Add Health Relationship and Fertility Data

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Overview of Presentation

- Brief introduction: Relationship and fertility data in Add Health **Waves I** to **III**

- **Wave IV:**

  – Distinct listing of relationships in **Wave IV**

  – Nested data structure

  – Relationship and fertility data across sections

    - Content and criteria

    - Data flows

    - Hierarchical data relationships

    - Unique ID components

Overview of Presentation

- Computational and technical tips and example SAS code
  - Unique ID Creation
  - Summary counts
  - Different levels and units of analysis
  - Hierarchical file merging
- Common issues when working with relationship and fertility data
- Some general advice
- Wave V preview
- **Q & A**

Waves I, II	Wave III	Wave IV
• Demographic • Family, siblings, friends • Education, work • Physical and mental health • Daily activities and sleep • **Relationships** • **Sexual, & fertility histories** • Substance use • Delinquency and violence • Attitudes, religion • Economics, expectations • Psychological, personality	• Demographic • Family, siblings, friends • Education, work, military • Physical and mental health • Daily activities and sleep • **Relationships** • **Sexual**, & **fertility histories** • Substance use • Involvement w/criminal justice system • Attitudes, religion • Economics, expectations • Psychological, personality • **Children and parenting** • Civic participation • Gambling • mentoring	• Demographic • Family, siblings, friends • Education, work, military (records) • Physical and mental health • Daily activities and sleep • **Relationships** • **Sexual, & fertility histories** • Substance use and abuse • Involvement w/criminal justice sys • Work attitudes and chars, religion • Economics, expectations • Big 5 Personality, stressors • **Children and parenting** • Civic participation • Cognitive function • Psychosocial factors

Wave I & Wave II

Wave I (1994-1995; Grades 7-12; N=20,745)
Wave II (1996; Grades 8-12; N=14,738)

- Adolescents name up to 3 **"romantic"** relationships.

- If no romantic relationships, then name 3 **"like"** relationships

Information about relationships:

- Begin/end dates

- Social context when relationship began

- Partner demographics
  - *Biological sex, age, race/ethnicity*

- First & most recent sexual intercourse
  - *date, contraceptive use*

- Verbal and physical abuse (W2 only)

- Ideal relationship characteristics and experiences

Wave I & Wave II

Wave I (1994-1995; Grades 7-12; N=20,745)
Wave II (1996; Grades 8-12; N=14,738)

Fertility Experiences (female respondents only):
Pregnancies :   • Number of times, dates, outcome   • Contraceptive use, want pregnancy?   • Marriage at time of pregnancy   • Child alive?   • Child gave up for adoption?

Wave III

Wave III (2001-2002; Aged 18-26; N=15,197)

Romantic and pregnancy relationships since 1995
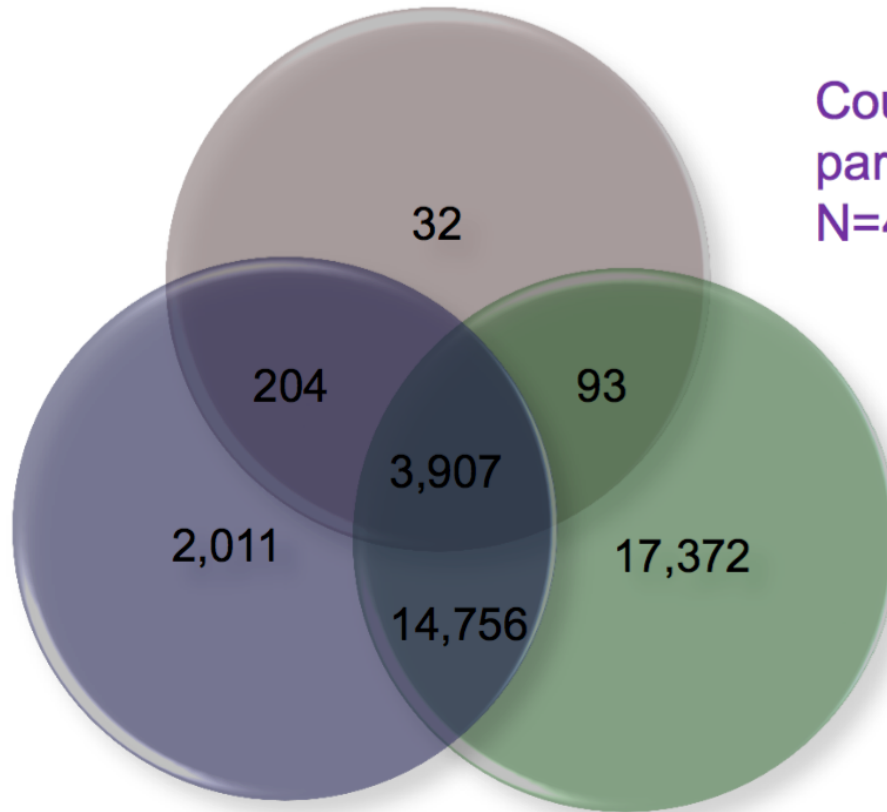   (N = 42,330 relationship records)

Relationships in Detail
        (N = 38,375)

3 sets selected according to different criteria:

- **Sexual relationships**, N = 36,128
- **2 most important relationships**, N= 20,878
- **Couple (CP) sample for partner recruitment**, N = 4,236

Couples Sample for
partner recruitment
N=4,236

32

204

93

3,907

2,011

17,372

14,756

Sexual
Relationships
N=36,128

2 Most
important
N=20,878

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Wave III

Couples Sample

The couples sample was a purposive, quota sample (N=1,507 partners) designed to collect information on 1/3 married, 1/3 cohabiting, and 1/3 dating partners.

Relationships are eligible if:
- Current
- Opposite sex partners
- Partner 18 or older
- Relationship duration >= 3 months

Sampling weight: **W3PTNR**

Wave III

Wave III (2001-2002; Aged 18-26; N=15,197)

Information about relationships:

Marriage history
- Begin/end dates
- Current?
- Still living together – last date
- How ended?

Cohabitation history
- Begin/end dates
- Still living together – last date
- Ever married to partner?
- How ended?

Wave III

Relationships in Detail

R & partner's age:
- Age when first met; began a romantic relationship; began sexual relationship

Begin/end dates:
- Romantic relationship; sexual relationship; marriage

Duration:
- Living together before marriage; sexual relationship before cohabitation; same residence

Cohabitation:
- Travel distance; other residence; who else lived there; # nights together

Wave III

Relationships in Detail (cont.)

Various types of sexual activities
- When: first/most recent time – dates, frequencies
- Enjoyment of sexual activity with partner

Different types of birth control/condom use
- Combined with different types of sexual activities
- When used: first/most recent time – dates, frequencies

Relationship qualities
- Best description of current relationship (dating exclusively?)
- Currently engaged to marry?
- Abuses (verbal, physical, forced sex, resulted injuries)
- Satisfaction; love; dominance
- Joint account; purchase; chores

WAVE IV RELATIONSHIP AND FERTILITY DATA

Wave IV

Wave IV (2007-2008; Aged 24-32; N=15,701)

Relationship data collection structure differs from Wave III:
- Specific romantic/sexual relationships R have had
- Exclusive listings by partner types:
    - Married ('M')
    - Cohabiting ('C')
    - Pregnancy ('P')
    - Currently Dating ('CD')
    - Most Recent ('MR')

Note: You cannot update Wave III with Wave IV relationships -- It's not an add-on!

Nested Data Structure:

- Respondent's reporting on **total number of relationships/partners** (by types)
  - Section 16A [H4TR*]
    - Married ('M')
    - Cohabiting ('C')
    - Pregnancy ('P')
    - Currently Dating ('CD')
    - Most Recent ('MR')

- **Time-segments** associated with each relationship/partner
  - Section 16B & 16C [H4TR*]

- Selected relationship in **detail**
  - Section 17 [H4RD*]

Nested Data Structure (cont.):

- **All pregnancies** associated with the reported relationship/partners
  - Section 18 [H4PG*]

- All **live births** resulting from pregnancies
  - Section 19 [H4LB*]

- All live births who are still living and not given up for adoption (**children**)
  - Section 20A [H4KK*]

- Respondents who have at least 1 child at home reporting on their **parenting attitudes**.
  - Section 20B [H4KK*]

Wave IV: Romantic/Sexual Relationships

S16A: R's description of total no. of relationships, pregnancies, live births, children still living.

- **Unit of Analysis** – Respondent (N=15,701)
- **Record ID:** AID
- **Contents:**
    - # Persons ever married ('M' partners)
    - # Persons ever lived with but not married ('C' partners)
    - # Persons ever had a pregnancy with besides 'M' and 'C' partners ('P' partners)
    - # Persons currently dating besides 'M', 'C', and 'P' partners ('CD' partners)
    - # Other relationships < 6 months since 2001
    - # Other relationships 6+ months since 2001

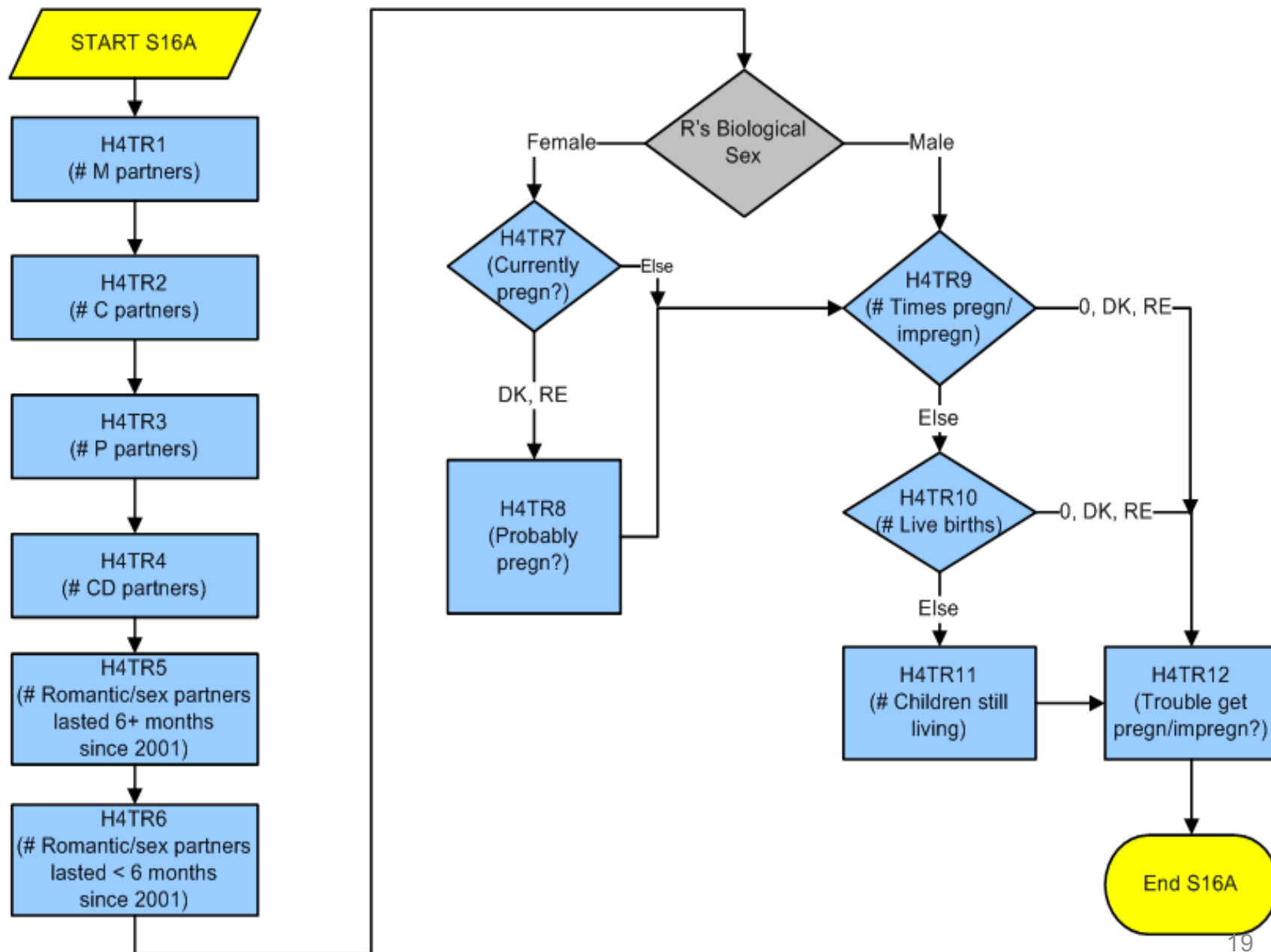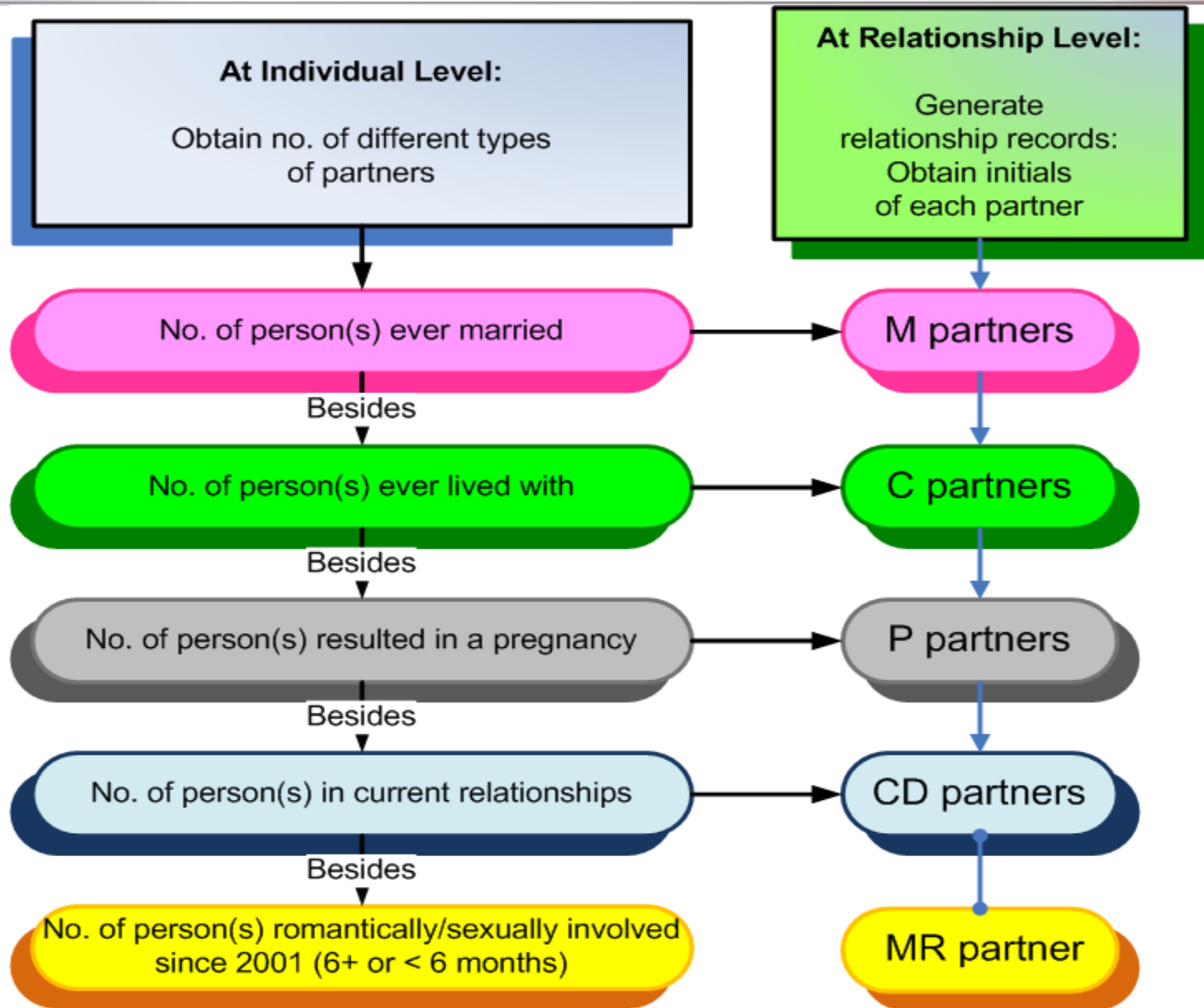| Relationships | Pregnancies | Live Births | Children | Parenting |

Wave IV: Romantic/Sexual Relationships

S16A: R's description of total no. of relationships, pregnancies, live births, children still living.

