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Understanding unmet need: Measurement in the Demographic and Health Surveys

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MEASURE DHS
ICF Macro

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Unmet Need Indicator

- Understood by many as
 - the percentage of women who are not currently using a method of family planning and want to stop or delay childbearing
- Complete calculation
 - Is complex
 - Has changed over time
 - Is not widely understood
 - Is difficult to calculate using data other than Demographic and Health Surveys (DHS)

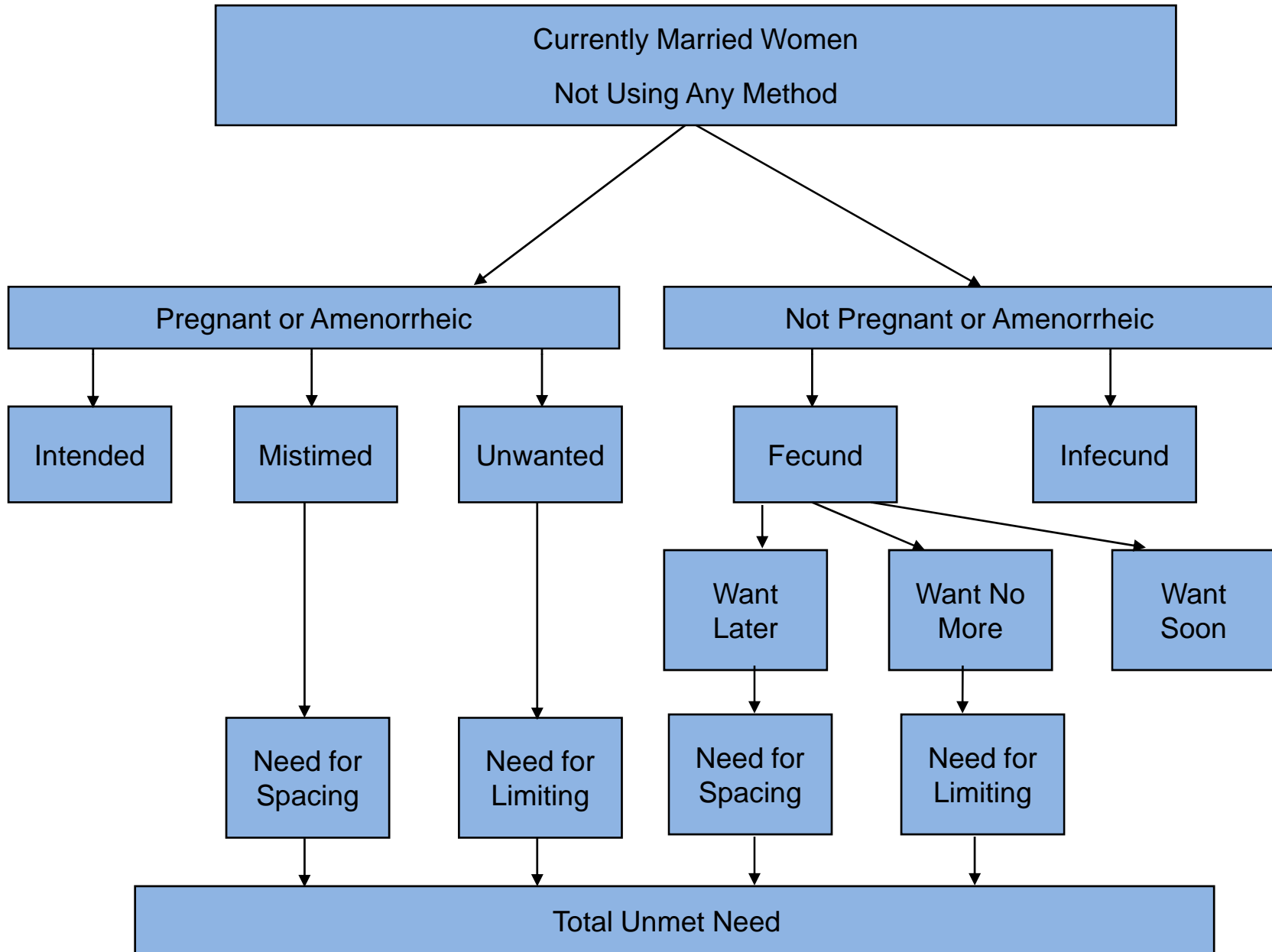
Unmet Need Indicator

- As unmet need is increasingly used for
 - advocacy
 - development of family planning policies
 - implementation and monitoring
- And has been adopted as a Millennium Development Goal (MDG) indicator (target 5b, indicator 5.6):
 1. **Understanding this indicator has become crucial**
 2. **New urgency to find a definition that can be applied consistently over time and across DHS, MICS, RHS, and other surveys**

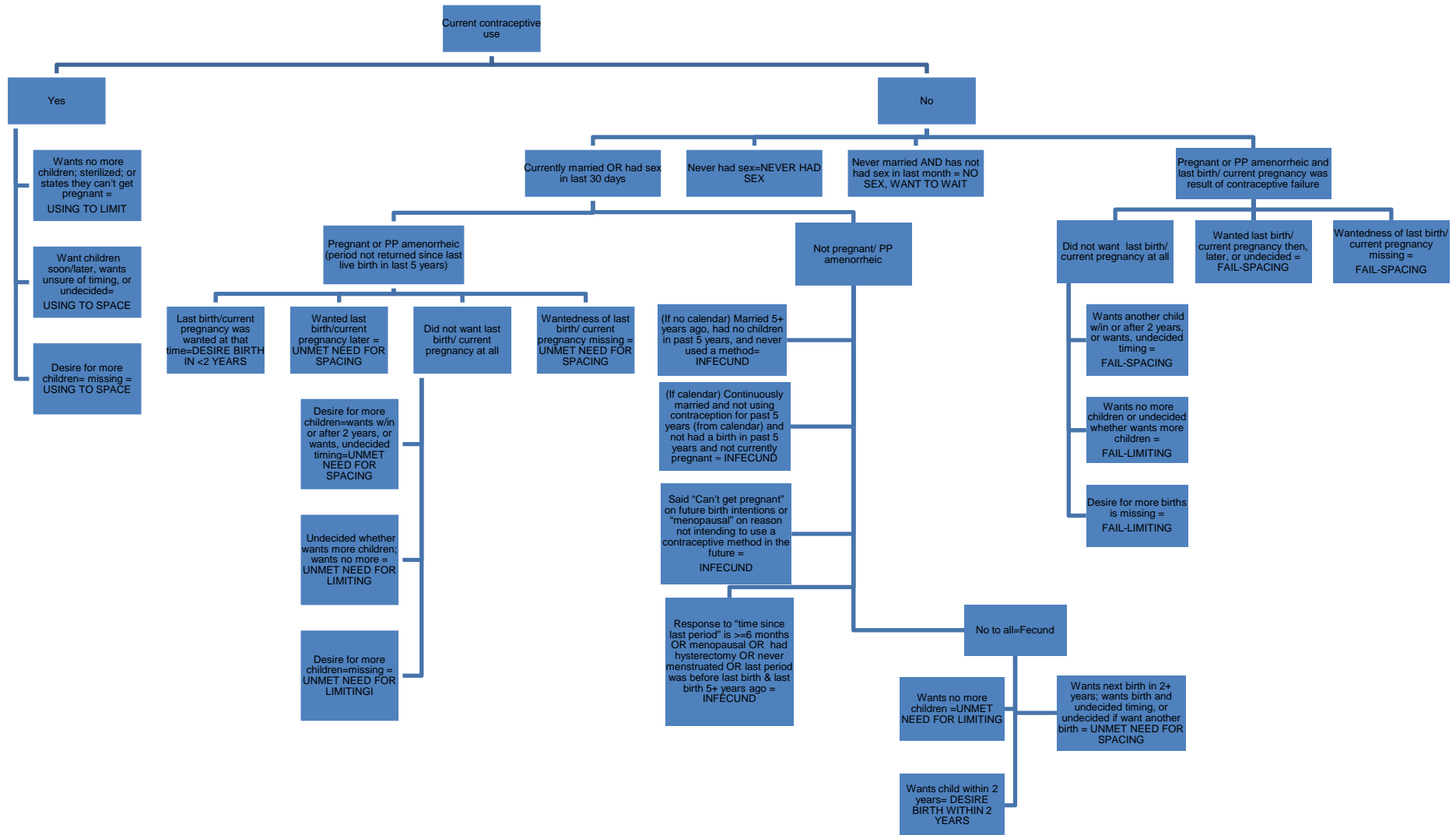
Goals of presentation

1. Describe complete definition of unmet need calculation as currently applied in DHS
 - Variations
 - Changes to definition over time
2. Define issues with using current definition in other national surveys or over time
3. Present initial thoughts on simplification
 - Very preliminary results

