

What's new in... Natsal-4: Britain's 4th National Survey of Sexual Attitudes & Lifestyles?

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on behalf of the Natsal team

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 [@NatsalStudy](https://twitter.com/NatsalStudy)



What is Natsal?



- Series of cross-sectional probability sample surveys
- Designed to be broadly representative of the British general population
- Undertaken every decade since 1990
- About sexual health in line with WHO definition:
...a state of physical, mental and social well-being in relation to sexuality. It requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence

Why do Natsal (again)?



Evidence for the design and evaluation of services and interventions



HPV vaccine recommended for NHS immunisation programme



Schools to teach 21st century relationships and sex education



Chlamydia - online tests for u-25s



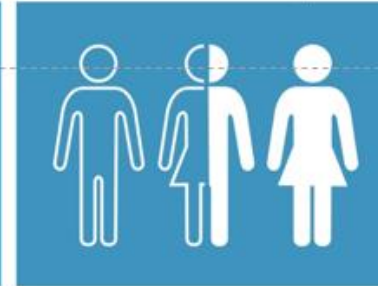
Sexual health services face 'perfect storm'

Major societal shifts

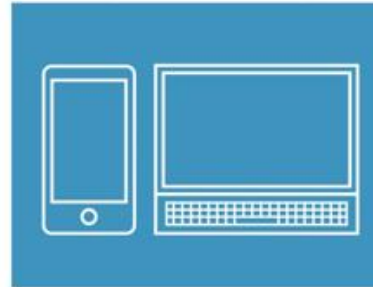
Diversity



Gender fluidity



Digital technology



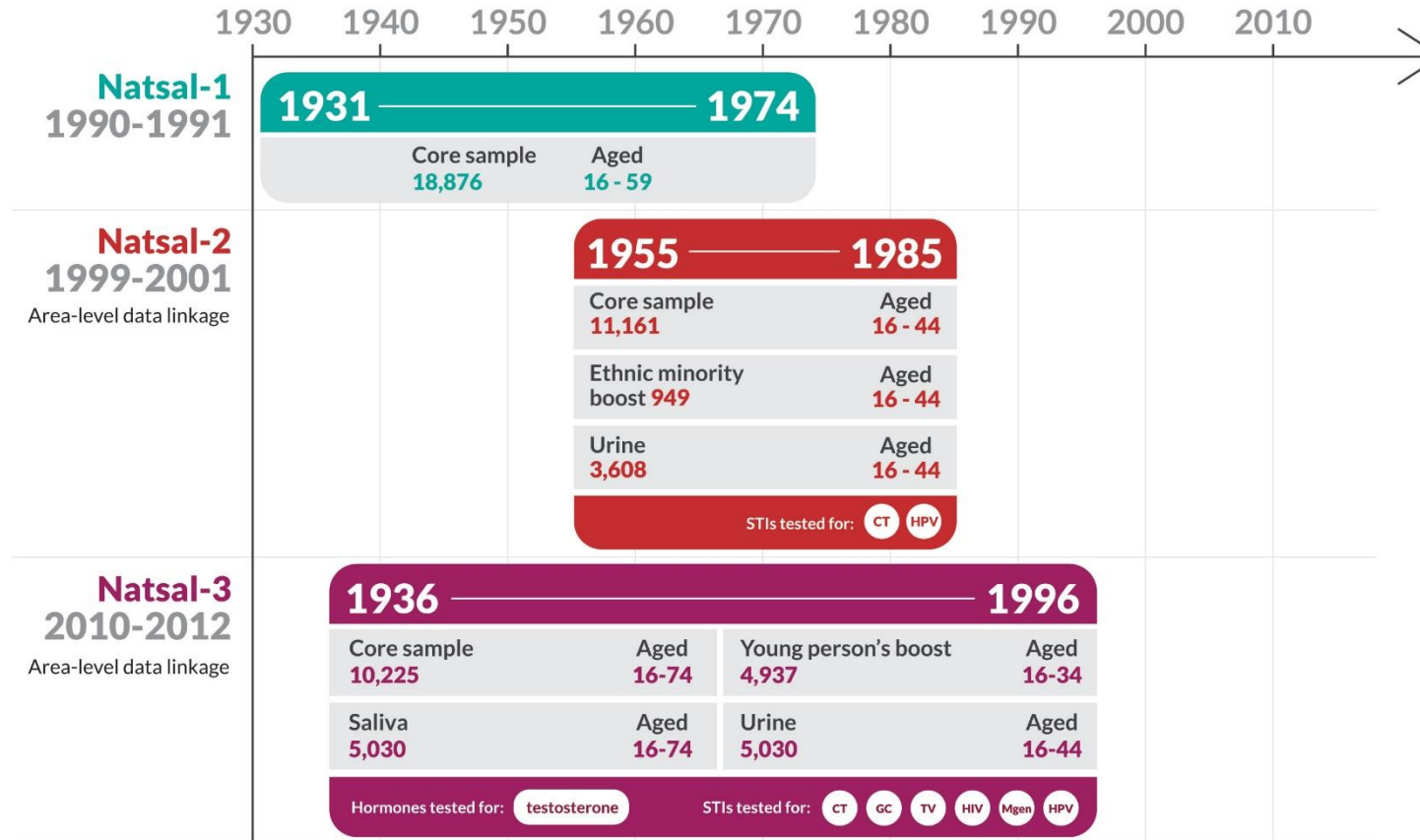
Online services



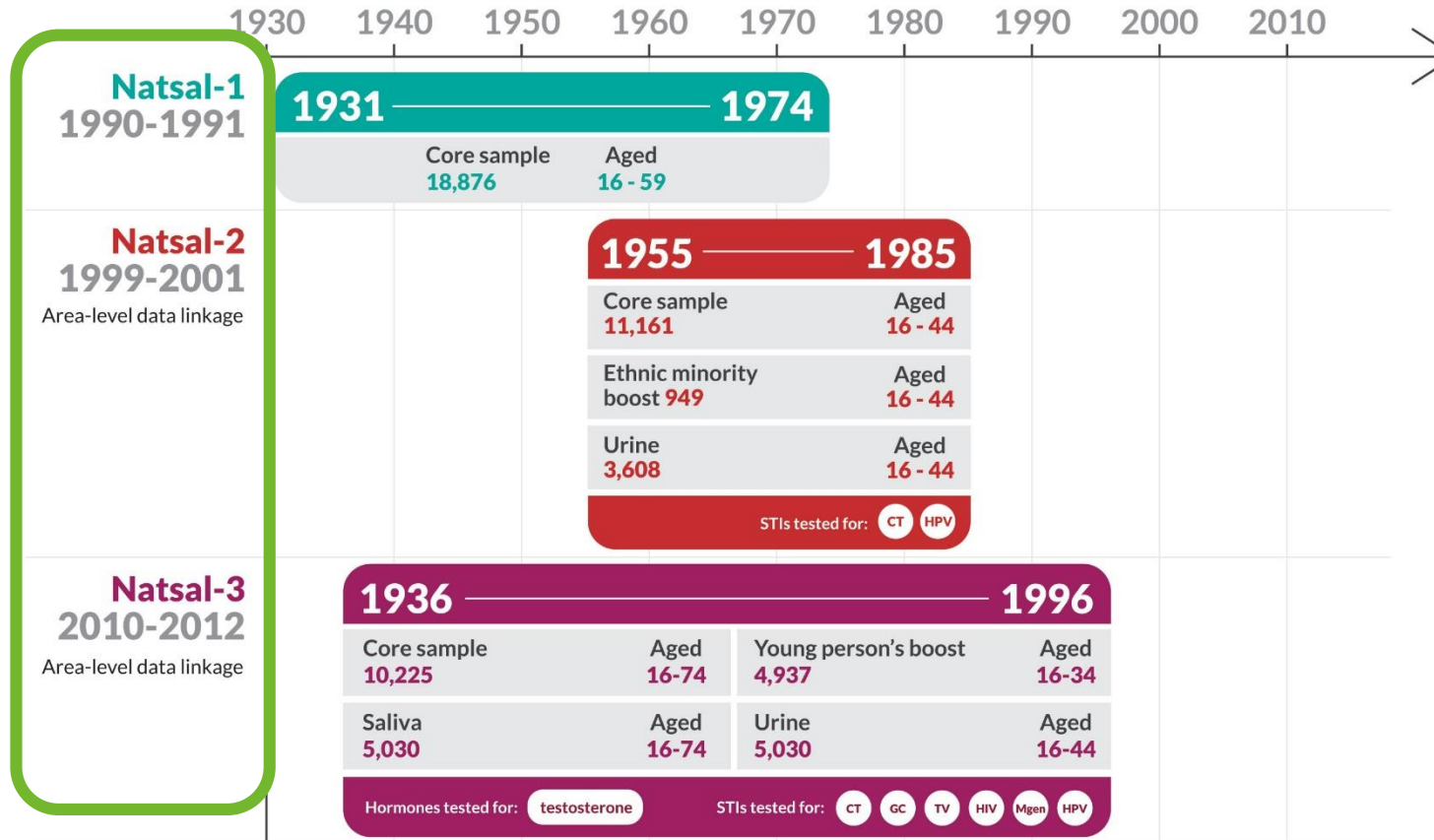
Natsal provides the population perspective in the jigsaw of evidence needed to design and evaluate sexual health services & interventions



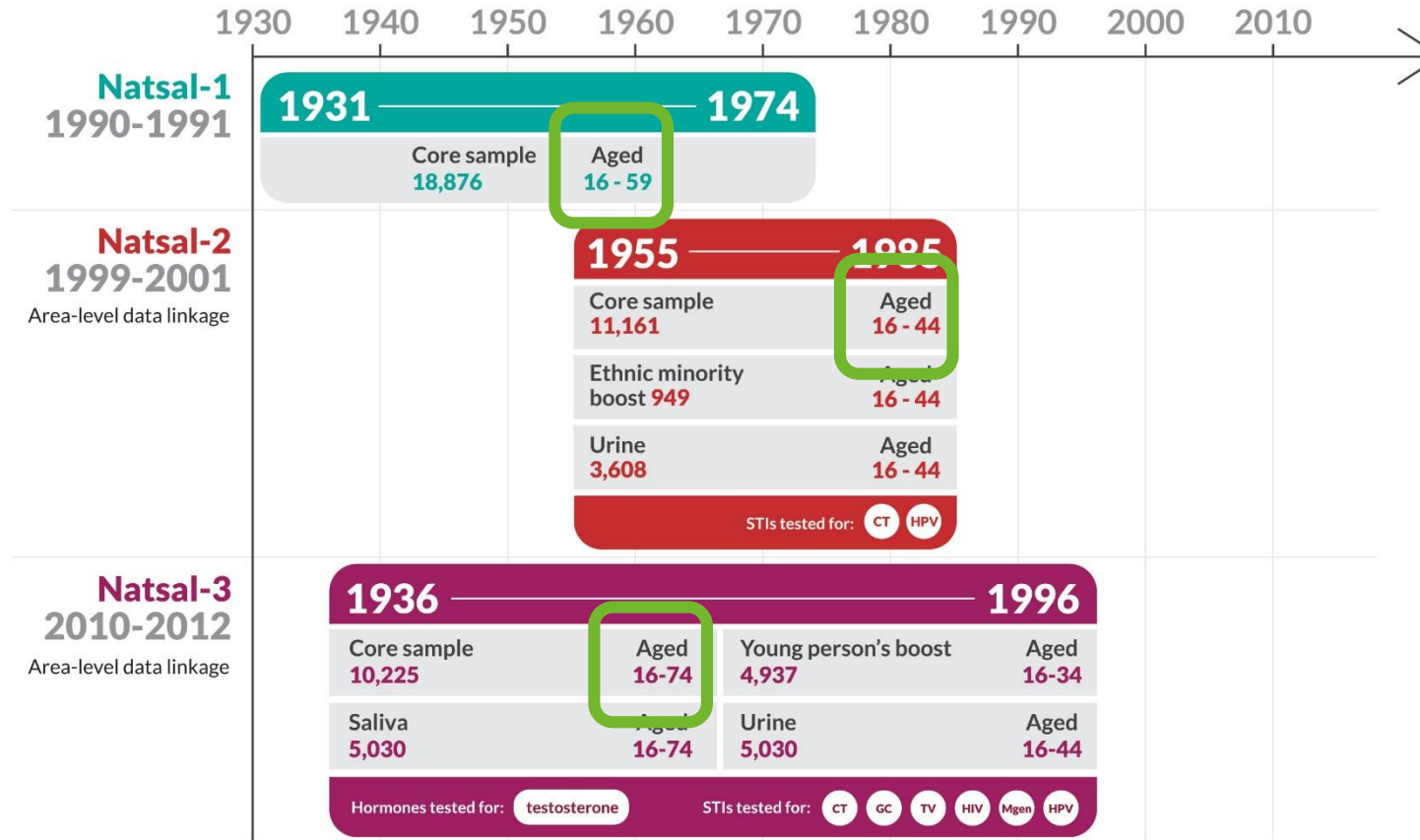
Natsal by wave and participant's years of birth