- **Unit of Analysis** – Respondent (N=15,701)

- **Record ID:** AID

- **Contents:**

  - Currently pregnant? {for female respondents}

  - Total # (life-time) pregnancies (including current)

  - Total # (life-time) live births

  - Total # biological children still living? {for respondents and any partners}

  - Ever have trouble getting pregnant or avoiding a miscarriage? {for respondents and any partners}

At Individual Level:

Obtain no. of different types of partners

At Relationship Level:

Generate relationship records: Obtain initials of each partner

No. of person(s) ever married → M partners

Besides

No. of person(s) ever lived with → C partners

Besides

No. of person(s) resulted in a pregnancy → P partners

Besides

No. of person(s) in current relationships → CD partners

Besides

No. of person(s) romantically/sexually involved since 2001 (6+ or < 6 months) → MR partner

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Wave IV: Romantic/Sexual Relationships

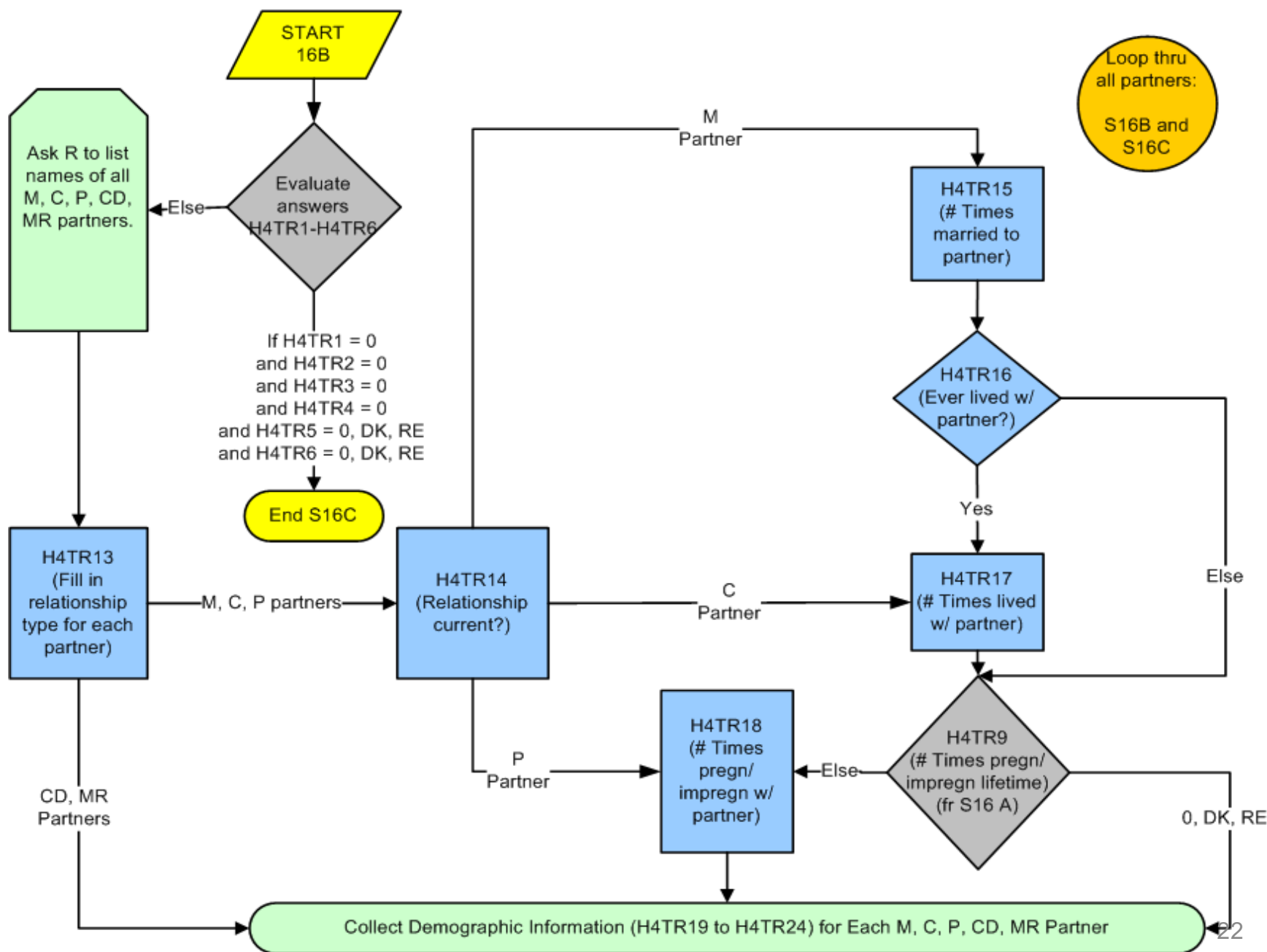*S16B: Relationship and partner characteristics*

- **Unit of Analysis** – Partners (N=30,263)

- **Record ID:** AID + PTNR_ID

- **Contents:**

  - Type of relationship listed with respondent ('M' , 'C' ,'P', 'CD' , 'MR' partner)

  - Relationship current?

  - # Times married to partner ('M')

  - Ever lived together? ('M')

  - # Times lived together with partner ('M','C')

  - # Times pregnant with partner ('M','C', 'P')

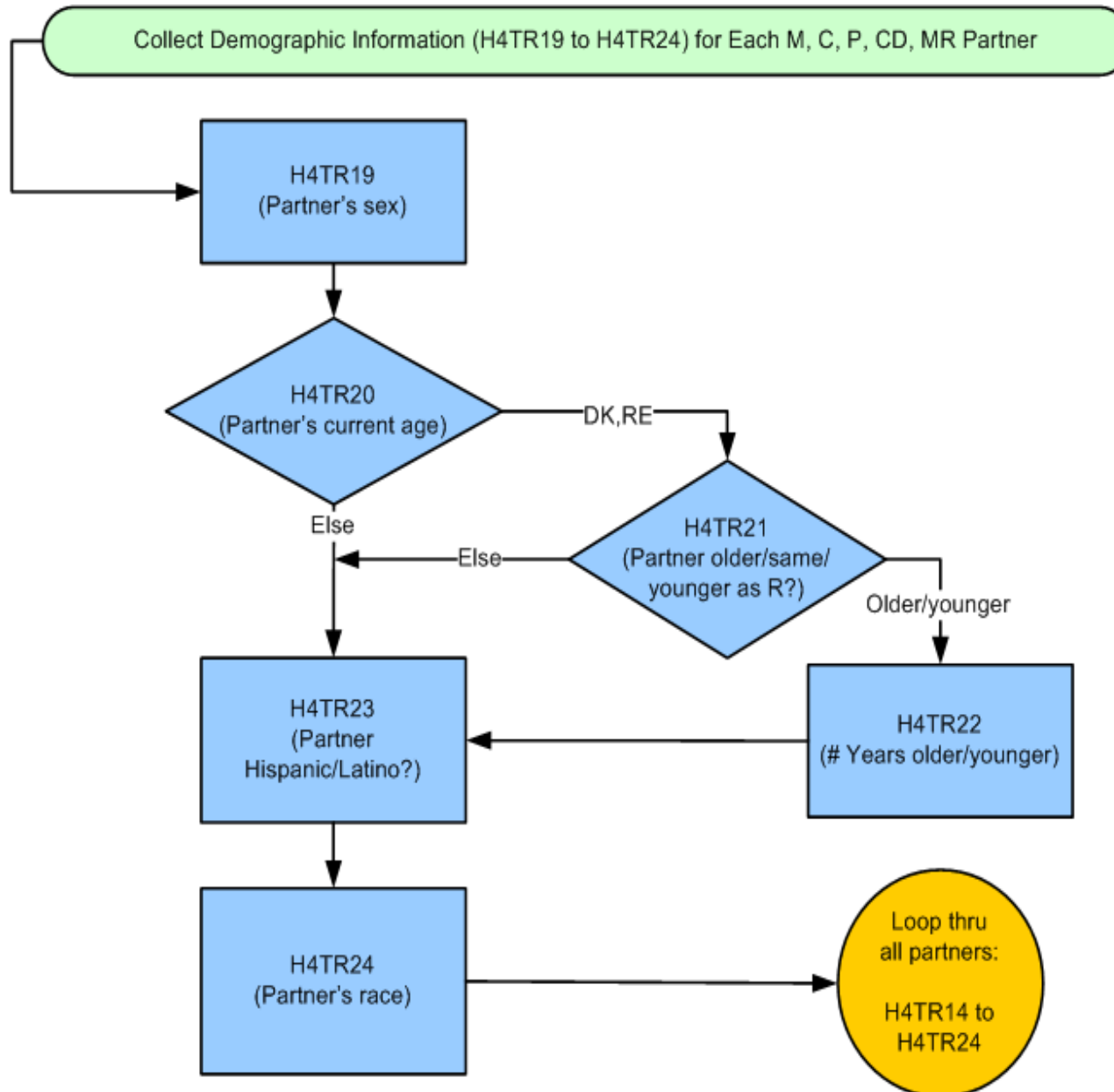 - Partner demographics: biological sex, age, Hispanic ethnicity, and race.

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| Relationships | Pregnancies | Live Births | Children | Parenting |

START
16B

Ask R to list names of all M, C, P, CD, MR partners.

Evaluate answers H4TR1-H4TR6

Else

If H4TR1 = 0
and H4TR2 = 0
and H4TR3 = 0
and H4TR4 = 0
and H4TR5 = 0, DK, RE
and H4TR6 = 0, DK, RE

End S16C

Loop thru all partners:

S16B and S16C

M Partner

H4TR15 (# Times married to partner)

H4TR16 (Ever lived w/ partner?)

Else

Yes

H4TR13 (Fill in relationship type for each partner)

M, C, P partners

H4TR14 (Relationship current?)

C Partner

H4TR17 (# Times lived w/ partner)

P Partner

H4TR18 (# Times pregn/ impregn w/ partner)

Else

H4TR9 (# Times pregn/ impregn lifetime) (fr S16 A)

0, DK, RE

CD, MR Partners

Collect Demographic Information (H4TR19 to H4TR24) for Each M, C, P, CD, MR Partner

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Collect Demographic Information (H4TR19 to H4TR24) for Each M, C, P, CD, MR Partner

H4TR19
(Partner's sex)

H4TR20
(Partner's current age)

—DK,RE—

Else

H4TR21
(Partner older/same/younger as R?)

—Else—

Older/younger

H4TR23
(Partner Hispanic/Latino?)

H4TR22
(# Years older/younger)

H4TR24
(Partner's race)

Loop thru all partners:

H4TR14 to H4TR24

Wave IV: Romantic/Sexual Relationships

S16B: Relationship and partner characteristics

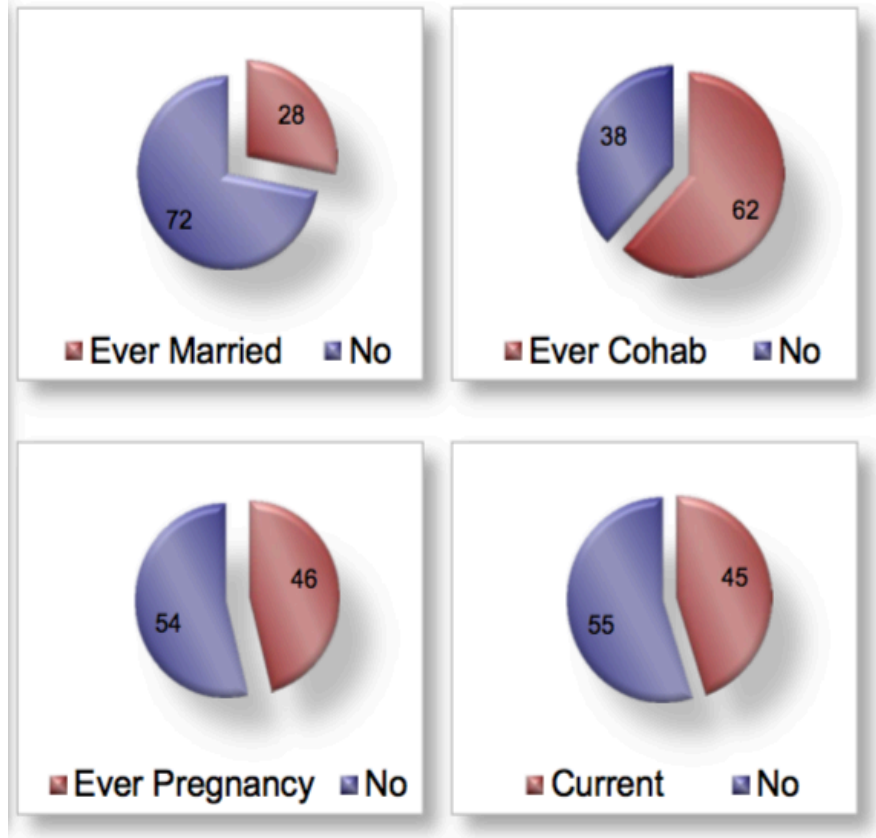**Among 15,701 respondents, 2.5% did not report any partner records.**

■ No partner record   ■ Reported at least 1 partner

Wave IV: Romantic/Sexual Relationships

Relationship type
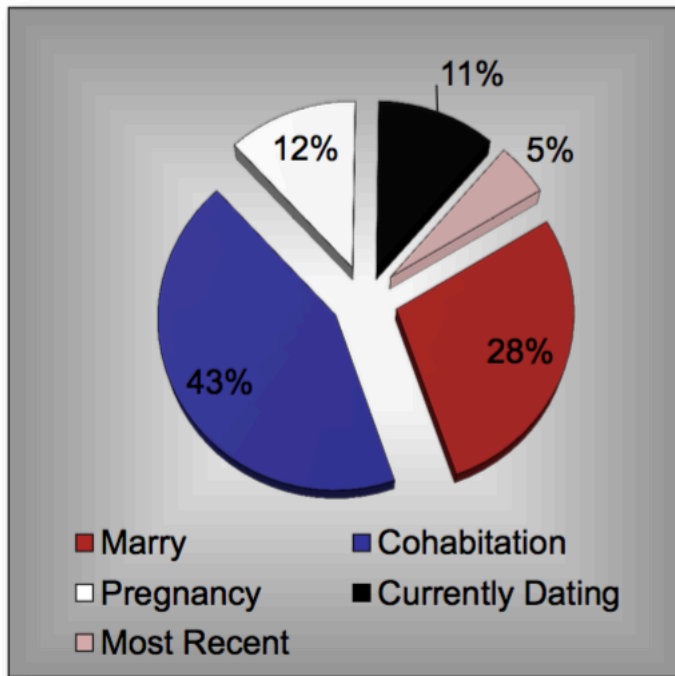
- 11%
- 5%
- 12%
- 43%
- 28%

■ Marry ■ Cohabitation
□ Pregnancy ■ Currently Dating
■ Most Recent

Among all relationships…

28 / 72

■ Ever Married ■ No

38 / 62

■ Ever Cohab ■ No

46 / 54

■ Ever Pregnancy ■ No

45 / 55

■ Current ■ No

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Wave IV: Romantic/Sexual Relationships

S16C: Relationship time-segments

- **Unit of Analysis** – Time-segment (N=36,133)

- **Record ID:** AID + PTNR_ID + H4TR25 + H4TR26

- **Contents:**

  - Type of relationship time-segment ('M', 'C', 'P', 'CD', 'MR') *[H4TR25]*

  - Time-segment number *[H4TR26]*

  - Relationship begin and end dates

  - Best estimate of relationship duration

  - How marriage ended

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| Relationships | Pregnancies | Live Births | Children | Parenting |

