

Flow diagrams for analytic variables

This section contains flow diagrams for analytic variables provided in the INSIDA 2021 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 initiatedartselselfreported)</i> | SA3-1 |
| psu_status/du_status/hhstatus/ indstatus/bt_status | Indicators of PSU, dwelling, 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 |
| artselselfreported | 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 |
| awareartselselfreported | 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 |
| tri90sraprt | Indicator of whether individual self-reported on ART, for 90-90-90 analysis using only self-reported awareness and ART data | SA3-38 |

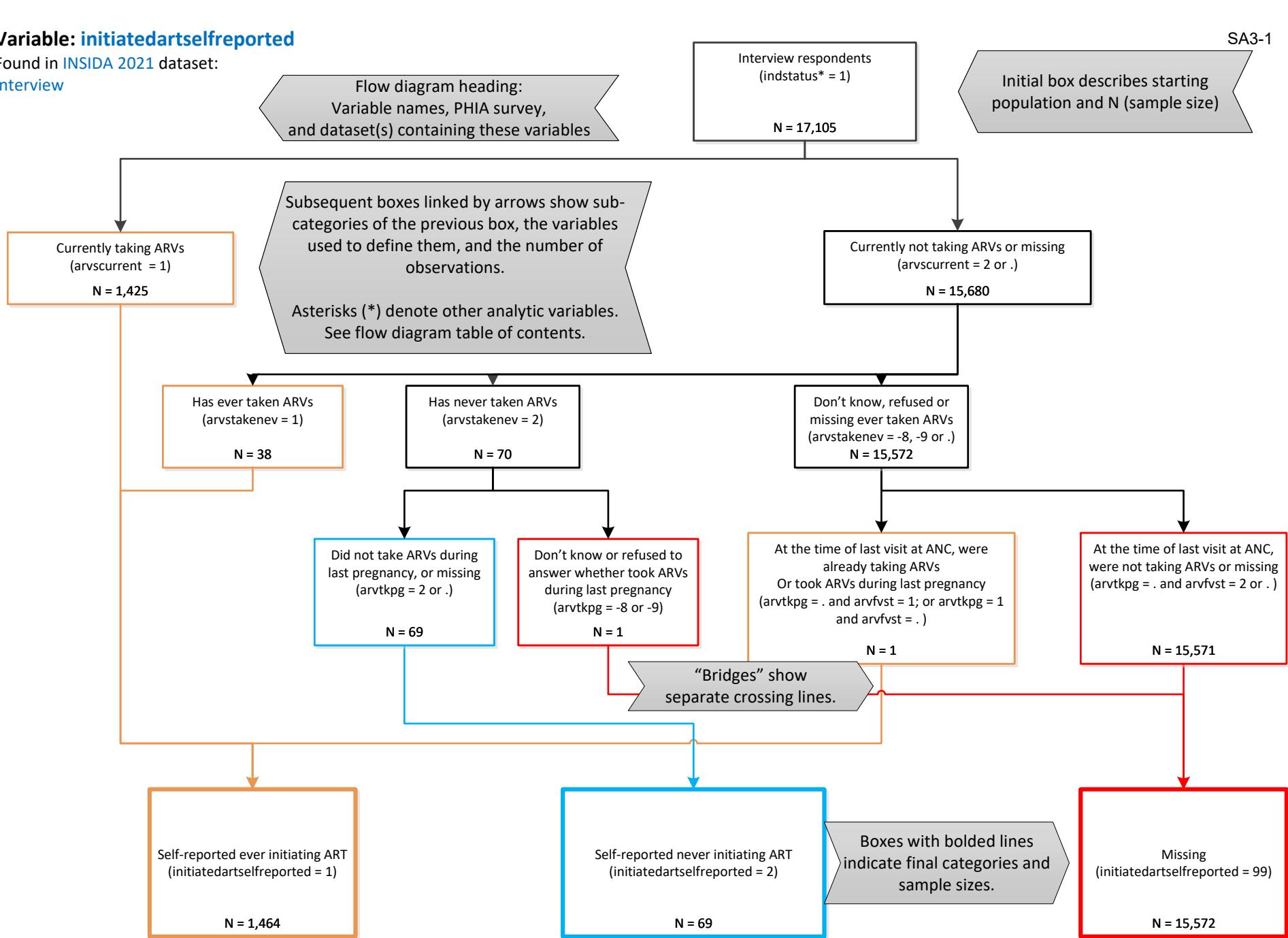
| | | |
|----------------------------|---|--------|
| tri90srvl | Indicator of whether individual has suppressed viral load, for 90-90-90 analysis using only self-reported awareness and ART data | SA3-40 |
| tri90vl | Flag for inclusion in 90-90-90 analysis using self-reported awareness and a viral load 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 |
| tri90vlvl | 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 HIV testing for last born child, 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_mz | Usual location of pickup of ART, for individuals self-reported on ART | SA3-96 |
| mcdetail | Male circumcision category | SA3-98 |

Variable: initiatedartselfreported

Found in [INSIDA 2021](#) dataset:

[Interview](#)

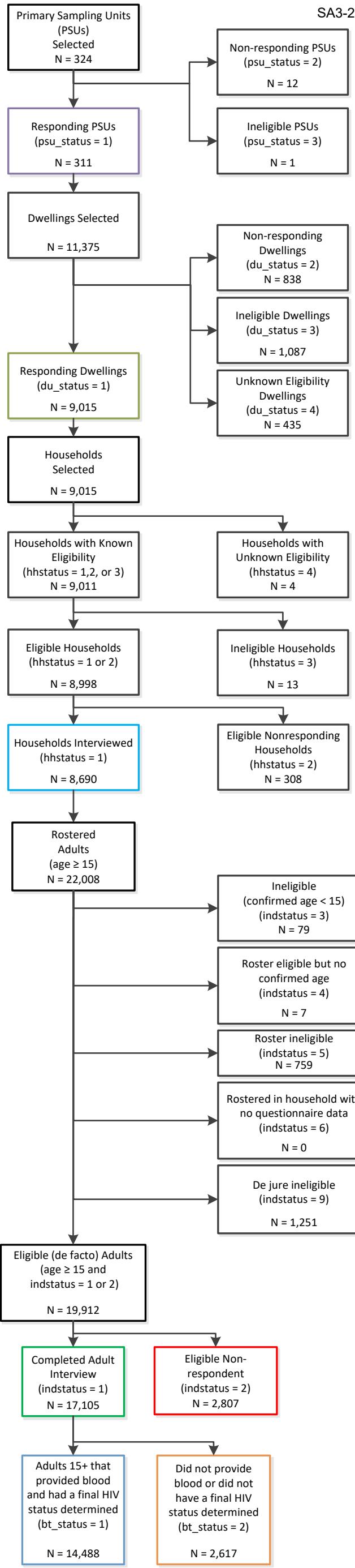
SA3-1



Variables: psu_status, du_status, hhstatus, indstatus, bt_status

Found in INSIDA 2021 datasets:

PSU
Household
Interview
Biomarker



Variables: hhstatus, indstatus, bt_status

Use the following INSIDA 2021 variables:

PSU dataset

 psu_status

Household dataset

 du_status

 hhstatus

Interview dataset

 age

 indstatus

Biomarker dataset

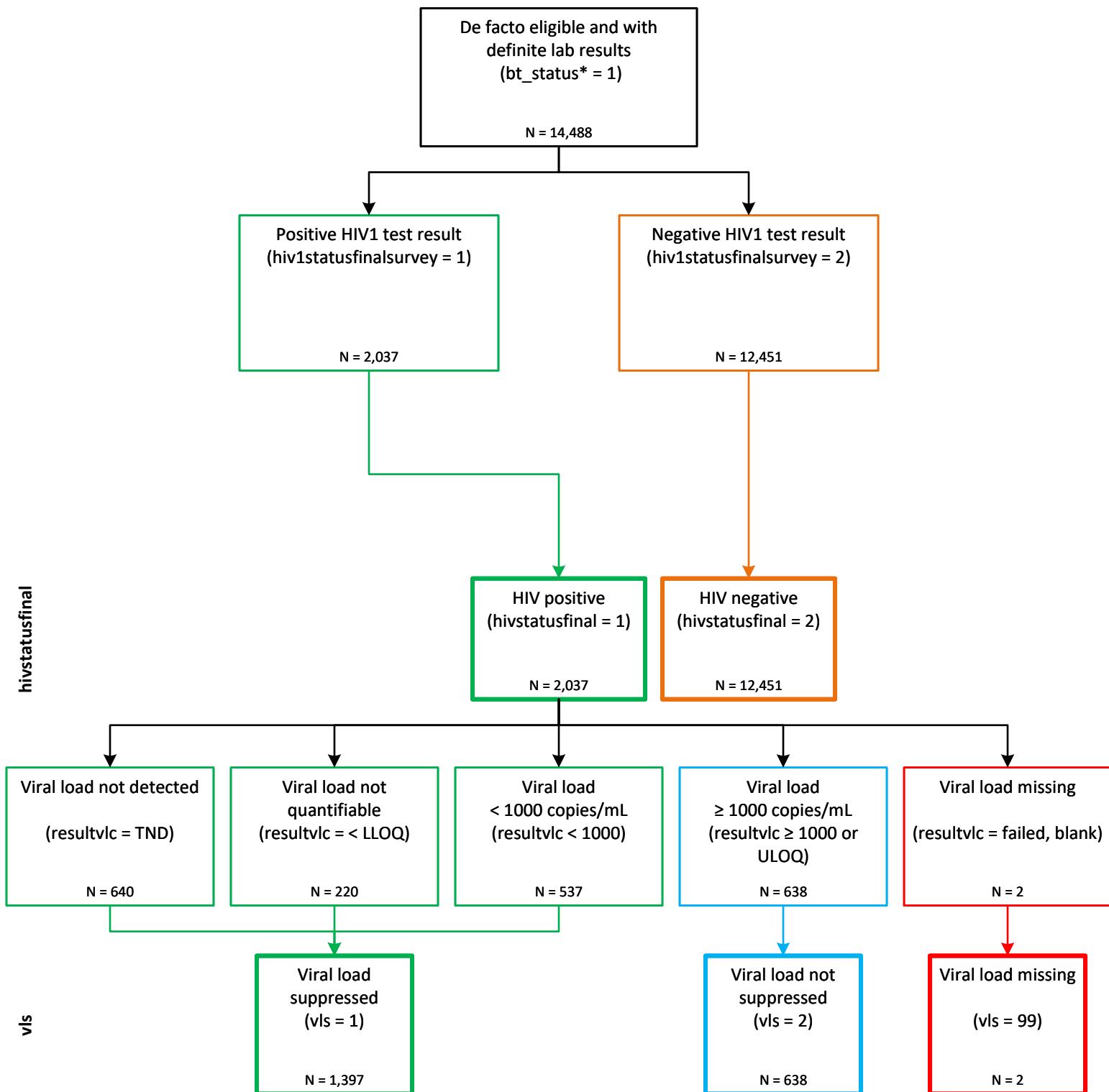
 bt_status

Variables: hivstatusfinal, vls

SA3-4

Found in INSIDA 2021 datasets:

Biomarker



Variables: hivstatusfinal, vls

SA3-5

Uses variables from INSIDA 2021 datasets:

Biomarker

bt_status

hiv1statusfinalsurvey

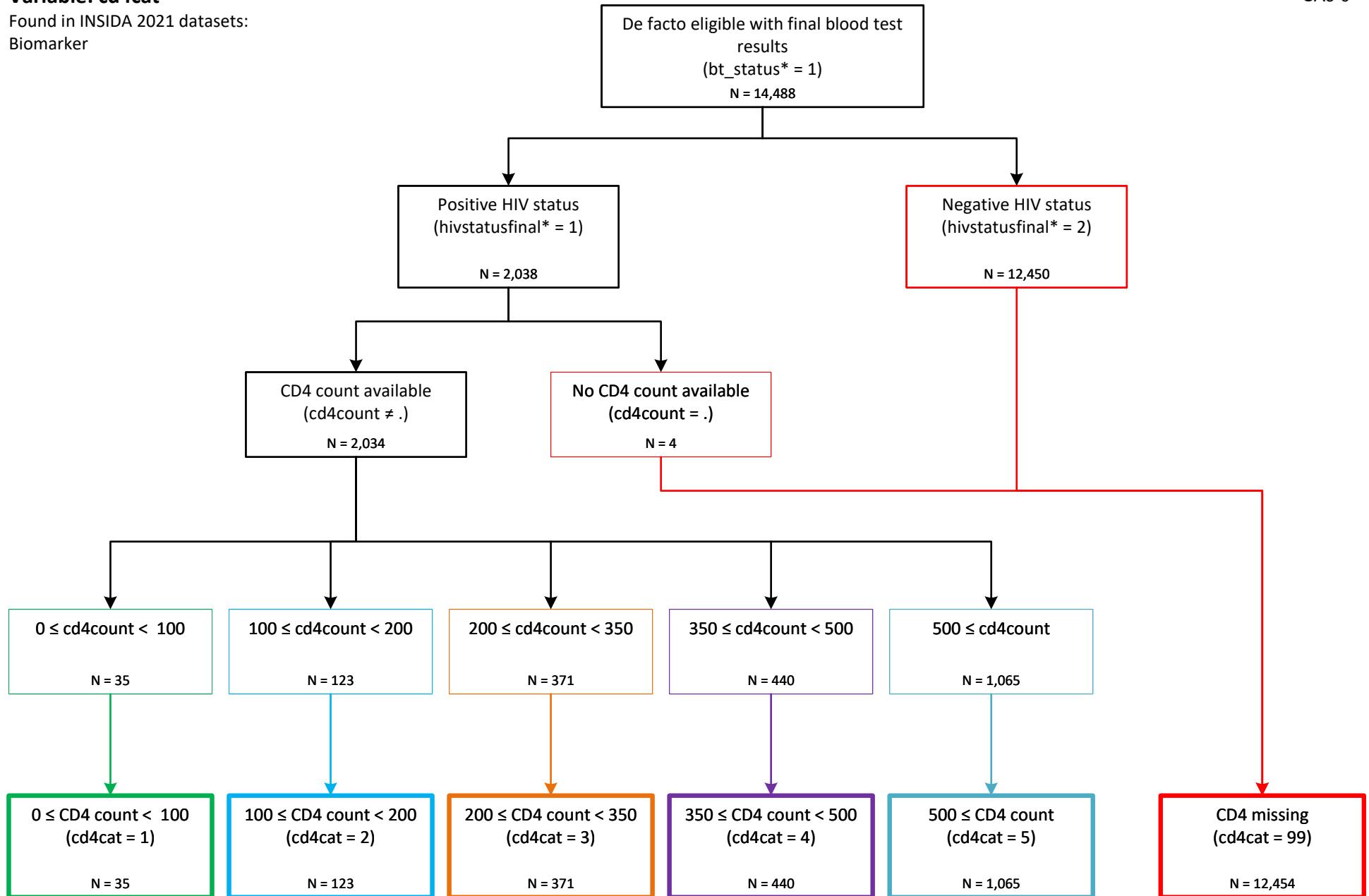
hivstatusfinal

resultvlc

vls

Variable: cd4cat

Found in INSIDA 2021 datasets:
Biomarker



Variable: cd4cat

Uses the following INSIDA 2021 variables:

Biomarker dataset

bt_status

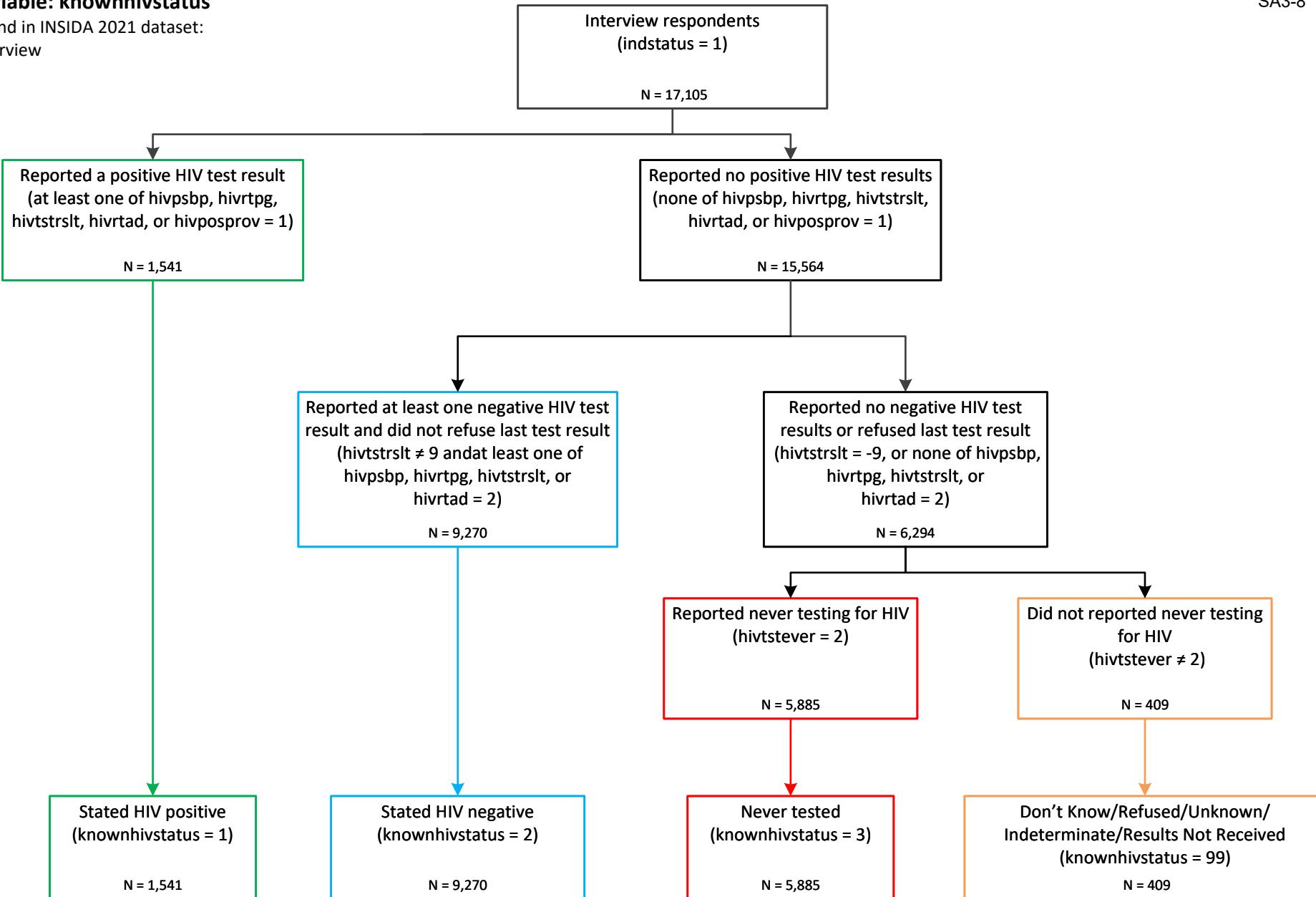
hivstatusfinal

cd4count

Variable: knownhivstatus

Found in INSIDA 2021 dataset:

Interview



Variable: knownhivstatus

SA3-9

Uses the following INSIDA 2021 variables:

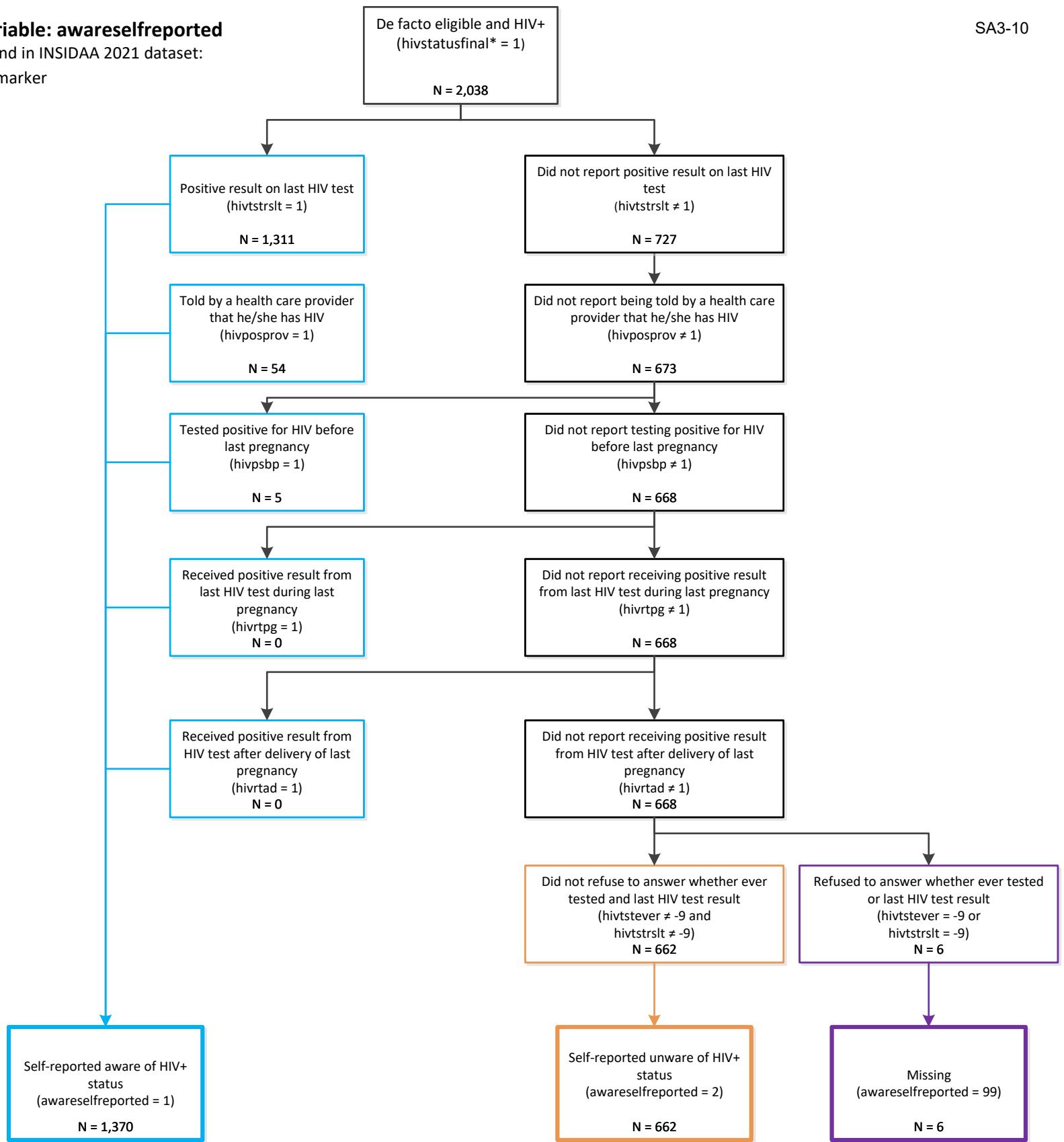
Interview dataset

age
indstatus
hivtsteve
hivposprov
hivstrslt
hivrtad
hivpsbp
hivrtpg

Variable: awareselfreported

Found in INSIDAA 2021 dataset:

Biomarker



Variable: awareselfreported

SA3-11

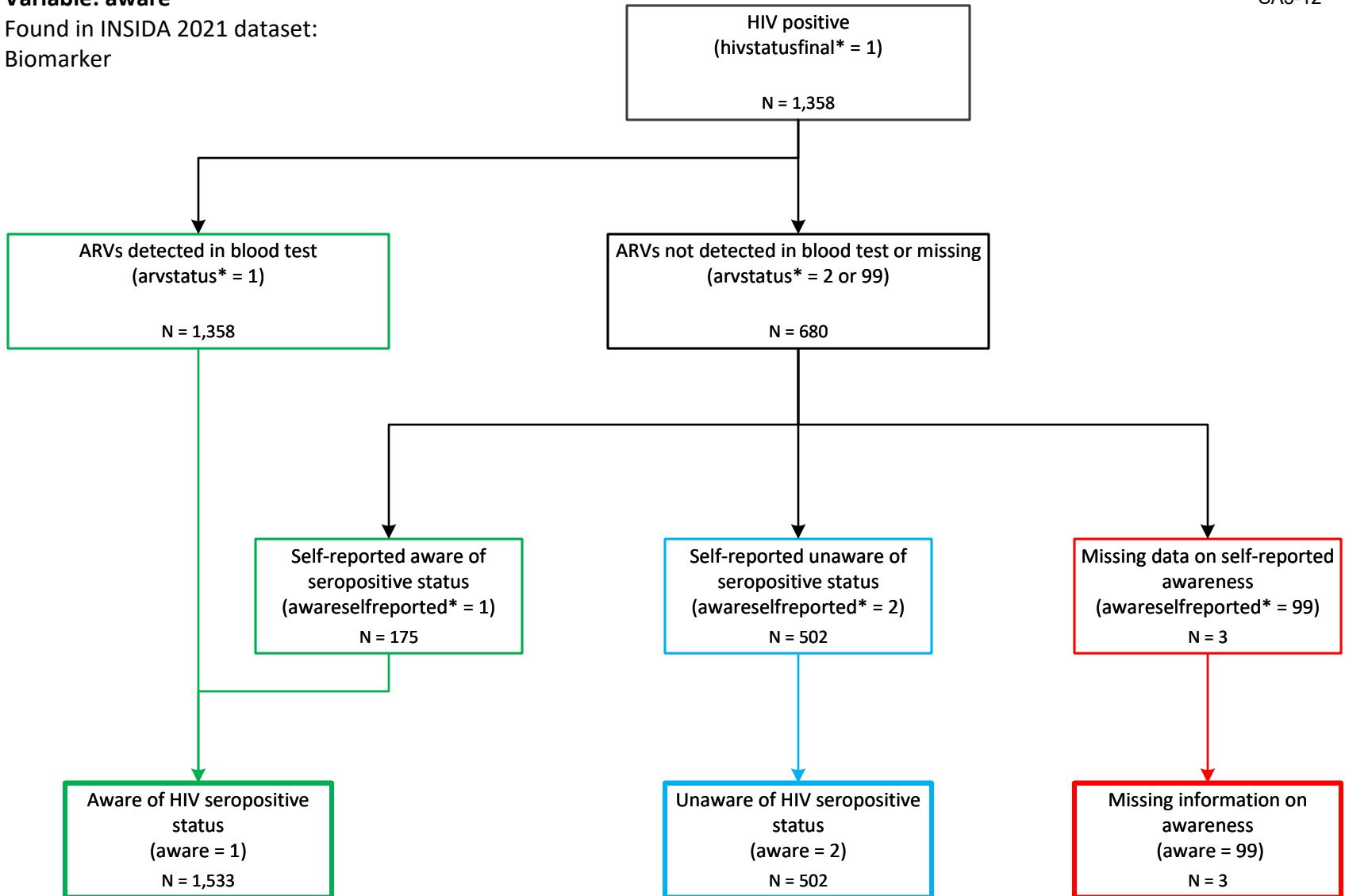
Uses the following INSIDA 2021 variables:

Interview dataset

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

Variable: aware

Found in INSIDA 2021 dataset:
Biomarker



Variable: aware

SA3-13

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

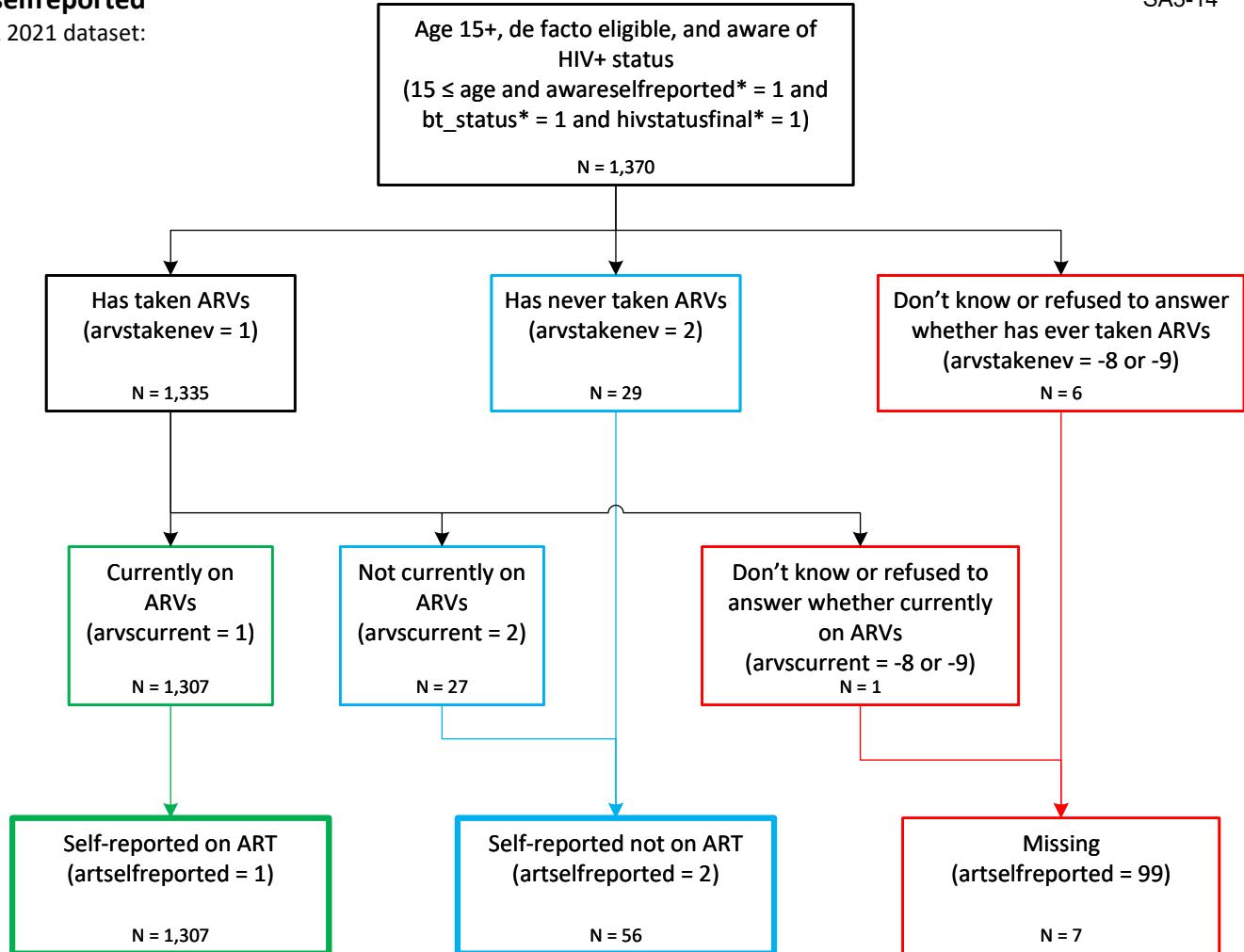
arvstatus

awareselfreported

Variable: artselfreported

Found in INSIDA 2021 dataset:

Biomarker



Variable: artselfreported

SA3-15

Uses the following INSIDA 2021 variables:

Interview dataset

age

arvstakenev

arvscurrent

Biomarker dataset

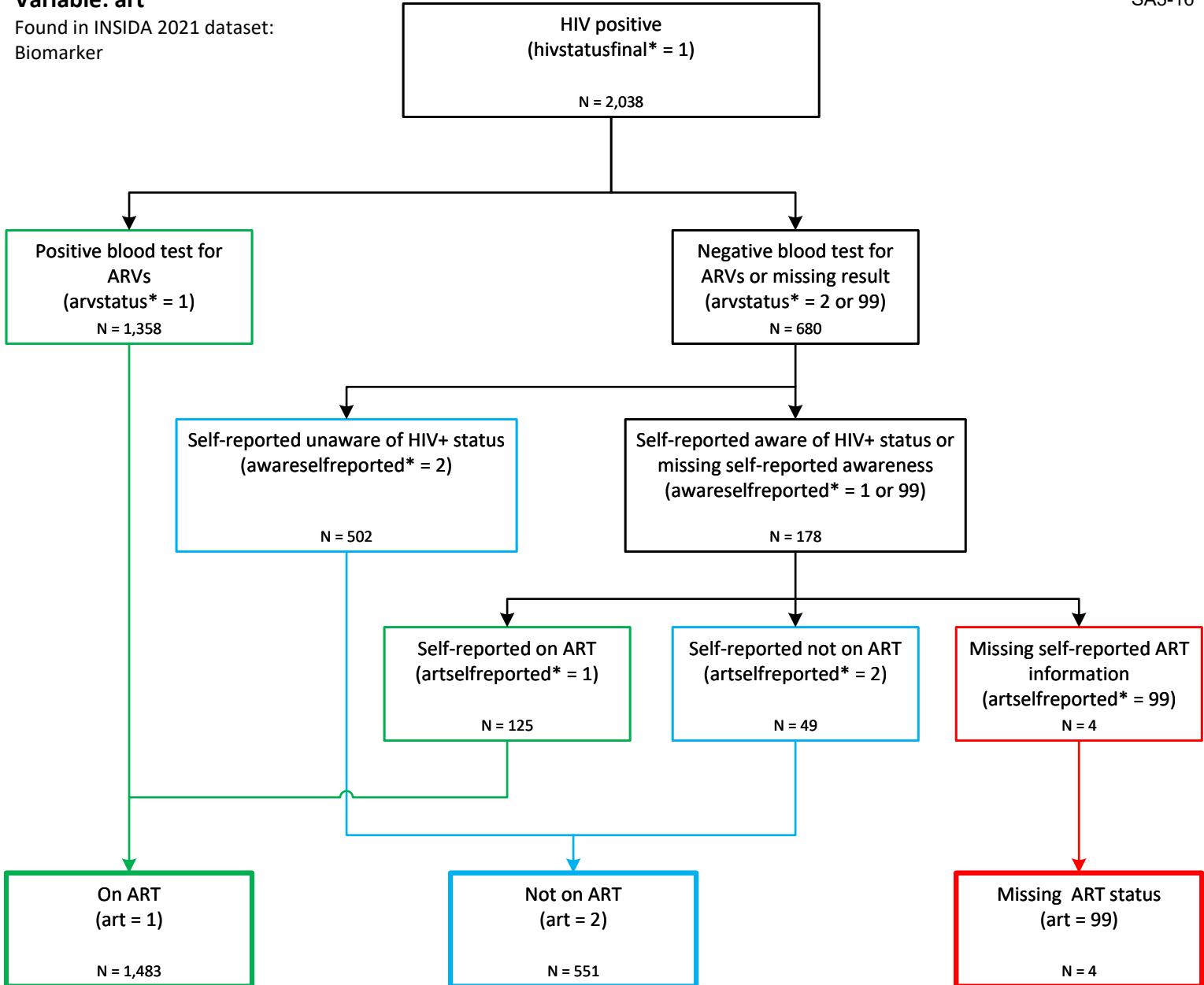
bt_status

hivstatusfinal

awareselfreported

Variable: art

Found in INSIDA 2021 dataset:
Biomarker



Variable: art

SA3-17

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

arvstatus

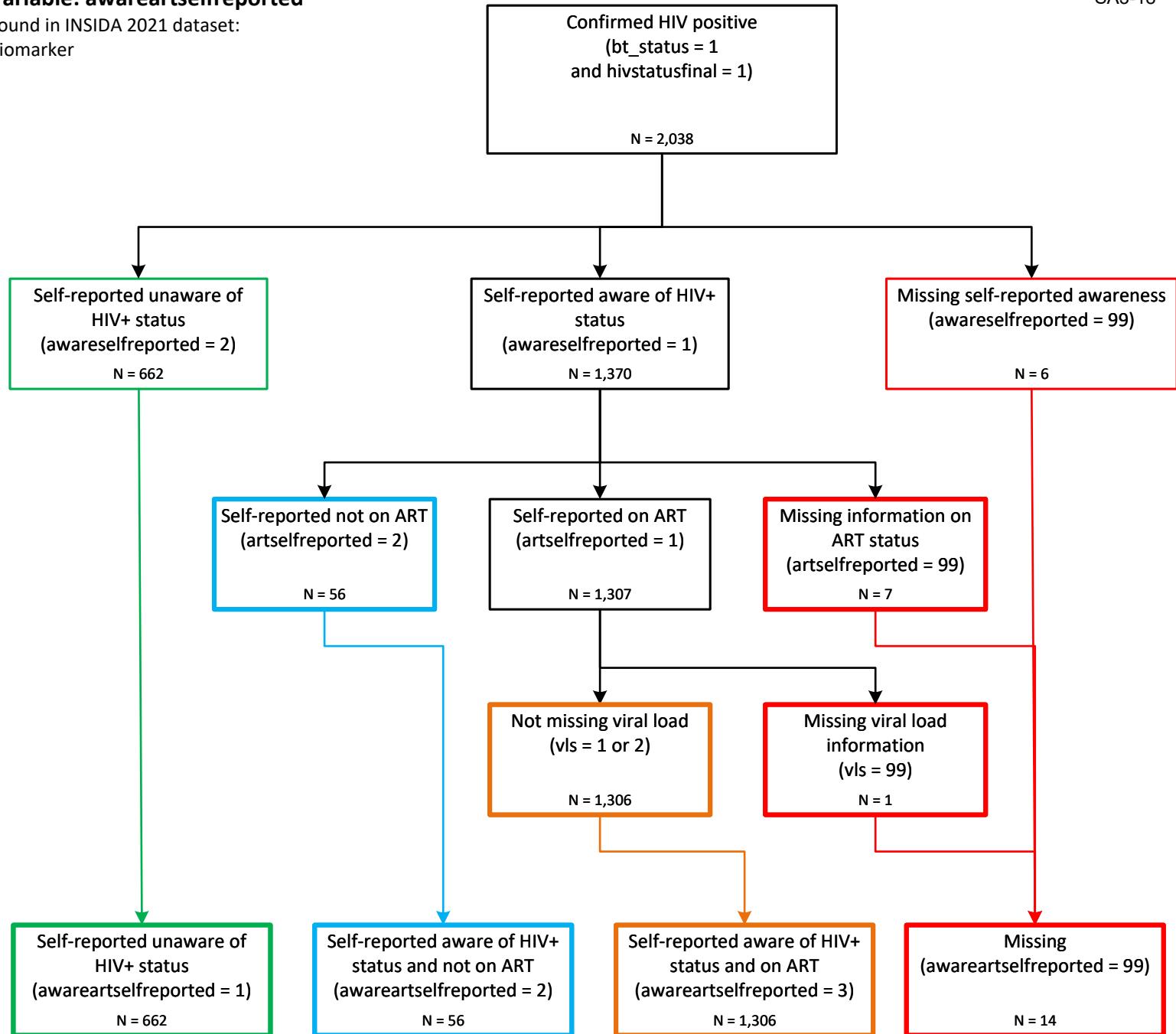
awareselfreported

artsselfreported

Variable: awareartselreported

Found in INSIDA 2021 dataset:

Biomarker



Variable: awareartsselfreported

Uses the following INSIDA 2021 variables:

Biomarker dataset

bt_status

hivstatusfinal

awareselfreported

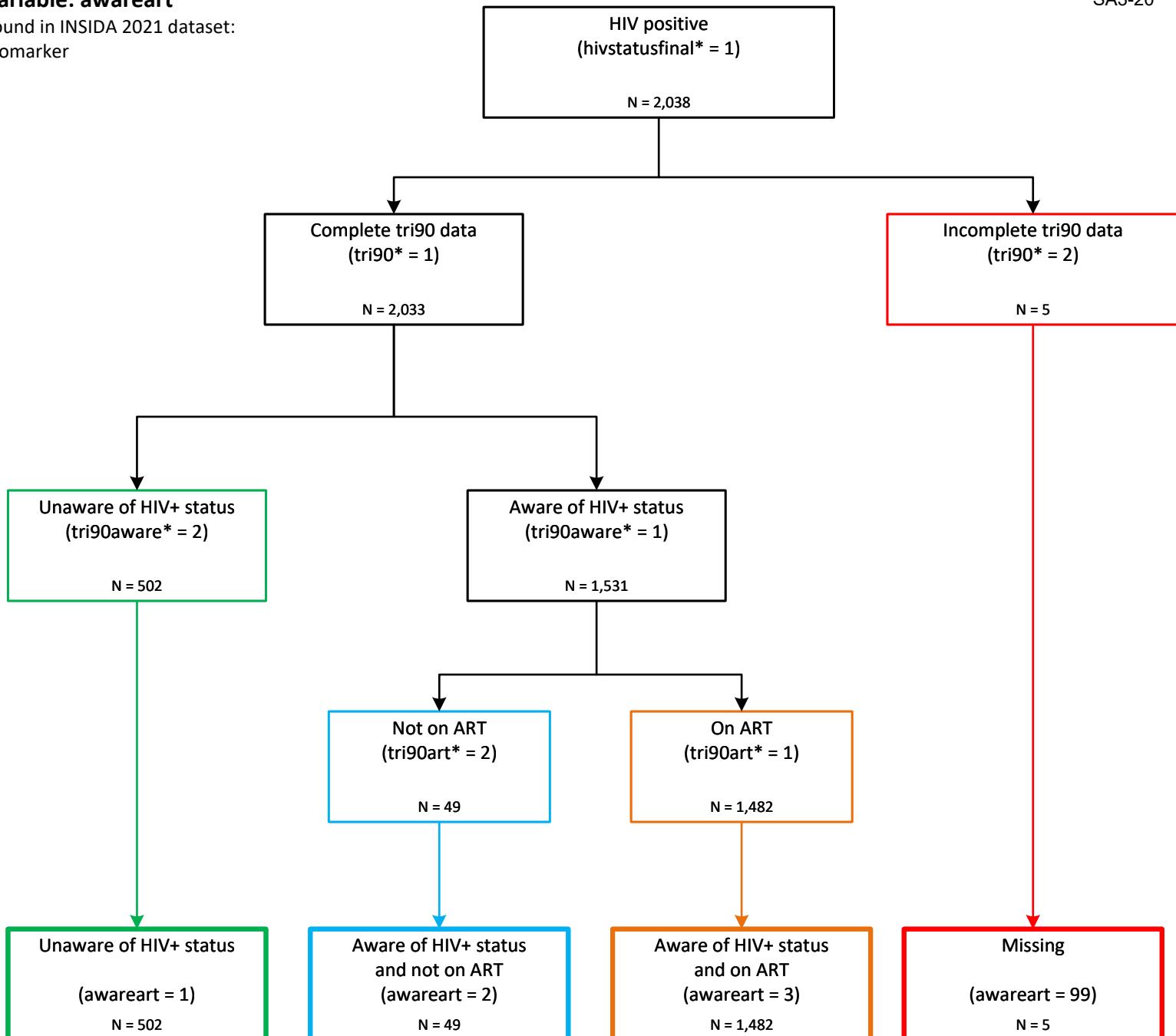
artsselfreported

vls

Variable: awareart

Found in INSIDA 2021 dataset:
Biomarker

SA3-20



Variable: awareart

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90

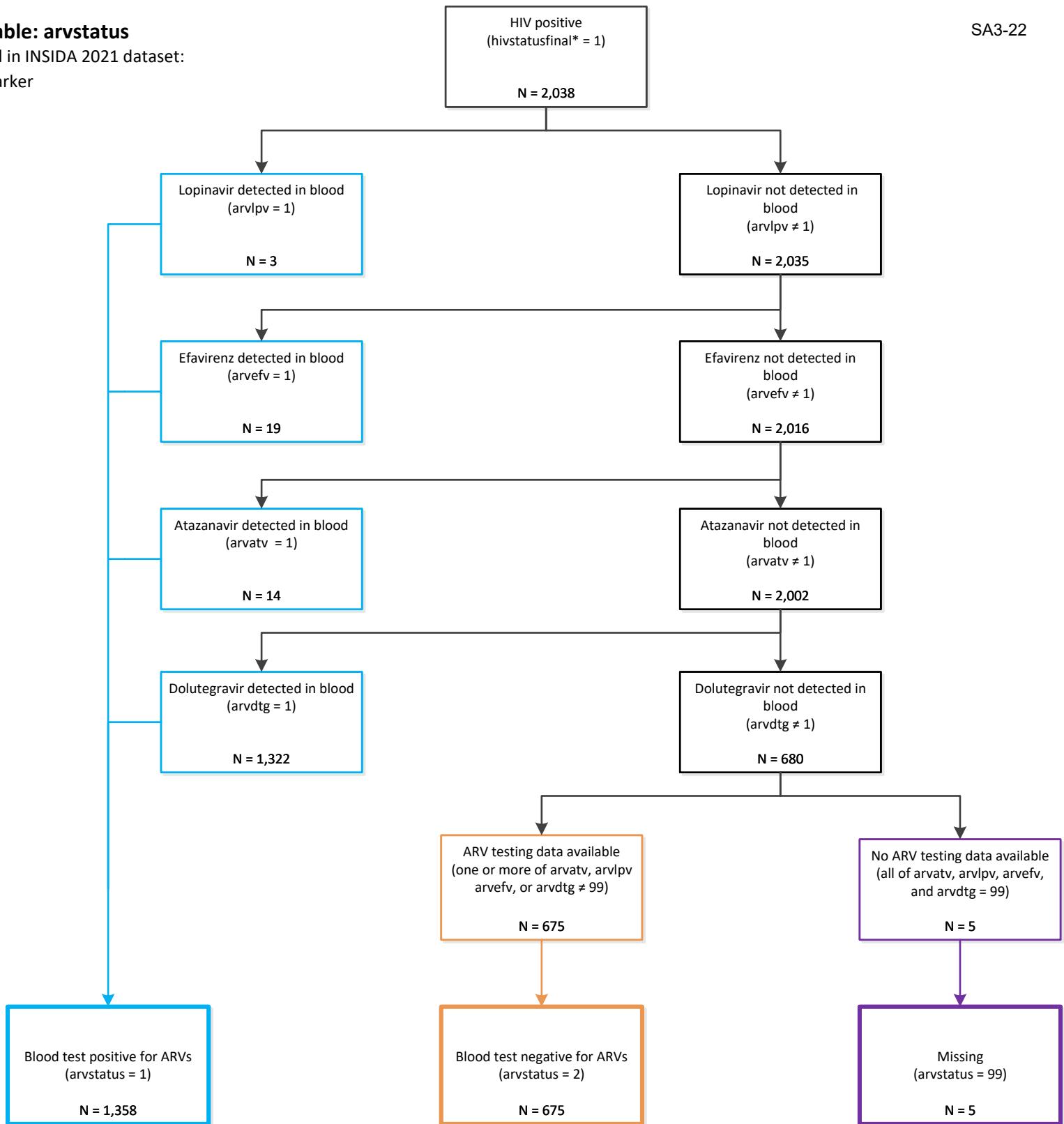
tri90aware

tri90art

Variable: arvstatus

Found in INSIDA 2021 dataset:

Biomarker



Variable: arvstatus

SA3-23

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

arvatv

arlpv

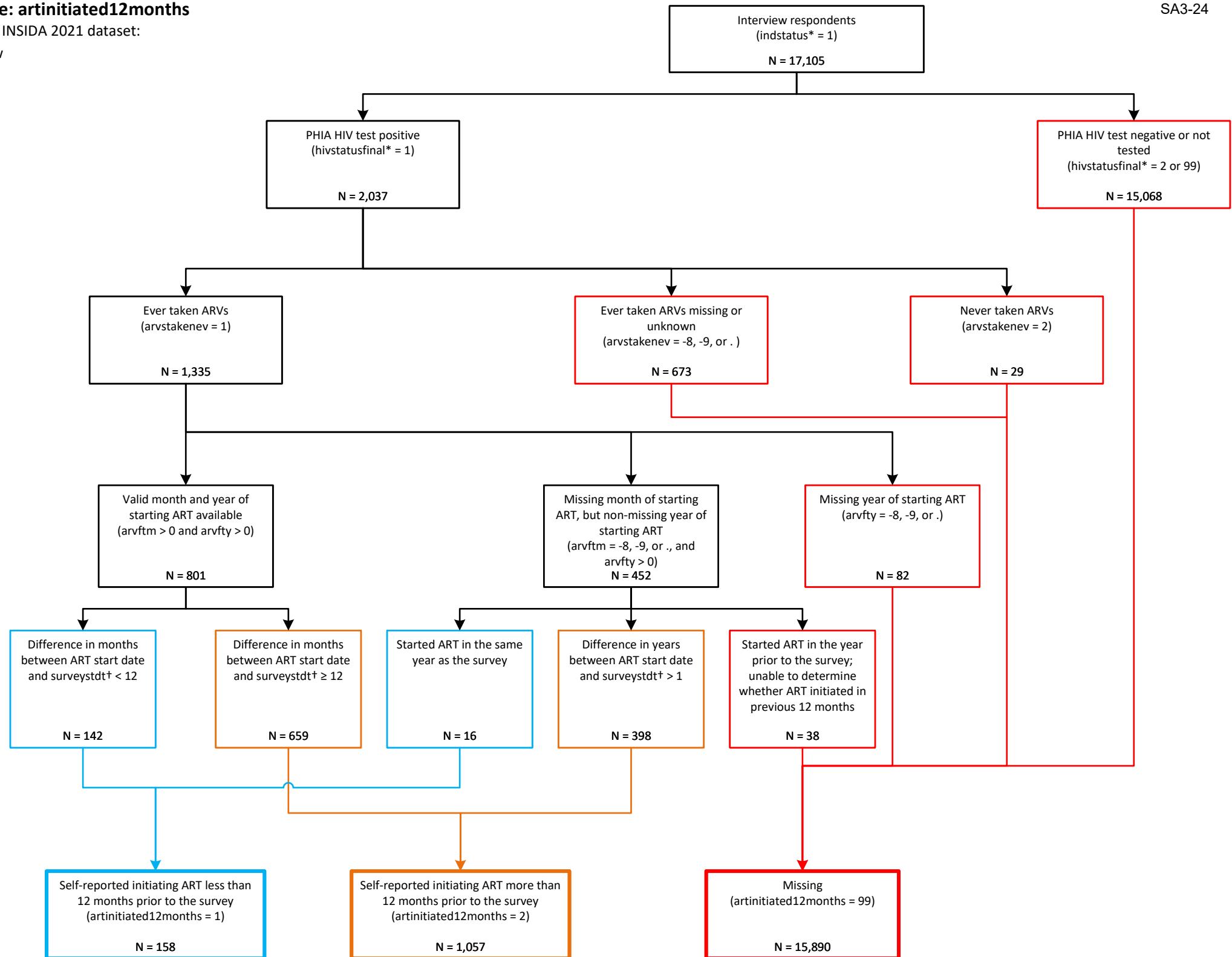
arvefv

arvdtg

Variable: artinitiated12months

Found in INSIDA 2021 dataset:

Interview



Variable: artinitiated12months

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal
artinitiated12months

Interview dataset

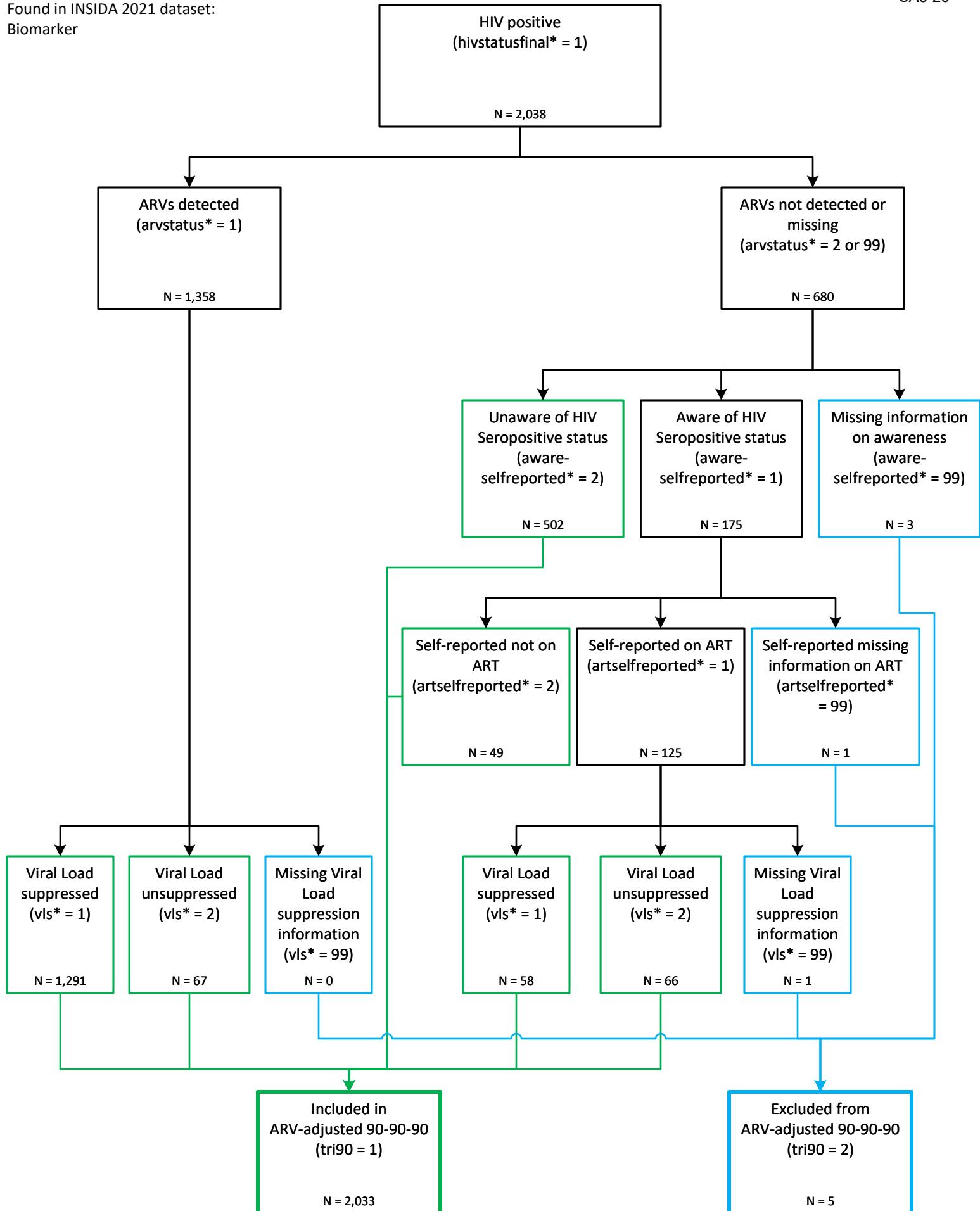
indstatus
arvstakenev
arvftm
arvfty
surveystday†
surveystmonth
surveystyear

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

Variable: tri90

Found in INSIDA 2021 dataset:
Biomarker

SA3-26



Variable: tri90

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

arvstatus

awareselfreported

artselfreported

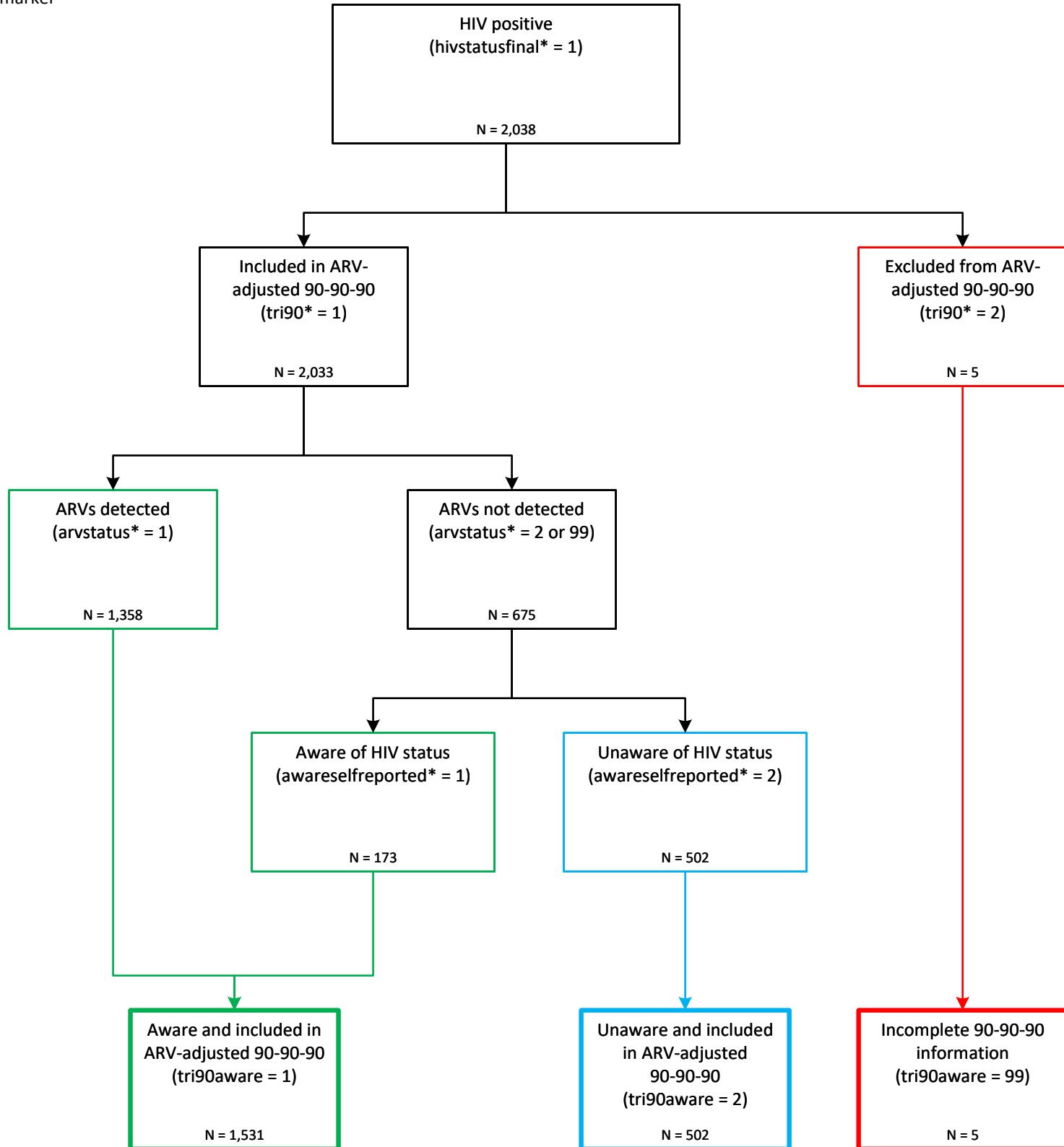
vls

Variable: tri90aware

SA3-28

Found in INSIDA 2021 dataset:

Biomarker



Variable: tri90aware

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90

arvstatus

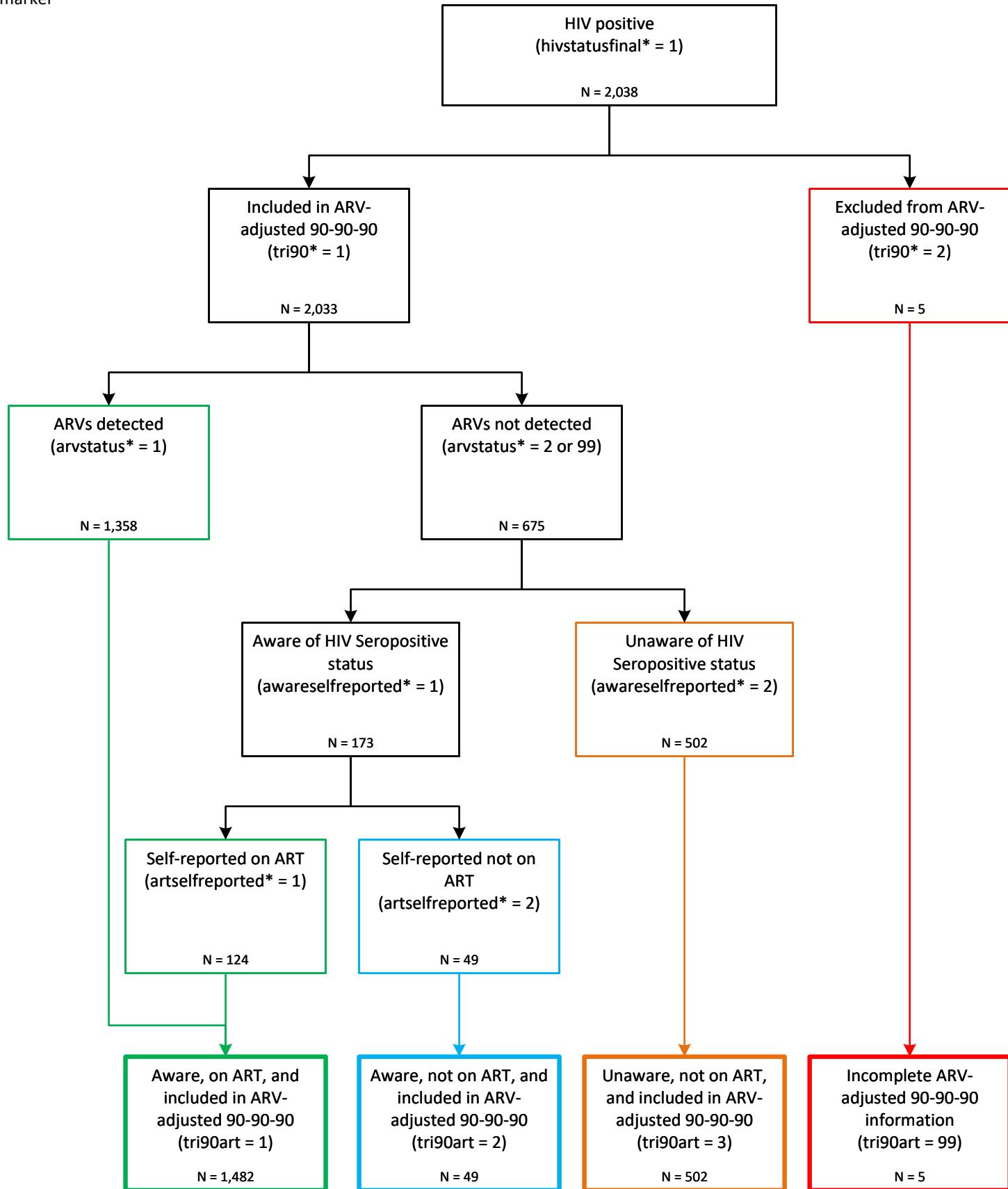
awareselfreported

Variable: tri90art

SA3-30

Found in INSIDA 2021 dataset:

Biomarker



Variable: tri90art

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90

arvstatus

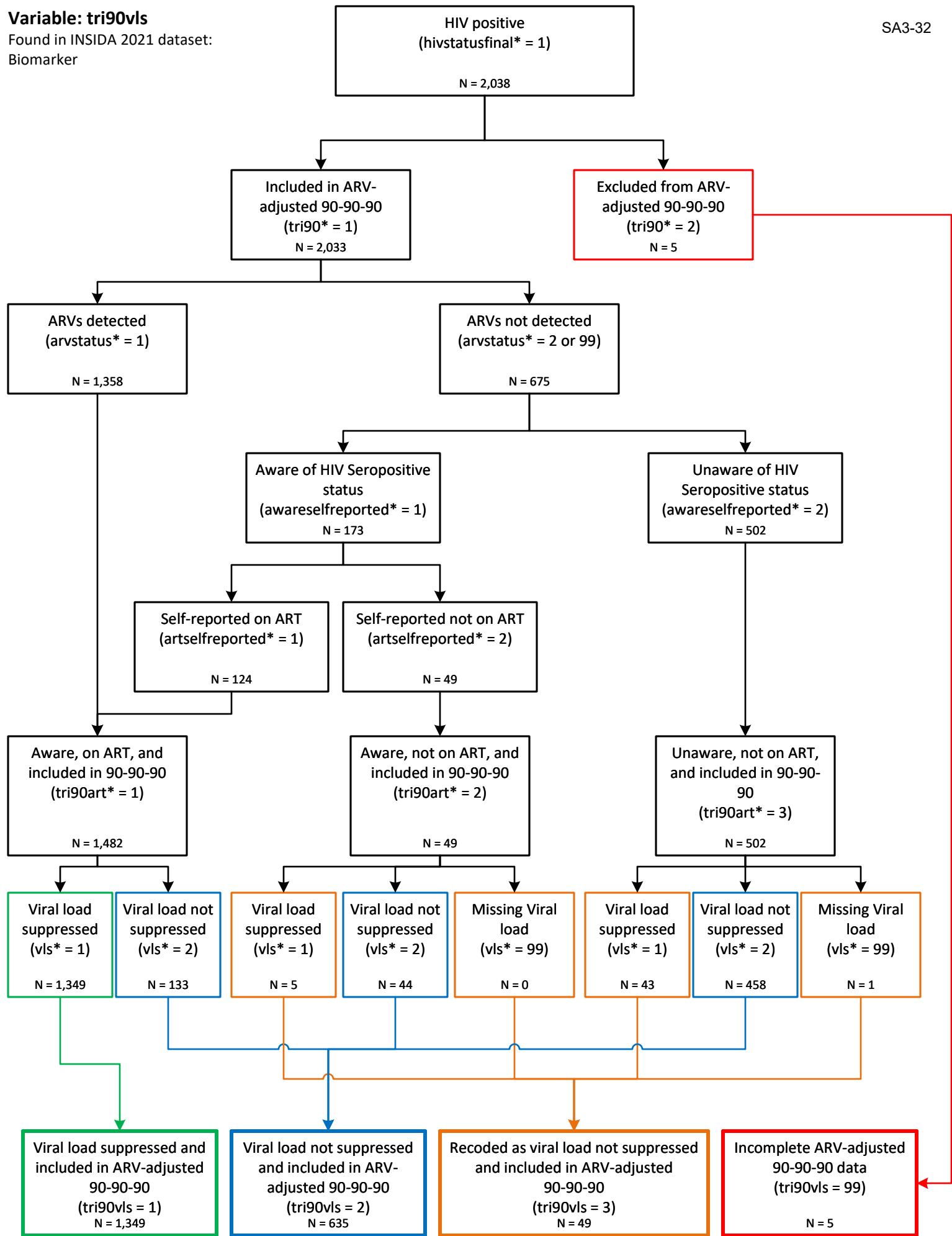
awareselfreported

artsselfreported

Variable: tri90vls

Found in INSIDA 2021 dataset:
Biomarker

SA3-32



Variable: tri90vls

SA3-33

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90

arvstatus

awareselfreported

artsselfreported

tri90art

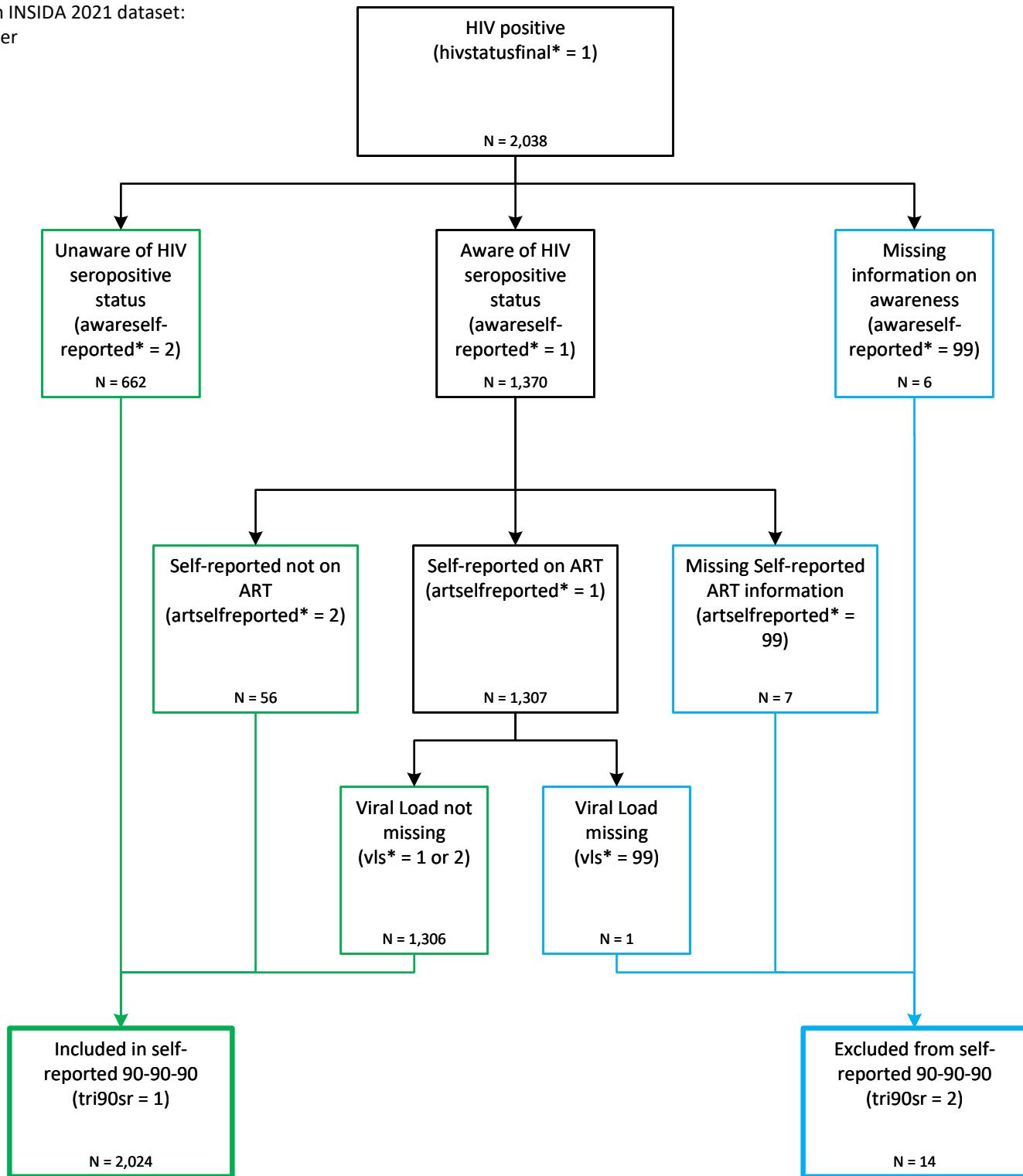
vls

Variable: tri90sr

SA3-34

Found in INSIDA 2021 dataset:

Biomarker



Variable: tri90sr

SA3-35

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

awareselfreported

artselfreported

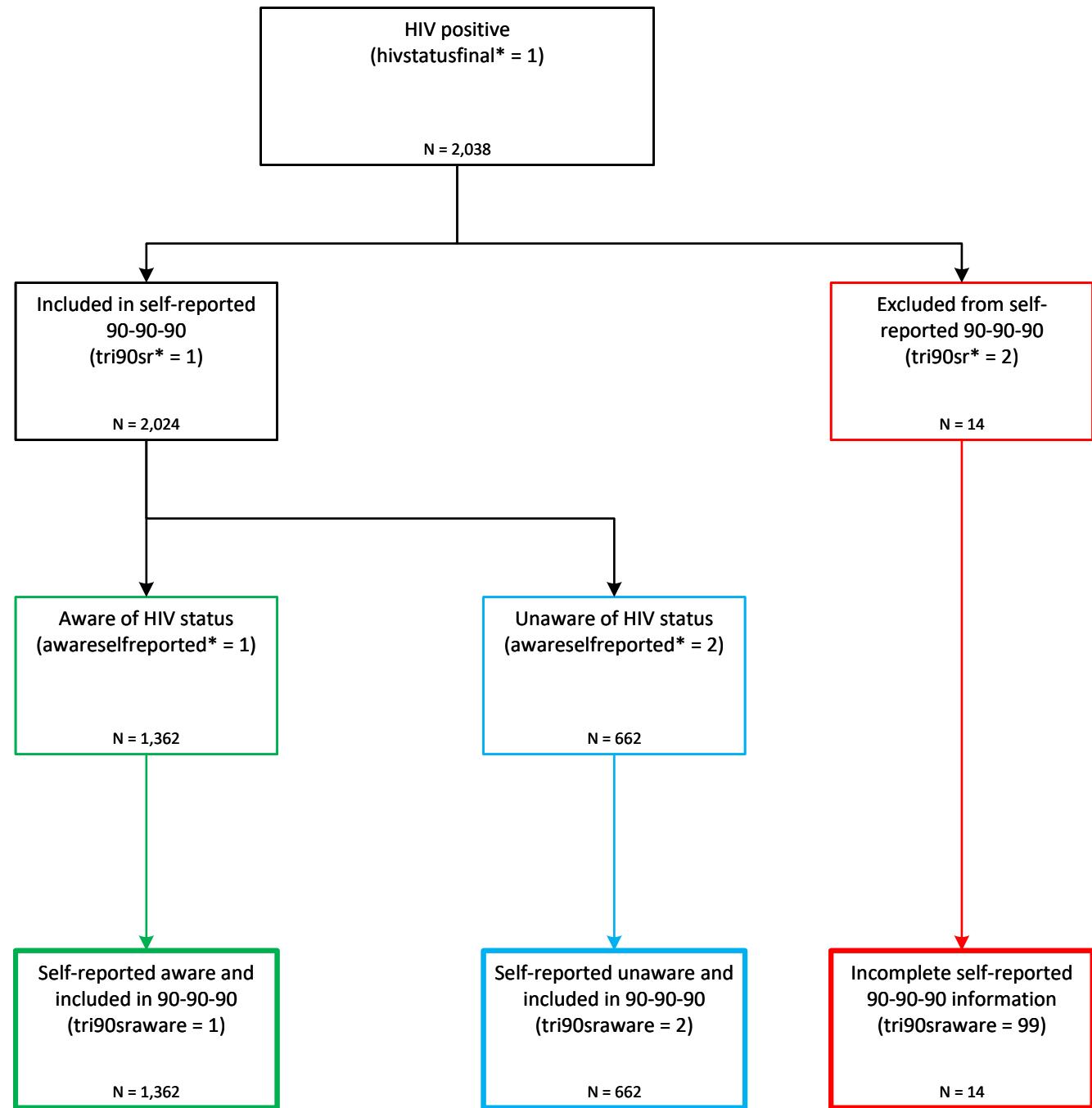
vls

Variable: tri90sraware

SA3-36

Found in INSIDA 2021 dataset:

Biomarker



Variable: tri90sraware

SA3-37

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90sr

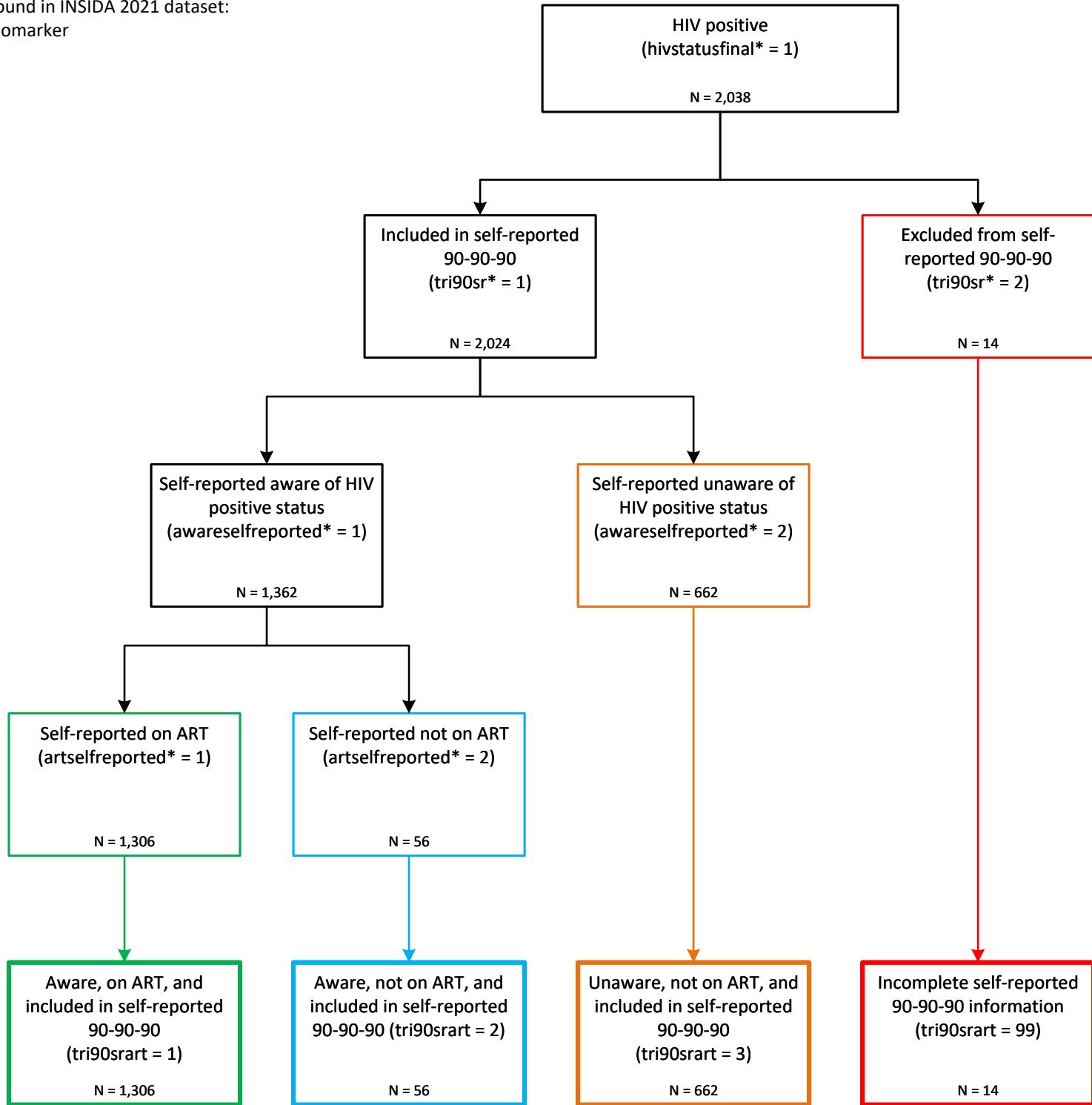
awareselfreported

Variable: tri90srart

SA3-38

Found in INSIDA 2021 dataset:

Biomarker



Variable: tri90srart

SA3-39

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90sr

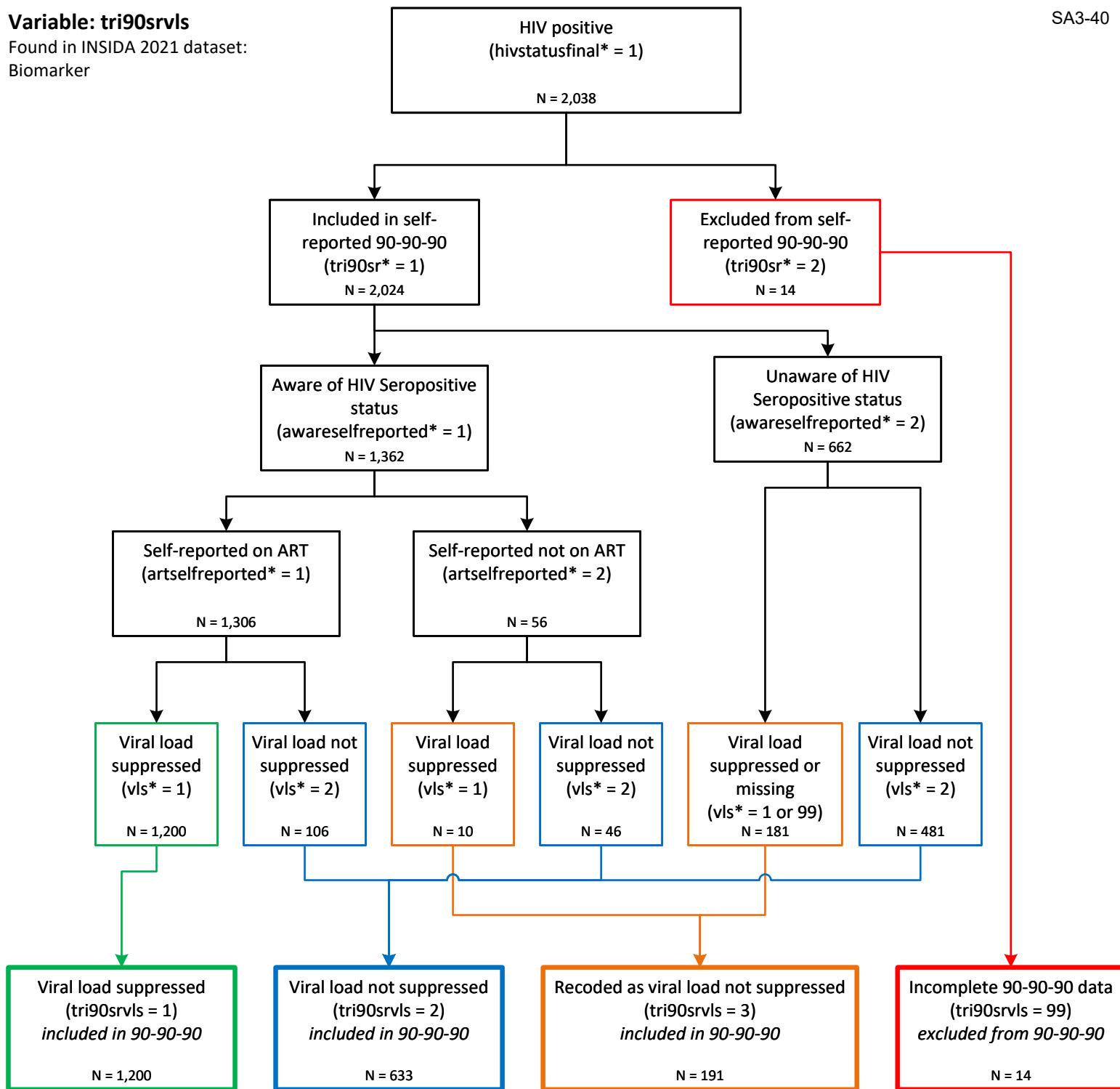
awareselfreported

artselfreported

Variable: tri90srvis

SA3-40

Found in INSIDA 2021 dataset:
Biomarker



Variable: tri90srvl5

SA3-41

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90sr

awareselfreported

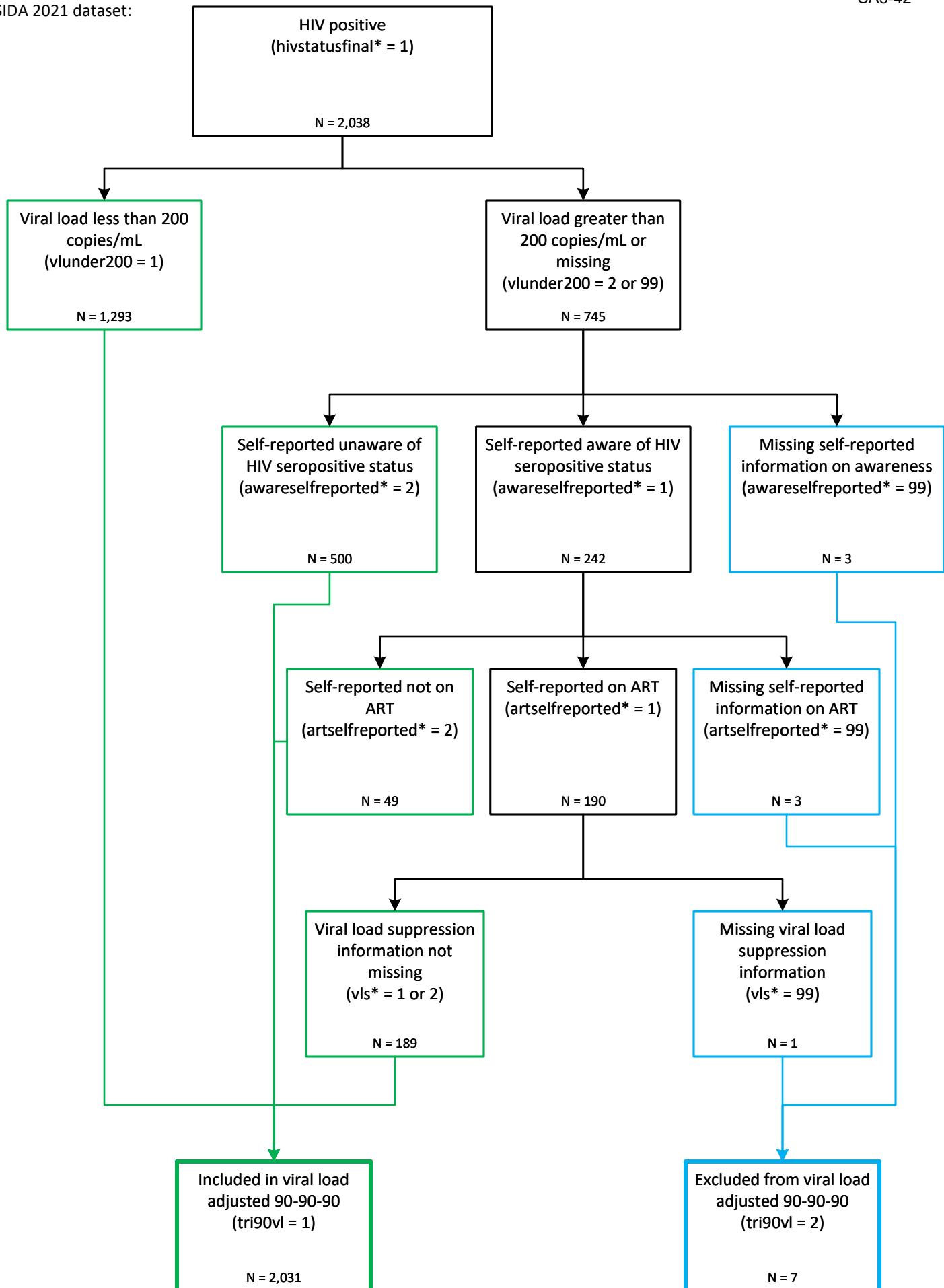
artselfreported

vls

Variable: tri90vl

Found in INSIDA 2021 dataset:
Biomarker

SA3-42



Variable: tri90vl

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

vlunder200

awareselfreported

artselfreported

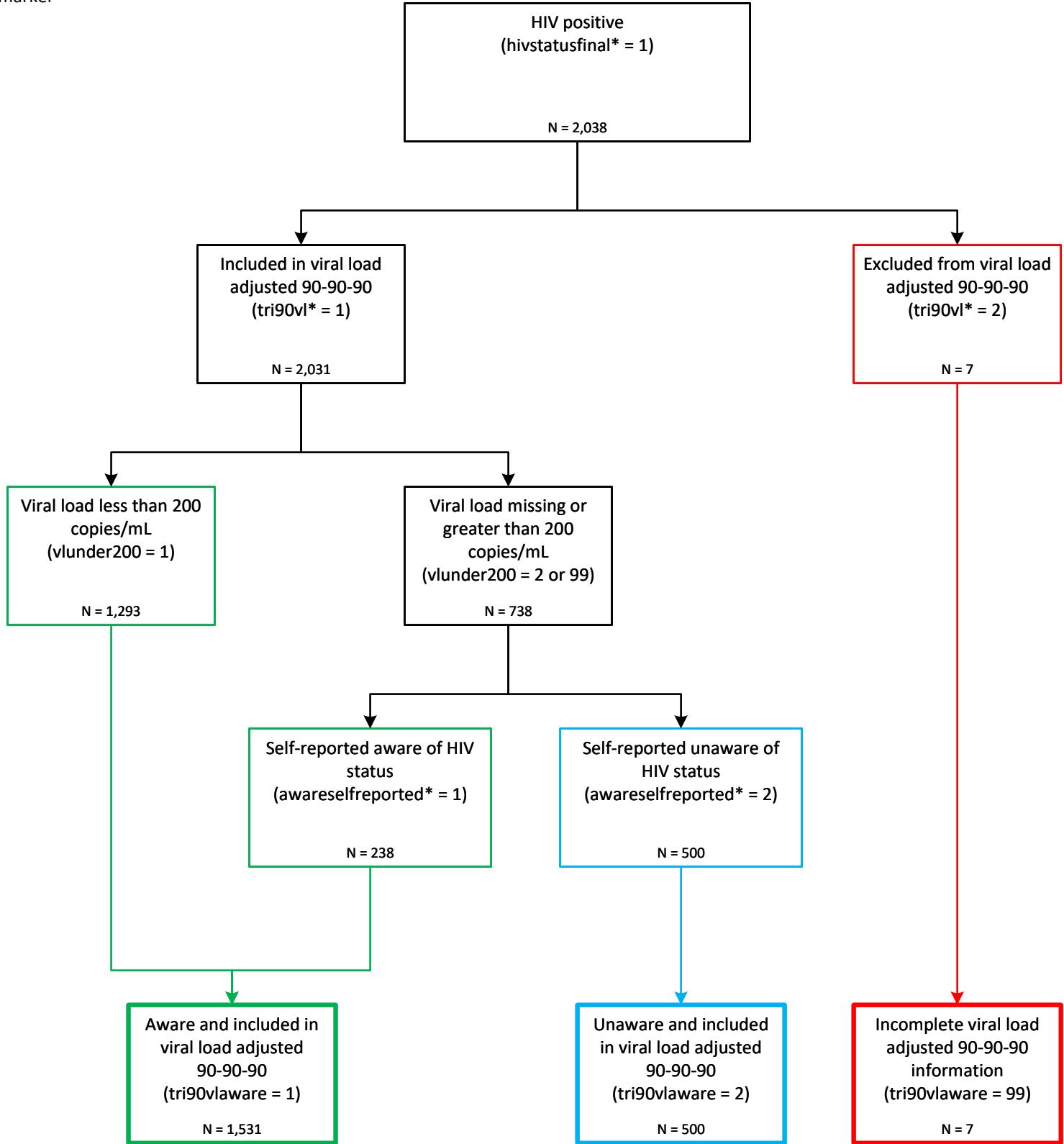
vls

Variable: tri90vlaware

SA3-44

Found in INSIDA 2021 dataset:

Biomarker



Variable: tri90vlaware

SA3-45

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90vl

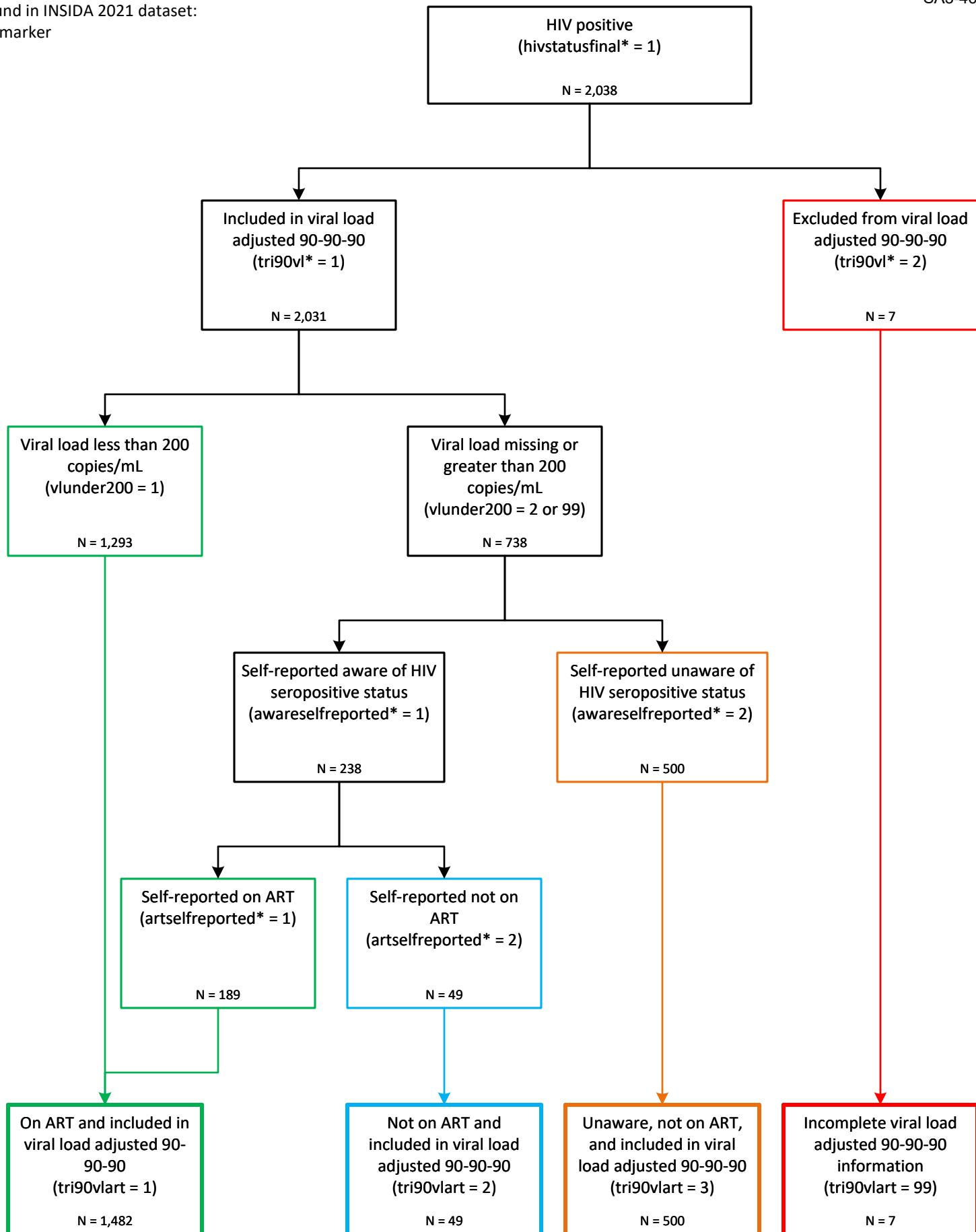
vlunder200

awareselfreported

Variable: tri90vlart

Found in INSIDA 2021 dataset:
Biomarker

SA3-46



Variable: tri90vlart

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90vl

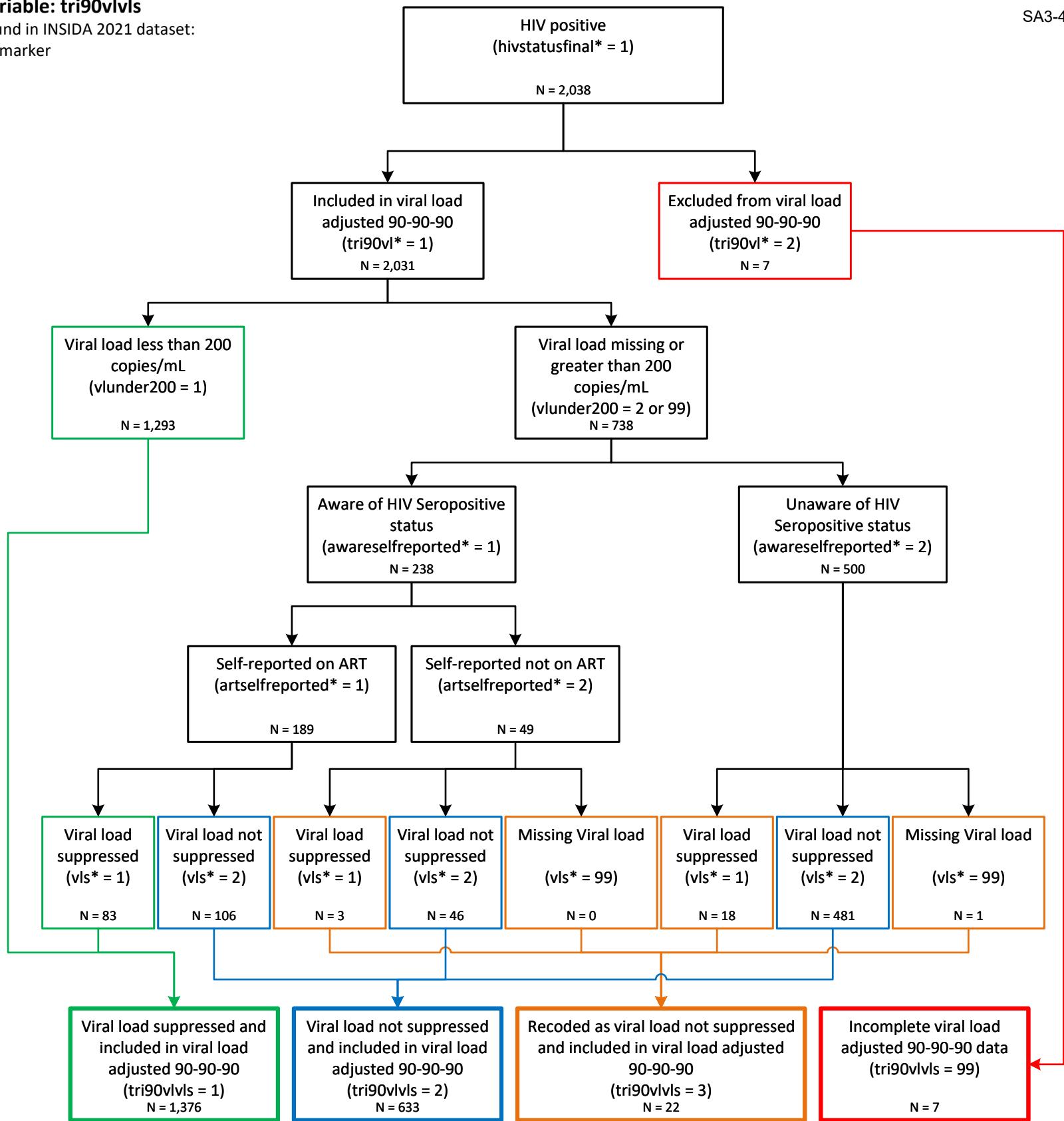
vlunder200

awareselfreported

artsselfreported

Variable: tri90vlvlsFound in INSIDA 2021 dataset:
Biomarker

SA3-48



Variable: tri90vlvl

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

tri90vl

vlunder200

awareselfreported

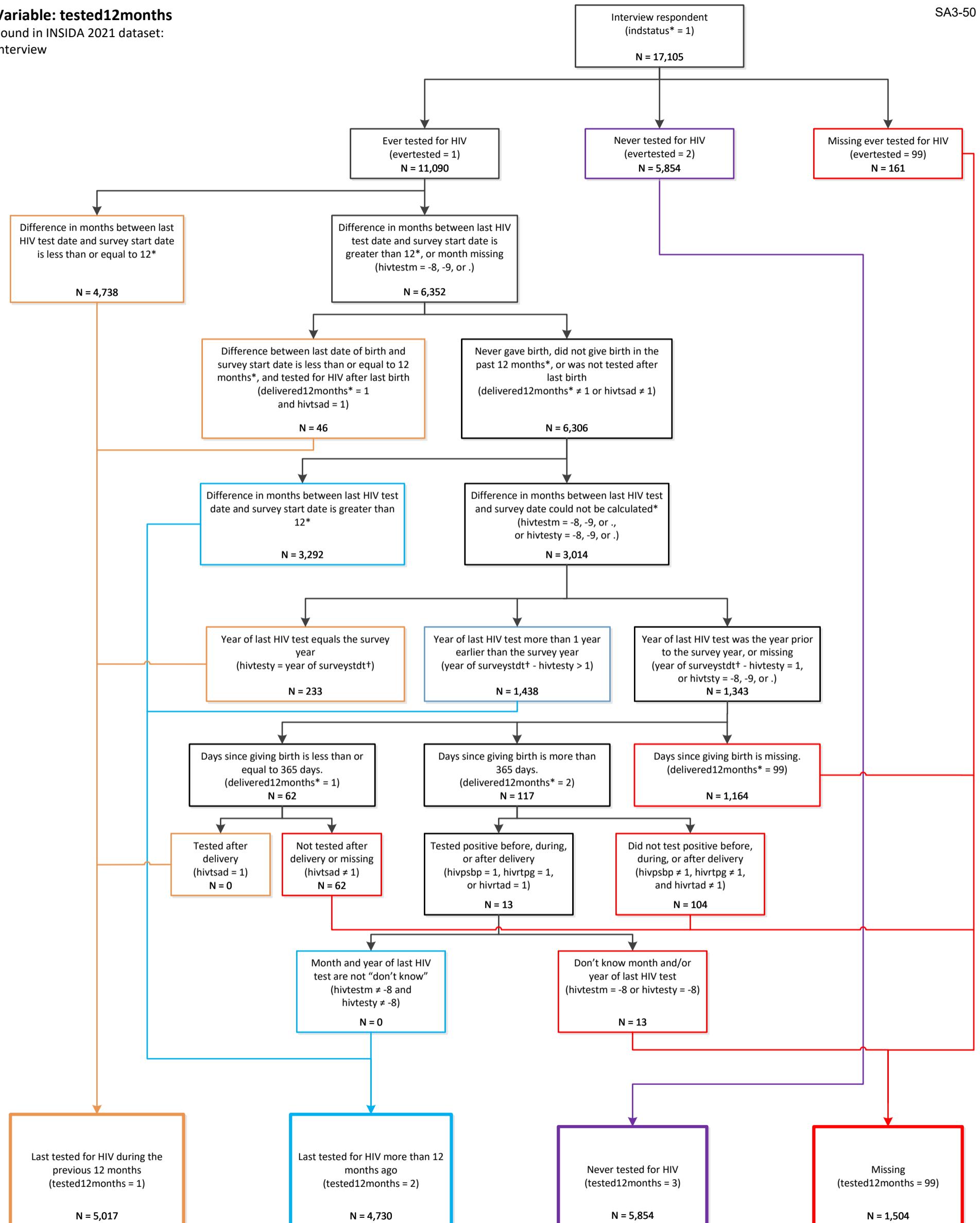
artsselfreported

vls

Variable: tested12months

Found in INSIDA 2021 dataset:

Interview

*** 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 INSIDA 2021 variables:

Interview dataset

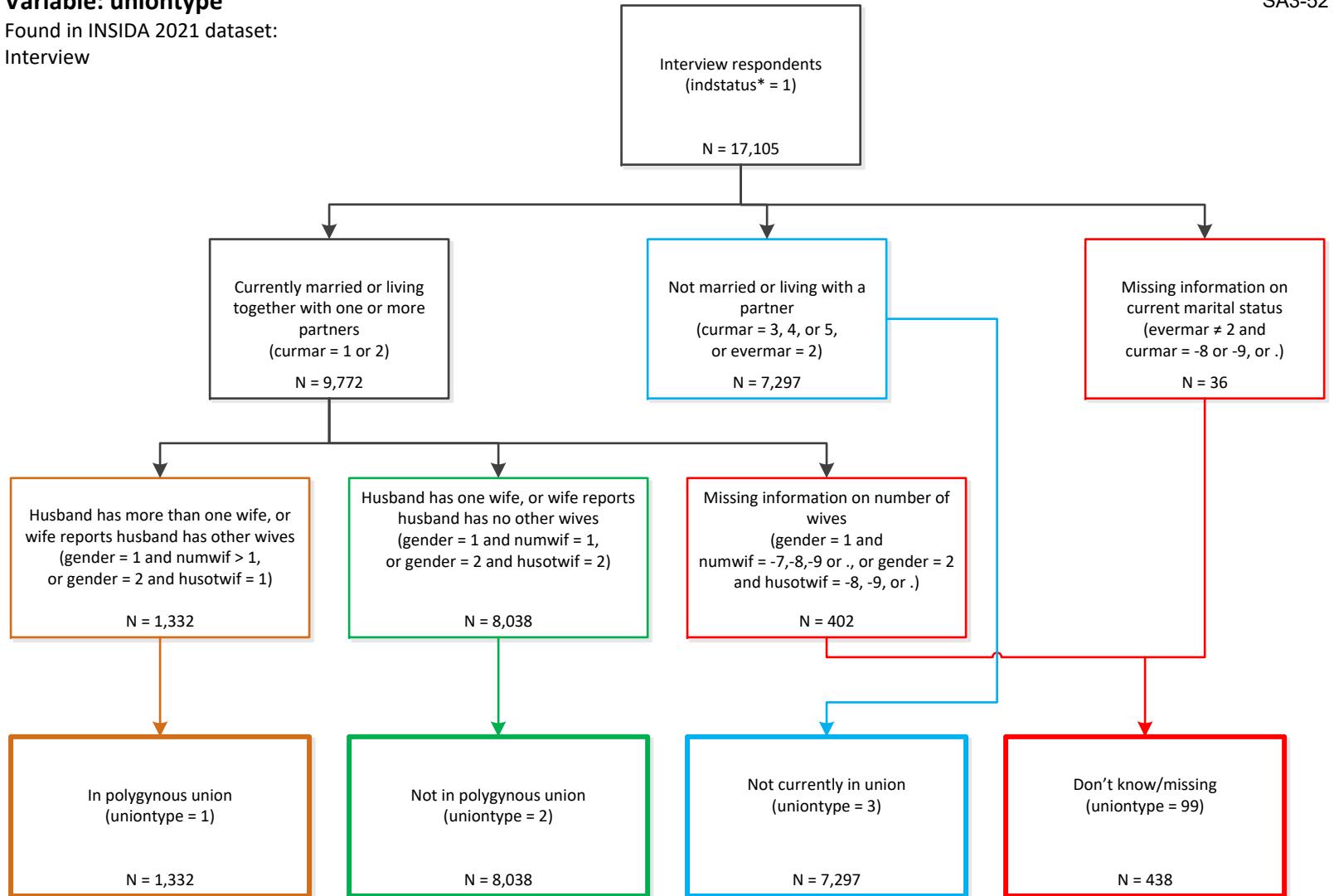
indstatus
evertested
hivtestm
hivtesty
surveystday†
surveystmonth
surveystyear
hivtsad
hivpsbp
hivrtpg
hivrtad
birthday†
birthmont†
birthyr
delivered12months

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

Variable: uniontype

Found in INSIDA 2021 dataset:

Interview



Variable: uniontype

Uses the following INSIDA 2021 variables:

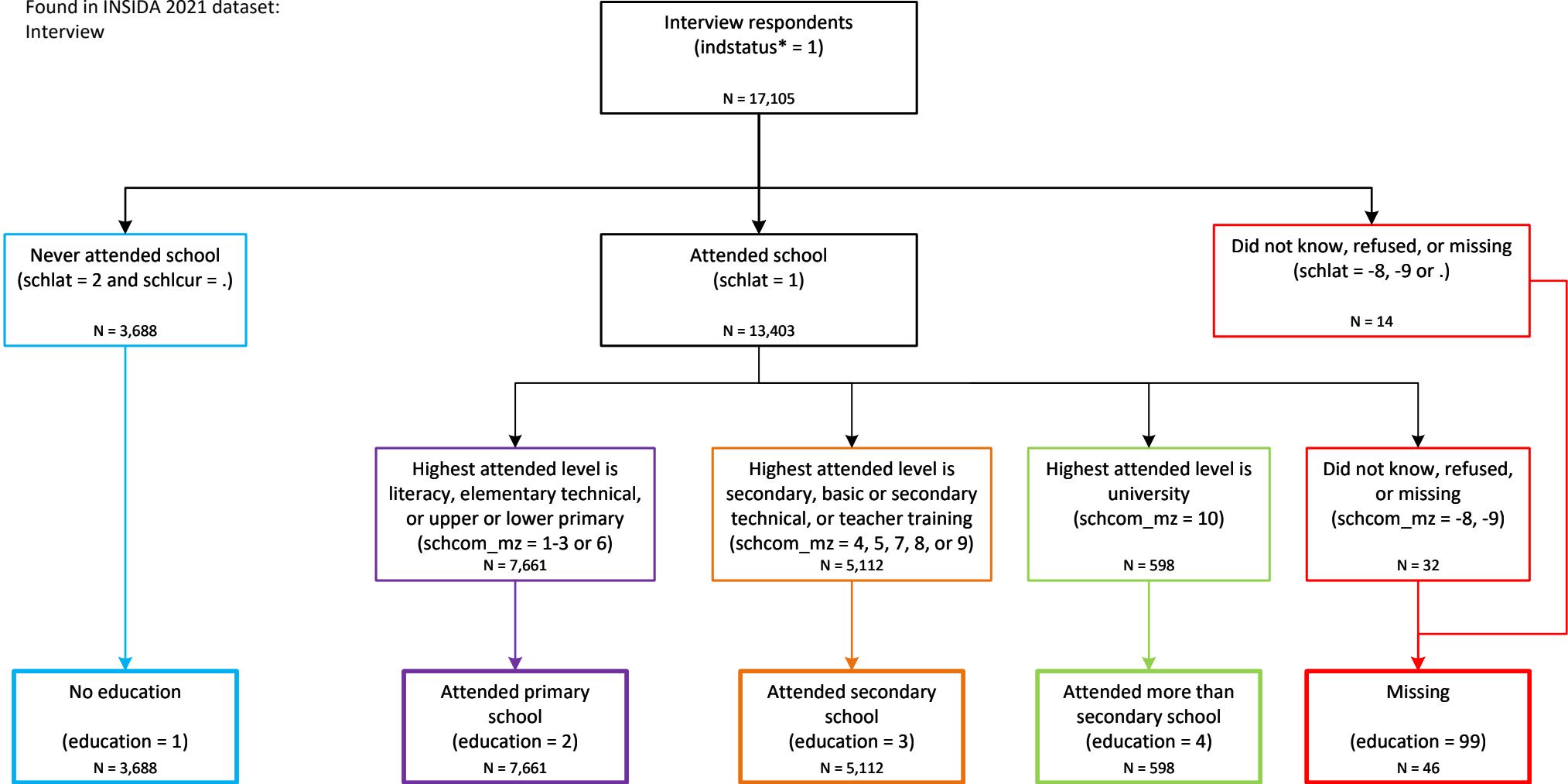
Interview dataset

indstatus
curmar
evermar
numwif
husotwif

Variable: education

Found in INSIDA 2021 dataset:

Interview



Variable: education

SA3-55

Uses the following INSIDA 2021 variables :

Interview dataset

indstatus

schlat

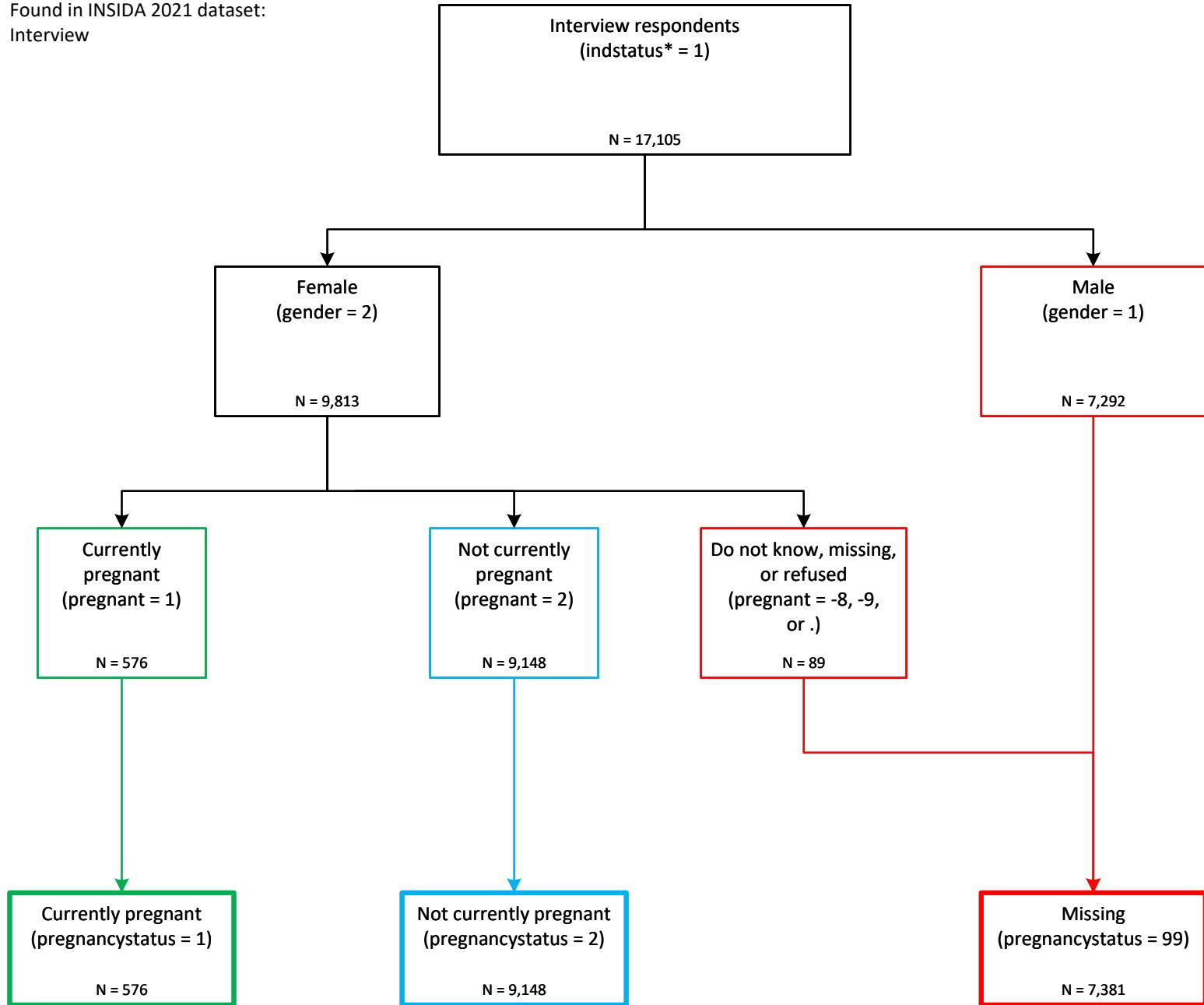
schlcur

schcom_mz

Variable: pregnancystatus

SA3-56

Found in INSIDA 2021 dataset:
Interview



Variable: pregnancystatus

SA3-57

Uses the following INSIDA 2021 variables:

Interview dataset

indstatus

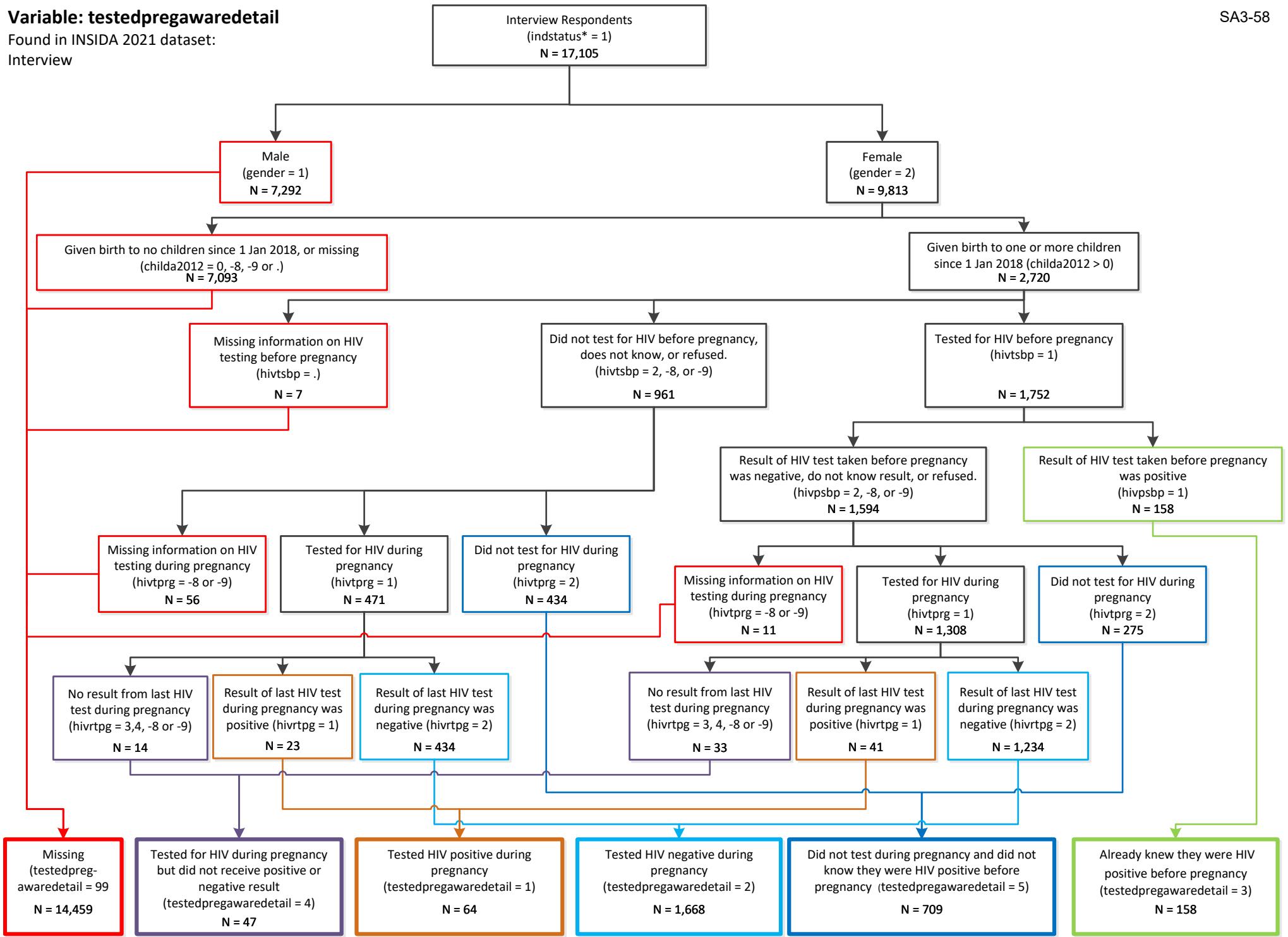
gender

pregnant

Variable: testedpregawaredetail

Found in INSIDA 2021 dataset:

Interview



Variable: testedpregawaredetail

SA3-59

Uses the following INSIDA 2021 variables:

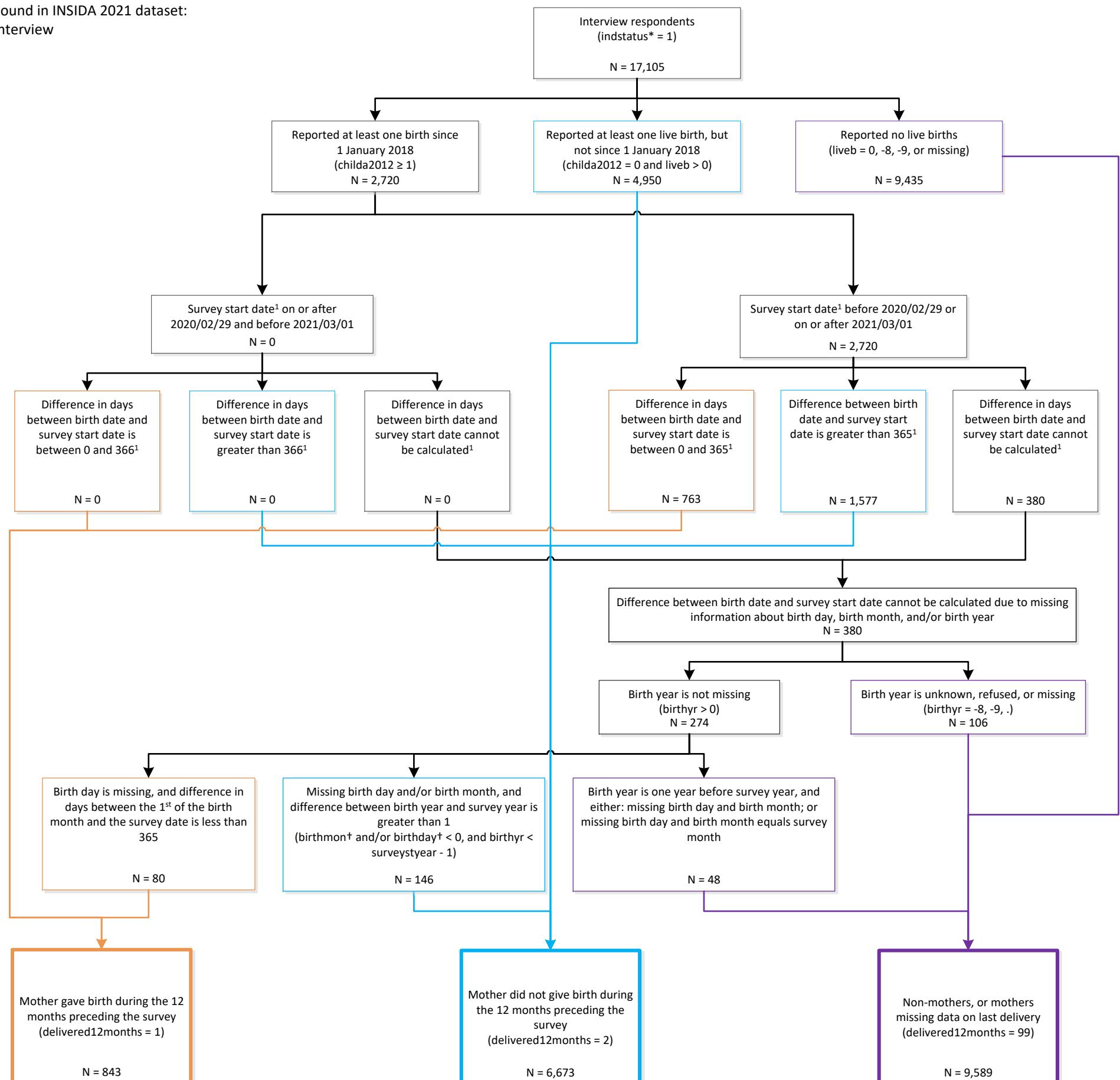
Interview dataset

indstatus
gender
childa2012
hivtsbp
hivpsbp
hivtprg
hivrtpg
delivered12months

Variable: delivered12months

Found in INSIDA 2021 dataset:

Interview

¹ Survey start date, the start date for the PHIA interview, is computed using surveystdayt, 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 INSIDA 2021 variables:

Interview

indstatus

liveb

childa2012

surveystday†

surveystmonth

surveystyear

birthyr

birthmont

birthday†

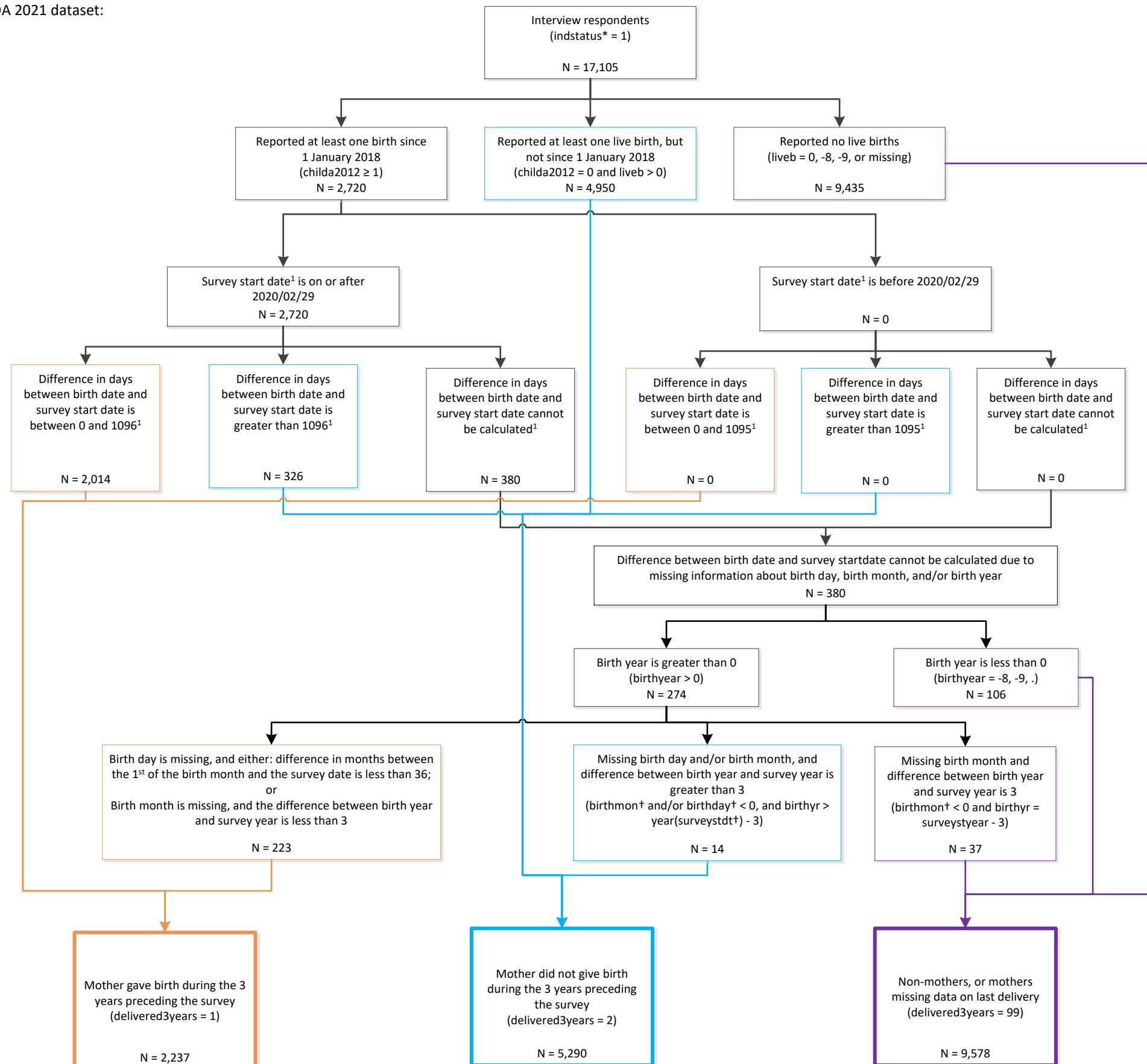
† Variable redacted from final dataset due to small counts and disclosure risk.

