

Zimbabwe Population-based HIV Impact Assessment 2020

ZIMPHIA 2020 CODEBOOK



FLOW DIAGRAMS FOR ANALYTIC VARIABLES



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Zimbabwe Population-based HIV Impact Assessment 2020

ZIMPHIA 2020

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Flow diagrams for analytic variables

This section contains flow diagrams for analytic variables provided in the ZIMPHIA 2020 datasets. These diagrams are designed to facilitate use of analytic variables by illustrating which source variables are incorporated into each analytic variable and how participants are categorized based on data from these variables. See the flow diagram key on page SA3-1 for a visual guide to these diagrams.

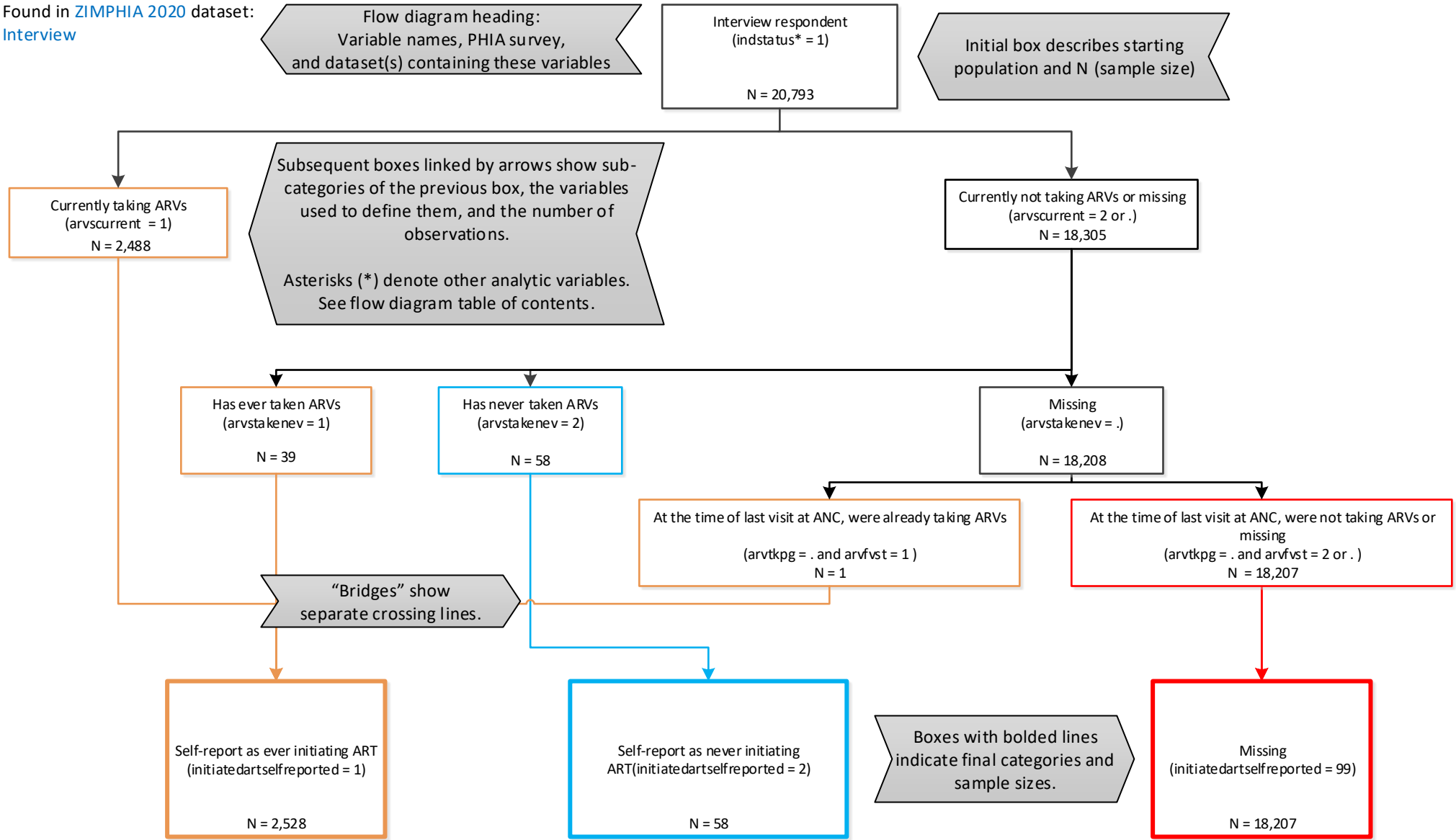
List of flow diagrams

Variable name (example)	Description	Page
	<i>Flow diagram example key (based on initiatedartselfreported)</i>	SA3-1
hhstatus/indstatus/bt_status	Indicator of household, interview, and blood test eligibility and response status	SA3-2
hivstatusfinal/vls	Final HIV-1 and viral load status, for survey analysis	SA3-4
cd4cat	CD4 category	SA3-6
knownhivstatus	Summary of self-reported HIV test results received	SA3-8
awareselfreported	Indicator of whether individual self-reported as aware of their HIV seropositive status	SA3-10
aware	Indicator of whether individual is aware of their HIV seropositive status, combining self-report and ARV testing	SA3-12
artselfreported	Indicator of whether individual self-reported as on ART	SA3-14
art	Indicator of whether individual is on ART, combining self-report and ARV testing	SA3-16
awareartselfreported	Indicator combining individual self-reporting of previous diagnosis and ART status	SA3-18
awareart	Indicator combining previously diagnosed and ART status, using self-report and ARV testing	SA3-20
arvstatus	Indicator of whether individual has detectable ARVs according to PHIA blood test	SA3-22
artinitiated12months	Indicator of whether individual initiated ART in past 12 months, among those ever reported to be on ART	SA3-24
tri90	Flag for inclusion in 90-90-90 analysis, combining self-reported information and lab ARV data	SA3-26
tri90aware	Indicator of whether individual is aware of their HIV seropositive status, for 90-90-90 analysis, combining self-reported information and lab ARV data	SA3-28
tri90art	Indicator of whether individual is on ART, for 90-90-90 analysis, combining self-reported information and lab ARV data	SA3-30
tri90vls	Indicator of whether individual has suppressed viral load, for 90-90-90 analysis, combining self-reported information and lab ARV data	SA3-32
tri90sr	Flag for inclusion in 90-90-90 analysis using only self-reported awareness and ART data	SA3-34
tri90sraware	Indicator of whether individual self-reported aware of their HIV seropositive status, for 90-90-90 analysis using only self-reported awareness and ART data	SA3-36
tri90sart	Indicator of whether individual self-reported on ART, for 90-90-90 analysis using only self-reported awareness and ART data	SA3-38

tri90srvls	Indicator of whether individual has suppressed viral load, for 90-90-90 analysis using only self-reported awareness and ART data	SA3-40
tri90vl	Flag for inclusion in 90-90-90 analysis using self-reported awareness and a viral load threshold of 200 copies/mL	SA3-42
tri90vlaware	Indicator of whether individual self-reported aware of their HIV seropositive status, for 90-90-90 analysis using self-reported awareness and a viral load threshold of 200 copies/mL	SA3-44
tri90vlart	Indicator of whether individual self-reported on ART, for 90-90-90 analysis using self-reported awareness and a viral load threshold of 200 copies/mL	SA3-46
tri90vlvls	Indicator of whether individual has suppressed viral load, for 90-90-90 analysis using self-reported awareness and a viral load threshold of 200 copies/mL	SA3-48
tested12months	Indicator of whether individual was last tested for HIV during the last 12 months	SA3-50
uniontype	Marital/live-in partner union type	SA3-52
education	Highest level of school ever attended	SA3-54
pregnancystatus	Current pregnancy status	SA3-56
testedpregawaredetail	Indicator of HIV testing during pregnancy and HIV test outcome	SA3-58
delivered12months	Indicator of whether mother has given birth during the past 12 months	SA3-60
delivered3years	Indicator of whether mother has given birth during the past 3 years	SA3-62
anclastchild	Receipt of antenatal care during last pregnancy, among mothers who delivered in past 3 years	SA3-64
arvspregnancydetail	Self-reported ARV treatment status of mothers before/during pregnancy and labor	SA3-66
hivstatuslastpregnancy	Self-reported HIV status of mothers during last pregnancy	SA3-68
lastbornhivstatus	HIV status of last born child, reported by mother/guardian	SA3-70
lastborntestedbirthdetail	Timing of last born child's first HIV test, reported by mother/guardian	SA3-72
breastfedlastchild	Breastfeeding status for last born child	SA3-74
sexever	Indicator for whether individual has ever had sex	SA3-76
sex12months	Indicator for whether individual had sexual intercourse in past 12 months	SA3-78
condomlastsex12months	Indicator of whether individual used a condom at last sexual encounter in past 12 months	SA3-80
allpartspouselivein12mo	Indicator of whether all partners in the past 12 months were spouses or live-in partners	SA3-82
condomlastnonmarital12mo	Indicator of whether individual used a condom at last sexual intercourse with their last non-marital non-cohabitating partner in past 12 months	SA3-84
recentlagvl/recentlagvlarv	Indicators for recent HIV infection	SA3-86
evertested	Indicator of whether individual has ever been tested for HIV	SA3-88
initiatedartselfreported	Individual's self-report of whether they ever initiated ART	SA3-90
arvinterralt	Indicator of having an interruption to individual ARV treatment due to living away from home in the past 12 months	SA3-92
arvswitchalt	Indicator of individual having switched ARV regimen	SA3-94
arvlocalt	Usual location of pickup of ART, for individuals self-reported on ART	SA3-96
mcdetail	Male circumcision category	SA3-98

Variable: **initiatedartselfreported**

Found in **ZIMPHIA 2020** dataset:
Interview

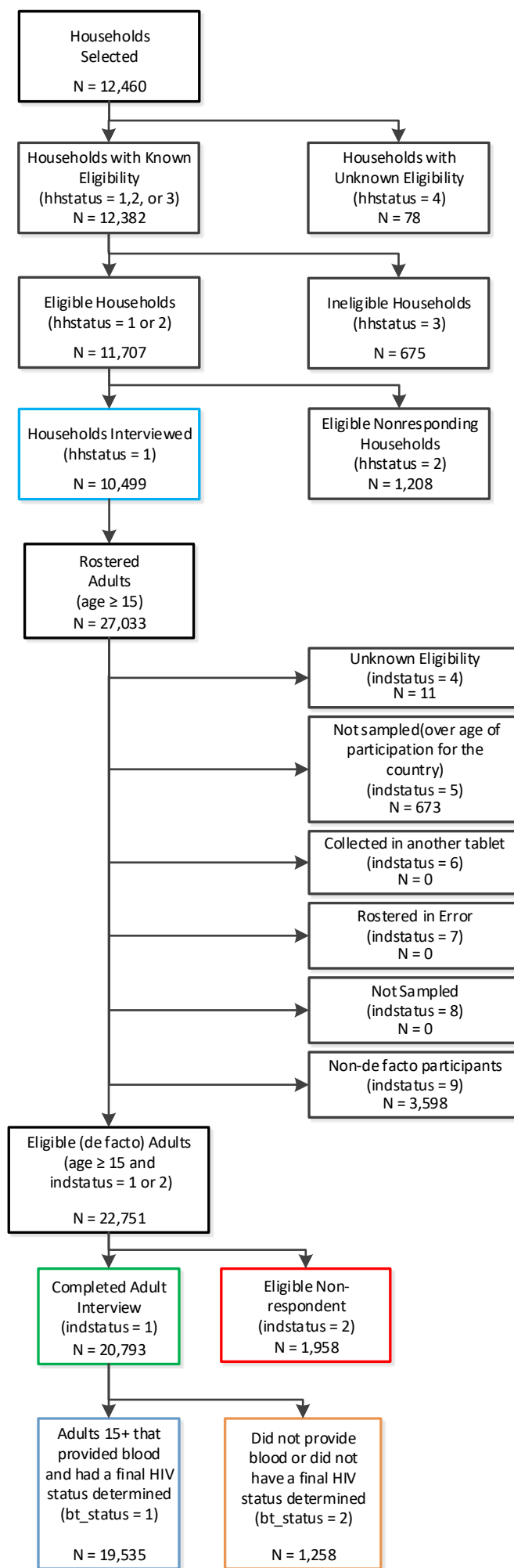


**Variables: hhstatus, indstatus,
bt_status**

Found in ZIMPHIA 2020 datasets:

Household
Interview
Biomarker

SA3-2



Variables: hhstatus, indstatus, bt_status

Use the following ZIMPHIA 2020 variables:

Household dataset

hhstatus

Interview dataset

age

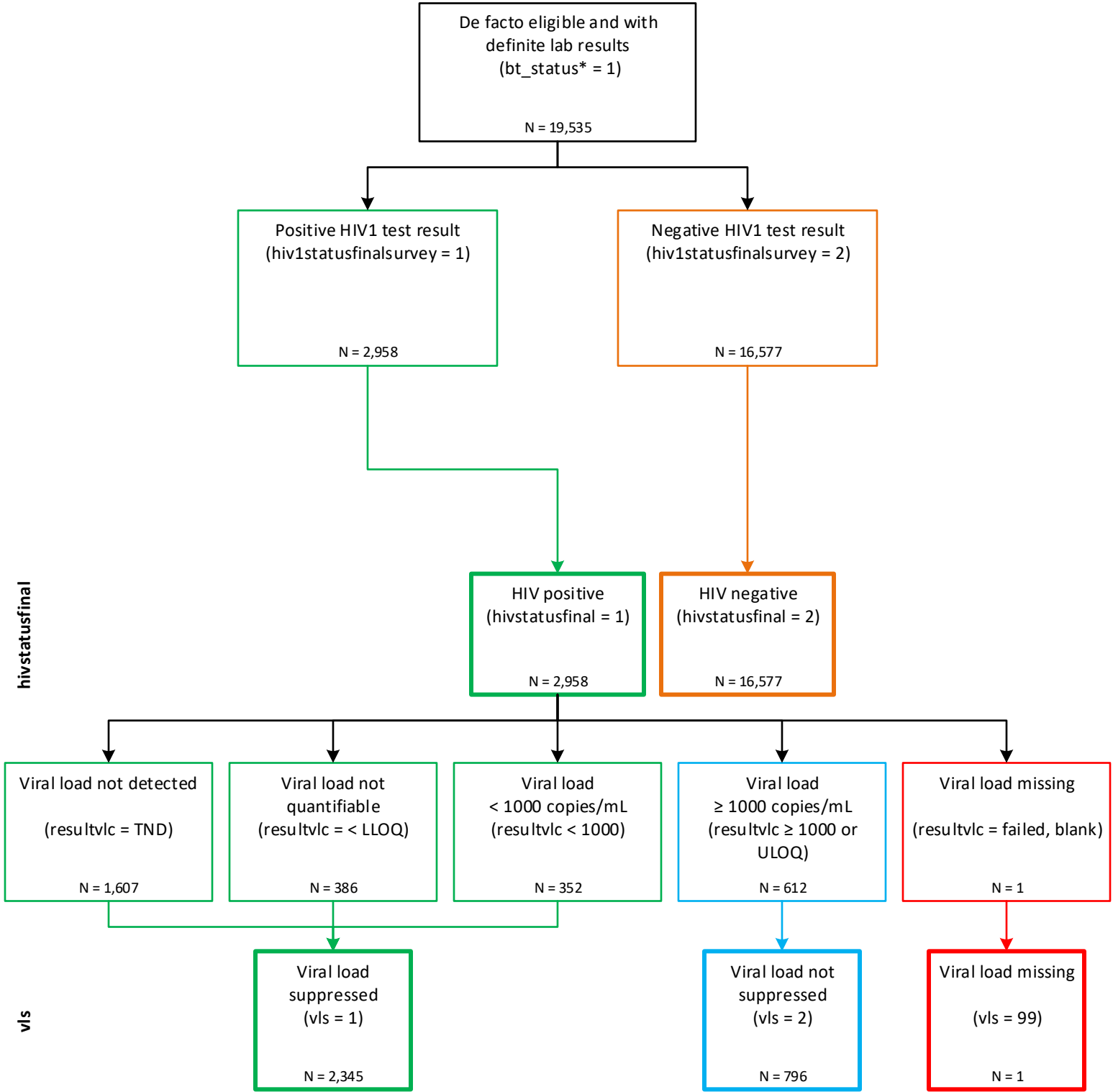
indstatus

Biomarker dataset

bt_status

Variables: hivstatusfinal, vls

Found in ZIMPHIA 2020 datasets:
Biomarker



Variables: hivstatusfinal, vls

Uses variables from ZIMPHIA 2020 datasets:

Biomarker

bt_status

hiv1statusfinalsurvey

hivstatusfinal

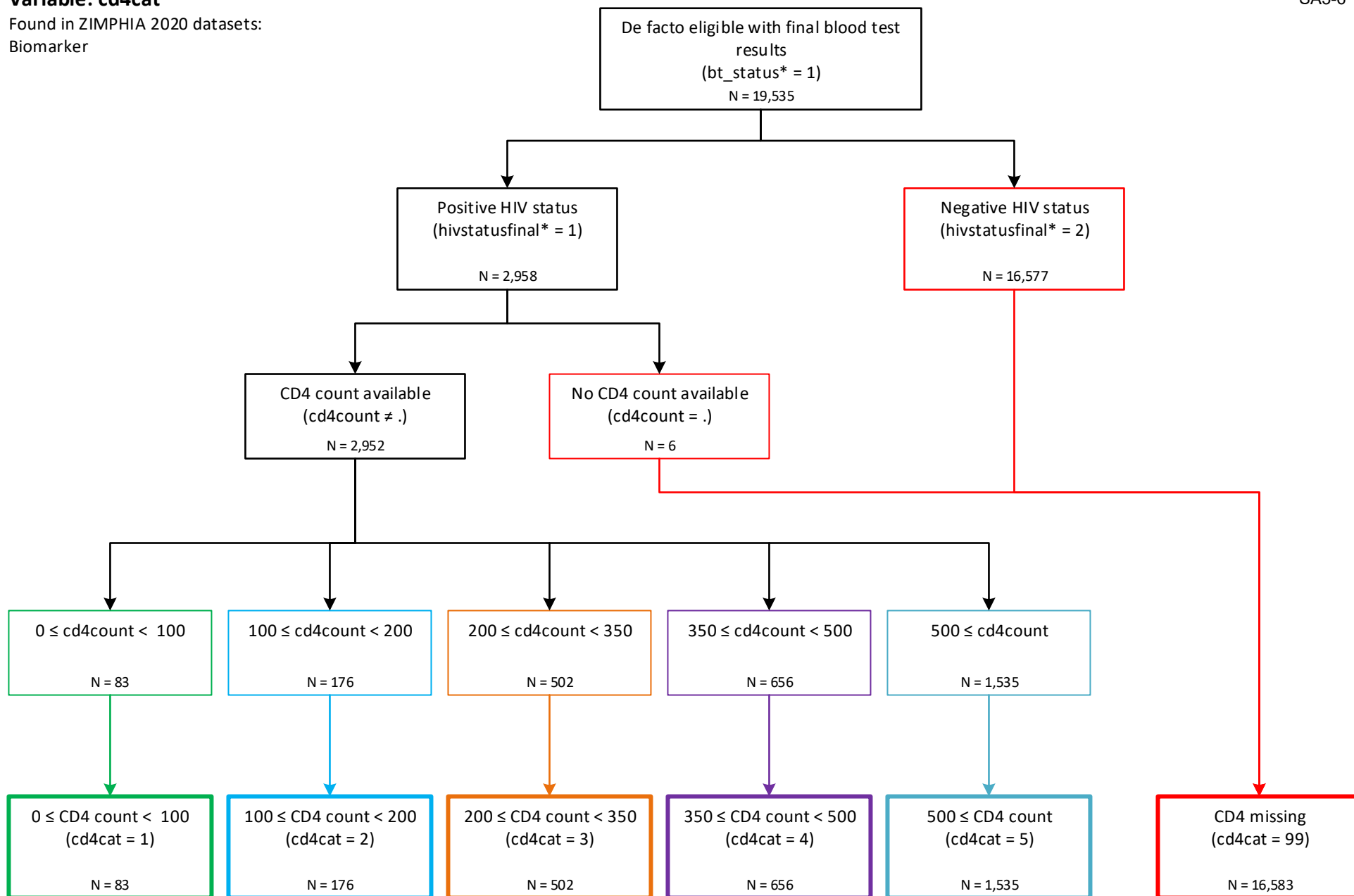
resultvlc

vls

Variable: cd4cat

Found in ZIMPHIA 2020 datasets:
Biomarker

SA3-6



Variable: cd4cat

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

bt_status

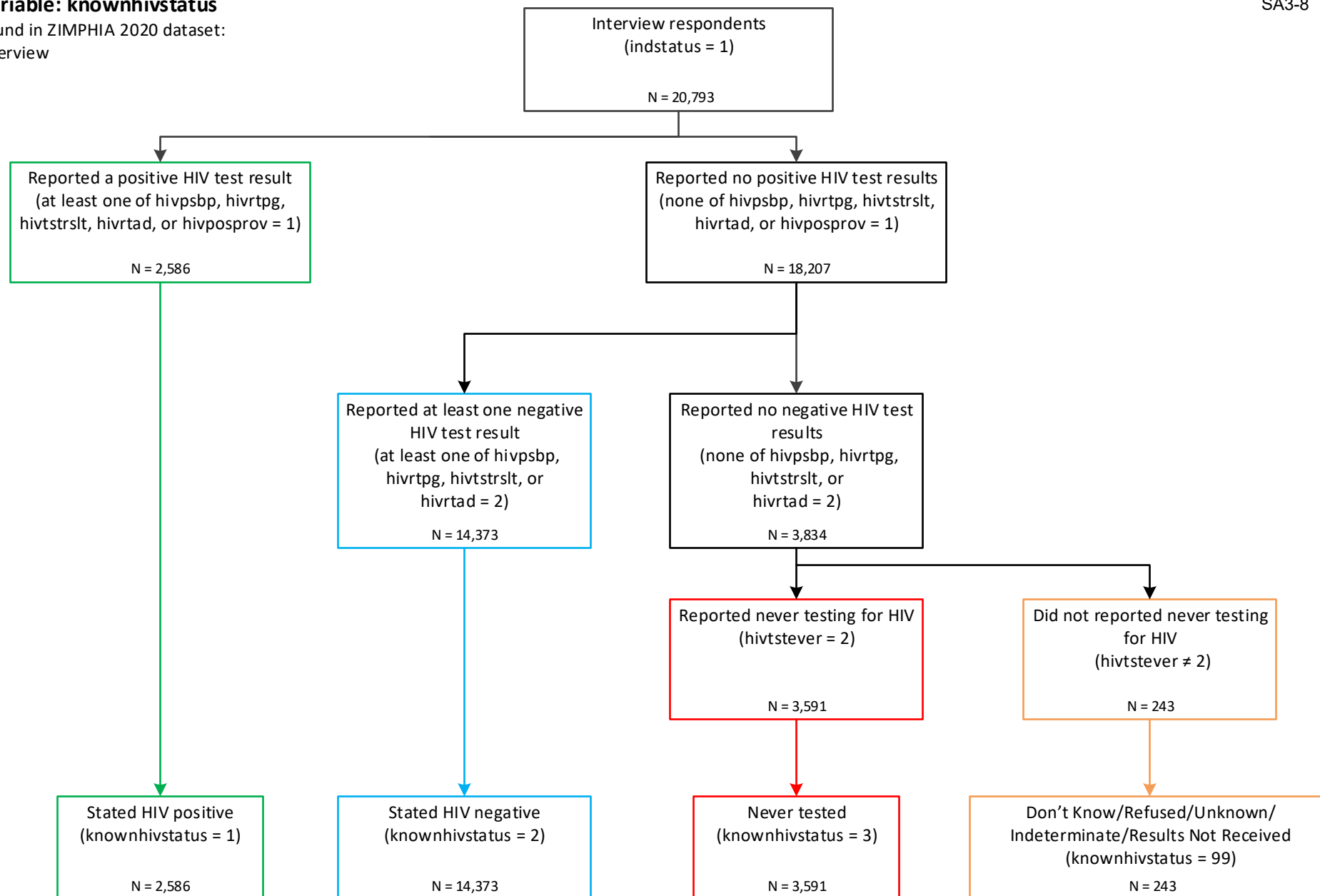
hivstatusfinal

cd4count

Variable: knownhivstatus

Found in ZIMPHIA 2020 dataset:
Interview

SA3-8



Variable: knownhivstatus

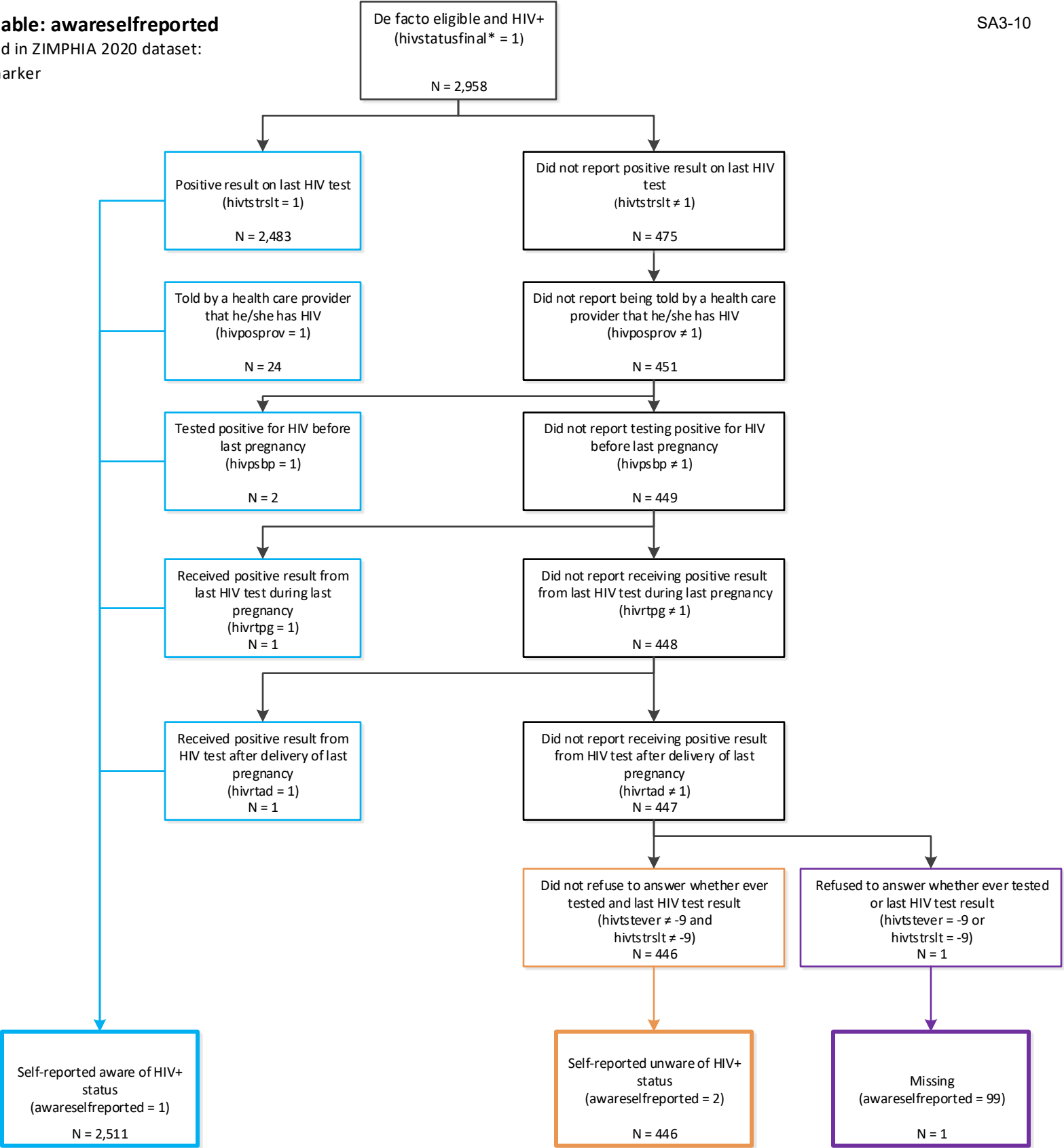
Uses the following ZIMPHIA 2020 variables:

Interview dataset

- age
- indstatus
- hivtstever
- hivposprov
- hivtstrslt
- hivrtad
- hivpsbp
- hivrtpg

Variable: awareselfreported
Found in ZIMPHIA 2020 dataset:
Biomarker

SA3-10



Variable: awareselfreported

SA3-11

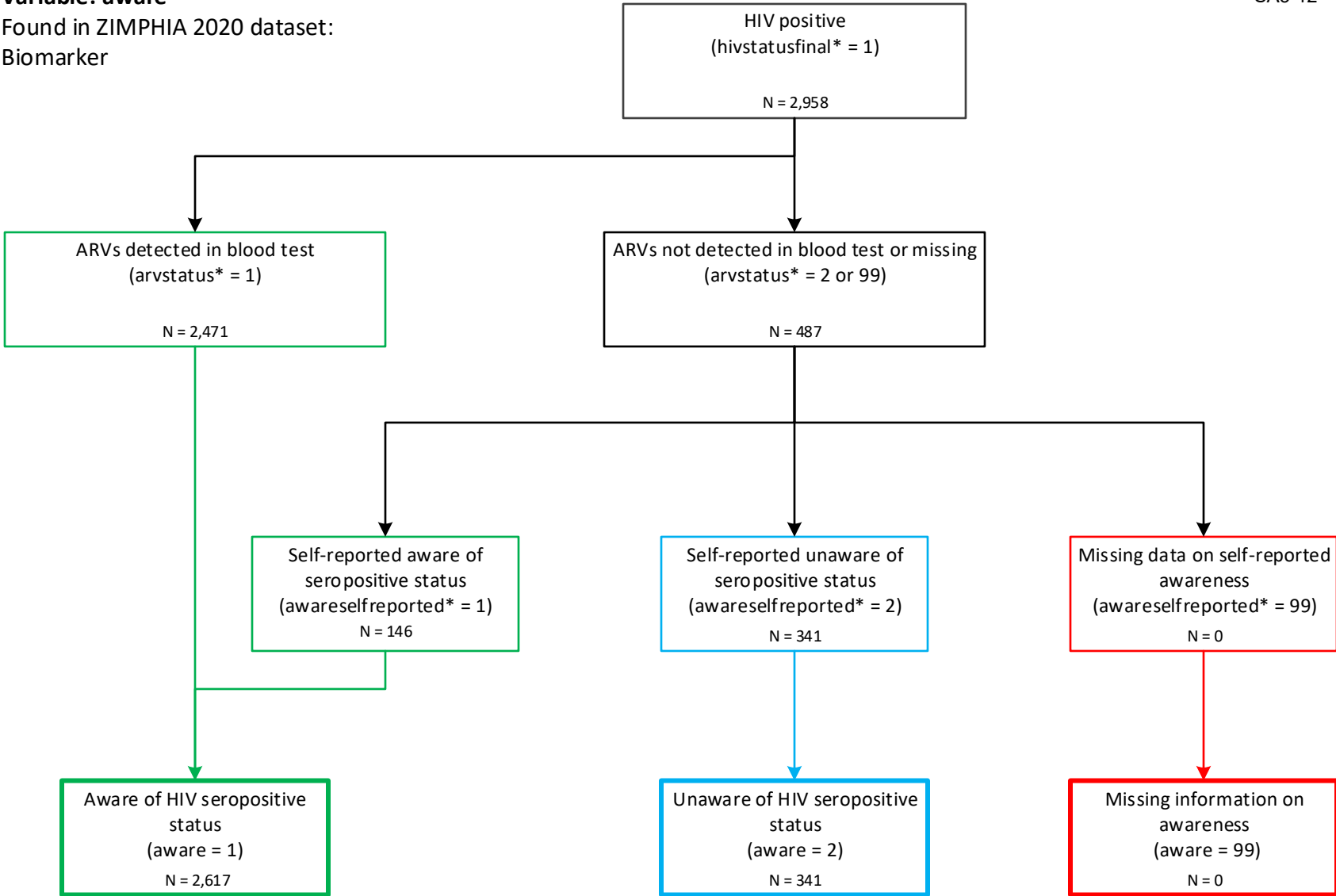
Uses the following ZIMPHIA 2020 variables:

Interview dataset

- indstatus
- hivstatusfinal
- hivtstrslt
- hivposprov
- hivpsbp
- hivrtpg
- hivrtad
- hivtstever

Variable: aware

Found in ZIMPHIA 2020 dataset:
Biomarker



Variable: aware

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

hivstatusfinal

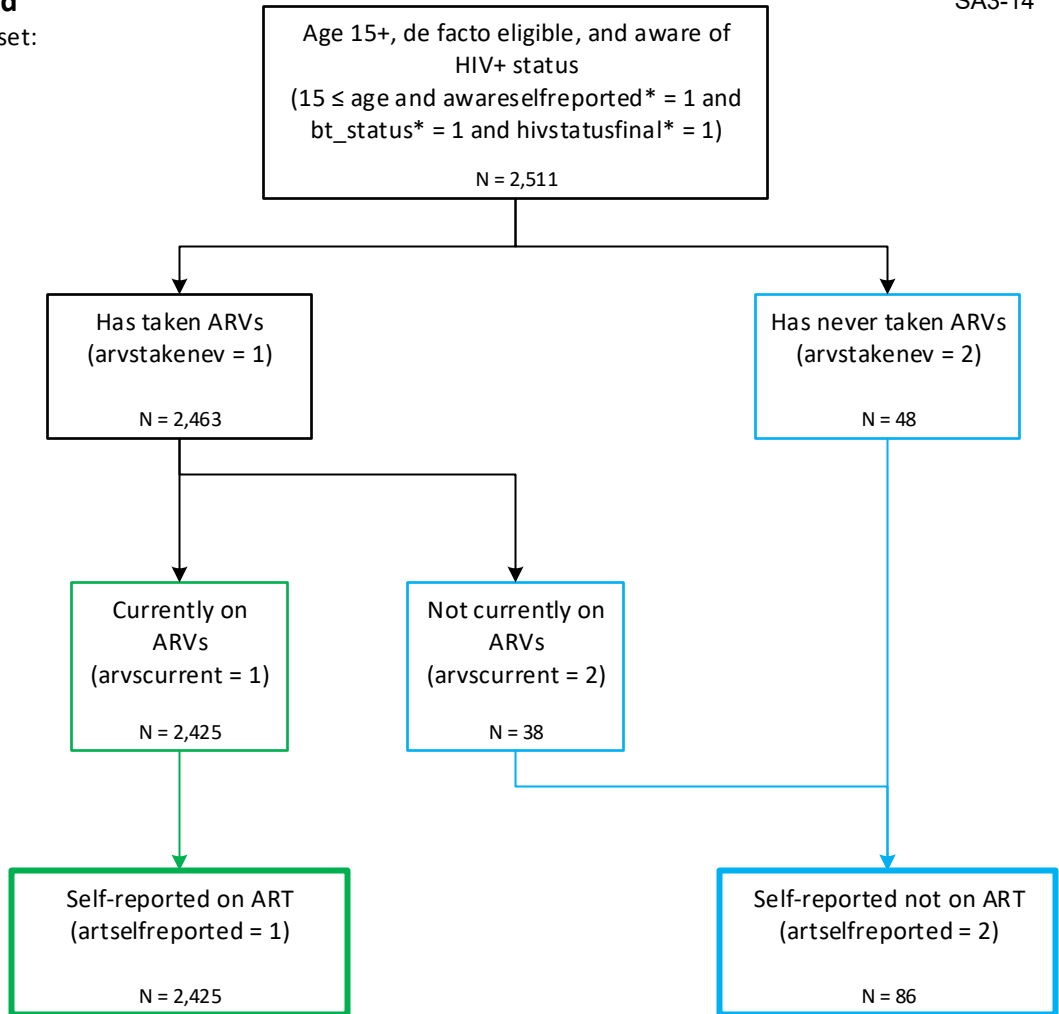
arvstatus

awareselfreported

Variable: artselfreported

Found in ZIMPHIA 2020 dataset:
Biomarker

SA3-14



Variable: artselfreported

Uses the following ZIMPHIA 2020 variables:

Interview dataset

- age

- arvstakenev

- arvscurrent

Biomarker dataset

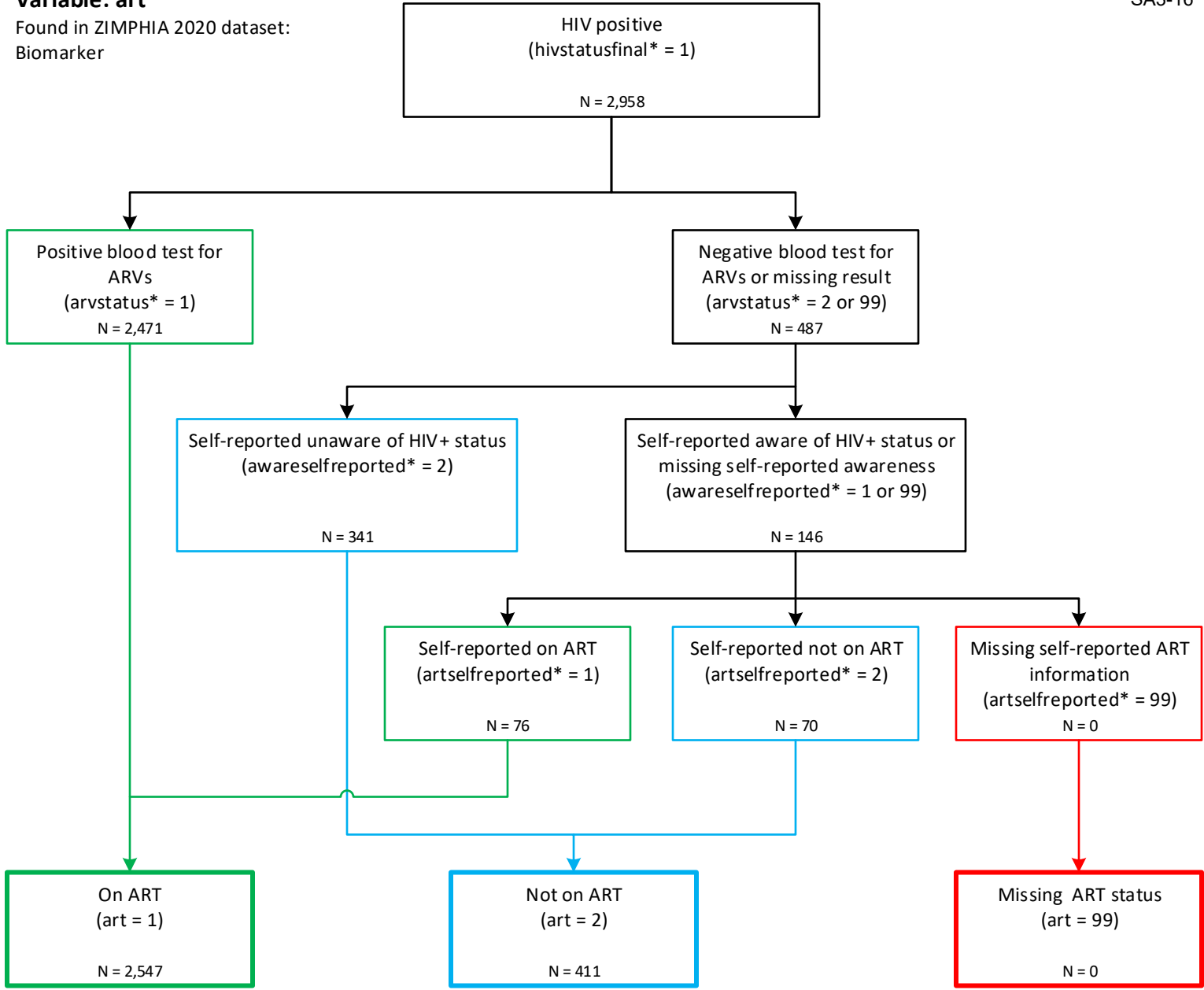
- bt_status

- hivstatusfinal

- awareselfreported

Variable: art

Found in ZIMPHIA 2020 dataset:
Biomarker



Variable: art

Uses the following ZIMPHIA 2020 variables:

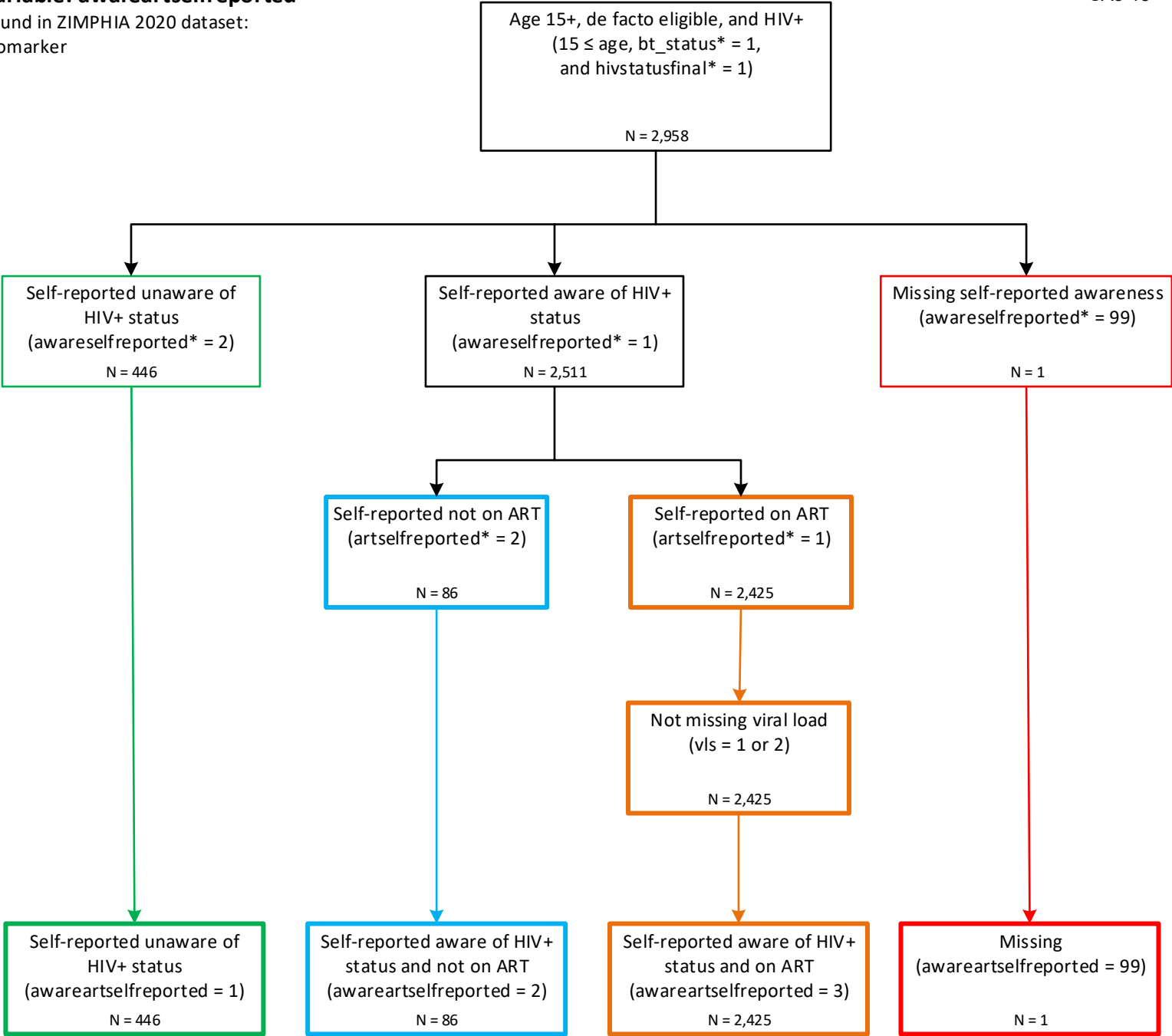
Biomarker dataset

 hivstatusfinal

 arvstatus

 awareselfreported

 artselfreported



Variable: awareartselfreported

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

age

bt_status

hivstatusfinal

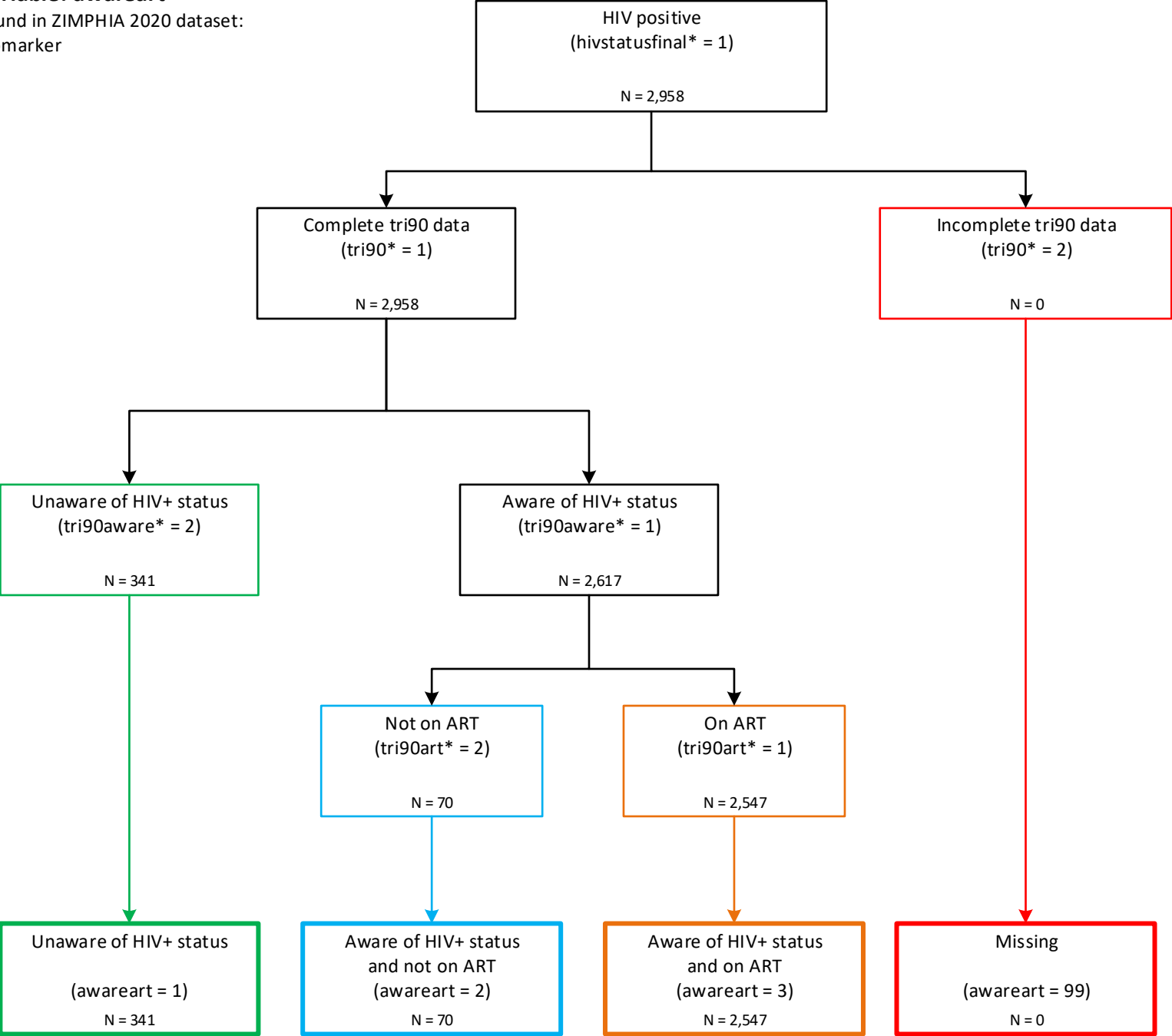
awareselfreported

artselfreported

vls

Variable: awareart
Found in ZIMPHIA 2020 dataset:
Biomarker

SA3-20



Variable: awareart

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

hivstatusfinal

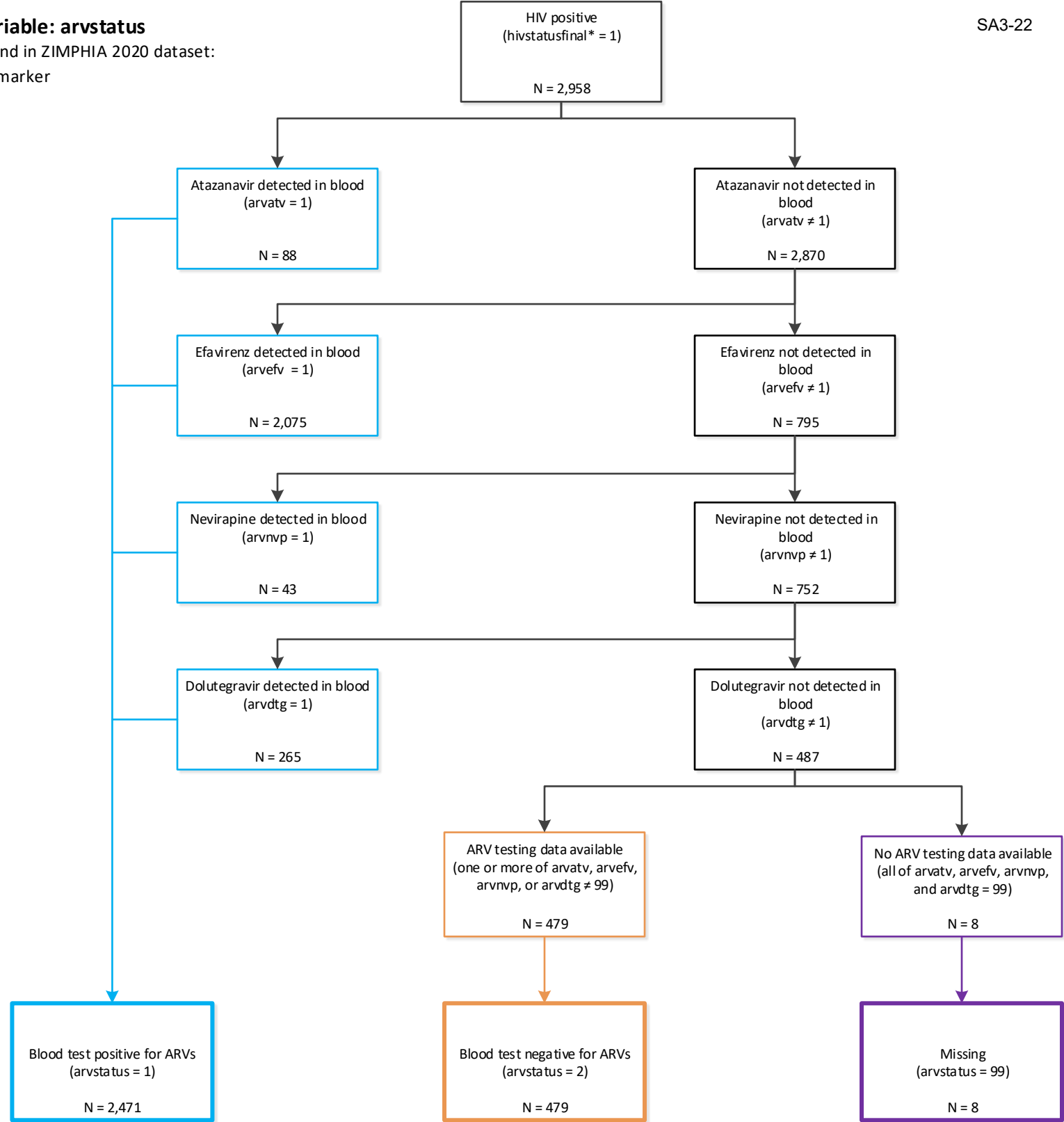
tri90

tri90aware

tri90art

Variable: arvstatus
Found in ZIMPHIA 2020 dataset:
Biomarker

SA3-22



Variable: sexever

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

hivstatusfinal

arvatv

arvefv

arvnvp

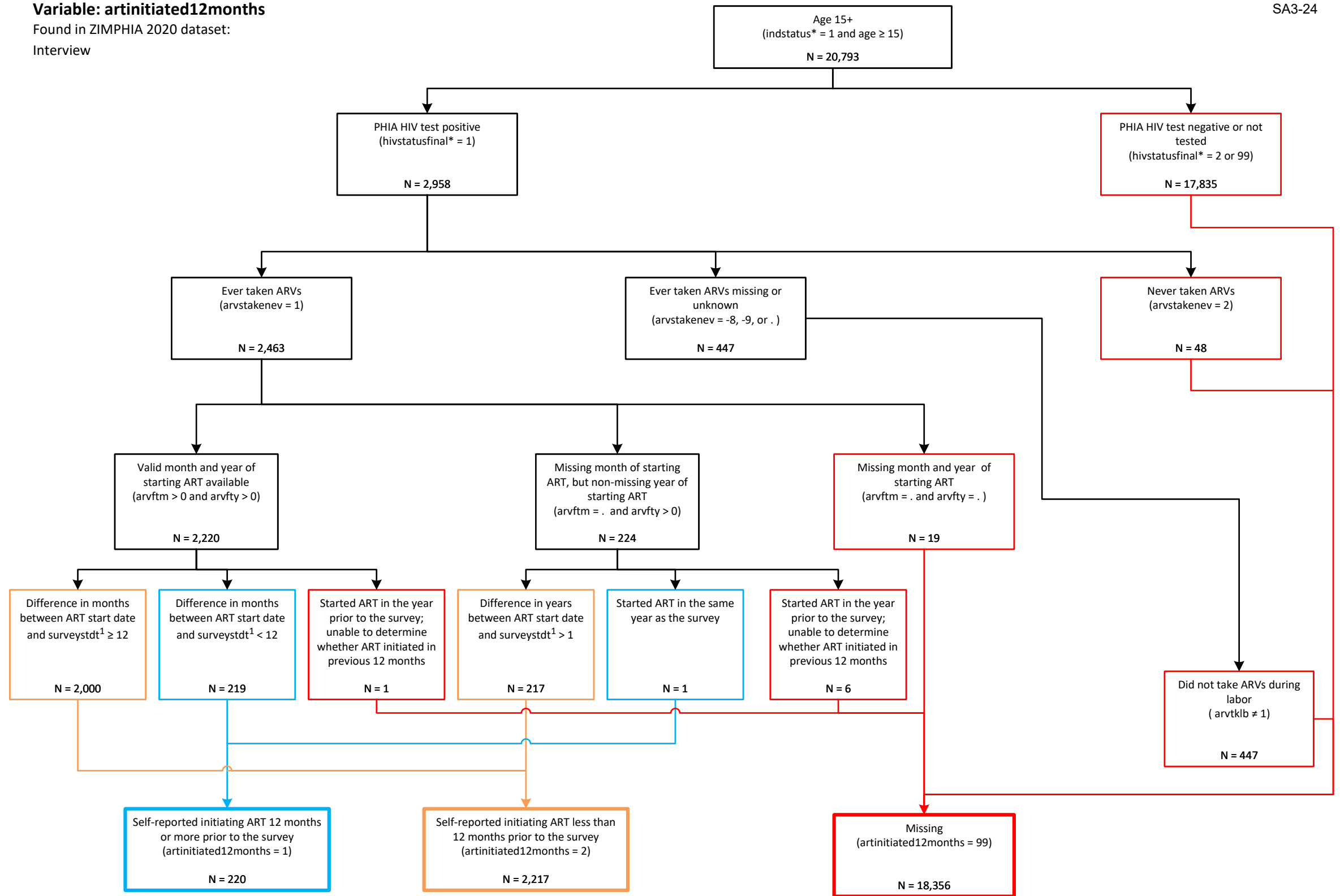
arvdtg

Variable: artinitiated12months

Found in ZIMPHIA 2020 dataset:

Interview

SA3-24



¹ Survey start date, the start date for the PHIA interview, is computed using surveystday, surveystmonth, and surveystyear. Invalid dates, such as dates after the survey start date, or invalid days (eg. 31st of September) are cleaned before calculating date differences.

Variable: artinitiated12months

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

 hivstatusfinal

Interview dataset

 age

 indstatus

 arvstakenev

 arvftm

 arvfty

 surveystday†

 surveystmonth

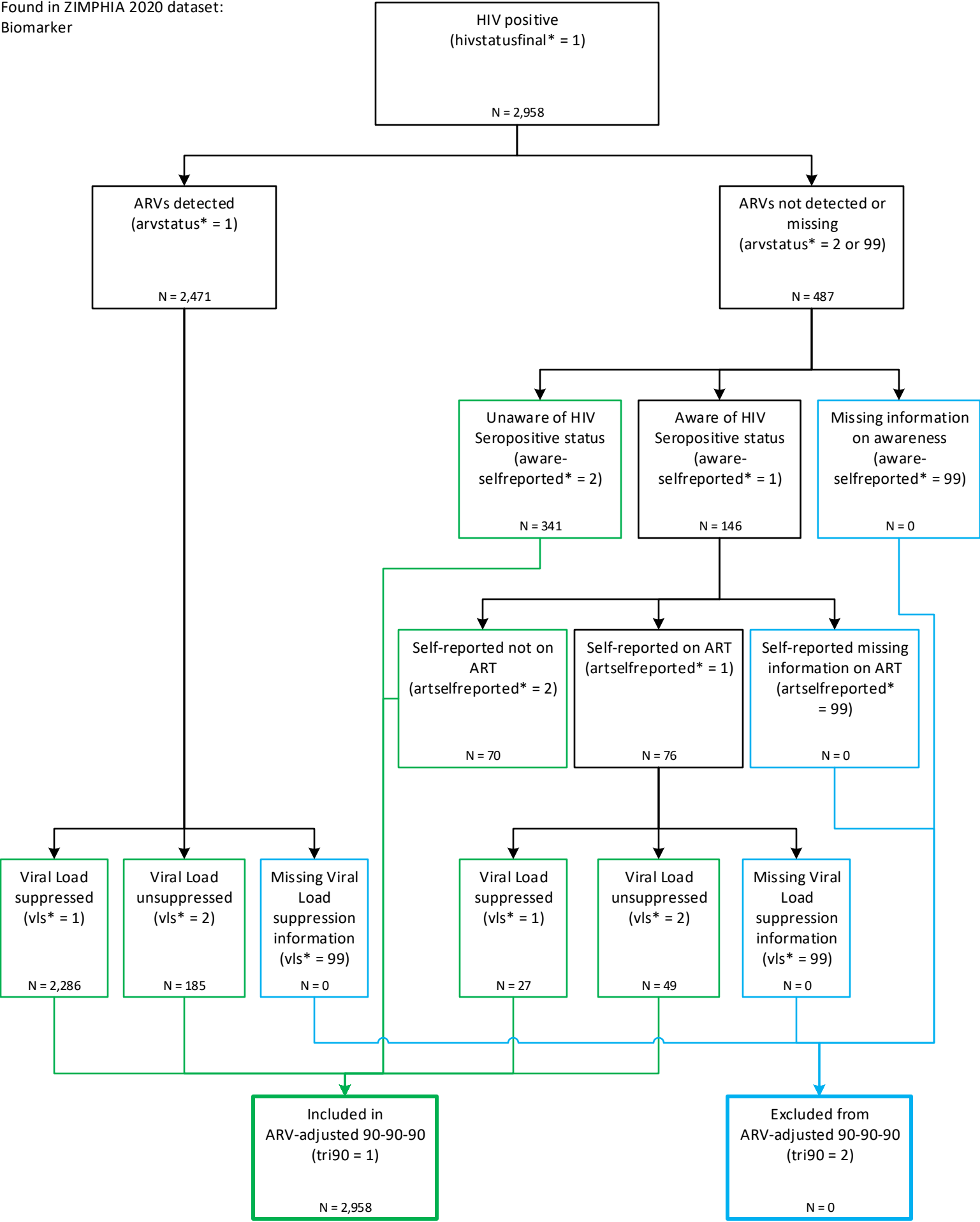
 surveystyear

 arvtklb

† Variable redacted from final dataset due to small counts and disclosure risk.

Variable: tri90

Found in ZIMPHIA 2020 dataset:
Biomarker



Variable: tri90

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

hivstatusfinal

arvstatus

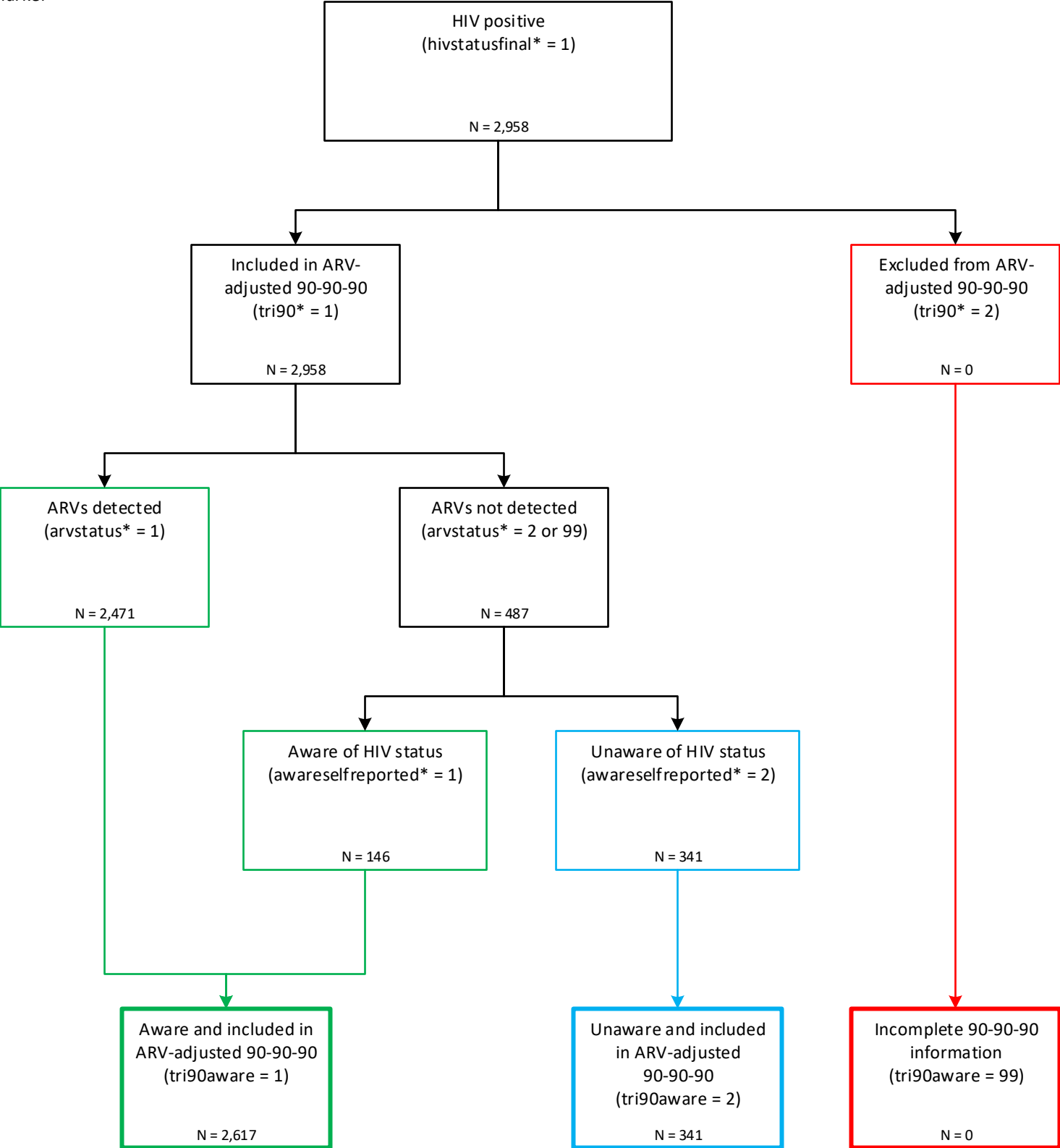
awareselfreported

artselfreported

vls

Variable: tri90aware

Found in ZIMPHIA 2020 dataset:
Biomarker



Variable: tri90aware

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

hivstatusfinal

tri90

arvstatus

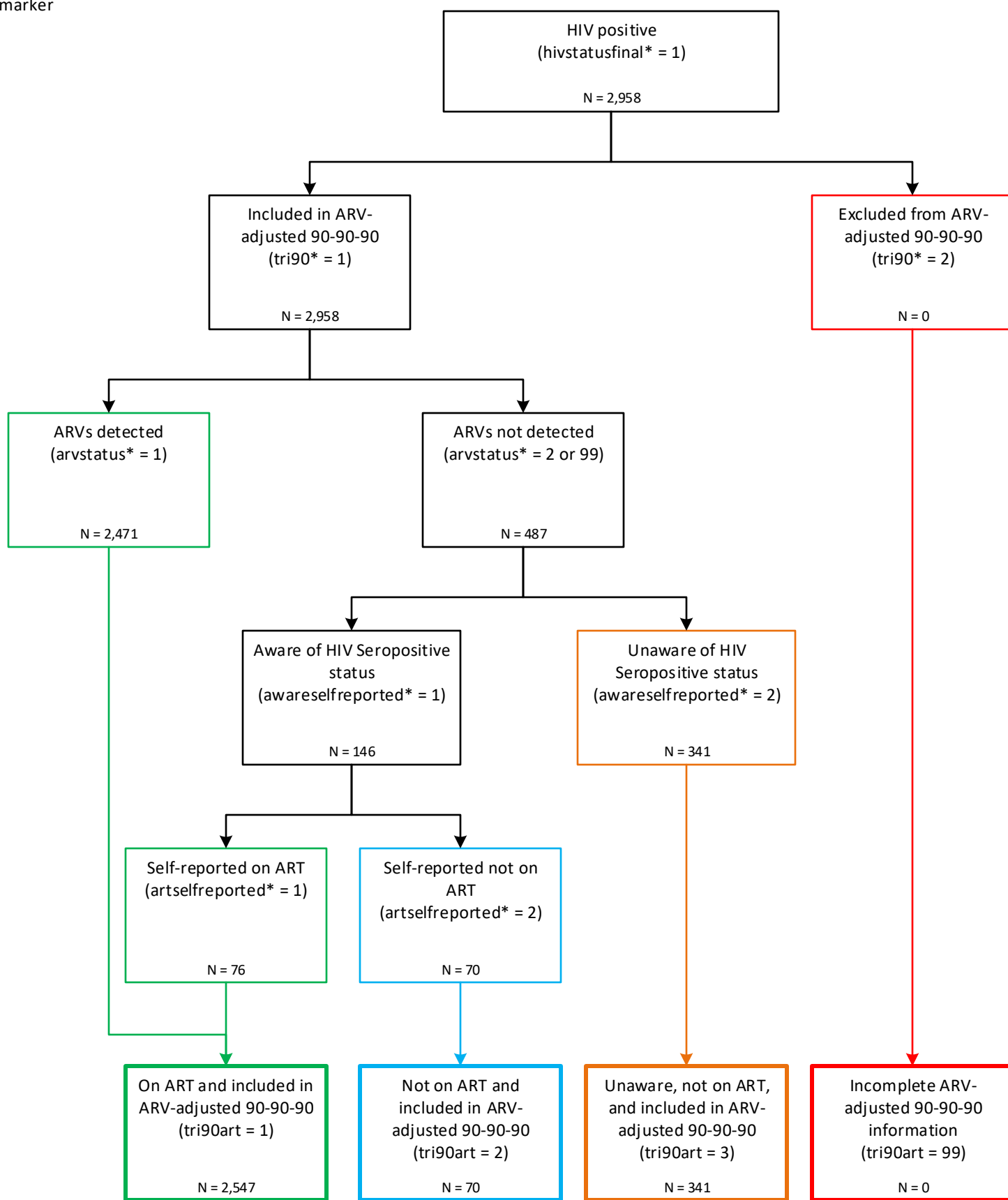
awareselfreported

Variable: tri90art

Found in ZIMPHIA 2020 dataset:

Biomarker

SA3-30



Variable: tri90art

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

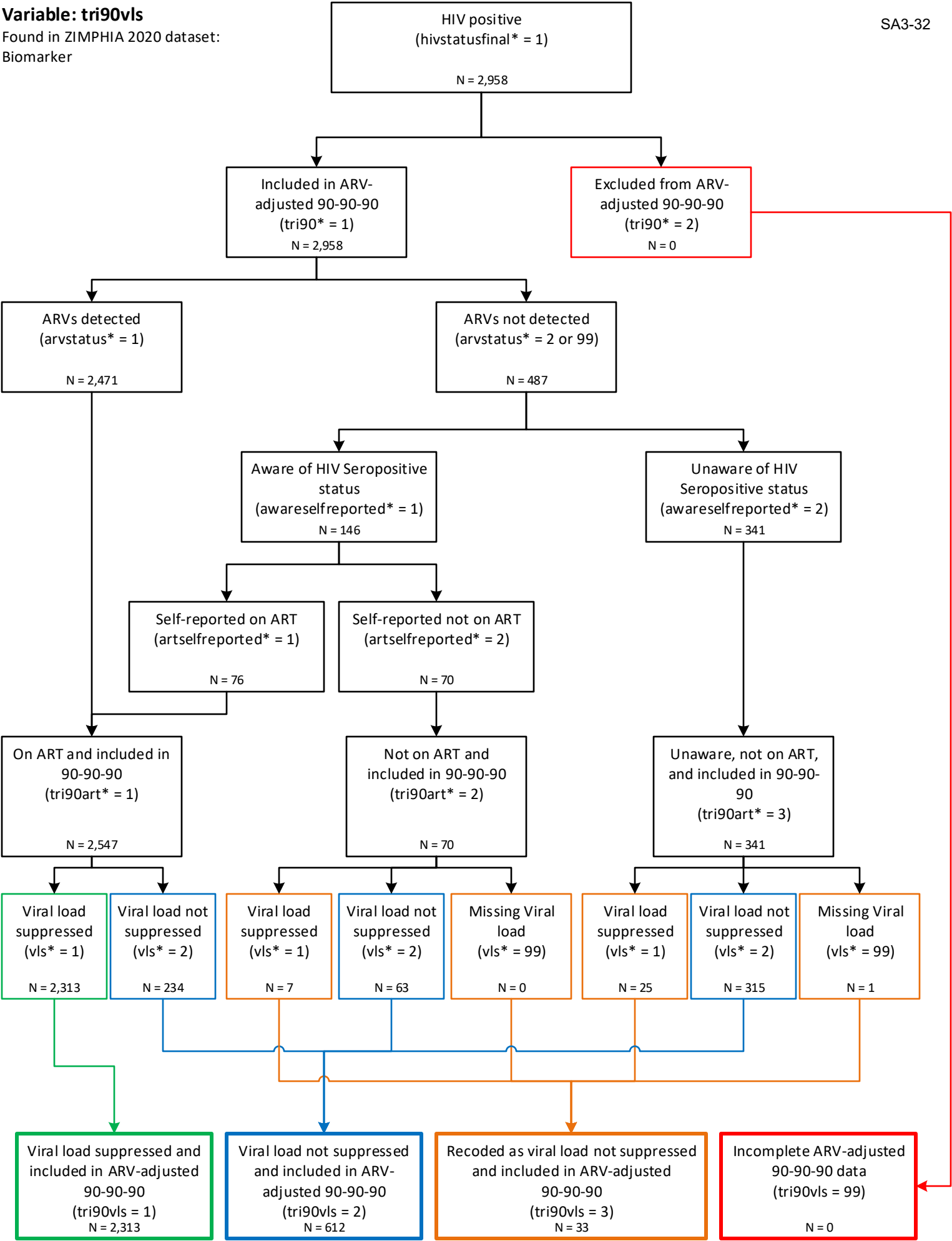
hivstatusfinal

tri90

arvstatus

awareselfreported

artselfreported



Variable: tri90vls

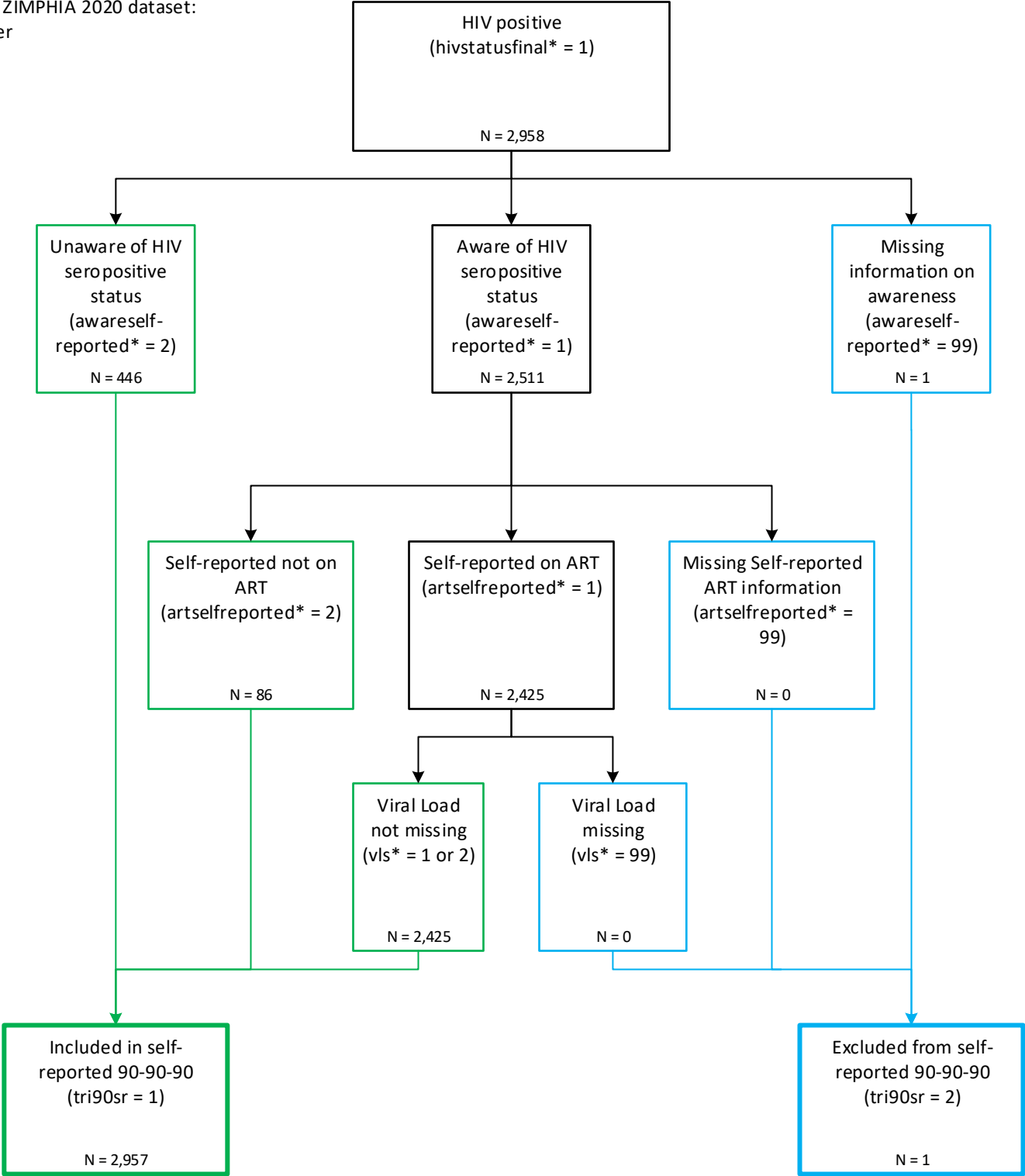
Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

- hivstatusfinal
- tri90
- arvstatus
- awareselfreported
- artselfreported
- tri90art
- vls