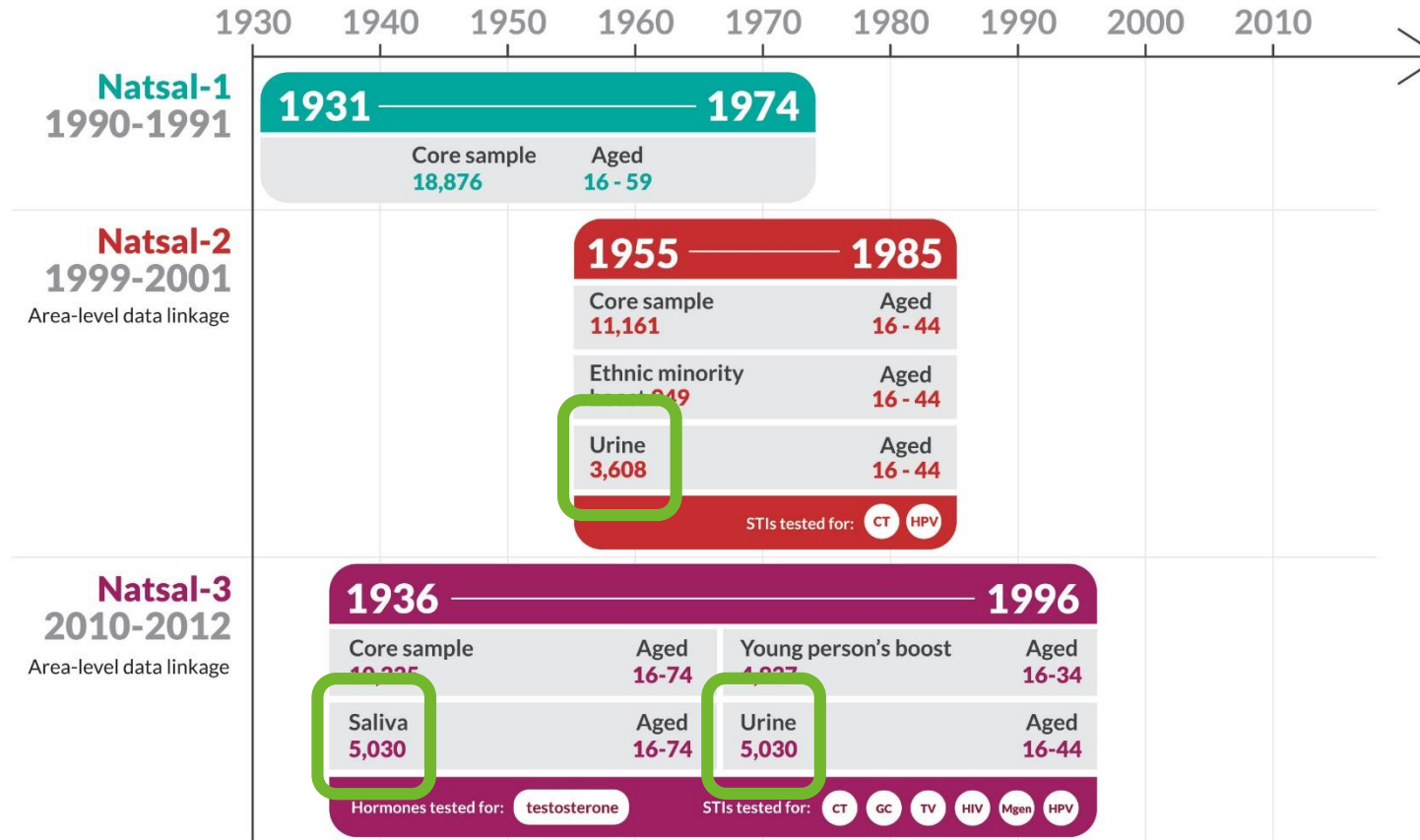
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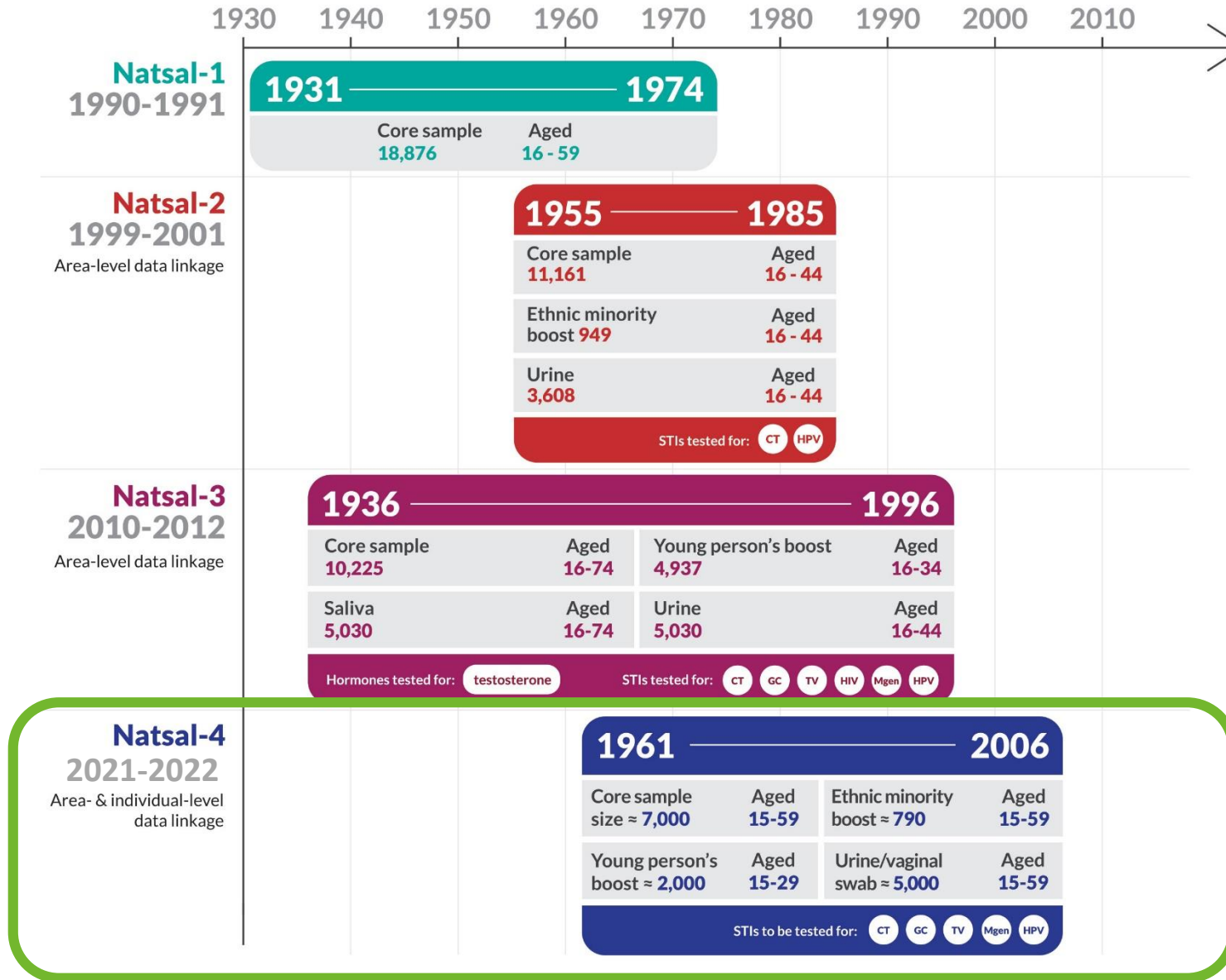
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