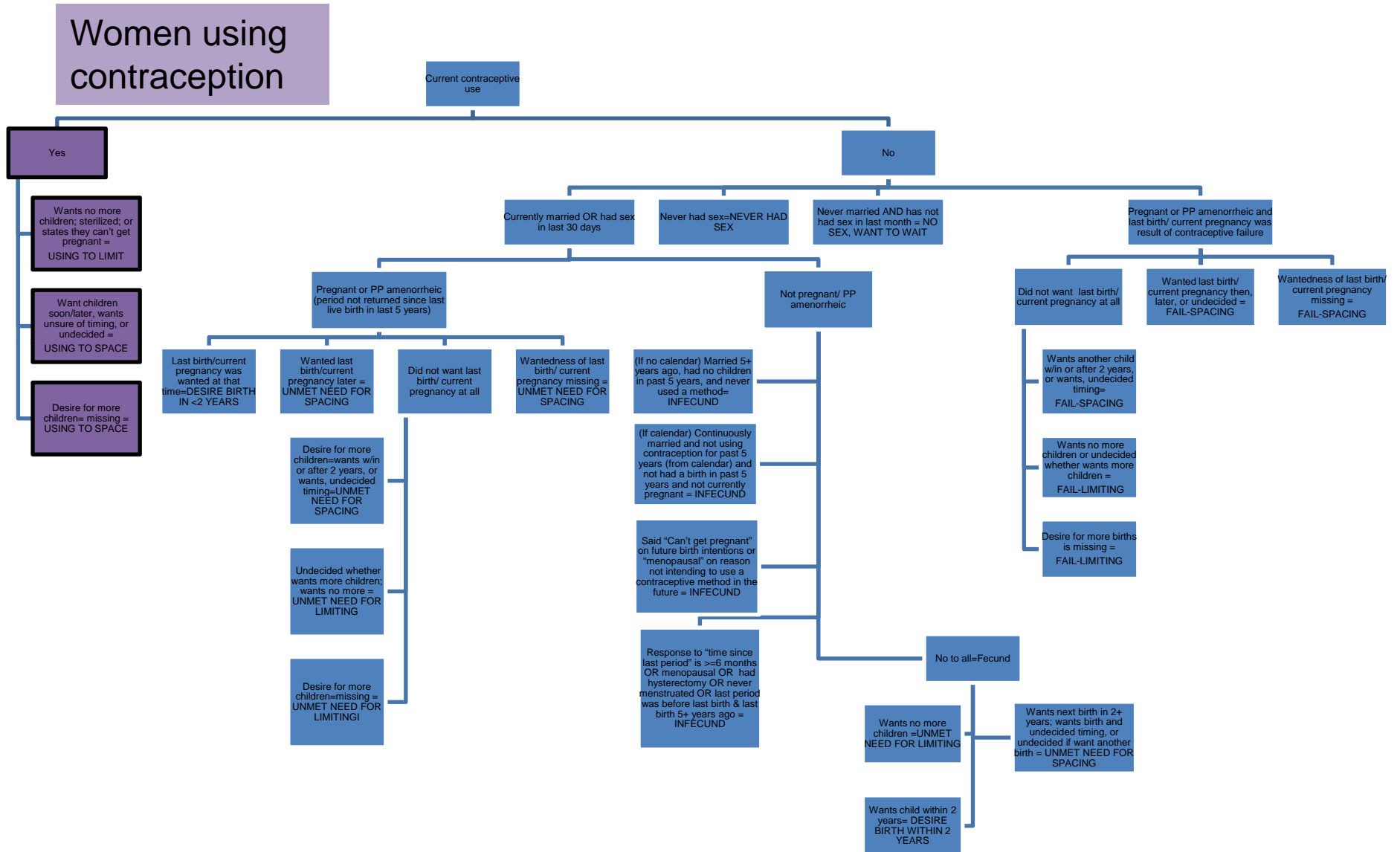
Unmet need as commonly presented (simplified)



Unmet need as actually calculated



Unmet need definition (v626) – as calculated since ~2003



**Women using
contraception**

```
graph TD; A[Women using contraception] --> B[Wants no more children OR sterilized OR states they can't get pregnant = USING TO LIMIT]; A --> C[Want children soon/later OR wants unsure of timing OR undecided = USING TO SPACE]; A --> D[Desire for more children is missing = USING TO SPACE];
```

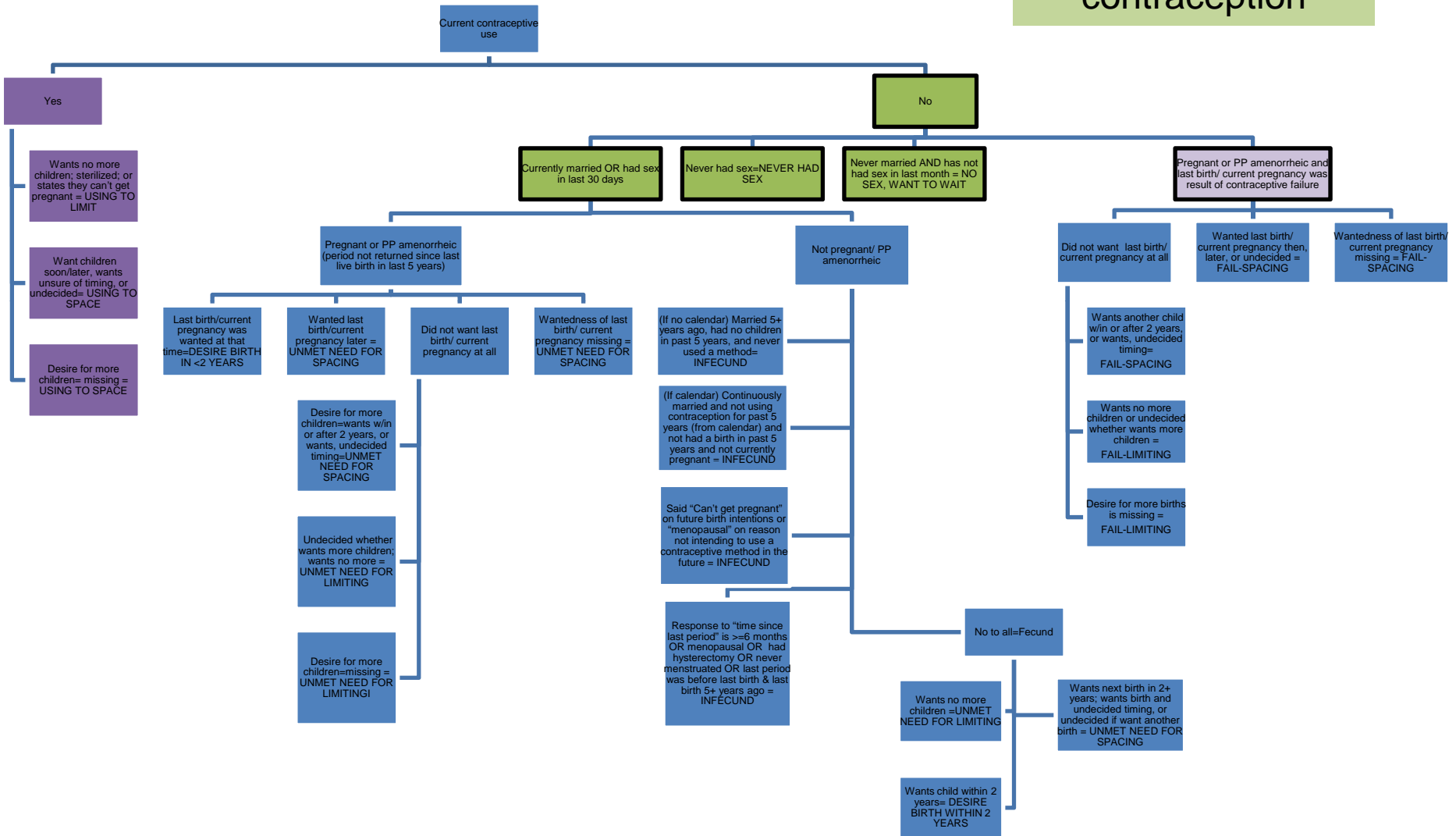
**Wants no more
children OR sterilized
OR states they can't
get pregnant =
USING TO LIMIT**