Wave IV Hierarchical Data Structure: Relationship and Relationship Time-Segments
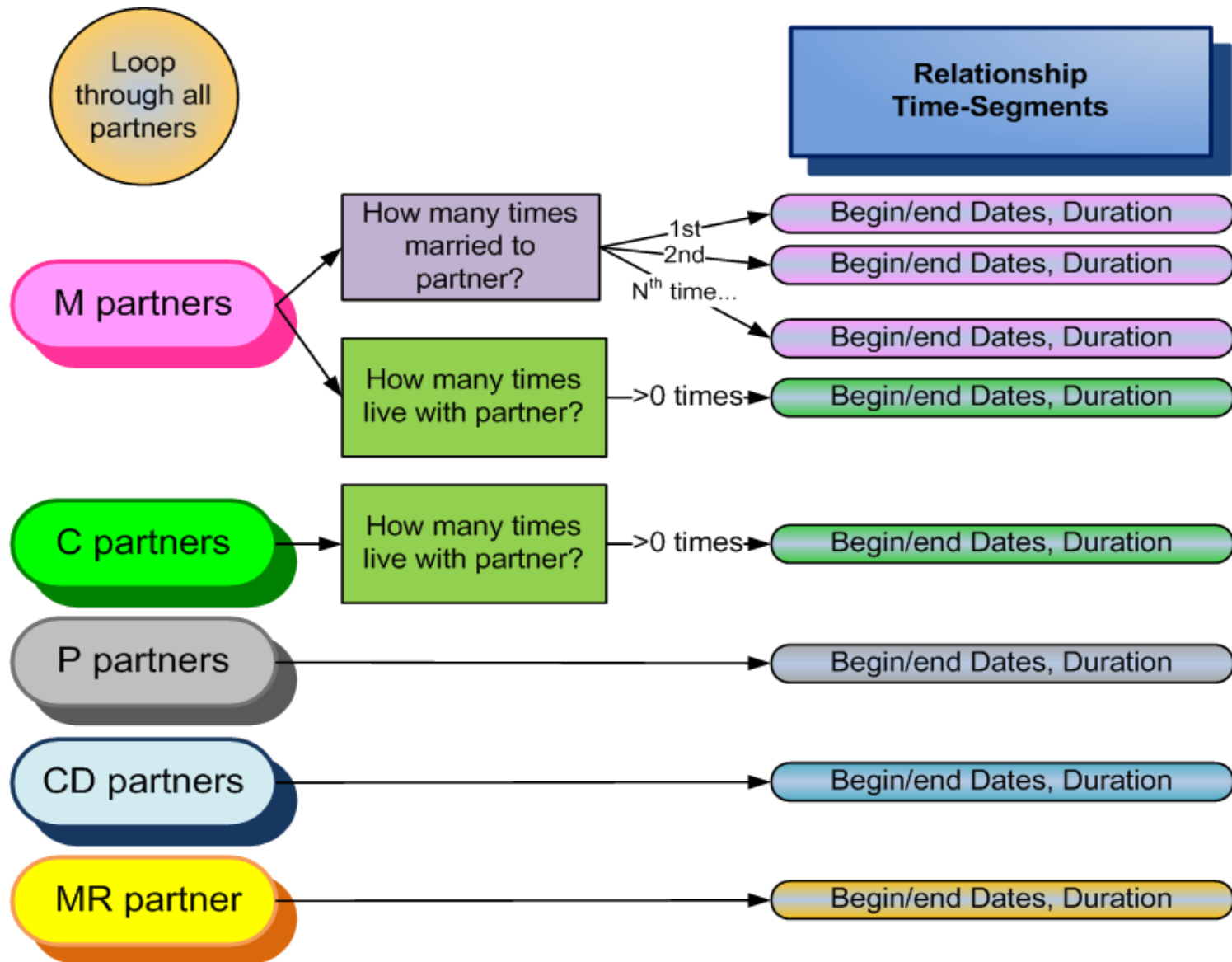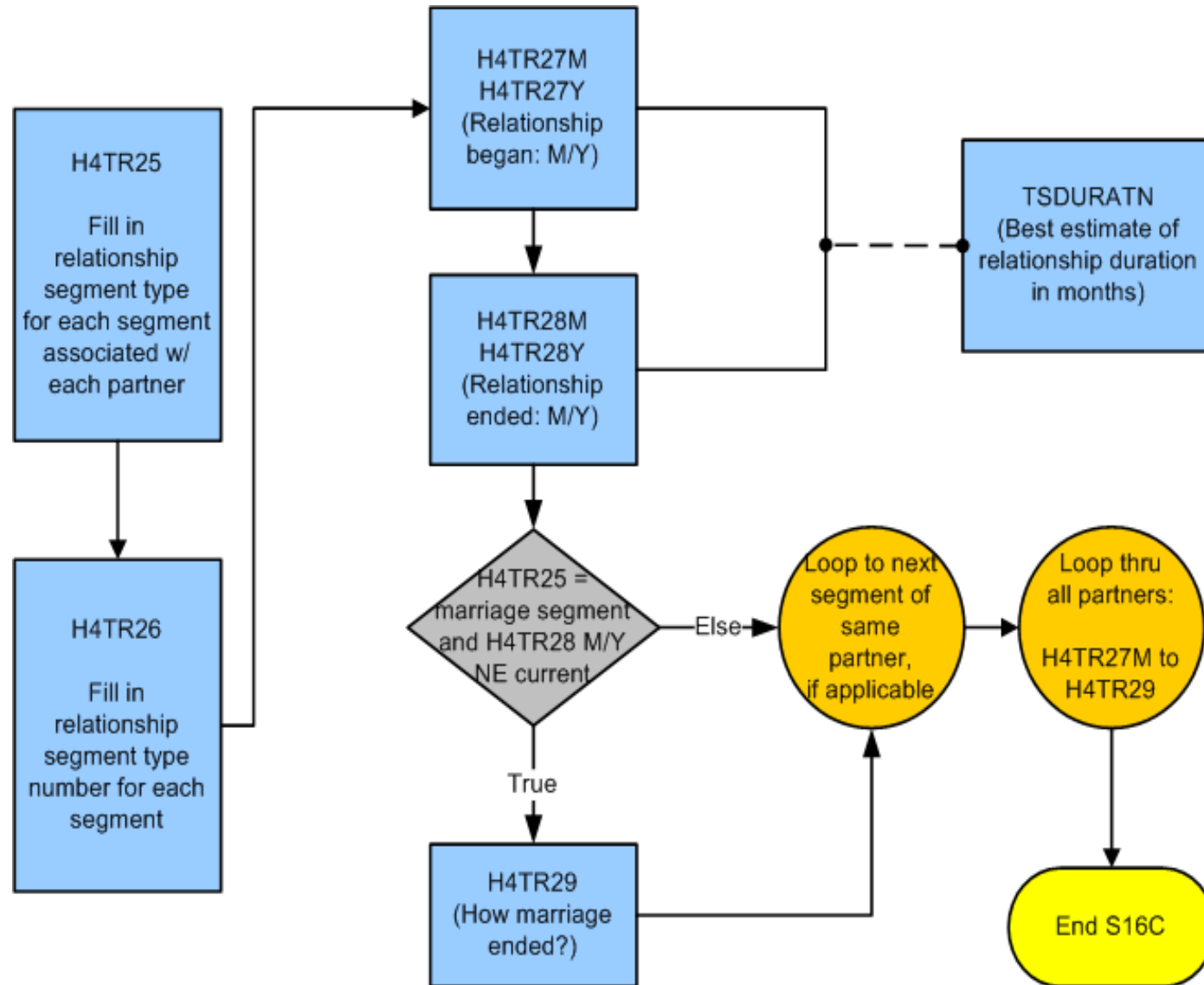
Wave IV: Romantic/Sexual Relationships

S16C: Relationship time-segments (example from 1 respondent)

Partner ID PTNR_ID	Partner Type H4TR13	Relationship Time-Segment Type H4TR25	Time-Segment Number H4TR26
1	M	M (1st time)	1=1st time
		M (2nd time)	2=2nd time
2	M	M (1st time)	1=1st time
		C	8=All
3	C	C	8=All
4	P	P	8=All
5	CD	CD	8=All

Relationships	Pregnancies	Live Births	Children	Parenting

Wave IV: Romantic/Sexual Relationships

S16B: Relationship and partner characteristics

Among 30,263 partner records, 81% link to 1 time-segment; 19% link to 2 time-segments; only a few linked to 3 or more time-segments.

■ 1 Time segment   ■ 2 Time segments   ☐ 3+ Time segments

| Relationships | Pregnancies | Live Births | Children | Parenting |
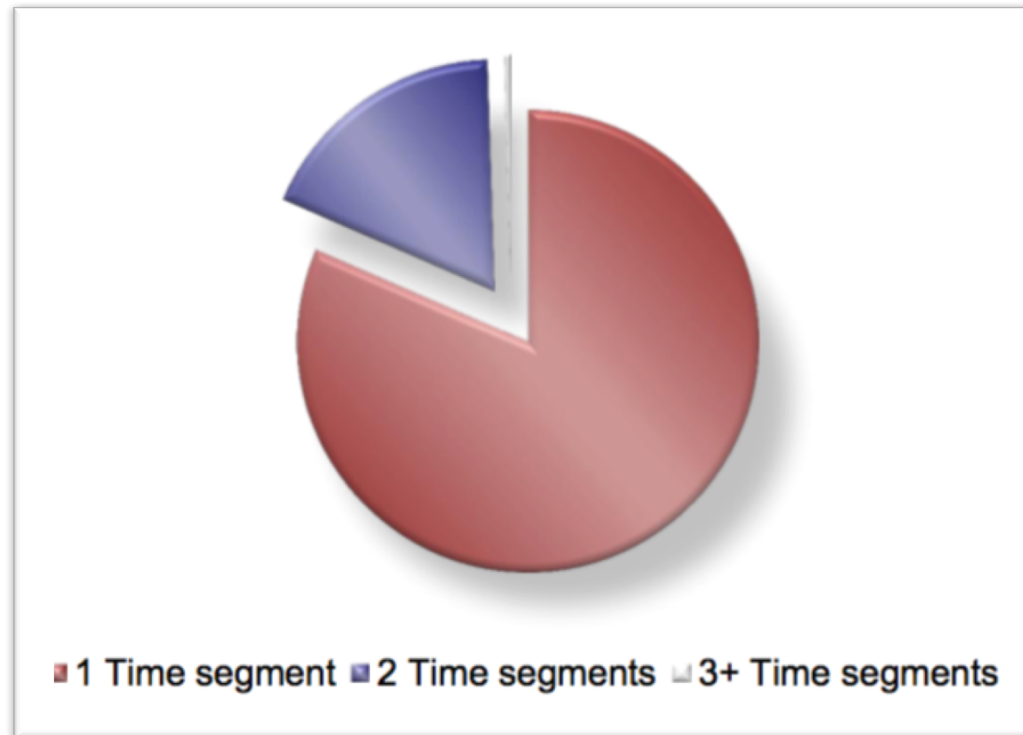
Wave IV: Romantic/Sexual Relationships

S17: Relationship in detail

- **Unit of Analysis** – Partner (N=15,216)

- **Record ID:** AID + PTNR_ID

- **Contents:**

  - Age when relationship began

  - Duration of relationship

  - Relationship description and based on relationship:

    - Either partner have a home other than the one cohabiting?

    - # nights spent together

    - Living situation for spouse

  - Relationship qualities (enjoy ordinary things, handling problems, finances, partner listens, sex life, trust partner, love for partner, happy w/ partner, commitment, closeness)
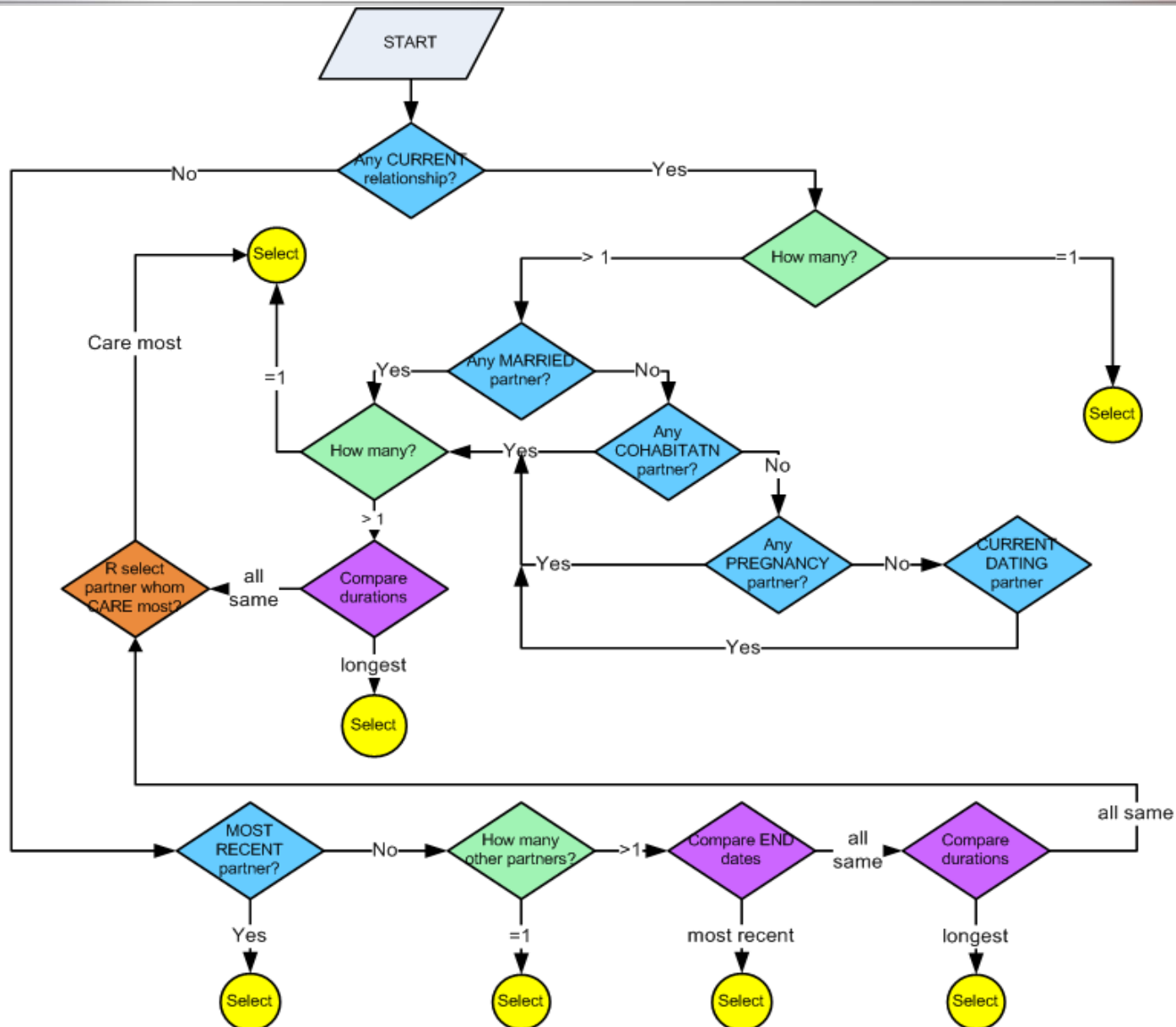
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| Relationships | Pregnancies | Live Births | Children | Parenting |

Wave IV: Romantic/Sexual Relationships

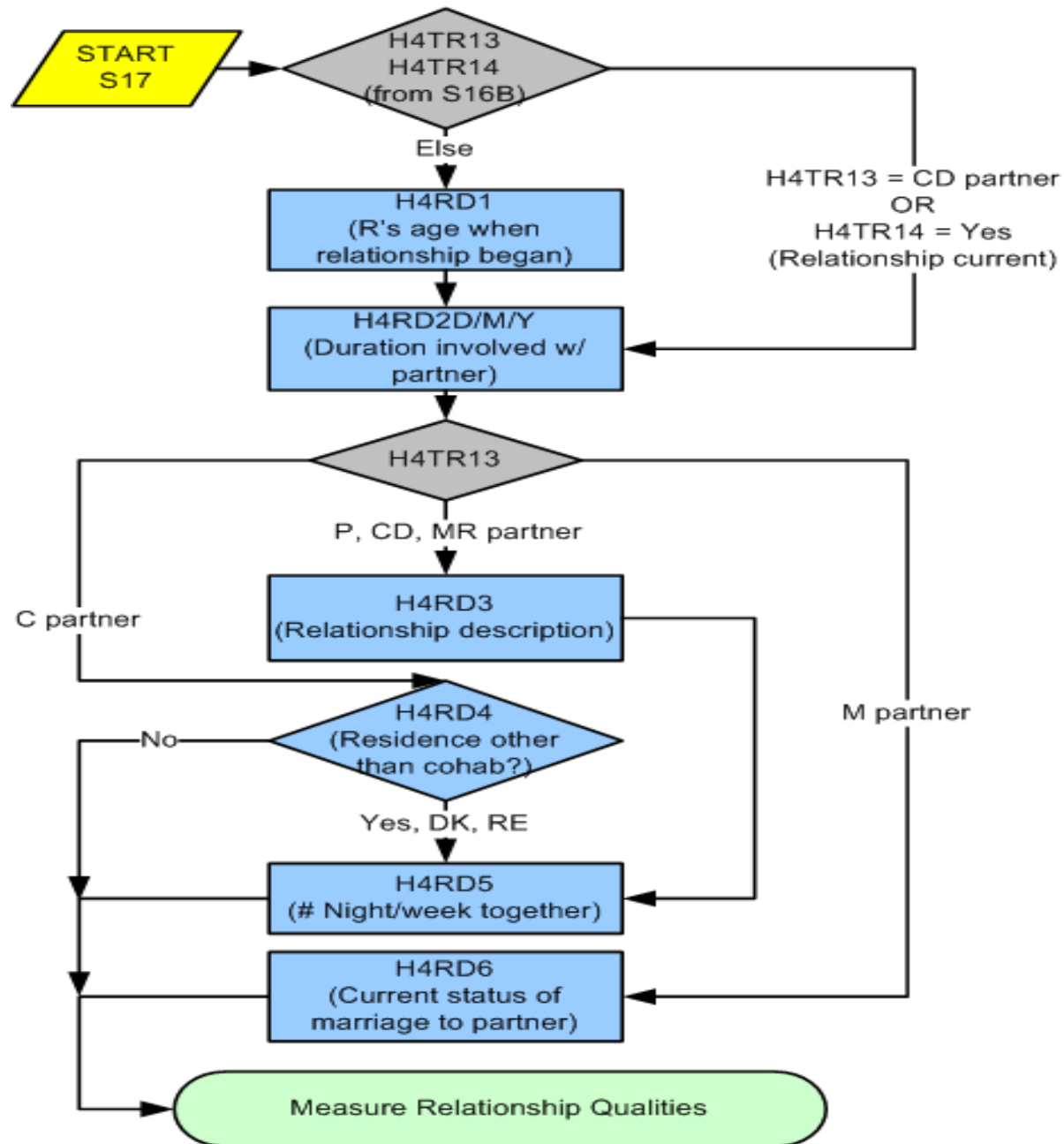## *S17: Relationship in detail*

Contents (cont.):

- Chance marrying partner

- Likelihood relationship permanency

- Frequency of sexual activities

- Contraceptive use

- On both R's and Partner's side:

  - Concurrent partner?