Variable: delivered3years

Found in INSIDA 2021 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 INSIDA 2021 variables:

Interview

indstatus

liveb

childa2012

surveystyear

surveystmonth

surveystday[†]

birthyr

birthmont

birthday[†]

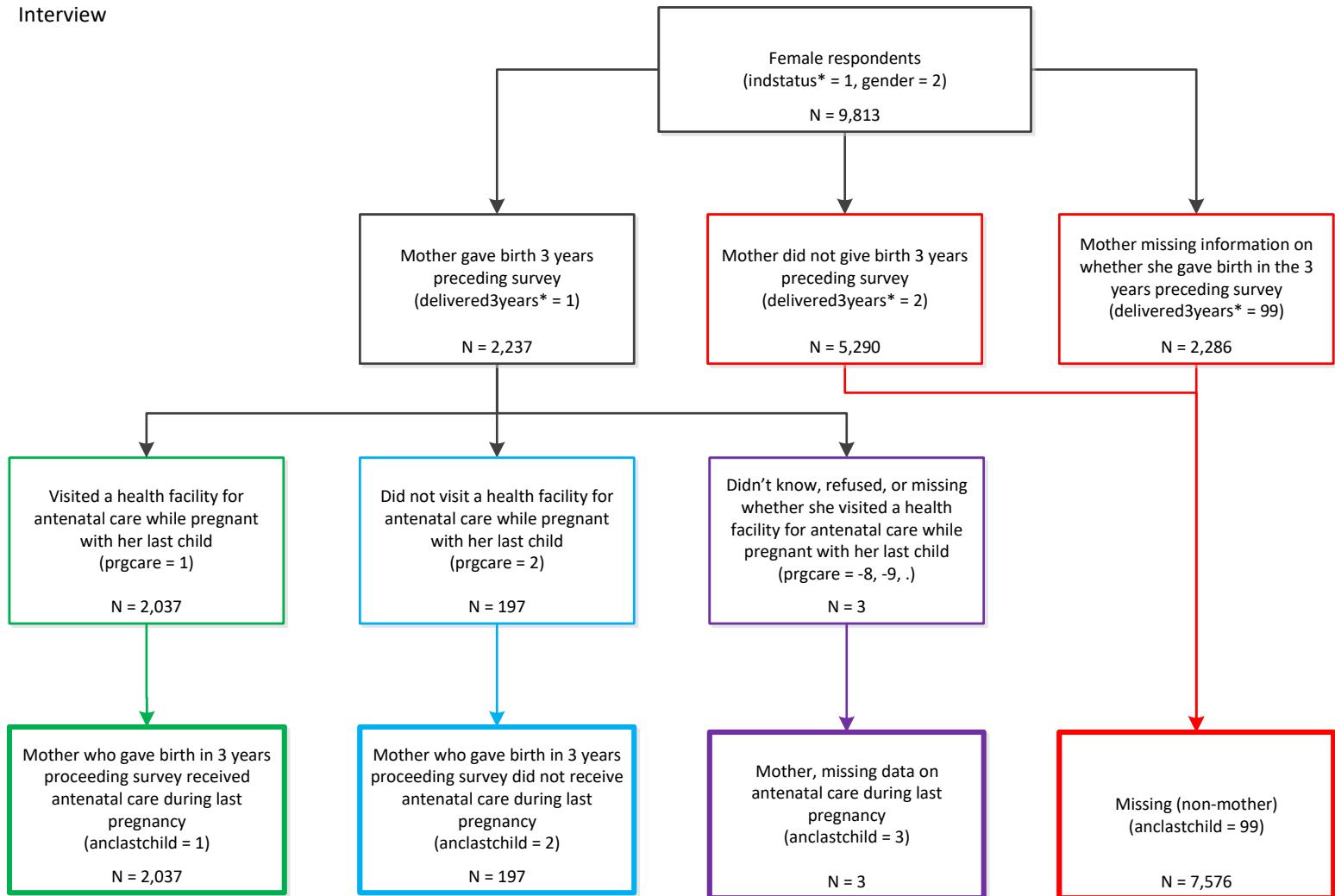
[†] Variable redacted from final dataset due to small counts and disclosure risk.

Variable: anlastchild

SA3-64

Found in INSIDA 2021 dataset:

Interview



Variable: anclastchild

Uses the following INSIDA 2021 variables:

Interview dataset

indstatus

gender

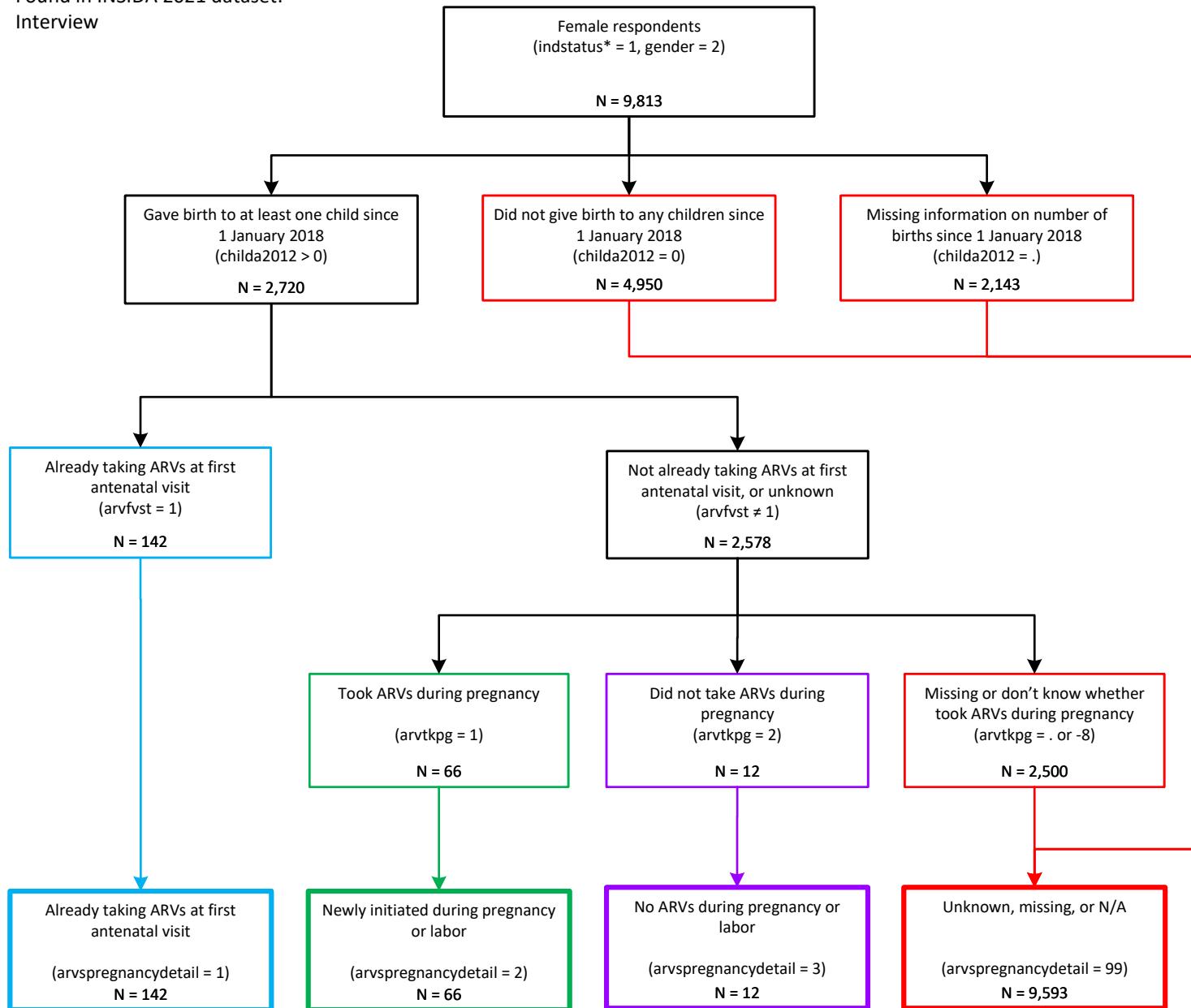
delivered3years

prgcare

Variable: arvspregnancydetail

Found in INSIDA 2021 dataset:

Interview



Variable: arvspregnancydetail

Uses the following INSIDA 2021 variables:

Interview

indstatus

gender

childa2012

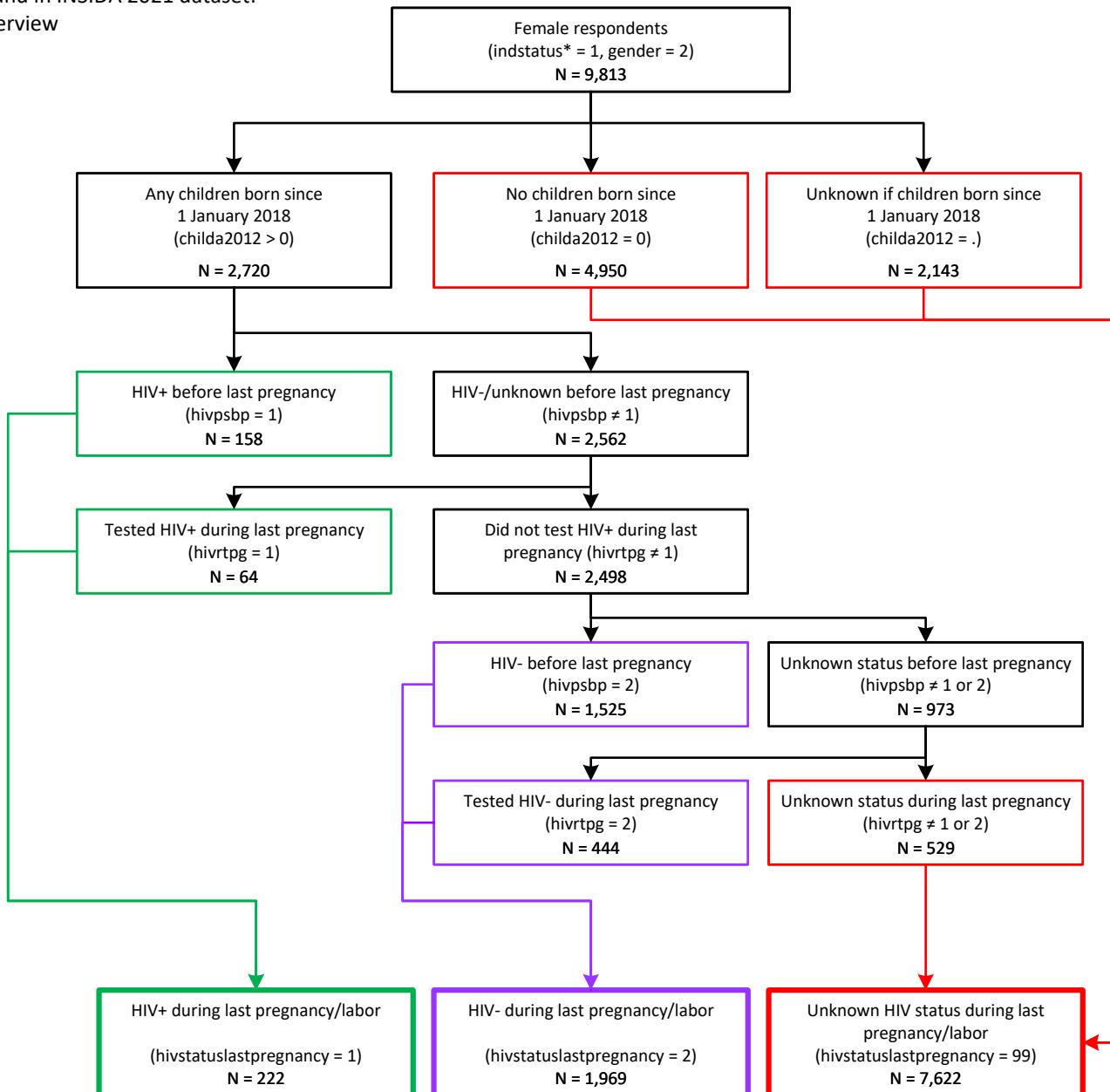
arfvst

arvtkpg

Variable: hivstatuslastpregnancy

Found in INSIDA 2021 dataset:

Interview



Variable: hivstatuslastpregnancy

Uses the following INSIDA 2021 variables:

Interview

indstatus

gender

childa2012

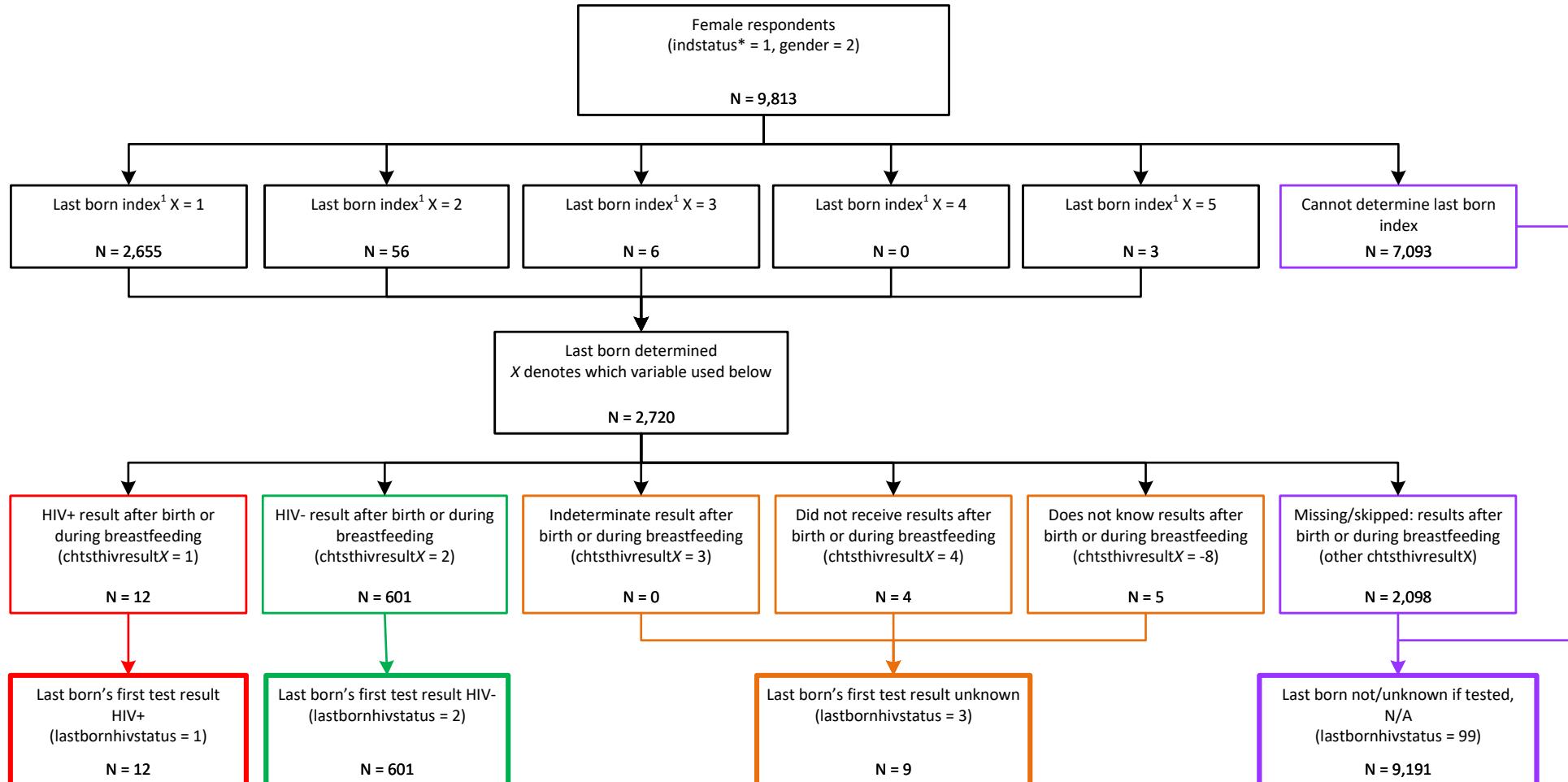
hivpsbp

hivrtpg

Variable: lastbornhivstatus

Found in INSIDA 2021 dataset:

Interview



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

Variable: lastbornhivstatus

SA3-71

Uses the following INSIDA 2021 variables:

Interview dataset

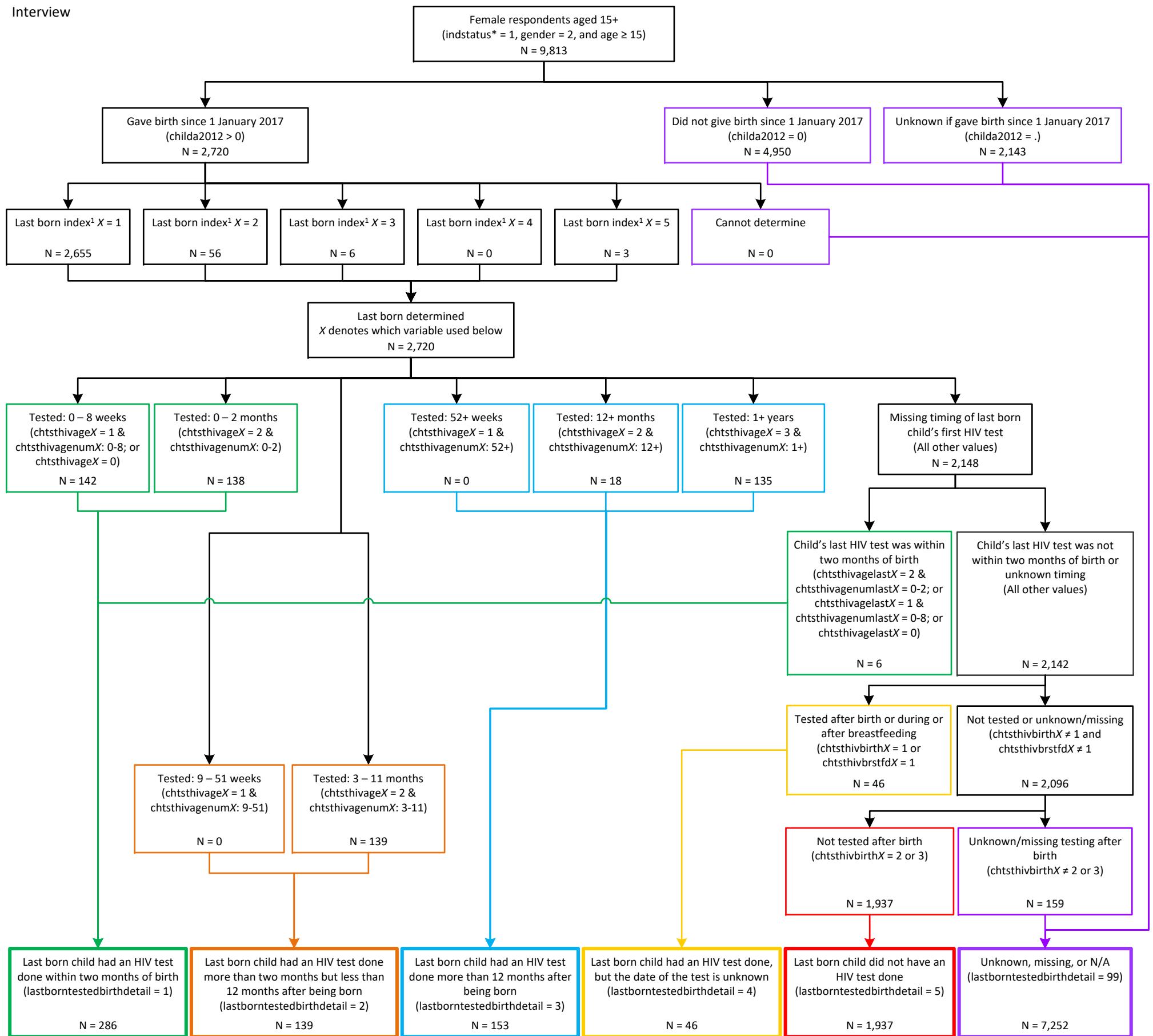
- indstatus
- gender
- childalive1
- childalive2-5†
- chtsthivresult1
- chtsthivresult2-3†

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

Variable: lastborntestedbirthdetail

Found in INSIDA 2021 datasets:

Interview



Variable: lastborntestedbirthdetail

Uses the following INSIDA 2021 variables:

Adult Interview dataset

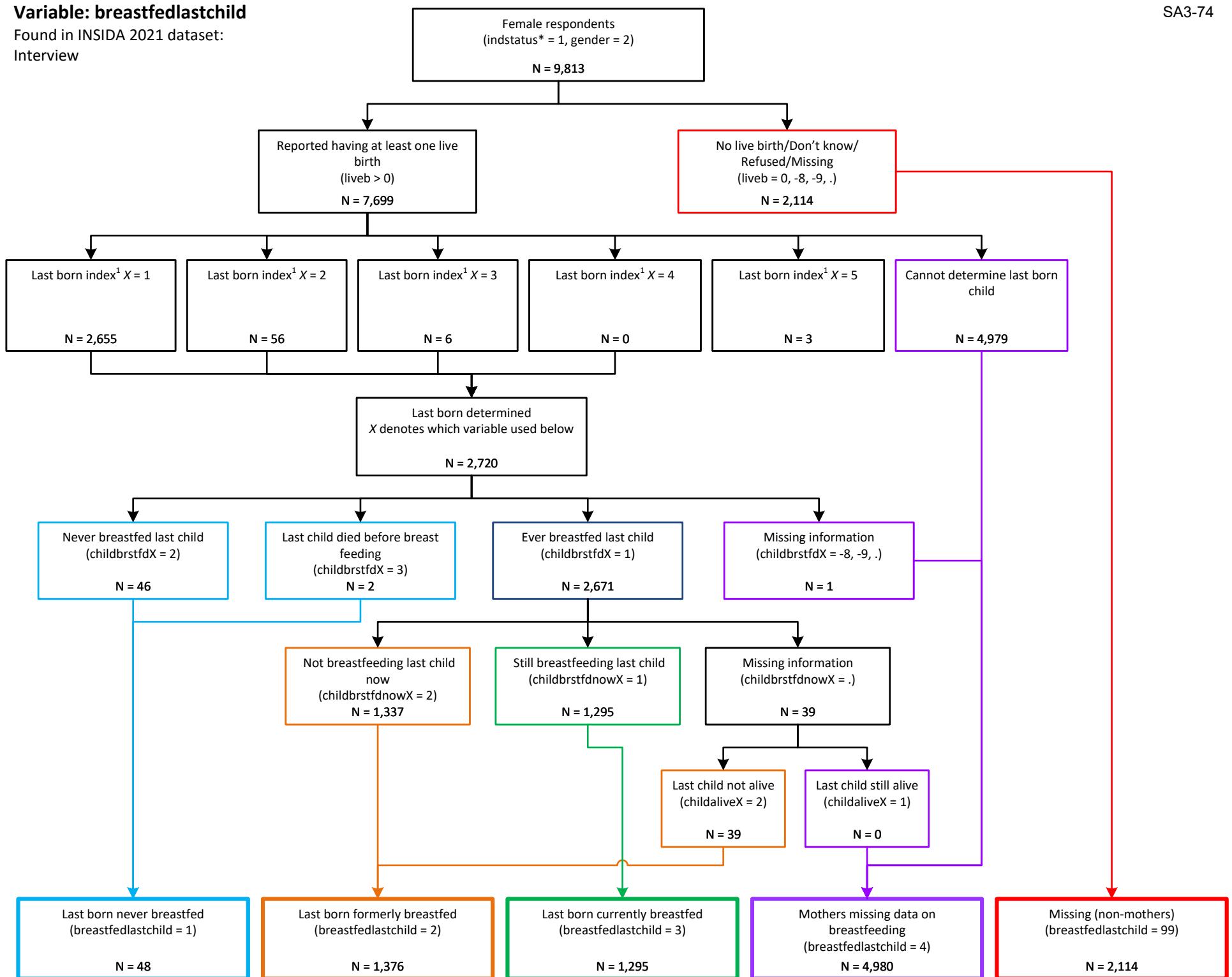
gender
indstatus
childa2012
childalive1
childalive2-5†
chtsthivbirth1
chtsthivbirth2-5†
chtsthivbrstfd1
chtsthivbrstfd2-3†
chtsthivagelast1-2
chtsthivagelastnum1-2

† Variable redacted from final dataset due to small counts and disclosure risk. The variable chtsthivagelastm1 provides the age of the last born child in months.