**Want children
soon/later OR wants
unsure of timing OR
undecided =
USING TO SPACE**

**Desire for more
children is missing=
USING TO SPACE**

Unmet need definition (v626) – as calculated since ~ 2003

Women not using contraception



**Women not
using
contraception**

Currently married
OR had sex in last
30 days

Never had sex =
NEVER HAD SEX

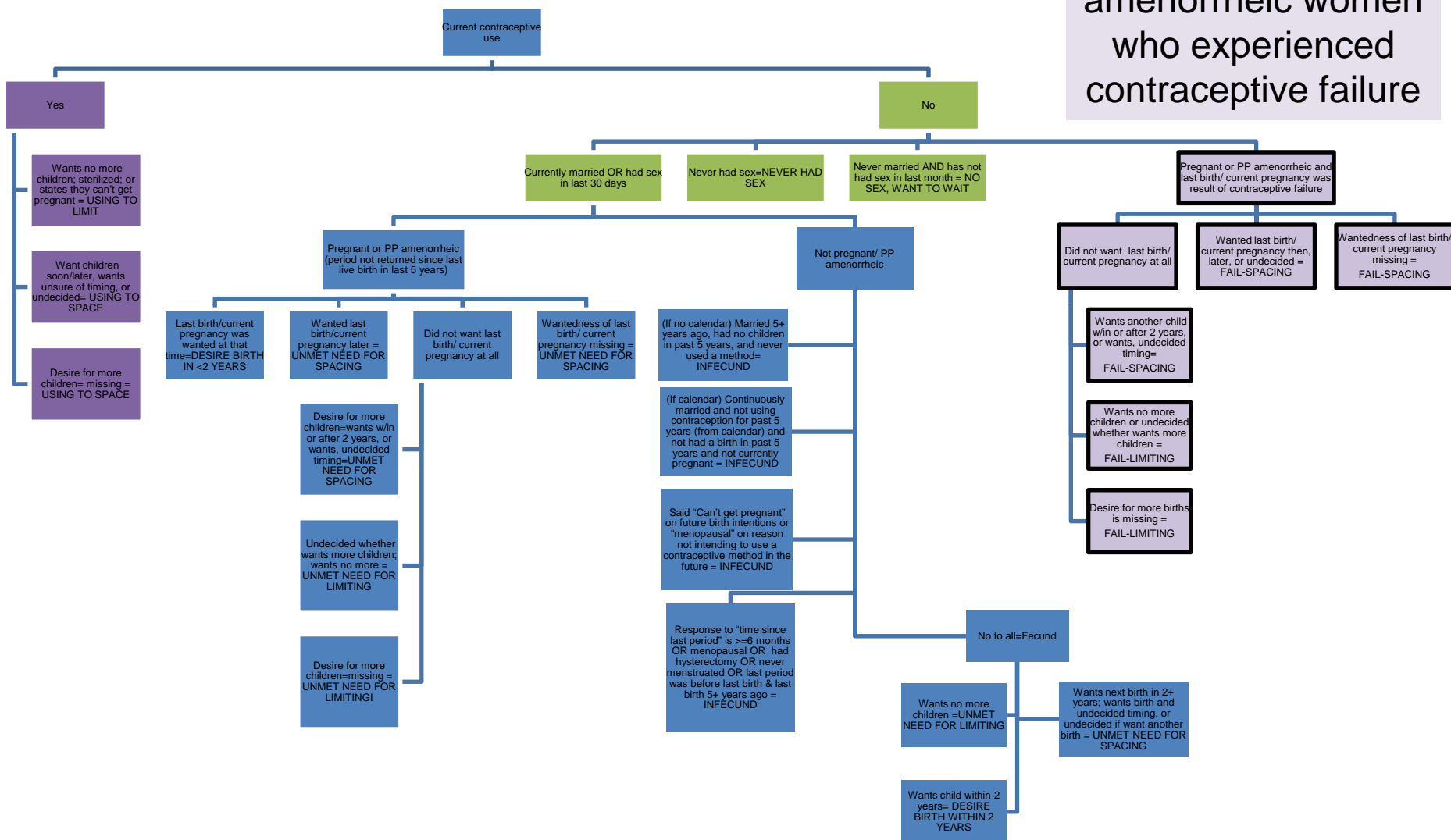
Never married
AND has not had
sex in last month
=
NO SEX, WANT
TO WAIT

Pregnant or PP
amenorrheic and
last birth/ current
pregnancy was
result of
contraceptive
failure (this
selection applies
first)



Unmet need definition (v626) – as calculated since ~ 2003

Pregnant or PP amenorrheic women who experienced contraceptive failure



Pregnant or PP amenorrheic and last birth/ current pregnancy was result of contraceptive failure

Did not want last birth/ current pregnancy at all

Wanted last birth/ current pregnancy then, later, or undecided =
FAIL-SPACING

Wantedness of last birth/ current pregnancy missing = FAIL - SPACING

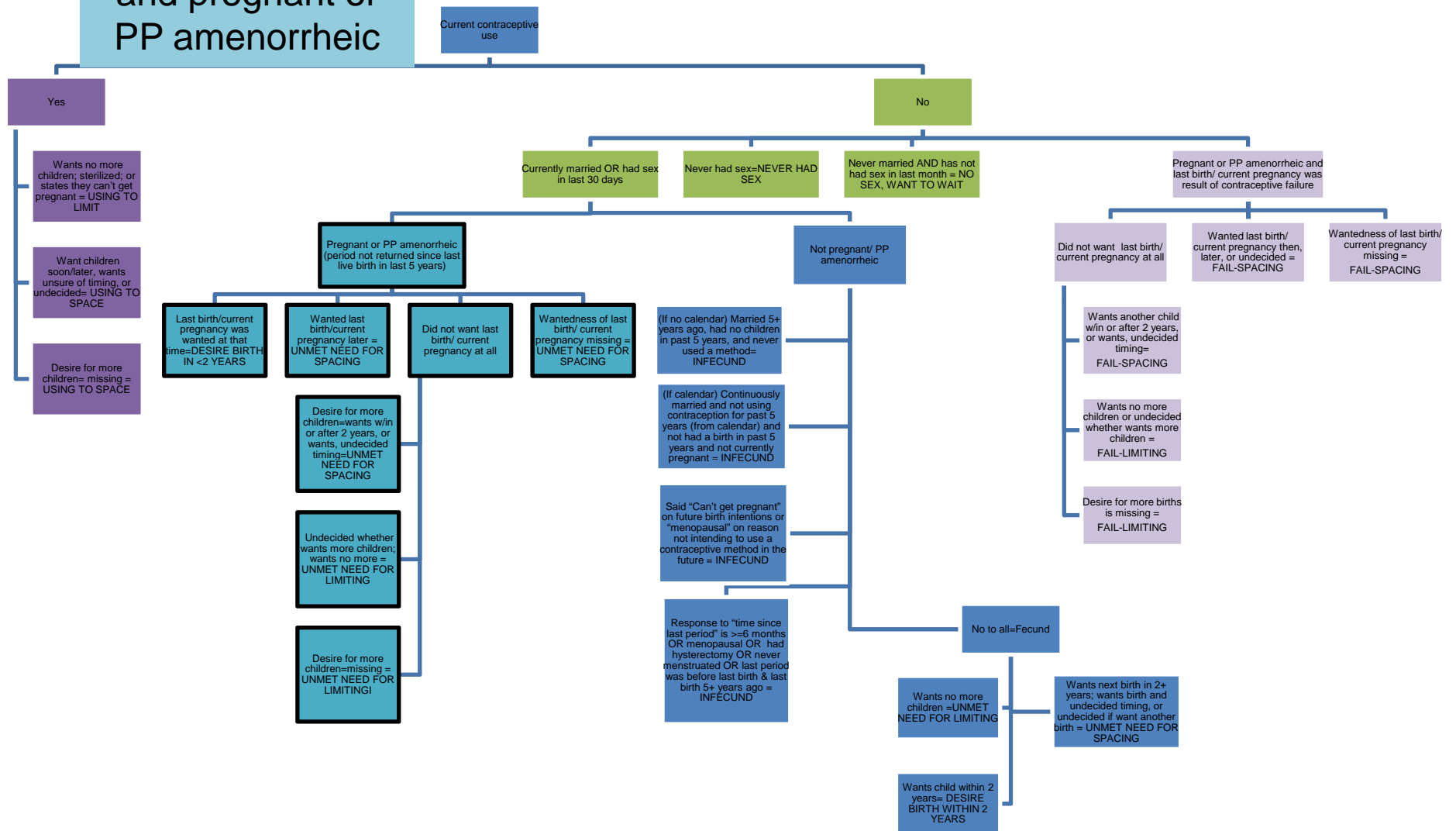
Wants another child w/in or after 2 years, or wants, undecided timing =
FAIL-SPACING

