand or model of the phone

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 7 Invalid: 198

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Samsung	2	28.6%
2	Huawei	1	14.3%
3	Nokia	0	0%
4	Xiaomi	0	0%
98	Other	4	57.1%
Sysmiss		198	

PC_ENOUGH_SPACE3: Does the phone have space? Probe without leading (space to install the study apps)

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 6 Invalid: 199

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	6	100%
Sysmiss		199	

PC_ATTMP3_WILLING_DISCUSS: Is the participant eligible and interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 6 Invalid: 199

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	6	100%
Sysmiss		199	

PC_ATTMP3_SCEDULEVST_DATE: Please schedule suitable date to enroll participant

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 6 Minimum: 2023-11-30 Maximum: 2024-06-05

Type: Discrete Width: 11 Range: - Format: character

HMS_CONTACT_ATTMP1: Conducting Contact Attempt - One?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 134 Invalid: 71

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	134	100%
Sysmiss		71	

HMS_DATETIME_ATTMP1: Attempt Date and Time

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 134 Minimum: 2023-11-13 Maximum: 2024-10-24

Type: Discrete Width: 11 Range: - Format: character

HMS_WAS_CONTACTED_ATTMP1: Was the participant contacted?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 134 Invalid: 71

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	18	13.4%
1	Yes	116	86.6%
Sysmiss		71	

HMS_WASNT_CONTACTED_ATTMP1: Why not?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 18 Invalid: 187

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	Participant not available	8	44.4%
1	Outmigrated	7	38.9%
2	Dead	1	5.6%
98	Other	2	11.1%
Sysmiss		187	

HMS_VERIFY_ATTMP1: Please confirm that you are speaking to the correct Participant

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 116 Invalid: 89

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	116	100%
Sysmiss		89	

HMS_RECRUITMENT_ATTMP1: Have you introduced the study to the participant over the phone?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 116 Invalid: 89

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	23	19.8%
1	Yes	93	80.2%
Sysmiss		89	

HMS_ATTMP1_INTERESTED: Is the participant interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 116 Invalid: 89

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	7	6%
1	Yes	109	94%
Sysmiss		89	

HMS_ATTMP1_NOTCONTACTED: Why not?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 7 Invalid: 198

Type: Discrete Decimal: 0 Width: 12 Range: 4 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
4	Refused	4	57.1%
98	Other	3	42.9%
Sysmiss		198	

HMS_RESCH_VSDATE_ATTMP1: Reschedule next visit date

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 8 Minimum: 2023-11-22 Maximum: 2024-06-18

Type: Discrete Width: 11 Range: - Format: character

HMS_CONTACT_ATTMP2: Conducting Contact Attempt - Two?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 10 Invalid: 195

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	3	30%
1	Yes	7	70%
Sysmiss		195	

HMS_DATETIME_ATTMP2: Attempt Date and Time

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 7 Minimum: 2023-11-22 Maximum: 2024-06-19
 Type: Discrete Width: 11 Range: - Format: character

HMS_WAS_CONTACTED_ATTMP2: Was the participant contacted?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 8 Invalid: 197
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	5	62.5%
1	Yes	3	37.5%
Sysmiss		197	

HMS_WASNT_CONTACTED_ATTMP2: Why not?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 5 Invalid: 200
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	Participant not available	5	100%
1	Outmigrated	0	0%
2	Dead	0	0%
98	Other	0	0%
Sysmiss		200	

HMS_VERIFY_ATTMP2: Please confirm that you are speaking to the correct Participant

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 3 Invalid: 202

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	3	100%
Sysmiss		202	

HMS_RECRUITMENT_ATTMP2: Have you introduced the study to the participant over the phone?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 3 Invalid: 202

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	3	100%
Sysmiss		202	

HMS_ATTMP2_INTERESTED: Is the participant interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 3 Invalid: 202

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	1	33.3%
1	Yes	2	66.7%

Sysmiss		202	
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HMS_ATTMP2_NOTCONTACTED: Why not?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 1 Invalid: 204
 Type: Discrete Decimal: 0 Width: 12 Range: 4 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
4	Refused	0	0%
98	Other	1	100%
Sysmiss		204	

HMS_RESCH_VSDATE_ATTMP2: Reschedule next visit date

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 5 Minimum: 2024-02-28 Maximum: 2024-07-03
 Type: Discrete Width: 11 Range: - Format: character

HMS_CONTACT_ATTMP3: Conducting Contact Attempt - Three?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 6 Invalid: 199
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	6	100%
Sysmiss		199	

HMS_DATETIME_ATTMP3: Was the participant contacted?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 6 Minimum: 2024-02-28 Maximum: 2024-07-04
 Type: Discrete Width: 11 Range: - Format: character