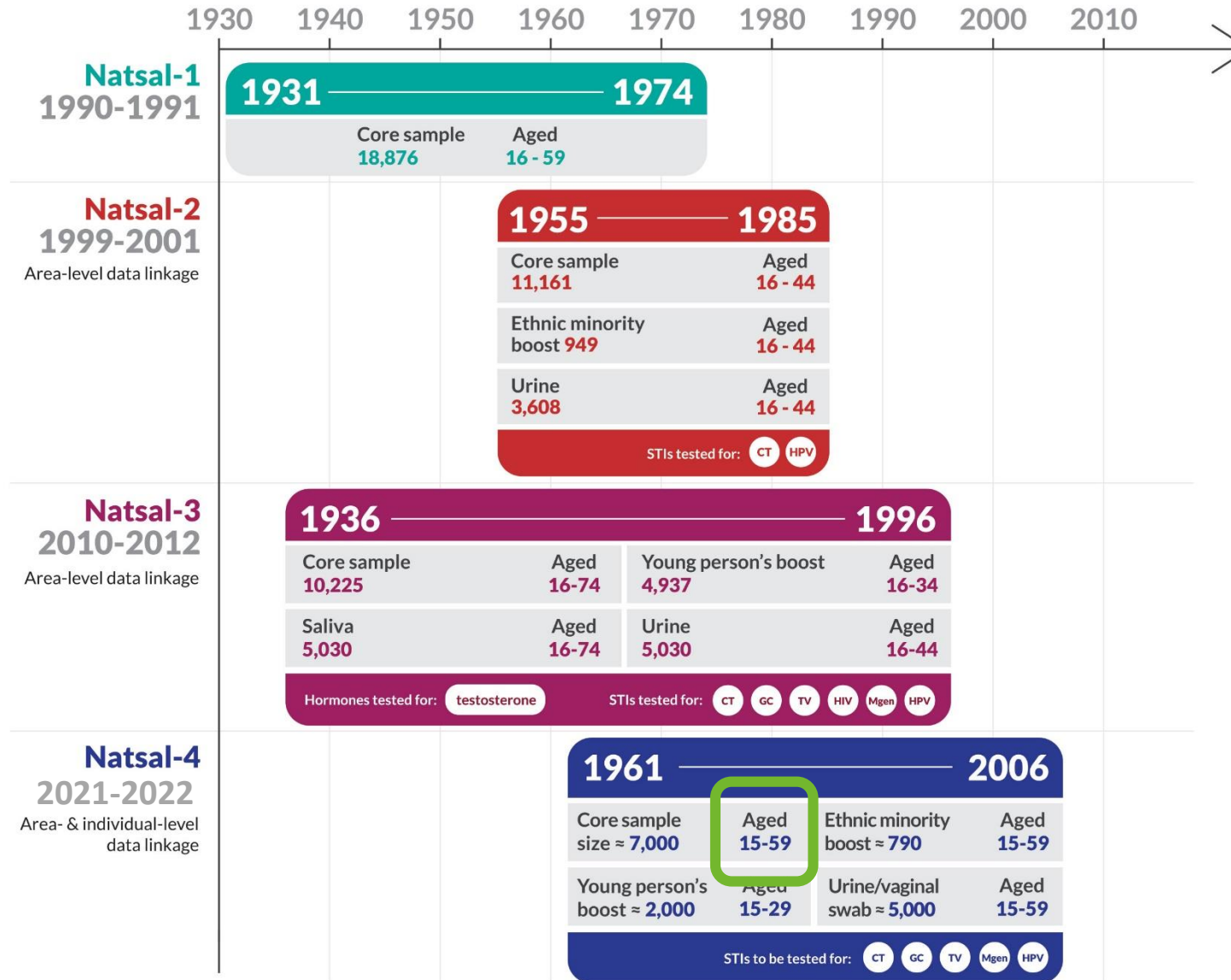
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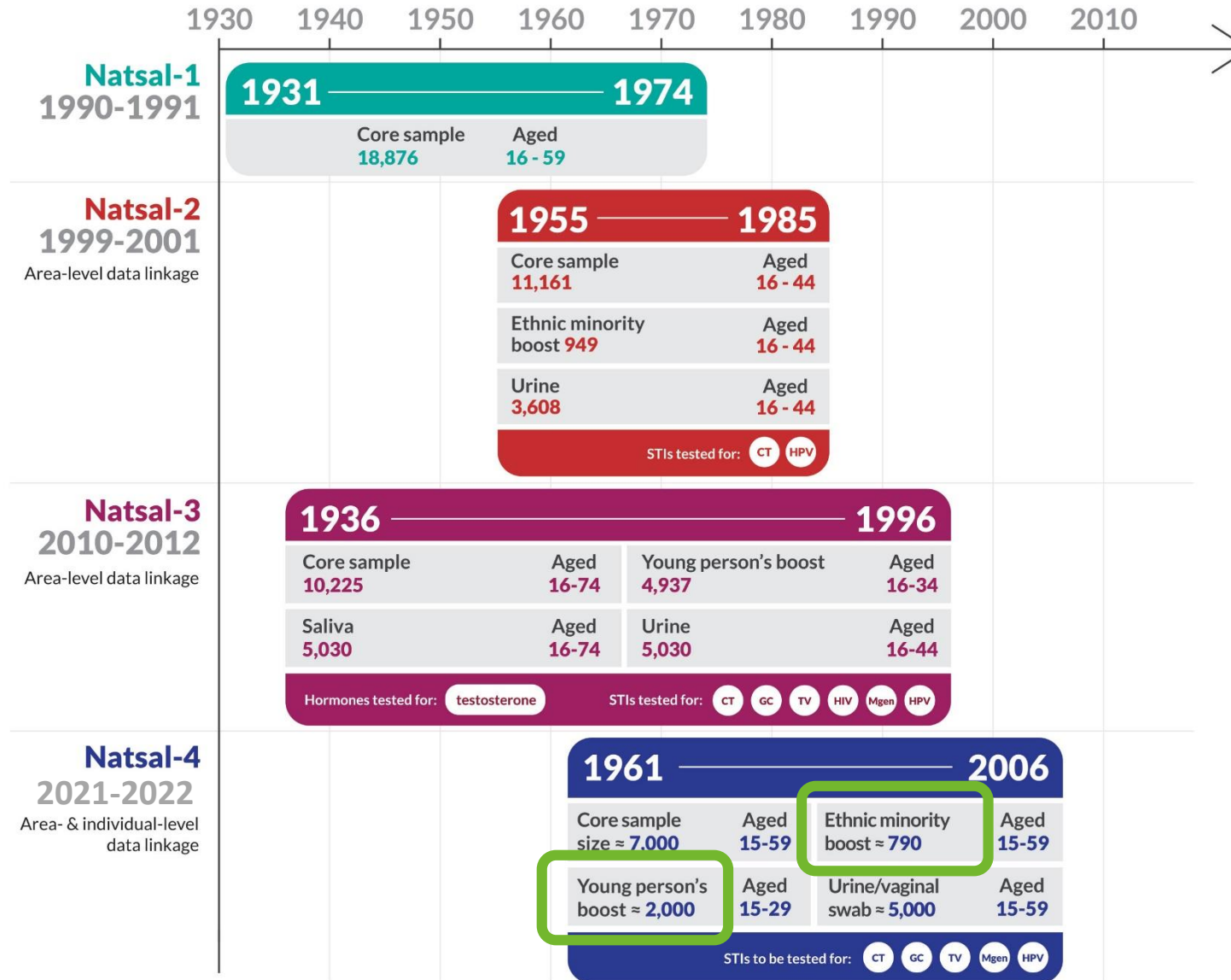
Natsal by wave and participant's years of birth