Wants no more children or undecided whether wants more children =
FAIL-LIMITING

Desire for more children is missing =
FAIL - LIMITING

Currently married or sexually active, and pregnant or PP amenorrheic

Unmet need definition (v626) – as calculated since ~ 2003



Currently married/ sexually active
Pregnant or PP amenorrheic
women (period not returned since
last live birth in last 5 years)

Last birth/current
pregnancy was wanted at
that time =
DESIRE BIRTH IN <2
YEARS

Wanted last birth/current
pregnancy later =
UNMET NEED FOR
SPACING

Did not want last birth/
current pregnancy at all

Wantedness of last birth/
current pregnancy
missing =
UNMET NEED FOR
SPACING

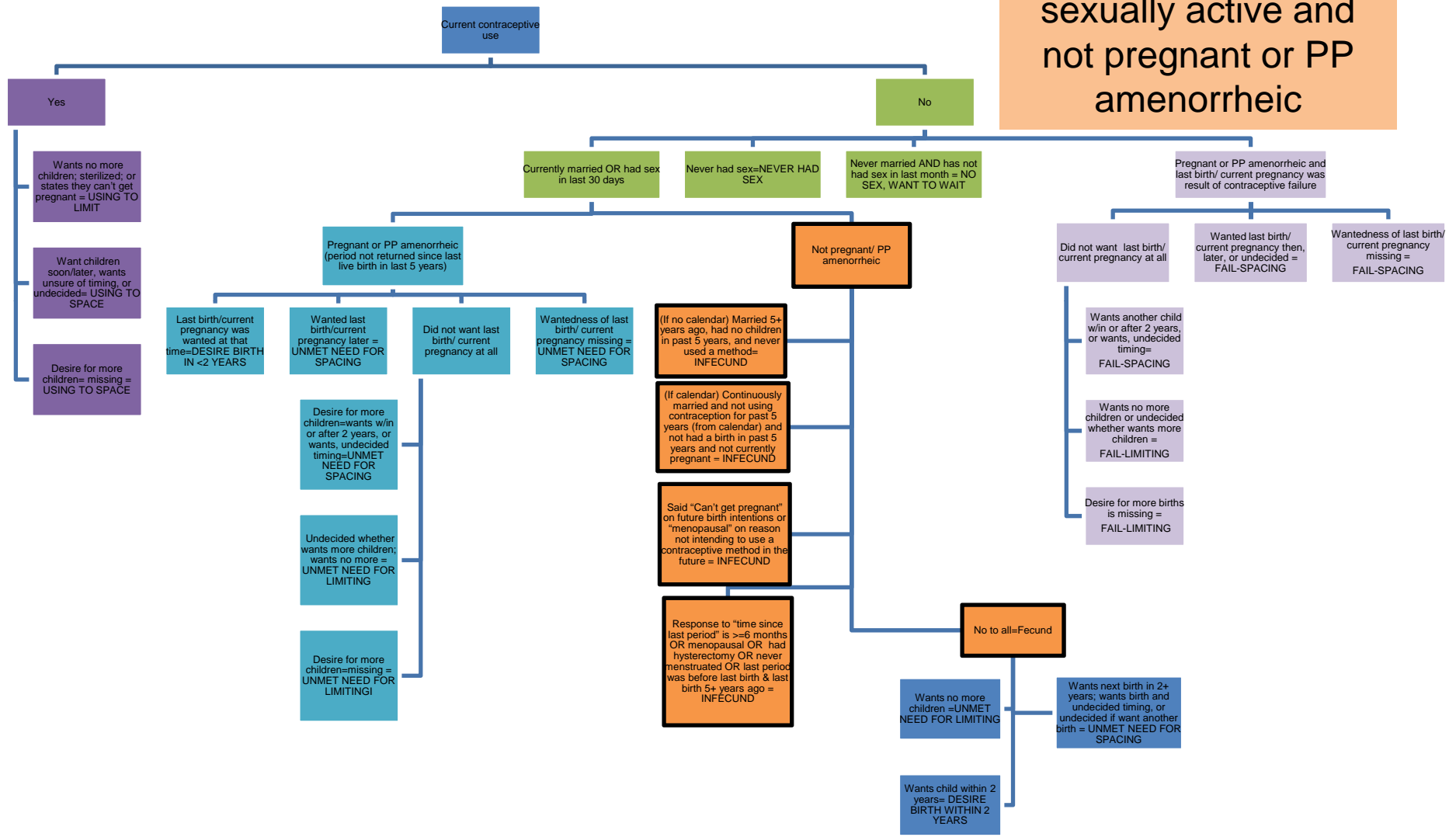
Desire for more children=wants
w/in or after 2 years, or wants,
undecided timing =
UNMET NEED FOR SPACING

Undecided whether wants more
children; wants no more =
UNMET NEED FOR LIMITING

Desire for more children is missing
= UNMET NEED FOR LIMITING

Unmet need definition (v626) – as calculated since ~ 2003

Currently married or sexually active and not pregnant or PP amenorrheic



Currently married/
sexually active and
Not pregnant/ PP
amenorrheic

(If no calendar)
Married 5+
years ago, had
no children in
past 5 years,
and never used
a method=
INFECUND

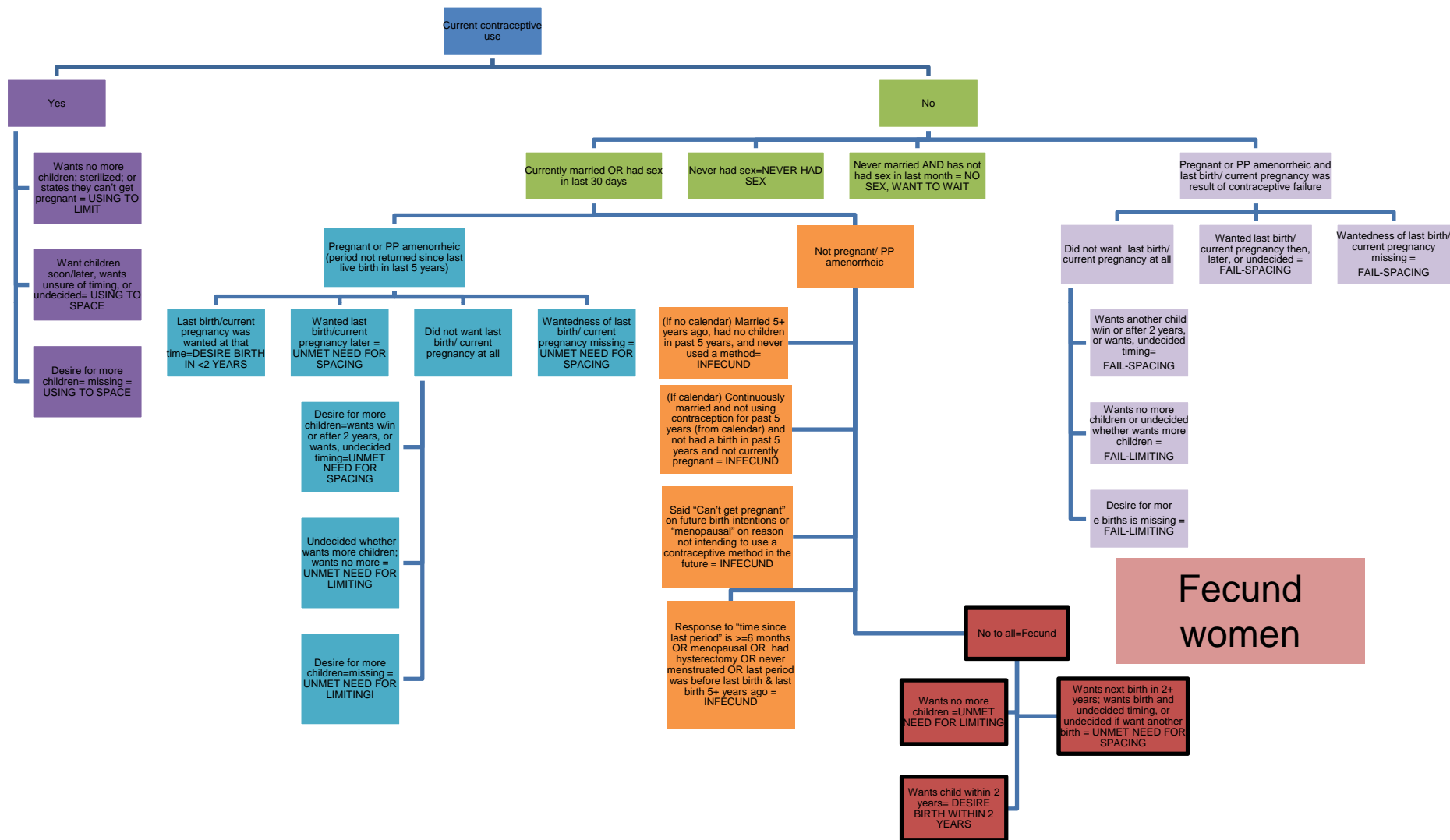
(If calendar)
Continuously
married and not
using
contraception
for past 5 years
(from calendar)
and not had a
birth in past 5
years and not
currently
pregnant =
INFECUND