HMS_WAS_CONTACTED_ATTMP3: Was the participant contacted?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 6 Invalid: 199
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	4	66.7%
1	Yes	2	33.3%
Sysmiss		199	

HMS_WASNT_CONTACTED_ATTMP3: Why not?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 4 Invalid: 201
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	Participant not available	4	100%
1	Outmigrated	0	0%
2	Dead	0	0%
98	Other	0	0%
Sysmiss		201	

HMS_VERIFY_ATTMP3: Please confirm that you are speaking to the correct Participant

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 2 Invalid: 203
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	2	100%
Sysmiss		203	

HMS_RECRUITMENT_ATTMP3: Have you introduced the study to the participant over the phone?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 2 Invalid: 203
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	1	50%
1	Yes	1	50%
Sysmiss		203	

HMS_ATTMP3_INTERESTED: Is the participant interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 2 Invalid: 203
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
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South Africa - Sesikhona! (we are here): Use of smartphone-based GPS technology to measure ultra-high resolution mobility patterns of young adults in rural KwaZulu Natal

0	No	0	0%
1	Yes	2	100%
Sysmiss		203	

HMS_ATTMP3_NOTCONTACTED: Why not?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 0 Invalid: 205
 Type: Discrete Decimal: 0 Width: 12 Range: 4 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
4	Refused
98	Other
Sysmiss	

PAR_PATHWAYS: Participant pathways

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 136 Invalid: 69
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	New Participant	1	0.7%
1	Participant from phase 1	106	77.9%
2	Participant from phase 2	29	21.3%
Sysmiss		69	

IC_STORAGE_PERCENT: Free storage space percentage

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 102 Invalid: 103 Minimum: 2 Maximum: 84 Mean: 24.765 Standard deviation: 19.601

Type: Continuous Decimal: 0 Width: 12 Range: 2 - 84 Format: Numeric

IC_NETWORK_COVERAGE: Network Coverage

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 101 Invalid: 104

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 3 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Strong	74	73.3%
2	Fair	23	22.8%
3	Weak	4	4%
Sysmiss		104	

APP_RAM_SIZE: RAM Size

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 102 Invalid: 103

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 3 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Less than 1GB	4	3.9%
2	Between 1 and 2 GB	68	66.7%
3	More than 2GB	30	29.4%
Sysmiss		103	

CAL_CONTACT_ATTMP1: Conducting Contact Attempt - One?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 15 Invalid: 190

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	1	6.7%
1	Yes	14	93.3%
Sysmiss		190	

CAL_DATETIME_ATTMP1: Attempt Date and Time

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 13 Minimum: 2024-05-30 Maximum: 2024-06-15
 Type: Discrete Width: 11 Range: - Format: character

CAL_WAS_CONTACTED_ATTMP1: Was the participant contacted?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 13 Invalid: 192
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	13	100%
Sysmiss		192	

CAL_WASNT_CONTACTED_ATTMP1: Why not?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 0 Invalid: 205
 Type: Discrete Decimal: 0 Width: 12 Range: 0 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
0	Participant not available
1	Outmigrated
2	Dead
98	Other
Sysmiss	

CAL_VERIFY_ATTMP1: Please confirm that you are speaking to the correct Participant

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 13 Invalid: 192

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	0	0%
1	Yes	13	100%
Sysmiss		192	

CAL_RECRUITMENT_ATTMP1: Have you introduced the study to the participant over the phone?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 15 Invalid: 190

Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	2	13.3%
1	Yes	13	86.7%
Sysmiss		190	

CAL_ATTMP1_INTERESTED: Is the participant interested in the study?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 13 Invalid: 192
Type: Discrete Decimal: 0 Width: 12 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	3	23.1%
1	Yes	10	76.9%
Sysmiss		192	

CAL_ATTMP1_NOTCONTACTED: Why not?

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 3 Invalid: 202
Type: Discrete Decimal: 0 Width: 12 Range: 4 - 98 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
4	Refused	0	0%
98	Other	3	100%
Sysmiss		202	

CAL_PATHWAYS: Participant pathways

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 13 Invalid: 192
Type: Discrete Decimal: 0 Width: 12 Range: 1 - 1 Format: Numeric

TERMINATION_DATE: Date of Termination

Data file: AHRI.Sesikhona.Phase3.Enrolment.2025.v1.0

Overview

Valid: 14 Minimum: 2024-04-17 Maximum: 2025-05-30
Type: Discrete Width: 11 Range: - Format: character

Download related resources

Technical documents

DDI:Sesikhona Phase3 Enrolment

Title	DDI:Sesikhona Phase3 Enrolment
Author(s)	Nompumelelo Mkwanazi
Date	2026-06-11
Country	South Africa
Language	English
Publisher(s)	Nompumelelo Mkwanazi
Filename	Sesikhona Phase3 Enrolment.pdf