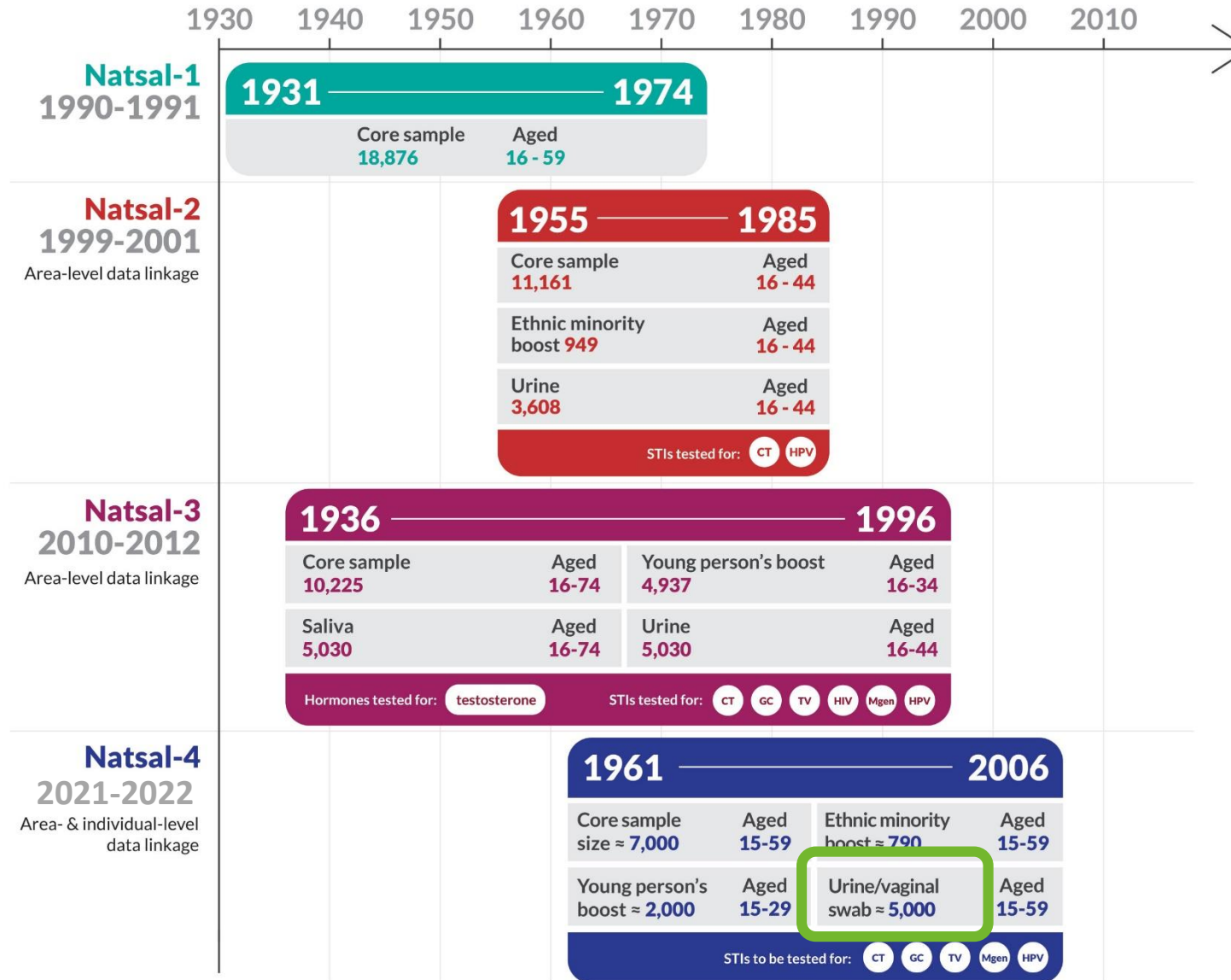
Natsal by wave and participant's years of birth