Said "Can't get
pregnant" on
future birth
intentions or
"menopausal"
on reason not
intending to use
a contraceptive
method in the
future =
INFECUND

Response to
"time since last
period" is ≥ 6
months OR
menopausal
OR had
hysterectomy
OR never
menstruated
OR last period
was before last
birth & last birth
5+ years ago =
INFECUND

No to all =
FECUND

Unmet need definition (v626) – as calculated since ~ 2003



Fecund women

```
graph TD; A[Fecund women] --> B[Wants no more children = UNMET NEED FOR LIMITING]; A --> C[Wants child within 2 years = DESIRE BIRTH WITHIN 2 YEARS]; A --> D[Wants next birth in 2+ years; wants birth and undecided timing, or undecided if wants another birth = UNMET NEED FOR SPACING]; A --> E[Missing on desire for future birth = MISSING];
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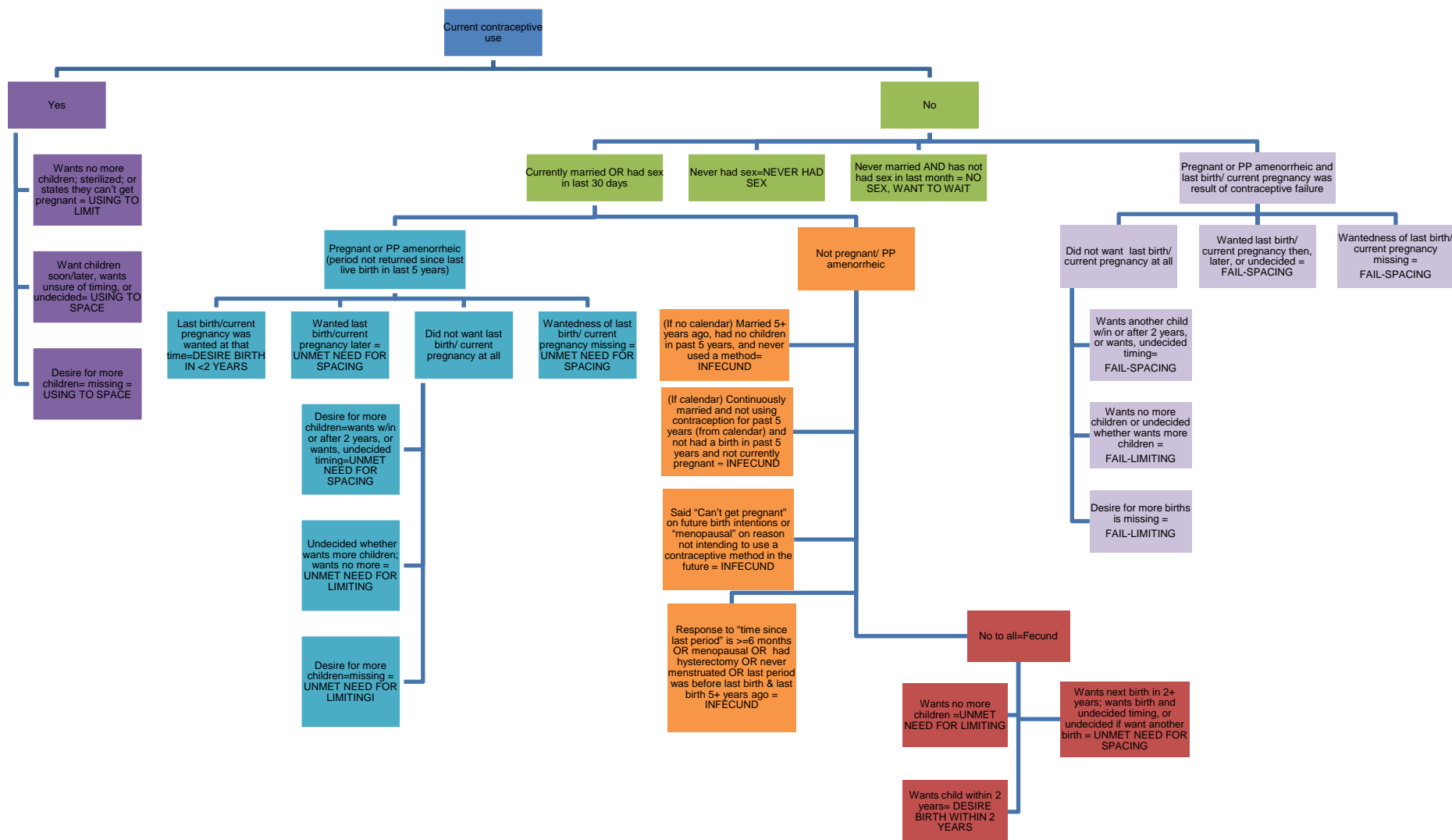
**Wants no more children =
UNMET NEED
FOR LIMITING**

**Wants child
within 2 years =
DESIRE BIRTH
WITHIN 2
YEARS**

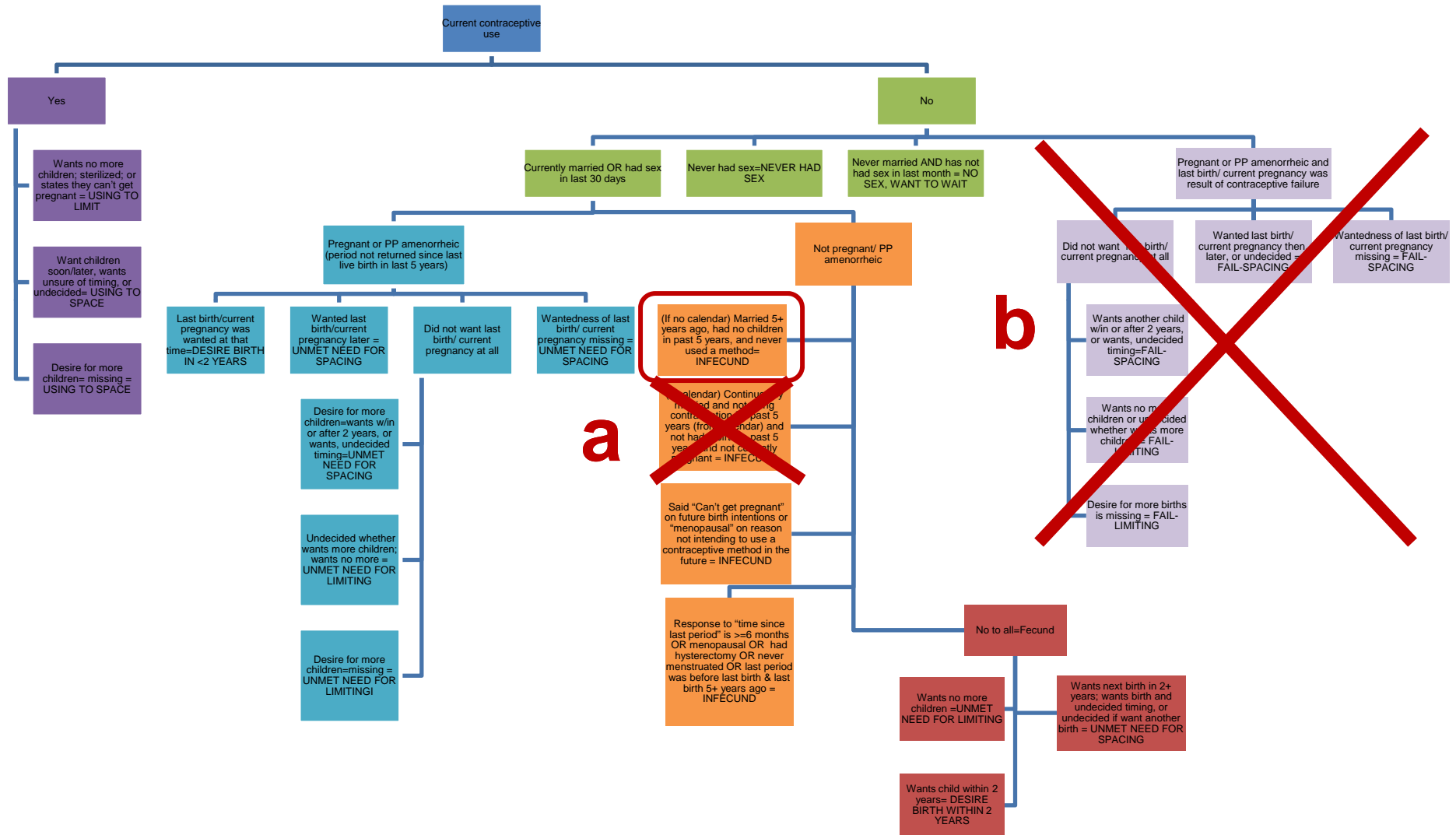
**Wants next birth
in 2+ years;
wants birth and
undecided
timing, or
undecided if
wants another
birth =
UNMET NEED
FOR SPACING**

**Missing on
desire for
future birth =
MISSING**

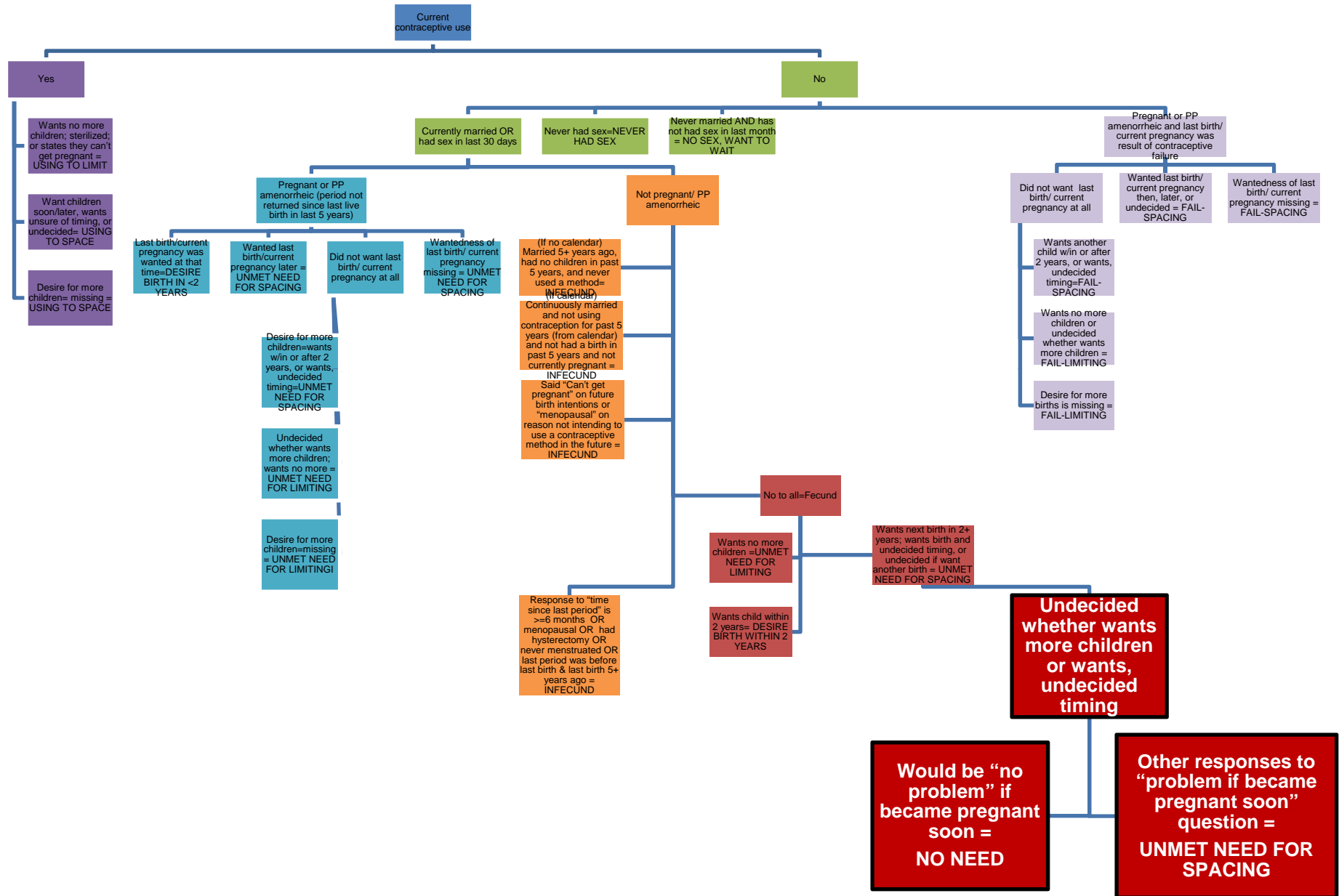