  - Any violence?
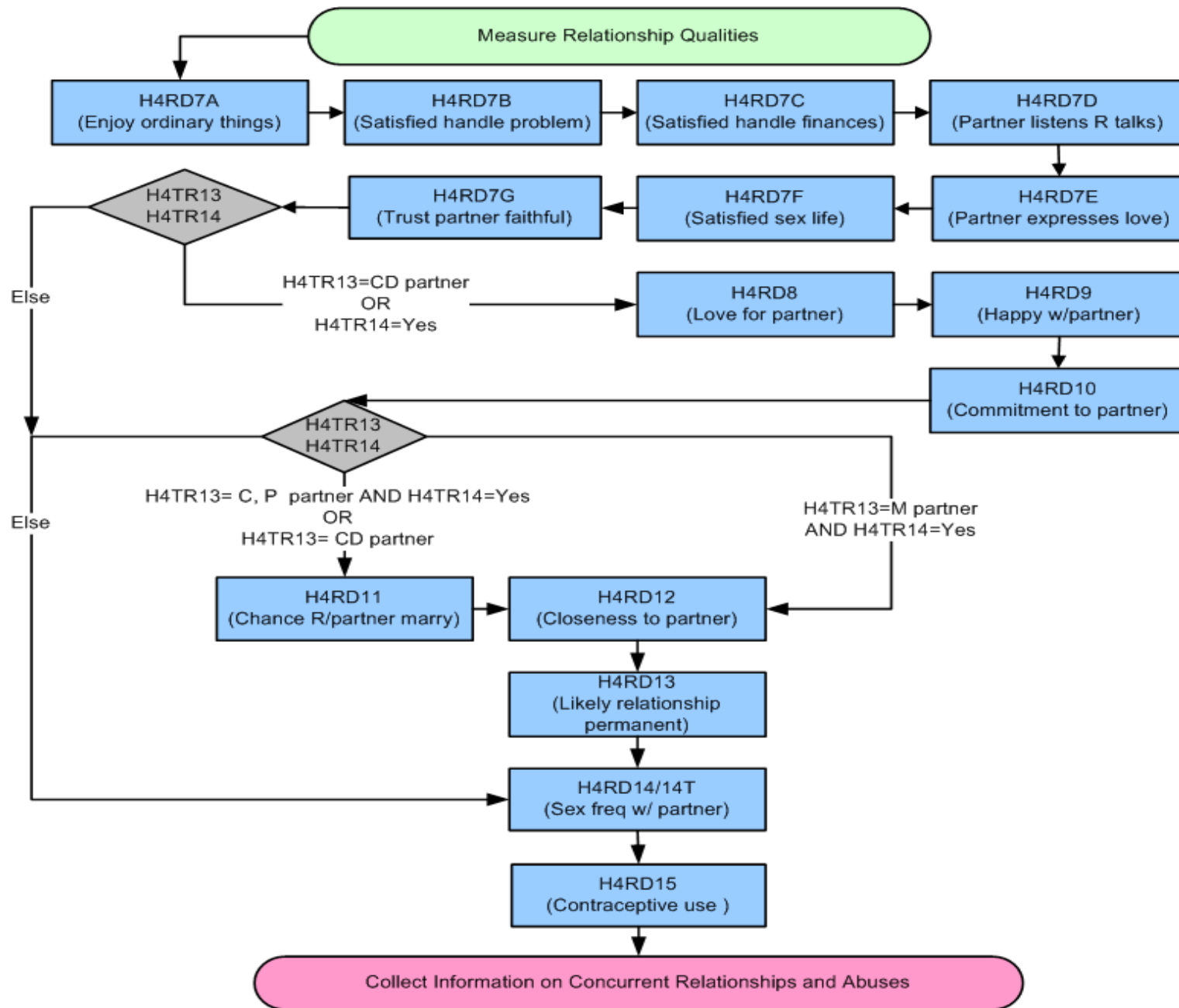
  - Slap/hit/kick?

  - Injured?

  - Forced sex?

| **Relationships** | **Pregnancies** | **Live Births** | **Children** | **Parenting** |

Criteria to Choose 1 Partner among All Reported
For Gathering Detailed information in S17

START
S17

H4TR13
H4TR14
(from S16B)

Else

H4RD1
(R's age when
relationship began)

H4RD2D/M/Y
(Duration involved w/
partner)

H4TR13 = CD partner
OR
H4TR14 = Yes
(Relationship current)

H4TR13

P, CD, MR partner

C partner

H4RD3
(Relationship description)

M partner

H4RD4
(Residence other
than cohab?)

No

Yes, DK, RE

H4RD5
(# Night/week together)

H4RD6
(Current status of
marriage to partner)

Measure Relationship Qualities

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Measure Relationship Qualities

H4RD7A (Enjoy ordinary things) → H4RD7B (Satisfied handle problem) → H4RD7C (Satisfied handle finances) → H4RD7D (Partner listens R talks)

H4TR13 H4TR14 ← H4RD7G (Trust partner faithful) ← H4RD7F (Satisfied sex life) ← H4RD7E (Partner expresses love)

H4TR13=CD partner OR H4TR14=Yes → H4RD8 (Love for partner) → H4RD9 (Happy w/partner)

H4RD10 (Commitment to partner)

H4TR13 H4TR14

H4TR13= C, P partner AND H4TR14=Yes OR H4TR13= CD partner

H4TR13=M partner AND H4TR14=Yes

Else

H4RD11 (Chance R/partner marry) → H4RD12 (Closeness to partner)

H4RD13 (Likely relationship permanent)

H4RD14/14T (Sex freq w/ partner)

H4RD15 (Contraceptive use)

Collect Information on Concurrent Relationships and Abuses

Else

35

S17: Relationship in detail

Among 15,315 respondents who have at least 1 partner record in S16B, 15,216 of them gave details on 1 partner in S17

■ With details ■ No detail
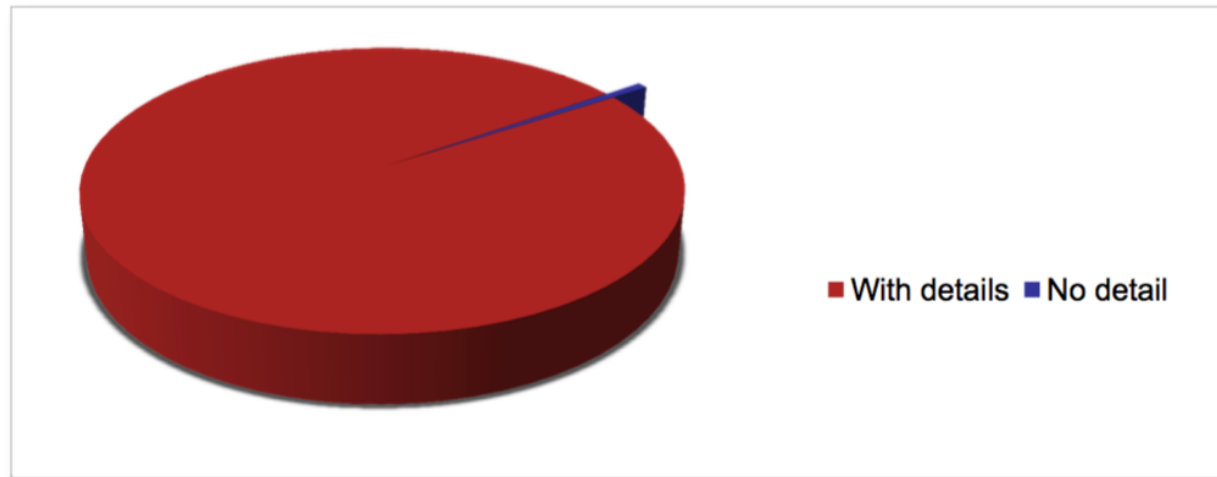
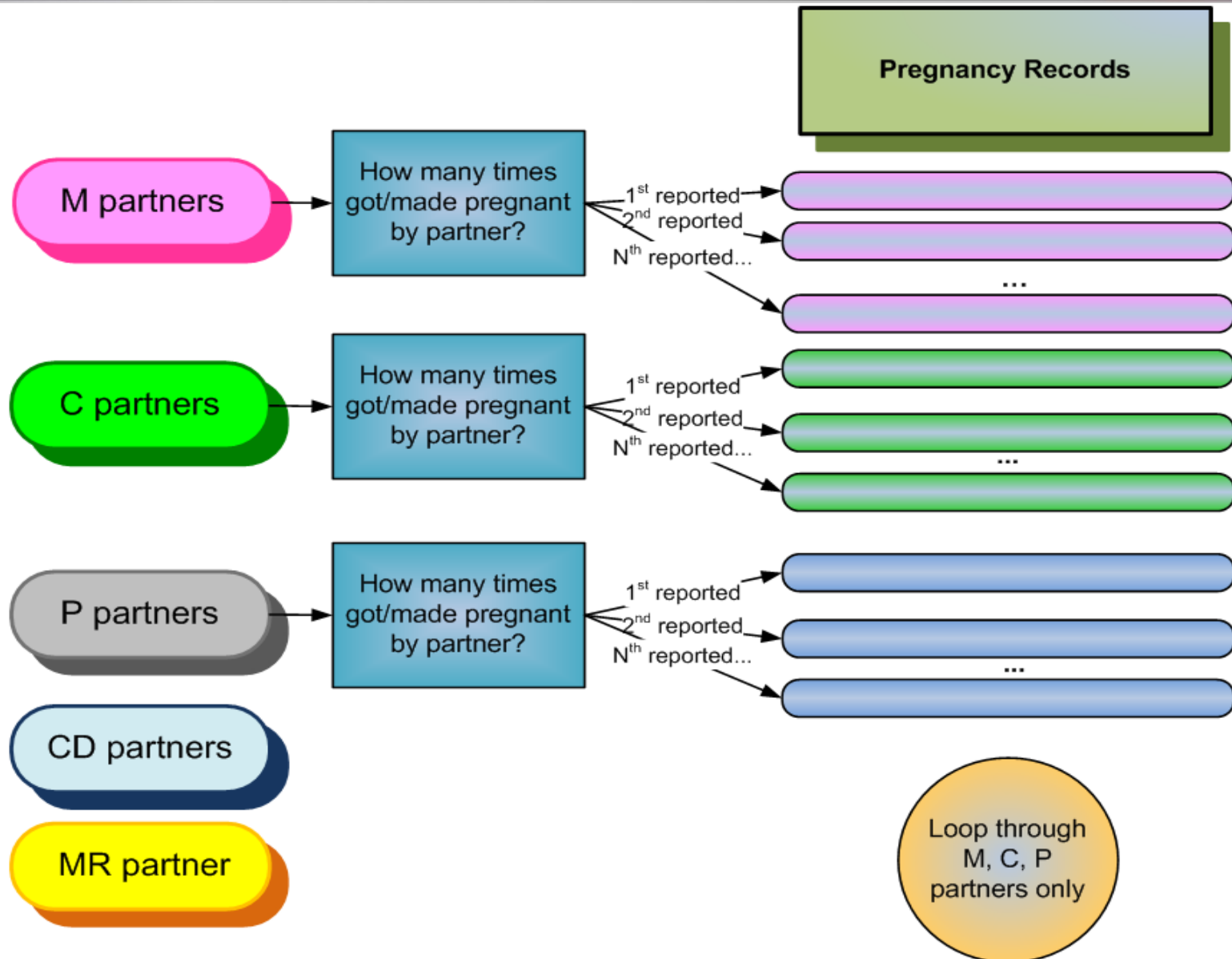# Wave IV: Fertility History

S18: Pregnancy Table

- **Unit of Analysis** – Pregnancy (N=21,966)

- **Record ID:** AID + PTNR_ID + PRGNO

- **Contents:**

  – Pregnancy outcomes

    - Abortion

    - Ectopic/tubal pregnancy

    - Miscarriage

    - Still birth

    - Live birth (C-section)

    - Live birth (vaginal delivery)

    - Pregnancy not ended

Relationships	Pregnancies	Live Births	Children	Parenting

Wave IV: Fertility History

S18: Pregnancy Table

- **Contents (cont.):**
  - Pregnancy end/due dates
  - # live birth(s) per pregnancy
    - Babies fraternal/identical?
  - Birth control use prior to pregnancy
  - Want child then?
  - Relationship context at pregnancy/birth
  - R/partner went to prenatal care together;
  - # weeks pregnant at 1st visit (female Rs only)
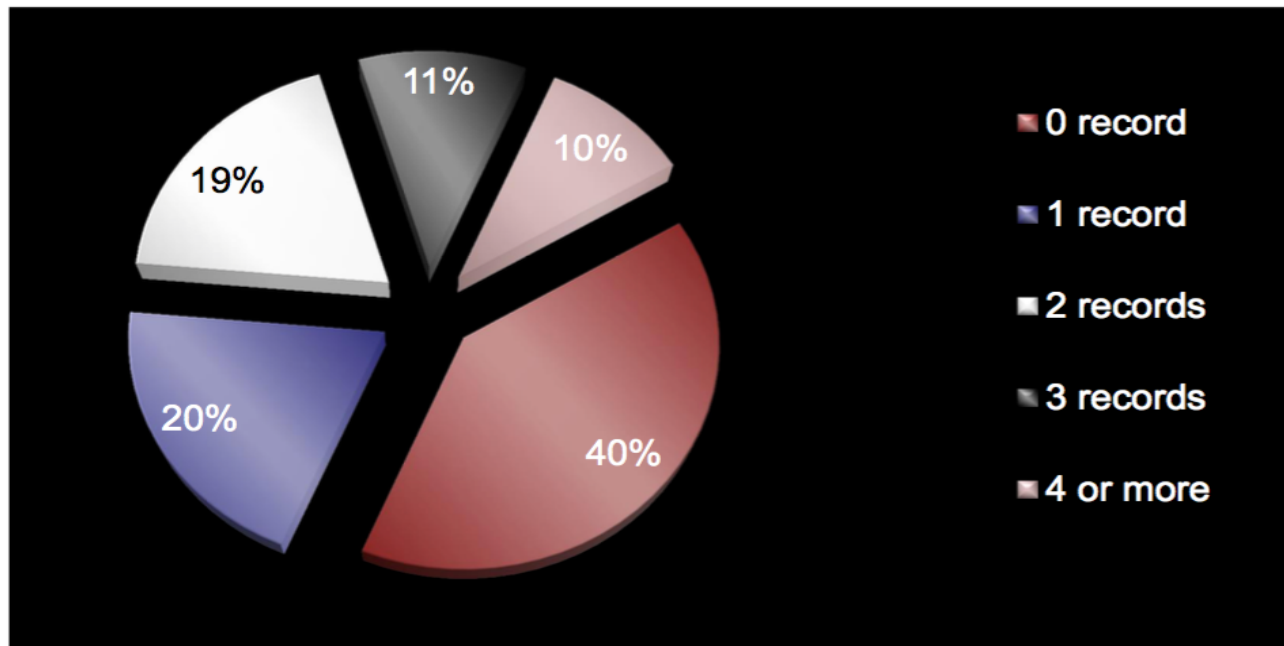 - Drinking and smoking habits during pregnancy (female Rs only)

| Relationships | Pregnancies | Live Births | Children | Parenting |

Wave IV: Fertility History

S18: Pregnancy Table

Among 15,701 respondents, 40% reported no pregnancy record in S18; 20% reported one pregnancy record; 19% reported two; 11% reported three; 10% reported 4 or more