Variable: breastfedlastchild

Found in INSIDA 2021 dataset:

Interview

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

Variable: breastfedlastchild

Uses the following INSIDA 2021 variables:

Interview dataset

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

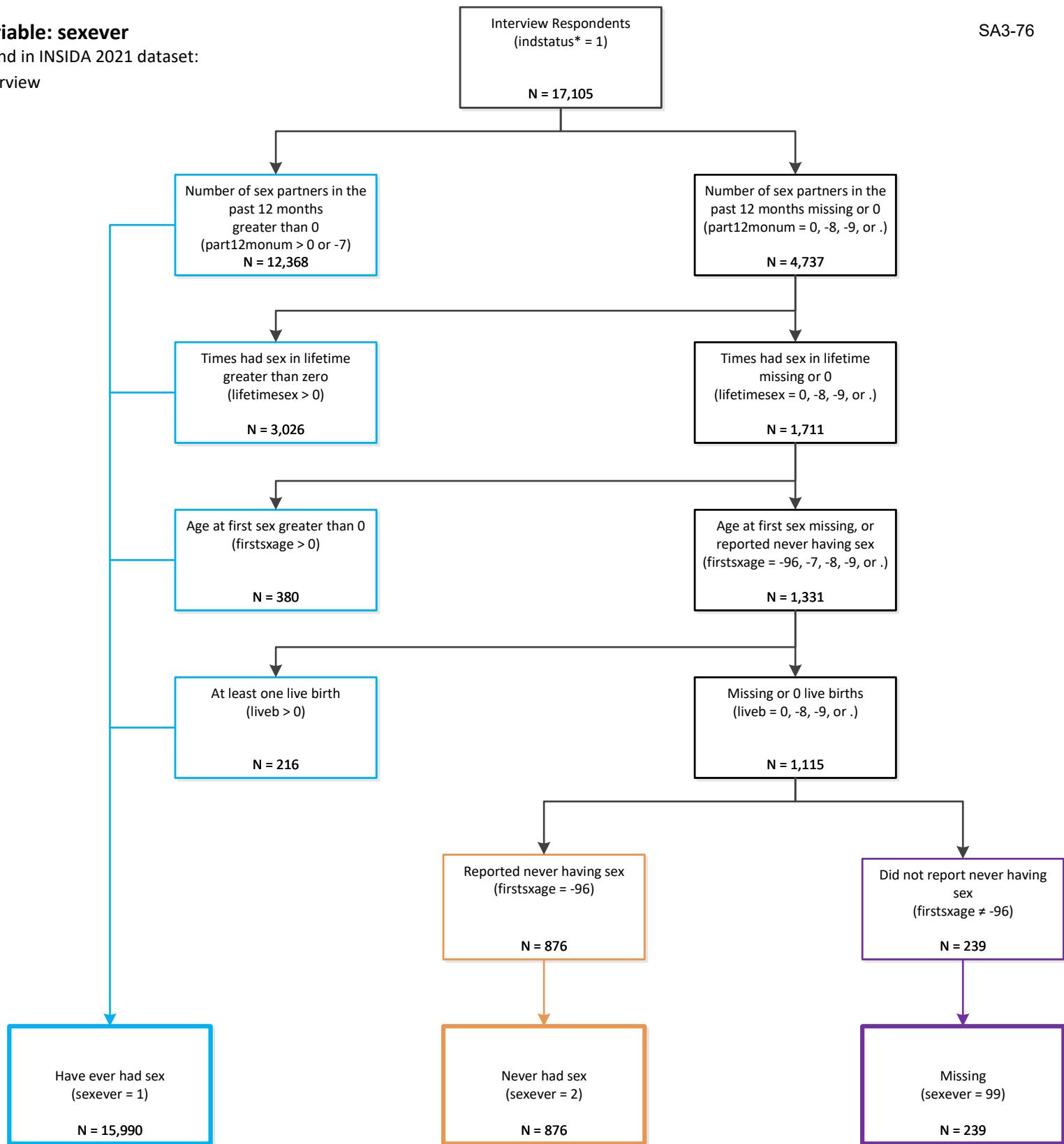
† Variable redacted from final dataset due to small counts and disclosure risk.

Variable: sexever

Found in INSIDA 2021 dataset:

Interview

SA3-76



Variable: sexever

SA3-77

Uses the following INSIDA 2021 variables:

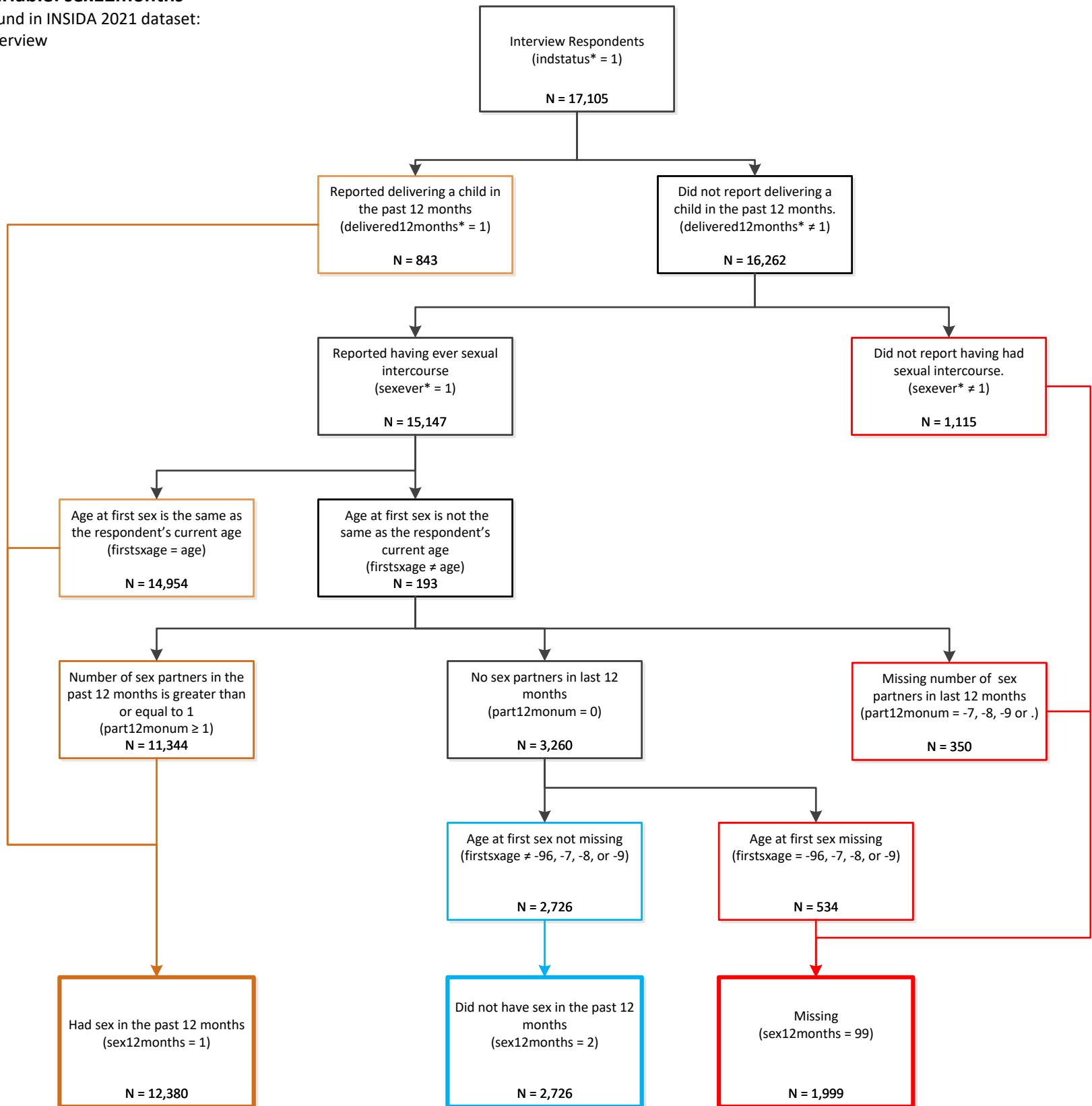
Interview dataset

- indstatus
- part12monum
- lifetimesex
- liveb
- firstsxage

Variable: sex12months

Found in INSIDA 2021 dataset:

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

SA3-79

Uses the following INSIDA 2021 variables:

Interview dataset

indstatus

delivered12months

sexever

part12monum

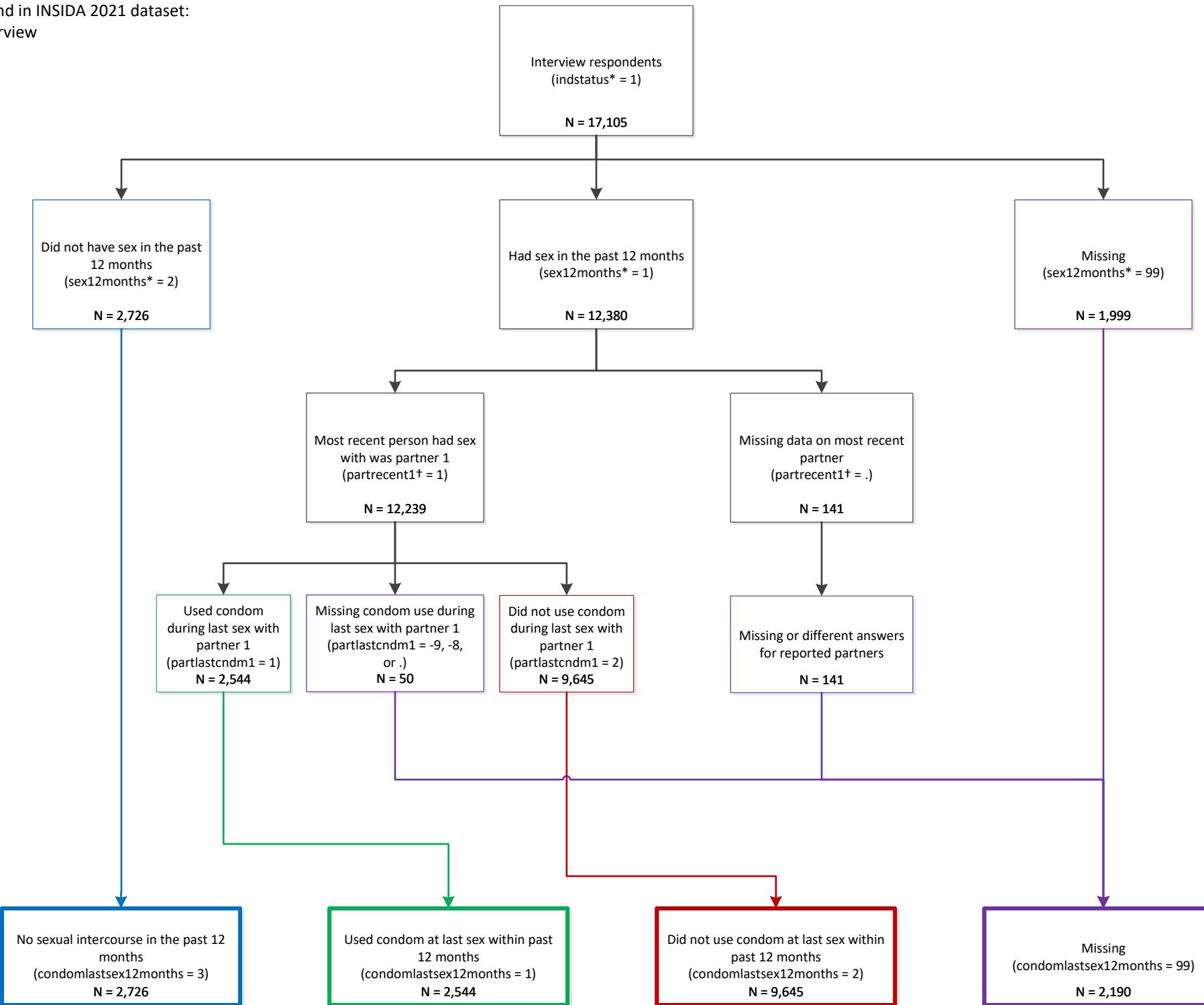
firstsxage

Variable: condomlastsex12months

SA3-80

Found in INSIDA 2021 dataset:

Interview



Variable: condomlastsex12months

Uses the following INSIDA 2021 variables:

Interview dataset

indstatus
sex12months
partrecent1†
partlastcndm1-3

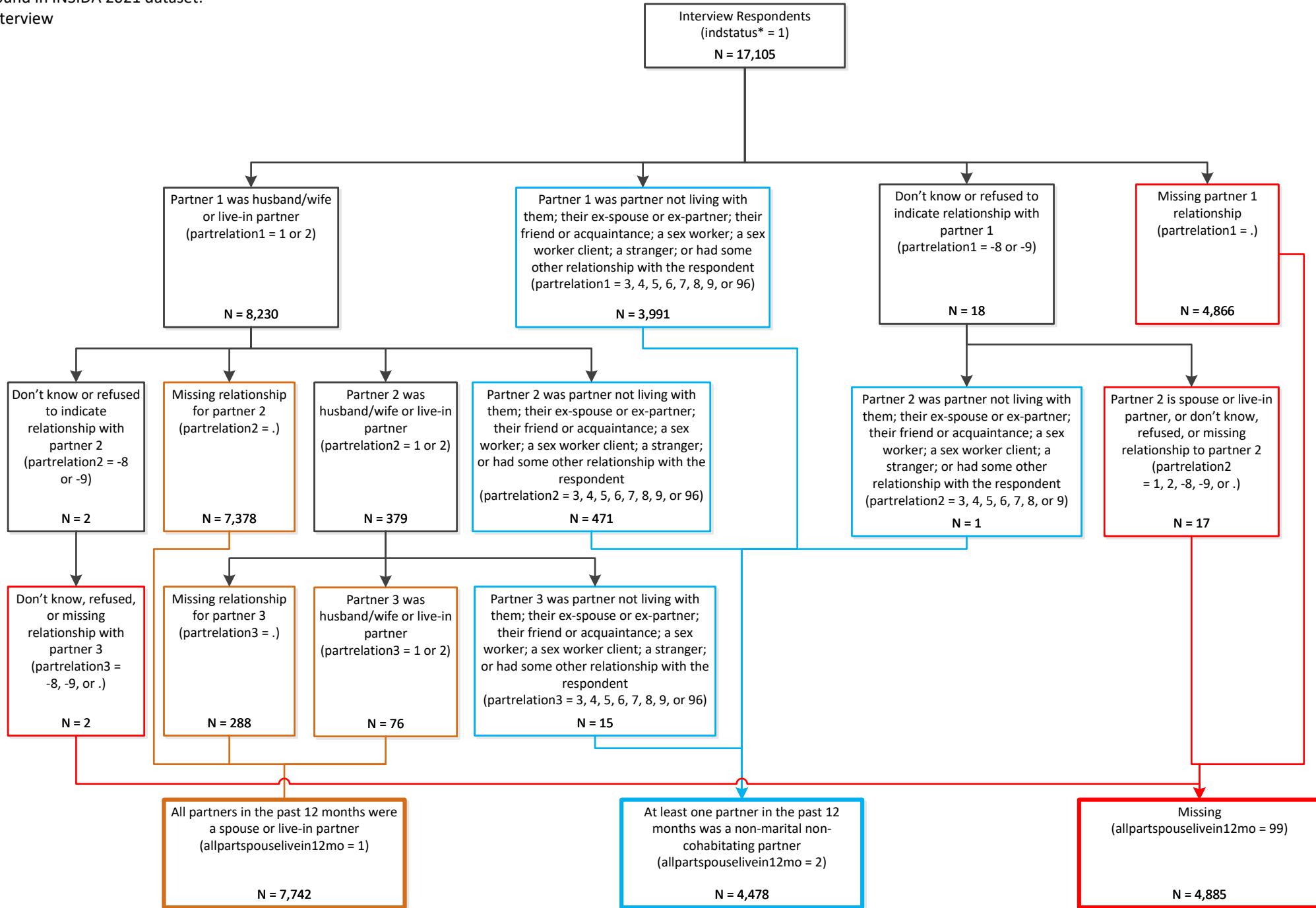
† Variable redacted from final dataset due to small counts and disclosure risk.

Variable: allpartspouselivein12mo

SA3-82

Found in INSIDA 2021 dataset:

Interview



Variable: allpartspouselivein12months

SA3-83

Uses the following INSIDA 2021 variables:

Interview dataset

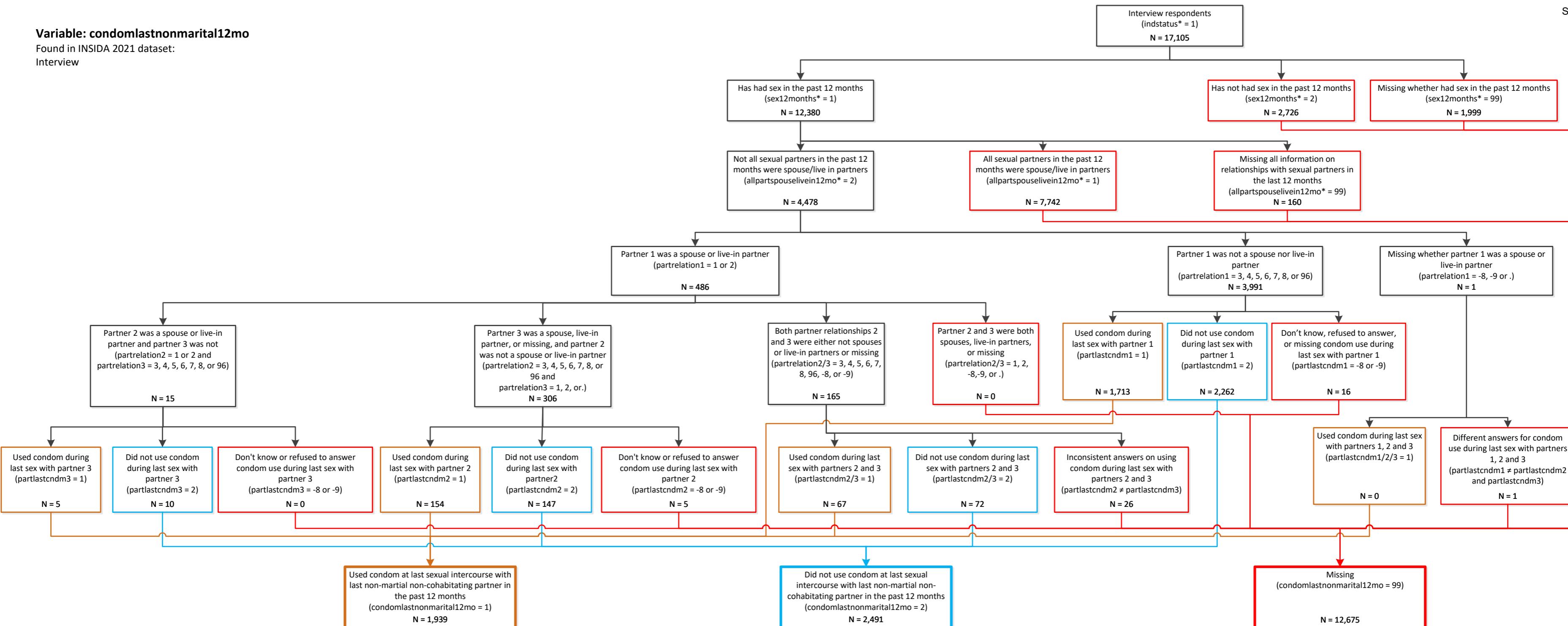
indstatus

partrelation1-3

Variable: condomlastnonmarital12mo

Found in INSIDA 2021 dataset:

Interview



Variable: condomlastnonmarital12mo

SA3-85

Uses the following INSIDA 2021 variables:

Adult Interview dataset

indstatus

sex12months

allpartspouselivein12mo

partrelation1-3

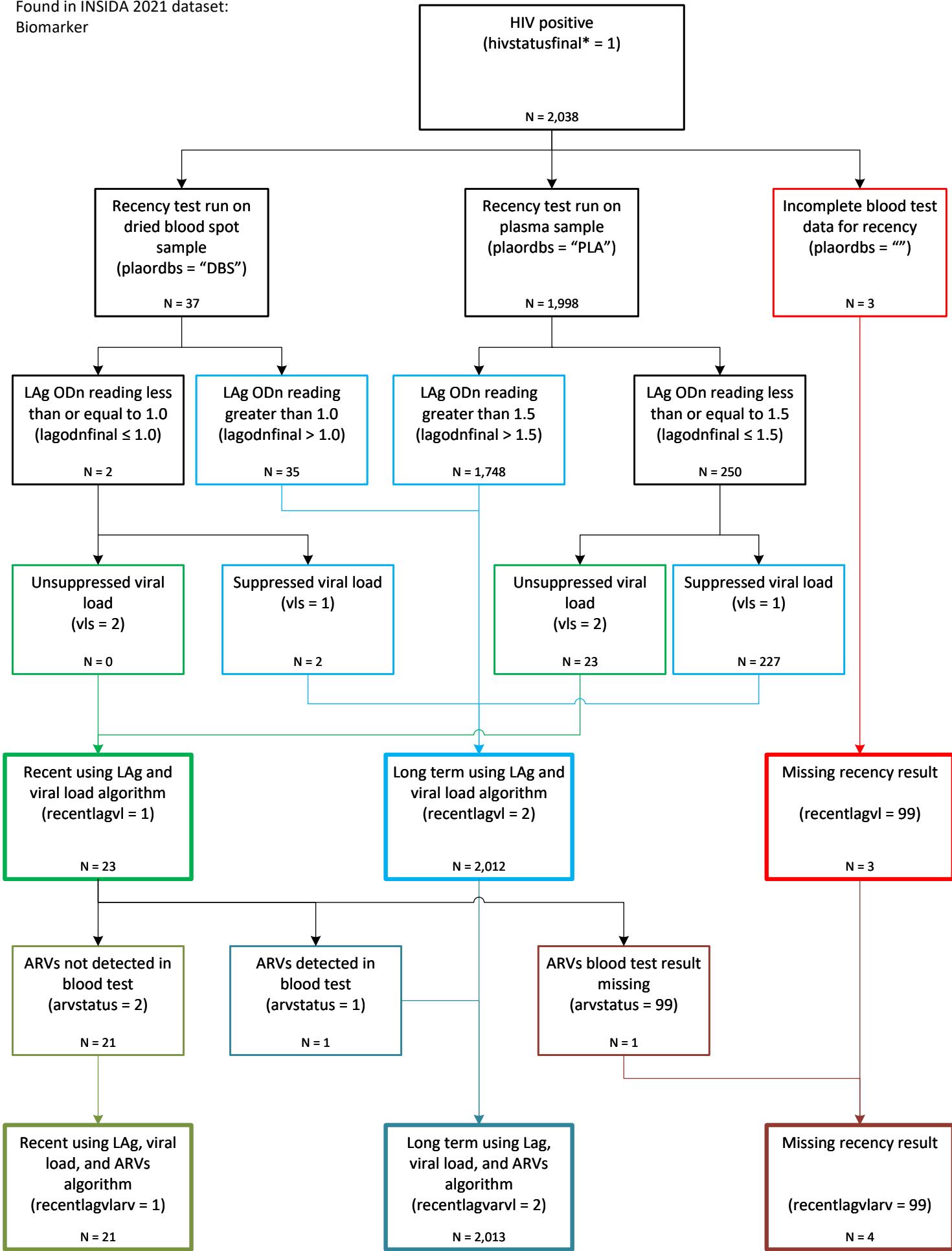
partlastcndm1-3

Variable: recentlagv1/recentlagv1larv

SA3-86

Found in INSIDA 2021 dataset:

Biomarker



Variable: recentlagvl/recentlagvlarv

SA3-87

Uses the following INSIDA 2021 variables:

Biomarker dataset

hivstatusfinal

plaordbs

lagodnfinal

vls

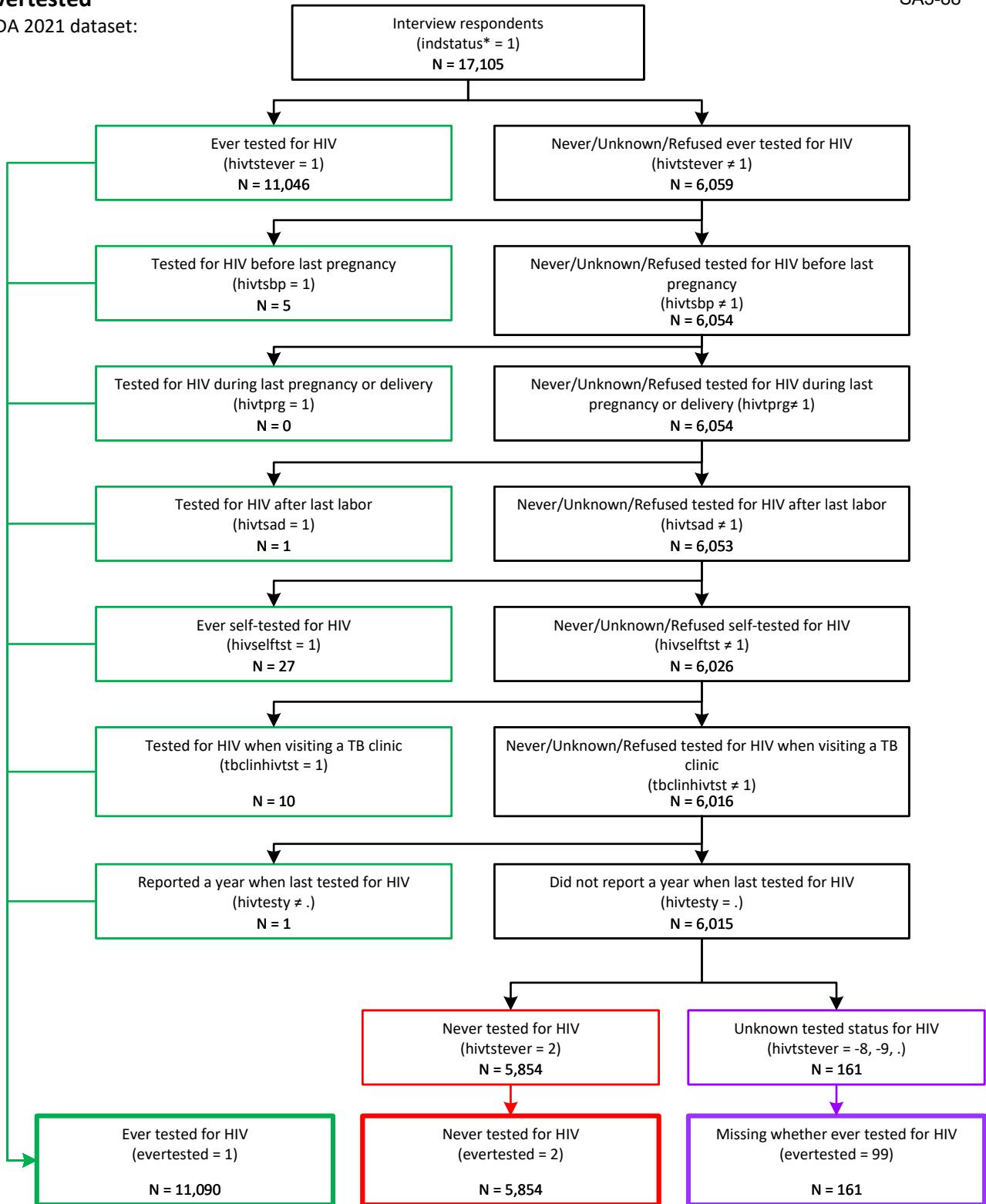
arvstatus

Variable: evertested

SA3-88

Found in INSIDA 2021 dataset:

Interview



Variable: evertested

Uses the following INSIDA 2021 variables:

Interview

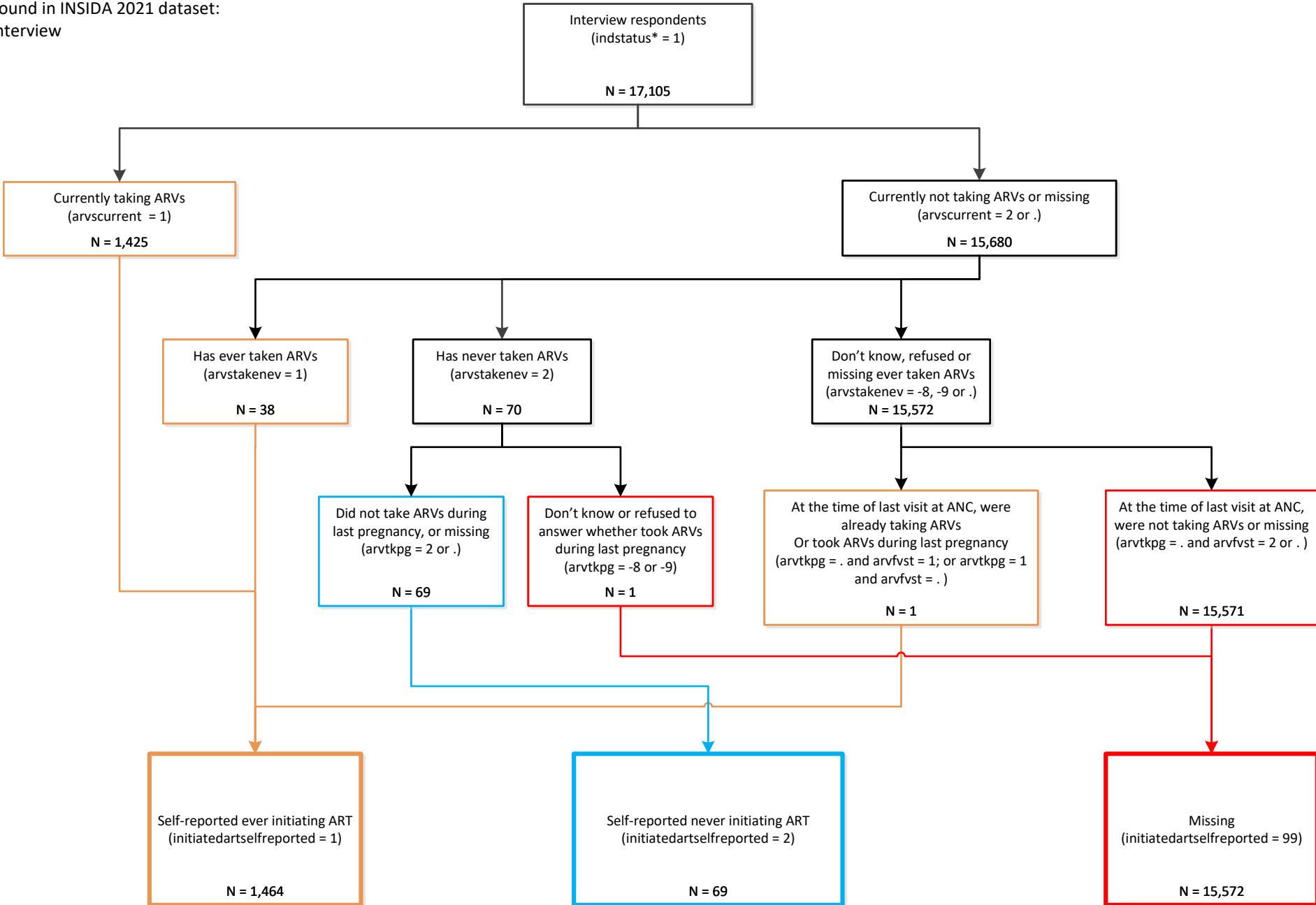
indstatus
hivtstever
hivtsbp
hivprg
hivtsad
hivselftst
tbclinhivtst
hivtesty
evertested

Variable: initiatedartselfreported

SA3-90

Found in INSIDA 2021 dataset:

Interview



Variable: initiatedartselfreported

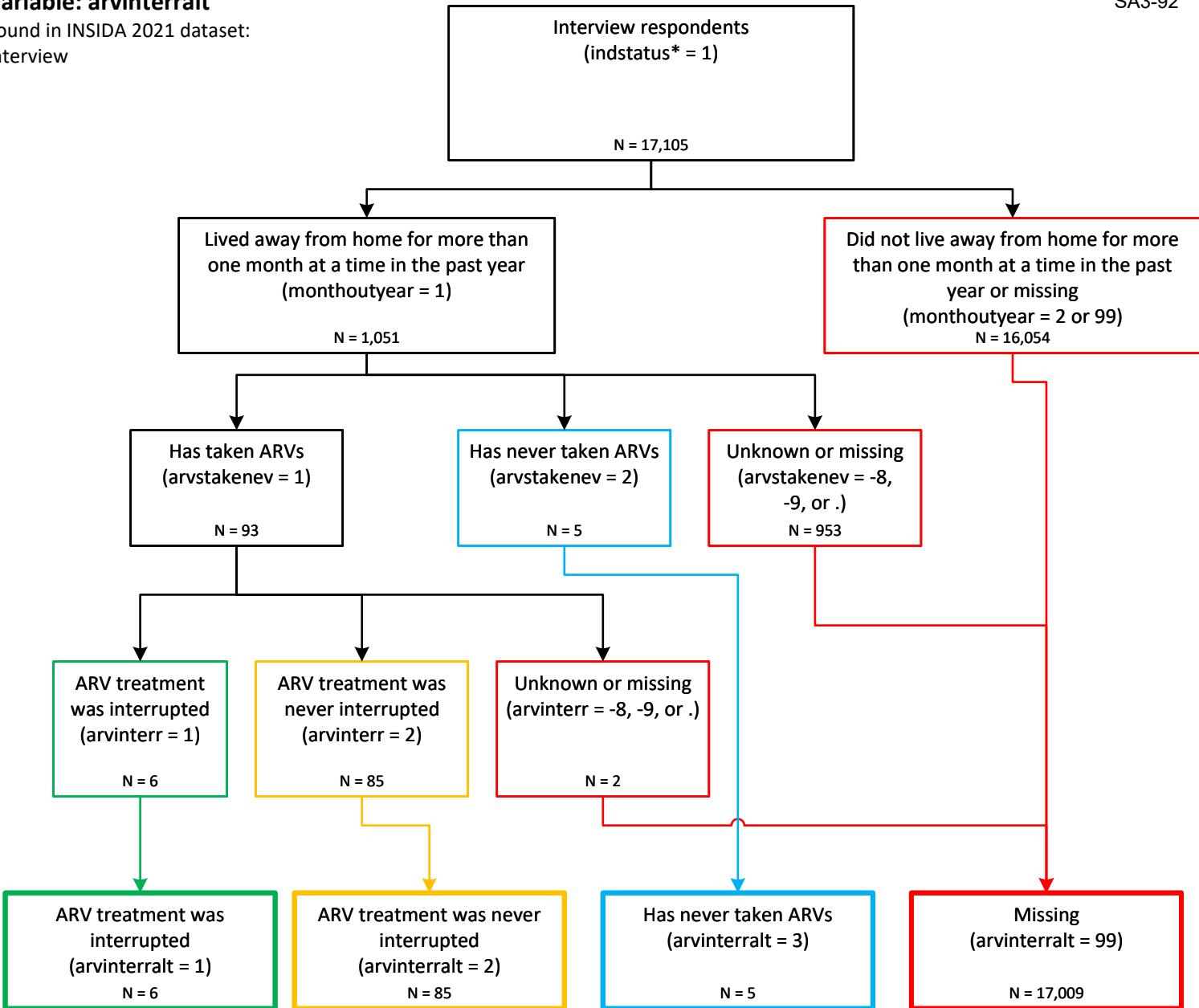
Uses the following INSIDA 2021 variables:

Interview dataset

- indstatus
- arvscurrent
- arvtakenev
- arfvst
- arvtkpg

Variable: arvinterralt

Found in INSIDA 2021 dataset:
Interview



Variable: arvinterralt

SA3-93

Uses the following INSIDA 2021 variables:

Interview dataset

arvstakenev

arvinterr

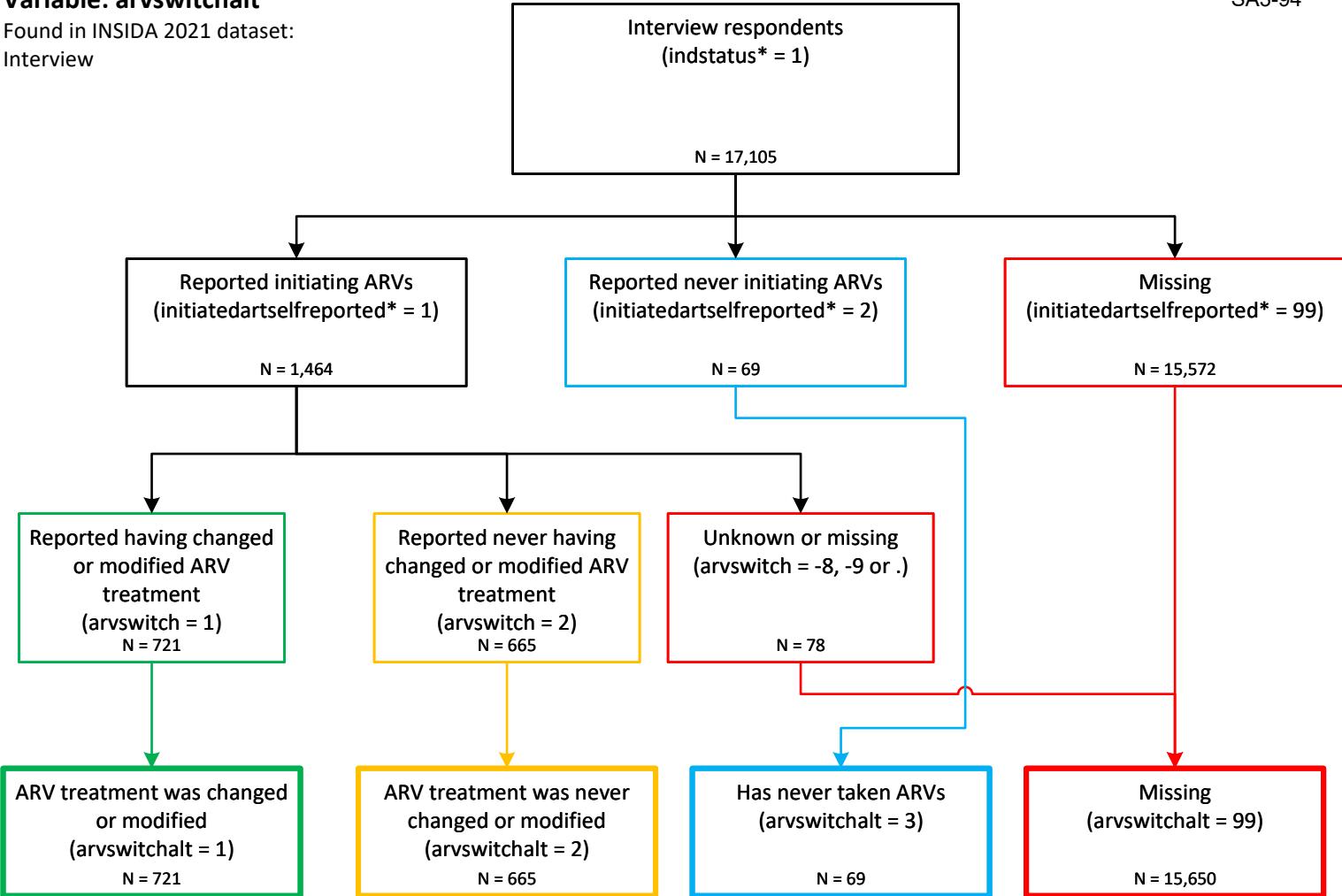
indstatus

monthoutyear

Variable: arvswitchalt

Found in INSIDA 2021 dataset:

Interview



Variable: arvswitchalt

SA3-95

Uses the following INSIDA 2021 variables:

Interview dataset

indstatus

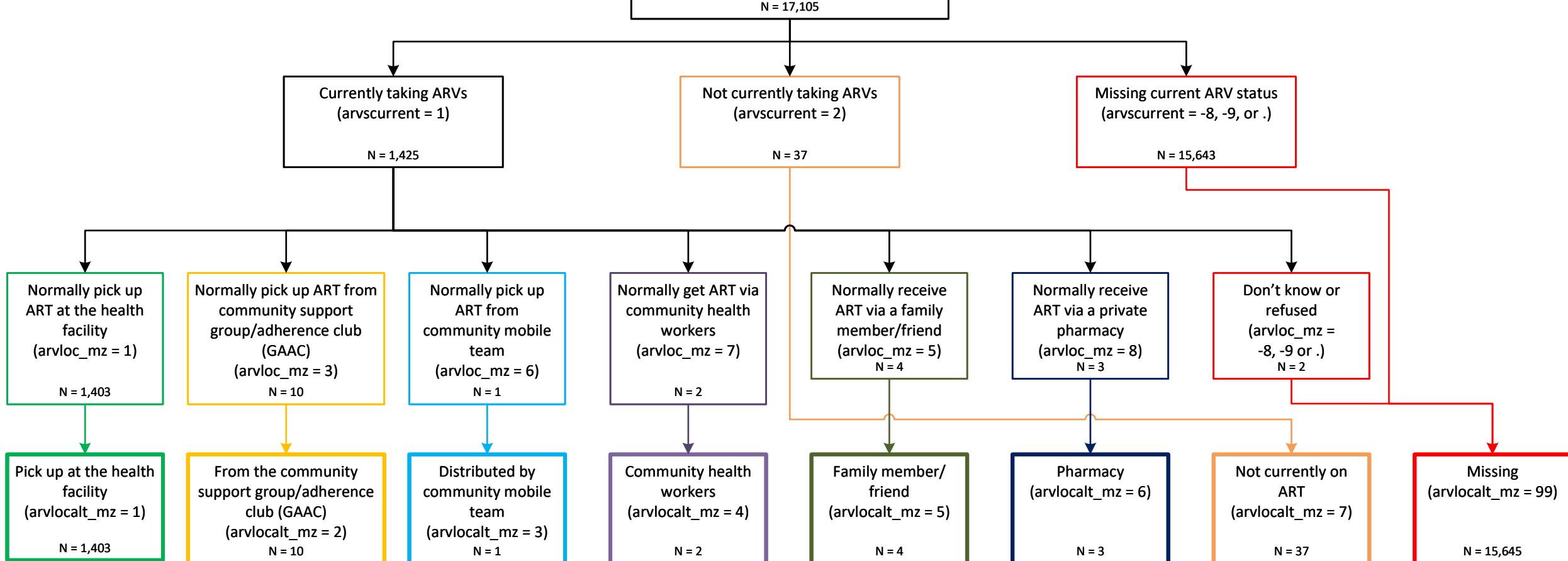
initiatedartselfreported

arvswitch

Variable: arvlocalt_mz

Found in INSIDA 2021 dataset:

Interview



Variable: arvlocalt_mz

SA3-97

Uses the following INSIDA 2021 variables:

Interview dataset

indstatus

arvscurrent

arvloc_mz

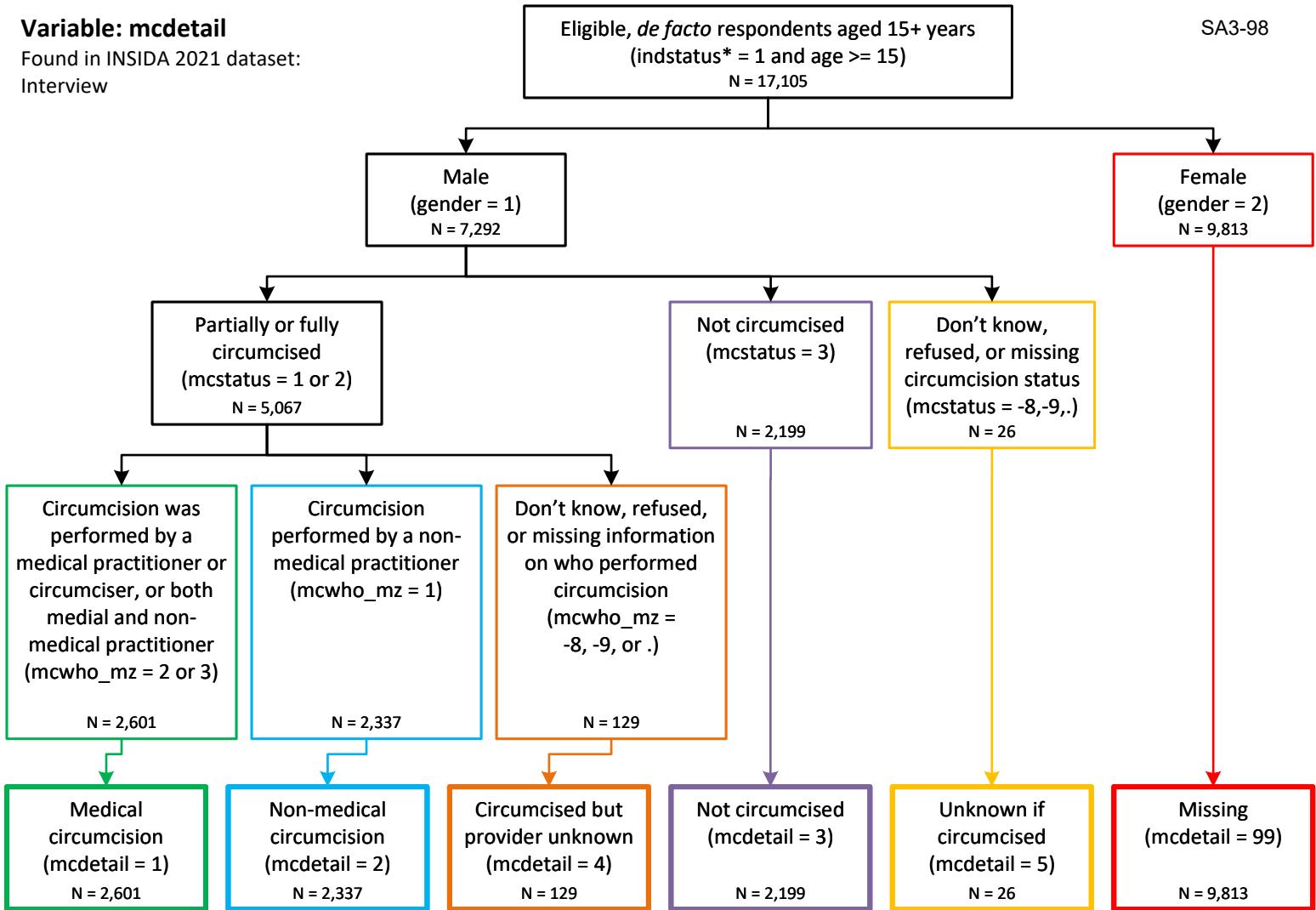
Variable: mcdetail

Found in INSIDA 2021 dataset:

Interview

Eligible, *de facto* respondents aged 15+ years
(indstatus* = 1 and age >= 15)
N = 17,105

SA3-98



Variable: mcdetail

SA3-99

Uses the following INSIDA 2021 variables:

Interview dataset

indstatus

age

gender

mcstatus

mcwho_mz