Natsal by wave and participant's years of birth



Natsal by wave and participant's years of birth



Natsal-1
1990-1991

Natsal-2
1999-2001
Area-level data linkage

Natsal-3
2010-2012
Area-level data linkage

Natsal-4
2021-2022
Area- & individual-level data linkage

1931 — 1974

Core sample 18,876 Aged 16-59

1955 — 1985

Core sample 11,161 Aged 16-44

Ethnic minority boost 949 Aged 16-44

Urine 3,608 Aged 16-44

STIs tested for: CT HPV

1936 — 1996

Core sample 10,225 Aged 16-74 Young person's boost 4,937 Aged 16-34

Saliva 5,030 Aged 16-74 Urine 5,030 Aged 16-44

Hormones tested for: testosterone STIs tested for: CT GC TV HIV Mgen HPV

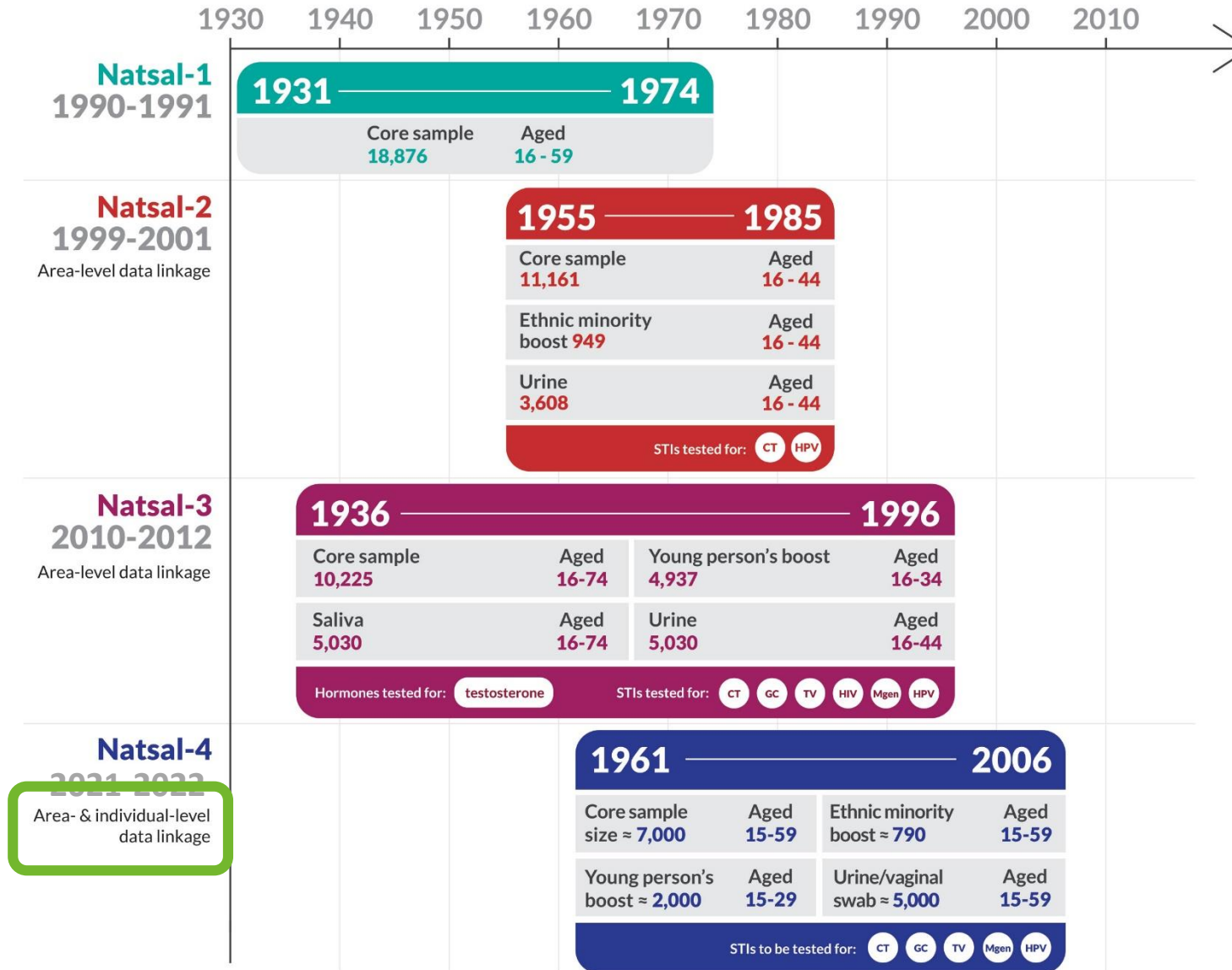
1961 — 2006

Core sample size ~ 7,000 Aged 15-59 Ethnic minority boost ~ 790 Aged 15-59

Young person's boost ~ 2,000 Aged 15-29 Urine/vaginal swab ~ 5,000 Aged 15-59

STIs to be tested for: CT GC TV Mgen HPV

Natsal by wave and participant's years of birth



2021-2022
Area- & individual-level data linkage

How is Natsal done?

- Randomly select private addresses from across Britain
- ...at each address, one individual randomly selected & invited to participate
- ...in a face-to-face computer-assisted personal interview (CAPI)
- ...with a computer-assisted self-interview (CASI)
- Usually done in the participant's home, taking ~ 1hr on average

Collecting data on the nation's sexual health: review of the design of Natsal-4



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¹University College London, ²NatCen Social Research, ³London School of Hygiene & Tropical Medicine, ⁴MRCOCS Social & Public Health Sciences Unit University of Glasgow, ⁵Healthcare Trust, ⁶Imperial College, ⁷NIHR Collaborating Centre for Genitourinary and Oral STIs

Background

- Accurate information on a nation's sexual health is essential to plan and evaluate services, inform prevention, and contribute to societal understanding.
- In Britain, sexual health data arise from surveillance systems, convenience surveys of key populations, and the decennial National Surveys of Sexual Attitudes and Lifestyles (Natsal).
- Natsal has employed 'gold standard' population survey methods: address-based probability sampling (see results), trained interviewers conducting detailed computer-assisted interviewing and collecting biomedical samples.
- However, this approach is resource intensive and limitations include declining response rates and the risk of non-response bias. In designing Natsal-4, we reviewed whether alternative methods could meet the needs of data users and the wider community.

How does address-based probability sampling work?

Addresses are selected from the Small User Residential Postcode Address File (a list of residential addresses in Britain) using stratified random sampling to get a broadly representative sample of the population. On Natsal, a trained fieldworker visits each address to see whether anyone living there is eligible to take part, and selects one individual per household who is invited to take part. Only selected individuals at selected addresses can take part, to ensure we represent a range of experiences, not just those from people who are more willing to take part in a sex survey.

Methods

We evaluated methods used by major UK general population surveys and sexual health surveys internationally. Key considerations were: general population representativeness, sample size, breadth and depth of information collected, data quality, potential for biomedical samples, potential for sub-group 'boost' sampling, and data linkage.

Read the full scoping review report and see more about our plans for Natsal at: <http://www.natsal.ac.uk/media/11716129/Natsal4-scoping-review.pdf>

Read the editorial about Natsal-4 in *STI*: Mercer CH, et al. Collecting and exploiting data to understand a nation's sexual health needs: implications for the British National Surveys of Sexual Attitudes and Lifestyles (Natsal). *Sex Transm Infect* 2019;95:159-161

Conclusions

Given the major drawbacks of the alternatives considered, the design used for previous Natsals was judged the best option for achieving a representative sample, enabling detailed data collection, enhancing survey data with biological/routine data, and retaining Natsal's time series; together maximising Natsal's utility and impact.

The design of Natsal-4

- Natsal-4 will interview 10,000 people aged 15-59 years using address-based sampling. Trained interviewers will select one individual at each address to take part, and they will be interviewed using computer-assisted interviewing, with a combination of face-to-face and self-completion questions.
- Survey answers will be combined with information from biological samples (e.g. urine and vaginal swabs to test for sexually transmitted infections) and routinely collected data (e.g. health records).
- We will oversample ('boost') young people and people from black African and black Caribbean groups to allow more detailed statistical analyses of these groups.

Results

Design	Response accuracy and response rate	Response period	Detailed questionnaire data linkage	Biological samples	Biological samples	Cost (pounds)	Response time (weeks)	Response
1. A dedicated probability sample using stratified random sampling to select addresses, followed by random selection of one individual per household to be invited to take part	✓	✓	✓	✓	✓	✓	✓	Current gold standard for general population surveys. Good for detailed data collection and linkage.
2. A dedicated probability sample using stratified random sampling to select addresses, followed by random selection of one individual per household to be invited to take part	✓	✓	✓	✓	✓	✓	✓	Minimal cost savings and potential for detailed data linkage. Good for detailed data collection and linkage.
3. A dedicated probability sample using stratified random sampling to select addresses, followed by random selection of one individual per household to be invited to take part	✓	✓	✓	✓	✓	✓	✓	Only very limited data could be collected or used for detailed data linkage.
4. A dedicated probability sample using stratified random sampling to select addresses, followed by random selection of one individual per household to be invited to take part	✓	✓	✓	✓	✓	✓	✓	Only very limited data could be collected or used for detailed data linkage.
5. A dedicated probability sample using stratified random sampling to select addresses, followed by random selection of one individual per household to be invited to take part	✓	✓	✓	✓	✓	✓	✓	Limitations in terms of sample frame coverage and non-response bias.
6. A dedicated probability sample using stratified random sampling to select addresses, followed by random selection of one individual per household to be invited to take part	✓	✓	✓	✓	✓	✓	✓	Unsuitable cost savings, risk of non-response bias and selection bias. Should use a national representative, population-based survey.
7. A dedicated probability sample using stratified random sampling to select addresses, followed by random selection of one individual per household to be invited to take part	✓	✓	✓	✓	✓	✓	✓	Only very limited data could be collected or used for detailed data linkage.

Key: ✓ (not applicable), ✓ (indicates that this is possible, depending on the specific design chosen), '✓' indicates insufficient evidence from available data to either strongly 'NO'/'?' indicates insufficient evidence, but likely to be able to deliver or partially deliver. 'NO'/'?' indicates insufficient evidence, but unlikely to deliver.

Acknowledgements



How can I get involved?