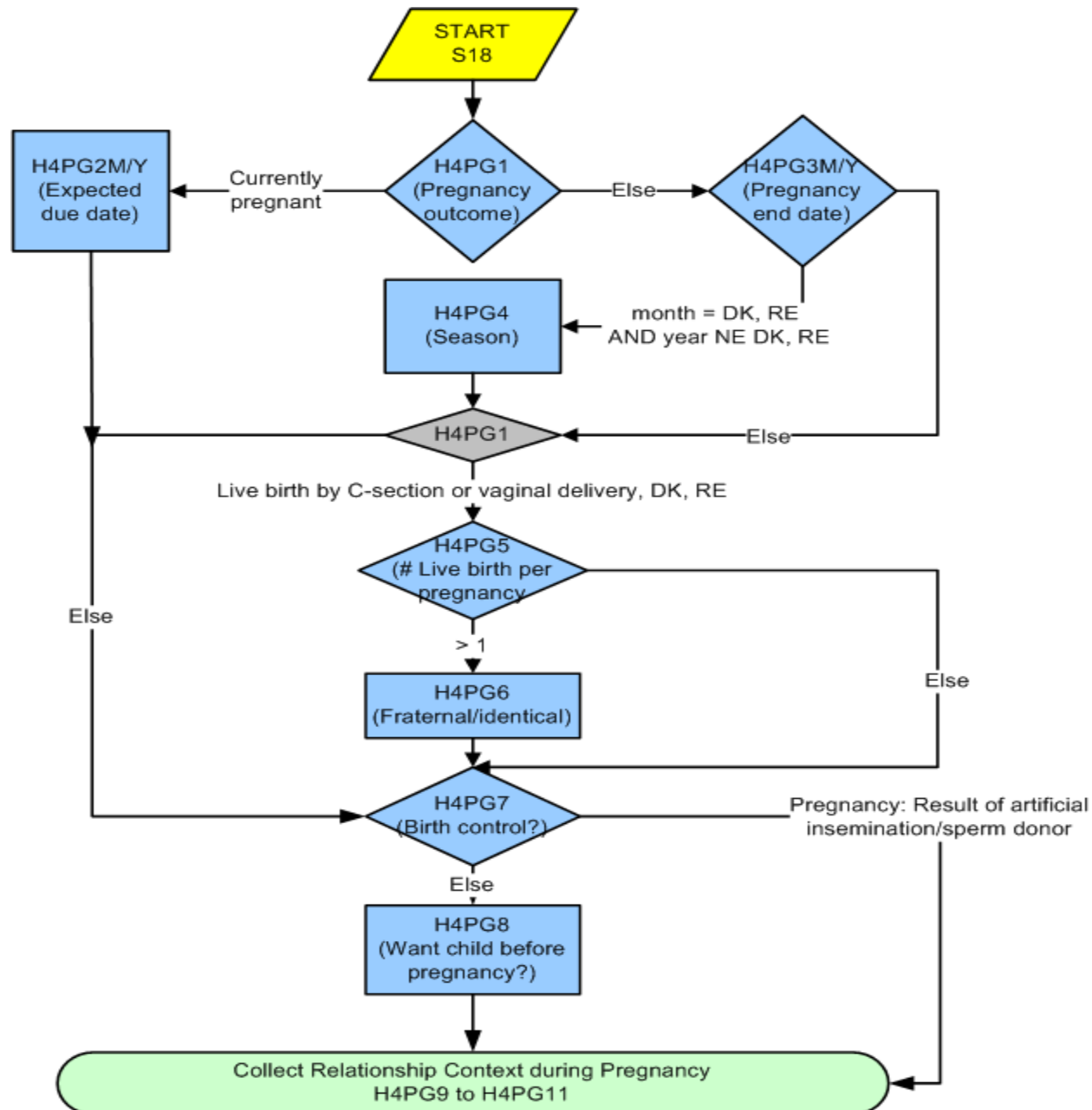# Wave IV: Fertility History

S18: Pregnancy Table

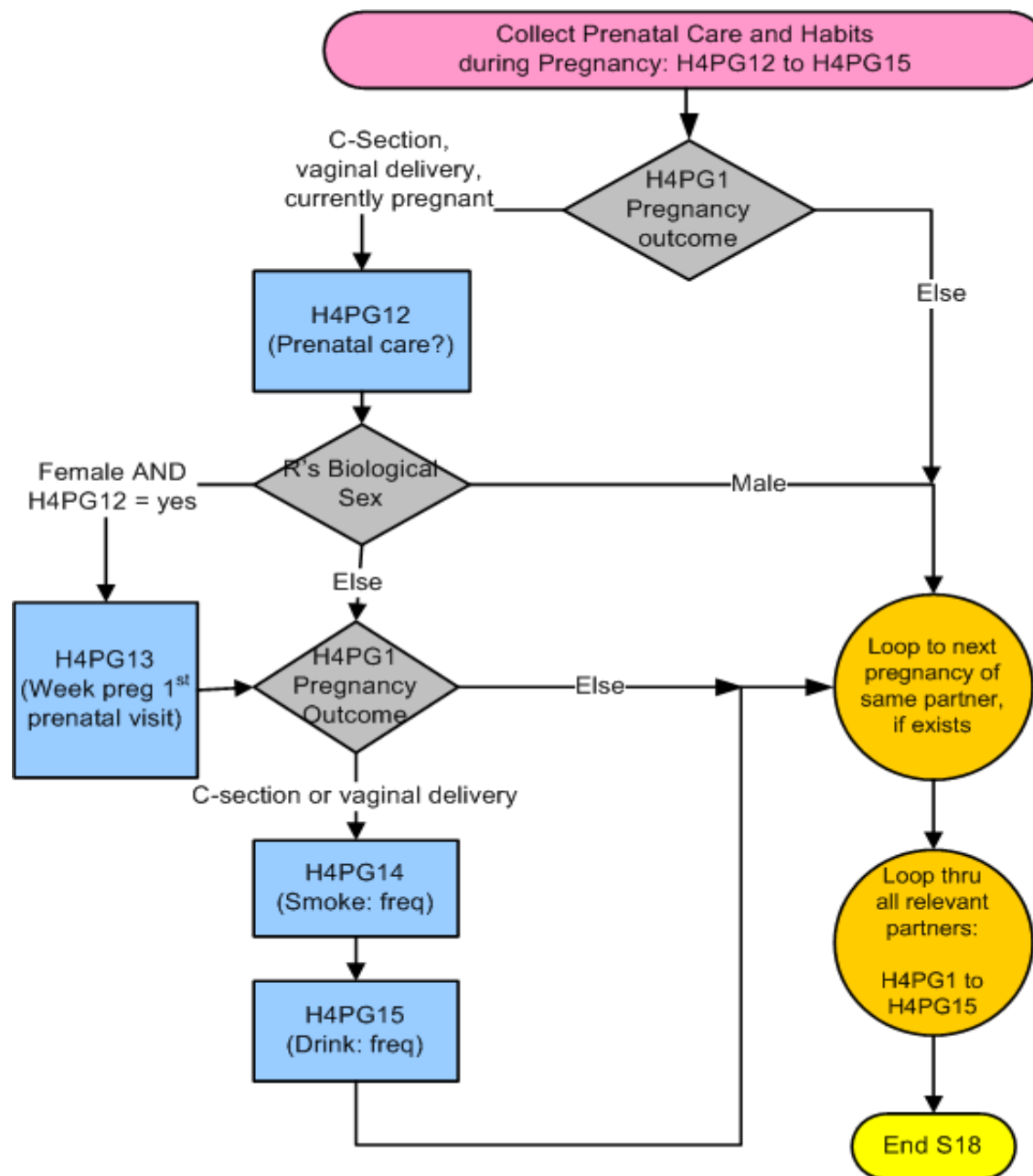**Among 21,196 pregnancy records, 65% live birth; 28% abortion/miscarriage; 4% current pregnancy; 3% other**
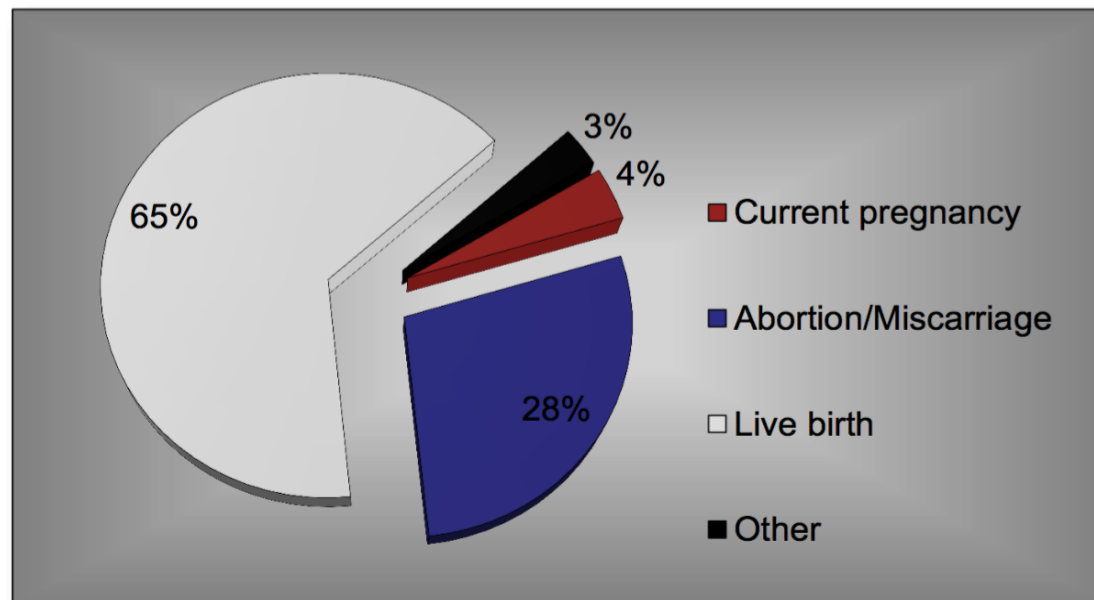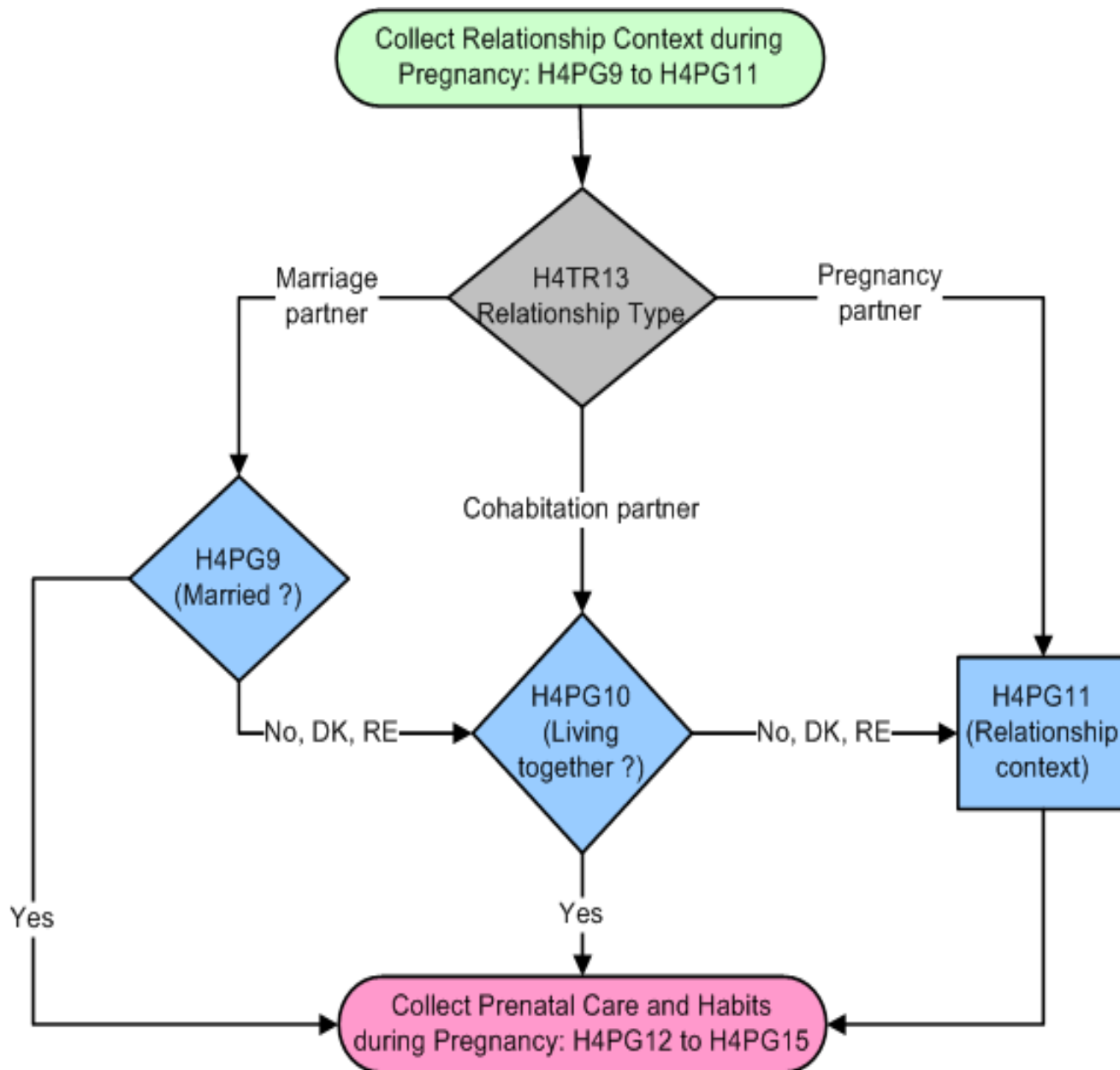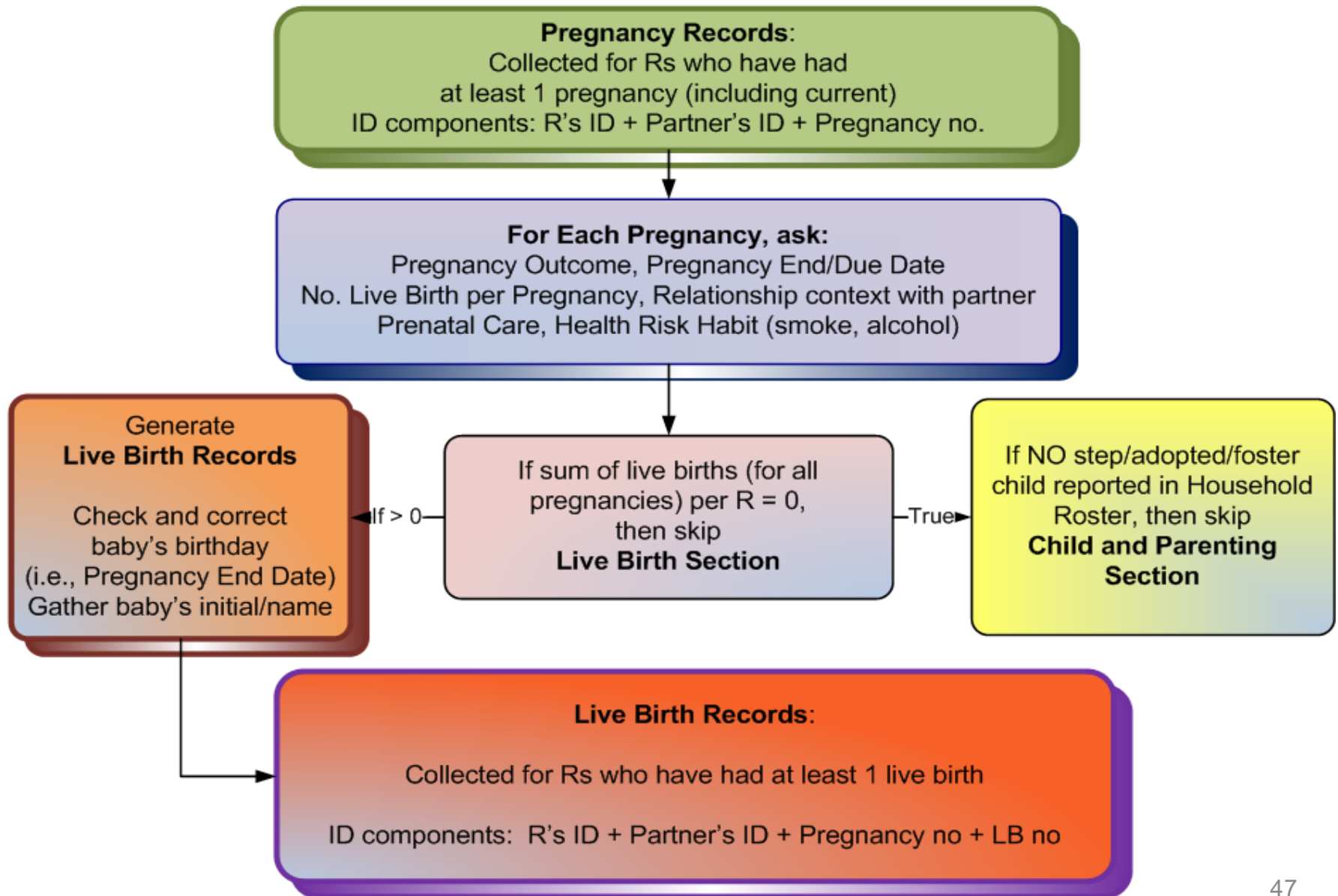
Wave IV: Fertility History