Unmet need definition (v626) – as calculated since ~ 2003



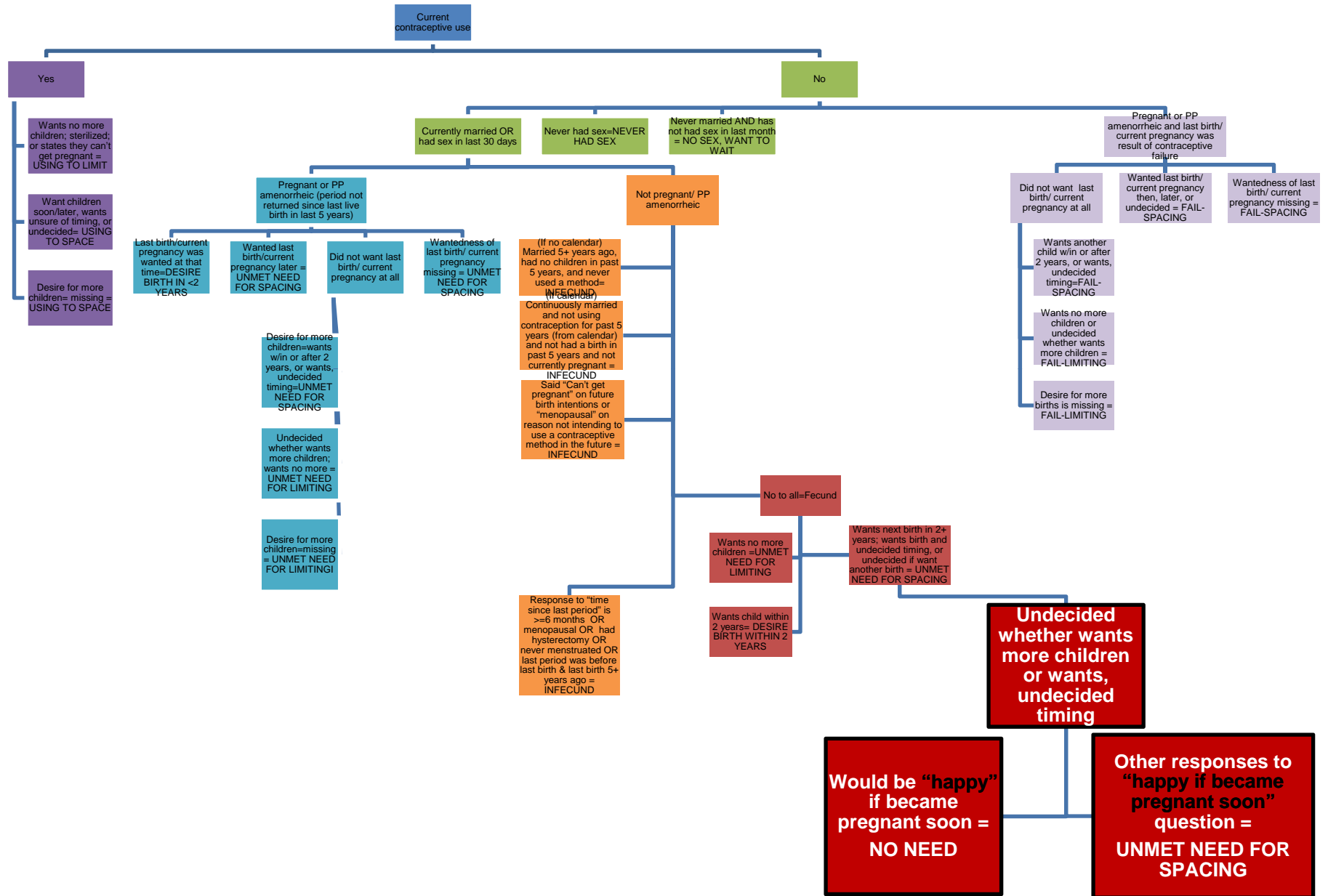
Variations: Unmet need as calculated since ~ 2003 surveys without
(a) marriage data in calendar or
(b) reasons for discontinuation in calendar



Changes over time: Unmet need definition – as calculated in 1998-2003



Changes over time: Unmet need definition – as calculated in 1994-1998



Before 1990

- Definition of unmet need was dramatically different from later definitions

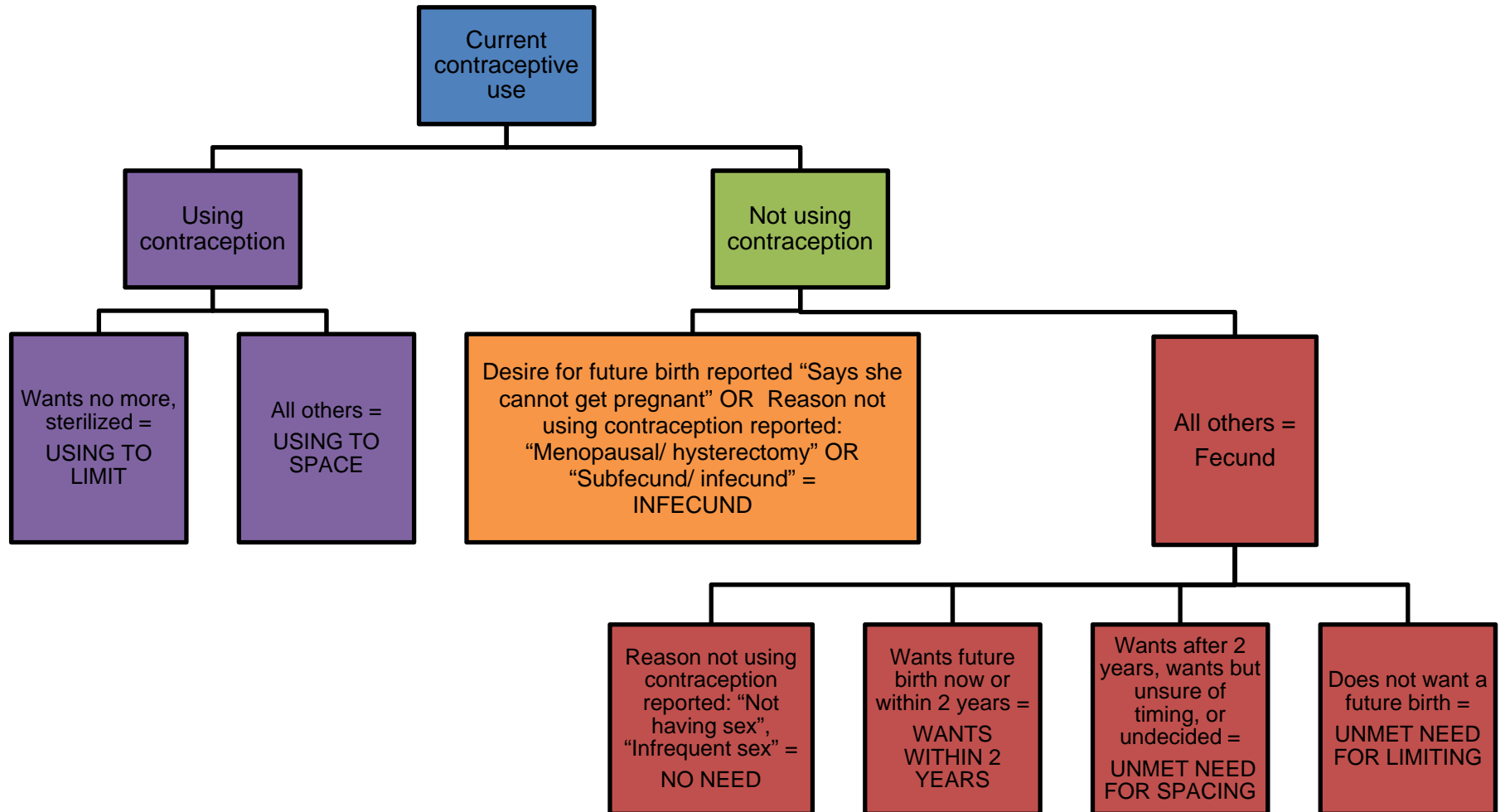
Issues with the current definition of unmet need

- Within DHS:
 - Variations in definition across surveys (calendar data)
 - Variations in definition over time
 - Data not completely comparable even within DHS surveys
- In other surveys:
 - Data requirements are extensive (14 different questions needed)
 - Not all surveys collect necessary data
 - Calculation is extremely complex and difficult to replicate
 - Computation, especially handling of missing data, is inconsistent
 - Different, simpler definitions used by other national surveys (e.g. MICS, RHS)
 - Results not comparable with DHS

Thinking about a new, simpler definition

- Contraceptive prevalence rate (CPR) is widely accepted