Variable: tri90sr

Found in ZIMPHIA 2020 dataset:
Biomarker



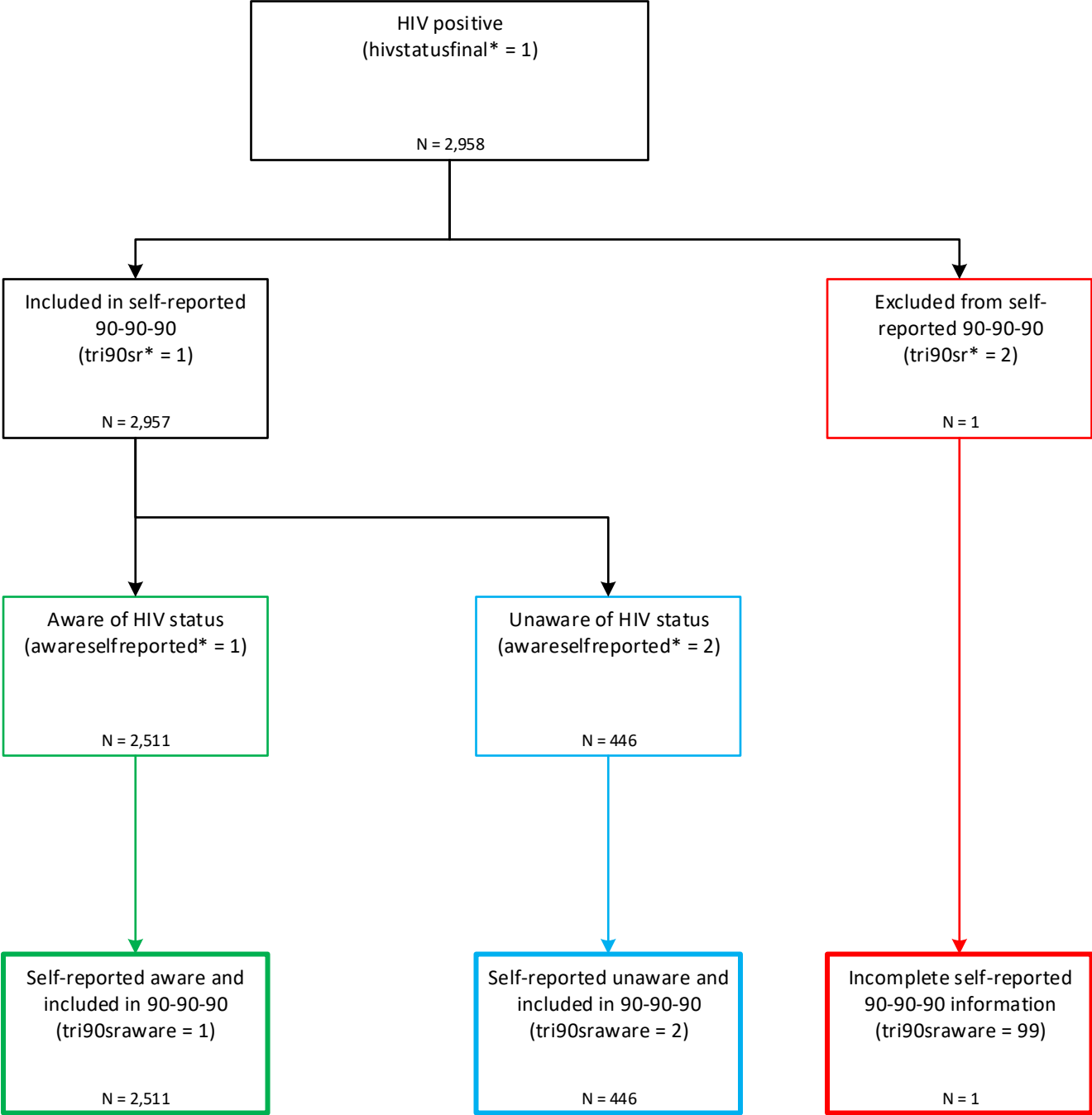
Variable: tri90sr

Uses the following ZIMPHIA 2020 variables:

- Biomarker dataset
 - hivstatusfinal
 - awareselfreported
 - artselfreported
 - vls

Variable: tri90sraware

Found in ZIMPHIA 2020 dataset:
Biomarker

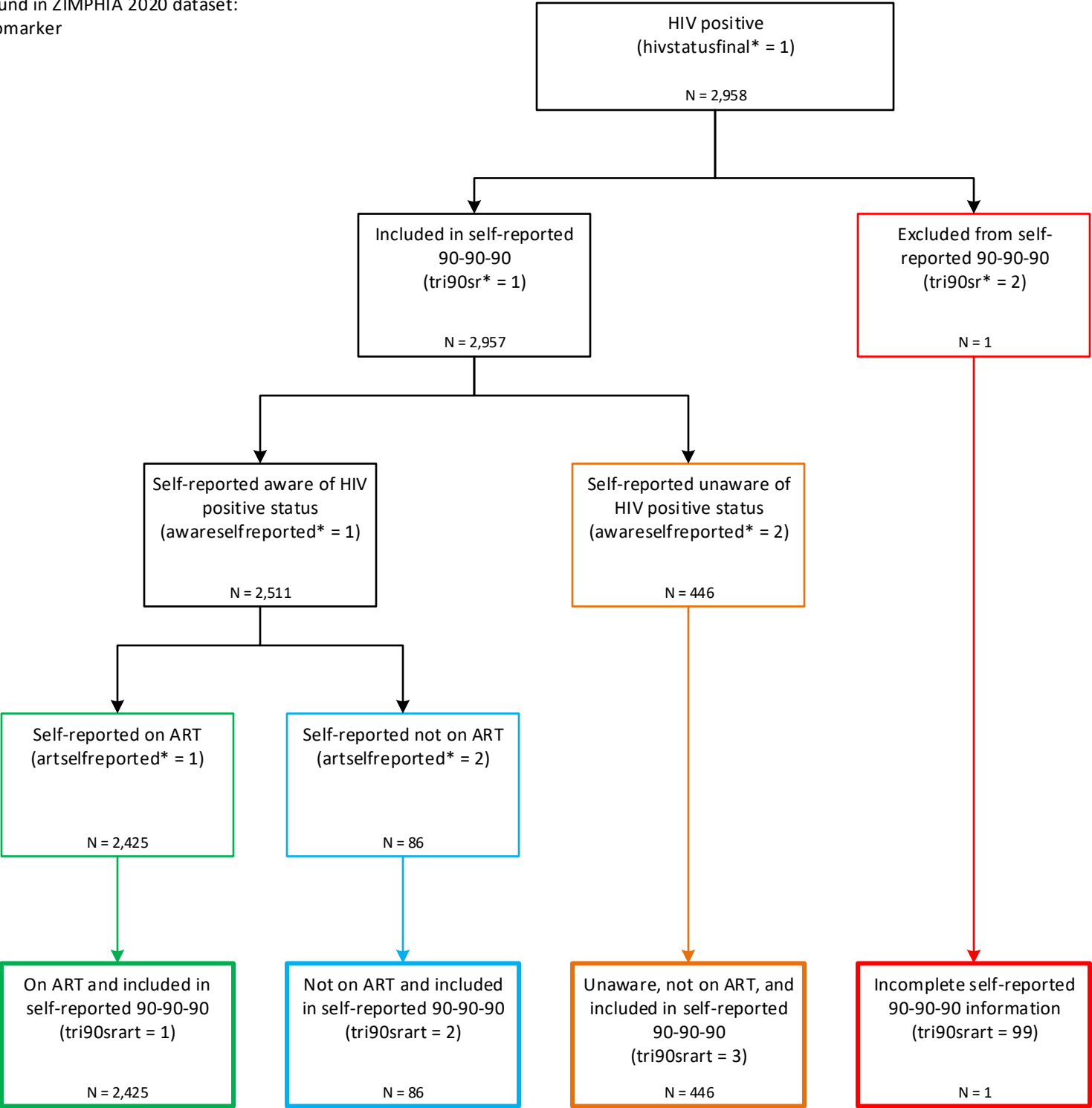


Variable: tri90sraware

Uses the following ZIMPHIA 2020 variables:

- Biomarker dataset
 - hivstatusfinal
 - trio90sr
 - awareselfreported

Variable: tri90srart
Found in ZIMPHIA 2020 dataset:
Biomarker



Variable: tri90srart

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

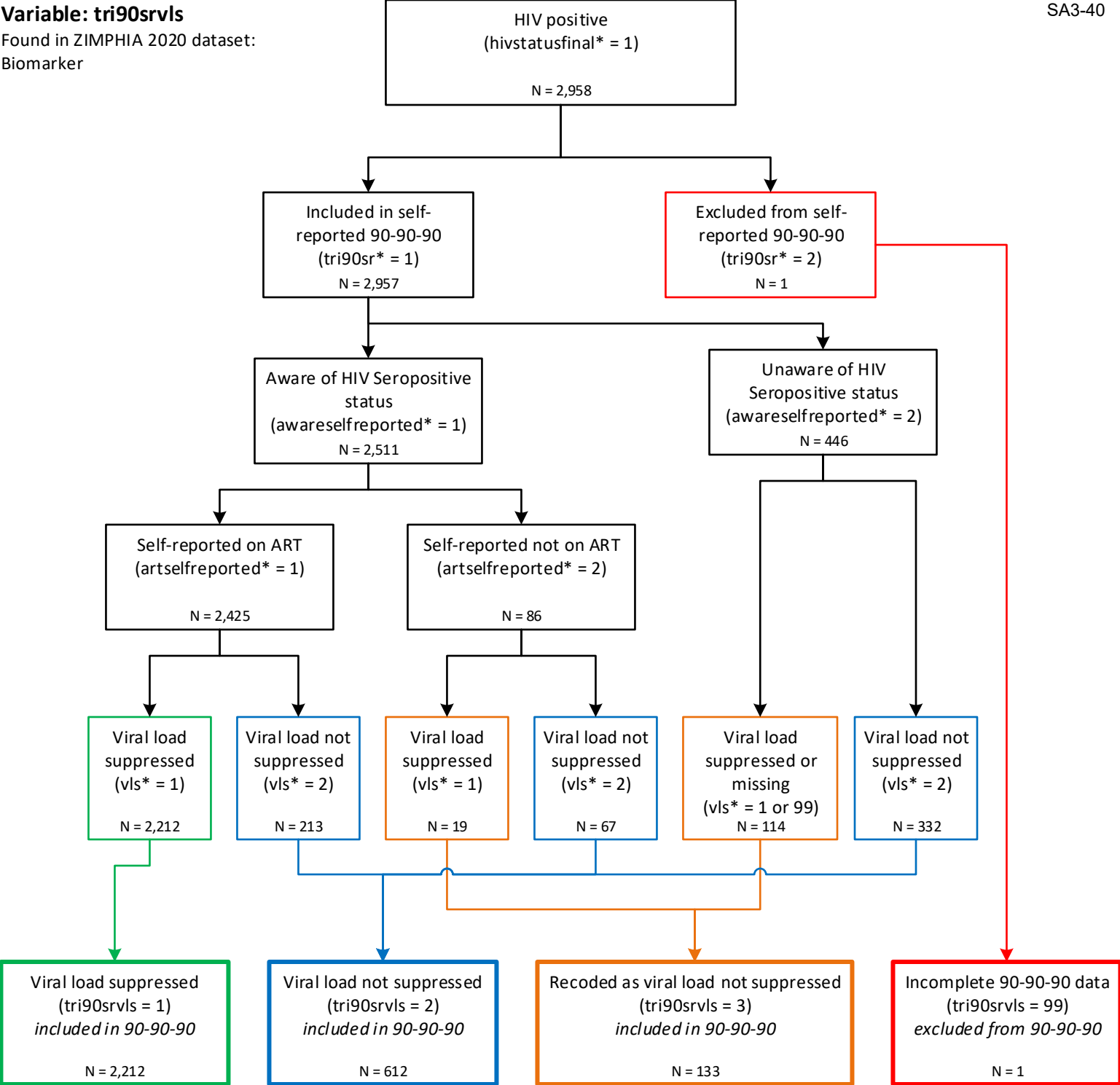
hivstatusfinal

tri90sr

awareselfreported

artselfreported

Variable: tri90srvls
Found in ZIMPHIA 2020 dataset:
Biomarker



Variable: tri90srvls

SA3-41

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

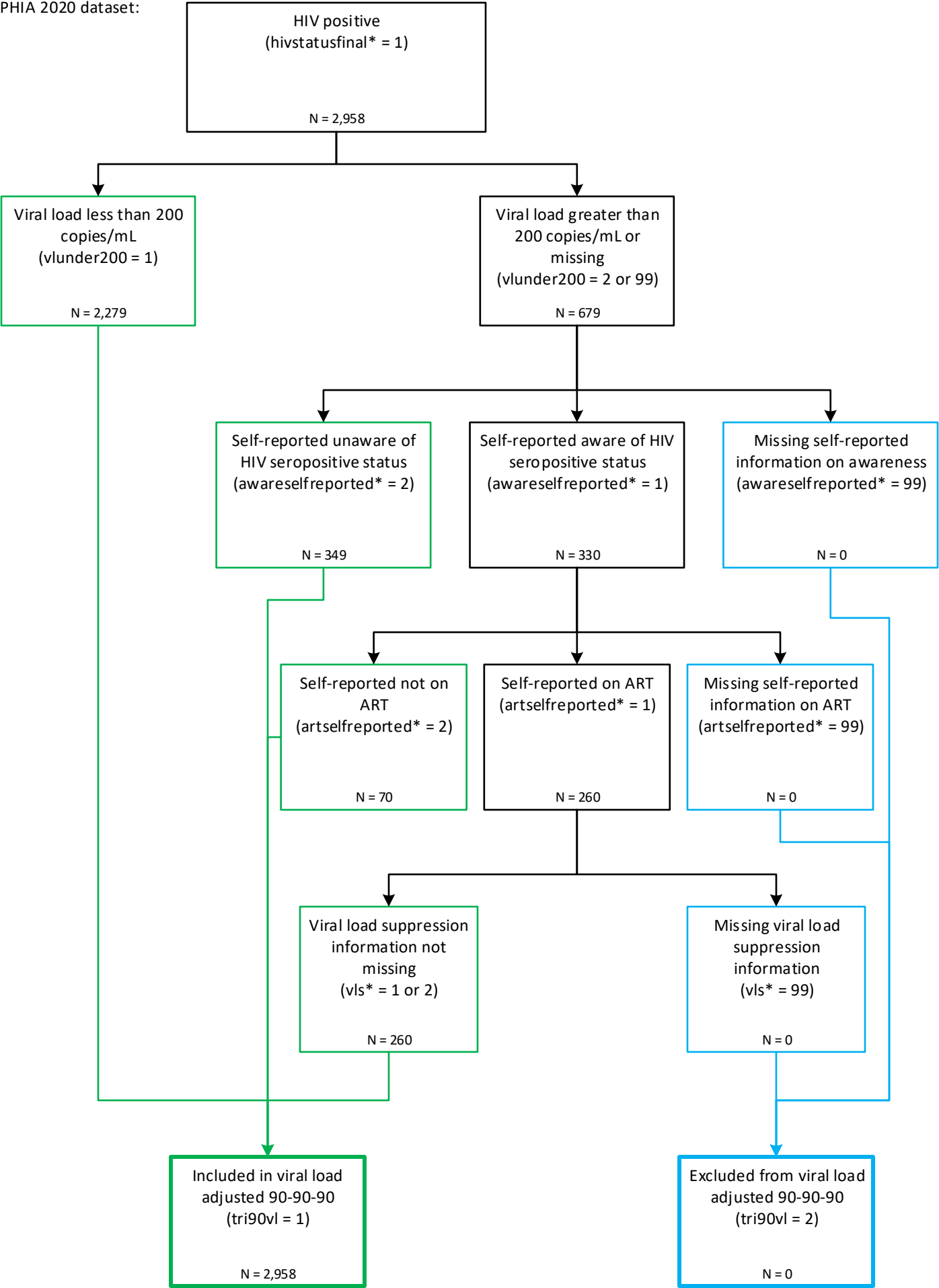
hivstatusfinal

tri90sr

awareselfreported

artselfreported

vls



Variable: tri90vl

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

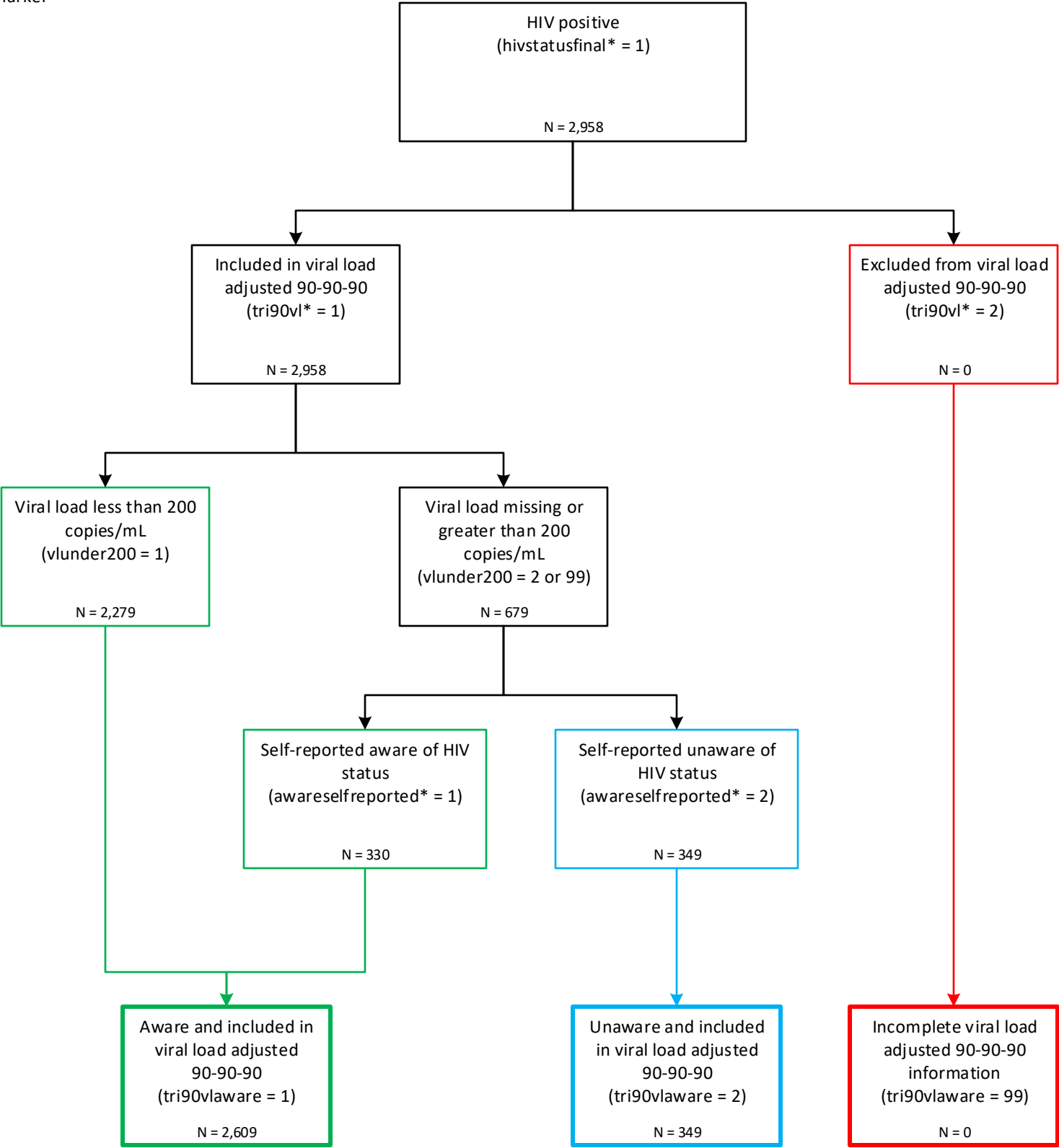
hivstatusfinal

vlunder200

awareselfreported

artselfreported

vl



Variable: tri90vlaware

SA3-45

Uses the following ZIMPHIA 2020 variables:

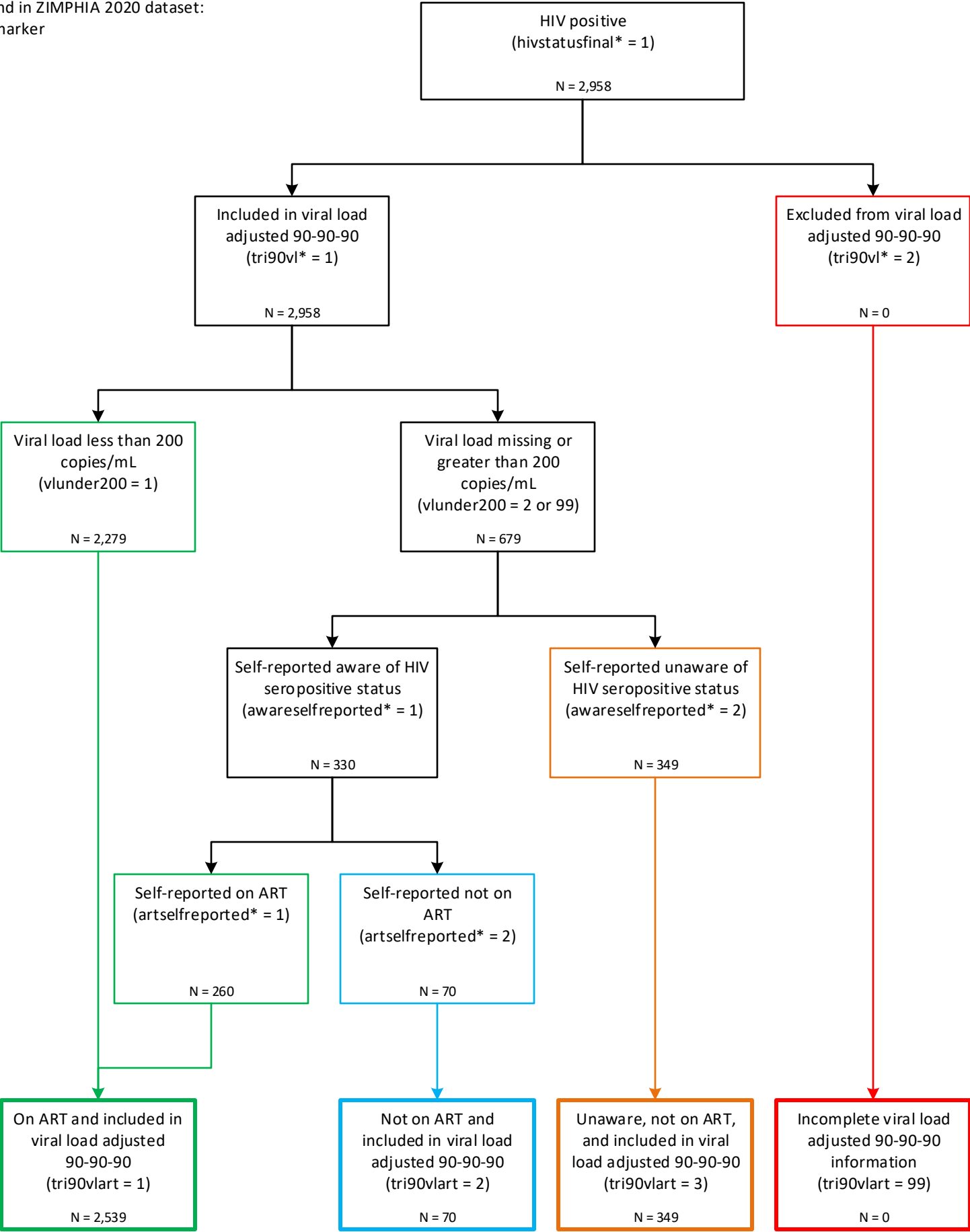
Biomarker dataset

hivstatusfinal

tri90vl

vlunder200

awareselfreported



Variable: tri90vlart

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

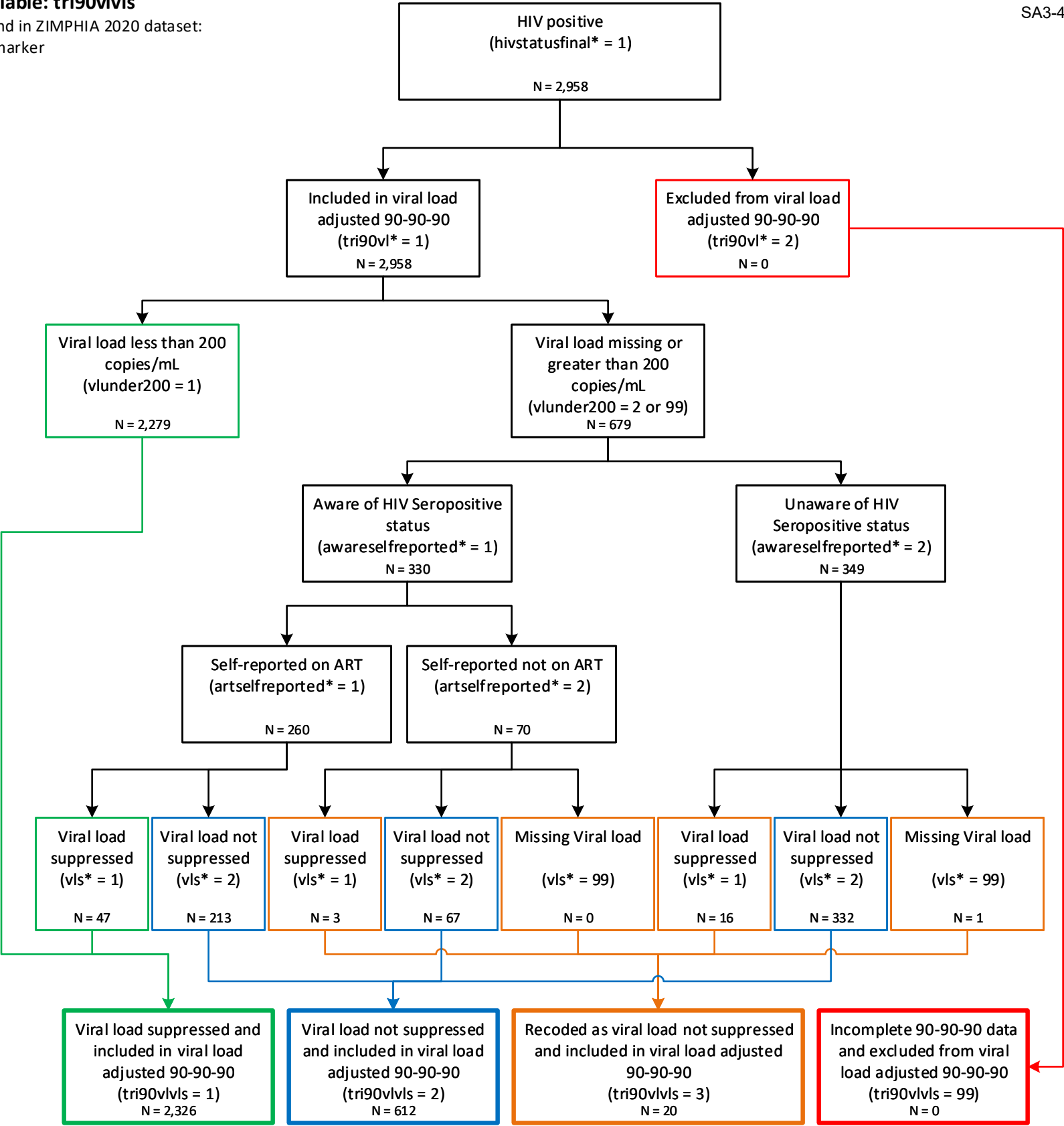
hivstatusfinal

tri90vl

vlunder200

awareselfreported

artselfreported

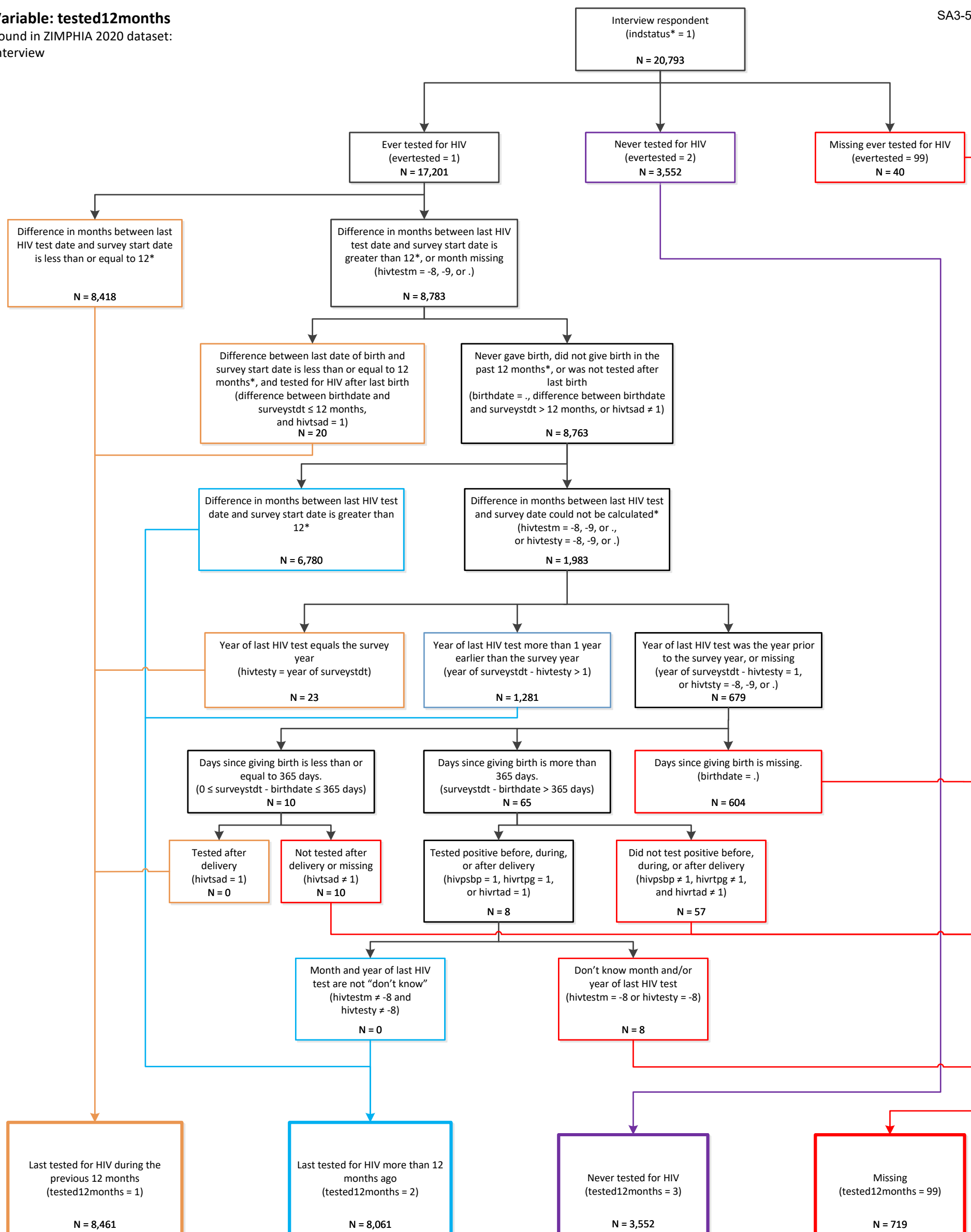


Variable: tri90vlvls

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

- hivstatusfinal
- tri90vl
- vlunder200
- awareselfreported
- artselfreported
- vls



*** Notes on date difference calculation and cleaning**

The difference between HIV test date and survey date is calculated from the variables hivtestm, hivtesty, and surveystdt, which is derived from surveystday/month/year. Birth date is derived from birthday, birthmonth, and birthyr. Impossible or implausible date values are set to missing. This includes all dates later than the date of the interview (surveystdt), and HIV testing dates prior to 1985.

Variable: tested12months

Uses the following ZIMPHIA 2020 variables:

Interview dataset

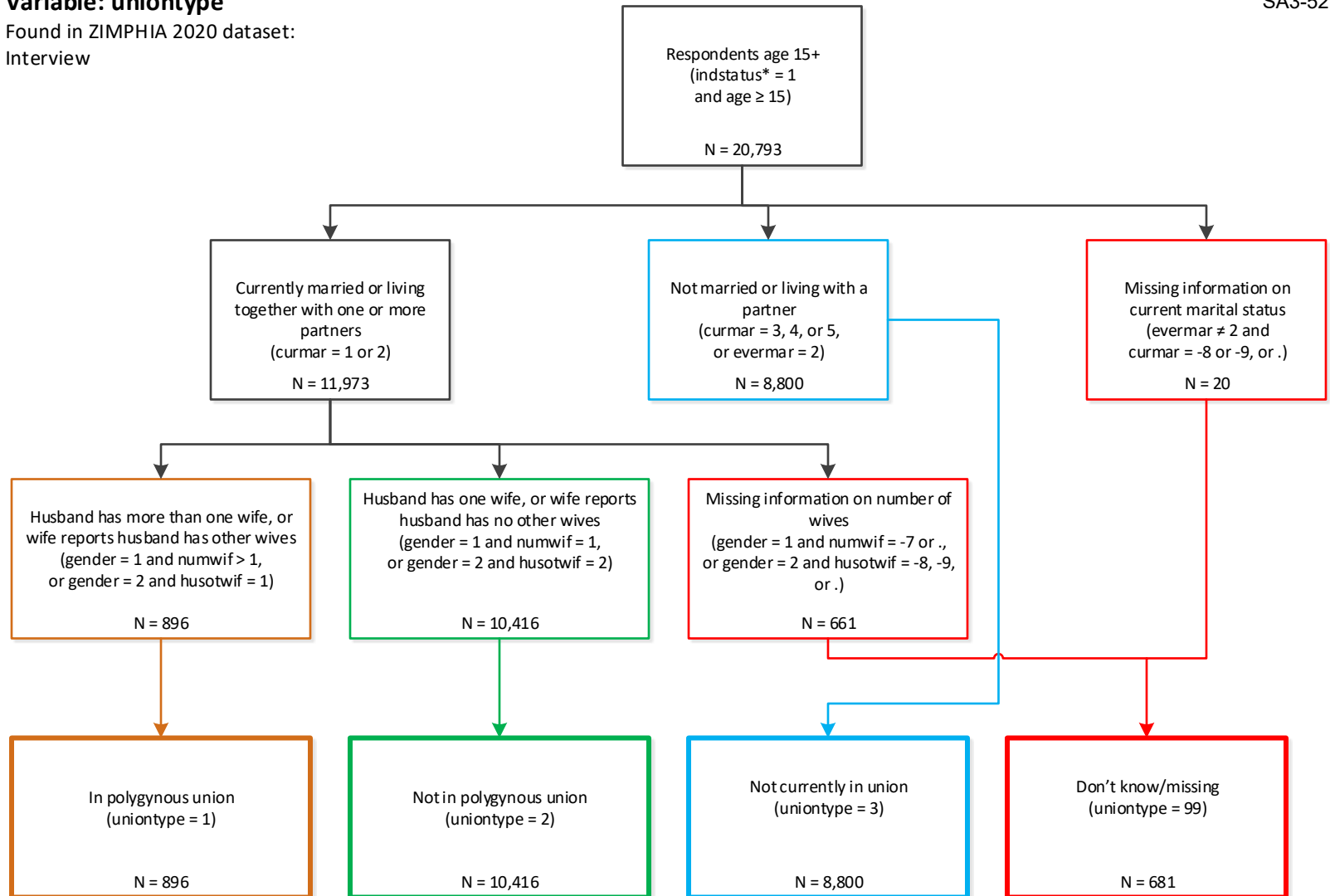
- indstatus
- evertested
- hivtestm
- hivtesty
- surveystday†
- surveystmonth
- surveystyear
- birthyr
- birthmon
- birthday†
- hivtsad
- hivpsbp
- hivrtpg
- hivrtad

† Variable redacted from final dataset due to small counts and disclosure risk.

Variable: uniontype

Found in ZIMPHIA 2020 dataset:
Interview

SA3-52



Variable: uniontype

SA3-53

Uses the following ZIMPHIA 2020 variables:

Interview dataset

age

indstatus

curmar

evermar

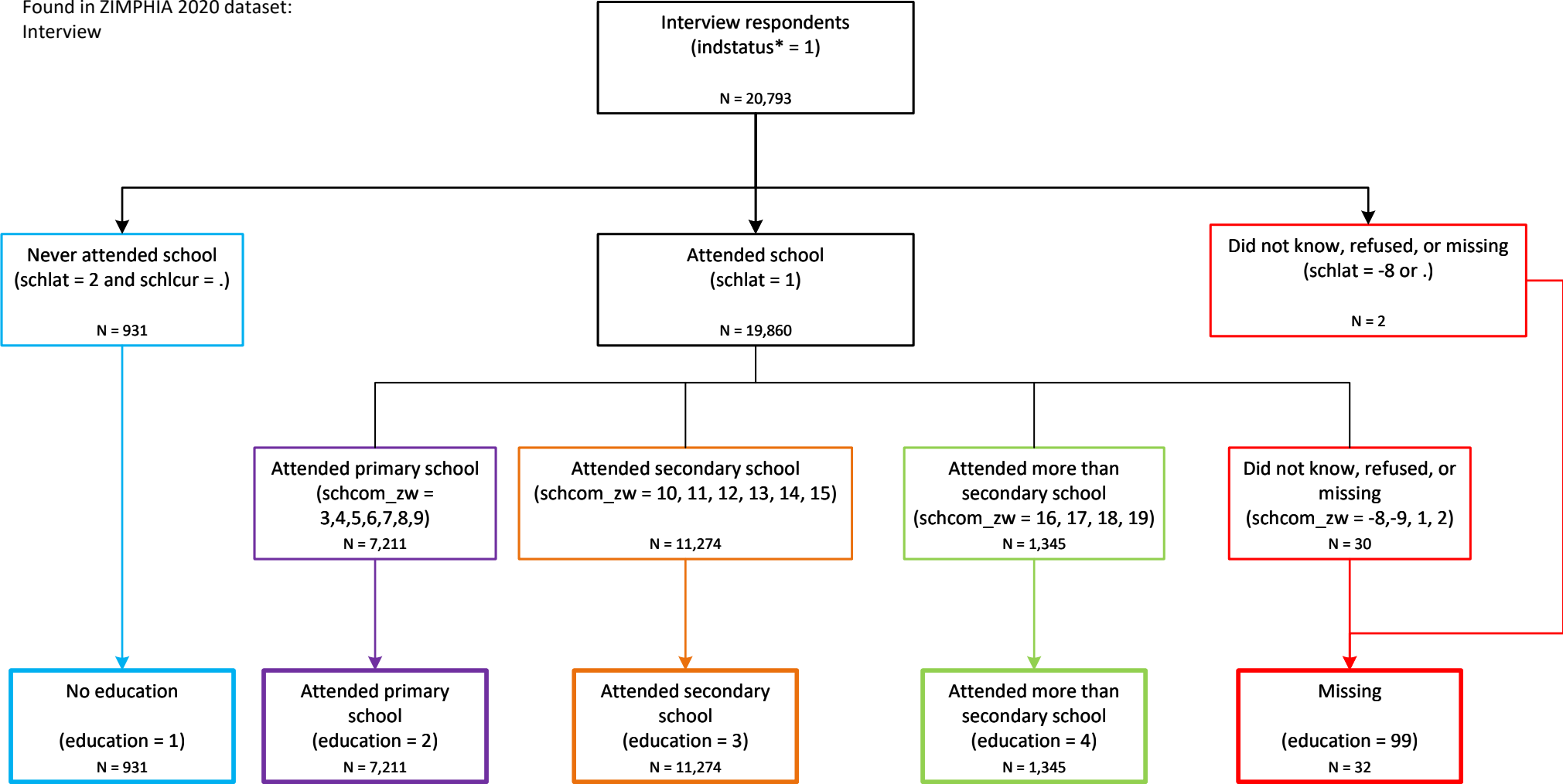
numwif

husotwif

Variable: education

Found in ZIMPHIA 2020 dataset:
Interview

SA3-54



Variable: education

Uses the following ZIMPHIA 2020 variables :

Interview dataset

indstatus

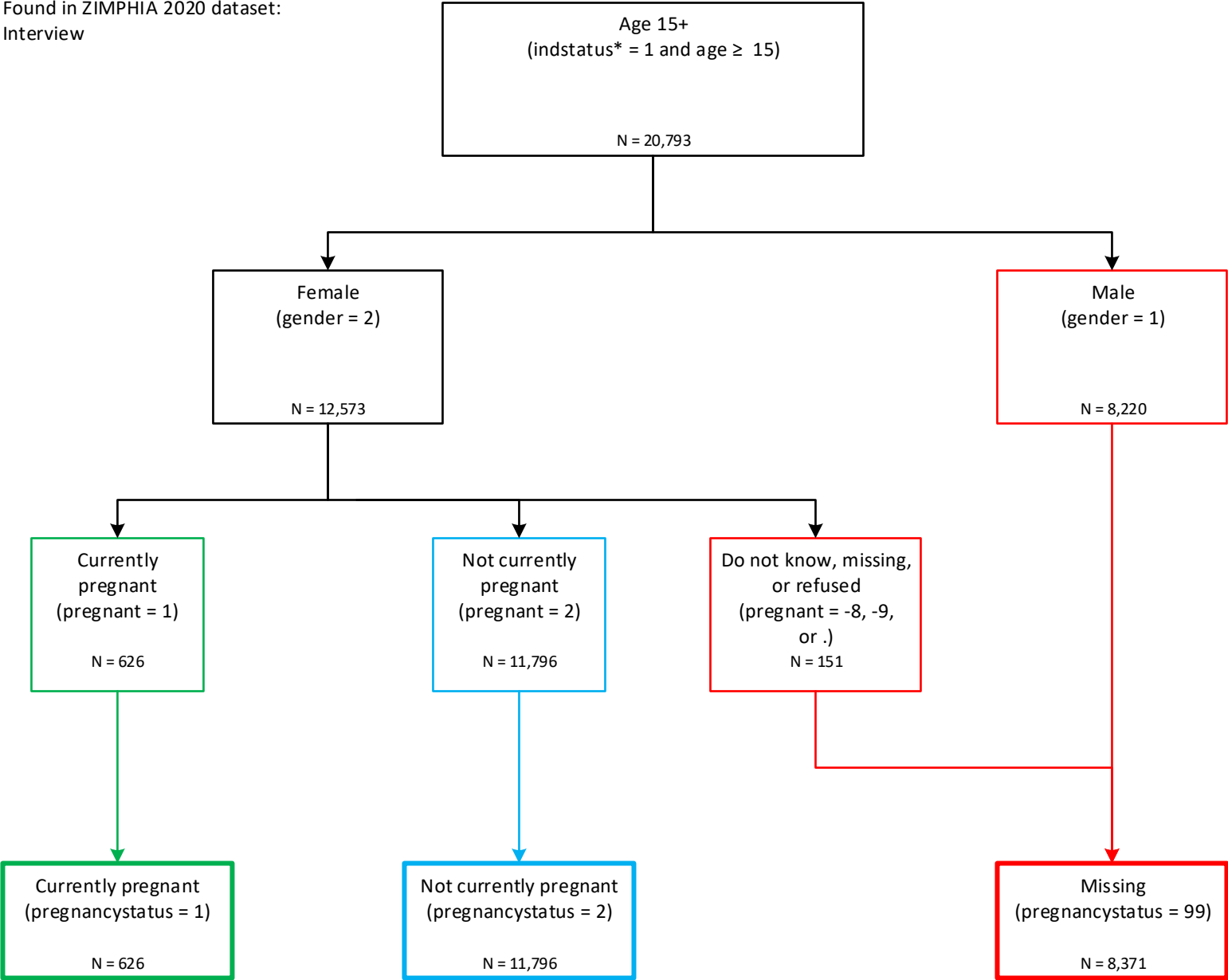
schlat

schlcur

schcom_zw

Variable: `pregnancystatus`
Found in ZIMPHIA 2020 dataset:
Interview

SA3-56



Variable: pregnancystatus

SA3-57

Uses the following ZIMPHIA 2020 variables:

Interview dataset

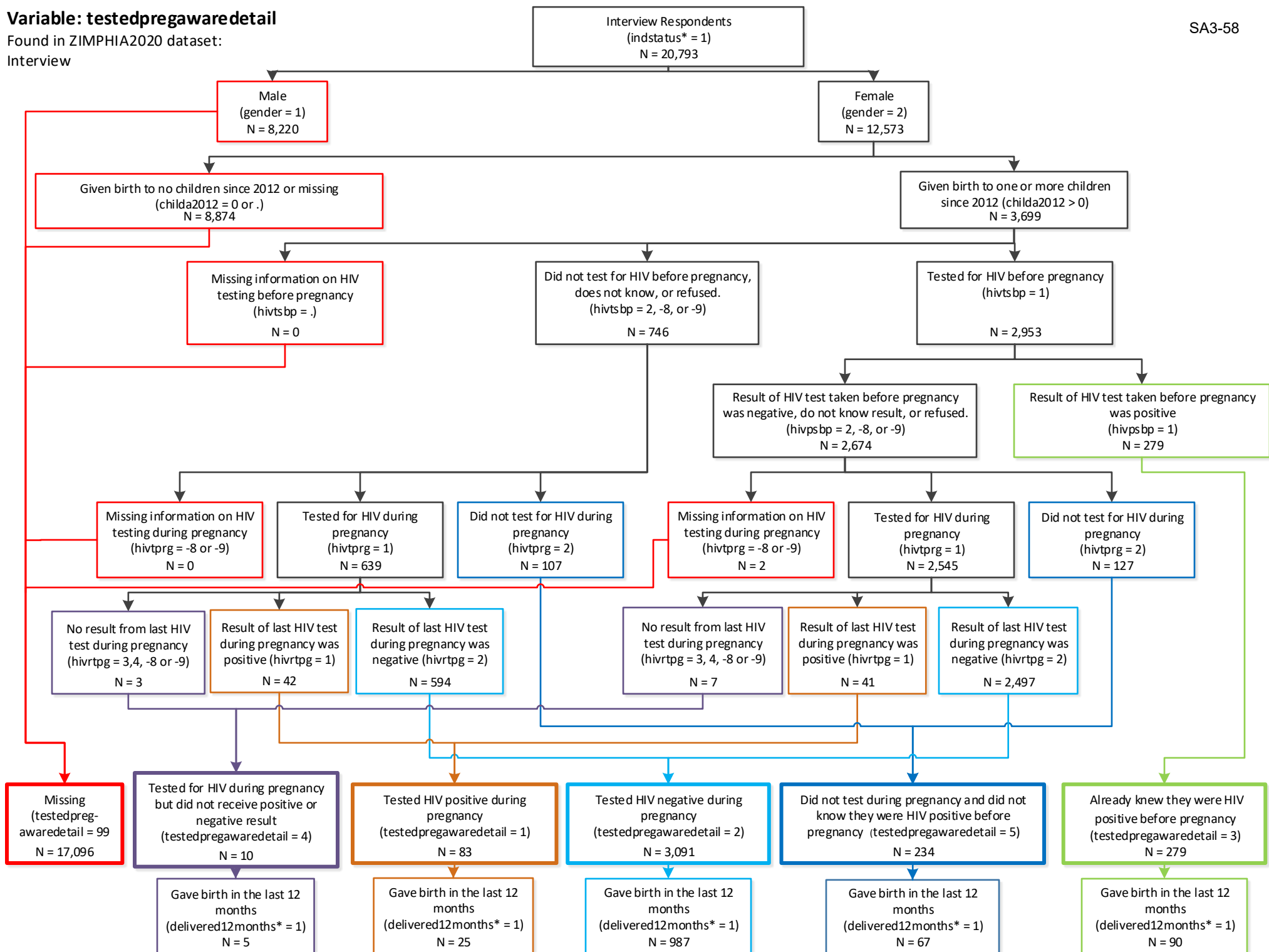
- age
- indstatus
- gender
- pregnant

Variable: testedpregawaredetail

Found in ZIMPHIA2020 dataset:

Interview

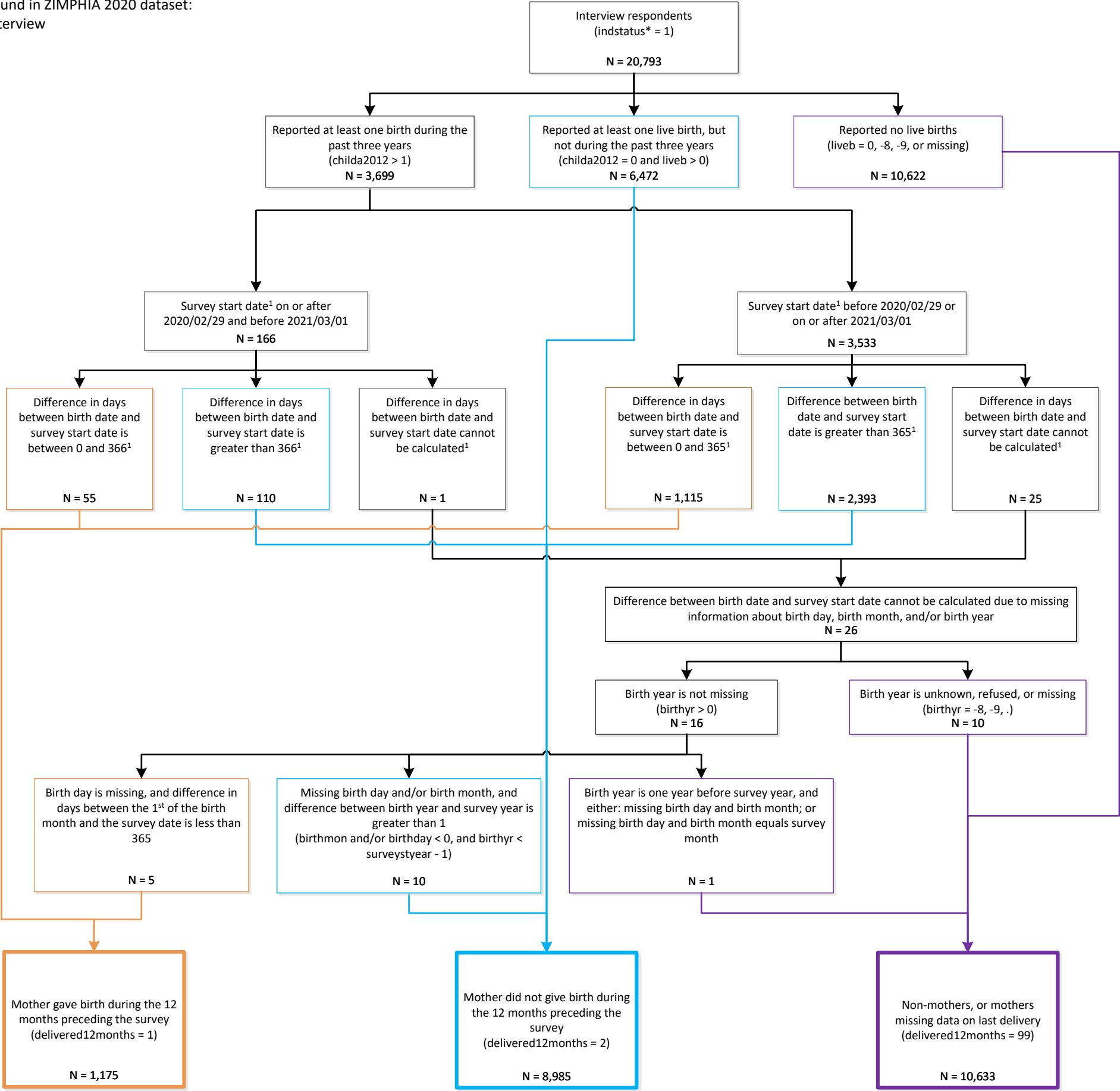
SA3-58



Variable: testedpregawaredetail

Uses the following ZIMPHIA 2020 variables:

- Interview dataset
- indstatus
 - gender
 - childa2012
 - hivtsbp
 - hivpsbp
 - hivtprg
 - hivrtpg
 - delivered12months



¹ Survey start date, the start date for the PHIA interview, is computed using surveystday, surveystmonth, and surveystyear. Birth date, the date of the mother's most recent birth, is computed using birth month (birthmon), birth day (birthday), and birth year (birthyr). Invalid dates, such as dates after the survey start date, or invalid days (eg. 31st of September) are cleaned before calculating date differences.