S19: Live Births

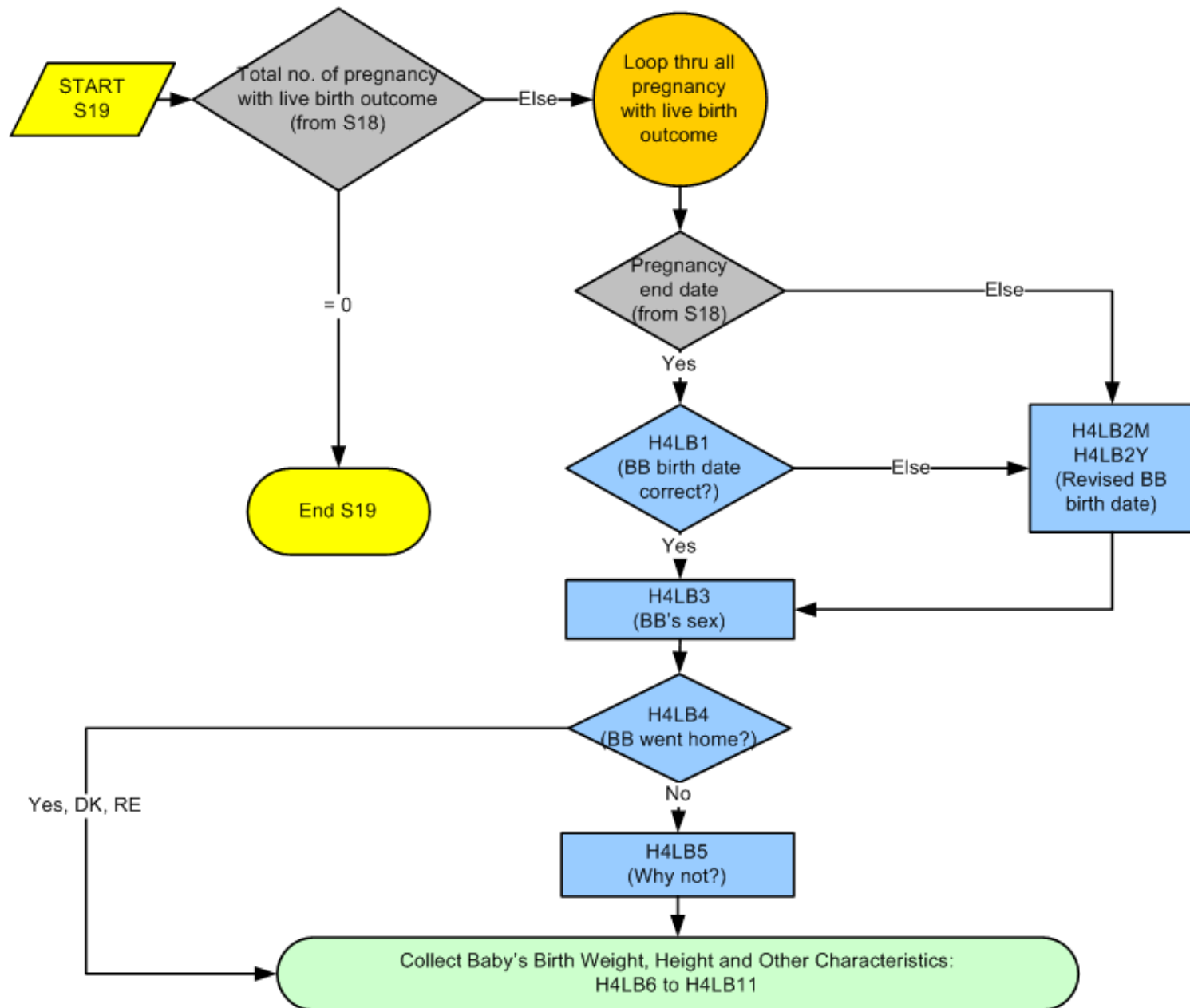- **Unit of Analysis** – Live birth (N=14,749)

- **Record ID:** AID + PTNR_ID + PRGNO + LBNO

- **Contents:**

  - Confirm baby's birth date; corrected birth date

  - Baby's biological sex

  - Baby went home; Why not?

  - Birth weight

  - Born before/on/after due date? # weeks/days before/after
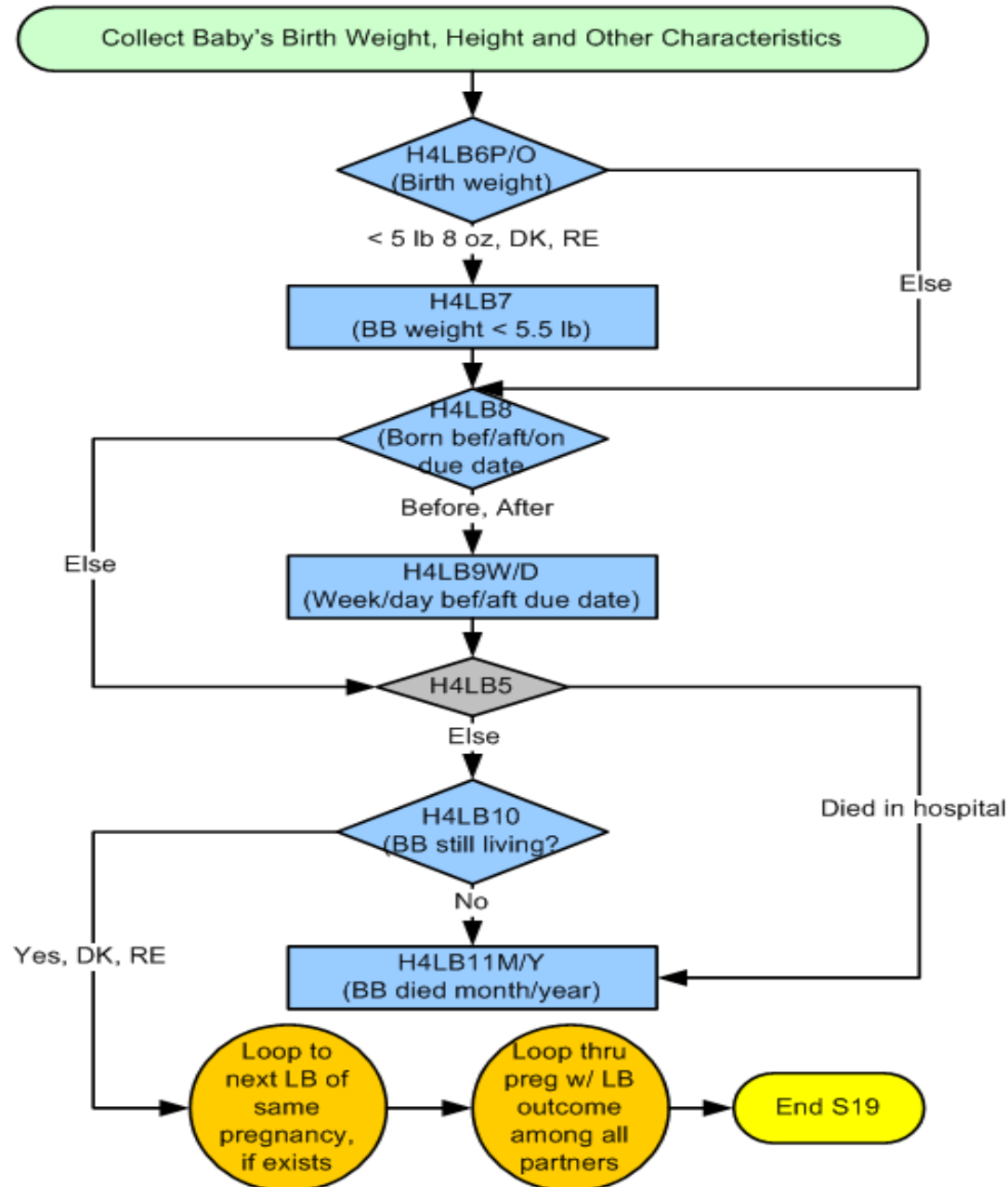
  - Still living; When died?

| Relationships | Pregnancies | Live Births | Children | Parenting |

Wave IV Hierarchical Data Structure: Pregnancy and Live Birth Records

Pregnancy Records:
Collected for Rs who have had
at least 1 pregnancy (including current)
ID components: R's ID + Partner's ID + Pregnancy no.

For Each Pregnancy, ask:
Pregnancy Outcome, Pregnancy End/Due Date
No. Live Birth per Pregnancy, Relationship context with partner
Prenatal Care, Health Risk Habit (smoke, alcohol)

Generate
Live Birth Records

Check and correct
baby's birthday
(i.e., Pregnancy End Date)
Gather baby's initial/name

If sum of live births (for all
pregnancies) per R = 0,
then skip
Live Birth Section

—If > 0—

—True►

If NO step/adopted/foster
child reported in Household
Roster, then skip
**Child and Parenting
Section**

Live Birth Records:

Collected for Rs who have had at least 1 live birth

ID components: R's ID + Partner's ID + Pregnancy no + LB no

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Wave IV: Fertility History

S19: Live Birth Table

Among 15,701 respondents, 51% reported no live birth record in S19; 21% reported one record; 17% reported two; 7% reported three; 4% reported 4 or more
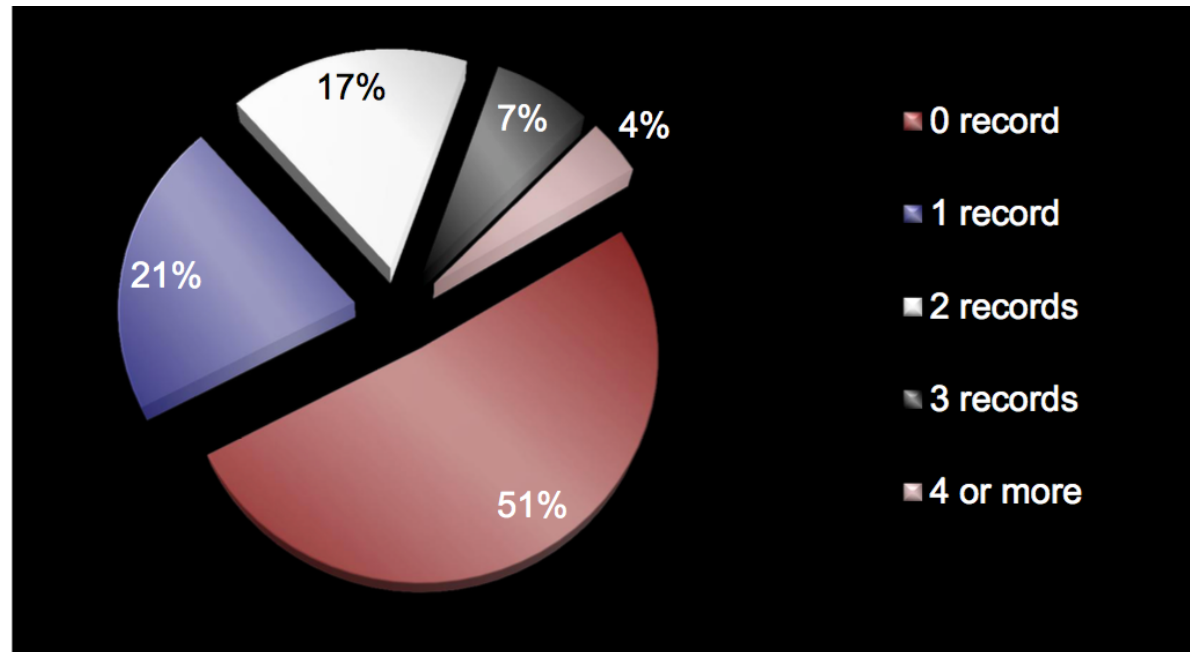
Wave IV: Fertility History
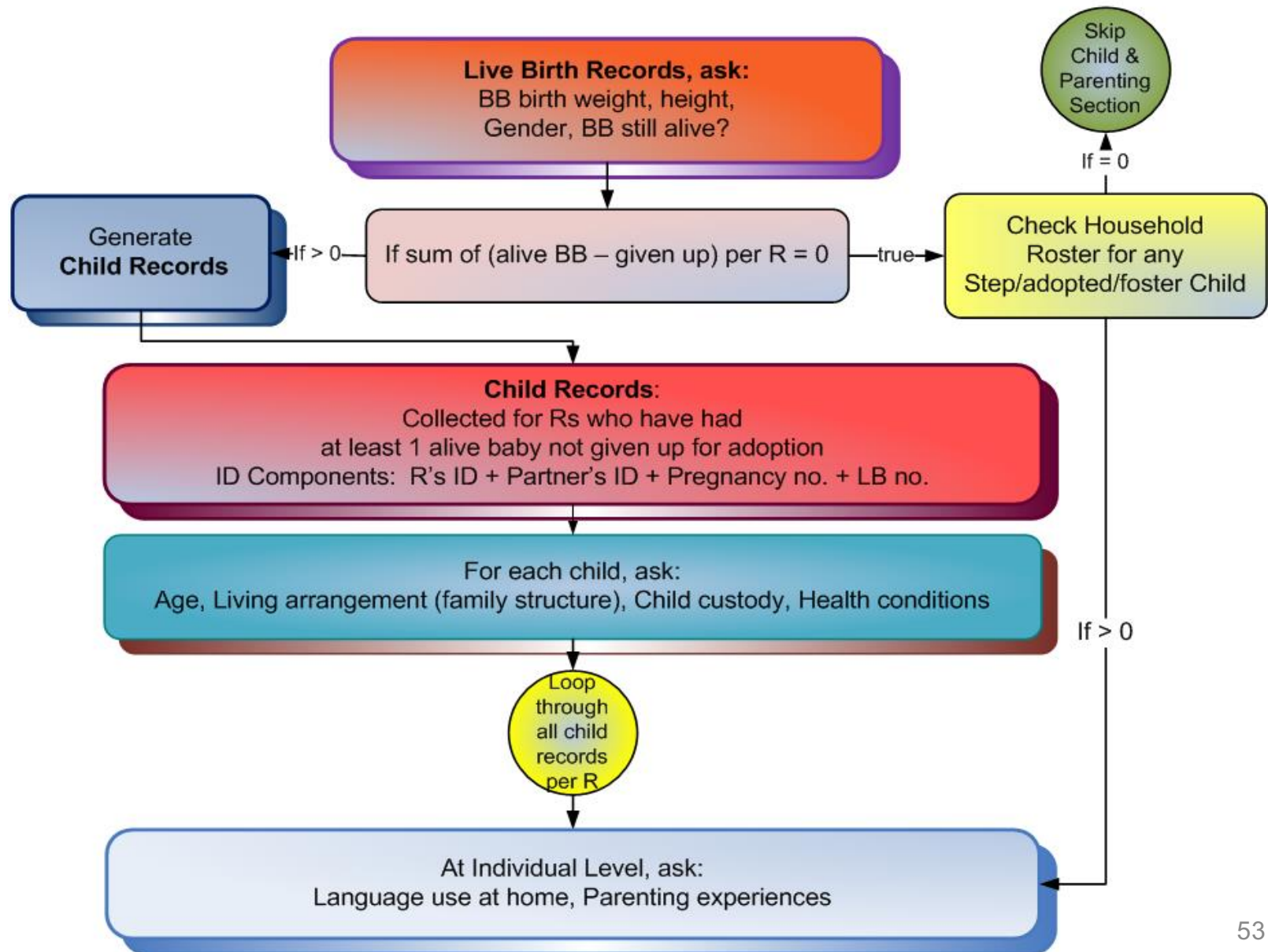
S20: Children and Parenting, Part A