 - Crude
 - Simple to define
 - Easy to calculate
 - Widely used
 - Widely understood
- Could a simpler, cruder definition of “need” work also?
- Focus on finding a definition that could be calculated
 - Consistently across countries
 - Consistently across time points
 - By surveys other than DHS

Thoughts on a new definition of unmet need



Elements of a new definition

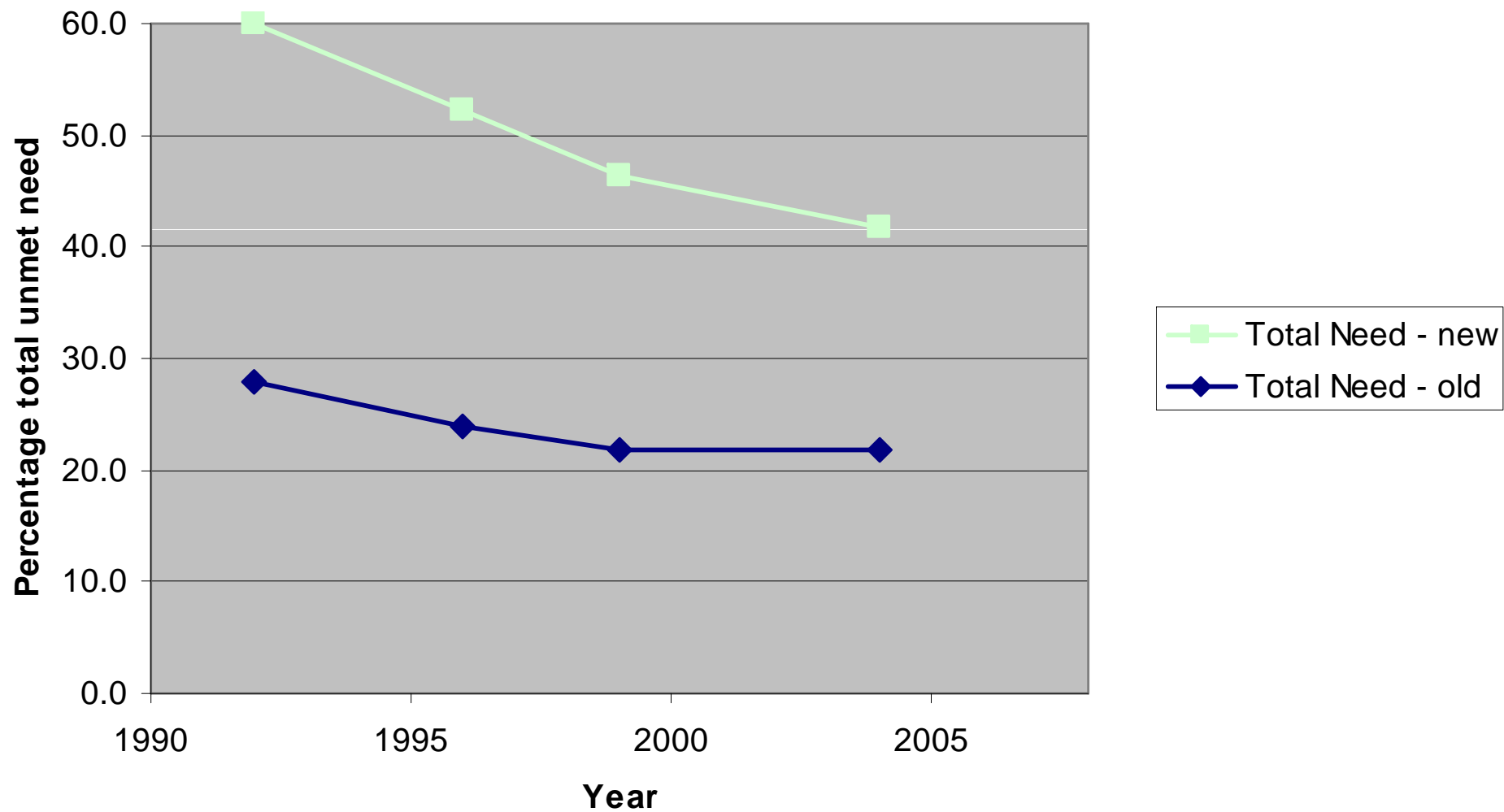
- Desire for births
 - Purely prospective
 - No retrospective information for pregnant or PP amenorrheic
- Infecundity, lack of need
 - Self reported
 - Not based on behavioral data
 - Defined as:
 - Desire for future birth reported “Says she cannot get pregnant”, or
 - Reason not using contraception reported:
 - “Menopausal/hysterectomy”, “Subfecund/infecund”
 - “Not having sex”, “Infrequent sex” (No need)

Data needs for standard definition and new definition

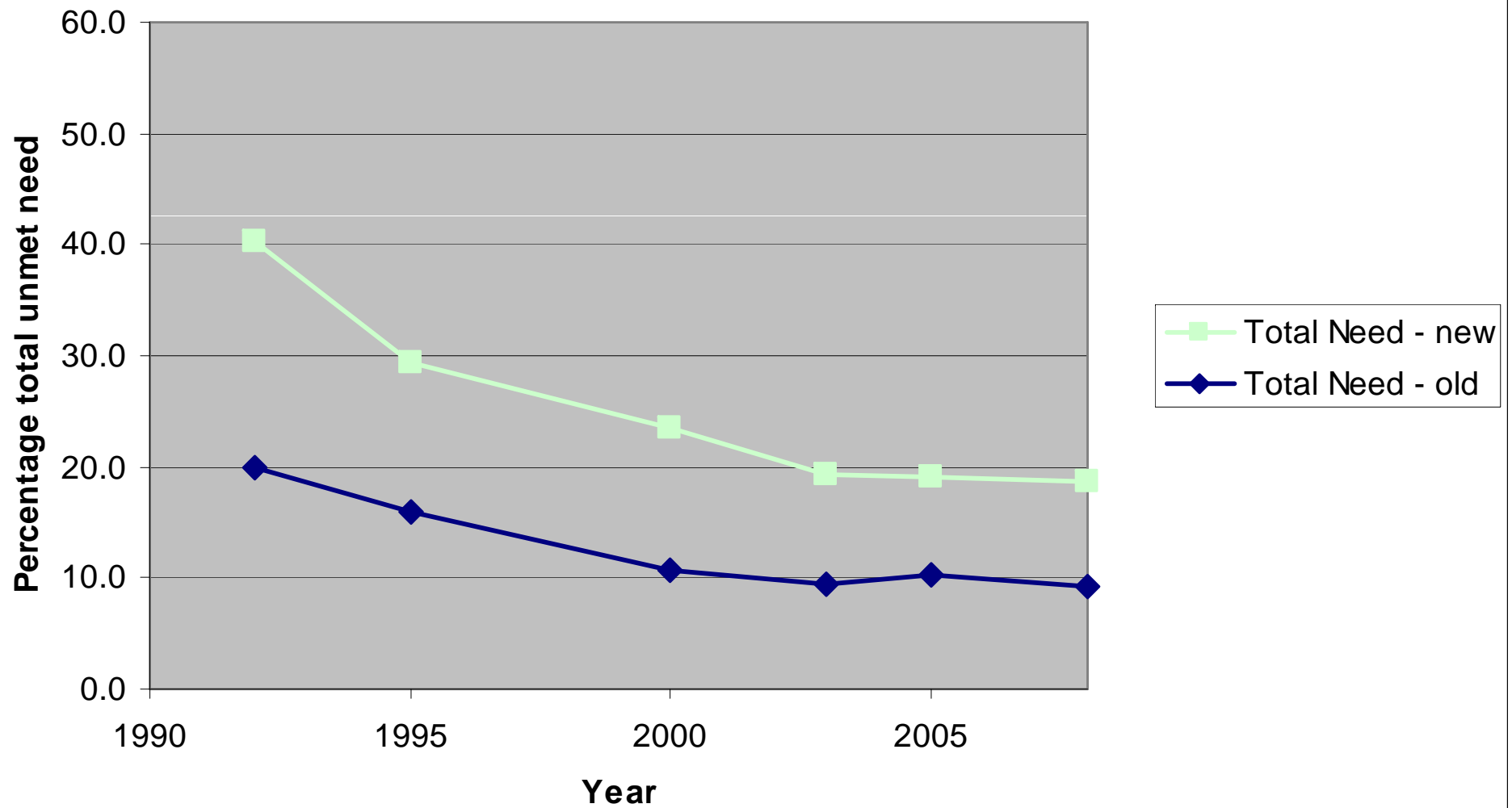
Standard Definition	New Definition
Contraceptive use	Contraceptive use
Marital status	
Currently pregnant	
Birth in past 5 years and period not returned since last birth	
Desire for future birth	Desire for future birth
Desire for current pregnancy	
Desire for last birth	
Time since last period	
Time since last sex	
Reason not using contraception	Reason not using contraception
Reason for discontinuation prior to last birth/current pregnancy	
Marital status throughout last 5 years	

No new data are needed – all data are already collected in DHS and some other surveys

**Percentage of currently married women with unmet need for
contraception using standard DHS definition and proposed new
definition: Tanzania**



Percentage of currently married women with unmet need for contraception using standard DHS definition and proposed new definition: Egypt



Comparing current and potential new definitions of unmet need

Current Definition	Potential New Definition
Complex	Simpler
Difficult to understand	Easier to understand
Difficult to calculate	Easier to calculate
Requires 14 separate questions	Requires 4 questions
Not calculated consistently across different DHS surveys	Can be calculated consistently across different DHS surveys
Not calculated consistently over time	Can be calculated consistently over time for comparable results
Cannot be calculated consistently from other surveys	Can be calculated from DHS, MICS, RHS, PapFam Can be calculated by national surveys, not just global survey programs