Variable: delivered12months

Uses the following ZIMPHIA 2020 variables:

Interview

- indstatus
- liveb
- childa2012
- surveystday†
- surveystmonth
- surveystyear
- birthday†
- birthmon
- birthyr

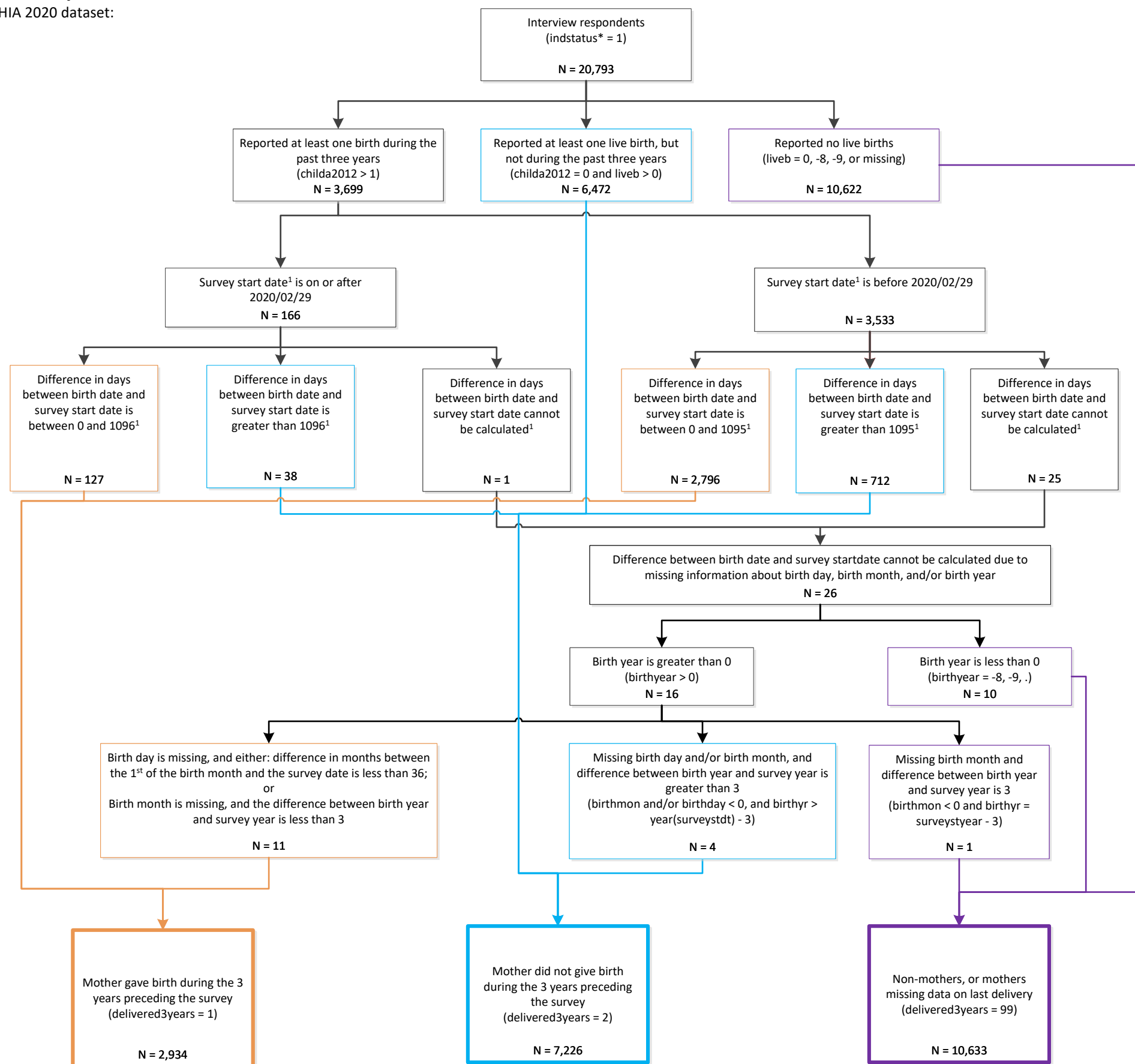
† Variable redacted from final dataset due to small counts and disclosure risk.

Variable: delivered3years

Found in ZIMPHIA 2020 dataset:

Interview

SA3-62



¹ Survey start date, the start date for the PHIA interview, is computed using surveystday, surveystmonth, and surveystyear.

Birth date, the date of the mother's most recent birth, is computed using birth month (birthmon), birth day (birthday), and birth year (birthyr). Invalid dates, such as dates after the survey start date, or invalid days (eg. 31st of September) are cleaned before calculating date differences.

Variable: delivered3years

Uses the following ZIMPHIA 2020 variables:

Interview

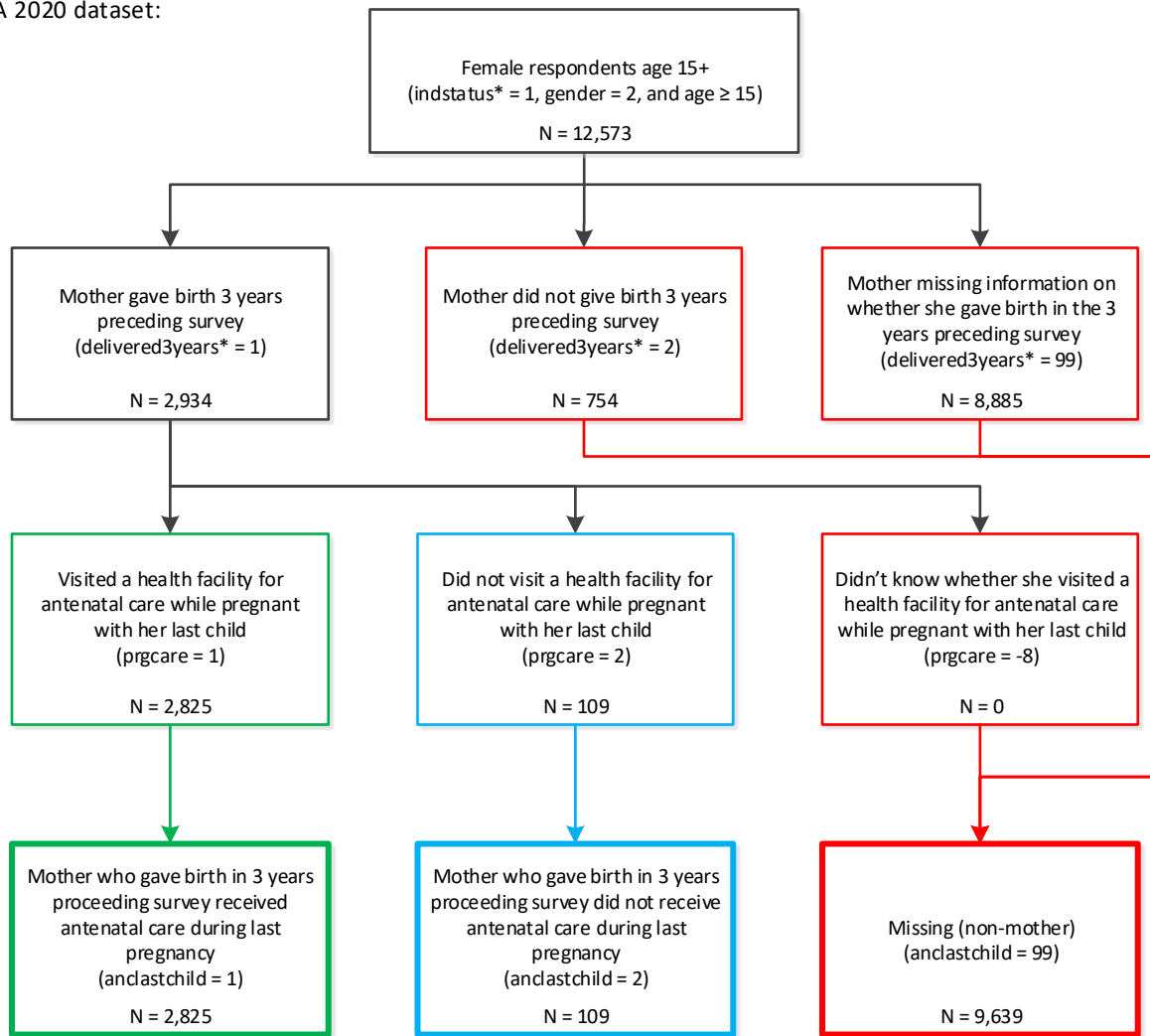
- indstatus
- liveb
- childa2012
- surveystyear
- surveystmonth
- surveystday†
- birthyr
- birthmon
- birthday†

† Variable redacted from final dataset due to small counts and disclosure risk.

Variable: anclastchild

Found in ZIMPHIA 2020 dataset:
Interview

SA3-64



Variable: anclastchild

Uses the following ZIMPHIA 2020 variables:

Interview dataset

age

indstatus

gender

delivered3years

prgcare

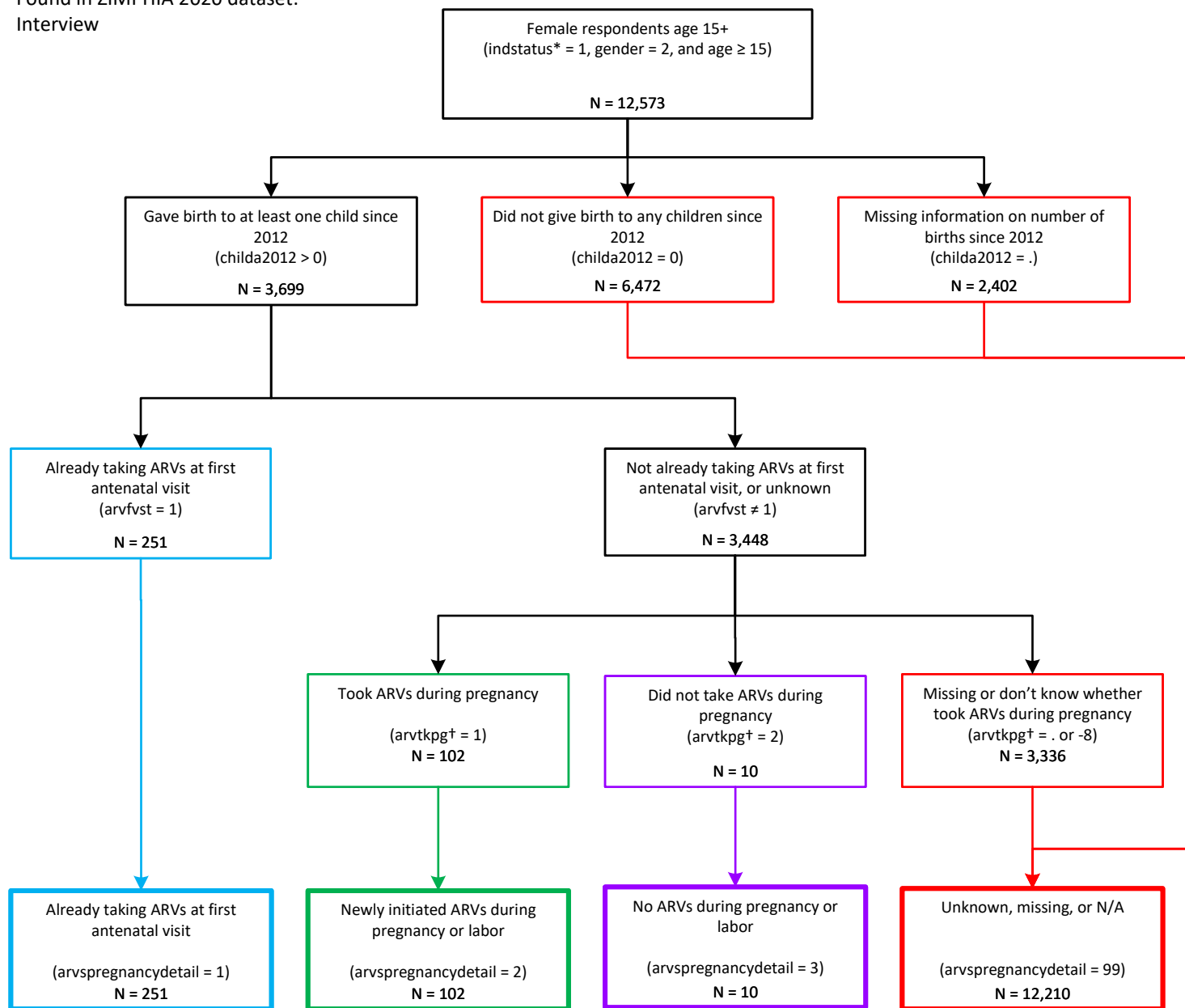
SA3-65

Variable: arvspregnancydetail

Found in ZIMPHIA 2020 dataset:

Interview

SA3-66



Variable: arvspregnancydetail

SA3-67

Uses the following ZIMPHIA 2020 variables:

Interview

- age
- indstatus
- gender
- childa2012
- arvfvst
- arvtpkg†

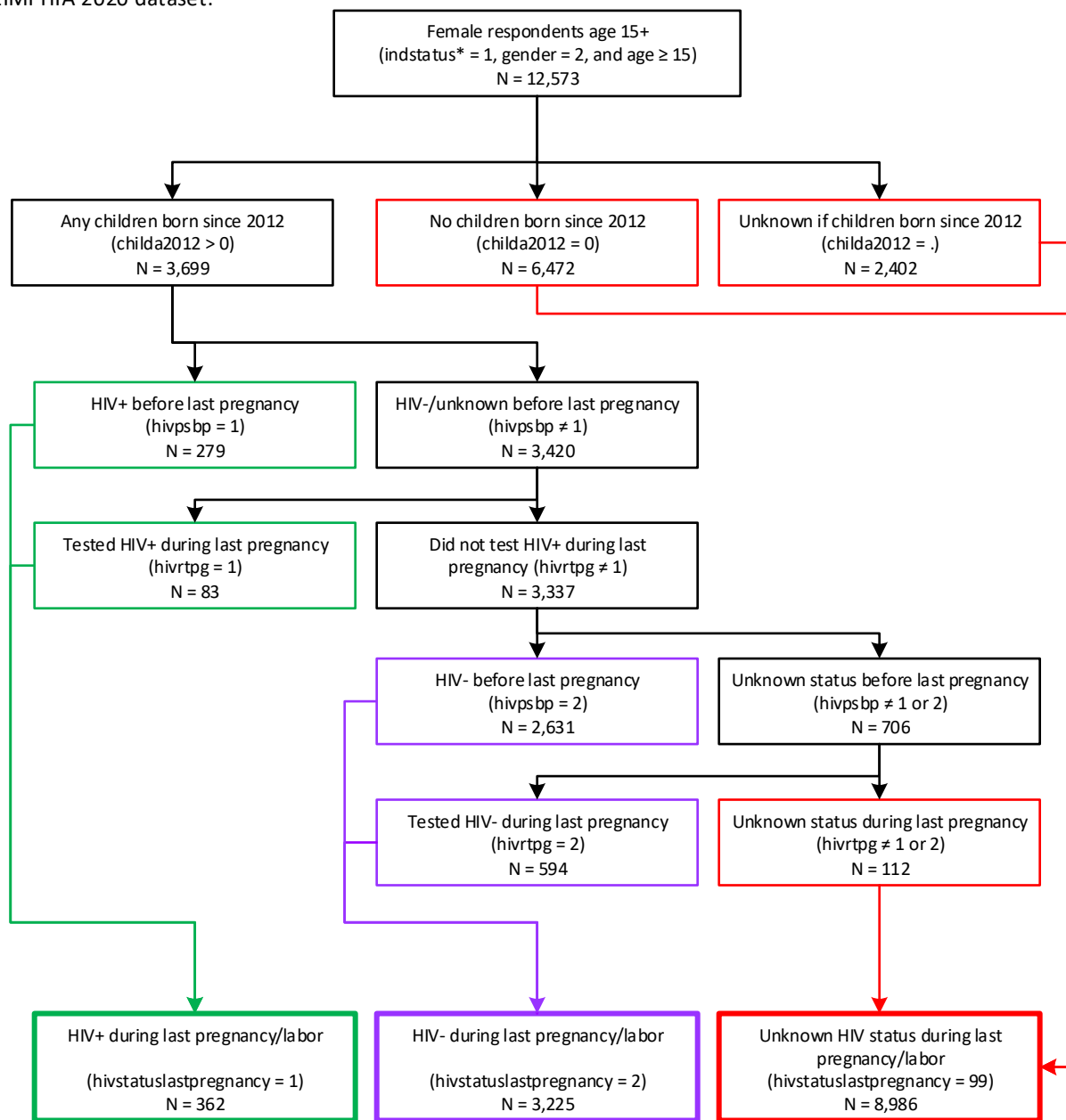
† Variable redacted from public release dataset due to small counts and disclosure risk

Variable: hivstatuslastpregnancy

Found in ZIMPHIA 2020 dataset:

Interview

SA3-68



Variable: hivstatuslastpregnancy

Uses the following ZIMPHIA 2020 variables:

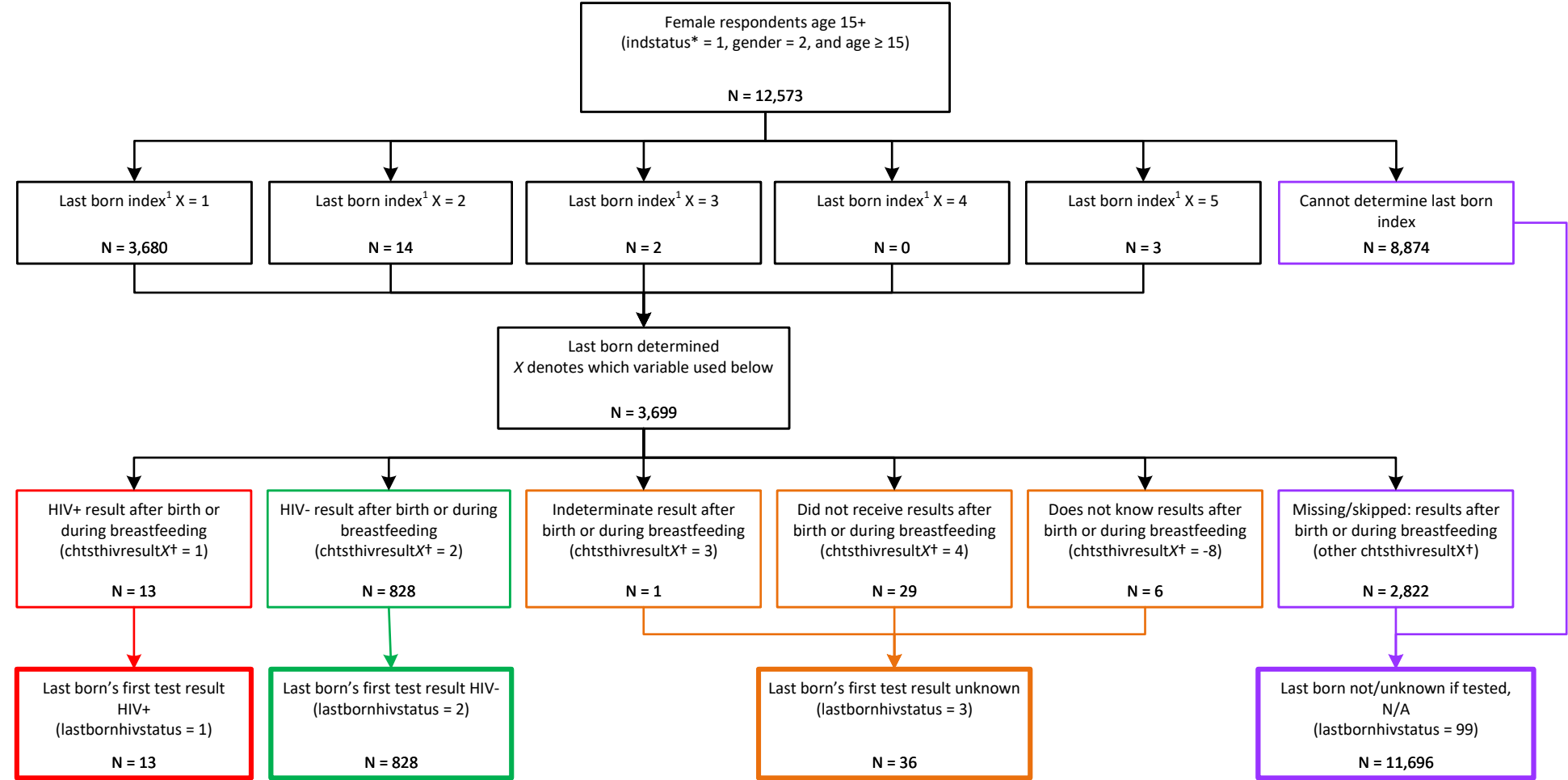
Interview

- age
- indstatus
- gender
- childa2012
- hivpsbp
- hivrtpg

Variable: lastbornhivstatus

Found in ZIMPHIA 2020 dataset:
Interview

SA3-70



¹ Last born child is defined as the highest number X for which the variable childaliveX is not missing.

Variable: lastbornhivstatus

SA3-71

Uses the following ZIMPHIA 2020 variables:

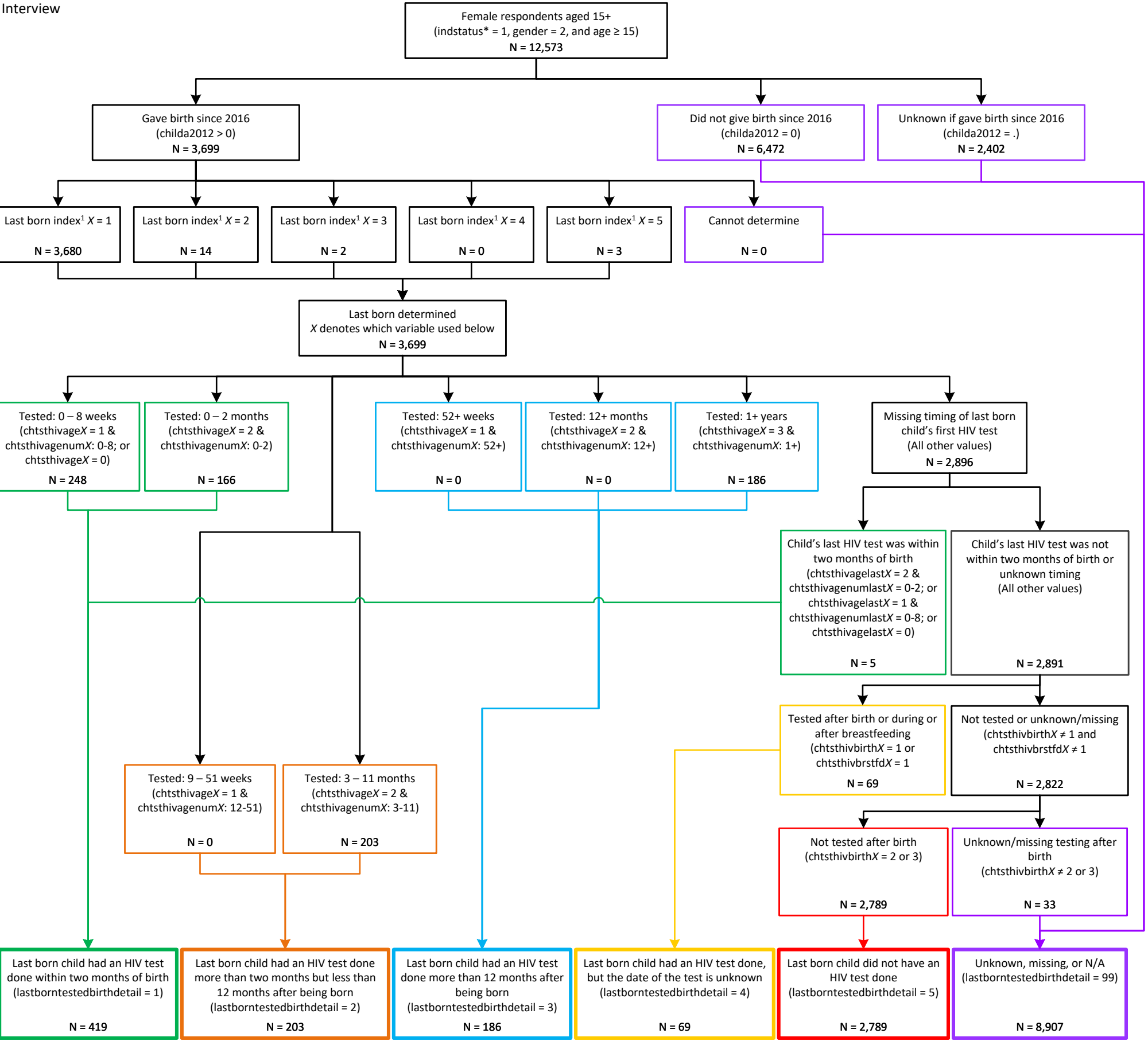
Interview dataset

- age
- indstatus
- gender
- childalive1
- childalive2-5†
- chtsthivresult1
- chtsthivresult2-5†

† Variable redacted from public release dataset due to small counts and disclosure risk

Variable: lastborntestedbirthdetail

Found in ZIMPHIA 2020 datasets:
Interview



¹ Last born child is defined as the highest number X for which the variable childaliveX is not missing.