- **Unit of Analysis** – Child (N=14,553)

- **Record ID:** AID + PTNR_ID + PRGNO + LBNO

- **Contents:**
  - How old?
  - Child lives with respondent; Ever?
    - Last date living together
    - With whom child lives with
    - Distance
    - How often R see child?
  - Respondent lives with partner?
    - If not, distance?
    - Any custody agreement?
    - How often partner see child?
  - Child's general health
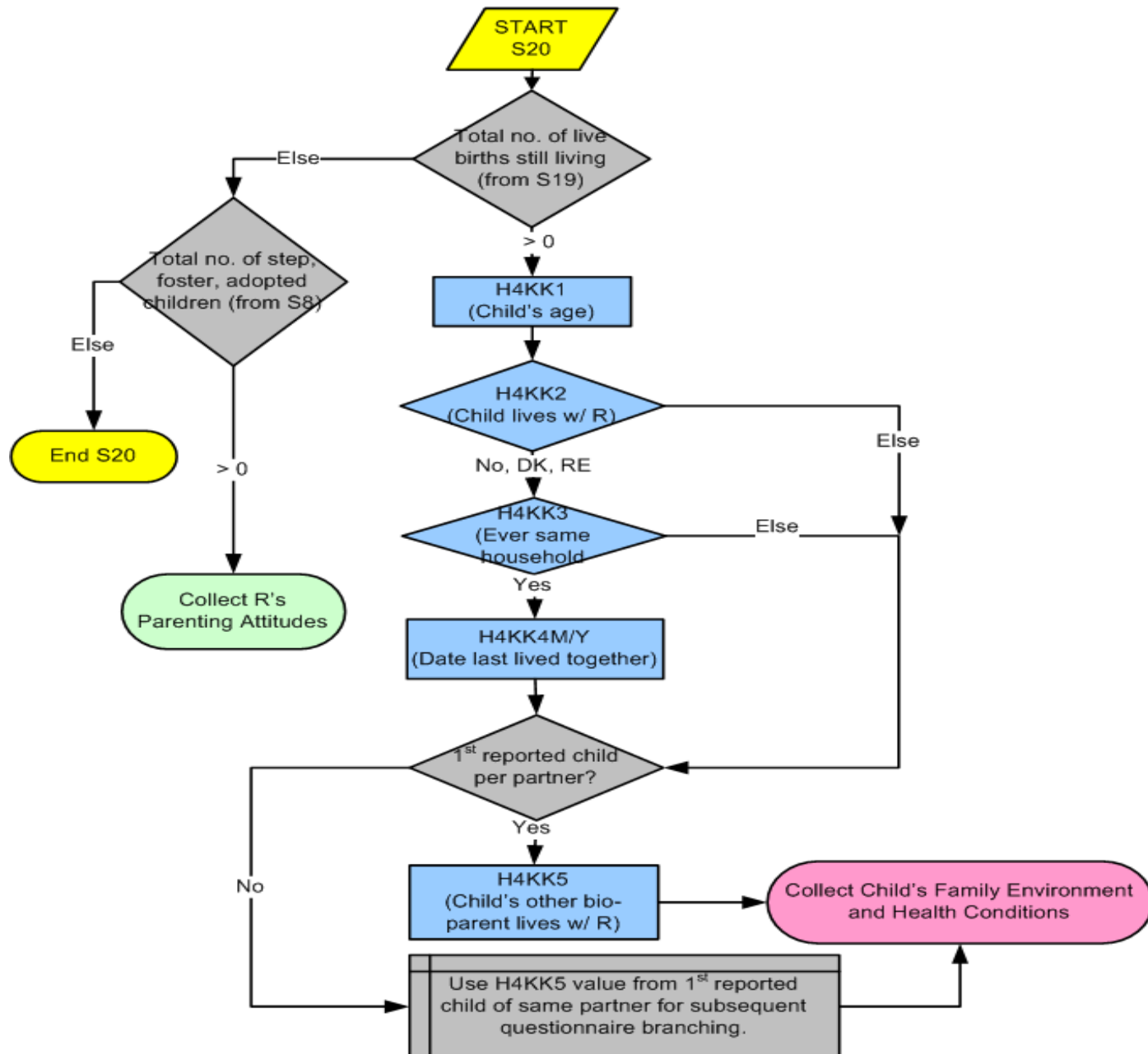 - Child-specific health problems

S20: Children and Parenting, Part B

- **Unit of Analysis** – Respondent (N=14,553)

- **Record ID:** AID

- **Contents:**

  - Language speak to child(ren) at home?

  - Happy in role as parent?

  - Respondent feels close to his/her child(ren)?

  - Child(ren): major source of stress?

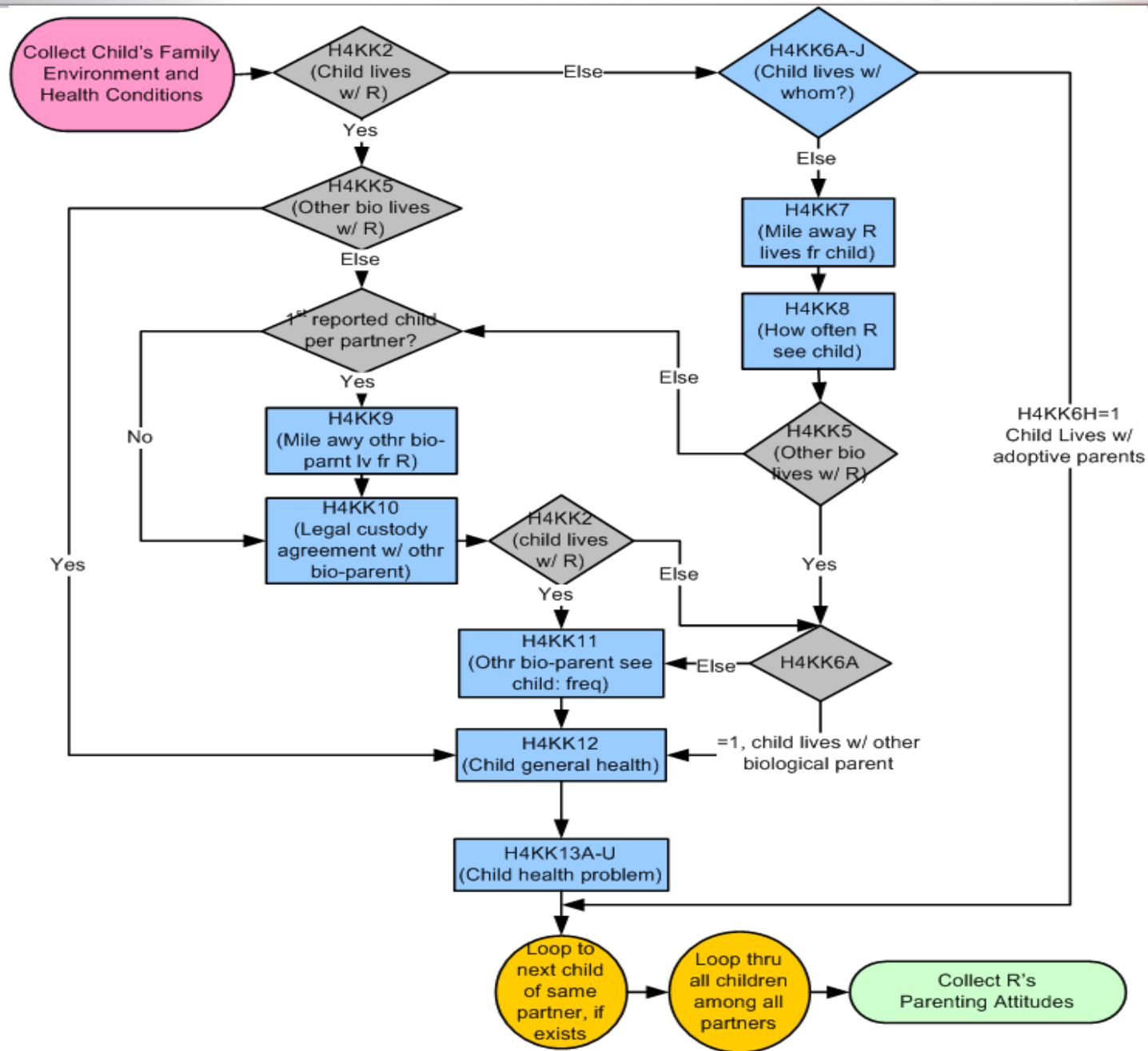 - Respondent feels overwhelmed by responsibility of being a parent

Wave IV Hierarchical Data Structure: Live Birth and Child Records

Live Birth Records, ask:
BB birth weight, height, Gender, BB still alive?

Generate **Child Records**

If sum of (alive BB – given up) per R = 0

If > 0

true

Skip Child & Parenting Section

If = 0

Check Household Roster for any Step/adopted/foster Child

Child Records:
Collected for Rs who have had
at least 1 alive baby not given up for adoption
ID Components: R's ID + Partner's ID + Pregnancy no. + LB no.

For each child, ask:
Age, Living arrangement (family structure), Child custody, Health conditions

If > 0

Loop through all child records per R

At Individual Level, ask:
Language use at home, Parenting experiences

53
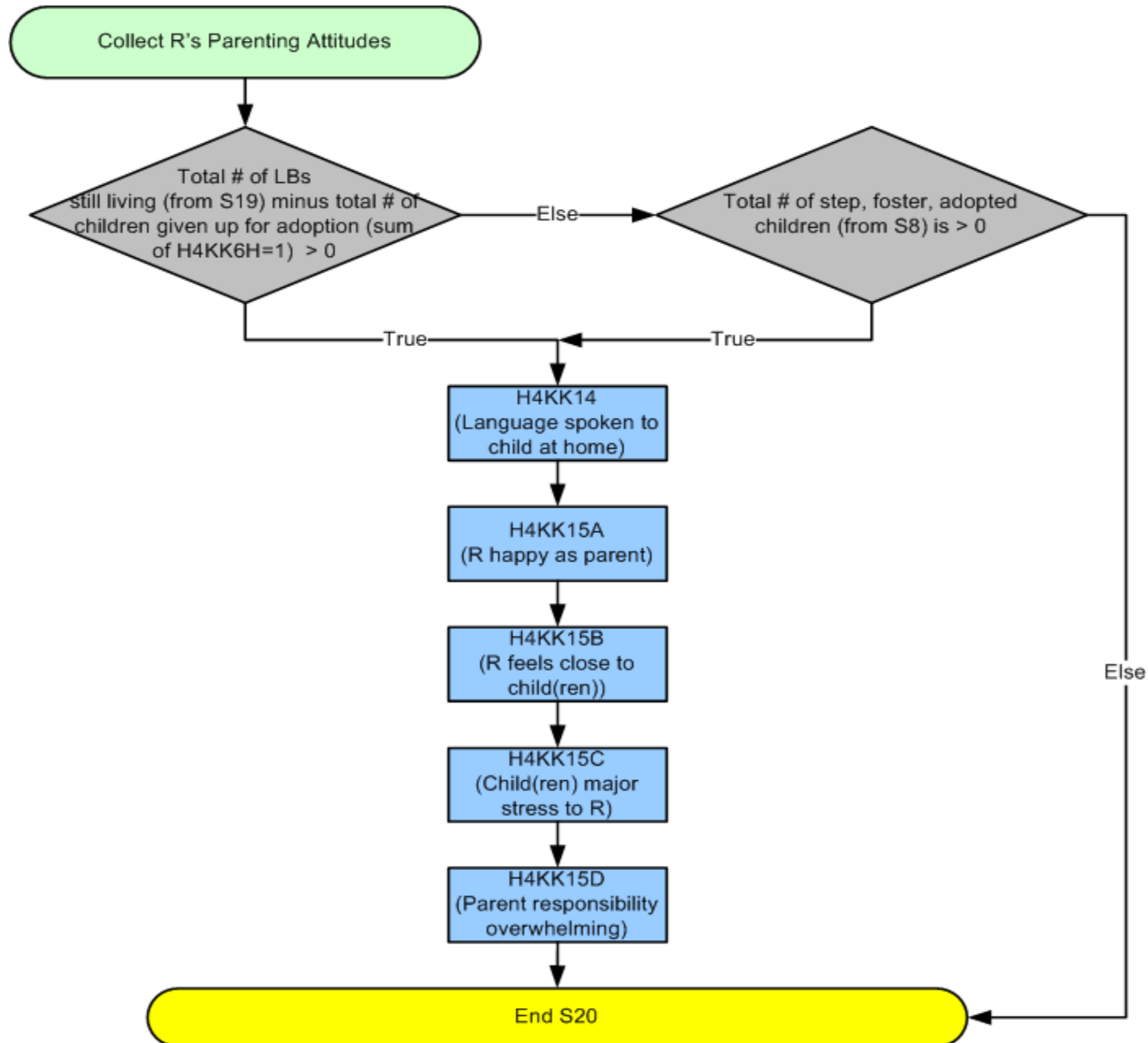
Wave IV: Fertility History

S19: Live Birth Table

Among 15,701 respondents, 51% reported no child record in S20A; 21% reported one child record; 17% reported two; 7% reported three; 3% reported 4 or more.