You're all invited! Have your say about what data Natsal-4 collects by going to www.natsal.ac.uk/involved. Our online consultation questionnaire is open until 22 July. Add your voice to shape discussions about sexual behaviour, sexual health & wellbeing. #getinvolved #natsal4 #sexualhealth

You can visit our stand at the BASHH conference for more info or email natsal@ucl.ac.uk

See poster #140

Question topics in Natsal-3



Face-to-face by an interviewer:

Less sensitive topics:

- General health (incl. drinking & smoking)
- Family structure when growing-up
- Learning about sex
- First sexual experiences
- Use of contraception



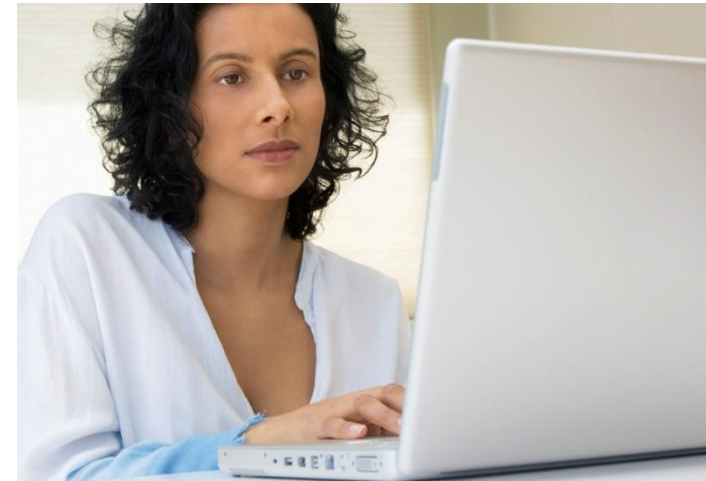
Question topics in Natsal-3 (cont'd)



Computer-assisted *self*-interview (CASI)

More sensitive topics:

- Sexual practices
- Numbers of partners
- Characteristics of most recent partnerships
- Travel & sex abroad
- Non-consensual sex
- Paying for sex
- History of pregnancies
- Unplanned pregnancy
- Family formation
- STIs & HPV vaccination
- HIV testing
- Drug use
- Sexual (dys)function
- Viagra use
- Mood and well-being



Question topics in Natsal-3 (cont'd)



(Again) face-to-face by an interviewer:

Less sensitive topics:

- Attitudes
- Household classification
- Occupation
- Education/qualifications
- Religion
- Ethnicity
- Sexual identity



Which questions should Natsal-4 ask?

The need to strike a balance between...



...to measure change
over time as
accurately as
possible

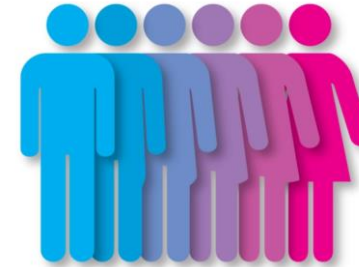
...to address
contemporary issues
so Natsal is 'fit for
purpose' in 2021

Asking the right questions in Natsal-4



1. *New topics* to address include:

- Gender identity (incl. trans & non-binary)
- Impact of digital technology
- Use/role of porn
- Concept of sexual wellbeing



2. *New questions to existing modules*, e.g. expanding questions on sexual violence; ...

3. *New response options*, e.g. to questions about how people meet partners -> need to include online options.

Asking the right questions in Natsal-4



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2. *New questions to existing modules*, e.g. expanding questions on sexual violence; ...

3. *New response options*, e.g. to questions about how people meet partners -> need to include online options.

....ok, but which questions
will go then?



When is Natsal-4 happening?



May 2019 – April 2020

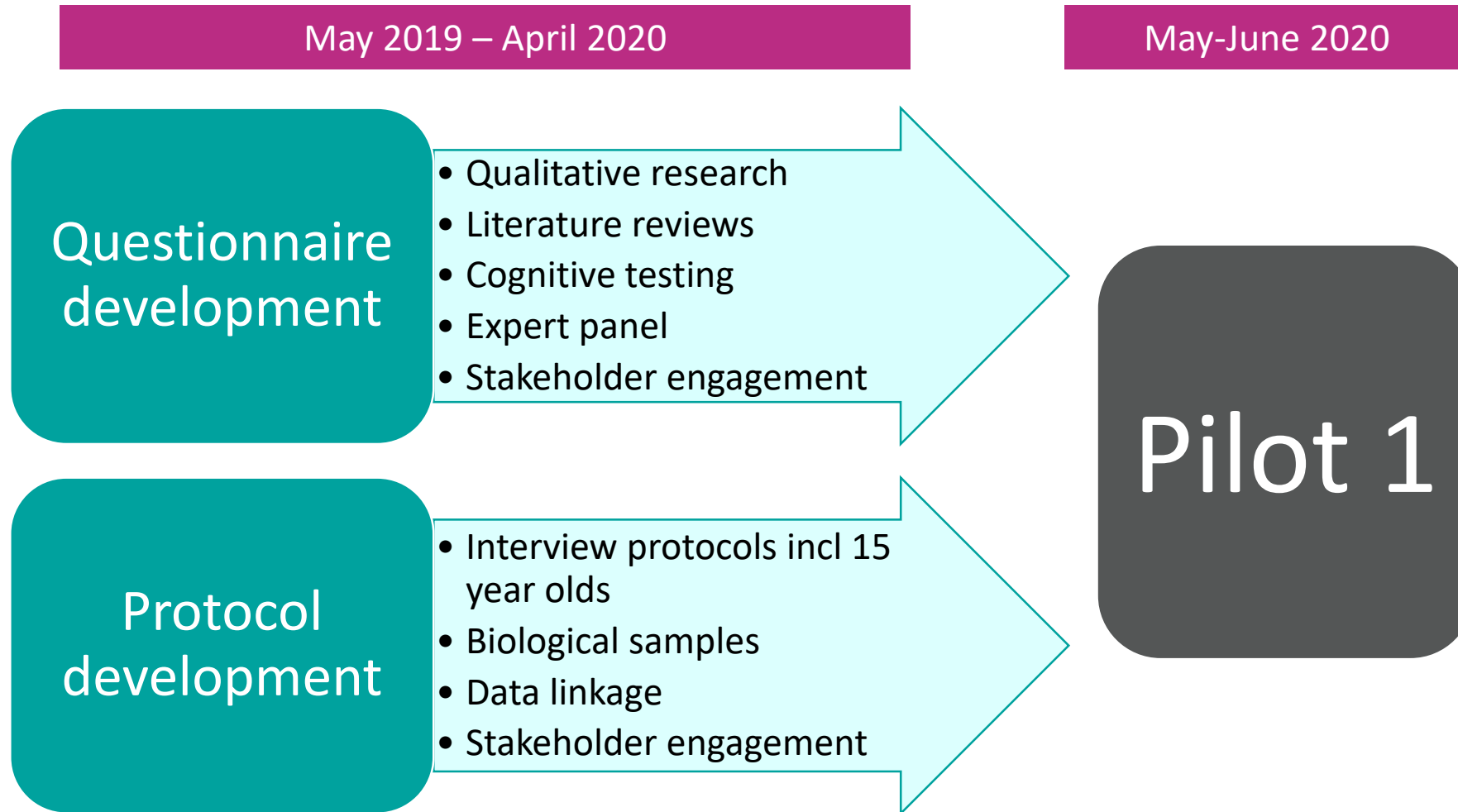
Questionnaire development

- Qualitative research
- Literature reviews
- Cognitive testing
- Expert panel
- Stakeholder engagement