Variable: lastborntestedbirthdetail

Uses the following ZIMPHIA 2020 variables:

Interview dataset

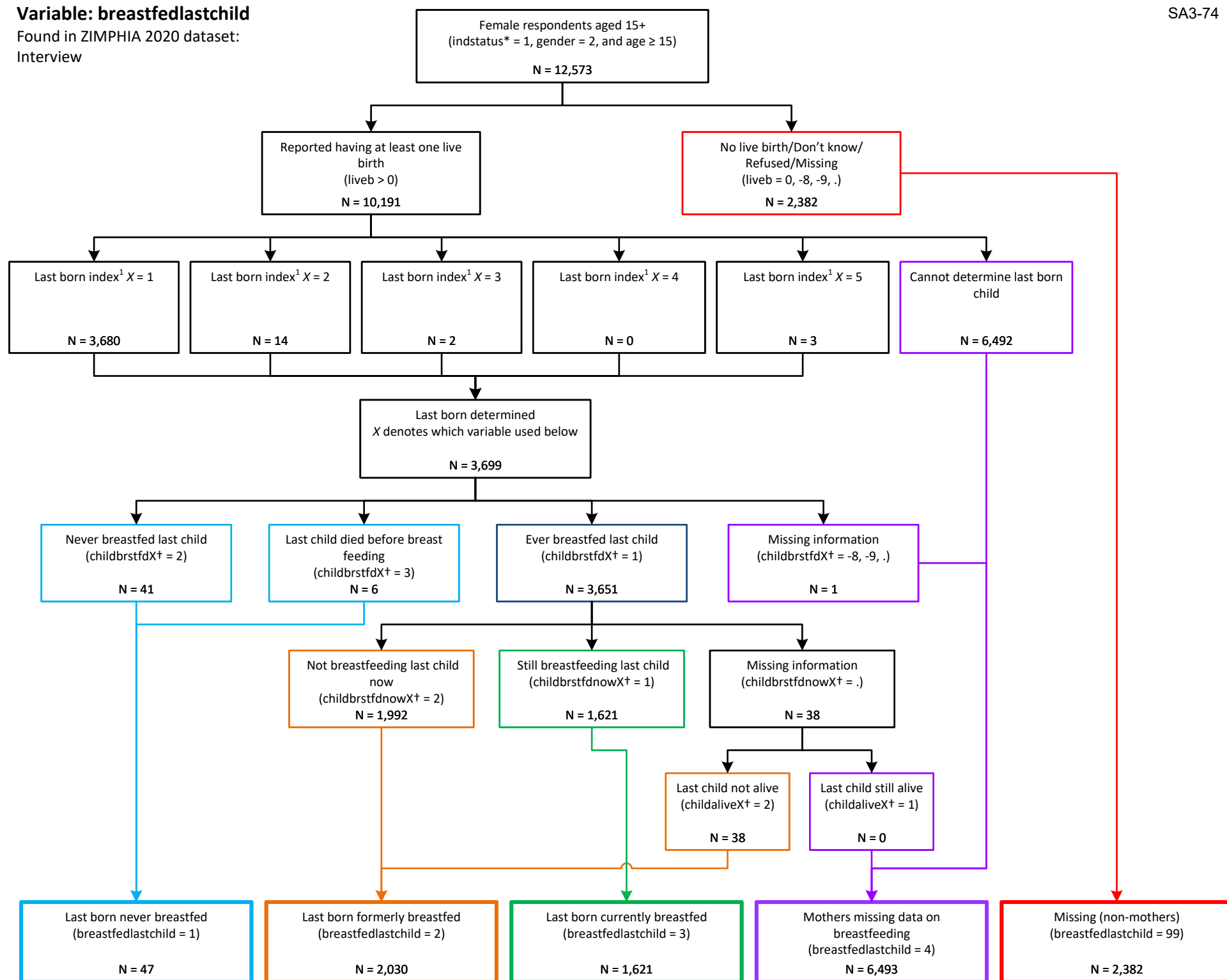
- age
- gender
- indstatus
- childa2012
- childalive1-5
- chtsthivbirth1-5
- chtsthivbrstfd1-5
- chtsthivage1-5
- chtsthivagenum1-5
- chtsthivagelast1-5
- chtsthivagelastnum1-5

Variable: breastfedlastchild

Found in ZIMPHIA 2020 dataset:

Interview

SA3-74



¹ Last born child is defined as the highest number X for which the variable childaliveX is not missing.

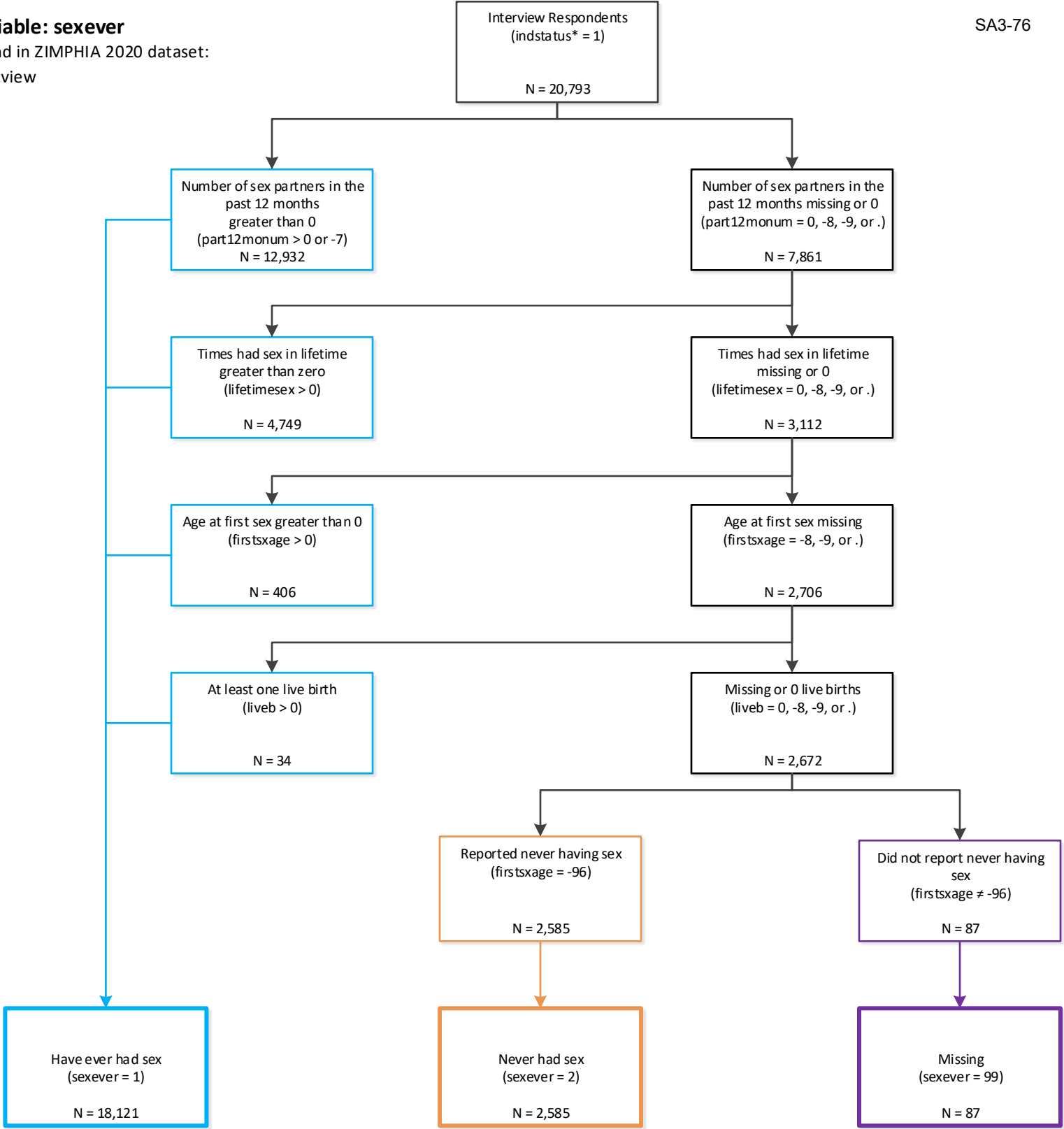
Variable: breastfedlastchild

Uses the following ZIMPHIA 2020 variables:

Interview dataset

- age
- indstatus
- gender
- liveb
- childalive1
- childalive2-5†
- childbrstfd1
- childbrstfd2-5†
- childbrstfdnow1
- childbrstfdnow2-5†

† Variable redacted from public release dataset due to small counts and disclosure risk



Variable: sexever

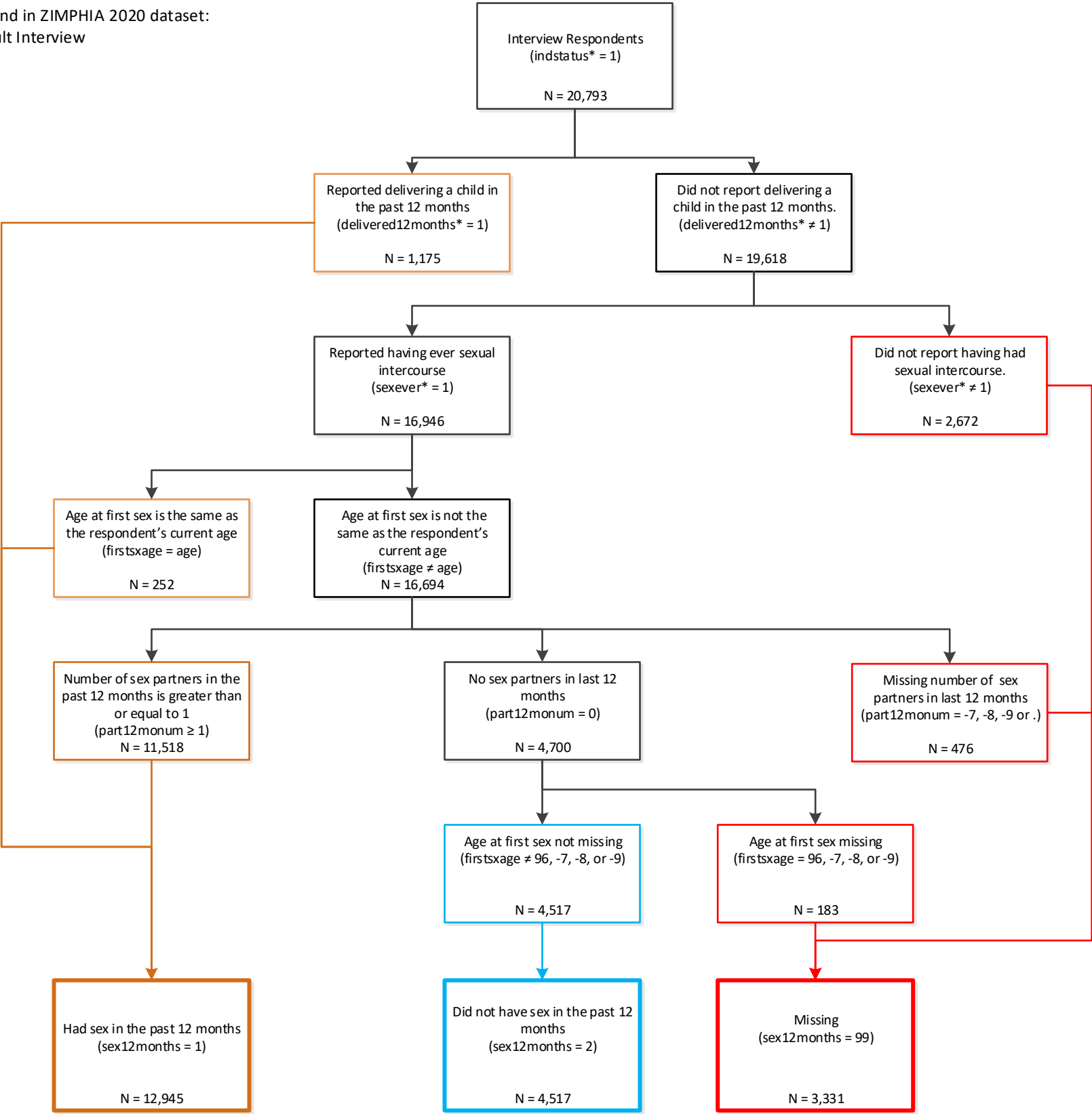
Uses the following ZIMPHIA 2020 variables:

Interview dataset

- indstatus
- part12monum
- lifetimesex
- liveb
- firstsxage

Variable: sex12months

Found in ZIMPHIA 2020 dataset:
Adult Interview



1. Number of sex partners in the past 12 months is out of range for women who had a child in the past 12 weeks.

Variable: sex12months

Uses the following ZIMPHIA 2020 variables:

Adult Interview dataset

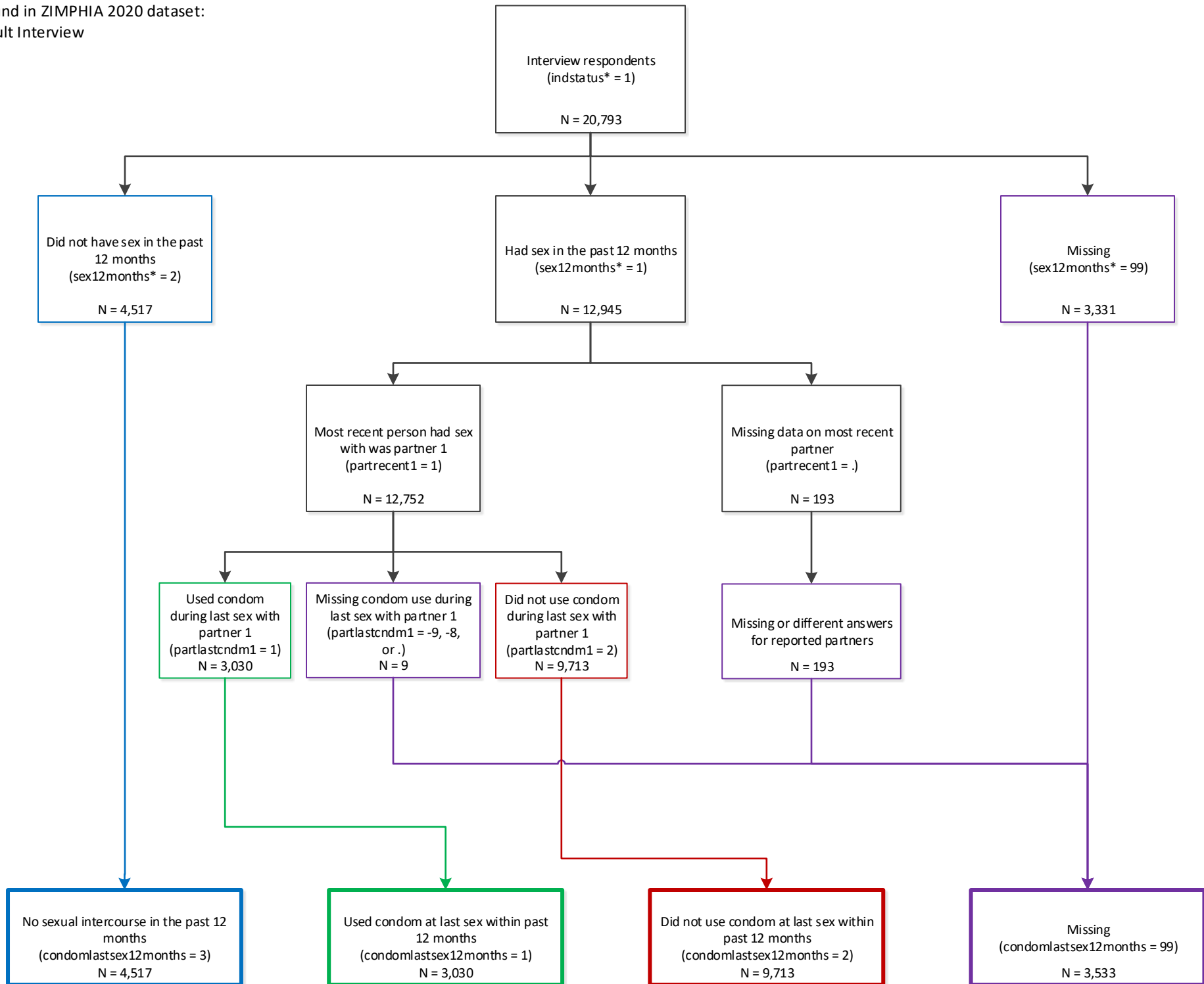
- age
- indstatus
- delivered12months
- sexever
- part12monum
- firstsxage

Variable: condomlastsex12months

Found in ZIMPHIA 2020 dataset:

Adult Interview

SA3-80



Variable: condomlastsex12months

Uses the following ZIMPHIA 2020 variables:

Adult Interview dataset

indstatus

sex12months

partrecent1

partlastsxunits1-3

partlastsxtime1-3

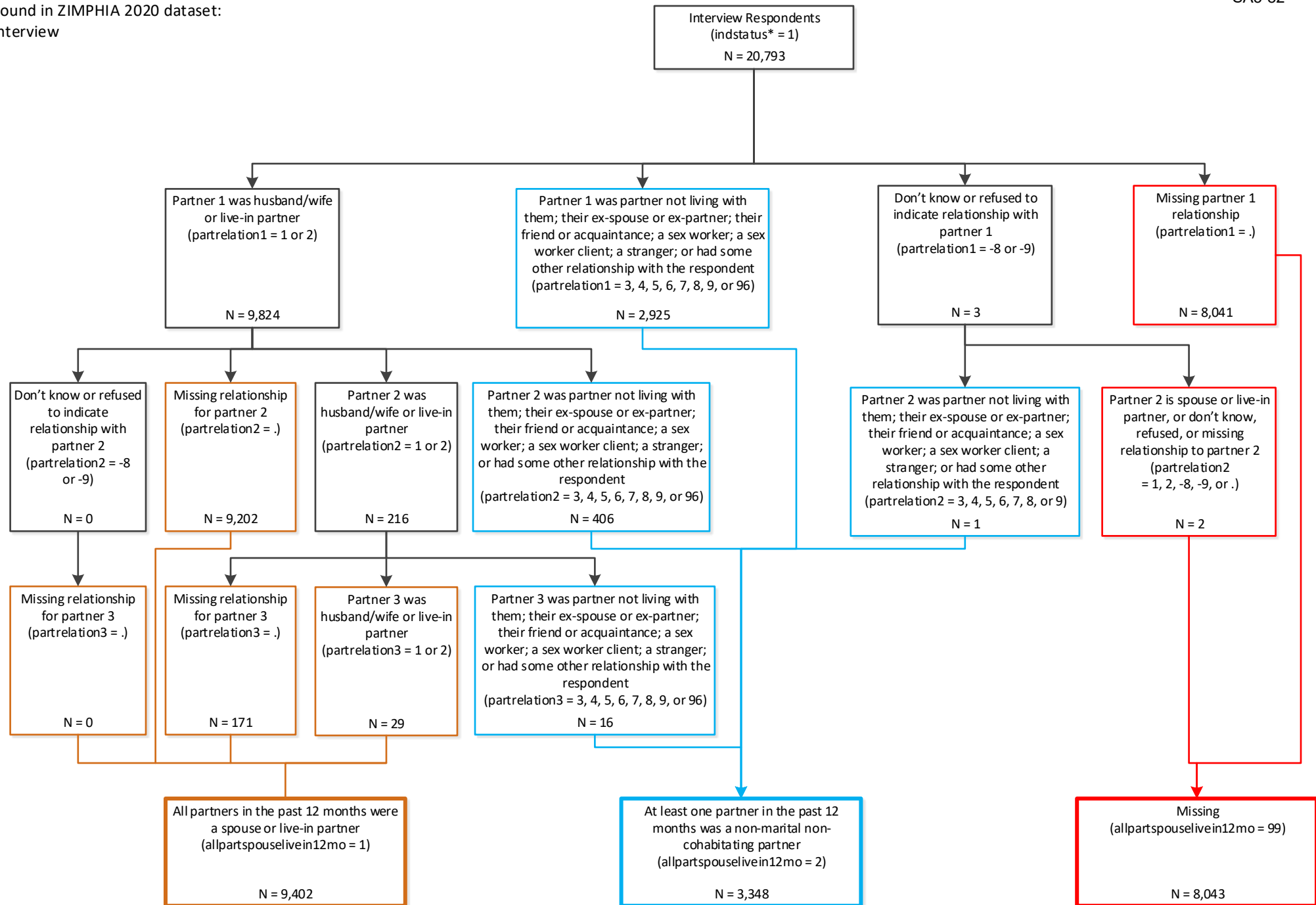
partlastcndm1-3

Variable: allpartspouselivein12mo

Found in ZIMPHIA 2020 dataset:

Interview

SA3-82



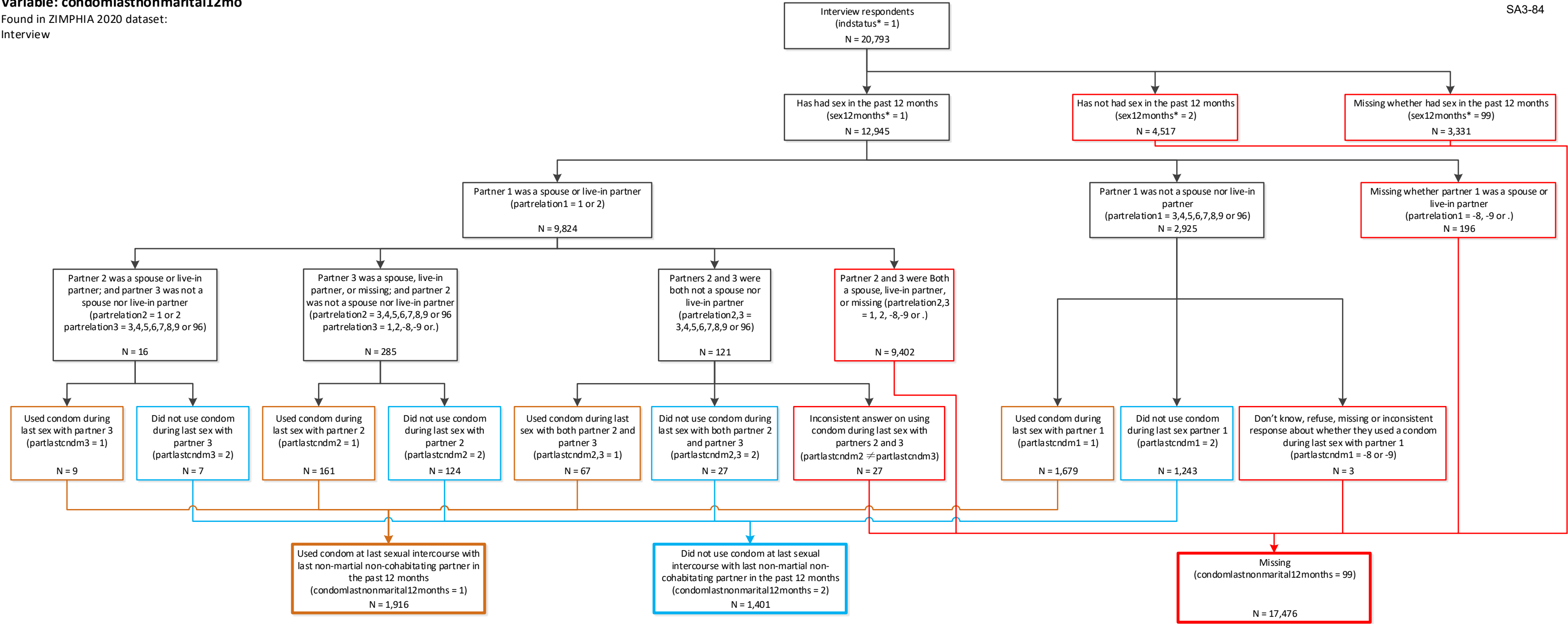
Variable: allpartspouselivein12months

Uses the following ZIMPHIA 2020 variables:

- Interview dataset
- indstatus
- partrelation1-3

Variable: condomlastnonmarital12mo
Found in ZIMPHIA 2020 dataset:
Interview

SA3-84



Variable: condomlastnonmarital12mo

Uses the following ZIMPHIA 2020 variables:

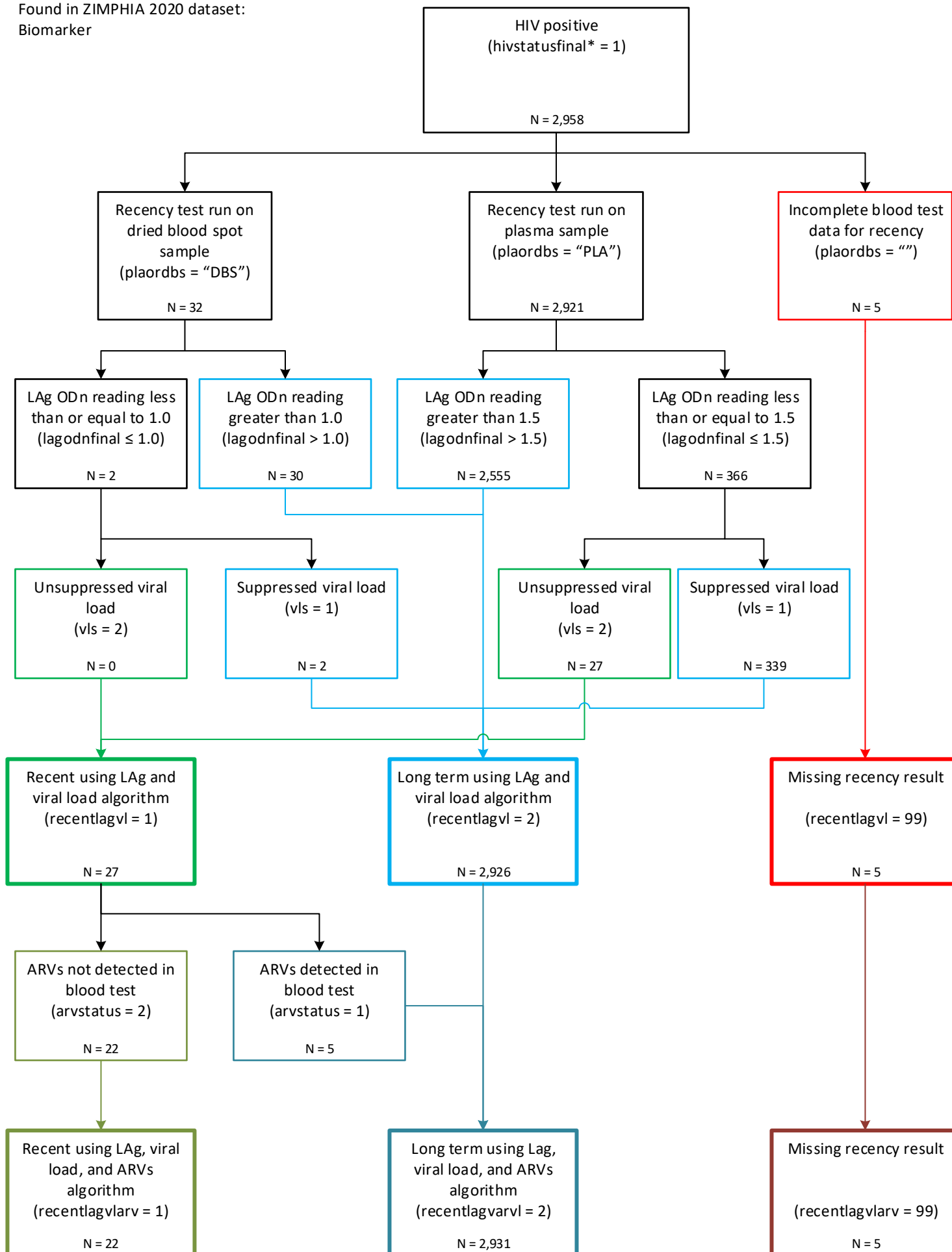
- Interview dataset
- indstatus
- sex12months
- partlastcndm1-3
- partrelation1-3