| Relationships | Pregnancies | Live Births | Children | Parenting |
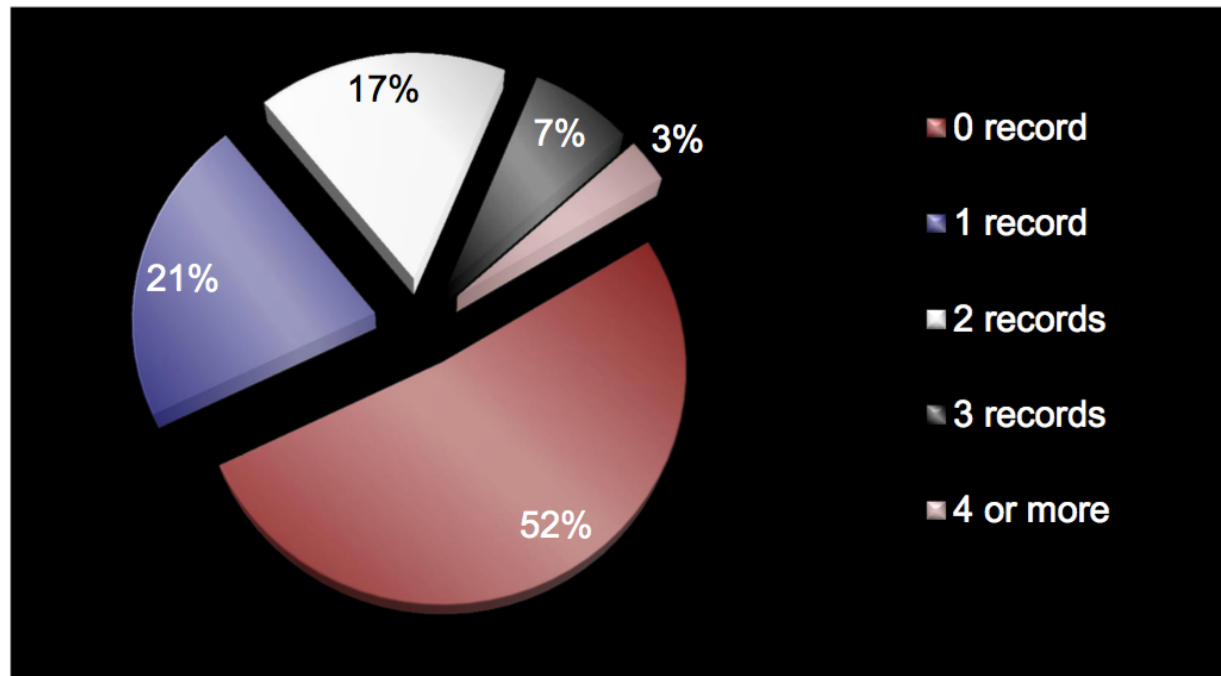
Wave IV Hierarchical Data Structure:
Pregnancy, Live Birth, and Child Records
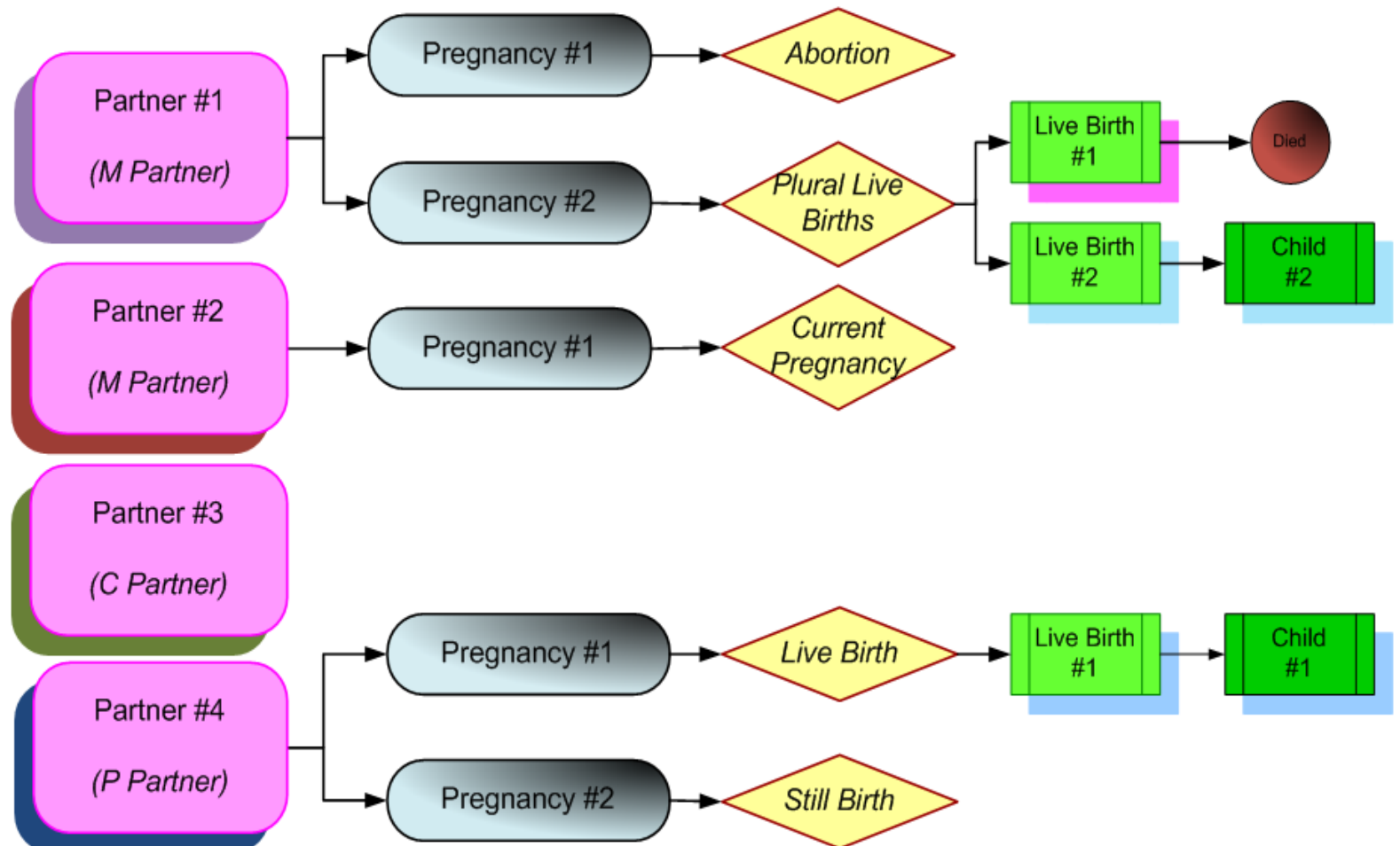
COMPUTATIONAL AND TECHNICAL TIPS

Computational and Technical Tips

Data Structure Transformation for Hierarchical Files

1. Construct unique record IDs for each file

- **Individual ID:** AID + PTNR_ID + PRGNO + LBNO
- **Relationship ID:** *AID* + *PTNR_ID*
- **Time-segment ID:** *AID* + *PTNR_ID* + *H4TR25* + *H4TR26*
- **Pregnancy ID:** *AID* + *PTNR_ID* + *PRGNO* + *LBNO*
- **Live birth ID:** *AID* + *PTNR_ID* + *PRGNO* + *LBNO*
- **Child ID:** *AID* + *PTNR_ID* + *PRGNO* + *LBNO*

Computational and Technical Tips

Data Structure Transformation for Hierarchical Files

2. Lower-level file contains IDs of all higher-level files

Individual ID

Relationship ID

Pregnancy ID

Live birth ID
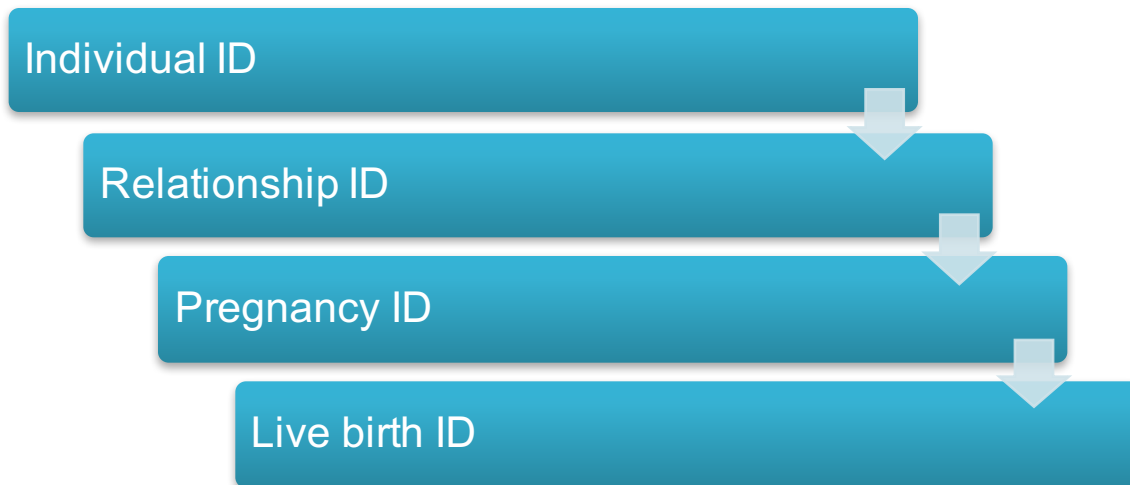
For example:

> Pregnancy records contain record IDs of the corresponding individual, relationship, and pregnancy record ID.

Computational and Technical Tips

Example SAS code

```
*-------------------------------------------------------*
|   Construct partner record ID and                     |
|   pregnancy record ID (Character vars)                |
*-------------------------------------------------------*;
data pregrcds (drop=nreln npreg);
    length partner_ID $ 10  preg_ID $ 12  nreln npreg $ 2;

 set pregtable (keep=AID PTNR_ID PRGNO ...);
    if PTNR_ID <=9 then nreln="0"||put(PTNR_ID,1.);
    else nreln= PTNR_ID;
    if PRGNO <=9 then npreg="0"||put(PRGNO,1.);
    else npreg= PRGNO;
    preg_ID     =AID||nreln||npreg;
    partner_ID  =AID||nreln;

label preg_ID="Preg Record ID (AID+PTNR_ID+PRGNO)"
      partner_ID="Partner Record ID (AID+PTNR_ID)"
;
run;
```

For syntax, visit Add Health website here

Computational and Technical Tips

Compute Summary Counts

1. Describe respondent by his/her reporting on total numbers of 'event': e.g.,

   – Total no. of partners reported by R

   – Total no. of pregnancies reported by R

2. Describe respondent by his/her average reporting on a certain 'event': e.g.,

   – Average no. of pregnancy per partner by R

Computational and Technical Tips

Example SAS code

```
*------------------------------------------------*
|   Total no. of partner records reported by R.   |
*------------------------------------------------*;
proc sort data=partnrcds; by AID; run;
proc summary data=partnrcds;
 var partnercd;
 by AID;
 output out=sumreltn sum(partnercd)=tot_partnr;
run;


*------------------------------------------------*
| Total no. of pregnancy records reported by R.   |
*------------------------------------------------*;
proc sort data=pregrcds; by AID; run;
proc summary data=pregrcds;
 var pregrcd;
 by AID;
 output out=sumpreg sum(pregrcd)=tot_preg;
run;
```

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Add Health
The National Longitudinal Study of Adolescent to Adult Health

For syntax, visit Add Health website here

Computational and Technical Tips

Example SAS code

```
*----------------------------------------------------------*
| Average no. of pregnancy per partner reported by R.  |
*----------------------------------------------------------*;
proc sort data=individ; by AID; run;
data individ2;
 merge individ (in=one)
       sumreltn(in=two    keep=AID tot_partnr)
       sumpreg (in=three keep=AID tot_preg);
by AID;

  if one then W4main=1;     else W4main=0;
  if two then rpt_partnr=1; else rpt_partnr=0;
  if three then rpt_preg=1; else rpt_preg=0;

label tot_partnr="Total no. of partner rcrds reported by R"
      tot_preg  ="Total no. of preg rcrds reported by R"
      rpt_partnr="Rs who reprted at least 1 partner record"
      rpt_preg  ="Rs who reprted at least 1 preg record"
      W4main    ="Rs who are in W4 Main file"
;
```

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For syntax, visit Add Health website here

Computational and Technical Tips

Example SAS code

```
*----------------------------------------------------*
| Assign 'O' to missing values in total no. of partner    |
| records and in total no. of pregnancy records reported by R.|
*----------------------------------------------------*;
array ms1[*] tot_partnr tot_preg;
        do i=1 to dim(ms1);
            if ms1[i]=. then ms1[i]=O;
        end;
*----------------------------------------------------*
| Compute average no. of pregnancy per partner reported by R. |
*----------------------------------------------------*;
 if tot_partnr ne O then do;
     ave_preg_partnr = tot_preg/tot_partnr;
 end;
label ave_preg_partnr="R's average no. of pregnancy per partner"
 ;
run;
```

For syntax, visit Add Health website here

Example SAS code: Construction of Relationship Quality Measure

```sas
/* Current PRIMARY relationship quality */
if h4rd7a in (96,98) then h4rd7a2=.; else h4rd7a2=h4rd7a;
if h4rd7b in (96,98) then h4rd7b2=.; else h4rd7b2=h4rd7b;
if h4rd7c in (96,98) then h4rd7c2=.; else h4rd7c2=h4rd7c;
if h4rd7d in (96,98) then h4rd7d2=.; else h4rd7d2=h4rd7d;
if h4rd7e in (96,98) then h4rd7e2=.; else h4rd7e2=h4rd7e;
if h4rd7f in (96,98) then h4rd7f2=.; else h4rd7f2=h4rd7f;
if h4rd7g in (96,98) then h4rd7g2=.; else h4rd7g2=h4rd7g;
if h4rd7a2>. and h4rd7b2>. and h4rd7c2>. and h4rd7d2>. and h4rd7e2>. and h4rd7f2>. and
   h4rd7g2>. then do;
relnqual=sum(h4rd7a2,h4rd7b2,h4rd7c2,h4rd7d2,h4rd7e2,h4rd7f2,h4rd7g2);
end;
if currreln4cat in (1,2,3) then currrelnqual=relnqual;
else if currreln4cat=. then currrelnqual=.;
label currrelnqual='CurrRelnQualityScale7-35LowIsHappy';

/* Current PRIMARY relationship duration */
if currreln4cat in (1,2,3) then do;
currrelndurn=h4rd2y+(h4rd2m/12)+(h4rd2d/365.25);
end;
else if currreln4cat in (.,0) then currrelndurn=.;
label currrelndurn='DurationOfCurrRelnInYears(incDecimals)';
```

Computational and Technical Tips

Examples for Different Levels and Units of Analysis, and Hierarchical Files Merging

| Level of analysis | Purpose | Input files | | Data sorted by for computation or merging | Summary statistics/ descriptive per unit of analysis | Files merged by | Output file |
		Unit of analysis	Unique ID per unit of analysis				Unit of analysis
Respondent	Describe respondent by a summary of partner characteristics. e.g., Total no. of partners reported by respondent	Respondent	AID	AID	Per respondent e.g., Count of partners	AID	Respondent
		Partner	AID, PTNR_ID	AID			
Respondent	Describe respondent by a summary of pregnancy history. e.g., Total no. of pregnancies with abortion as outcome	Respondent	AID	AID	Per respondent e.g., Count of pregnancies ended in abortion	AID	Respondent
		Pregnancy	AID, PTNR_ID, PRGNO	AID			

Computational and Technical Tips

| Level of analysis | Purpose | Input files | | Data sorted by for computation or merging | Summary statistics/ descriptive per unit of analysis | Files merged by | Output file |
		Unit of analysis	Unique ID per unit of analysis				Unit of analysis
Respondent	Describe respondent by a summary of live birth history. e.g., Total no. of live births born outside marriage	Respondent	AID	AID	Per respondent e.g., Flag live births born while R and partner not married and count up total	AID	Respondent
		Live birth	AID, PTNR_ID, PRGNO, LBNO	AID			
Partner	Associate respondent's characteristics to partners. e.g., Identify hetero/homosexual relationship	Partner	AID, PTNR_ID	AID	Spread R's information onto each partner record e.g., spread R's biological sex onto partner record and compare	AID	Partner
		Respondent	AID	AID			

Computational and Technical Tips

Level of analysis	Purpose	Input files		Data sorted by for computation or merging	Summary statistics/ descriptive per unit of analysis	Files merged by	Output file
		Unit of analysis	Unique ID per unit of analysis				Unit of analysis
Partner	Associate pregnancy characteristics to partners. e.g., No. of non-birth pregnancies associated with each partner	Partner	AID, PTNR_ID	AID, PTNR_ID	Per partner e.g., Flag pregnancies with non-birth outcomes and count up total.	AID, PTNR_ID	Partner
		Pregnancy	AID, PTNR_ID, PRGNO	AID, PTNR_ID			
Partner	Associate partner demographics w/ partner detailed information in S17.	Partner	AID, PTNR_ID	AID, PTNR_ID	By partner	AID, PTNR_ID	Partner
		Partner	AID, PTNR_ID	AID, PTNR_ID			

Issues When Working with Relationship and Fertility Data

- Retrospective reports on relationship and fertility history

- Ages of first sexual experiences reported in whole years

- Sexual behavior and fertility during adolescence are sensitive topics that may be underreported

- Data items vary by wave

- Challenging programming jobs

General Advice

- **Spend time to know your data!**

  - Examine question branching; Test skip patterns; Check value ranges; Further clean your data for odd/extreme cases. Know your variables!

  - Check your programs: When in doubt, list your cases and examine.

  - Do logical checks and analytical checks on your results. You can never be too careful!

- **Take small steps: Think through your results**

  - Do thorough preliminary analysis before going into sophisticated multivariate advanced statistics.

  - Take pains to document your data and programming decisions.

- **Do not assume!**
  - Read as much as you can including:
    - Add Health documentation
    - Subscribe to Add Health list server:
      - Email Add Health (**addhealth@unc.edu**) and request that your email address be added.
    - Check out publications using Add Health data

Wave V Preview

	Content
Relationships	• Marriage and cohabitation summary history • Current/most recent partner demographics • Gender, age, race/ethnicity • Relationship duration and quality • Frequency of sexual activity • Frequency of contraceptive use • Fertility intentions • Concurrent partners • IPV and injuries
Pregnancy and birth history	• Full history • Pregnancy complications • Pregnancy outcomes • Birth outcomes • Relationship with partner at time of child's birth • Child's health

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Thank you!

Questions?

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For syntax and other resources, visit:

https://www.cpc.unc.edu/projects/addhealth/