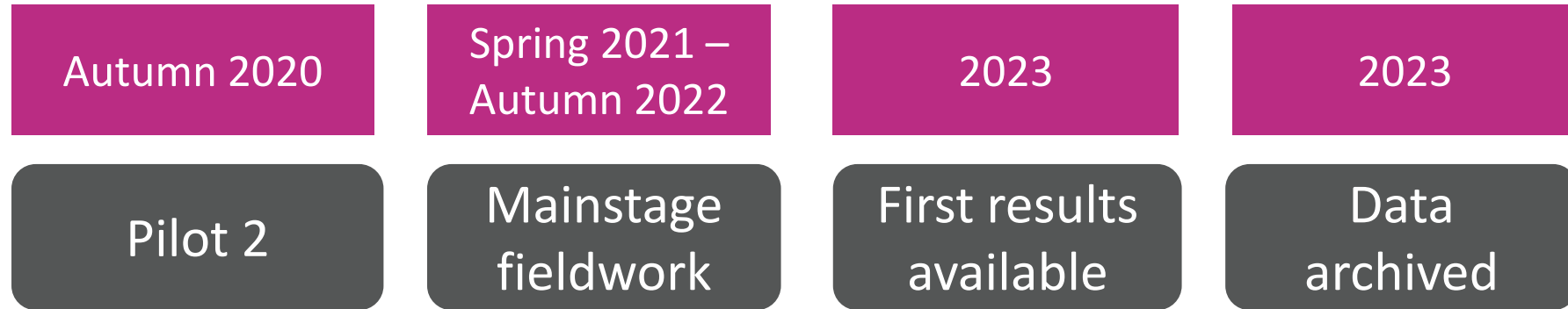
Protocol development

- Interview protocols incl 15 year olds
- Biological samples
- Data linkage
- Stakeholder engagement

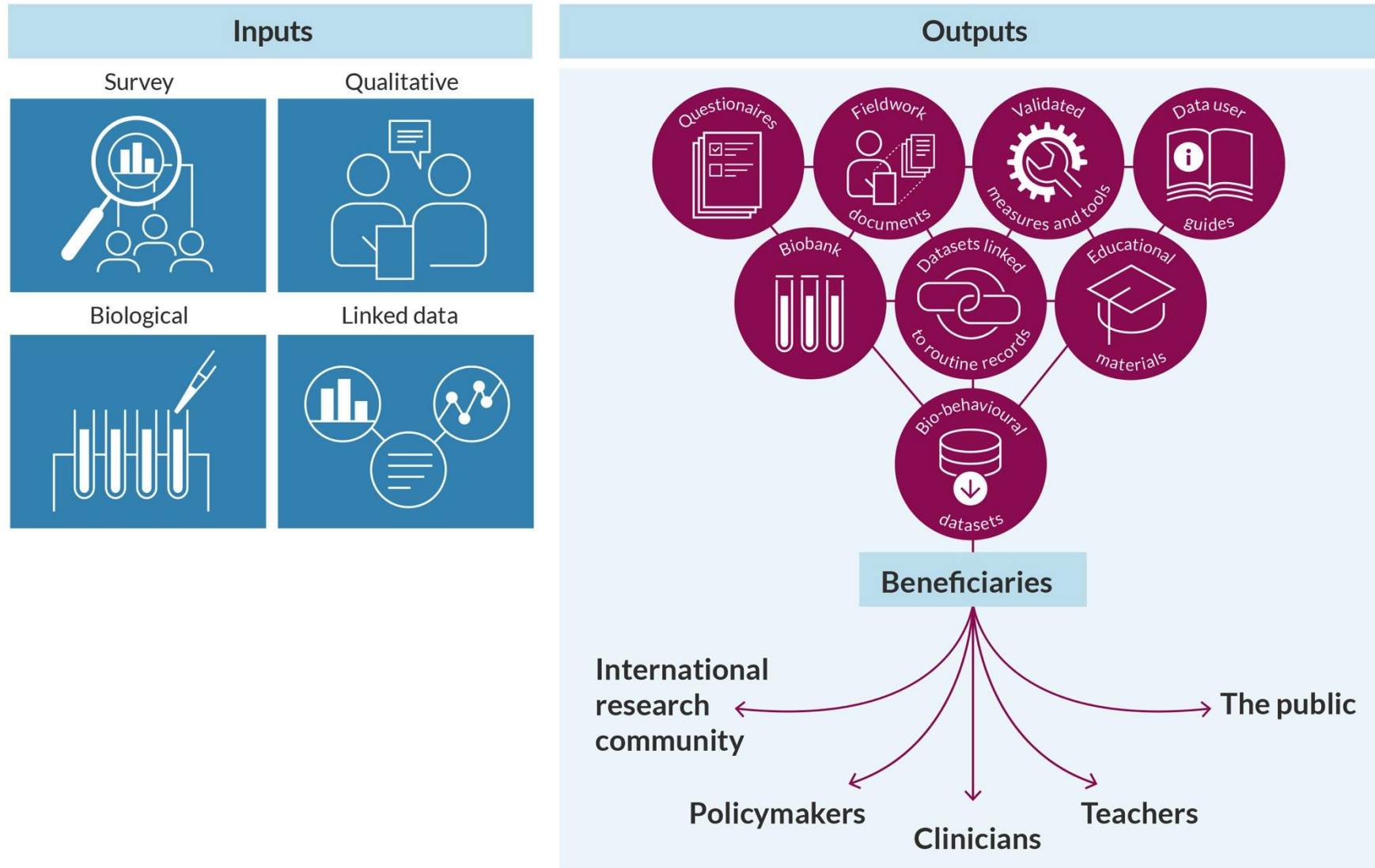
When is Natsal-4 happening?



When is Natsal-4 happening?



Natsal as a resource



...so Natsal needs you - now!



#addyourvoice

...to tell us which questions *you* think Natsal-4 should ask

...so take part in our online consultation

<https://ucl.onlinesurveys.ac.uk/natsal>

**** live until 22 July 2019 ****



Please share!

W: natsal.ac.uk

E: natsal@ucl.ac.uk

 [@NatsalStudy](https://twitter.com/NatsalStudy)

Come and see us in the Exhibition Space



- Find out more about Natsal
- Look at questionnaires used in previous waves
- Have a go at our 'Sexy Science' game
- Do the consultation!



Stand 116 – opposite lunch! 😊



Thank you!



- To you for listening & in advance, taking part in the online consultation (<https://ucl.onlinesurveys.ac.uk/natsal>)
- To BASHH for all their support of Natsal
- Colleagues across the Natsal team



MRC/CSO Social and Public Health Sciences Unit



- The funders of the Natsal Resource





The Times, 30 November 2001