Variable: recentlagvl/recentlagvarv

SA3-86

Found in ZIMPHIA 2020 dataset:

Biomarker



Variable: recentlagvl/recentlagvlarv

Uses the following ZIMPHIA 2020 variables:

Biomarker dataset

hivstatusfinal

plaordbs

lagodnfinal

vls

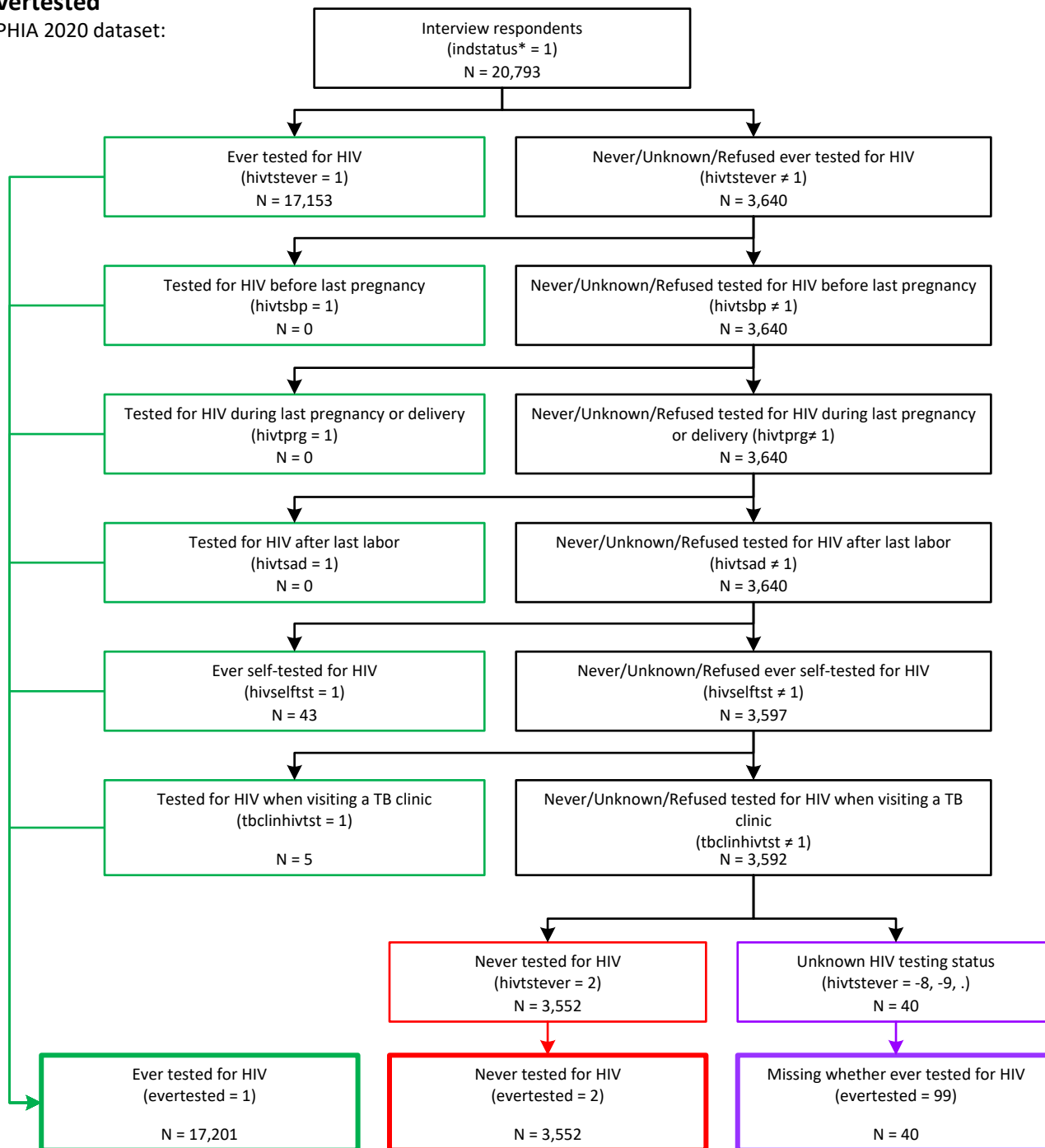
arvstatus

Variable: evertested

Found in ZIMPHIA 2020 dataset:

Interview

SA3-88



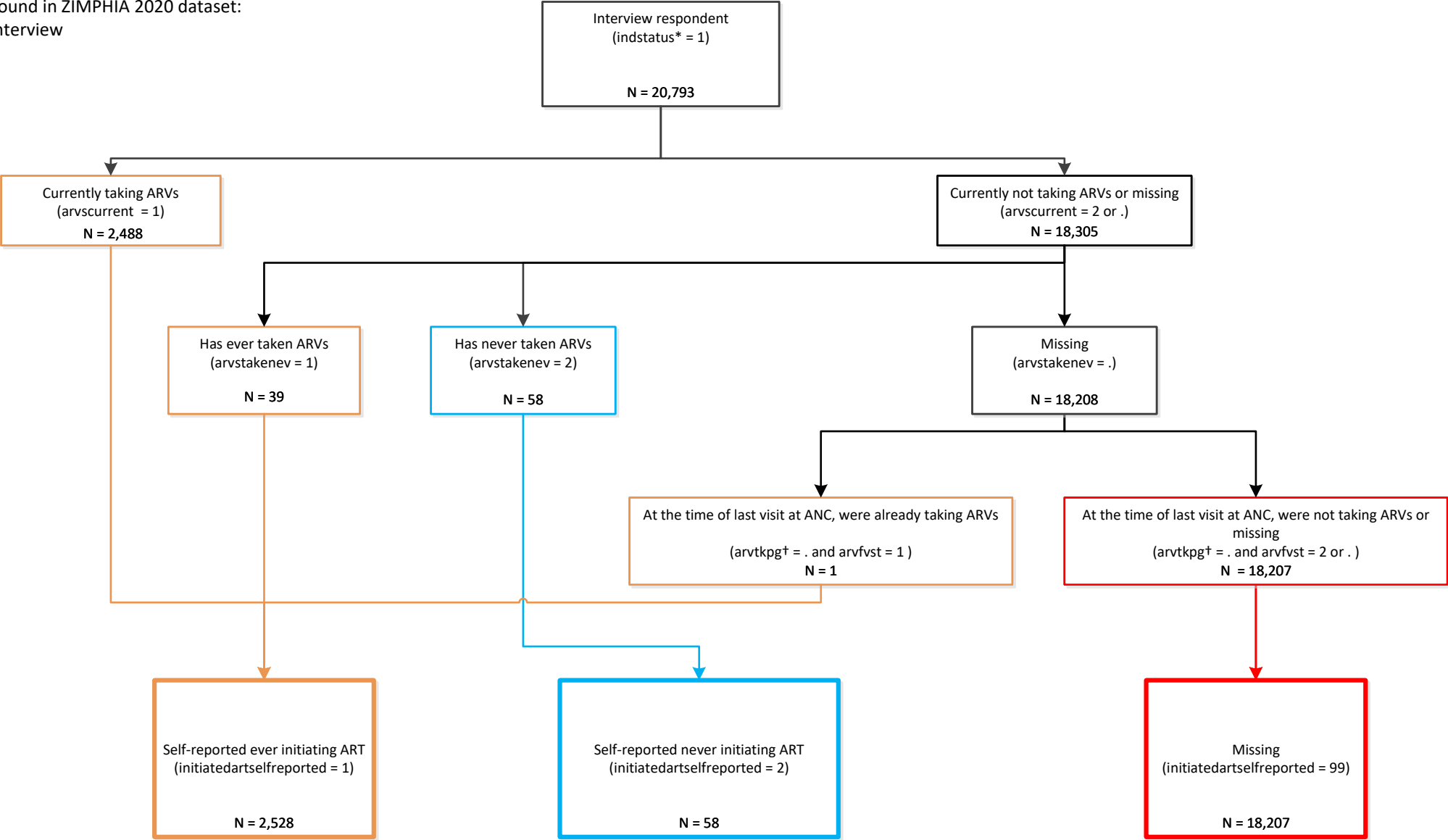
Variable: evertested

Uses the following ZIMPHIA 2020 variables:

- Interview
 - indstatus
 - hivtstever
 - hivtsbp
 - hivtprg
 - hivtsad
 - hivselftst
 - tbclinhivtst
 - evertested

Variable: **initiatedartselfreported**

Found in ZIMPHIA 2020 dataset:
Interview



Variable: initiatedartselfreported

Uses the following ZIMPHIA 2020 variables:

Interview dataset

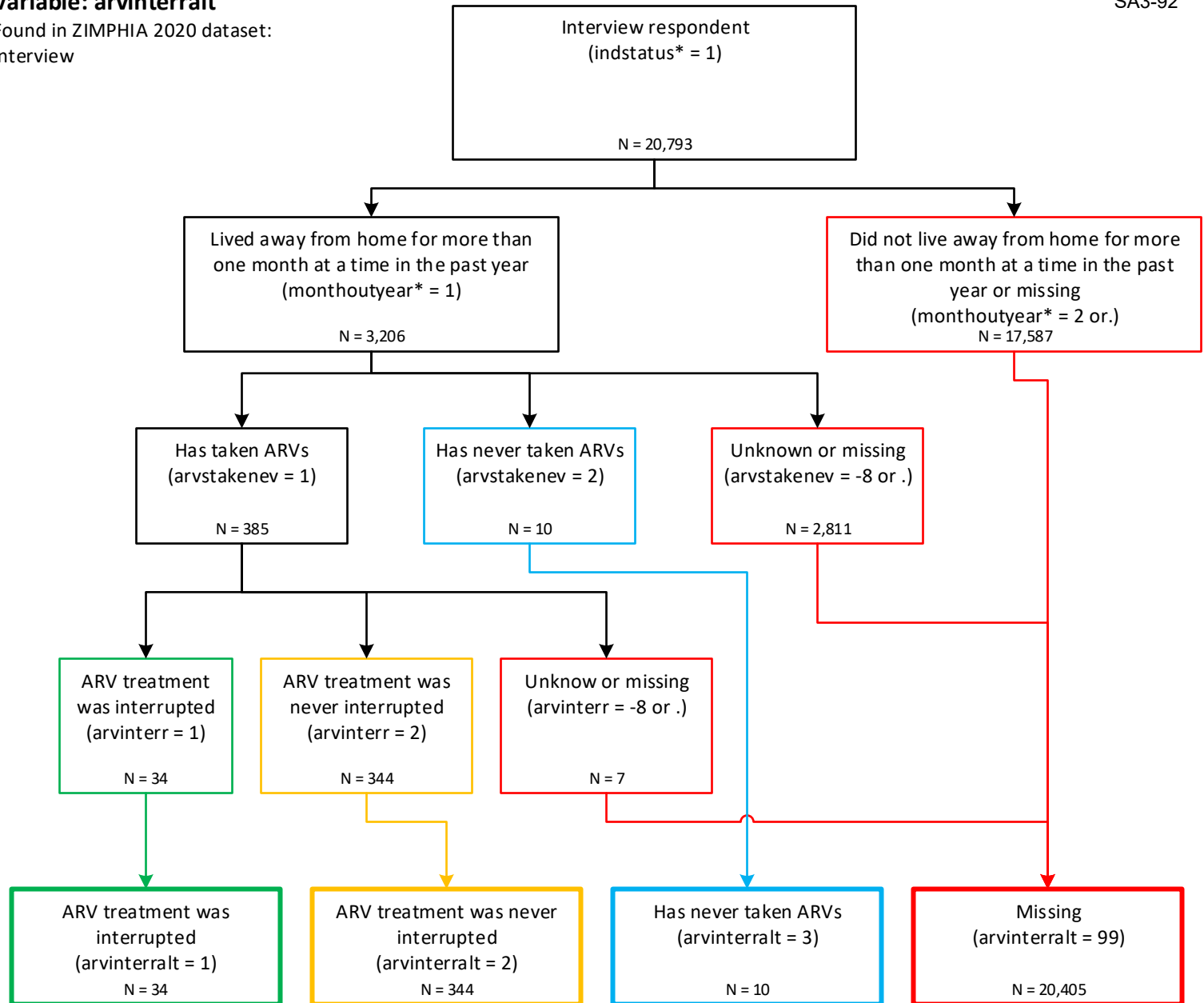
- indstatus
- arvcurrent
- arvstakenev
- arvfvt
- arvtpg†

† Variable redacted from public release dataset due to small counts and disclosure risk

Variable: arvinterralt

Found in ZIMPHIA 2020 dataset:
Interview

SA3-92



Variable: arvinterralt

Uses the following ZIMPHIA 2020 variables:

Interview dataset

indstatus

arvstakenev

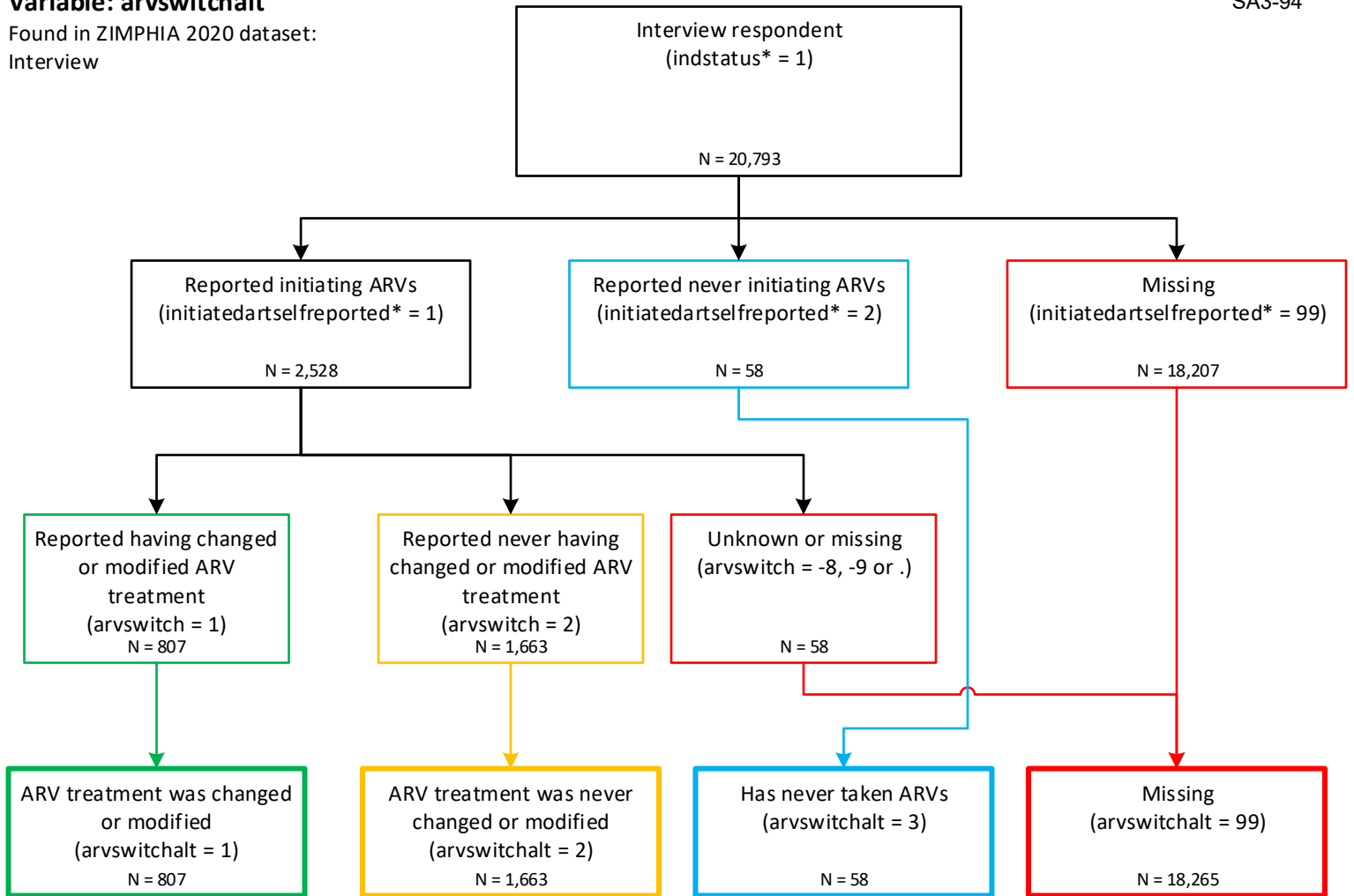
arvinterr

monthoutyear

Variable: arvswitchalt

Found in ZIMPHIA 2020 dataset:
Interview

SA3-94



Variable: arvswitchalt

Uses the following ZIMPHIA 2020 variables:

Interview dataset

indstatus

initiatedartselfreported

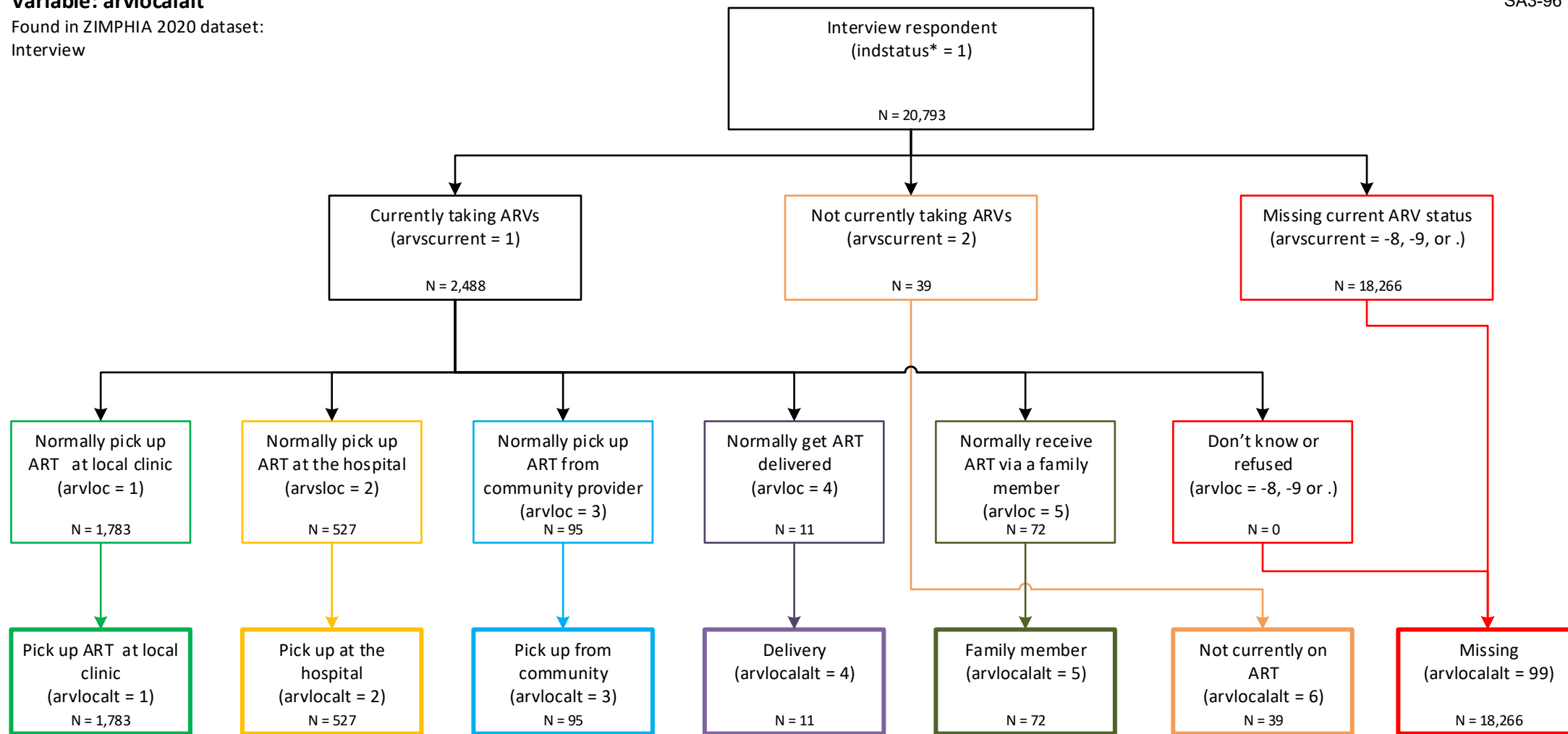
arvswitch

SA3-95

Variable: arvlocalalt

Found in ZIMPHIA 2020 dataset:
Interview

SA3-96



Variable: arvlocalalt

Uses the following ZIMPHIA 2020 variables:

Interview dataset

indstatus

arvscurrent

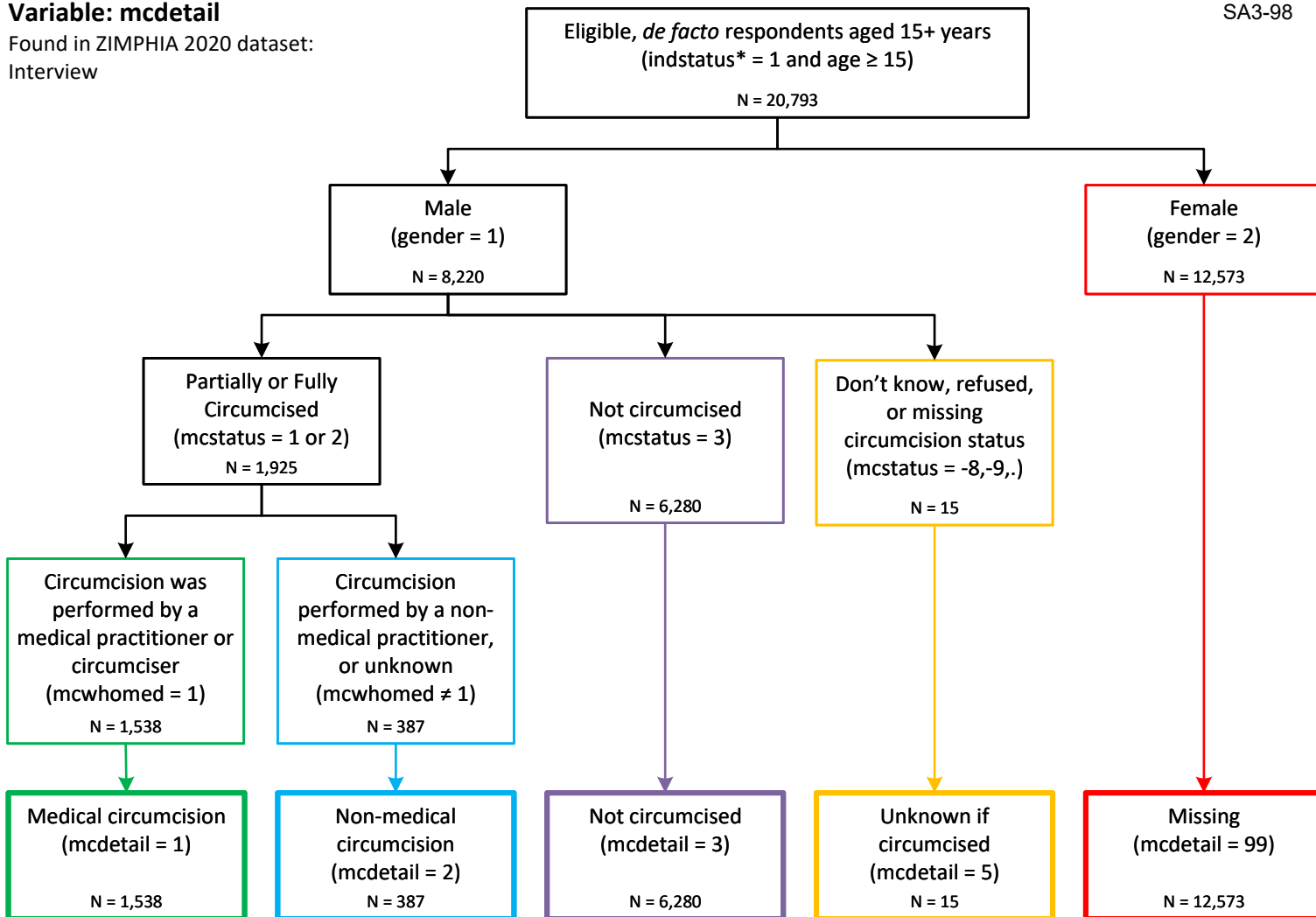
arvloc

SA3-97

Variable: mcdetail

Found in ZIMPHIA 2020 dataset:
Interview

SA3-98



Variable: mcdetail

Uses the following ZIMPHIA 2020 variables:

Interview dataset

indstatus

age

gender

mcstatus

mcwhomed

SA3-99